

## 5.0 FIELD RESULTS

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### 5.1 Parcel 1

The landform in Parcel 1 yielded a stratigraphic profile indicative of a once-active plowed agricultural setting converted into a manicured yard area (Photograph 1) (Figure 9). The test pit excavations produced a 4.0- to 9.0-centimeter thick very dark grayish brown (10YR 3/2) silt loam sod horizon capping a 16.0- to 26.0-centimeter thick brown (10YR 4/3) silty clay plowzone horizon. Beneath the plowzone, the excavations exposed a dark yellowish brown to yellowish brown (10YR 4/6 to 5/6) silt loam to silty clay subsoil (E) horizon (Appendix D). Pockets of fill deposits were recorded in Parcel 5. STP 1-3, Stratum II (5.0 to 1.0 centimeters below surface [cmbs]) produced a dark yellowish brown (10YR 4/4) silt loam fill deposit overlying the plowzone horizon. A mottled dark yellowish brown (10YR 4/4) and yellowish brown (10YR 5/6) clay loam fill horizon was noted in Stratum II, 4.0 to 30.0 centimeters below surface in STP 1-5, and in Stratum I, 0.0 to 30.0 centimeters below surface in STP 1-4. STP 1-4+25E produced a yellowish brown (10YR 5/8) sand fill deposit 24.0 to 31.0 centimeters below surface in Stratum II.

A small number of cultural materials were recovered from the plowzone and fill deposits in Parcel 1. Much of the collection consisted of architecturally related items, including four brick fragments, six fragments of window glass, three fragments of coal, three fragments of colorless vessel glass, and one fragment of industrial porcelain (Appendix E). In addition, two precontact artifacts, one quartz flake and one argillite flake, were recovered from a fill deposit in STP 1-4. Four radial STPs were excavated at 7.6-meter intervals along the grid surrounding the isolated find, but no additional precontact artifacts were recovered. No prehistoric or historic features were identified within Parcel 1.

### 5.2 Parcel 2

Archaeological testing in Parcel 2 exposed an intact landform supporting minor fill episodes (Photograph 2; Figure 9). STP 2-1 and STP 2-5 revealed a 25.0- to 29.0-centimeter thick dark brown to dark grayish brown (10YR 3/3 to 4/2) silty clay Ap-horizon overlying a strong brown to yellowish brown (7.5YR 4/6 to 10YR 5/8) silty clay subsoil horizon (B). STP 2-2 and STP 2-3



**Photograph 1:** Parcel 1, view south (April 2005).



**Photograph 2:** Parcel 2, view west (April 2005).

revealed the Ap- and B-horizon stratigraphy as well, but these natural horizons were capped with 30.0 to 48.0 centimeters of modern stratified fill episodes. STP 2-4 did not yield an Ap- or B-horizon, but consisted of stratified fill deposits extending to the end of excavation at 100.0 centimeters below surface (Appendix D).

A total of 303 artifacts were recovered from Parcel 2, 89.8 percent (n=272) of which were classified as architectural items (Appendix E). Architectural artifacts included 54 fragments of window glass, 17 fragments of lumber, 13 fragments of brick, and 24 fragments of mortar. Other architecturally related artifacts included 49 fragments of plaster, 26 fragments of plaster with paint, and 24 paint chips. Fasteners included nine wire nails, two cut nails, one iron hook, one bolt, and one fragment of wire. Roofing and siding-related artifacts included 17 tar shingles, four asbestos tiles, and two slate fragments. Other items included 15 fragments of concrete, four fragments of yarn carpet fiber, three fragment of coal slag, two coal, and two fragments of lamp glass.

