

**MANAGEMENT REPORT:
PHASE I ARCHAEOLOGICAL INVESTIGATIONS
KIELKOPF HOUSE SITE
NEW CASTLE COUNTY, DELAWARE**



Prepared for:

**DELAWARE DEPARTMENT OF TRANSPORTATION
DOVER, DELAWARE**

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Prepared by:

**PARSONS CORPORATION
10521 ROSEHAVEN STREET
FAIRFAX, VIRGINIA 22030**

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I. PROJECT DESCRIPTION

Parsons conducted a Phase I archaeological investigation for the Right Turn Lane Project, located at the southbound US 13/State Route (SR) 299 junction in historic Odessa, New Castle County, Delaware (Figure 1). DelDOT planned to widen the west southbound lane on US 13 to provide a turn lane onto westbound SR 299, with potential impact to the corner property. The area investigated extended westward from US 13 and northward from SR 299 to the “Existing R/W” (Right of Way, or ROW) on the DelDOT 6/5/2000 plan sheets. At the time of the survey, construction plans included replacing the existing sidewalk and widening the road. While no standing structures presently appear within the project area, construction had the potential to impact historic features. Possible secondary impact included sign and utility relocation, and staging areas for construction within the ROW. Subsequent to the survey, archeological monitoring occurred for removal of the existing sidewalk.

The Kielkopf house was constructed in the late nineteenth century, and along with associated structural features remained within the project area until demolition in the late 1980s. In 1969, a survey conducted by the Winterthur Museum resulted in nomination of the Odessa Historic District to the National Register of Historic Places. The district was enlarged in 1981 to include among other properties, the Kielkopf House (National Register number N126.29), and was eventually listed on the National Register in 1984. The current investigations examined the property from an archaeological perspective only, as the house and associated outbuildings were razed during the 1980s. The investigations were performed in accordance with the requirements of the National Historic Preservation Act of 1966, as amended, the Advisory Council’s Guidelines set forth in 36CFR800 for the Protection of Historical and Cultural Properties, and the *Guidelines for Architectural and Archaeological Surveys in Delaware* (Delaware State Historic Preservation Office 1993).

II. PROJECT AREA HISTORY

Background research was conducted at the Historical Society of Delaware, New Castle County Courthouse, Corbit Library in Odessa, Delaware Public Archives, and the Library of Congress in Washington, D.C. In addition to archival research, informal interviews were conducted with members of the Odessa Historical Commission, neighbors, and Mr. Fred Kielkopf, owner of the house at time of demolition. Mr. Kielkopf, grandson of the builder of the house, John George Kielkopf, was a frequent visitor to the site during the field investigation, and supplied photographs and stories of the Kielkopf house and family, and of the Odessa community, for inclusion in this report.

The first land grant relating to the project area was to Garrett Otto, who received 180 acres of land in 1671 adjoining lands given to Hans Hansen to the east and Jan Sherricks to the west. Otto’s land was a rectangular lot abutting the northwest side of the Appoquinimink Creek, minus a few acres granted to William Whittet along the creek (UD History Department 1972:xviii; Figure 2). The road that became Main Street of Cantwell’s Bridge (later renamed Odessa) was along this boundary line between the Otto and Sherrick property, with Otto’s tract lying north of Main Street.

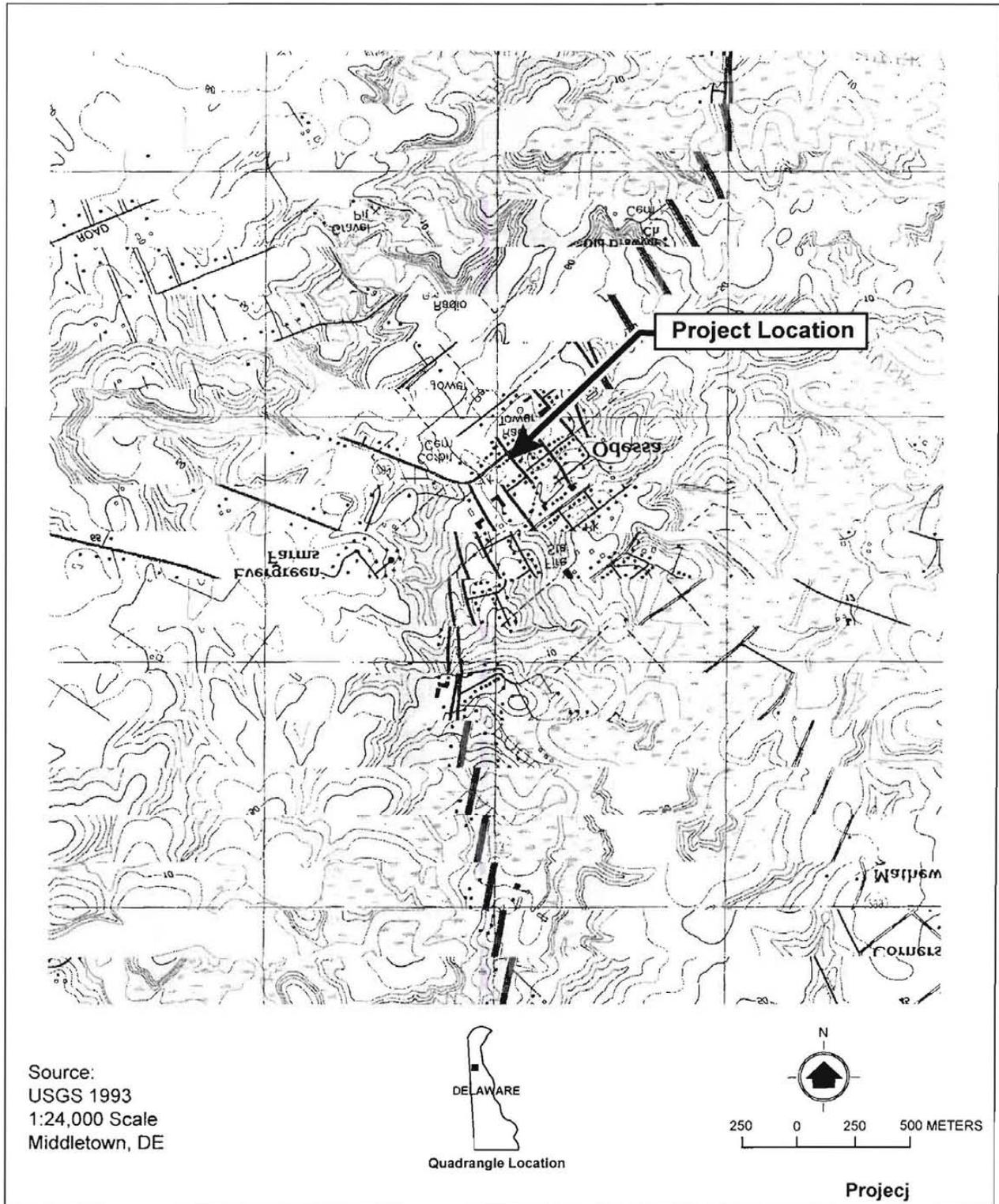


Figure 1: 7.5 Minute USGS Quadrangle Showing Project Location in Odessa, Delaware

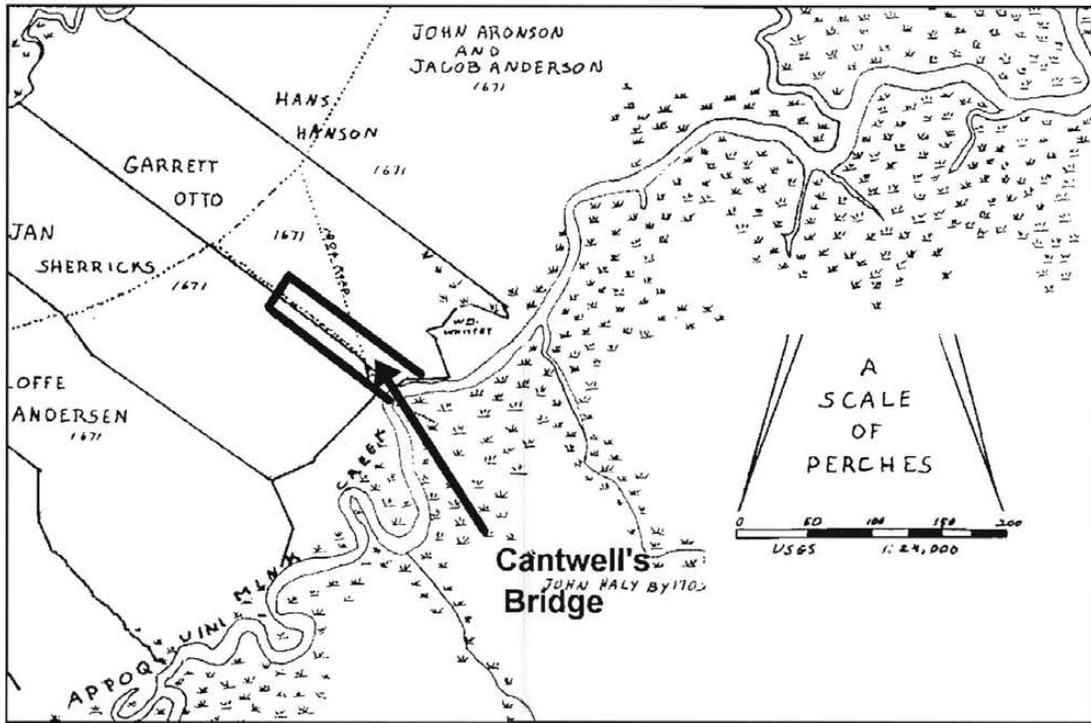


Figure 2: Early Land Tracts Around Cantwell's Bridge (Odessa)

From 1671 to 1735, several owners purchased or inherited the Otto parcel, until the Osborne family came into possession in 1735 (UD History Department 1972:xviii). Prior to 1821, the houses of Cantwell's Bridge were located south of Main Street on the Sherrick tract (Schwartz 1974:10). An Act by the State of Delaware required that the Osborne land be divided in 1821 to expand the village of Cantwell's Bridge (Enrolled Bills Volume 6, 247-251). Daniel Corbit purchased two tracts, Nos. 28 (present survey area) and 29 (Figure 3).

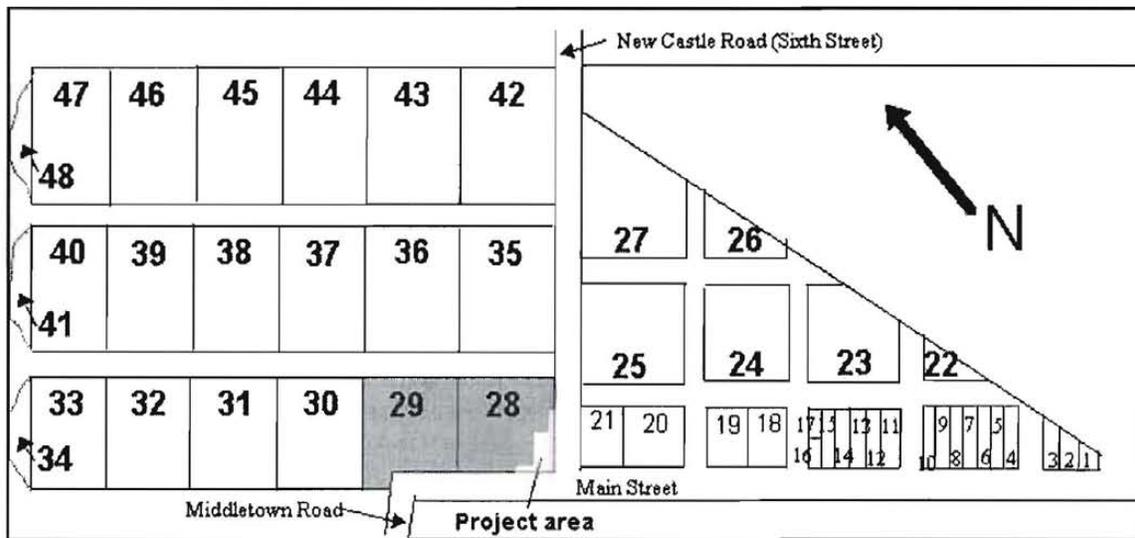


Figure 3: 1821 Property Distribution Of Odessa North Of Main Street.

