Archeological Testing at Pflugerville Bottling Works, Travis County, Texas

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By
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Environmental Affairs Division
Texas Department of Transportation
Abstract

Archival research and archaeological test excavations in connection with proposed development of Dessau Road in north Travis County revealed the presence of the Pflugerville Bottling Works near the north end of the project. The plant was established in 1914 and moved to Austin in 1927. Archeological excavations exposed a midden, paved area and filled brick cistern but did not expose evidence of the building. Because of the lack of an associated building, those parts of the site within the proposed right-of-way are not considered eligible for inclusion in the National Register of Historic Places.

Project Location

The project is located in northern Travis County, south and east of Pflugerville extending from present Dessau Road and the intersection of Howard Lane, north to the abandoned MKT RR right-of-way, proceeding within the MKT RR right-of-way to Walter Custer Creek and then northeast to meet FM 685. Five creeks are crossed by this alignment. All creek crossings and the two ends of the project with new right-of-way were surveyed and the only archeological site found was the Pflugerville Bottling Works site. It is situated on the left bank of Gilleland Creek south of the intersection of FM 685 and FM 1825 (Pecan Street) in Bohls Park (Fig. 1).

Project Description

The proposed construction will extend Dessau Road 4.8 km to FM 1825 at FM 685 and require 9.6 ha of new right-of-way. The right-of-way width will be about 19 m with four lanes and raised median, curb and gutter and sidewalks. The outside lanes are described as bike friendly. Five drainage structures will be installed at the intermittent creek crossings, one replacing a concrete structure along the Rail Road dated 1929. Previous coordination with the Texas Historical Commission determined that this structure was not deemed eligible for inclusion on the National Register of Historic Places. Much of the length of the project lies within the already disturbed MKT RR right-of-way.

Environmental Description

The proposed project is in a largely rural area with much of the right-of-way as disturbed growth of hackberries, ragweed and a wide variety of forbs and grasses. Also within the right-of-way are sycamores, and black willows, Johnson and Bermuda grasses, cedar elm, juniper and prickly pear. Soils in the project area include Houston Black clay, Austin silty clay, Eddy gravelly loam and Frio soils (Werchan, Lowther and Ramsey 1974). Underlying these soils is a marly limestone containing late Cretaceous exogyra. The terrain in the area is generally flat to very slightly rolling. It is within this terrain that the site was found.

Site Description: Pflugerville Bottling Works

The site of the Pflugerville Bottling Works is in the left bank floodplain of the upper reaches of Gilleland Creek within Bohls Park. The creek trends southeast in the area of the site with FM 1825 (Pecan Street) trending the same direction. The site is situated between the two and is traversed by a paved hike and bike trail. In the site area and elsewhere, the creek margins are marked by heavy woods along both sides of the creek. Away from the margins are grasslands and, historically, cultivated fields. The topography of the site area comprises the creek bed and low bank with a gentle upward slope to the margin of the woods where the topography flattens but still rises gently to the road. There it flattens again comprising the upland prairie. All archeological indications of the site are between the woods and the road. Near the creek at the edge of the woods is a filled bottle shaped cistern made of brick and plastered. The bricks appear to be Elgin/Butler bricks made shortly after the beginning of this century. Adjacent to the cistern is a marker placed by the City of Pflugerville commemorating the site of the bottling works (Fig. 2). Immediately north of this is the paved hike and bike trail paralleling the creek. In the gently rising area to the north are mowed native grasses and Bermuda grass and an old barbed wire fence overgrown with hackberries. The fence marks the south right-of-way of FM 1825. Near the east edge of the fence are more hackberries, virginia creeper and
Fig. 1: Pflugerville East quadrangle (3097-244) showing the north end of the project. Solid line is new right of way.
poison ivy in a broad line (about 10 m wide) running about 30 m north/south. Within the area of the woods and fence remnant is a small area near the west edge of the right-of-way containing a number of fragmentary and near complete bottle fragments. Within the area between the hike and bike trail and bounded on the north by the woods and fence remnant and the north/south patch of woods in a roughly rectangular area of shorter and drier grass originally thought to be the site of the building. West of this at the edge of the proposed right-of-way appears limestone gravel possibly representing a pavement.