A smaller number of artifacts associated with kitchen activities were recovered as well. Nondescript colorless bottle glass (n=9), aqua bottle glass (n=2), and amber bottle glass (n=1) represent the sparse remains of glass containers found in the assemblage. Evidence of ceramics were limited as well, with one sherd of lead glaze redware, a sherd of manganese glaze exterior, brown salt glaze interior redware, and two undecorated fragments of whiteware found in Parcel 2. Personal artifacts included a painted brown two-hole button, a white four-hole button, and two fragments of mirrored glass. Both buttons were identified as Prosser buttons, a mid- to late-nineteenth-century porcelain button created by compressing a dry clay and metal oxide mixture into a mold, then firing and glazing the resulting form (Porcelain or Glass: Buttons from the Fischer Site website, accessed 31 May 2005). Three fragments of bone were also recovered from Parcel 2.

Other artifacts from Parcel 2 included modern debris, such as plastic (n=2), cellophane (n=2), one piece of PVC pipe, one fragment of foil, one aluminum can fragment, and one piece of unidentified metal.

The distribution of the artifact assemblage poses an interesting view of landscape modification. Analysis of the horizontal distribution of the artifact collection indicates that the largest quantity of artifacts trends toward the northeast corner of the parcel. STP 2-4 produced over 256 artifacts dispersed between four separate fill episodes extending to 100.0 centimeters below surface, whereas STP 2-5 contained one window glass fragment in the plowzone horizon. In general, the content of each fill horizon in STP 2-4 included modern refuse, including lumber fragments, plastic, wire nails, asphalt, plaster fragments, yarn, and other demolition debris, mixed in with a small number of historic artifacts. The greatest number of modern artifacts (n=113) were recovered in Stratum IV, 78.0 to 100.0 centimeters below surface, with decreasing artifact counts in the overlying fill deposits. Window glass (n=15), paint chips (n=16), painted plaster fragments (n=26), mortar (n=20), and cement (n=12) fragments represent some of the modern refuse found in Stratum IV. Other than an unidentifiable metal fragment in the B-horizon of STP 2-1, the B-horizon was void of any cultural materials. Such a mixture of modern building debris and a small number of historic artifacts is interpreted to represent the spoils from the demolition of the early- to mid-twentieth-century structures adjacent to SR 141, as depicted on the *circa*-1950s DelDOT road contracts, graded and dispersed across Parcel 2.

The concentration of fill and refuse in STP 4 is attributed to twentieth-century infilling of a low area on the property, but not a depression associated with a foundation or structure(s) identified on mid-nineteenth-century maps of the project area. First, no foundation remains, soil stains, or other features indicative of a mid-nineteenth-century structure were identified in STP 2-4 or in Parcel 2. Second, the artifact collection overwhelmingly represents a general mix of twentieth-century architectural refuse interspersed with a few mid- to late-nineteenth-century items. If the in-filled depression represented a cellar, well, or other feature of a mid-nineteenth-century domestic occupation, it is anticipated that a larger variety of domestic items would be found in the artifact collection. Third, STP 2-4 is located at the bottom of a slope and in close proximity to the floodplain of Little Mill Creek. It was noted in the geomorphologic investigation of the project area that a swampy setting resides south of the creek, approximately 22.9 to 30.5 meters southeast of STP 2-4. It is unlikely that a structure, or a well, would be placed on a low-lying setting adjacent to a swampy section of floodplain, especially one prone to flooding.

### 5.3 Parcel 3

Parcel 3 consists of an approximately 76.2-meter long by 39.6-meter wide area east of SR 141 comprising the wooded uplands adjacent to the south side of Little Mill Creek (Photograph 3). The test pits excavated in Parcel 3 revealed evidence of disturbance, varying from minor episodes of fill at the southern end of the lot to prominent rubble deposits at the northern end (Figures 9 and 10). Recent deposits of concrete and asphalt rubble were noted along the eastern edge of the APE in Parcel 3. Excavations of STP 3-2 and STP 3-3 were discontinued when asphalt was discovered at 32.0 and 40.0 centimeters, respectively, below surface. The excavation of STP 3-7 was terminated at 32.0 centimeters below surface when impenetrable concrete was discovered at 32.0 centimeters below surface. STP 3-5 and STP 3-6 yielded a dense layer of rock fill at approximately 80.0 centimeters below surface. STP 3-1 and 3-4 along the southern end of the parcel, away from the creek, evidenced an intact subsoil horizon stripped of the plowzone and capped with numerous fill episodes. STP 3-1 produced a yellowish brown (10YR 5/4) silt loam subsoil horizon at 65.0 centimeters below surface, while STP 3-4 contained a strong brown (7.5YR 4/6) silt loam subsoil at 61.0 centimeters below surface (Appendix D).