The corner of Sixth and Main was the first main intersection in town, a prime location for a business. The 1868 Beers Atlas shows a building owned by Daniel Corbit on the northwest corner of Sixth and Main (Figure 4). The structure extended the entire width of the lot (50 ft) and approximately one-third the length. The Odessa Historic Commission has no information relating to a structure on that corner prior to the Kielkopf residence (personal conversation with Horace Hotchkiss and Jerry Unruh, September 7, 2000). The tax assessment records revealed limited structural information on buildings identified at the time. However, Daniel Corbit owned a multitude of structures, and the tract in question could not be singled out among the tax records.

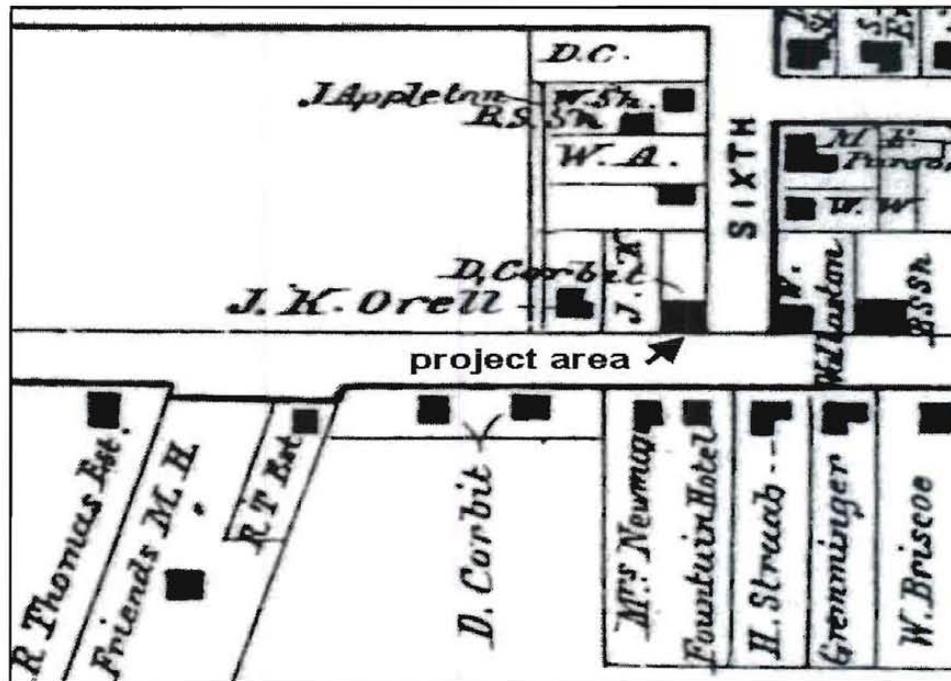


Figure 4: Beers 1868 Atlas For Odessa, Showing The Project Area

Daniel Corbit willed the land to his son, John Cowgill Corbit, in 1877. The 1881 Hopkins Atlas illustrates a building on the corner of Sixth and Main now labeled “store”, that probably fronted Sixth Street (Figure 5). John Cowgill Corbit sold the property to John George Kielkopf in 1888 (New Castle County Deed Book G14:457-459). Landowners of the Kielkopf property from 1888 to the present were as follows:

- John George Kielkopf (1888-1890)
- Odessa Loan Association (1890-1890) (Deed Book E15:464-467)
- Anna Walz (1890-1904) (Deed Book F15:261-263)
- Mary Kielkopf, daughter? of John George Kielkopf (1904-1913) (Deed Book U19:590-592)
- James Conner (1913-1917) (Deed Book Q24:165-167)
- George Kielkopf, son of John George Kielkopf (1917-1972) (Deed Book A27:475-477)

- Fred Kielkopf, son of George Kielkopf (1972 to early 1990s) (Deed Book W85:545)
- State of Delaware (early 1990s to present)

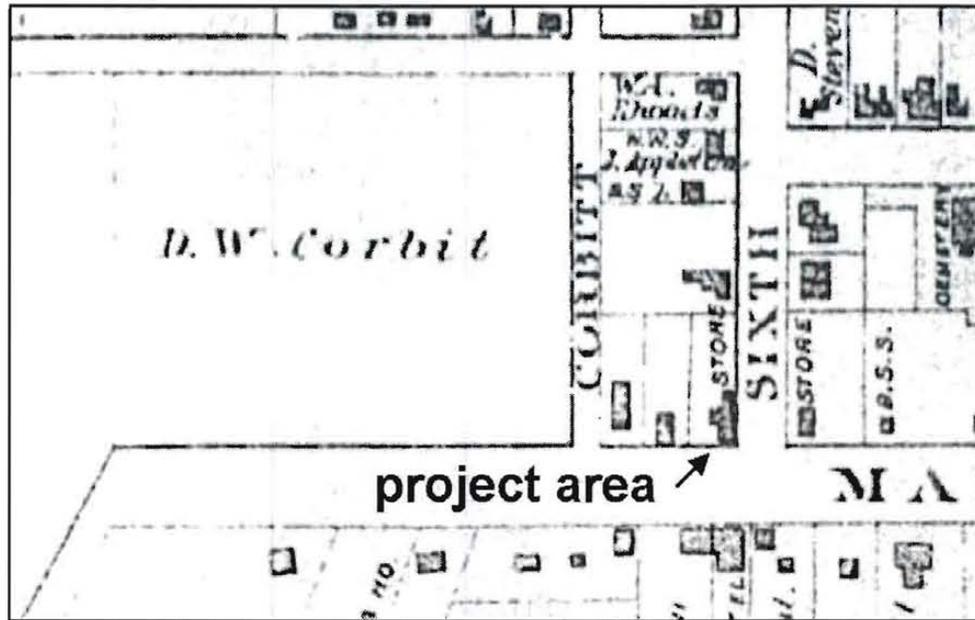


Figure 5: 1881 Hopkins Atlas Of Odessa, Showing Project Area

The 1893 Baist Atlas shows the same configuration of the corner store as the Hopkins 1881 atlas (Figure 6). It is possible that the Kielkopf house was already constructed, and that the new atlas did not reflect that the store was gone and the house had been built, as the 1893 map was almost an exact duplicate of the 1881 atlas.

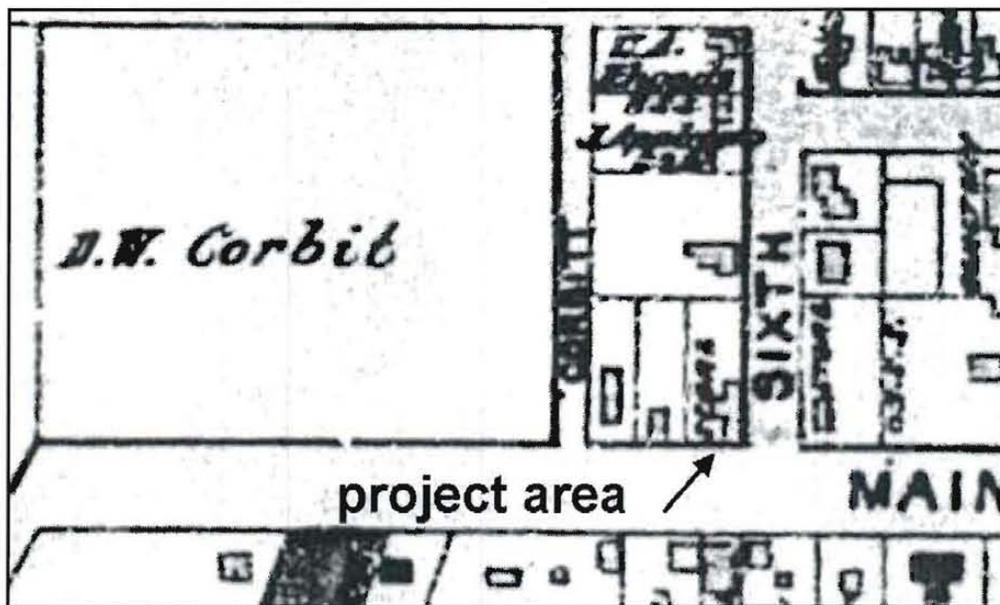


Figure 6: 1893 Baist Atlas Of Odessa, Showing Project Area

The earliest known photographic image of the Kielkopf House complex was from a 1908 postcard, view to the southwest (Figure 7). John Kielkopf constructed both the house and blacksmith shop sometime in the late 1880s or early 1890s, with both structures fronting Sixth Street. The house had a partial cellar, with a small cellar window north of the porch. Horse hitching posts can be seen in the street, with wheel repair anvils around the tree between the house and shop. Note that the street was several feet lower than the elevation of the front porch floor.



Figure 7: Kielkopf House, Ca. 1908 and Blacksmith Shop, View To The Southwest

A photograph taken between 1910-1915 from the south reveals the privy and a shed north of the house, and a concrete sidewalk that were not on the 1908 photograph (Figure 8). A wider porch has been added to the front of the house along Sixth Street and the southern entrance did not yet have a porch. Both “chimneys” for the Kielkopf house were stove vents in the living room and kitchen (personal communication with Fred Kielkopf, September 7, 2000). Note that the tree between the sidewalk and Main Street had just been trimmed and the small branches were only two to three feet long. An electric railroad, or trolley, operated in Odessa from 1903 to 1907 along Main Street, and ran in front of the Kielkopf property (Caley n.d.:22-23; Figures 9 and 10). Powered by a motor on the car, the machine would go to the Odessa wharf, where the conductor had to go to the opposite end and drive it back to Middletown (Caley n.d.:22-23). The trolley company went bankrupt, and the rails were torn up in 1907 (Mandes 1950; Heite 1972:10).

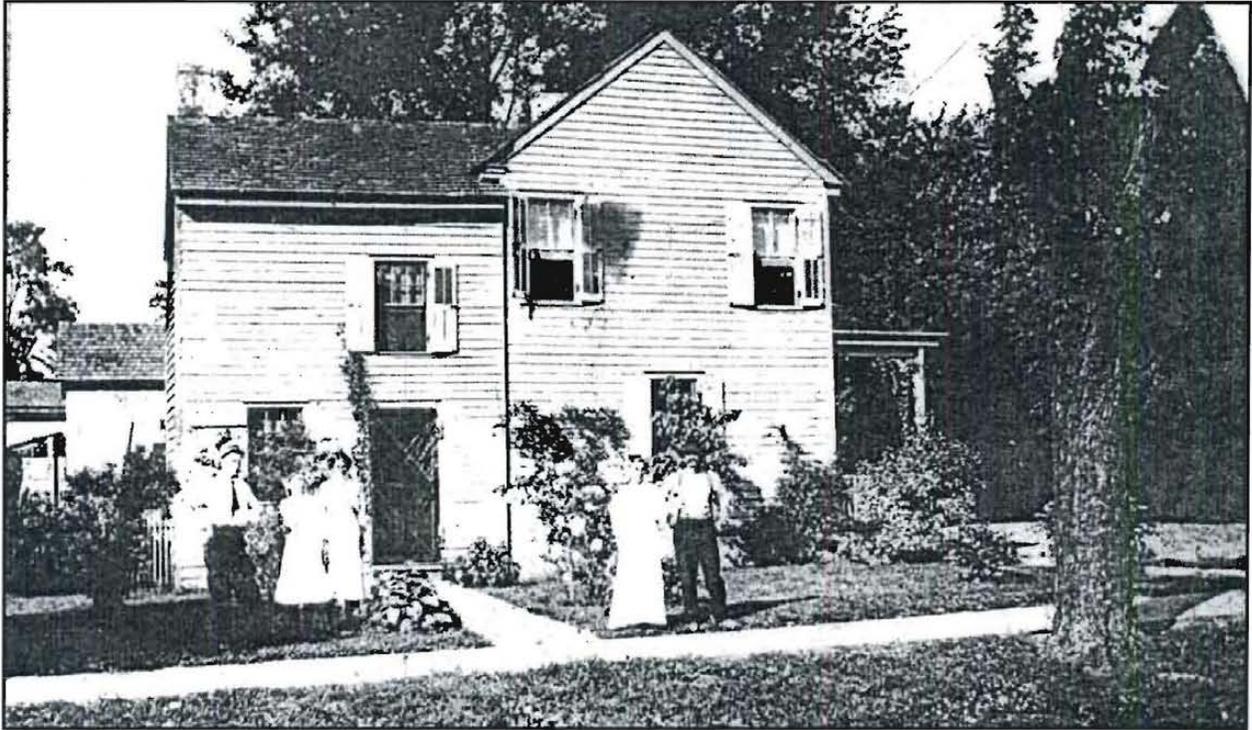


Figure 8: Privy (Far Rear), Shed, and House, Ca. 1910-1915



Figure 9: Postcard of Main Street, Odessa Showing Trolley Tracks



Figure 10: Postcard of Main Street, Odessa Showing Trolley Tracks

Another photograph shows the houses west and north of the Kielkopf House (Figure 11). The blacksmith shop is the darker structure to the right of the Kielkopf House. The small shed seen in Figure 8 north of the house is barely discernible. A wagon port roof extended from the blacksmith shop to the edge of the sidewalk fronting Sixth Street.