**Historical Research**

The historical marker at the site (situated adjacent to the cistern) exhibits the following text:

PFLUGERVILLE
BOTTLING WORKS
A soda bottling works stood on this site in the early 1900's.
Goods were delivered by wagon.
E. R. Kneble moved the business to Austin in 1927

The first attempt to find additional information centered on finding if the company had incorporated. Research at the Texas Secretary of State's Office indicated that the company had never incorporated. Searches of the Austin City directories for 1893-94 and 1903-04 also failed to turn up any mention of the enterprise. Research at the Austin History Center provided some information, however. A number of early commercial establishments were noted in the files, mostly documented by history papers written by local students. Among these were Otto Pfluger's gin and ice plant, Herman Pfluger's grist mill (1904), Brooks' Stable (1908), a second gin, an oil mill and dance hall (1909), Herman Pfluger's theater (1910), the bank/Post Office (1911), a drug store (1909), etc. In 1914 Monroe Kreidel established the Pflugerville Bottling Works on the east side of town. There he mixed his own drinks. According to one student (Weiss, 1958) the business did not last long, moving to Austin in 1927. In a copy of the Pflugerville historical marker file at the Austin History Center, the following people were associated with Kreidel in the business: Eugene Preiss, _______ Johnson, and Ed. Knebel. Also available was a single photograph of the plant.

The historic photograph of the bottling works (Fig. 3) indicates that it was a small wood frame building sheathed in corrugated sheet iron and painted a dark color. It
Fig. 4: Map of backhoe trenches at Pflugerville Bottling Works.
appears to have been oriented approximately north/south facing the road and with the rear to the creek. The roof ridge ran the length of the building having the entrance on the north gable end. Two windows flanked the entrance and two were on the east wall. Above the door was painted the following:

**PFLUGERVILLE BOTTLING WORKS**

Near the rear of the building on the east side was a wooden water tower. Flanking the sides of the building and oriented with the front of the building. The photograph does not provide adequate information to determine the nature of the foundation of the building.

**Archeological Testing**

Primary goals of the effort were identification of structural remains, evaluation of deposit integrity, and assessment of the significance of the artifactual material. If evidence of the principal structure was found and the deposits were found to be largely undisturbed and containing artifacts reflecting the process and product of the bottling works, then it was anticipated that the site would meet criteria A, C and D for the National Register of Historic Places. The archeological testing of the site was to consist of two co-dependent approaches, backhoe trenches to define the nature of the deposits and to locate features or concentrations of artifacts and hand excavation of any features or artifact concentrations found to assess their integrity and potential to yield significant information. A series of seven backhoe trenches was dug at an angle across the proposed right-of-way north of the hike and bike trail (Fig. 4). It appears that south of the hike and bike trail, the elevation is too low for the bottling works as the area would be subject to frequent flash flooding. The location of the east ends of the trenches was limited by the north/south grove of trees noted above. Trenches 1 and 2 were excavated to a depth well below expected cultural materials in order to examine the depth of the deposits in the site area. All other trenches were dug to a depth of 15 to 20 cm below the surface or top of the gravel pavement where that was present (Fig. 4).

The soil profile exposed in the first two trenches consisted of largely unmodified Eddy gravelly loam developed in place over marly chalk. The upper portion of the deposit consisted of 20 to 25 cm of gray/brown gravelly loam over about 15 cm of decomposed chalk. The vast bulk of the artifacts found in the trenching were found in the west one quarter of trench 1 near the surface. Trench 1 included the following artifacts found during excavation:

- 18 crown caps
- 1 Wire fragment
- 1 wire nail (framing)
- 1 fence staple
- 2 large meat can keys
- 1 rectangular can lid fragment
- 1 brass .22 caliber short cartridge case stamped H
- 2 hard paste earthenware (whether) sherds (plain)
- 1 hard paste earthenware embossed
- 25 non-bleached bottle body sherds (plain)
- 32 selenium bleached plain bottle body sherds
- 10 arsenic bleached plain bottle body sherds
- 1 manganese bleached plain bottle body sherd
- 4 amber plain bottle body sherds
- 1 olive green bottle body sherds
- 7 crown closure bottle neck sherds non-bleached
- 1 crown bottle neck arsenic bleached
- 11 crown bottle neck selenium bleached
- 1 extract closure bottle neck arsenic bleached
- 1 bottle base selenium bleached no marks
- 2 bottle bases non-bleached with marks
- 1 bottle base selenium bleached with mark
- 5 embossed fragment non-bleached 4 Pflugerville Bottling Works (one complete, 1 star)
- 1 embossed fragment selenium bleached Taylor Bottling Works
- 1 embossed fragment arsenic bleached Austin Ice & Bottling Works
- 1 embossed fragment selenium bleached Star Bottling Works
- 1 arsenic bleached pitcher handle
- 7 embossed fragments with lettering
- 1 glass marble
- 3 linoleum fragments