A total of 87 artifacts were recovered from Parcel 3. Kitchen activity-related artifacts include colorless glass (n=38), aqua glass (n=3), colorless tumbler glass (n=1), olive glass (n=1), and rose glass (n=1). STP 3-4, Stratum IV (36.0 to 61.0 cmbs) produced fragments of a machine-made screw-top colorless bottle, typical of twentieth-century mass-produced containers. The ceramic assemblage yielded a mixture of early- through late-nineteenth-century wares, with nine fragments of whiteware, three fragments of redware, two fragments of porcelain, two fragments of pearlware, and one fragment of yellowware recovered from the fill deposits. Decorated sherds, including blue painted pearlware (n=2), blue transfer print whiteware (n=1), polychrome decal whiteware (n=1), blue transfer print porcelain (n=2), and plain wares were present in the assemblage. Two fragments of a can were also recovered (Appendix E).

Architectural items recovered from Parcel 3 include window glass (n=8), lamp glass (n=5), concrete (n=3), and unidentifiable nail fragments (n=2). Other artifacts recovered from Parcel 3 included two fragments of slag, one brick fragment, one fragment of asphalt, a fragment of a bakelite clay pigeon, and a leather watchband.



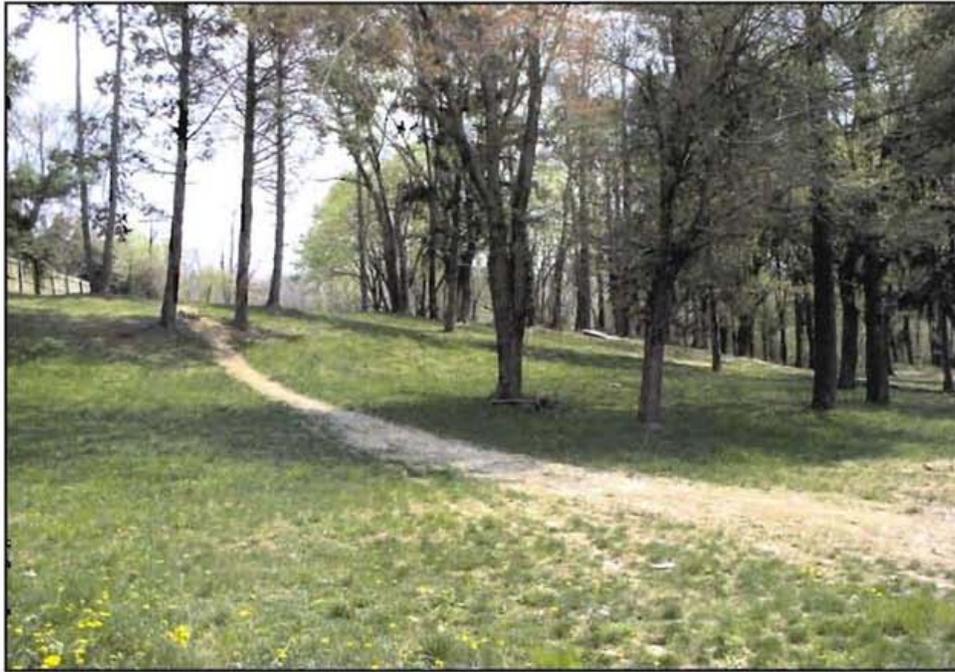
**Photograph 3:** Parcel 3, view northwest (April 2005).