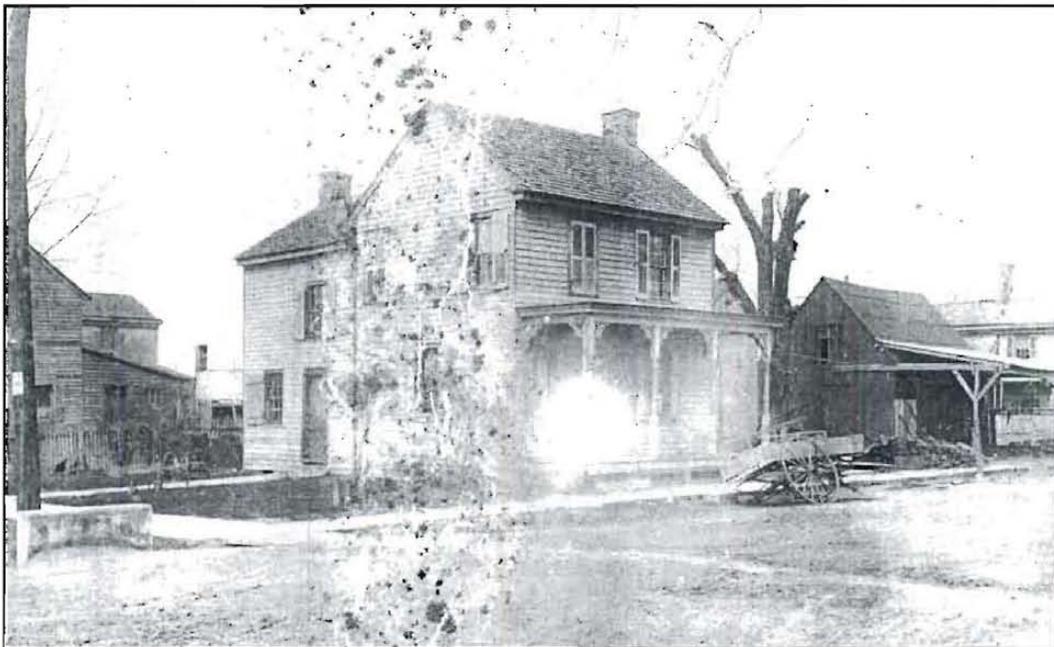


Figure 11: Kielkopf House, ca. 1910-1915, View Northwest

John George Kielkopf, son George, and grandson Fred, were blacksmiths. Fred Kielkopf operated a well drilling business in the shop for several years after World War II, and still owns the building containing Lorenzo's Pizza across Route 13 (formerly Sixth street) to the east. During Fred Kielkopf's tenure, the porch on the east side facing Route 13 was enclosed, and a small addition was constructed on the north side of the kitchen/dining room area (Figure 12; personal communication with Fred Kielkopf, September 7, 2000). A new blacksmith shop was constructed over the old shop between WWI and WWII, and the old shop was torn down from inside the new establishment (Figures 13 and 14).

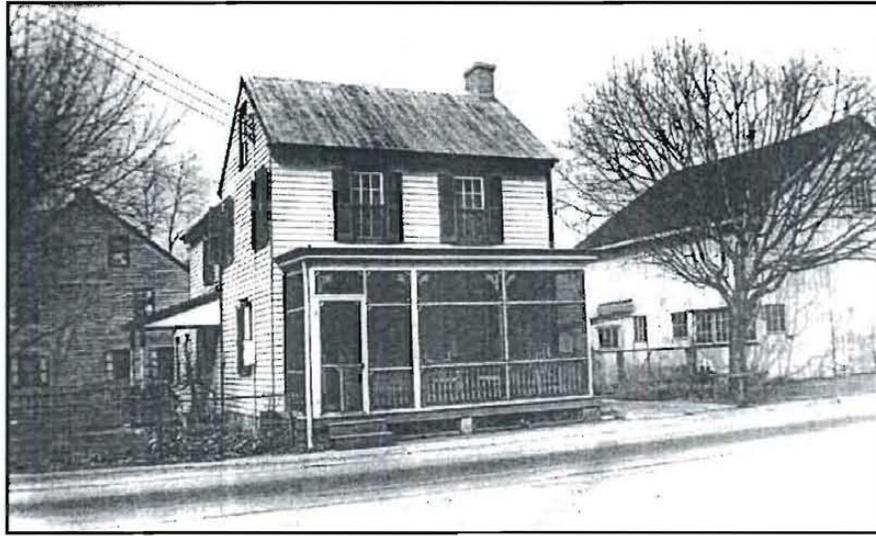


Figure 12: Kielkopf House with Enclosed Porch and Second Blacksmith Shop, ca. 1940, view northwest.



Figure 13: George Kielkopf Shoeing a Horse Ca. 1940, With Dugan/Carty House To The North

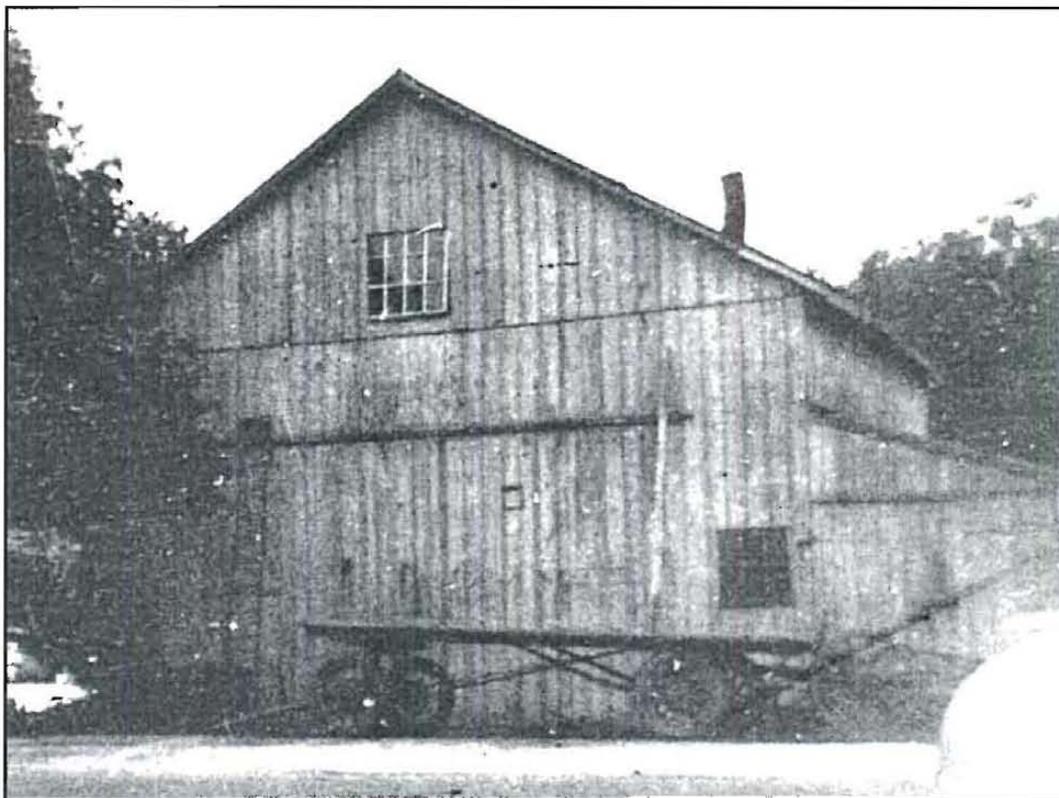


Figure 14: The New Kielkopf Blacksmith Shop

A brick-lined, hand-dug well was located a few feet from the northwest corner of the house. The well was used until after WWII (personal conversation with Fred Kielkopf, September 8, 2000). The privy was apparently always in that location during the Kielkopf's occupation. In the 1930s, the WPA installed a new privy adjacent to the old, on a concrete slab with wooden superstructure. A garden was located between the blacksmith shop and the northern property line. A 25 ft deep, 8ft wide, hand-dug cesspool was located between the blacksmith shop and the northeast corner of the house after WWII. The cesspool was lined with concrete blocks and had a concrete slab cover. The floor of the new blacksmith shop was concrete, poured in several stages over many years.

The crawlspace below the enclosed porch fronting Route 13 was covered with wire mesh hardware cloth (Figure 15). The cement sidewalk visible in Figure 15 may or may not be the same sidewalk observed in Figure 8, but in any case was replaced with a new sidewalk and curb when the Route 13 southbound lanes were constructed after WWI. In 1946, the Delaware Department of Transportation raised Route 13 almost two feet in elevation in front of the Kielkopf residence (Figure 16). A high curb was built directly adjacent to the front board of the porch on the Kielkopf house, bringing the street almost level with the porch. Prior to 1946, the porch had two steps down to the sidewalk and then one step down from the curb to the street level. The wooden front steps were moved to the north side of the house to pour a high curb against the brick footers for the porch and directly against the fascia board of the porch.



Figure 15: Screen Under Porch Visible Right of the Steps

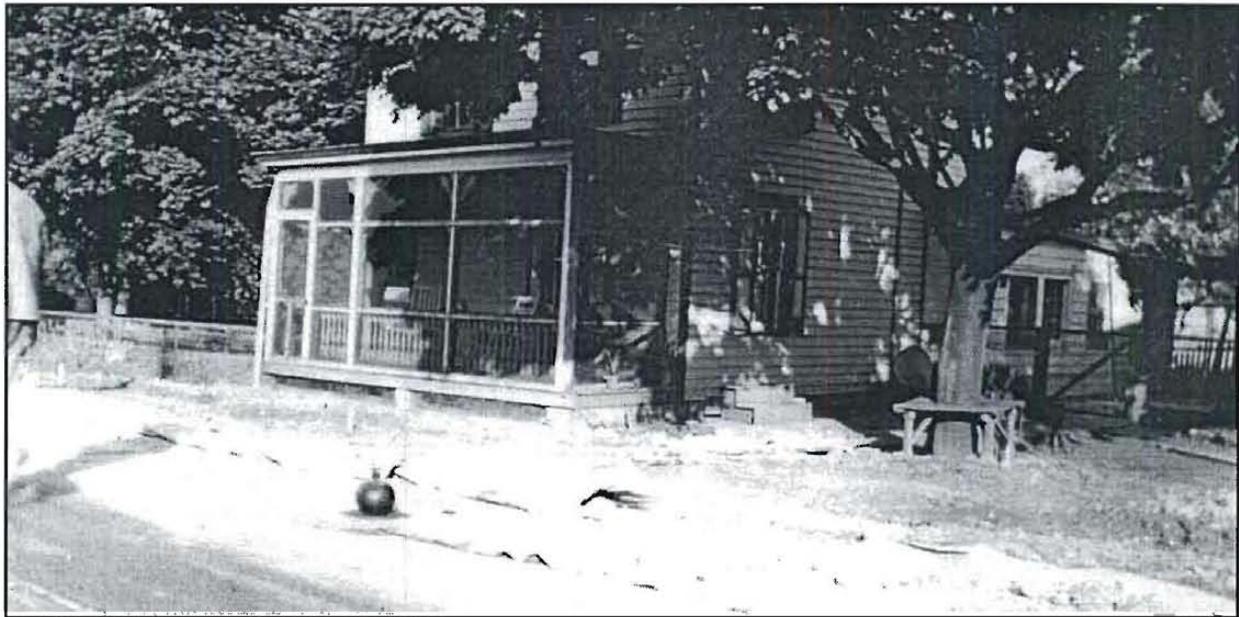


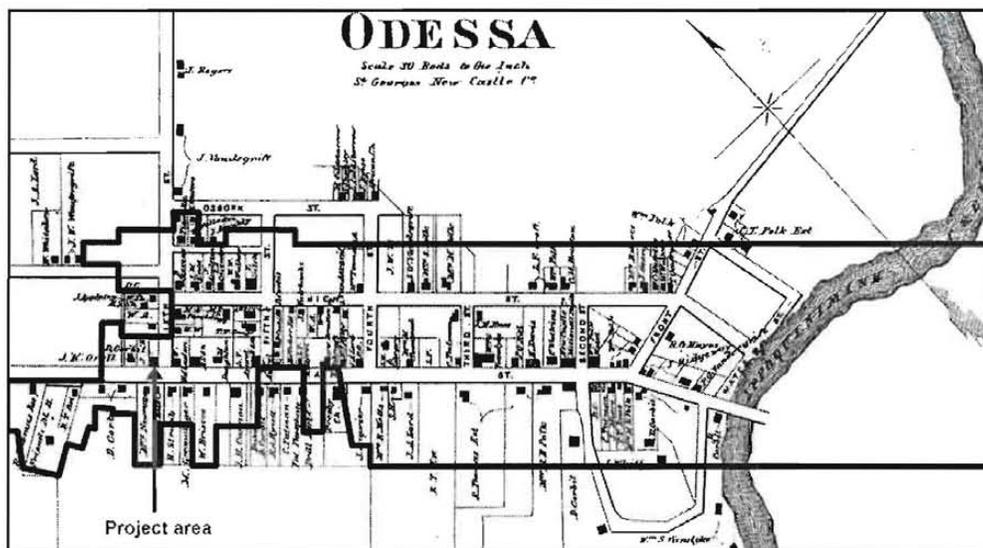
Figure 16: Elevation of Route 13 in 1946 to the Level of the Kielkopf Porch
(Note: the wooden steps have been moved off to the side of the house.)