The marked bases include one marked Electrified/ Austin, Tex. Another marked AB and one marked P (figs. 5 & 6). The Pflugerville bottles were marked:

**PFLUGERVILLE BOTTLING WORKS**

**PFLUGERVILLE TEXAS**
Three sherds from the same bottle (fig. 7) are marked:

TAYLOR BOTTLING WORKS
TAYLOR, TEXAS

A single sherd (fig. 8) is marked:

REGI---

AUS---
ICE & BOT----------
AUS---

Another sherd is marked:
Coca--
TRADE M------

Two sherds (fig. 9) are embossed;
Electrified
BEV--

One sherd is embossed with two stars on the shoulder (fig. 10).

Others are embossed with:
7 FL--

THIS BOTTLE--

The remaining sherds (6) appear to be fragments of Pflugerville Bottling Works bottles.

Trench 2 had a much diminished number of artifacts found near the west end of the trench. The following items were noted:
4 non-bleached bottle body sherds, plain
3 selenium bleached body sherds, plain
5 arsenic bleached body sherds, plain
1 manganese bleached body sherd, plain
1 amber bottle body sherd, plain
2 Coca-Cola bottle sherds
3 crown closure bottle neck fragments non-bleached
1 non-bleached bottle base, plain
1 selenium bleached plain bottle base
1 arsenic bleached plain bottle base
1 embossed bottle body fragment Pflugerville Bottling Works
1 plastic fragment

Trench 3 contained one non-bleached bottle body fragment while Trench 4 included two non-bleached bottle body fragments. Trench 5 contained two light green bottle body fragments. No other trenches contained artifacts. It appears that the area north of the west end of trench 1 and the west ends of trenches 1 and 2 represent an area of concentrated trash or a midden area.

A small surface collection was made in the midden area near the west right-of-way line. These items were:
1 non-bleached crown closure bottle neck
1 olive green crown closure bottle neck
2 amber bottle bases embossed with maker's marks:

<table>
<thead>
<tr>
<th>ABCO</th>
<th>SB&amp;GCO</th>
</tr>
</thead>
<tbody>
<tr>
<td>30</td>
<td></td>
</tr>
</tbody>
</table>
1 Selenium bleached base with embossed star
2 non-bleached sherds Pflugerville Bottling Works, one embossed P on the base.
2 non-bleached plain bottle fragments
1 wire bail handle

Artifact Analysis

The artifacts listed above were identified by the laboratory cataloger. Some of the arsenic bleached glass may well be flint glass and some of the selenium bleached glass may be non-bleached. The artifacts provide considerable information on historical and cultural practices related to the importance of the soda bottling industry to socialization in small communities. Most of the items found in the excavations and on the surface relate to the small industrial nature of the site, but virtually none relate to the structure itself. There were no concentrations of nails from either construction or demolition. These should have been quite numerous if the structure had been demolished at this location.

Crown cap closures were patented to William Painter, the foreman of a Baltimore machine shop in 1892 and were widely accepted after the turn of the century (Lief nd: 17-20). Both caps and bottle mouth finishes were found in the test excavations indicating a period of time when both types of closures were common. A single bottle mouth had a double beaded finish present on some extract bottles of the early to mid twentieth century. This likely represents some of the flavoring used in the soda making process.

The bottle bases represent both bottle manufacturers and bottlers. The mark ABCo is a mark of the American Bottle Company of Chicago, IL and dates between 1905 and 1916. The AB mark is the Adolphus Busch Glass Manufacturing Company of Belleville, IL dating from 1904.
Fig. 5: A complete Pflugerville Bottling Works bottle with crown enclosure.