The context of the artifact collection offers little information as to the origin and provenience for the deposits. The assemblage was recovered exclusively from fill horizons, and the survey did not identify any particular deposits extending over the entire parcel to suggest a single fill episode. While STP 3-4, Stratum IV, yielded a variety of nineteenth-century ceramics (n=11), the largest number of ceramics overall in Parcel 3, these historic artifacts were found mixed with modern refuse, indicating the disturbed nature of the fill horizon. It is suggested that the historic artifacts recovered in Parcel 3 represent household refuse from the residence depicted on the mid- to late-nineteenth-century maps in the Parcel 2/3 area. However, twentieth-century development of SR 141, and possibly demolition activities associated with the mid- to late-twentieth-century structures adjacent to SR 141 in Parcel 2, have disturbed the original context of these deposits, eliminating the potential to positively identify their association with the property.

#### **5.4 Parcel 4**

Parcel 4 consists of a 83.8-meter long by 167.6-meter wide area east of SR 141 comprising the wooded uplands adjacent to the floodplain on the north side of Little Mill Creek (Photograph 4; Figure 10). This section of ground resides just north of a large sanitary sewer line running parallel to Little Mill Creek. A total of 58 STPs were excavated within Parcel 4.

A variety of soil profiles reflecting man-made disturbances and natural landscape setting were encountered in Parcel 4. Test pit excavations in the western and southwestern portion of the lot exposed highly disturbed soil profiles. In general, STPs within Rows 1 and 2 yielded four to six 15.0- to 20.0-centimeter thick silt loam to sand loam fill horizons composed of very dark grayish brown (10YR 3/2), dark yellowish brown (10YR 3/4 to 4/6), brown (10YR 4/3), strong brown (7.5YR 5/8), and dark brown (7.5YR 3/4) soils. A yellowish brown (10YR 4/6) silty clay subsoil horizon was noted at 58.0 centimeters below surface in STP 2B and at 78.0 centimeters below surface in STP 2D. The remaining test pits in Row 1 and 2 yielded fill deposits to the bottom of excavation. Evidence of rubble deposition was noted in the fill horizons. STP 1B exposed a rock fill horizon at 24.0 centimeters below surface, while STP 2C recovered an impenetrable rock layer at 96.0 centimeters below surface. A mix of rock and asphalt was noted at 45.0 centimeters



**Photograph 4:** Parcel 4, view east (April 2005).

below surface in STP 1C. STP 1D produced concrete rubble at 51.0 centimeters below surface (Appendix D).

Soil profiles of test pits placed to the east of Row 2 illustrated a transition from extensive fill deposits to shallow fill episodes above a truncated subsoil horizon. STP 3B evidenced four separate fill horizons overlying a dark yellowish brown (10YR 4/6) clay silt subsoil from 67.0 centimeters to the end of excavation at 78.0 centimeters below surface. STP 4D yielded a 16.0-centimeter thick dark yellowish brown (10YR 3/4) silt loam fill and a 30.0-centimeter thick strong brown (7.5YR 4/6) silty clay fill overlying a yellowish brown (10YR 5/8) silt loam subsoil horizon from 46.0 centimeters to the bottom of excavation at 63.0 centimeters below surface.

The remaining STPs exhibited intact and relatively undisturbed soils. Three stratum were generally noted, consisting of a 3.0- to 17.0-centimeter thick very dark brown to very dark grayish brown (10YR 2/2 to 3/2) silt loam O-horizon overlying a brown to dark yellowish brown (10YR 4/3 to 4/6) silt loam A-horizon. The third stratum, a B-horizon, consisted of a strong brown (7.5YR 4/6 to 5/6) to a yellowish brown (10YR 5/4 to 5/6) silty clay to loamy clay (Appendix D).

