Brickyard Disposal & Recycling, Inc.
Danville, Vermilion County, Illinois

Site Number: 1838040029

EXHIBIT B

Adjusted Standard Petition Technical Support Document

May 2013

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1. INTRODUCTION

Brickyard Disposal & Recycling is located in Vermilion County approximately one mile southeast of Danville, Illinois, within Danville Township, Sections 15, 16, 21, and 22 of Township 19 North, Range 11 West of the 2nd Principal Meridian. The site is at the edge of an upland area directly west of the wastewater treatment facility for the Danville Sanitary District. As shown in Figure 1, the wastewater treatment facility is located between Brickyard Disposal & Recycling and the Vermilion River.

The facility was initially developed and operated pursuant to Permit No. 1981-24-DE, issued June 1, 1981. The disposal area, Units 1 and 2, currently consists of approximately 152 acres within a 293-acre site. The two units are delineated by a haul road, which allows independent groundwater and gas monitoring systems (see Figure 1). Unit 1, the south unit, contains final cover and no longer accepts waste. Unit 1 was operated and covered pursuant to 35 Illinois Administrative Code (Ill. Adm. Code) Part 814, Subpart D (Standards for existing units accepting chemical and putrescible wastes that must initiate closure within seven years [from the effective date of adoption of R88-7 by the Illinois Pollution Control Board – September 18, 1990]). Unit 2, the north unit, is currently filling in Cell 6 and operating pursuant to 35 Ill. Adm. Code Part 814, Subpart C, (which includes all regulations contained in 35 Ill. Adm. Code Part 811) in accordance with Permit No. 1994-419-LFM.

The following sections detail the occurrence of materials encountered outside the permitted waste boundary adjacent to Unit 1, which necessitates this Adjusted Standard Petition that requests an extension of the compliance boundary as referenced in 35 Ill. Adm. Code Section 814.402(3) in order to more appropriately monitor Unit 1.

As stated above, the regulations identified in 35 Ill. Adm. Code Part 814, Subpart D, are applicable to Unit 1. This includes Section 814.402(b)(3), which states in part:

> "A unit shall not contaminate a source of drinking water at the compliance boundary, defined as any point on the edge of the unit at or below the ground surface. At any point on the compliance boundary, the concentration of constituents shall not exceed the water quality standards specified in 35 Ill. Adm. Code 302.301, 302.303, 302.304, and 302.305. *The Board may provide for a zone of attenuation and adjust the compliance boundary in accordance with Section 28.1 of the Act and the procedures of 35 Ill. Adm. Code 106.Subpart G upon petition demonstration by the owner or operator that the alternative compliance boundary will not result in contamination of groundwater which may be needed or used for human consumption. In reviewing such petitions, the Board will consider the following factors:…" (emphasis added).*

Pursuant to the referenced regulation, the compliance boundary is at the edge of the waste unit. Circumstances exist on the perimeter of Unit 1 such that the compliance boundary cannot reasonably be located at the edge of the waste unit. Therefore, this Adjusted Standard Petition requests the compliance boundary be extended outward from the waste boundary allowing for a monitor well network to be located more appropriately, capable of detecting changes in groundwater quality that may be associated with the permitted waste unit and materials located adjacent to and outside the permitted waste boundary. Hydrogeologic and other characteristics at this site support a finding that an alternative compliance boundary will not result in contamination of groundwater that may be needed or used for human consumption.

The factors to be considered by the Illinois Pollution Control Board for granting this Adjusted Standard Petition (identified in 35 Illinois Administrative Code [Ill. Adm. Code] 814.402(b)(3)(A-I)) are addressed in Section 4 below. As discussed in Section 4.1.2, a source of drinking water does not exist downgradient to Unit 1.

2. UNIT 1 MONITOR WELL NETWORK

Unit 1 monitor wells are located horizontally and vertically to provide early detection of changes to the groundwater that may be attributable to potential sources related to Unit 1. This includes both the permitted waste unit and extraneous materials. Unit 1 is located in an area of variable stratigraphy, both vertically and horizontally, due to historical mining activities at the site; mining for both shale and coal. Subsequently, significant spatial variability of the groundwater quality exists historically within the Unit 1 wells. The most probable route of contaminant migration has been identified as the coal seam, the mine void where the coal has been removed via underground mining, or the spoil/bedrock interface where surface mining has occurred. The pathway is continuous beneath Unit 1.

The Unit 1 monitor well network consists of 33 wells that are tested quarterly and/or semiannually. The majority of monitor wells identified below are screened across the coal seam/mine void, or the spoil/bedrock interface where surface mining has occurred. However, seven of the 33 (R106, R123, R132, G33S, T101, T103, and T104) wells are screened below the coal or spoil/bedrock interface in the shale deposit identified as the Middle Shale, and one well (R103) is screened in the Glacial Sand upgradient to Unit 1. The wells and sampling intervals are listed below:

Routine/Annual Monitoring

R123	G34S	T112	T117	T122
R124	G35S	T113	T118	T123
G125	T109	T114	T119	
R127	T110	T115	T120	
G33S	T111	T116	T121	

Semiannual Monitoring

+R103	+G134	G131
+G130	R106	R132
+G133	A126	

\+ Upgradient

Remedial Monitoring (Semiannual)

T101	R123	A126
T103	R124	R127
T104	G125	

The location of the Unit 1 monitor wells is provided in Figure 2.

The wells contained in the first two tables above are tested for routine and semiannual parameters, identified in the current permit as List G1 and G2, respectively. Wells T101, T103, T104, R123, R124, G125, and R127 are tested for 1,1-dichloroethane and dichlorodifluoromethane during the second and fourth quarters of each year, and a modified list of 40 CFR Part 258 Appendix II parameters are tested in wells R124, G125, and R127 semiannually as well. Well A126 is tested for cis-1,2-dichloroethene semiannually.

A groundwater management zone (GMZ) was established with the approval of the October 20, 2000 GMZ application (Log No. 2000-403). The GMZ defines the area where elevated levels of the parameters dichlorodifluoromethane, and 1,1-dichloroethane were observed in the groundwater. Cis-1,2-dichloroethene was later added via application Log No. 2012-535 to address the parameter in well A126. The GMZ is located within extraneous materials deposited outside the waste footprint as shown in Figure 3. Detection of the referenced organic compounds was identified to be the result of gas migration from Unit 1.

The facility is required to evaluate the remedial activities on an annual basis pursuant to Condition No. IX of the current permit. The most recent Evaluation of Remedial Activities (Illinois EPA Log No. 2013-154—pending) found no detections of 1,1-dichloroethane occurred in 2012. Dichlorodifluoromethane was also not detected in any well during the second and fourth quarters of 2012. Cis-1,2-dichloroethene was detected in well A126, with concentrations ranging from 7.4 mg/L (first quarter 2012) to 6.0 ug/L (fourth quarter 2012). However, no additional organic parameters contained on the modified 40 CFR Part 258 Appendix II list were detected in any of the assessment wells, indicating the remedial activities are effective in controlling gas migration.

As described in Application Log Nos. 2006-013, 2006-344, 2008-138, and 2009-089, railroad tie/construction debris and minor amounts of municipal waste were discovered outside the permitted waste boundary. Several investigations were conducted as part of these applications to determine the nature and extent of the material. Permit Modification 63, issued October 30, 2008, approved Application Log Nos. 2006-013, 2006-344, and 2008-138 and provided for additional monitoring points and assessment under Condition VIII.A.19 of the applicable permit.

The groundwater monitoring program for Unit 1 was augmented in late 2008 and again in 2009 and 2010 by the addition of 15 temporary wells along the perimeter of the extraneous materials. These wells were installed to characterize the groundwater beyond the extraneous materials. The wells listed below were located as close to the limits of the extraneous materials as possible given the topographic constraints (extreme topographic relief or surface water). The wells included:

T109	T113	T117	T121
T110	T114	T118	T122
T111	T115	T119	T123
T112	T116	T120	

Most of the referenced wells are anticipated to comprise the perimeter monitor well network if the adjusted standard is granted. Not all of the referenced wells will be necessary due to the hydrogeologic characteristics east of the unit; some of the wells are upgradient and not necessary for adequate monitoring. A detailed discussion of the hydrogeologic characteristics pertaining to Unit 1 is provided in Section 4.1.1.

3. IDENTIFICATION OF EXTRANEOUS MATERIALS

The Adjusted Standard Petition for the modified compliance boundary is due to the occurrence of railroad ties, demolition debris, and small amounts of municipal solid waste located beyond the perimeter of the permitted waste boundary, referenced as extraneous materials. The monitor wells listed above (T109 through T123) were located based on the results of the

investigations to identify the location and extent of the subject materials. Details of the investigation of the subject materials are provided herein.

Assessment monitoring activities were proposed and implemented pursuant to Permit Condition VIII.A.15 and 35 Ill. Adm. Code 811.319(b), and Application Log Nos. 2004-098 and 2005-036 along the northeast perimeter of Unit 1. This included installation of three temporary assessment monitoring wells in November/December 2005 (T106, T107, and T108) in the vicinity of R123. During the advancement of wells T106 and T107, railroad ties, as wells as other materials were encountered. Due to the occurrence of the materials, several attempts were necessary to identify locations where wells could be installed. The intermittent nature of the material warranted additional investigation to characterize the extent outside the permitted waste boundary. As described below, two separate field investigations were conducted to define the extent of materials located outside the waste footprint.

3.1 2006 Field Investigation

A field investigation along the northeast corner of Unit 1, where the material was first encountered, was conducted during July/August of 2006. As shown in Figure 4, the test pits were conducted in a sequence, following the material away from Unit 1, and at individual locations verifying historical information. Thirteen test pits were completed altogether with three series of pits conducted in sequence; (1) 2A, 2B, 2C, and 2D; (2) 3A, 3B, and 3C; and (3) 4A, 4B, and 4C. Individual pit locations included Test Pit Nos. 1, 5, and 6.

The results of the 2006 investigation documented the material along the east waste boundary of Unit 1 west of the haul road and within the existing GMZ in the vicinity of R123. The location of the material is not continuous on a large scale; there are areas within the identified limits of the external deposits where no material was encountered. Historical boring information shows that routine monitoring wells G131, R124, and R123; piezometer P104; and temporary assessment wells T101, T106, and T107 were installed through soils devoid of debris even though the locations are within the limits of external material.