Fig. 6: The bottle fragment is a Pflugerville Bottling Works body sherd with embossed lettering.

Fig. 7: A body sherd of a Taylor Bottling Works soda bottle.

Fig. 8: A body sherd of a Taylor Bottling Works soda bottle.

Fig. 9: The base of a soda bottle of the Electrified Beverage Company of Austin.

Fig. 10: This sherd is the shoulder of a Star Bottling Works of Austin soda bottle.
The mark P appears to be the mark of Pierce Glass Company of Port Allegany, PA after 1917. The S&B&GCo mark is from the Streator Bottle and Glass Company of Streator, IL and dates between 1881 and 1905 (Toulouse 1971). The bottle marked with a star on the base could represent Three Rivers Glass Company of Three Rivers, Texas, but more likely is a Bottling Works logo belonging to The Star Bottling Company of Austin (Morrison and Fourmy 1903:6). The Electrified Beverage Company of Austin appears to post date 1903.

Bottle bodies having embossing indicate that several bottlers in addition to Pflugerville Bottling Works had their bottles recycled by the Pflugerville Plant (Fig. 4). These included Coca-Cola, The Star Bottling Company of Austin, The Electrified Beverage Company of Austin, The Austin Ice and Bottling Works and the Taylor Bottling Works of Taylor, TX. It should be noted that one of the Coca Cola bottle fragments appears to date to about the 1950s.

Glass color is suggestive that more than soda water was bottled at the plant. The amber colored bottles were probably beer and the olive green bottles probably were wine or some other alcoholic beverage.

The glass marble appears to be a machine made "Slag" marble (Grist 1992: 66-67) probably dating to the early twentieth century.

The .22 caliber cartridge case is probably intrusive. It exhibits a headstamp marked H, the mark of the Winchester Repeating Arms Company of New Haven, CT (White and Munhall 1963:26). Rimfire cartridges in this caliber have been manufactured since 1857 (Barnes 1980:289).

### Features

Two features were noted in the excavations that had surface expressions. One was the midden area from which a surface collection was made and which contributed the large numbers of artifacts noted in backhoe trenches 1 and 2. The trenches also defined the south and eastern limits of the midden. The midden appears to extend into the present right-of-way of FM 1825 and to the west of the proposed west right-of-way of Dessau Road. The midden extends to a maximum depth of 10 cm. Most of the contents of the midden appears to be bottles and bottle fragments and crown caps.

The second feature is a limestone gravel pavement partially buried by a thin layer of overbank flood deposits. It extends beyond the proposed right-of-way to the west and south across the present hike and bike trail into the woods along the margin of the creek. The eastern edge of the pavement is irregular in shape (Fig. 4). Maximum thickness of the pavement appears to be about 10 to 15 cm. No artifacts were noted within or associated with this pavement area. Likewise, no pits or post molds were recognized in the exposed portion of the pavement. The estimated period of use of this pavement cannot be directly determined through artifact evidence. However, it likely dates to the period of use of the site (1914-1927). Despite extensive trenching designed to encounter foundation remains, no stone or wood piers were found, nor was evidence of construction or demolition in the form of nail concentrations.

### Summary and Conclusions

The Pflugerville Bottling works plant was apparently established in 1914 by Monroe Kreidel on the left bank of Gilleland Creek on the eastern edge of the community of Pflugerville. He built a frame structure sheathed in corrugated sheet iron and painted a dark color (red?). In this structure, he mixed his drinks and utilized, at a relatively early period, fairly modern filling and capping machines. Kreidel is said to have mixed his own concoctions. This statement is supported by the finding of a probable extract bottle neck in the test excavation. Sometime during the operation of the plant, three partners were acquired (Weiss 1958). When the plant closed in 1927, it was moved to Austin by partner Edward Knebel after about 13 years of unincorporated operation.

Bottles were acquired from several sources including those marked for Pflugerville Bottling Works. Two bottles collected in the excavation (one complete and one fragmentary) are marked and have bases, one marked and the other not. The marked bottle appears to be a Pierce Glass Company bottle made in Port Allegany, PA after 1917. Other bottle manufacturers' marks were on bottles that were not marked Pflugerville or were clearly from bottling works in Austin and reflect the sources of bottles for those bottlers. The presence of amber and olive green bottles suggest that Kreidel may have also bottled beer and some other alcoholic beverage in addition to soda water.