Architectural items (n=96) account for the largest artifact class recovered. Window glass fragments (n=31), brick fragments (n=10), mortar fragments (n=7), coal slag (18), and tar shingles (n=3) represent some of the architectural materials. Fasteners include ten unidentified nail fragments, nine wire nails, and five cut nails. Other architectural items included two fragments of sewer pipe and one iron ring.

Kitchen-related artifacts (n=40) include a small assortment of nineteenth- through early-twentieth-century wares, including whiteware (n=11), redware (n=3), pearlware (n=4), and stoneware (n=1). Decorated wares were minimal, with one sherd of blue transfer print whiteware found in STP 2C, Stratum VII (81.0 to 96.0 cmbs). Fourteen fragments of colorless bottle glass and seven fragments of green bottle glass were also recovered. Other artifacts include two

modern saw blade fragments, two fragments of plastic, and one fragment of a clay shooting pigeon (Appendix E).

In addition to the historic artifacts and modern refuse, a small assortment of prehistoric artifacts (n=12) were recovered in Parcel 4 as well.<sup>1</sup> The assemblage consisted exclusively of debitage, with quartz (n=7), jasper (n=4), and quartzite (n=1) comprising the collection of materials. Debitage forms included primary/cortical flakes (n=3), secondary flakes (n=2), tertiary flakes (n=1), shatter (n=3), and flake fragments (n=3). No diagnostic tools or prehistoric ceramics were noted in the excavations in Parcel 4.

Overall, the artifact collection in Parcel 4 was recovered from the fill deposits and the A-horizon in the undisturbed portion of the lot. The archaeological excavations did not identify any patterns in historic artifact density or class to suggest that historic cultural features are present in the parcel. STP 2C produced ten window glass fragments in Stratum I, a fill horizon 0.0 to 18.0 centimeters below surface, and 16 slag fragments in Stratum II, a fill horizon 18.0 to 23.0 centimeters below surface, but these artifacts were found in different fill deposits containing a mix of historic and modern refuse and offer limited information as to the original context of the materials.

Conversely, the distribution of the prehistoric artifact assemblage suggests that a small activity area is located on the upland setting in the eastern portion of the parcel. As seen in Figure 8, a small cluster of STPs bordered by Row 7 to the west, Column C to the north, Row 10 to the east, and Column B to the south produced a scattering of flakes and shatter from a 12.0- to 22.0-centimeter thick dark yellowish brown to olive brown (10YR 4/4 to 2.5Y 4/4) silt loam to silty clay A-horizon. Additionally, one STP in the western portion of the site, STP 2D, produced two prehistoric artifacts from fill layers. The varied stages of lithic reduction forms found in this concentration suggest that this artifact concentration represents stone tool maintenance activities. The absence of diagnostic tools or ceramics prohibited assigning a temporal association with this site at the close of the Phase I survey.

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<sup>1</sup> It should be noted that the Phase I prehistoric artifact count has been revised since the publication of the Phase I management summary. Originally, it was thought that 20 prehistoric artifacts had been found. These items were reanalyzed during the Phase II investigation, at which time eight items were found to be non-cultural pieces of quartz and other materials. These non-cultural items were discarded and removed from the artifact catalog.

## **5.5 Parcel 5**

Parcel 5 consists of a 126.5-meter long by 18.3-meter wide parcel of ground comprising the backyards of several structures in the Eton Court residential development (Photograph 5; Figures 10 and 11). Of the five STPs excavated in Parcel 5, four revealed relatively intact soils. STP 5-1, 5-3, 5-4, and 5-5 comprised a 13.0- to 21.0-centimeter thick dark yellowish brown (10YR 3/4 to 4/4) silt loam A-horizon overlying a strong brown (7.5YR 4/6 to 5/6) silt loam to silty clay B-horizon. A 10.0- to 49.0-centimeter thick brown (10YR 4/3) silt loam fill episode was noted above the intact soils of STP 1 and STP 5. STP 2 was comprised of five separate 10.0- to 18.0-centimeter thick silt loam to silty clay fill episodes extending to 75.0 centimeters below surface, at which point an impenetrable layer of rock rubble was encountered (Appendix D).