3.2 2008 Field Investigation

Pursuant to recommendations by Illinois EPA personnel, an additional field investigation was conducted during August and September 2008 that included the excavation of an additional 60 test pits completed along the perimeter of Unit 1 to further identify the extent of the materials. The limits of the materials outside the landfill footprint, which are indicated by the yellow shading in Figure 4, were determined from several events, including the 2006 and 2008 field investigations conducted as part of Application Log No. 2006-013, well and piezometer installations reports, and from visual inspection of the subject area. The shaded areas represent the estimated maximum extent of material outside the permitted waste boundary. The occurrence of materials in the shaded areas is generally not continuous but is encountered in pockets, consisting mainly of railroad ties. The occurrence of the material is more prevalent to the south and east. The discontinuous nature of the materials explain why some existing background, detection monitoring and temporary assessment wells within the shaded areas are installed through soils and mine spoil devoid of the material.

Table 1 lists the probe and trench excavations used to evaluate the presence of the materials and provides details of the overlying cover, thickness of the material, and vertical extent. The proposed compliance boundary pursuant to this Adjusted Standard Petition is beyond the extent/limits identified. The proposed limit must take into consideration accessibility issues. The current topography is also shown in Figure 2. The steep slopes paralleling and outside the

permitted waste footprint typically identify the approximate extent of the extraneous materials. With the exception of the west perimeter, drainage structures are immediately adjacent to the material, making placement of a well at the limit unlikely. The previously referenced wells (T109 through T123) were installed as close as practical to the limits without jeopardizing the well integrity or the safety of the drilling contractors. Well T109 and T110 were also located to enhance the possibility of obtaining groundwater at the bedrock/mine spoil interface as the bedrock surface elevation was high east of the trough (see Section 4.1.2).

4. FACTORS FOR REVIEW

Pursuant to 35 Ill. Adm. Code Section 814.402(b)(3), the Illinois Pollution Control Board will consider the factors identified in Section 814.402(b)(3)(A) through 814.402(b)(3)(I). Each factor is identified, followed by site-specific information, generally and as it relates to the requested adjusted standard.

4.1 Section 814.402(b)(3)(A):

The hydrogeological characteristics of the unit and surrounding land, including any natural attenuation and dilution characteristics of the aquifer.

The hydrogeologic characteristics for Unit 1 are provided in the following sections.

4.1.1 Site Geology

Multiple site investigations, including exploratory boring programs and subsequent monitor well installations, have been conducted since the early 1970s to identify the hydrogeologic and geochemical conditions beneath and immediately adjacent to the facility. The near-surface materials include disturbed sediments in the form of mine spoil (both coal and shale), backfill material, and Pennsylvanian-aged bedrock. Mine spoil from the strip mine areas is a composite of the overburden material, including clay, sand and silt, shale/siltstone, and coal and underclay. Detailed hydrogeologic reports were provided to the Illinois EPA in the form of permit modifications, identified as Application for Significant Modification to Permit for a New Expansion Unit (Illinois EPA Log No. 1993-057 [February 1, 1993]) and Application for Significant Modification (Illinois EPA Log No. 1994-419 [September 9, 1994]). Information provided below was obtained from the referenced reports and subsequent investigations.

The approximate western half of the facility has not been surface mined. Therefore, the following deposits are generally present in that area:

1. Upper Clay – The Upper Clay consists of typically brown silty clay with isolated packets of silty or clayey sand. It is only present in the western portion of the site since surface mining and landfill development activities resulted in removal of the materials to the east.

2. Glacial Sand – The Glacial Sand demarks a transition between the upper and lower clay deposits. It is only present in the near west side of the property where no surface mining activities occurred. The sand deposit is not present hydraulically downgradient (east) to Unit 1.

3. Lower Silty Clay – The Lower Silty Clay consists of silty clay, clayey silt, silt and clay. It directly overlies Pennsylvanian shale in areas not removed due to surface mining activities. Where present, it is directly overlain by the waste unit.

4. Upper Shale – The Upper Shale is the uppermost bedrock deposit at the site and consists of the Anna Shale and occasionally the Brereton Limestone Member. This deposit is absent where surface mining occurred for coal.

5. Coal and Underclay – The coal unit beneath Unit 1 was identified as the Danville #7 Coal, which was both strip-mined and subsurface mined. The coal/voids, or spoil/bedrock interface, has been identified as the contaminant migration pathway for Unit 1. Potential solute migration from Unit 1 will be vertical to the coal seam/void, then laterally.

6. Middle Shale – The Middle Shale is the lower confining layer for the contaminant migration pathway for Unit 1. It essentially creates a vertical hydraulic barrier beneath the coal/mine void. Monitoring wells for Unit 1 do not extend below the upper few feet of the middle shale.

Cross sections contained in Attachment 1 were obtained from the Application for Significant Modification to Permit for a New Expansion Unit (Illinois EPA Log No. 1993-057). Cross Section A-8 (Sheet No. B-2) illustrates Unit 1 entirely overlies in-situ (undisturbed) deposits along the north-south line of East 3,000. The unit invert is located on the glacial silty clay deposit overlying the upper shale unit. Cross Section A-9 (Sheet B-3) illustrates that Unit 1 overlies in-situ deposits and mine spoil, and is adjacent to disturbed material containing railroad ties to the south, along the north-south line of East 4,000. The two cross sections represent the variability of the materials beneath Unit 1. Sheet A-1 was included to illustrate the locations of the subject cross sections.

Cross Sections provided in Attachment 2 (contained in Addendum 1 to Illinois EPA Log No. 2009-393) illustrate subsurface conditions on the east perimeter of Unit 1. As shown, the entire eastern perimeter is disturbed, containing both mine spoil and railroad tie material. The bedrock surface decreases east of Unit 1 due to the surface mining activities. As discussed below, this affects the groundwater movement in this area. The cross sections in Attachment 2 are further discussed in Section 4.1.2.

Coal mining operations have historically impacted the groundwater quality and potentiometric surface characteristics of the Unit 1 area. Historical records indicate the following mines occurred beneath and/or adjacent to Unit 1:

- Danville Brick and Tile Company – strip-mined coal and shale east Unit 1
- Western Brick Mine – underground mine directly southeast of Unit 1
- Delaware No. 1 Mine – southeast of Unit 1 and south of the Danville Brick and Tile Company strip mine
- Delaware No. 2 Mine – directly south of Unit 1
- Delaware No. 3 Mine – present beneath Unit 1
- Dry Bread Coal Company Mine – south/southwest of Unit 1
- Traer Mine

4.1.2 Site Hydrogeology

The migration pathway for Unit 1 has been identified as the coal seam, the mine void where the coal has been removed via underground mining, or the spoil/bedrock interface where surface mining has occurred; the pathway is continuous beneath Unit 1. Groundwater subject to monitoring for Unit 1 occurs in the coal seam, mine voids, or on top of the shale underlying the mine spoil.

Data from existing Unit 1 monitor wells have been used to evaluate potentiometric surface characteristics for the Unit 1 area. Potentiometric surface maps for the third quarter 2011 to the first quarter 2013 sampling events are contained in Attachment 3.

As illustrated in the potentiometric surface maps, overall groundwater movement is from west to east beneath Unit 1. Due to mechanical disturbance of the bedrock surface east of Unit 1, the groundwater movement east of Unit 1 varies. Temporary wells (T109 through T116, including T118) were screened in an area that was previously strip mined for coal by the Danville Brick and Tile Company. Therefore, the screen intervals are at the bedrock/spoil interface. To the south and west of Unit 1, the thickness of the overburden increases, which ultimately limited the extent of surface mining. Typically, coal is present south and west of Unit 1 as indicated in the boring logs of wells T119 through T123, T104, R127, and G130, and at G133 and G134 as inferred in Attachment 1 to the current permit.

A detailed bedrock surface topography map (Figure 5) was created for the area east of Unit 1 based on boring data from the monitor well installations. As shown in Figure 5, the bedrock was excavated in a trench-like manner, decreasing in elevation from well T102 (south) to T108 (north). The trench, referred to as a trough, creates not only a surface drainage structure, but also a groundwater divide. The trough intersects groundwater moving west to east beneath the site, as well as east to west from an area west of the Vermilion River. Groundwater within the trough moves down slope via gravity towards wells T113, T114, and T115 near the northeast corner of Unit 1. The bedrock trough appears to widen and dissipate as it nears the City of Danville's wastewater treatment plant directly to the east (see Figure 1).

The groundwater contours contained in the potentiometric surface maps generally mimic the bedrock topography east of Unit 1. The groundwater divide was further explored and delineated through the construction of geologic cross sections for this area of Unit 1. The geologic cross sections are provided in Attachment 2 of this submittal.

Geologic Cross Sections A-A' and B-B' (Attachment 2) are oriented parallel to the groundwater divide and the eastern waste boundary of Unit 1. Cross Section A-A' intersects wells A126, G125, G131, R123, R124, T106, and T107, which were installed within the extraneous materials area immediately downgradient of the Unit 1 waste boundary. Cross Section B-B' intersects wells T110, T112, G113, T114, T115, and T117. Cross Sections C-C' through E-E' run perpendicular to the groundwater divide and intersect wells located on both sides of the trough. As depicted on the geologic cross sections, the coal was generally present west of the trough and absent to the east. Historical records indicate that the Danville Brick and Tile Company mined the No. 7 coal in the area east of the ditch. Subsequent geologic evaluations suggest the Herrin #6 Coal was actually mined and had been misidentified as the Danville #7 Coal.

The hydraulic conductivity of the potential migration pathway can vary significantly dependent upon the material present and whether mining activities occurred. Hydraulic conductivity testing (horizontal) conducted as part of the 1994 permit modification application indicated values ranged from a high of 5.3×10^{-6} cm/sec to low as 3.8×10^{-8} cm/sec in undisturbed coal. The

horizontal hydraulic conductivity of wells screened in disturbed materials will range widely dependent upon the material present and its consolidation. Spoil rich in glacial clay may contain an extremely low value, whereas spoil comprised largely of blocky bedrock may be quite high. It is difficult to apply a narrow range to the general area since it can vary within a short distance.