A brick-lined storm drain was laid under the new sidewalk and currently extends along Routes 13 and 299 adjacent to the Kielkopf property (Figure 17). The drain may have been laid directly on the old sidewalk prior to the raising of the highway. Two additional drains were constructed near the blacksmith shop and the north property boundary.



Figure 17: Brick-Lined Storm Drain Under Current Sidewalk, Built in 1946

The Odessa Historic District was surveyed in 1969 to include a four-block area, and enlarged in 1981 to encompass almost the entire town (NRHP Nomination Forms 1969, 1981; Figure 18). The district was listed on the National Register in 1984. The 1981 survey incorporated the Kielkopf House (National Register number N126.29) and nearby properties. The house was described on the form as a late 19th century, wood-framed two-story, two-bay, gable-roofed, frame dwelling with rear additions. The windows were six over six sash-hung with no shutters. A three-light transom topped the front door. A porch with turned post supports and cutwork brackets extended across the façade. The form included no photographs of the Kielkopf House.



**Figure 18: The Odessa Historic District (1984)
Overlaid on the 1868 Beers Atlas of Odessa.**

The Kielkopf house was rented in the 1970s and 1980s to an individual named Wallace, who worked for the highway department during the day. Wallace had a barber chair in the front living room of the house and cut hair in the evenings and on weekends (Fred Kielkopf, personal communication). The house and shop were razed in the late 1980s. A bulldozer was used to push the concrete slabs and other surface trash and building materials into the cellar. Figure 19 shows the footers for the porch, along with the imprint of the crawl space screening on the elevated roadbed concrete. The well had been capped years earlier. The cesspool and the concrete floor of the blacksmith shop were left intact.

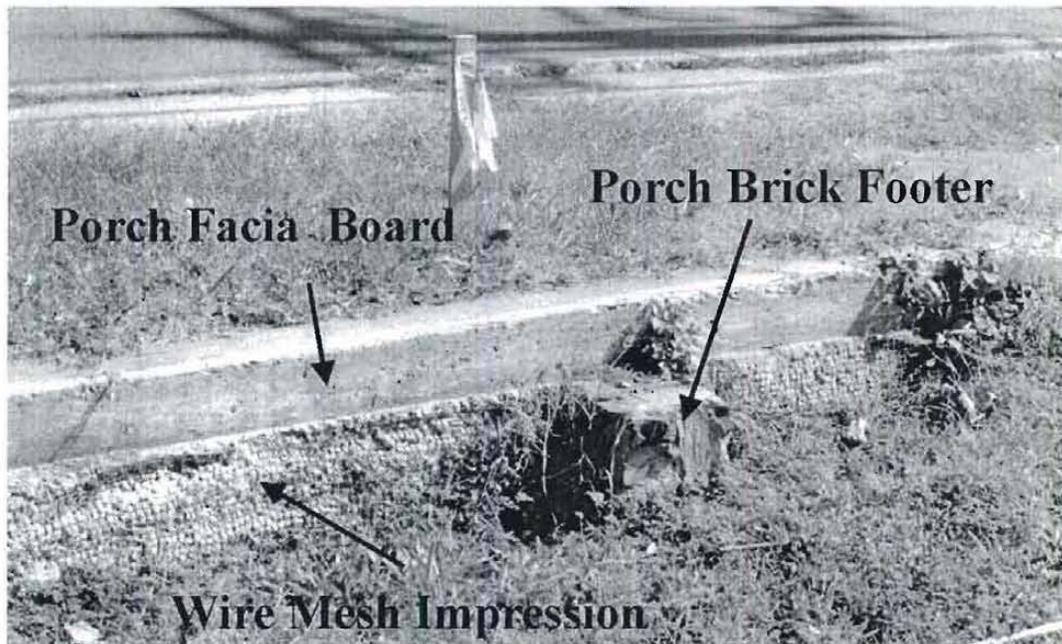


Figure 19: Curb Along SR 13 Showing Porch Brick Footers and Wire Mesh Imprint on Concrete

The lot west of the Kielkopf property had a large two-story house and a small one-story shed-roofed kitchen addition on the rear. The gable was parallel to Main Street, with the house abutting the sidewalk. The house was present in many of the Kielkopf photographs, and was torn down to put in a one story ranch style house that was later bought by Tidewater Utilities (Figures 20 and 21).

The Henson house adjacent to Corbit Alley (now Park Alley) was probably built in the early 1880s (see Figure 21). The Henson structure was a two-story I-house situated perpendicular to Main Street and set back a few feet from the sidewalk, but was apparently not the L-shaped structure illustrated on the 1868 Beers Atlas map (see Figure 4). The NRHP nomination form stated that the house was a 2-bay, late 19th century frame dwelling with later shed roof addition, extensively altered, and labeled as a non-contributing element to the historic district because of modifications (NRHP 1981:12; Figure 22). One- and two-story shed-roofed additions were added to the east side of the structure. Tidewater Utilities bought the lot in the 1980a and razed the house to construct a parking lot.

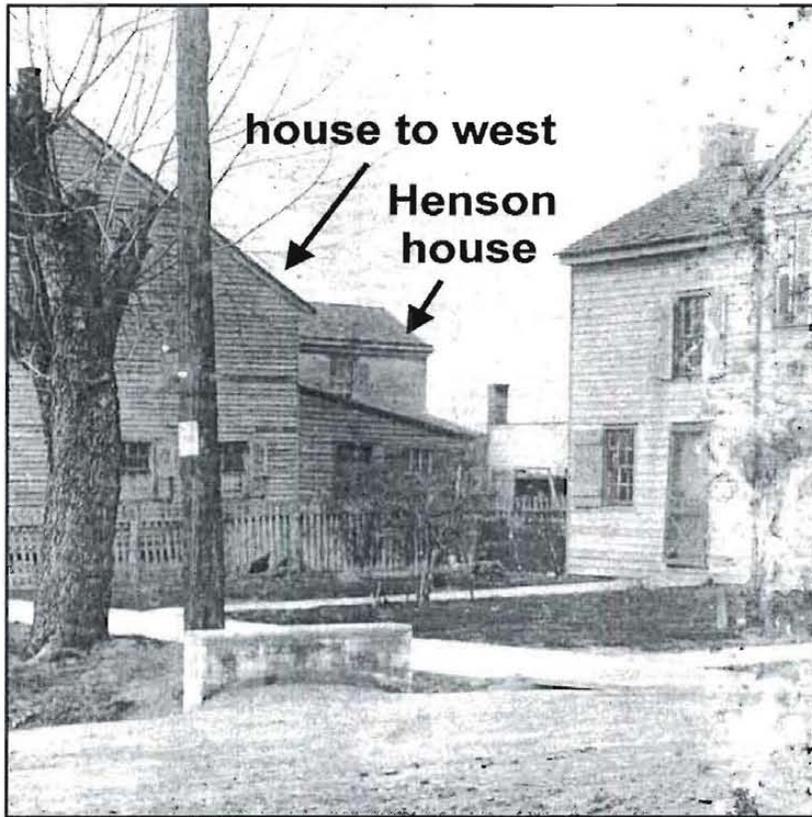


Figure 20: The House West of the Kielkopf House, ca. 1910-1915



Figure 21: Ca. 1930s Photograph Showing the House West of the Kielkopf House, with a Young Fred Kielkopf

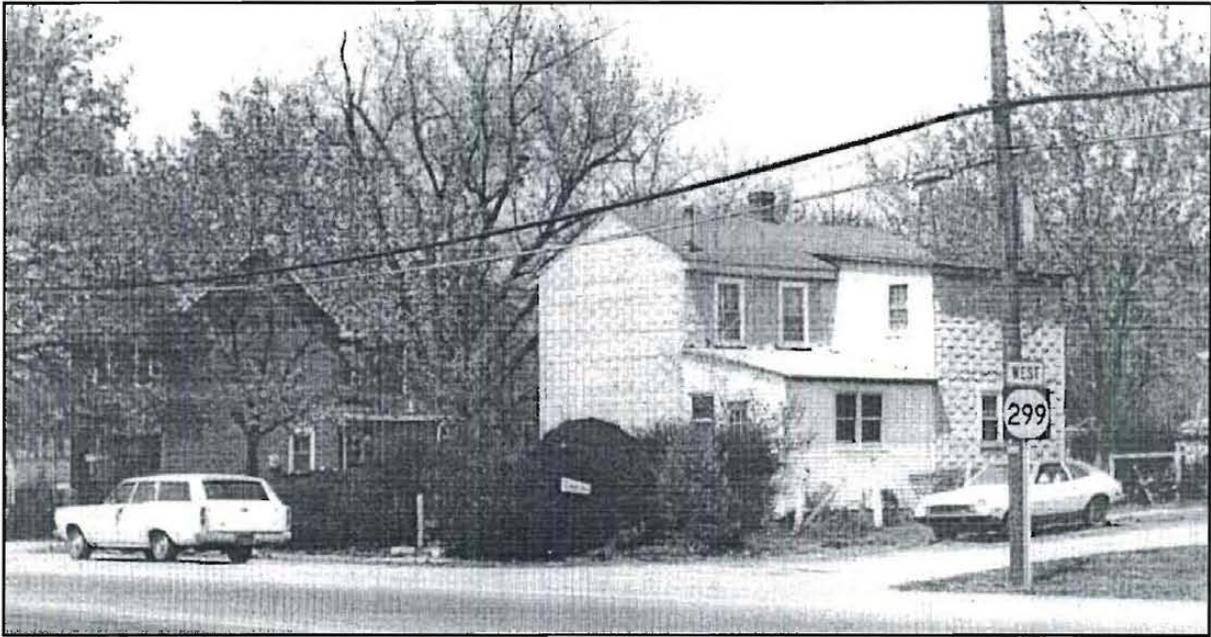


Figure 22: Photograph from NRHP Historic District form, Showing the Henson House Along Corbit Alley

III. METHODOLOGY

Field

Parsons conducted a Phase I archaeological survey of the current project area in September 2000 (Figure 23). The goal of the Phase I survey was to test the area between the LOC and the existing ROW, as shown on the July 30, 2000 DeIDOT construction plan sheet. Construction plans were revised somewhat on the February 5, 2001 plan sheet to straighten the proposed sidewalk. However, the revisions did not expand the testing area, and thus did not require additional archaeological investigation beyond the already-planned monitoring of existing sidewalk removal. The focus of investigation was on the southeastern corner of the Kielkopf property where signposts would be placed; the immediate yard surrounding the house; and features, including wells, privies, the house cellar and the blacksmith shop area. Deep features were not fully excavated within TUs due both to safety considerations, and because demolition debris comprised the matrix within deep features.

A total of 15 shovel test pits (STPs), eight 1 x 1 m TUs, and two 3.3 x 0.3 m trenches were excavated within the project area (see Figure 23). Twelve features were identified during the excavations and are described in more detail in Appendix A. The placement of STPs and TUs was based upon visual observation of features and archival and oral history information. The wells, privies and house cellar were the primary focus of the units, and the STPs were dispersed site-wide to find additional features and to test the yard areas.