A small sample of historic artifacts and modern refuse were found in the fill deposits, as well as the A-horizon and B-horizon, of STP 1 and STP 5. Kitchen activity artifacts included four fragments of whiteware and two fragments of bottle glass. Window glass (n=5) and brick fragments (n=3) represent architectural refuse found in the parcel. Other finds include one fragment of oyster shell and two fragments of plastic. No prehistoric artifacts and no cultural features were noted in Parcel 5 (Appendix E). The presence of a limited number of cultural materials in the A- and B-horizons is attributed to recent residential development of the landscape. STP 5-1 is located on a sloping section of ground downhill from a twentieth-century residence, while STP 5-5 is situated in a lot where a two-story house once stood, but has since been demolished. It is not unexpected to find cultural materials that have been introduced into the subsoil through landscaping activities, bioturbation (root and rodent disturbance), and the construction/demolition of adjacent buildings. These finds are reflective of general artifact scatter and do not represent a significant cultural resource.

## **5.6 Parcel 6**

Parcel 6 is comprised of an approximately 487.7-meter long by 30.5-meter wide parcel of ground bordered by SR 141 to the east, Faulkland Road to the south, an entry road into the Ferris Center



**Photograph 5:** Parcel 5, view south (April 2005).

to the west, and the Ferris Center grounds to the north (Photograph 6; Figures 12 and 13). STPs in Parcel 6 generally revealed disturbed soils at the eastern end of the parcel, adjacent to SR 141. STP 6-1 through STP 6-3 exhibited three to four 10.0- to 20.0-centimeter thick silt loam to clay loam fill horizons overlying a strong brown (7.5YR 4/6 to 5/8) to yellowish brown (10YR 5/6) clay loam to silty clay subsoil horizon (B). Concrete chunks were noted in Stratum II of STP 6-2, 10.0 to 35.0 centimeters below surface, indicating that construction rubble was utilized as part of the fill mixture for certain horizons. The fill episodes noted within the STP 6-1 through 6-3 are consistent with the construction of a raised berm along the north side of Faulkland Road, evident in Photograph 6.

STP 6-4, 6-5 and 6-6 uncovered a 33.0- to 57.0-centimeter thick dark grayish brown to brown (10YR 4/2 to 4/3) clay loam to silt loam plowzone horizon overlying a yellowish brown (10YR 5/4 to 5/6) silty clay to clay loam B-horizon. Curiously, STP 6-4 is located at the crest of a small ridge following a line of trees. This ridge sits approximately 45.7 centimeters above the surface of the landscape to the west. STP 6-5 and 6-6 are located at a lower elevation to the west. It is suggested that plowing and/or landscaping activities have cut away the plowzone along the edge of the woodline, dispersing the soils into the open section of the field to the west. The plowzone depth diminishes from a 57.0-centimeter thick horizon in STP 6-4 to a 50.0-centimeter thick deposit in STP 6-5, ending with a 33.0-centimeter thick deposit in STP 6-6.

Test excavations across the western section of the parcel exposed a similar profile of a dark grayish brown to brown (10YR 4/2 to 4/3) clay loam to silt loam plowzone over a dark yellowish brown to yellowish brown (10YR 4/6 to 5/8) silty clay to clay loam B-horizon. Episodes of fill were recorded in STP 6-8 and 6-11 overlying the B-horizon, while STP 6-7 exposed a brown (10YR 5/3) clay loam horizon with ground water penetrating the profile at 32.0 centimeters below surface (Appendix D).