The attenuation capabilities of the screened material will also vary. Attenuation largely relies on sorption, dilution, and dispersion within the water-bearing zone. Variable materials comprising the migration pathway (coal, void, or spoil) will significantly affect the attenuation. The areas of lower hydraulic conductivity will not disperse/dilute solute as quickly as mine voids or coarse bedrock spoil, which contain higher hydraulic conductivities.

Spoil rich in clay typically contains a higher cation exchange capacity than bedrock material. Therefore, sorption in the clay spoil will increase, increasing the attenuation properties. As part of the 1994 permit application, seven soil samples were analyzed for cation exchange capacity. The values ranged from 3.2 (mine spoil – low) to 27 meq/100 gm (Lower Silty Clay). It was apparent that the Lower Silty Clay deposit contained a much higher cation exchange capacity than the samples tested for the mine spoil and Upper Clay. The Lower Silty Clay deposit is present beneath part of Unit 1 where no mining occurred or only underground mining occurred. The Lower Silty Clay is intermixed with the mine spoil where surface mining occurred. The subject data from the 1994 application is provided in Attachment 4.

Total organic carbon within a water-bearing zone can support reductive dechlorination of chlorinated contaminates. Total organic carbon was analyzed in seven samples as part of the 1994 application. The results range from 1.6 mg/g (Lower Silty Clay) to a high of 71 mg/g (also in the Lower Silty Clay). Values from the Lower Silty Clay deposit are variable but overall higher than in the Upper Clay. The Lower Silty Clay deposit provides better attenuation capabilities than the Upper Clay. As stated previously, Unit 1 partially overlies the Lower Silty Clay, and the Lower Silty Clay is contained in the mine spoil where surface mining occurred.

4.1.3 Summary

The hydrogeologic characteristics beneath and in the vicinity of Unit 1 are such as to minimize the potential to impact groundwater which is may be needed or used for human consumption. The requested adjusted standard will not in any way negatively impact those characteristics and, in fact, will allow for more appropriately monitoring of actual conditions.

4.2 Section 814.402(b)(3)(B):

The volume and physical and chemical characteristics of the leachate.

4.2.1 Volume of Leachate

Pursuant to Condition VII.2 of the current permit (Permit No. 1994-419-LFM, Modification No. 82), the leachate levels within Unit 1 shall be maintained to prevent buildup of three feet of head above the manhole invert. Although the manhole invert elevations are typically lower than the liner elevations, for purposes of leachate volume calculations, the maximum leachate head in the manholes shall be assumed to exist on the entire liner. The leachate volume calculation is based on the following assumptions:

1. Unit 1 consists of an area of 56 acres of waste
2. The saturated thickness is a maximum of three feet

3. The volume available to retain liquids (porosity of the waste) is 53 percent
4. The field capacity of the waste is approximately 35 percent

The volume of leachate is determined by multiplying the area of Unit 1 (56 acres) by the saturated thickness of the waste (3 feet).

$$56 \text{ Acres} \times 43{,}560 \text{ ft/acre} \times 3 \text{ ft} = 7{,}318{,}080 \text{ ft}^3$$

Forty-seven percent of the volume of Unit 1 is occupied by refuse (assuming a porosity of 0.53 - Benson, C. H., and Wang, X. (1998)).

$$7{,}318{,}080 \text{ ft}^3 \times 0.53 = 3{,}878{,}582 \text{ ft}^3$$

Based on the age of the waste, it is assumed the field capacity is 0.35, indicating (by definition) only 65 percent of the 3,878,582 cubic feet is available to drain via gravity.

$$3{,}878{,}582 \text{ ft}^3 \times 0.65 = 2{,}521{,}079 \text{ ft}^3$$

Therefore, 2,521,079 cubic feet equates to 18,850,000 gallons. Under normal conditions, approximately 18,850,000 gallons are present over the 56-acre unit, which is considered potentially mobile. Due to sidewall liners and final cover, mobilization of liquid is restricted.

4.2.2 Physical and Chemical Characteristics

The leachate in Unit 1 is generated by precipitation infiltration of the cover system and, potentially, groundwater infiltration from saturated deposits coincident with the sidewall liner west of the unit. The physical characteristics are very similar to water as confirmed by observation of the leachate during sampling activities required by Permit Condition VII.5.

The chemical characteristics of the leachate have been monitored for several years as required by Condition Nos. VII.4 and VII.5 of the current permit. An extensive list of parameters is routinely monitored at alternating manholes (L101, L102, L103, and L104). Recent data for each manhole have been graphed and compared to the concentrations provided in Attachment 1 to Appendix C (Chemical Parameters Associated with Putrescible and Chemical Landfill) to LPC-PA2. The concentrations contained in Attachment 1 to Appendix C represent average concentrations expected in leachate for a municipal solid waste disposal facility. It must be noted that not all parameters analyzed contained corresponding values from Attachment 1 to Appendix C. As shown in the graphs and tabular data (Attachment 5), only barium and boron were detected in the leachate at higher concentrations than listed in Attachment 1 to Appendix C. Typically, leachate concentrations were significantly less than the values listed in the subject Attachment. This further minimizes the potential for Unit 1 to impact groundwater which may be needed or used for human consumption.

4.2.3 Summary

The volume and physical and chemical characteristics of Unit 1's leachate are well known and have been effectively analyzed. The proposed adjusted standard will not in any way adversely impact that leachate but instead will allow for a more effective groundwater monitoring system.

4.3 Section 814.402(b)(3)(C):

The quantity, quality, and direction of flow of groundwater underlying the facility.

4.3.1 Quantity

The water-bearing zone beneath Unit 1 varies as described in Section 4.1 above. The subject water-bearing zone consists of coal in unmined areas, voids where coal was underground mined, and spoil where the coal was surface mined. Therefore, it is difficult to determine the actual quantity of groundwater underlying the unit. The groundwater within the coal seam/void space is under pressure; the potentiometric surface exceeds the top of the coal deposit or roof rock (artesian conditions). In areas where surface mining occurred, the saturated thickness may be slightly higher.

For purposes of calculating the quantity of groundwater beneath the unit, the following is assumed:

1. Unit 1 consists of an area of 56 acres of waste.
2. The saturated thickness is a maximum of five feet.
3. The volume available to retain liquids (porosity of the water-bearing zone) is 50 percent. Field hydraulic conductivity tests (packer/pressure testing) of the coal indicate the coal is dense with a low porosity; however, voids contain 100 percent porosity. To be conservative, a total porosity value of 50 percent (0.50) should be representative of the 56 acres underlying Unit 1.

The volume of groundwater is determined by multiplying the area of Unit 1 (56 acres) by the saturated thickness (5 feet).

$$56 \text{ Acres} \times 43{,}560 \text{ ft/acre} \times 5 \text{ ft} = 12{,}196{,}800 \text{ ft}^3$$

Fifty percent of the volume is occupied by solids (assuming a total porosity of 0.5)

$$12{,}196{,}800 \text{ ft}^3 \times 0.5 = 6{,}098{,}400 \text{ ft}^3$$

Therefore, 6,098,400 cubic feet equates to 45,619,200 gallons. This is the approximate gross volume of groundwater present beneath Unit 1. Not all pore spaces are connected. The effective porosity is the amount of interconnected pore space through which fluids can pass. Part of the total porosity will be occupied by static fluid being held to the mineral surface tension, so the effective porosity will be less than the total porosity for granular materials. The effective porosity may be equivalent to the total porosity in voids and fractured bedrock.

4.3.2 Quality

The groundwater within the coal deposit, mine voids, and strip mine area has been classified as a Class IV (Other) groundwater pursuant to 35 Ill. Adm. Code Section 620.240(g). The referenced section states “Other Groundwater is—Groundwater within a previously mined area, unless monitoring demonstrates that the groundwater is capable of consistently meeting the standards of Sections 620.410 or 620.420. If such capability is determined, groundwater within the previously mined area shall not be Class IV.” Due to mining activities, the groundwater quality cannot meet Class I or II groundwater quality standards for all listed parameters. Therefore, the Class IV classification applies.

Class IV groundwater quality standards are less restrictive due to the disturbance of the water-bearing zone and associated geochemical effects. Effects have been documented such that groundwater standards for total dissolved solids, chloride, iron, manganese, sulfates, and pH do not exist (35 Ill. Adm. Code Section 620.440(c)). These parameters have been shown to be impacted by coal mining activities, either underground or surface mining. However, the subject regulation does not exempt the referenced parameters from being monitored. All parameters required to be monitored pursuant to Condition VIII.A of the current permit shall continue to be monitored unless revised via permit modification.

Because of the mining activities, the groundwater quality is highly variable dependent upon location (spatial variability). This creates complexities when comparing downgradient groundwater quality with background (upgradient) groundwater quality. The permitted interwell background concentrations contained in the current permit were derived from data obtained from wells screened in the coal or unmined areas west of Unit 1. Several downgradient wells are screened at the bedrock/mine spoil interface; screened deposits vary dependent upon the well location. Wells to the south and west typically are screened in in-situ coal, and wells to the southeast and east screen mine spoil on top of the bedrock surface. Groundwater constituent concentrations can significantly vary with no implications of impacts from the waste unit.

The groundwater adjacent to the waste unit has been monitored since the facility was initially permitted; the current monitoring network was described in Section 2 above. The Unit 1 groundwater quality has been evaluated in detail as part of site assessment activities. Comprehensive reports have been submitted to the Illinois EPA, including a pending application identified as Log No. 2009-393. Further details of the existing groundwater quality are contained in Section 4.6 below.

4.3.3 Direction of Flow

Groundwater movement within the monitored water-bearing zone is generally from west to east, towards the bedrock trough located east of Unit 1. Due to mechanical disturbance of the bedrock surface east of Unit 1, the groundwater movement east of Unit 1 varies. A detailed discussion of the potentiometric surface for Unit 1 was provided in Section 4.1.2 above.

4.3.4 Summary

The quantity, quality, and direction of flow of groundwater underlying Unit 1, and the surrounding area, are well known and have been extensively analyzed. The proposed adjusted standard will not in any way adversely impact that flow but instead will allow for a more effective groundwater monitoring system.

4.4 Section 814.402(b)(3)(D):

The proximity and withdrawal rates of groundwater users.

Data from the Illinois EPA Source Water Assessment Program (SWAP) and the Illinois State Geological Survey were utilized to evaluate area water wells in the proximity of Unit 1. The evaluation included community water supply wells, non-community water supply wells, and private wells.