Figure 23: Kielkopf House Site, Showing Survey Methodology

All STPs measured approximately 50 cm (1.6 ft) in diameter and were excavated at least 10 cm into sterile subsoil, depending on the degree of soil development. All excavated soils were screened through quarter-inch-mesh hardware cloth to ensure uniform recovery of cultural materials. Stratigraphic profiles of each STP were recorded on standard forms, listing soil texture, color, and inclusions. Nearby landmarks or anomalies (e.g., a plowzone) also were recorded on the standard forms. Recovered artifacts were stored in resealable polyethylene bags, and provenience information for each artifact bag was recorded on a master bag inventory sheet. STPs were recorded by transect, shovel test number, and stratum within each shovel test.

TU excavation followed natural stratigraphy. The upper plow zone horizon constituted a single stratigraphic unit; ten centimeter arbitrary levels, excavated within natural strata, provided vertical control within horizons encountered below the plow zone. Excavation terminated not less than two arbitrary levels, or 20 cm, below cultural deposits. All soils removed from the TUs were screened through ¼ inch hardware mesh. Unit artifact bags contained appropriate horizontal and vertical provenience information. Excavators recorded locational, stratigraphic, and artifact data on a standardized form.

Lab

Artifacts recovered from these investigations were delivered to the Parsons archaeological laboratory in Fairfax, Virginia for processing. All artifacts were processed and packaged in accordance with 36 CFR Part 79 and the Delaware State Museums' *Curation Guidelines and Standards for Archaeological Collections* (Delaware State Museums 2001).

The artifacts were cleaned in plain water, air-dried, and bagged in 4-mil polyethylene zip-lock bags according to provenience and material type. Consecutive bag numbers were assigned in the field for each provenience where artifacts were recovered. Artifact numbers were assigned to the items as they were cataloged. The site number, provenience information and artifact numbers were written in indelible ink on the exterior of the artifact bags and acid-free tags with the same information were placed within the bags. In addition, diagnostic artifacts were hand-labeled with the site number and artifact number using acryloid B-72 sealant and black or white pigment ink.

The artifacts were cataloged by count, raw material, typology, function, and segment. Additional attributes were recorded where they contributed to the determination of the artifact function or temporal range. Cataloging also included grouping the artifacts in categories in order to provide a framework for analysis. The group and class categories were based on a system developed by Stanley South (1977) but were tailored to incorporate nineteenth and twentieth century artifact types. References consulted in the identification of the artifacts included Jones and Sullivan (1985), Munsey (1970), Godden (1991) and Toulouse (1971). The artifact catalog was prepared using Microsoft Access software.

The collections were labeled with the project name, site number, and the date of the survey. Field notes and documentation were copied on acid-free paper and organized using archival materials. Photographs were labeled and placed in archival sleeves. The project records

and the artifacts were placed in labeled acid-free boxes. All artifacts and photographs were transmitted to the Delaware State Museum repository in Dover.

Blacksmith Shop

Probing revealed a solid concrete floor across the blacksmith shop area just below the grass/topsoil; thus, no STPs or TUs were placed in that area. A single STP (N132/E194) was attempted in the north portion of the blacksmith shop in what was once a carport, but encountered concrete. STP N138/E194 examined the garden area north of the Blacksmith Shop, producing glass, brick fragments, machine-cut nails and late 19th century whiteware.

North Project Area

Four STPs excavated in the northern portion of the project area produced information relating to the Dugan/Carty occupation north of the Kielkopf property. The Dugan/Carty Victorian house abutted the sidewalk on Sixth Street, and was destroyed by arson several years ago. Feature 2 in STP N163/E201 was an early 20th century concrete slab sidewalk edged with brick; the soil matrix produced mixed modern (i.e., mid- to late-20th century) artifacts. A brick garden or walkway (Feature 4) was recorded in STP N147/E199. STP N147/E195 contained a thin layer of coal ash at the interface of Strata A and B, with plastic and an aluminum pull-tab mixed with earlier 20th century artifacts. The edge of a builder's trench (Feature 7) for the Dugan/Carty well was found in STP N148/E183, and further investigated with TU 5. The well was modern, with poured mortar mix and pvc pipe in the builder's trench, and 3-hole brick and cinderblock for the well construction material.

Removal of High Curb

In the spring of 2001, a meeting between DelDOT, the DE SHPO and Parsons was held to discuss whether the site's status as part of the Odessa Historic District, since the district was defined by standing structures and not the archaeological potential of the sites within the district. Gwen Davis, with the Delaware SHPO, suggested that the site could still be eligible for the NRHP even though the standing structures had been razed, and key features should therefore be avoided, if possible. The DelDOT construction plan was modified to minimize potential impact by altering the width of the turn lane to avoid the house foundation/cellar. Archaeologists monitored the removal of the south 10 feet of the east high curb and the entire south high curb (Figures 24-26). Photographs were taken and profiles were drawn. A vegetation difference on the north end of the project area in the former location of the Dugan/Carty House was plotted on the site map, but the anomaly was not investigated as it was outside the project area.

Century Engineering contacted Parsons when the new utility/light pole was to be placed in the project area in February 2002. DelDOT agreed that the auger hole did not need to be monitored. The planned pole location was in close proximity to TU 1 and an STP, both showing the area to be disturbed by bulldozer activity and covered with overburden. The existing sidewalk and drain culvert area east and south of the high curb were removed and replaced with new asphalt paving before the removal of the high curb. The brick-lined culvert section revealed construction details from the 1940s. The storm drain had a concrete floor with brick sides, and

may have been placed directly on the old concrete/cement sidewalk in front of the Kielkopf House (see Figure 17). Terra cotta piping next to the exterior of the drain culvert was stamped “conduit”, apparently used for a buried electrical wiring system. Following removal of the high curb, the edge of the cut provided a soil profile. Almost 30 cm of disturbed overburden was observed above the subsoil, with no developed A horizon present. No evidence associated with an earlier mid-19th century building, or with the early culvert and road construction along what is now Highway 13, was found.



Figure 24: Removal of the High Curb

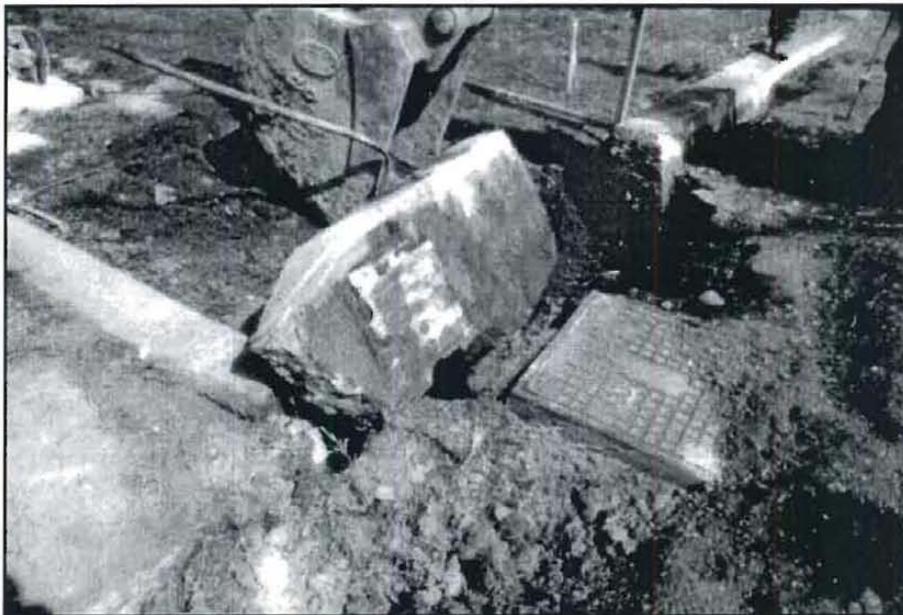


Figure 25: Removal of the Eastern Portion of the High Curb

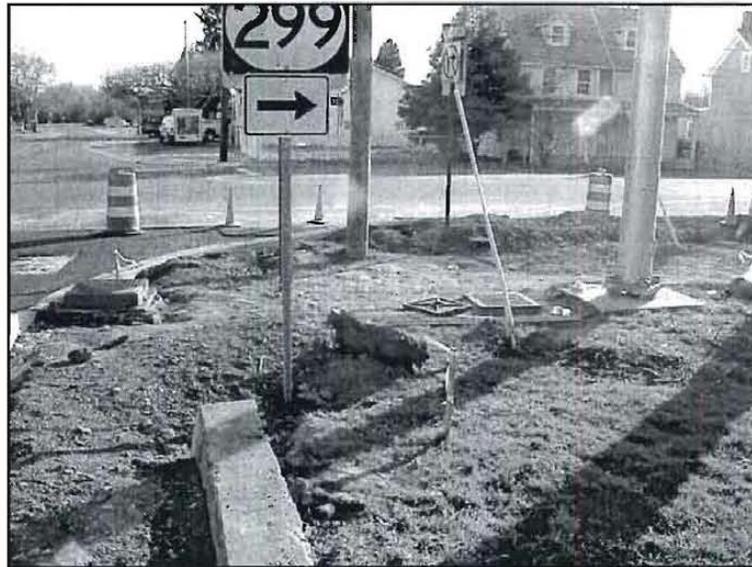


Figure 26: Corner After Removal of the High Curb; with a Portion of the Remaining High Curb Visible at the Bottom Center

Public Outreach

The public outreach program at the site occurred throughout fieldwork. The location of the site at the intersection of two major roads in Odessa drew many passersby. The local Odessa Historical Commission sent two representatives to inquire about the project. One Sun Times newspaper reporter and a local school group visited (Figure 27). A local junior high student also used the project for a school report in Middletown (Michael Brown, personal communication September 2000).



Figure 27: School Group Tour on the Kielkopf House Site

IV. RESULTS

South of the Main House

TU (TU) 1 and four STPs on the south side of the house were placed to test for any remains of a building shown on the Beers 1868 Atlas. STP N103/E199 next to the high curb near the corner of the sidewalk revealed the side of the construction trench of the storm drain under the 1946 sidewalk and almost 25 cm of fill above the subsoil, with no developed A horizon. TU 1 contained a large pit (Feature 1) filled with a mix of modern trash and some historical material, presumably the pit dug for a Tidewater Utilities sign that was removed a few years ago, according to Tidewater Utilities employees. TU 1 also yielded a small amount of creamware and pearlware. Feature 3 was concluded to be a continuation of Feature 1, containing pearlware, plastic and a 1926 copper penny.

The STPs north, east and west of TU 1 revealed 30 to 40 cm of bulldozer disturbance from the razing of the house. The disturbance overlaid 10 - 15 cm of undisturbed general yard accumulation south of the house in the STPN103/E193 and 33 - 69 cm of the same strata in STPs N105/E196 and N103/E199. STP N103/E187 to the west of the south entrance to the house revealed little bulldozer activity and 40 cm of the undisturbed stratum

Following on-site consultation with the Delaware SHPO and DelDOT in the spring of 2001, Parsons excavated two 3.3 x .3 m trenches (TUs 9 and 10) in the southwest portion of the project area. The trenches were placed to further investigate the undisturbed stratum to determine whether any evidence of the earlier structure identified on the 1868, 1881, and 1893 atlas maps remained. The undisturbed stratum was identified in both TUs 9 and 10. TU 10 produced a limited quantity of spalled creamware, pearlware and whiteware dating possibly to the earlier portion of the 19th century. TU 9 also produced a limited quantity of the same ceramics, but evidenced disturbance and contained machine-made glass from the later 19th and early 20th centuries. While the undisturbed stratum is likely a cultural level associated with the earlier 19th century occupation of Odessa prior to the construction of the Kielkopf house, no evidence of an earlier structure was found.

House

Two STPs ((N110/E188 and N110/E193) in the west half of the Kielkopf house in the kitchen area revealed extreme disturbance resulting from bulldozer activity during the razing of the structure. TUs 2, 6 and 8 were placed to examine the house and cellar areas. Feature 5, in TU 2, was the stone and concrete foundation/cellar wall for the house. Due to in-filling of the cellar as a result of house demolition as well as safety factors, excavation of the unit was terminated at 66 centimeters below datum. TU 8 revealed a machined-brick footer for the porch (Feature 12) on the south side of the house, a lightening rod extending into subsoil, and Feature 13, a shallow posthole containing nail fragments and one brick fragment. No builder's trench was found in TU 8 for the cellar walls, likely destroyed by the bulldozing of the walls into the cellar area. As in TU 2, excavation ceased before reaching the base of the cellar because of disturbance and safety factors. TU 6 contained a continuation of Feature 5 (cellar wall); most of

the stones appeared displaced and were found mixed with fragments of concrete. Excavation of the cellar fill in that unit ended at 142 centimeters below datum.