A total of 54 artifacts were recovered from the fill and plowzone horizons. Kitchenware included colorless (n=8), green (n=7) and amber (n=1) bottle glass, and sherds of redware (n=7) and creamware (n=1). Architectural items included brick fragments (n=20), window glass fragment (n=3), slate fragments (n=2), and one fragment of plaster. Modern historic debris included two



**Photograph 6:** Parcel 6, view west (April 2005).

fragments of cellophane wrapper, one fragments of plastic, and an aluminum pull tab. One quartz secondary flake was recovered from Stratum I, a fill horizon, in STP 6-3 (Appendix E).

Overall, the artifact collection was evenly dispersed over Parcel 6 and did not indicate the presence of cultural features or activity areas. STP 6-3 produced a small amount of brick fragments in Stratum II (23.0 to 33.0 cmbs) (n=10) and Stratum III (33.0 to 57.0 cmbs) (n=6), two fill horizons, the only noticeable concentration of artifact type in the parcel. The small quantity and size of the fragments, mixed with modern and historic refuse, suggests that the brick fragments have been excavated from elsewhere and redeposited as fill in the APE. These materials are not associated with a structure in the APE.

### **5.7 Parcel 7**

Parcel 7 consists of an approximately 167.6-meter long by 30.5-meter wide corridor along the north side of Faulkland Road extending from the east side of SR 141 to an unnamed drainage (Photograph 7; Figures 12 and 14). The soil stratigraphy of this landform consisted of a 24.0- to 36.0-centimeter thick brown to dark yellowish brown (10YR 4/3 to 4/4) silt loam plowzone horizon overlying a dark yellowish brown to yellowish brown (10YR 4/6 to 5/6) silty clay to silty sand B-horizon subsoil. STP 7-6 revealed two 13.0- to 20.0-centimeter thick silt loam to silty clay fill episodes overlying the intact stratigraphic sequence. STP 7, located in a gentle swale, revealed highly disturbed soils consisting of a 12.0-centimeter thick brown (10YR 5/3) silt loam fill deposit overlying three mottled silty clay fill horizons. The excavation in STP 7 was terminated at approximately 54.0 centimeters below surface when a distinct chemical odor was noted within the fourth stratum of fill (Appendix D).

The excavations in Parcel 7 yielded a small number of artifacts from the plowzone and fill horizons. Architectural items included two brick fragments, one nail fragment, and one unidentified fragment of iron. Kitchenware included four fragments of amber bottle glass, one fragment of creamware, one fragment of white salt glaze stoneware, one fragment of redware, and one fragment of yellowware. An unidentified fragment of shell represents the only faunal material recovered in Parcel 7. No cultural features were recorded in Parcel 7.



**Photograph 7:** Parcel 7, view east (April 2005).

While the presence of white salt glaze stoneware and creamware suggests an eighteenth-century association, these limited finds were recovered together with nineteenth-century materials and modern refuse. The artifact assemblage found in Parcel 7 is representative of surface scatter transported over the lot through plow activities. No indication of cultural features associated with a structure was noted in the APE.

### **5.8 Parcel 8**

Parcel 8 consists of an approximately 121.9-meter long by 30.5-meter wide corridor along the south side of Faulkland Road extending from the east side of SR 141 to an unnamed drainage (Photograph 8; Figures 12 and 14). All excavated soils in Parcel 8 appeared intact. Three separate stratum were noted. Soils consisted of a 17.0- to 33.0-centimeter thick brown (10YR 4/3) silty clay A-horizon overlying an 8.0- to 14.0-centimeter thick yellowish brown (10YR 5/6) silty clay E-horizon. A third stratum, a B-horizon, was comprised of a strong brown (7.5YR 5/6) silty clay (Appendix D).

Six artifacts were recovered from Parcel 8, including two brick fragments, two fragments of coal, one fragment of redware, and one fragment of window glass (Appendix E). No prehistoric artifacts were recovered from Parcel 8. These artifacts were recovered exclusively from the A-horizon and represent surface scatter associated with nineteenth-century occupation in the project area.



**Photograph 8:** Parcel 8, view east (April 2005).