Four community water supply wells were identified to the northeast of the facility. The locations are provided on Sheet No. 1 (CWS Well Location Map) contained in Attachment 6. All four wells are located across the river from the landfill and no impact is reasonably expected from Unit 1. The wells are listed as a five-digit number. Data from the Public Water Supply List (Illinois EPA, 1999) indicated well 45229 as inactive. The remaining three wells were identified as active. Each well was screened in unconsolidated deposits, varying from approximately 88 to 105 feet in depth. The nearest well, 45225, is approximately 3,400 feet northeast of the northeast corner of Unit1.

Three non-community water wells were identified in the SWAP database. The closest well (18300186) is located approximately 5,500 feet east of Unit 1. A map depicting the well locations (Sheet No. 2) is also provided in Attachment 6. No geologic data or pumping records were available for these wells.

As identified in Sheet No. 3 in Attachment 6, numerous wells/borings are listed in the proximity of Unit 1. The maps derived by the SWAP database do not differentiate between wells and borings, except as part of the interactive feature for viewing the logs online. The well/boring designation corresponds to a location listed on Sheet No. 3.

Fourteen of the closest wells/borings to the facility have been reviewed. Of the fourteen, only two designations were actually water wells. A detail of the fourteen wells/borings are listed in the following table:

Well/Boring Designation	Notes
00199	Coal Boring
00200	Coal Boring
00201	Coal Boring
00203	Coal Boring
00204	Western Brick Co. Coal Boring
01505	Jim Hewes Well
23991	Brickyard Monitor Well G103
24025	Brickyard Monitor Well G126
24029	Essie Williams Well
24030	Brickyard Monitor Well G131
24725	Bridge Boring
25210	Brickyard Monitor Well
25211	Brickyard Monitor Well
25212	Brickyard Monitor Well

One of the residential wells (01505) is shown to be located upgradient to the west of the landfill facility. It is assumed that usage of the well is typical for a single-family dwelling; no withdrawal rate or usage information was provided. Given the upgradient location of the well, the groundwater at the subject well should not be susceptible to influences from Unit 1.

The only other water well located in the proximity of Unit 1 that may be used for residential purposes is identified as 24029. Based on the SWAP data, the well is located approximately 3,200 feet east/southeast of Unit 1, east of the Vermilion River and screened in a basal sand

from 93 to 97 feet in depth. Given the historical land use of the Unit 1 area, and that well 24029 is located more than half a mile east of Unit 1, the groundwater is not susceptible to influences from Unit 1. Well logs and construction information for wells 01505 and 24029 are also provided in Attachment 6.

The SWAP and Illinois State Geological Survey databases have been reviewed to identify public or residential wells near the landfill facility. Given the historical land usage on and near the facility, there are no groundwater users or receptors located downgradient to Unit 1. Data in tabular format are provided in Attachment 6 for the well/boring identifications, which are accompanied by a yellow circle on Sheet No. 3. Well designations not accompanied by a yellow circle are not included in the table and are considered beyond the study area.

Moving the compliance boundary to the location proposed in Figure 7 will not affect any groundwater users of community water supply wells, non-community water supply wells, or residential wells.

4.4.1 Summary

The proximity and withdrawal rates of nearby groundwater users have been extensively investigated, as reported above. The proposed adjusted standard will not have any adverse impact on any groundwater users, but will serve to more effectively monitor groundwater conditions at the site.

4.5 Section 814.402(b)(3)(E):

The availability of alternative drinking water supplies.

Most residents in the vicinity of Brickyard Disposal and Recycling are connected to a public water supply via Aqua Illinois. A water line is located on the south side of Brickyard Road leading up to the gate of the landfill facility. Aqua Illinois services the City of Danville, Villages of Tilton, Indianola, Catlin, Westville, Belgium, and unincorporated surrounding areas. Aqua Illinois obtains water for distribution from a surface water body, Lake Vermilion. The southern tip of Lake Vermilion is located approximately 5.5 miles north/northwest of Unit 1 (See Figure 8).

In areas that are not serviced by Aqua Illinois near the facility, alternative drinking water can include bulk supply (tanks), bottled water, and groundwater from deeper geologic formations.

4.5.1 Summary

While Andrews Engineering has conducted an investigation of alternative drinking water supplies, the proposed adjusted standard is not expected to implicate a need for such alternative supplies; instead, it will simply serve to more effectively monitor actual conditions at the site.

4.6 Section 814.402(b)(3)(F):

The existing quality of the groundwater, including other sources of contamination and their cumulative impacts on the groundwater.

The existing groundwater quality within the coal seam, mined voids, and mine spoil/bedrock contact has been evaluated extensively adjacent to Unit 1. Significant spatial variability has

been demonstrated to exist, based on the extent and type of mining that occurred beneath and adjacent to the unit. The initial background concentrations used to evaluate the downgradient groundwater quality pursuant to permit requirements has magnified the spatial variability issue. The permitted interwell background concentrations were derived from data obtained from wells screened in the coal west of Unit 1. This background data did not represent groundwater quality in mined areas, either in underground or surface mined. This led to several groundwater assessments that were not related to the waste unit.

Recently installed monitor wells (T109 through T113, located east of Unit 1) were screened at the bedrock/mine spoil interface. Screened deposits for wells T114 through T123 vary dependent upon the well location. In general, wells to the south and west of Unit 1 typically are screened in in-situ coal, and wells to the southeast and east screen mine spoil on top of the bedrock surface.

To aid in evaluating the groundwater quality and accounting for spatial variability, a series of intrawell background concentrations were proposed and approved for specific parameters in several monitor wells. The specific wells (T109 through T123) were each located outside the perimeter of the extraneous materials. As stated in Section 4.1.2, wells T109, T110, T111, and T112 are located upgradient to the extraneous materials due to the bedrock trough east of Unit 1. The remaining “T” wells are located downgradient to Unit 1 and the extraneous materials, capable of detecting potential changes in groundwater quality due to both Unit 1 and the extraneous materials. Alternate source demonstrations were conducted for wells T114, T115, T116, T117, T118, T119, and T121 as part of Illinois EPA Application Log Nos. 2010-472, 2011-007, 2012-428, and 2013-034. The subject applications demonstrated that background concentration exceedences were the result of spatial variability between upgradient and downgradient groundwater quality and not the result of impacts from Unit 1 or the extraneous materials. The Illinois EPA concurred with the demonstrations via approval of the subject applications, resulting with the incorporation of intrawell background concentrations to the permit.

Pursuant to Condition No. VIII.A.22 of Permit Modification No. 95, intrawell background concentrations are being developed for total manganese at well T114, and total manganese and total sulfate at well T115. Additionally, a pending permit application (Log No. 2013-159) proposes an intrawell background for total recoverable phenols for well T114. The referenced parameters were shown to be spatially variable and not affected by the waste unit or extraneous materials.

There are currently no groundwater assessment activities for the aforementioned wells located on the periphery of the extraneous materials, indicating the groundwater quality at those locations meet the Illinois EPA approved background concentrations.

4.6.1 Summary

The potential sources of contamination at the subject location are the waste unit, the extraneous material areas outside the permitted boundary of the waste unit, and the former coal mining activities. The proposed adjusted standard will allow for a more effective monitoring of actual conditions. Specifically, it will allow for the placement of permanent monitoring wells in an area which will account for all three potential sources and any cumulative effects.

4.7 Section 814.402(b)(3)(G):

Public health, safety, and welfare effects.

As stated previously, the materials located outside the waste boundary of Unit 1 have been in place for approximately 25 years or greater. Yet, in order to assess whether leaving the materials in place is the best environmental opinion, Brickyard Disposal and Recycling has evaluated the possibility of excavating the debris and backfilling with available materials. As part of the evaluation process, the facility reviewed slope stability issues, disturbance of existing final cover and permitted appurtenances (gas and leachate extraction systems, including extraction wells and conveyance lines), and environmental impacts such as control of the liquid contacting the materials. Due to safety and environmental concerns, excavation is not an option the facility plans to pursue as it is not environmentally or economically reasonable. Further discussion of the specific concerns with excavation of the extraneous materials is provided below, as it relates to the criteria here: public health, safety and welfare.

4.7.1 Slope Stability

The location, thickness, and total depth of the extraneous materials have been evaluated with respect to excavation and related potential/probable slope stability issues. The areas containing the extraneous materials can be divided into three segments, east, south, and northwest (Figure 4) and consist of approximately 9.1, 9.2, and 0.3 acres, respectively.

The bottom extent of the extraneous materials encountered adjacent to the waste unit varies dependent upon location. The eastern portion of Unit 1 was largely surface-mined prior to site development and filling operations; therefore, the bedrock topography is lower in this area. Historical documentation places the invert elevation of Unit 1 between 585 to 590 feet above mean sea level (MSL), with some areas as low as 565 feet MSL near well T106 in the northeast corner of Unit 1. Figure 5 identifies the bedrock surface immediately east of Unit 1 and horizontal extent of the materials outside the waste boundary. Coincident to the surface mining, the bottom extent of the extraneous materials in the eastern portion of Unit 1 is lower than elsewhere on the site, averaging an elevation of 564 feet MSL. The material at the deepest location is 556.5 feet above MSL.

Slope stability calculations were conducted using the software PC Stable Version 6 at two representative locations along the east perimeter of the waste unit. Figure 8-1 (Attachment 7) identified the locations as C-C' and E-E'. Calculations for E-E' were determined to also represent the conditions along the south perimeter of Unit 1. The slope failure/slip planes were based on the vertical location of the extraneous materials adjacent to the permitted waste boundary. Information used in for the slope stability evaluation is provided in Attachment 7.

Based on typical friction angles of municipal solid waste, it was projected that the overburden (waste upslope of the extraneous material) would have to be removed at an approximate 2:1 slope (horizontal to vertical) in order to achieve a minimum safety factor for the excavation. However, a variation in refuse characteristics (highly saturated) could require the removal of additional waste to maintain an appropriate factor of safety. The slope of 2:1 was used to calculate the volume of refuse to be temporarily relocated in the areas shown in Figure 6. Based on the stability requirements, approximately 197,000 cubic yards of waste would need to be excavated and temporarily stock-piled on site. This includes 88,000 cubic yards from the eastern perimeter and 109,000 cubic yards from the southern perimeter of Unit 1.