Kielkopf Well

TU 4 and STP N116/E188.5 were excavated north of the house to find the water well, but failed in that objective. Mr. Fred Kielkopf later identified the location of the well, where TU 7 was excavated. The unit uncovered the edge of the well (Feature 11), which was a hand dug, machined brick-lined well dating probably to the construction of the house in the late 1880s. The well was apparently filled-in during the 1940s or early 1950s, and the upper layers of brick either collapsed or were robbed for other purposes (Fred Kielkopf, personal communication September 7, 2000). A concrete slab next to the well was a platform for a catch basin. A modern metal drainpipe took the overflow water to the storm drain south of the house, out by the curb. A reddish-orange subsoil fill comprised approximately 25% of the soil matrix within the well in TU 7. Four machined bricks were in alignment just below the ground surface and could represent part of a platform around the well.

Privy

Three possible privies were located immediately west of the former location of the Blacksmith Shop. Features 8 and 9, in TU 3, were possibly two adjacent privy shafts. Feature 8 produced 476 artifacts, and Feature 9 produced 158 artifacts – both assemblages consisted mostly bottle and window glass, and wire and cut nails. The refined ceramics from both features were mainly ironstone and undecorated whiteware. A cypress post in Feature 9 is thought to be associated with Feature 10, a 1930s WPA privy slab support located adjacent to the south side of the unit.

Feature 13 was a small, square posthole, probably from the southern exposure porch of the Kielkopf house. The feature was near Feature 12, the south porch brick footers.



**Figure 28: Larkin Soap Co. Smelling Salts Bottle
Made in Buffalo, New York (TU 3)**

Artifact Assemblage

Over 4,500 historical artifacts were recovered during these investigations (Table A). Over half of the artifacts recovered (51.1 percent) are architectural materials consisting of brick, glass, hardware (i.e., nails and screws), asphalt roofing shingles, mortar, and drainpipe fragments. Thirty-two percent of the assemblage is domestic debris including glass and ceramic food containers, food storage or food serving items. The rest of the assemblage represents artifacts associated with specific activities such as gardening, livestock maintenance or equipment maintenance; arms and ammunition (shotgun and rimfire shells); clothing (such as buttons, a buckle, a snap, and a zipper); floral (wood fragments) and faunal remains (mammal and tooth fragments and oyster shell fragments); fuel (coal and clinker pieces); personal items such as a 1926 penny, a mirror sherd, domestic bottle fragments, a fishing lure, children's toys, a pencil fragment; a tobacco pipe fragment; unidentified objects of aluminum, cupreous and ferrous alloy; porcelain; rubber and synthetics; and two prehistoric flakes of jasper and quartz .

Table A: Artifact Assemblage from the Kielkopf House Site

Artifact Group	Count	Percentage of Group	Percentage Overall
Activity	187		4.1
Architectural	2312	100.0	51.1
Brick	201	8.7	
Glass	695	30.1	
Mortar	9	0.4	
Hardware	1357	58.7	
Other	50	2.1	
Arms and Ammunition	6		0.1
Clothing	24		0.5
Domestic	1481	100.0	32.7
Bottle	595	40.2	
Food Container/Storage	592	40.0	
Food Preparation	97	6.5	
Food Storage	39	2.6	
Lighting/Heating	100	6.8	
Vessel	56	3.8	
Other	2	>0.1	
Faunal	163	100.0	3.6
Mammal	152	93.3	
Oyster	11	6.7	
Floral	8		0.2
Fuel	73		1.6
Personal	31		0.7
Miscellaneous	238		5.3
Prehistoric	2		<0.1
TOTAL	4,525		100.0

Datable artifacts identified from the Kielkopf Site include nails, vessel glass with and without maker's marks, ceramics with and without maker's marks, ammunition, and a 1926 penny (Table B). Of the 1,166 nails that are identifiable as to method of production, 27 (2 percent) are hand wrought (pre-1840), 827 (71 percent) are machine-cut (1795-1880) and 312 (27 percent) are wire (1880-present) (Edwards and Wells 1993). Different types of temporally distinct glass production methods or styles in the glass assemblage include blown-in-mold with applied lip (ca. 1840-1920), automatic machined bottle glass (1904-present), solarized (amethyst-colored) glass (ca. 1880-1914), and crown cap lips (1892-present). Two glass fragments contain maker's marks dating from 1910-1935 (Lysol, Fike 1971:100) and 1930-present (Rockware Glass Ltd., Toulouse 1971:434).

Pre-1830s ceramics include Jackfield, plain and annular creamware, and pearlware including shell-edged, hand painted, transfer printed, and annular (Figure 29; Table C). One of the pearlware sherds is stamped Adams Staffordshire, dating to ca. 1810-1825 (Godden 1991). Other sherds that date to the early- to mid-nineteenth century include annular yellowware, American gray salt-glazed stoneware, and American Albany Slip stoneware. One ironstone sherd is stamped John Wedgewood, dating from 1841-1860 (Godden 1991:687). The majority of the ceramic sherds (Table C) are whiteware (post-1820) (Noel Hume 1969; Majewski and O'Brien 1987). Ammunition in the form of shotgun shell casings and rifle shell casings date from 1867-1934.

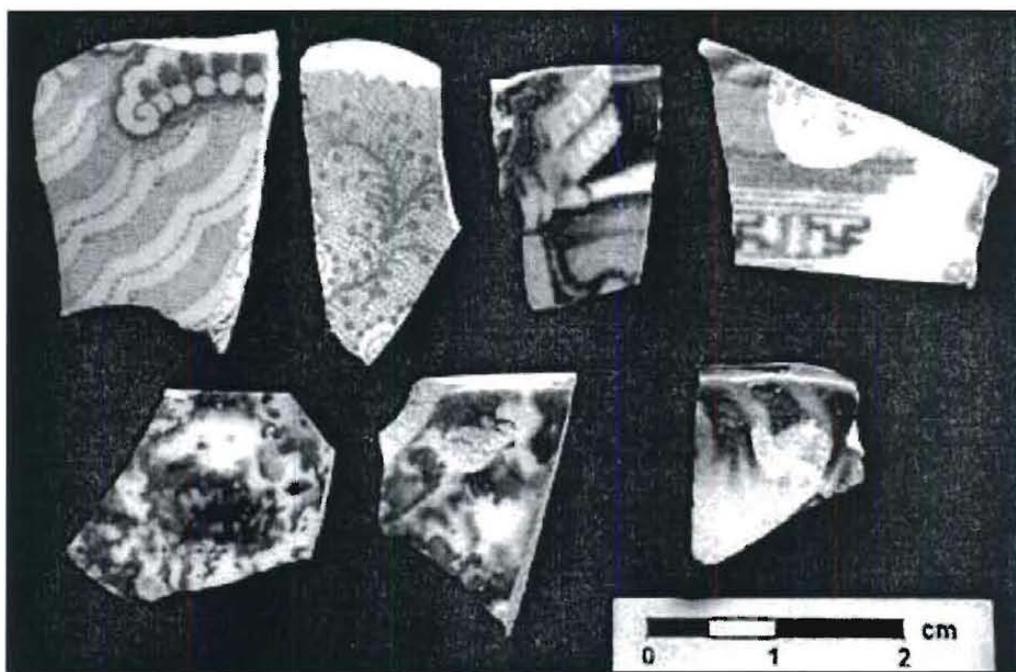


Figure 29: Selected Ceramics from the Kielkopf House Site

Table B: Temporally Diagnostic Artifacts by Type for the Kielkopf House Site

Artifact	Type	Manufacturer/Place	Manufacturing Dates	Terminus Post Quem	Reference
Nail	Wrought	England, Netherlands, France, North America (United States, Canada, French Louisiana, Spanish Florida)	Pre-ca.1790-1840	1790	Noel Hume 1969:253; Edwards and Wells 1993:6-16
Nail	Cut	England, France, United States	ca. 1795-present	1795	Edwards and Wells 1993
Nail	Wire		ca. 1880-present	1880	Edwards and Wells 1993:16
Glass	Blown in Mold, Applied Lip		ca. 1840-1920	1840	IMACS June 1992
Glass	Automatic bottle machine (Owens or later)		1904-present	1904	IMACS June 1992; Stelle 2001
Glass	Solarized glass (amethyst)		1880-1914	1880	Kendrick 1971:55
Glass	Crown Cap		1892-present	1892	IMACS 1984
Glass	Pharmacy bottle panel	S.B. Catarrah Cure; Smith Brothers, Fresno, California	??-1920 (end of blown-in-mold)		Fike 1987:105
Glass	Pharmacy bottle panel, blown-in-mold	J. W. Bull's Cough Syrup, Baltimore, Maryland	1852-1920	1852	Fike 1987:224;
Glass	Green, Blown-in-post-bottom mold	Larkin Soap Co., Buffalo, New York	1878 (incorp. date) – ca. 1920 (end of blown-in-mold)	1878	Fike 1987: 67; LaChiusa 2001
Glass	Aqua glass fruit jar fragment		1885-1920		Toulouse 1969
Bottle mark	Amber glass bottle	Lysol	1910-1935	1910	Fike 1971:100
Bottle mark	Green automatic bottle machine soda bottle	Rockware Glass, Ltd., Greenford, Middlesex, England	1930-present	1930	Toulouse 1971: 434
Ceramic	Whiteware, plain	England	1820-present	1820	Noel Hume 1969
Ceramic	Whiteware, blue shell-edged	England	1820-1900+	1820	South 1977; Noel Hume 1969
Ceramic	Whiteware, annular	England	1830-1900	1830	Price 1979:18; Noel Hume 1969:131

Table B: Temporally Diagnostic Artifacts by Type for the Kielkopf House Site

Artifact	Type	Manufacturer/Place	Manufacturing Dates	Terminus Post Quem	Reference
Ceramic	Whiteware, transfer printed	England	1830-1900	1830	Price 1979:19; Noel Hume 1969
Ceramic	Whiteware, hand painted	England	1820-1900	1820	Noel Hume 1969
Ceramic	Whiteware, decalomania	England, United States (Ohio)	1890-1930s	1890	Stelle 2001
Ceramic	Pearlware, plain	England	1770s-1830s	1770s	Price 1979:10; Noel Hume 1969: 128-129; Seidel 1990:93
Ceramic	Pearlware, hand painted	England, United States, and Europe	1795-1815	1795	South 1977
Ceramic	Pearlware, blue shell-edged	England	1780-1830	1780	Price 1979:10-11; Noel Hume 1969: 126-131
Ceramic	Pearlware, transfer printed	England	1795-1830	1795	South 1977
Ceramic	Pearlware, annular	England	1795-1830	1795	Noel Hume 1969
Ceramic mark	Pearlware, hand painted	William Adams & Sons, Staffordshire Potteries, England	1810-1825	1810	Godden 1991: 21
Ceramic	Creamware, plain	England	1762-1820	1762	Noel Hume 1969
Ceramic	Creamware, annular	England	1780-1815	1780	South 1977
Ceramic	Yellowware, annular	England, United States	1827-1922	1827	Ketchum 1971
Ceramic	Jackfield	England	1745-1790	1745	Noel Hume 1969:123
Ceramic	Stoneware, American Gray	United States	1730-1900s	1730	Noel Hume 1969:101; Turnbaugh 1985: 22; Ketchum 1987
Ceramic	Stoneware, American-Albany Slip	United States	1850-1900	1850	Noel Hume 1969:101
Ceramic mark	Ironstone	John Wedgewood	1841-1860	1841	Godden 1991:687
Ceramic mark	Ironstone	Liverpool Pottery Co., Waco China	1896-1901	1896	Gates and Ormerod 1982:43 http://pages.tias.com/947/PictPage/1418384.html (picture of mark)

Table B: Temporally Diagnostic Artifacts by Type for the Kielkopf House Site

Artifact	Type	Manufacturer/Place	Manufacturing Dates	Terminus Post Quem	Reference
Ceramic	Bisque Doll	Armand Marseille	1885-1925+	1885	http://www.antiquedoll.com/am_dolls.htm
Ammunition	Rimfire cartridge	Union Metallic Cartridge Company/ Remington Arms-Union Metallic Cartridge Co./ Remington Arms Company, Bridgeport, Connecticut	1867-present	1867	White and Munhall 1977:31 Steinhauer 2002
Ammunition	Shotgun shell	Union Metallic Cartridge Co. Bridgeport, Connecticut	1867-1911	1867	White and Munhall 1977: 148, Steinhauer 2002
Ammunition		Winchester Repeating Arms Co., New Haven, Connecticut	1866-1932	1866	White and Munhall 1977:23 Steinhauer 2002
Coin	Cent	Lincoln penny	1926 (Philadelphia)	1926	

Food and liquid containers included glass bottle fragments, canning jar fragments and lid liners (fruit jars), beer, wine and soft drink bottle fragments, and embossed and paneled pharmacy bottle fragments (Table B). Other food and drink containers or storage items included glass drinking tumbler fragments, porcelain, ironstone, creamware, pearlware, whiteware, stoneware holloware and flatware, and a tin can key.