Bottle recycling is clearly evident in the sample of artifacts found. Several other bottling works, mostly from Austin, bottles are in the sample. Likewise, the retention of bottles manufactured at an earlier date than the opening of the enterprise appears to have been practiced. It is interesting that no bottles from Three Rivers Glass Company of Three Rivers, Texas were found since that
was a regional plant unlike those used by Kreidel. This may suggest that because of the presence of the railroad, the purchase of bottles out of state might have been less expensive. A search of the literature on historic archeological sites in the Austin area reveals a small number of references to Austin Bottling works and to Star Bottling Company. Both of these companies are discussed by the author at Waters Park (m.s. on file at the Texas Department of Transportation) and Austin Bottling Works and Coca-Cola are described there and in a very small number of other sites. Previously undescribed soda water bottling companies are Electrified Beverage Company of Austin, Austin Ice and Bottling Works and Taylor Bottling Works. In the literature examined, there were few other early bottling plants noted except Austin Bottling and Star. Excavations at the Austin Convention Center produced examples of bottles from Fred Horstman (later Austin Bottling Works) and F. M. Kain. They also had Austin Bottling Works and Star Bottling Co., all in Hutchinson bottles (Anthony and Parsons ms). This test excavation, then, revealed information on the appearance of bottles belonging to previously undescribed Pflugeville Bottling Works, Austin Ice and Bottling Company, Electrified Beverage Company of Austin and Taylor Bottling Company and provides additional examples from Star Bottling Company, Austin Bottling Works and Coca-Cola.

The lack of any evidence of a structure (foundation stones or concrete beam, nail concentrations, post molds or broken window pane fragments) and the apparently relatively undisturbed condition of the midden suggest that the structure was at a location other than the one tested. It is unlikely that it was situated lower topographically (closer to the Creek) because of the potential for flooding. The historic photograph also does not support a position immediately on the margin of the creek. If the building had been situated north of the excavations, it would have been within the present right-of-way of FM 1825 and would have been destroyed by shoulder work for that highway. It could have been located outside of the proposed Dessau Road right-of-way to the east or, more likely, west. There are no evident remains in these areas. Thus, one must conclude that the structure remains have been destroyed (if to the north of the testing) or outside the proposed right-of-way.

Because of the lack of a structure at the site, any additional archeological work on the site would necessarily concentrate on the midden, since the testing defined the limits of the gravel pavement in the right-of-way. Work on the midden certainly would produce more artifacts related to the function of the plant. However, these test excavations have produced an excellent example of a complete Pflugerville Bottling Works Bottle and fragments of others. We also have fragmentary examples of bottles from other plants. It is unlikely that further work would provide much new information. Likewise, more archival work could be done, but would be unlikely to produce much more information. The one approach that might produce significant additional data is oral history.

Since there is no structure we can associate with the few features found at the site and since further excavation and further archival work are unlikely to provide significant new data, we believe that the site does not meet criterion D for the National Register of Historic Places. We believe that the data gathered in the testing is important in placing the plant in a cultural and historical context but do not recommend further investigation.

The Pflugerville Bottling Works was established at a time in which the social drinking of soda water was both pleasurable and an important devise used to enhance social interaction. Gatherings at places where soda was sold (such as local grocery and drug stores) and the development of soda fountains were an icon of American culture into the early 1960s. The requirement of having bottle deposits and retrieving them kept many a child busy during the summers. The development of numerous small local bottling works fulfilled the need for sources of the drinks and supported the social integration of their communities. This plant appears to have been a representative of the industry in a time before the large monopolies developed.

Although important information was gathered during the testing of the site regarding the history of the enterprise, the artifacts associated with it and a bit of its cultural context discussed, the lack of association of the archeological remains with the plant building limits the significance of those remains in the right-of-way of the project. Without this association (archeological deposits with the structure remains), that portion of the site lying in the right-of-way does not meet the criteria for eligibility for listing in the National Register of Historic Places under criterion D.
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