The temporary relocation of waste material from the eastern and southern perimeters of Unit 1 would require the removal of the permitted final cover for Unit 1 and interruption of the gas extraction system. The areas along the eastern and southern perimeters where the temporary relocation of waste material would be required are depicted in Figure 6. As shown, five gas extraction wells and the gas conveyance line leading to the gas plant are located within the area along the eastern perimeter of Unit 1 requiring waste relocation. Waste relocation in this area would require the abandonment and replacement of these gas extraction wells. Along the southern perimeter of Unit 1 where extraneous material removal would require waste relocation, three gas extraction wells would require abandonment and replacement. Additionally, waste relocation along the southern perimeter of Unit 1 would require the relocation of the vacuum line that runs through that area.

The removal of extraneous materials along the eastern and southern perimeter of Unit 1 would require the removal of the cap and temporary relocation of waste material. In addition to compromising the structural integrity of Unit 1, these activities would result in the temporary shutdown of the gas extraction system for Unit 1 and creating potential contractual issues with the gas extraction company. In addition to the facility's contractual obligations, a temporary shutdown of the gas extraction system will halt the remedial action system pursuant to Condition IX of the current permit.

4.7.2 Mass Stability

If excavation of the extraneous materials was undertaken, dewatering of the subject areas would likely be necessary to minimize potential groundwater impacts and exposure of the liquids within the excavation to adjacent surface water. Connectivity to existing mine voids is not known. Dewatering mine voids present within the vicinity of Unit 1 could promote void collapse, which can cause liner fatigue and potential failure. As discussed previously, the potentiometric surface exceeds the top of the coal formation beneath the unit. The groundwater is under artesian conditions, which helps support the roof rock of underground mined areas. Dewatering could lower the potentiometric surface below the top of the mine, removing support from the overlying rock.

4.7.3 Air Quality

Removing the final cover for slope stabilization purposes would create additional difficulties. Once the final cover is removed from applicable areas, the air quality will need to be monitored to ensure worker safety, including but not limited to methane/lower explosive limit and hydrogen sulfide. Dependent upon weather conditions, the odor may be a nuisance to downwind residents. Odor control measures may be necessary in the event waste must be relocated as part of slope stabilization efforts.

4.7.4 Groundwater and Surface Water Affects

The water-bearing zone monitored along the eastern perimeter of Unit 1 is located at the spoil/bedrock interface. Groundwater occurring along the spoil/bedrock interface is underlain by very low hydraulic conductivity shale. This shale is a vertical hydraulic barrier (aquitard).

The extraneous material is generally located along the same stratigraphic horizon as the saturated deposits overlying the shale. As a result, the extraneous material is saturated. Excavating, loading, and hauling the saturated materials are anticipated to be problematic. Removal of the debris may require dewatering to control runoff (ensure groundwater within the

excavation does not drain to the surface ditches) and to allow placement of structural backfill. The drainage swales/ditches along the perimeter of Unit 1 ultimately discharge to the Vermilion River.

Disturbance of the materials will likely affect the chemical properties of the groundwater, potentially causing the mobilization of inorganic constituents and the degradation of groundwater and surface water quality near the affected areas.

4.7.5 Leachate Collection System Capacity

As discussed above, test excavations have shown that groundwater will likely be encountered within the extraneous materials, requiring dewatering. It is assumed that the recovered liquids will have to be collected and treated as leachate. This will entail conveyance directly to the Unit 2 leachate storage tank prior to transfer to the offsite treatment facility. The volume of recovered liquids may become excessive and require operational or design changes to the leachate conveyance and storage systems. At no time would liquids be introduced into Unit 2 disposal cells.

The transmissivity of the coal and/or mined areas, as well as railroad ties, is expected to be high. This directly corresponds with a higher discharge rate and higher volume of liquid that may need to be collected and treated.

4.7.6 Cover Thickness Over the Extraneous Material

Historical information indicates the railroad ties were placed along the periphery of Unit 1 in the 1980s. The tie placement was not continuous but occurred in pockets or specific areas. Three field investigations were conducted over the years to better identify the locations of the extraneous materials which also determined the thickness of cover overlying the materials. The field investigations accounted for 109 probe locations, including 36 cover probe borings (conducted with a drilling unit) and 73 test pits completed with the use of a tracked backhoe. Based on the 1992 cover probe investigation and the 2006 and 2008 trench investigations, the thickness of soils overlying the extraneous materials ranged from 0 to 15 feet, with an average thickness of 5.5 feet. The number of probes/test pits conducted to evaluate the cover occurred on the average one per 0.17 acres, less than a 100-foot grid spacing. The 1992 cover probe locations and the 2006 and 2008 test pit locations are shown on Figure 4. Cover thicknesses, or depths to the top of the extraneous materials, are provided in Table 1.

Based on the aforementioned investigations, the cover composition ranges from clayey soil to a combination of clay, silt and stone. In areas directly adjacent to the Unit 1 waste boundary, the cover appears to be consistent with that present on Unit 1, i.e. vegetated clayey soil. It is expected this cover was placed simultaneously with the capping of areas of Unit 1 and in the same manner (compacted soil with a vegetated cover). With distance from the waste boundary, the percentage of aggregate increases within the soil matrix; the cover composition varies with location.

Visual observation of the trench excavations indicate the cover is highly compacted due to over 25 years of traffic during placement and site operation/development. The cover is well vegetated in most areas except in areas of equipment traffic due to soil borrow activities adjacent to Unit 1 and facility maintenance. As illustrated in Figure 7, the cover overlying the extraneous materials is sloped to promote drainage such that no ponding water occurs, minimizing the potential of

surface water infiltration into materials. Existing cover overlying the extraneous material will not be disturbed except as to conduct maintenance and augment the vegetation.

Pursuant to comments provided by Illinois EPA personnel, an additional investigation was conducted to further evaluate the qualities of the cover overlying known areas containing extraneous materials. The cover investigation included test pits at 24 locations. Soil samples were retained for analyses, including grain size, standard proctor curves, and vertical hydraulic conductivity. Each test pit location included field density/moisture testing utilizing a nuclear density gauge. Details of the cover investigation are included in the Extraneous Materials Cover Plan which is provided as Exhibit C to the Adjusted Standard Petition.

The Extraneous Materials Cover Plan was developed to ensure adequate placement of cover and vegetative soil occurred (over extraneous materials) in areas identified as having less than two feet of protective cover by the previously discussed field investigations.

4.7.7 Summary

The temporary groundwater monitor well network can adequately monitor the groundwater quality on the perimeter of both Unit 1 and the extraneous materials. By leaving the extraneous materials in place, there are no negative effects to the public safety, health, and welfare. By removing the extraneous materials, potential effects to the public safety, health and welfare can occur. The temporary monitor well network will be further justified and or modified as necessary via subsequent permitting which will include appropriate well spacing calculations/modeling.

Brickyard Disposal and Recycling, Inc. is responsible for monitoring and managing the groundwater quality as necessary to maintain statutory compliance. This not only includes Unit 1, but also the extraneous materials identified in this Adjusted Standard Petition. Approving the Adjusted Standard Petition will not negatively impact public health and safety, but will allow for greater protection against any unnecessary risk and harm at this site.

4.8 Section 814.402(b)(3)(H):

In no case shall the zone of compliance extend beyond the facility property line or beyond the annual high water mark of any navigable surface water.

Pursuant to Section 814.402(b)(3)(I), the compliance boundary cannot extend beyond 150 meters from the edge of the unit. The maximum extent of the compliance boundary is shown in Figure 7, which is within the property limits of the facility.

The Vermilion River is a navigable surface water located adjacent (east) of Unit 1. The average annual high water level was derived from data obtained from the United Stated Geological Survey gaging station (No. 03339000) located at the bridge directly west of County Highway 505 (Back Bone Road) at the wastewater treatment facility directly east of the landfill. The location is shown in Figure 1.

Daily measurements were available from October 1, 1993 to July 18, 2012. Additional water level measurements were available dating back to June 23, 1960; however, measurements were sporadic. The maximum river elevations were determined for each year data was available. The maximum values were then averaged over the subject time interval. The maximum average annual high water mark is 519.14 feet MSL. Figure 7 also shows the topography of Unit 1 and the surrounding area. The maximum average annual high water mark

does not encroach on the facility property and therefore does not affect the proposed groundwater monitoring network. The gage data discussed above are provided in Attachment 8.

4.8.1 Summary

The proposed adjusted standard seeks to establish an effective groundwater monitoring network within the facility property line and not beyond the annual high water mark of any nearby surface water. Thus, Section 814.402 (b)(3)(H) is not negatively implicated.

4.9 Section 814.402(b)(3)(I):

Notwithstanding the limitations of subsection 814.402(b)(3)(H), in no case shall the zone of compliance at an existing MSWLF unit extend beyond 150 meters from the edge of the unit.

The location of all current monitoring wells has been evaluated with respect to the distance to the edge of the permitted waste boundary. At no point does the distance exceed 150 meters. Figure 7 identifies the permitted waste boundary, the limits of the materials located outside the waste boundary, current monitor wells, and the 150 meter distance. The proposed compliance boundary is identified in Figure 7. Brickyard Disposal and Recycling, Inc. does not seek to permit any future wells beyond 150 meters from the edge of Unit 1.

4.9.1 Summary

The adjusted standard proposed would allow for a new groundwater compliance boundary relevant to Unit 1, so that the effects of Unit 1 (and the extraneous material) are adequately monitored. Any routine wells within the revised compliance boundary will not extend beyond 150 meters from the edge of the Unit 1. Thus, Section 814.402(b)(3)(I) is not negatively implicated.

5. SUMMARY

The Adjusted Standard Petition for the modified compliance boundary is the result of the occurrence of materials encountered outside the Unit 1 landfill footprint adjacent to Unit 1. Historical records indicate the materials were placed approximately 25 years ago or more. The materials, largely railroad ties, were generally used as backfill adjacent to the Unit 1 waste boundary. The location of the materials was determined from two field investigations that occurred in 2006 and 2008. Details of the investigations were discussed in Section 3.