Table C. Ceramic Artifacts from the Kielkopf House Site.

Ceramic Type	Count	Percentage
Creamware	35	5.1
Plain	34	
Annular	1	
Ironstone	97	14.1
Pearlware	111	16.1
Plain	55	
Hand painted	12	
Blue shell-edged	8	
Green shell-edged	1	
Transfer printed	8	
Annular	27	
Porcelain	21	3.0
Hard paste	21	
Redware	101	14.7
Ceramic Type	Count	Percentage
Imitation Jackfield	2	
Other	99	
Rockingham/Bennington	7	1.0
Stoneware	8	
American, gray salt-glazed	6	
American, Albany slip	1	
Other	1	
Whiteware	306	44.4
Plain	194	
Hand painted	51	
Blue shell-edged	6	
Red shell-edged	1	
Transfer printed	19	
Annular	10	
Blue Willow	1	
Chelsea	1	
Decalomania	6	
Lined	6	
Other	11	
Yellowware	5	0.7
Plain	4	
Annular	1	
Unidentified	6	0.9
Total	697	100.0

Conclusions

Oral history and archival records produced an abundance of detailed historical information associated with the site. The historical records associated with the property, the existence of a living member of the Kielkopf family, and archaeology completed to date collectively maximize the site's research potential. In fact, the Kielkopf House Site investigations benefited to a greater extent from associated historical records than from archaeological investigations. Of particular importance to the investigation were the recollections of Mr. Fred Kielkopf and the availability of numerous historical photographs of the Kielkopf property and its vicinity. These records, in conjunction with the archaeological record have revealed the following information. No evidence of an earlier structure from the 1868, 1881, and 1893 atlases was found within the project area. The assumption is that any pre-1880s component was destroyed when the Kielkopf house and blacksmith shop were constructed, and further erased from the archaeological record when the house and shop were later destroyed. The remains of the Kielkopf house/cellar, well and privies were located, although all the features and the yard area around the Kielkopf house were disturbed to varying degrees by bulldozer activity associated with demolition of all structures in the late 1980s. The ground slopes down from the well area to the cellar, and concrete slabs between the house and blacksmith shop – along with the upper portion of the cellar walls - were pushed into the cellar.

The artifact assemblage recovered from the site appears to be associated with the Kielkopf family occupation from the late 1880s through much of the 20th century, with most of the assemblage comprised of cut, wire and unidentified nails; whiteware; machine-made bottle glass; brick fragments; and window pane glass. The 111 pearlware and 35 creamware sherds were found site-wide in both STPs and TUs. Quantities of one to six sherds were recovered from Strata A and B in eight STPs, and in TUs 1, 3, 6, 7, 8, and Trenches 9 and 10. A ninth STP (N147/E199) yielded 20 creamware and pearlware sherds in Stratum C, the same level as the sidewalk (Feature 4). TU 7 and STP N116/E188.5 also produced creamware and pearlware sherds in Stratum C (n=7 sherds). All creamware and pearlware were recovered from mixed contexts containing modern artifacts, likely due to site disturbance resulting from demolition. Artifacts and features were found to suggest life within the Kielkopf household (i.e., hooks/eyes, pipes, preserving jars, doll parts, glass marbles, etc.), activities (i.e., blacksmithing) and socio-economic status of the occupants (i.e., types of refined ceramics; privies versus indoor plumbing, etc.). The few artifacts recovered from an earlier period (i.e., creamware, pearlware and machine cut nails) may or may not be associated with an earlier occupation of the property, but will remain an unsolved mystery due to demolition effects.

The Delaware SHPO suggested that removal of the structures did not necessarily alter the property's eligibility. However, demolition across the site has compromised the site's integrity, which according to Delaware standards, must be high for sites dating from the late-19th century. Even if the site's integrity was intact, the actual area to be impacted by construction was minimal. The northern end of the ROW was outside of the Kielkopf tract on the Dugan/Carty tract. Archival records indicate that the house on the Dugan/Carty tract was outside of both the ROW and the limits of construction; field observation placed the foundation slightly within the ROW but still outside of the LOC. STPs on the Dugan/Carty tract failed to find the house, but did locate a brick-lined well, slightly collapsed, but mostly intact. The Dugan/Carty well is

within the ROW, but outside the LOC, as are the Kielkopf privies and water well (Features 8, 9, 10, and 11). Thus, only the east and south portions of the Kielkopf cellar were within the LOC and would have been directly impacted by the original construction plan, but were avoided when plans were altered.

DelDOT further agreed to limit the construction impact on the site by placing only one utility pole with two anchor wires within the site in an already disturbed area south of the main house. DelDOT also agreed to remove only the south portion of the high curb and to cover the site with fill-dirt as protection. The high curb was removed and no features or intact buried cultural horizons were identified in the profile of the exposed area. DelDOT has no further plans that will impact the Kielkopf House Site. Therefore, Parsons recommends that no further cultural resource investigations be required at the Kielkopf House Site.

REFERENCES CITED

Baist, G. William

1893 *Atlas of the State of Delaware*. G. William Baist, Philadelphia. Available on microfiche at the Delaware State Archives, Dover.

Beers, D.G.

1868 *Atlas of the State of Delaware*. Pomeroy & Beers, Philadelphia. Available on microfiche at the Delaware State Archives, Dover.

Caley, George L. Caley

n.d. *Postcards of Yesteryear 1893-1926 Delaware and Elsewhere*. Shane Quality Press, Smyrna, Delaware.

Delaware State Historic Preservation Office

1993 *Guidelines for Architectural and Archaeological Surveys in Delaware*. Dover, Delaware.

Edwards, Jay D., and Tom Wells

1993 *Historic Louisiana Nails: Aids to the Dating of Old Buildings*. Geoscience Publications. Department of Geology and Anthropology, Louisiana State University. Baton Rouge, Louisiana.

Fike, Richard E.

1987 *The Bottle Book: A Comprehensive Guide to Historic, Embossed Medicine Bottles*. Gibbs M. Smith, Salt Lake City.

Gaston, Mary Frank

1996 *Blue Willow: An Identification and Value Guide*. Revised Second Edition. Collector Books, Paducah, Kentucky.

Gates, William C., Jr. and Dana E. Ormerod

1982 *The East Liverpool, Ohio, Pottery District: Identification of Manufacturers and Marks*. *Historical Archaeology* 16:1-358.

Godden, Geoffrey A.

1991 *Encyclopedia of British Pottery and Porcelain Marks*. Barrie & Jenkins, London.

Heite, Louise

1972 *Appoquinimink: A Delaware Frontier Village*. Manuscript on file at the Delaware State Historic Preservation Office, Dover, Delaware.

Hopkins, G.M.

1881 *Map of New Castle County, Delaware, From Actual Surveys and Records*. G.M. Hopkins, & Company, Philadelphia, Pennsylvania. Available at the Geography & Map Division of the Library of Congress, Washington, DC.

Jones, Olive and Catherine Sullivan

1985 *The Parks Canada Glass Glossary. Studies in Archaeology, Architecture and History.* National Historic Parks and Sites Branch, Parks Canada, Environment Canada.

Kendrick, Grace

1971 *The Antique Bottle Collector.* Harcourt Brace Jovanich, New York.

LaChiusa, Chuck

2001 Buffalo as an Architectural Museum: John D. Larkin. Buffalo Preservation Scroll, Home page of the Preservation Coalition of Erie County.
<http://bfn.org/preservationworks/bam/archs/wright/lark/hp/>. (November 21, 2002)

Majewski, Teresita and Michael J. O'Brien

1987 The Use and Misuse of Nineteenth-Century English and American Ceramics in Archaeological Analysis. In *Advances in Archaeological Method and Theory, Volume 11*, edited by Michael B. Schiffer, Academic Press, San Diego.

Miller, George L.

1980 Classification and Economic Scaling of 19th Century Ceramics. *Historical Archaeology* 14:1-40.

1991 A Revised Set of CC Index Values for Classification and Economic Scaling of English Ceramics from 1787 to 1880. *Historical Archaeology* 25(1):1-25.

Mandes, Louis

1950 *Odessa.* Manuscript on file at the Corbit-Calloway Museum, Odessa, Delaware, dated April 11, 1950.

Munsey, Cecil

1970 *An Illustrated Guide to Collecting Bottles.* Hawthorne Books.

National Register of Historic Places

1969 *National Register of Historic Places Inventory-Nomination Form: Historic Odessa.* Prepared by Historic District Commission, Winterthur Museum, Wilmington, Delaware. On file at the State Historic Preservation Office, Dover, Delaware.

1981 *National Register of Historic Places Inventory-Nomination Form: Odessa Historic District – An Amendment.* Delaware Cultural Resource Survey N-126. On file at the State Historic Preservation Office, Dover, Delaware.

Noel Hume, Ivor

1969 *A Guide to Artifacts of Colonial America.* Alfred A. Knopf, New York.

Price, Cynthia R.

1979 *Nineteenth Century Ceramics in the Eastern Ozark Border Region.* Monograph Series No. 1, Center for Archaeological Research, Southwest Missouri State University, Springfield.

Schwartz, Sally

1972 *Cantwell's Bridge, Delaware, 1770-1860*. Thesis submitted for BA with Distinction in History, University of Delaware, Newark, Delaware, May 1974.

Seidel, John

1990 "China Glaze" Wares on Sites from the American Revolution: Pearlware Before Wedgwood? *Historical Archaeology* 24(1):82-95.

South, Stanley

1977 *Method and Theory in Historical Archaeology*. Academic Press, New York.

Steinhauer, Carl

2002 Centerfire Shotshells: Shotshell Head Stamp Identification.
<http://members.shaw.ca/cstein0/shotgun.htm>. Last Updated September 26, 2002 (November 20, 2002).

Stelle, Lenville J.

2001 An Archaeological Guide to Historic Artifacts in the Upper Sangamon Basin. Parkland College, Champaign, Illinois.
<http://virtual.parkland.cc.il.us/lstelle1/len/archguide/documents/arccguide.htm>. (November 20, 2002).

Toulouse, Julian

1971 *Bottle Maker's and Their Marks*. Thomas Nelson, Inc., New York.

Turnbaugh, Sarah P.

1985 Introduction. In *Domestic Pottery of the Northeastern United States, 1625-1850*, edited by Sarah P. Turnbaugh, pp. 1-26. Academic Press, New York.

UD History Department

1972 *Interim Project Summary, Documenting, Preserving and Interpreting an Historic Village, Odessa, Delaware, 1750-1800*. Prepared for the Henry Francis du Pont Winterthur Museum, of Winterthur, DE, by the History Department of the University of Delaware, Newark.

White, Henry P. and Burton D. Munhall

1977 *Cartridge Headstamp Guide*. Revised by R.T. Huntington and D.R. Dunn. H.P. White Laboratory, Bel Air, Maryland.

APPENDIX A FEATURE DESCRIPTIONS

Features 1 and 3 (TU1):

Features 1 and 3 were modern disturbances, more than likely the location of the old Tidewater Utilities sign (personal communications with Tidewater Utilities employees). Contained both historic artifacts and plastic fragments.

Feature 2 (STP):

Feature 2 was a historic sidewalk from the Du Pont Highway construction early 1900s (Figure 30). Concrete sidewalk edged with brick; feature was defined on the west side of the walkway. It is not known if the concrete section of the sidewalk was contemporaneous with the concrete/cement sidewalk in front of the Kielkopf House seen in Figures 8, 11, and 12).



Figure 30: Historic sidewalk (Feature 2)

Feature 4 (STP):

Feature 4 consisted of three vertical bricks in a short alignment perpendicular to the sidewalk and street. The feature was probably a walkway or garden feature for the Dugan/Carty property to the north; no mortar was associated with the feature.

Feature 5 (TUs 2, 6, and 8):

Feature 5 consisted of the walls of a full cellar found in three locations in front area (east portion) of the Kielkopf house (Figure 31). Large water-worn cobbles and lime mortar were used in the construction of the cellar, located under the front room of the house. The walls were partially intact in TU2 (northeast corner of cellar) where the bulldozer could not easily push in the walls. The upper 1 meter of the west and south walls of the cellar (TUs 6 and 8) were bulldozed into the cellar. The two units contained large chunks of concrete from the area between the house and blacksmith shop, which was almost entirely covered with concrete by the 1980s. The entrance was from the center of the north side of the house, and after the shed roof addition was added on the north side, the entrance to the cellar was then covered. All three units contained modern fill from the bulldozing of the house. TU 8 straddled the south wall and revealed no exterior construction trench for the cellar walls.



**Figure 31: Northeast Corner of Feature 5, Cellar Wall (TU2).
Note the Facia Board Impression in the Concrete Curb**

Feature 6 (designation not used in field)**Feature 7 (TU 5):**

Feature 7 was a brick lined well on the Dugan/Carty lot north of the Kielkopf property. The well was located south central in the lot. The construction of the well was mixed solid brick and three holed brick and capped with concrete (Figure 32). A poor job of filling in the well left cavities and concrete slabs thrown into the hole, and part of the wall was collapsing, but largely still intact. Nearby STP encountered sinkhole on outside of well revealing the exterior of the brick feature.



Figure 32: Brick-lined well (Feature 7) located on the Dugan/Carty property north of the Kielkopf House; STP in forefront

Features 8 and 9 (TU3):

Features 8 and 9 were two privy shafts on the backside (west) of the blacksmith shop. A cypress post in Feature 9 could be from Feature 10, WPA privy slab support system, constructed in the 1930s.

Feature 10:

Feature 10 was a WPA-era privy slab, for a one-hole outhouse (Figure 33). Two metal braces were present on the top of the slab for holding down the upper framework of the latrine. Construction impacted the privy shafts of Features 8 and 9. The area under the slab was still not filled in during the current investigations. Mr. Kielkopf remembered when his parents bought the privy from a WPA representative in the 1930s, similar to that depicted in Figure 34.



Figure 33: WPA Concrete Privy Slab (Feature 10)

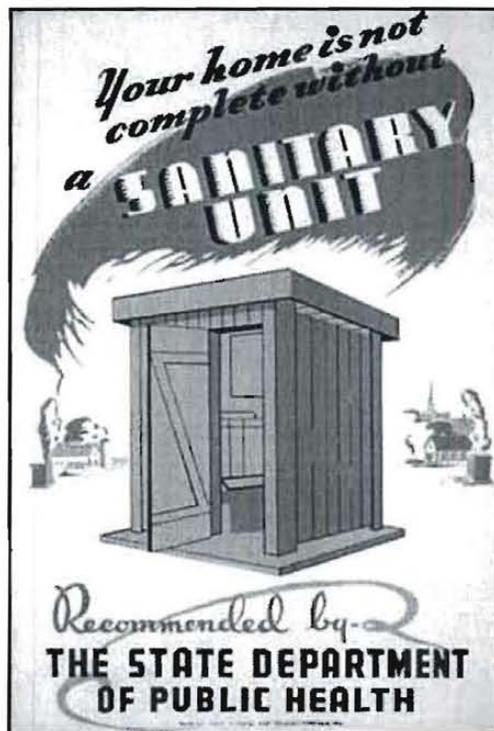


Figure 34: Privy from the WPA era (Library of Congress' American Memory website at <http://memory.loc.gov/>)

Feature 11 (TU7):

Feature 11 was a hand dug, brick lined well, believed to date to the construction of the Kielkopf House, in the late 1880s. Mr. Kielkopf stated that the well was a “cucumber well”, a wooden feature using a wooden post inside a wooden shaft to siphone water up from the well into the catch basin. The well was filled in during the 1940s or early 1950s, and the upper layers of brick either collapsed or were robbed (personal conversation with Fred Kielkopf, September 7, 2000). A concrete slab with a built-in “trough” was located next to well area to the west and was used as a platform for a catch basin (Figure 35). A modern metal drainpipe took overflow water to the storm drain to the south of the house by the highway curb. Brick was not encountered during the current investigations, but a reddish orange subsoil fill was found in approximately 25% of the circumference of the well in TU7. Four bricks were in alignment just below the ground surface, believed to represent the base of a platform around the well area. A concrete “post” was seen under the edge of the concrete platform (Figure 36). Concrete had been poured into a form made by narrow wooden slats, possibly for a support post for the concrete slab.

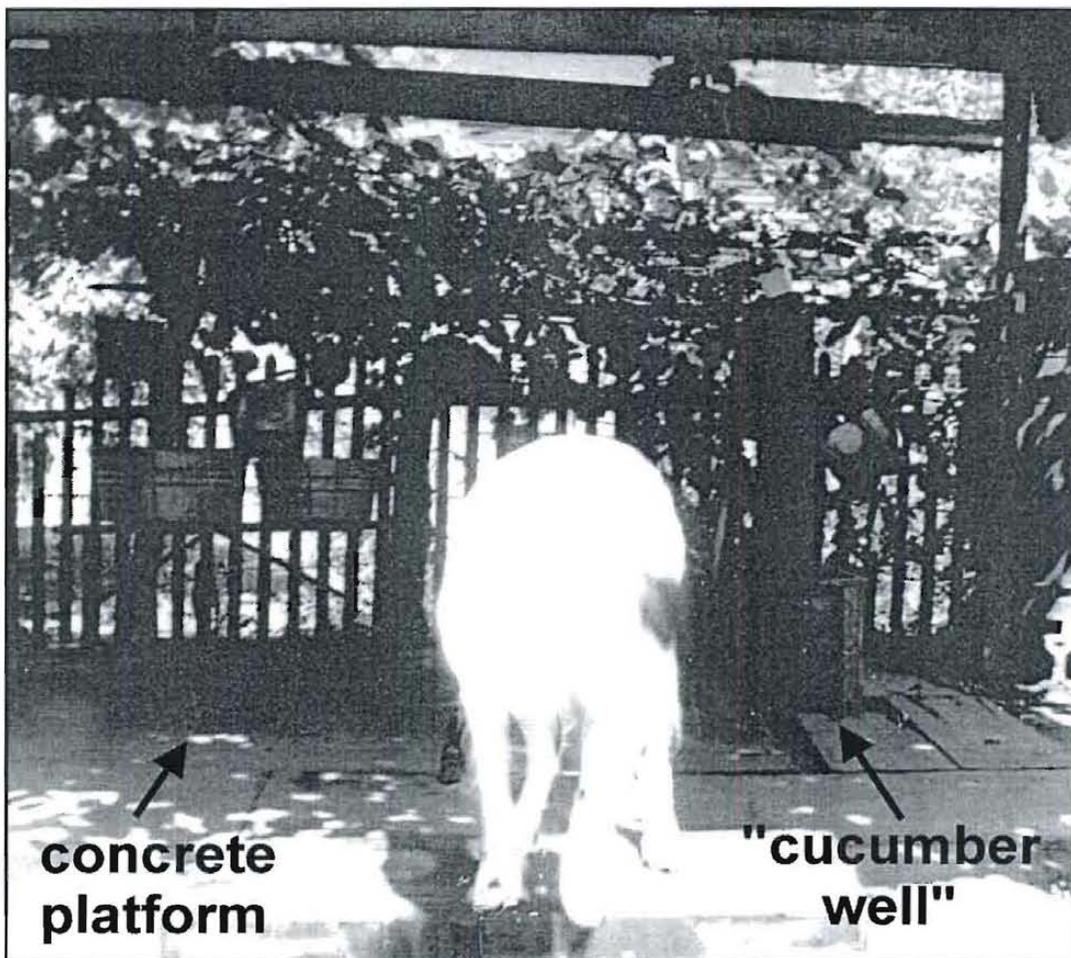


Figure 35: The “Cucumber Well” and Concrete Platform Between the Kielkopf House and Newer Blacksmith Shop

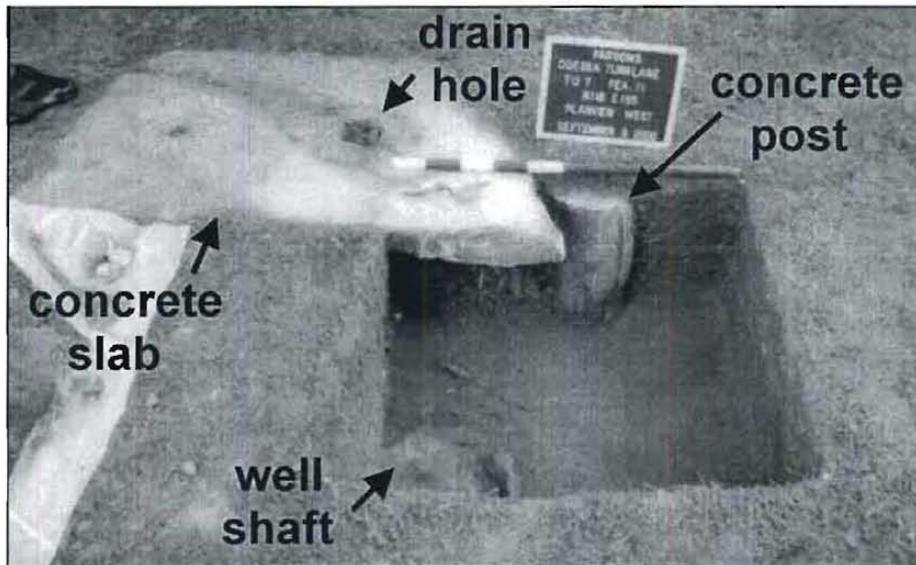


Figure 36: Kielkopf House Well (Feature 11), Concrete Post and Concrete Platform

Feature 12 (TU8):

Feature 12 consisted of a series of bricks used for the footers of the small south side porch observed in Figure 12 (Figure 37). The construction probably dates to the construction of the newer front porch, sometime between 1905-1915. Located on the north side of the alignment next to cellar/foundation wall was a thick copper rod/wire extending into the ground, probably a lightning rod ground cable.

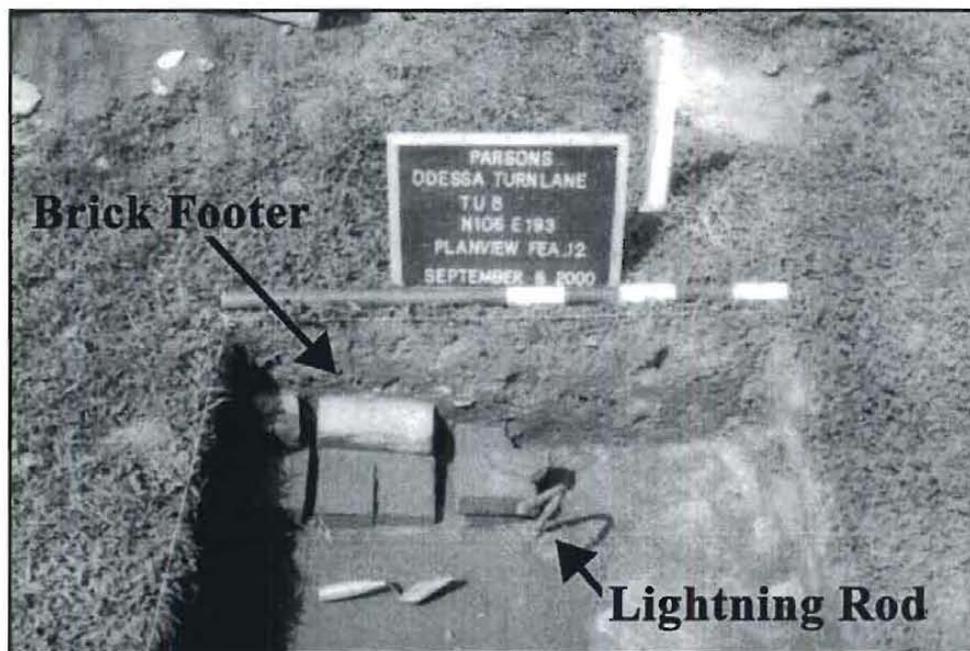


Figure 37: Brick Footers (Feature 12) for the South Side Porch on the Kielkopf House