As discussed in Section 2, the current Unit 1 monitor well network includes a series of temporary assessment wells T109 through T123 located beyond the perimeter of the extraneous material capable of evaluating potential influences to the groundwater from Unit 1 and/or the extraneous materials. In order to permit some of the referenced wells outside the perimeter of the extraneous material (as routine detection wells and not assessment wells), and allow for the permitting of any other appropriate monitoring wells, an adjusted standard is necessary to revise the location of the compliance boundary.

5.1 Limited Extent of Water-Bearing Zone

Site hydrogeologic investigations have identified the coal seam, voids where the coal has been underground mined, or the spoil/bedrock interface (where the coal was surface mined) as the

potential contaminant migration pathway. In the event of a release from Unit 1, changes in groundwater quality should be discernible in wells screened in the identified pathway or water-bearing zone.

Groundwater has been shown to move from west to east in the water-bearing zone with localized deviations, from the coal or underground mines to surface mined areas to the east of Unit 1. As discussed in Section 4.1.2, the bedrock was excavated in a trench-like manner east of Unit 1, decreasing in elevation from well T102 (south) to T108 (north). The trench, referred to as a trough, creates not only a surface drainage structure, but also a groundwater divide. The trough intersects groundwater moving west to east beneath the site, as well as east to west from an area west of the Vermilion River but east of the trough. Groundwater within the trough moves down slope via gravity towards wells T113, T114, and T115 near the northeast corner of Unit 1. The bedrock trough is expected to terminate prior to or at the Vermilion River. The river denotes the maximum extent of the water-bearing zone; therefore, the extent of the water-bearing zone downgradient of Unit 1 is very limited.

5.2 No Water Supply Wells Downgradient of Unit 1

Given the limited extent of the water-bearing zone, no water supply wells were identified downgradient to Unit 1 screened in the subject zone. As discussed in Section 4.4, the Illinois Environmental Protection Agency SWAP database and the Illinois State Geological Survey database have been reviewed to identify public or residential wells near the landfill facility. Given the historical land usage on and near the facility, there are no groundwater users or receptors located downgradient to Unit 1. Refuse at the Unit 1 location has been present since the 1960s, bordered by the wastewater treatment plant and Vermilion River in the hydraulically downgradient direction (east). There will be no development within that area that would create the need or use of groundwater for human consumption.

5.3 Public Health, Safety and Welfare Effects

As discussed in Section 3, the extraneous materials are typically covered with several feet of compact soil, isolating the materials from the surrounding environment. Excavating the materials will create several potential issues, including:

1. Slope Stability – Removing extraneous materials adjacent to Unit 1 would destabilize the slopes of the existing waste unit such that the minimum safety factors could not be met pursuant to 35 Ill. Adm. Code Section 811.304(d). In order to stabilize the waste, approximately 197,000 cubic yards of waste would need to be excavated and temporarily stockpiled on site. This includes 88,000 cubic yards from the eastern perimeter and 109,000 cubic yards from the southern perimeter of Unit 1. The temporary relocation of waste material would require the removal of the permitted final cover for Unit 1, and interruption of the gas extraction system. Several gas extraction wells and the gas conveyance line leading to the gas plant would have to be abandoned and subsequently reinstalled. In addition, a temporary shutdown of the gas extraction system will halt the remedial action system pursuant to Condition IX of the current permit.

2. Mass Stability – Dewatering of the excavation areas will likely be necessary to minimize potential groundwater impacts and exposure of the liquids within the excavation to adjacent surface water. Dewatering mine voids present within the vicinity of Unit 1 could promote void collapse, which can cause liner fatigue and potential failure.

3. Air Quality – If the final cover is removed from applicable areas, the air quality will need to be monitored to ensure worker safety, including but not limited to methane/lower explosive limit, hydrogen sulfide, and asbestos particles. Dependent upon weather conditions, the odor may be a nuisance to downwind residents. Odor control measures may be necessary in the event waste must be relocated as part of slope stabilization efforts.

4. Groundwater and Surface Water Affects – During the 2006 and 2008 investigations, the material encountered was typically saturated. Excavating, loading, and hauling the saturated materials are anticipated to be problematic. Removal of the materials may require dewatering to control runoff (ensure groundwater within the excavation does not drain to the surface ditches) and to allow placement of structural backfill. The drainage swales/ditches along the perimeter of Unit 1 ultimately discharge to the Vermilion River.

5. Leachate Collection System Capacity – If excavation of the debris along the eastern and southern perimeter of Unit 1 requires dewatering, it is assumed that the recovered liquids will have to be collected and treated as leachate, ultimately being disposed in the Unit 2 leachate tank. Liquids recovered from dewatering would be conveyed directly to the Unit 2 storage tanks. At no time would liquids be introduced into the cells of Unit 2.

5.4 Existing Cover

Based on the 1992 cover probe investigation and the 2006 and 2008 trench investigations, the thickness of the clean fill overlying the debris ranges from 0 to 15 feet, with an average thickness of 5.5 feet. Visual observation of the trench excavations indicate the cover is highly compacted due to over 25 years of traffic during placement and site operation/development, resulting in a low hydraulic conductivity barrier. The cover is well vegetated except in areas of equipment traffic due to soil borrow activities and facility maintenance.

The follow-up cover investigation (October 2012) further confirmed the results aforementioned investigations. The 2012 cover investigation determined the soil characteristics of the cover overlying the extraneous materials were more than sufficient to provide a long-term low hydraulic conductivity barrier. In fact, the 2012 laboratory hydraulic conductivity tests of the cover were lower than the Illinois EPA's recommended long-term soil cover hydraulic conductivity of $1x10^{-5}$ cm/sec. Details of the 2012 cover investigation are contained in the Extraneous Materials Cover Plan provided in Exhibit C to the Adjusted Standard Petition.

5.5 Temporary Monitor Well Network

The temporary monitor well network has been designed to monitor the groundwater quality beyond the Unit 1 waste boundary and the extraneous materials. Upon approval of the Adjusted Standard Petition, the temporary assessment wells identified as T110, T111, T113 through T121, and T123 shall become part of the monitor well network along with existing wells G130, R106, R132, G33S, G34S, G35S, and G36S (to be installed as part of Cell 7 development). The subject network of monitor wells is shown in Figure 9. Within 90 days of the approval of the Adjusted Standard Petition, the temporary monitor well network will be further justified and/or modified as necessary via subsequent permitting which will include appropriate well spacing calculations/modeling. The monitor well network may be modified in the future as necessary via the permit modification process to address changing conditions for the areas referenced in the Adjusted Standard Petition.

The groundwater monitor well network referenced above can adequately monitor the groundwater quality on the perimeter of both Unit 1 and the extraneous materials. This Adjusted Standard is necessary to sanction the regulatory appropriateness of this network location, for purposes of compliance and, ultimately, closure. By leaving the extraneous materials in place, there are no negative effects to the public safety, health, and welfare. By removing the extraneous materials, potential effects to the public safety, health, and welfare can occur. Absent removal, monitoring for actual effects is insufficient, since monitoring wells must be placed above the extraneous materials.

6. CONCLUSION

Approval of the alternative compliance boundary sought in the Adjusted Standard Petition is necessary in order to leave the materials in place and still achieve consistency with the Illinois Pollution Control Board's regulations. Specifically, extending the compliance boundary will allow for a more appropriate monitoring network, so that the regulatory framework related to monitoring any potential impacts is more effectively achieved at this site, given actual site conditions. The Adjusted Standard Petition will not result in contamination of groundwater, let alone contamination of groundwater needed or used for human consumption.

The Technical Support Document has been completed by and under the direct supervision of Brad Hunsberger, a Licensed Professional Geologist for Andrews Engineering, Inc. A curriculum vitae for Mr. Hunsberger is provided in Attachment 9.

Brad J. Hunsberger 5-31-2013

Brad J. Hunsberger — Date — Expires 03/31/2015

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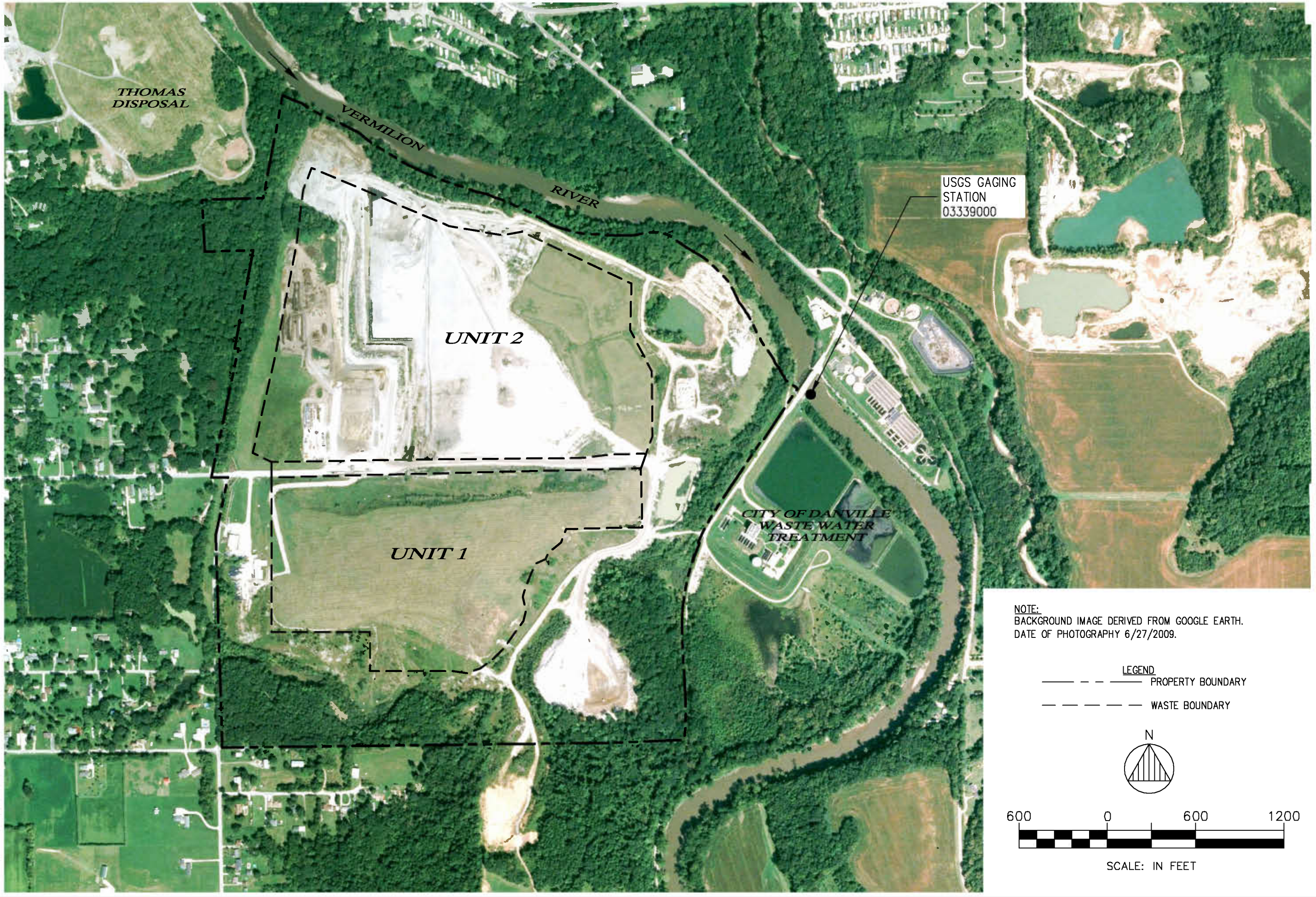
United States Geologic Survey, *Streamflow Measurements for the Nation* (USGS 03339000 Vermilion River Near Danville, IL).

FIGURES



NOTE:
BACKGROUND IMAGE DERIVED FROM GOOGLE EARTH.
DATE OF PHOTOGRAPHY 6/27/2009.

LEGEND
PROPERTY BOUNDARY
WASTE BOUNDARY

N

600 0 600 1200

SCALE: IN FEET

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APPROVED BY:	BJH	DESIGNED BY:	BJH	DRAWN BY:	MPN

SITE MAP

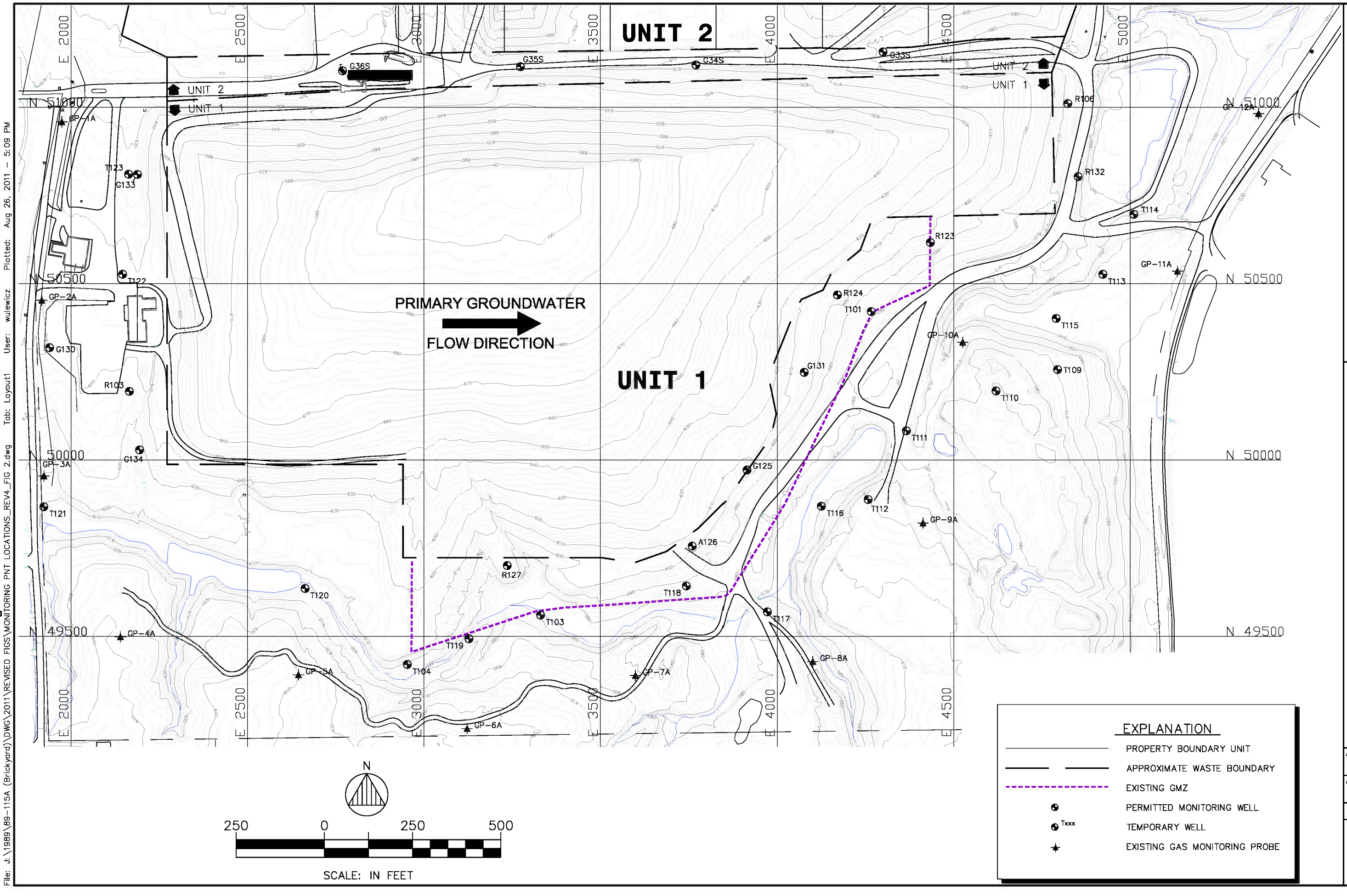
PLANS PREPARED FOR
BRICKYARD DISPOSAL & RECYCLING
DANVILLE, ILLINOIS

DATE: SEPTEMBER 2011

PROJECT ID: 1989-115A

SHEET NUMBER:

FIG. 1



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APPROVED BY:	DRAWN BY:
JLR	JLR
DESIGNED BY:	
JLR	WCU

UNIT 1 MONITORING WELL LOCARTION MAP

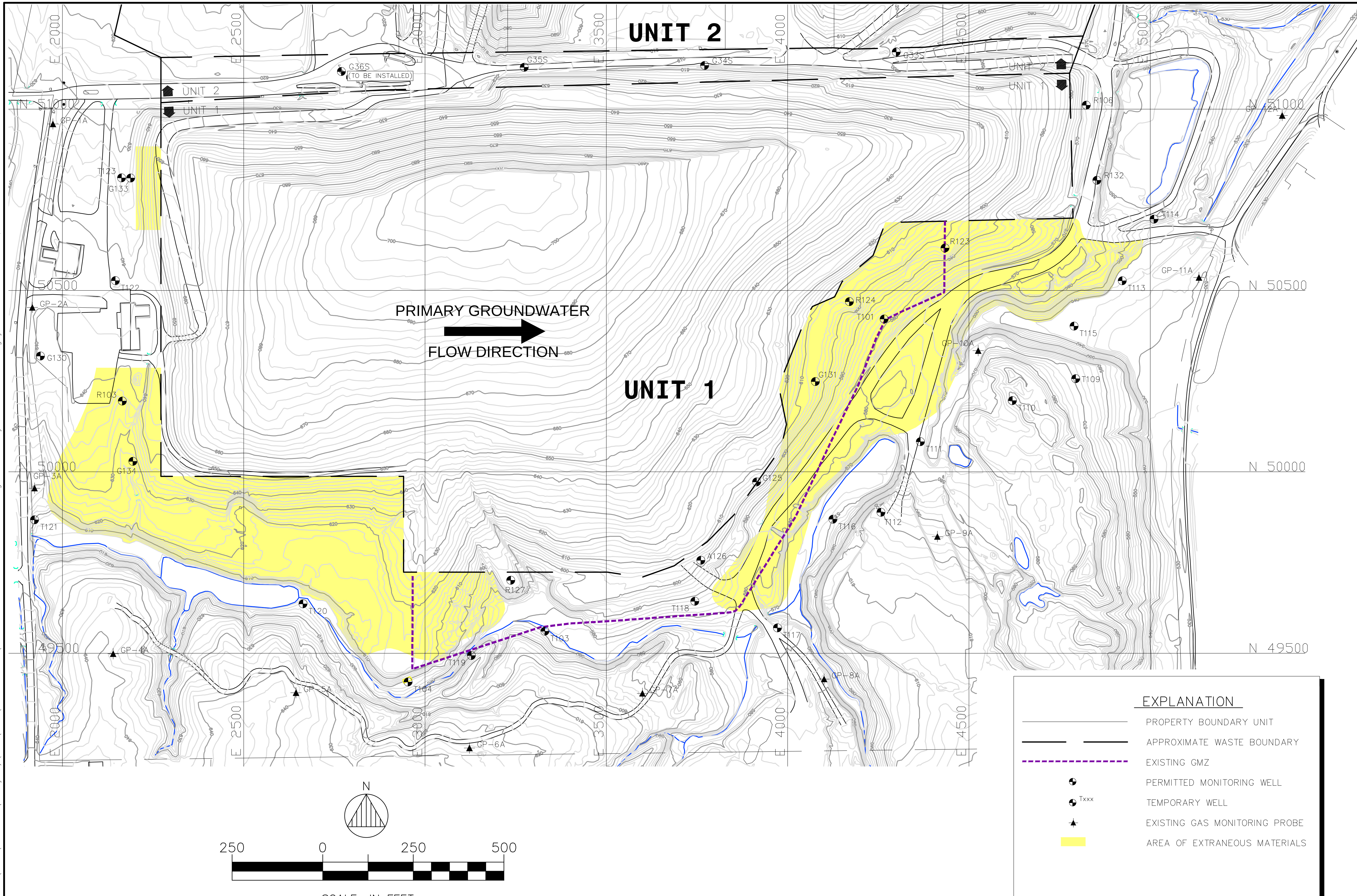
PLANS PREPARED FOR
BRICKYARD DISPOSAL & RECYCLING
DANVILLE, ILLINOIS

DATE: AUGUST 2011

PROJECT ID: 89-115A

SHEET NUMBER:

FIG. 2



EXPLANATION

- PROPERTY BOUNDARY UNIT
- APPROXIMATE WASTE BOUNDARY
- EXISTING GMZ
- PERMITTED MONITORING WELL
- TEMPORARY WELL (Txxx)
- EXISTING GAS MONITORING PROBE
- AREA OF EXTRANEOUS MATERIALS

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APPROVED BY: JLR
DESIGNED BY: JLR
DRAWN BY: WCU

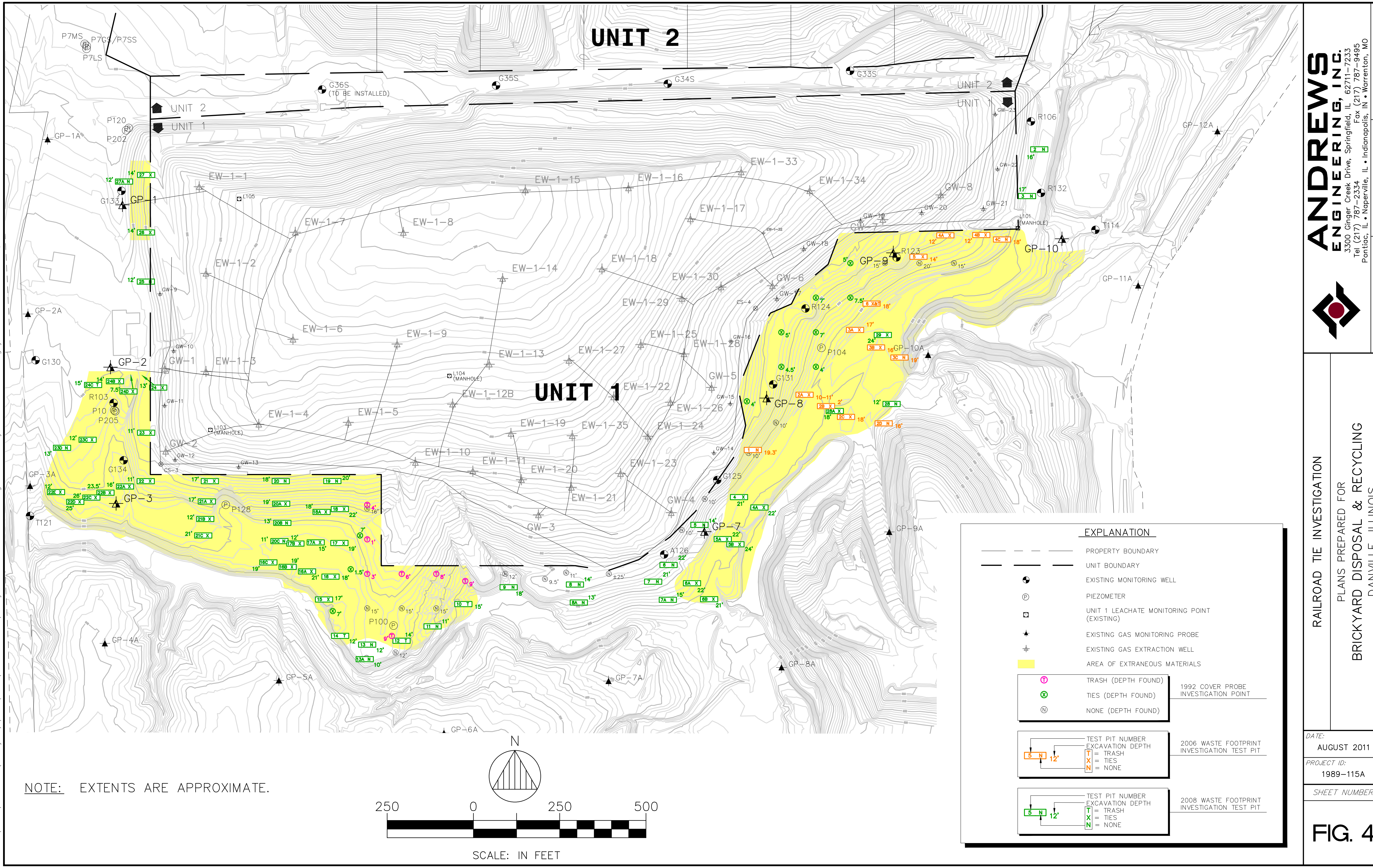
UNIT 1 EXTRANEOUS MATERIALS LOCATION MAP

PLANS PREPARED FOR
BRICKYARD DISPOSAL & RECYCLING
DANVILLE, ILLINOIS

DATE: AUGUST 2011
PROJECT ID: 89-115A
SHEET NUMBER:

FIG. 3

File: J:\1989\89-115A (Brickyard)\DWG\2011\REVISED FIGS\MONITORING PNT LOCATIONS_REV4.dwg Tab: Layout1 User: mnguyen Plotted: Jul 19, 2012 - 9:06 AM


UNIT 2
UNIT 1
NOTE: EXTENTS ARE APPROXIMATE.
N
250 0 250 500
SCALE: IN FEET
EXPLANATION
PROPERTY BOUNDARY
UNIT BOUNDARY
EXISTING MONITORING WELL
PIEZOMETER
UNIT 1 LEACHATE MONITORING POINT (EXISTING)
EXISTING GAS MONITORING PROBE
EXISTING GAS EXTRACTION WELL
AREA OF EXTRANEOUS MATERIALS
TRASH (DEPTH FOUND)
TIES (DEPTH FOUND)
NONE (DEPTH FOUND)
1992 COVER PROBE INVESTIGATION POINT
TEST PIT NUMBER
EXCAVATION DEPTH
T = TRASH
X = TIES
N = NONE
2006 WASTE FOOTPRINT INVESTIGATION TEST PIT
2008 WASTE FOOTPRINT INVESTIGATION TEST PIT
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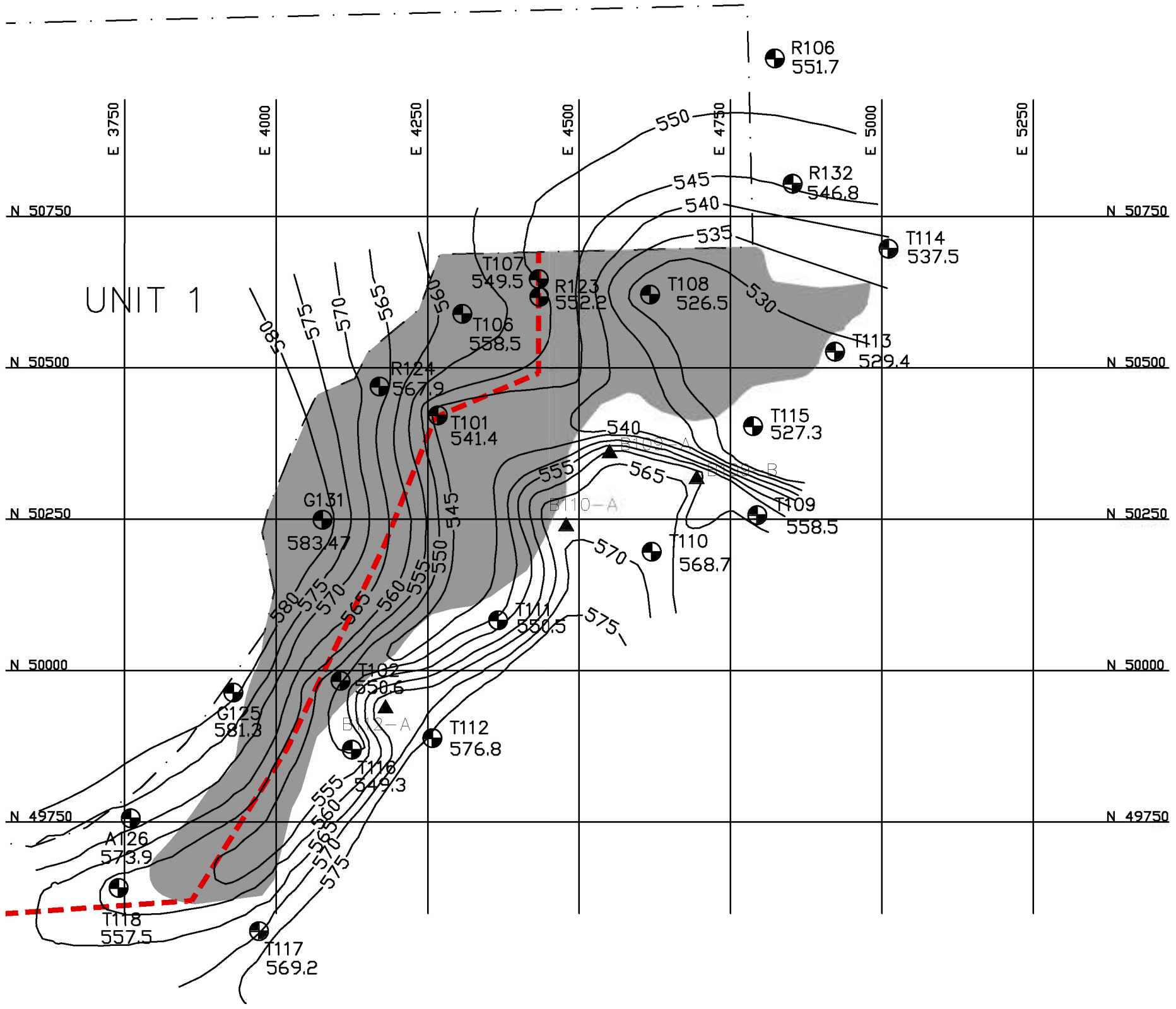
APPROVED BY: BEM
DESIGNED BY: BEM
DRAWN BY: LJE
RAILROAD TIE INVESTIGATION
PLANS PREPARED FOR
BRICKYARD DISPOSAL & RECYCLING
DANVILLE, ILLINOIS
DATE: AUGUST 2011
PROJECT ID: 1989-115A
SHEET NUMBER:
FIG. 4



EXPLANATION

- WASTE BOUNDARY
- CURRENT PERMITTED GMZ BOUNDARY
- AREA OF EXTRANEOUS MATERIALS
- GROUNDWATER MONITORING WELL
- BORING LOCATION

N

200 0 200 400

SCALE: IN FEET

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APPROVED BY: JLR | DESIGNED BY: JLR | DRAWN BY: MPN

BEDROCK TOPOGRAPHY MAP (UNIT 1 EASTERN BOUNDARY)

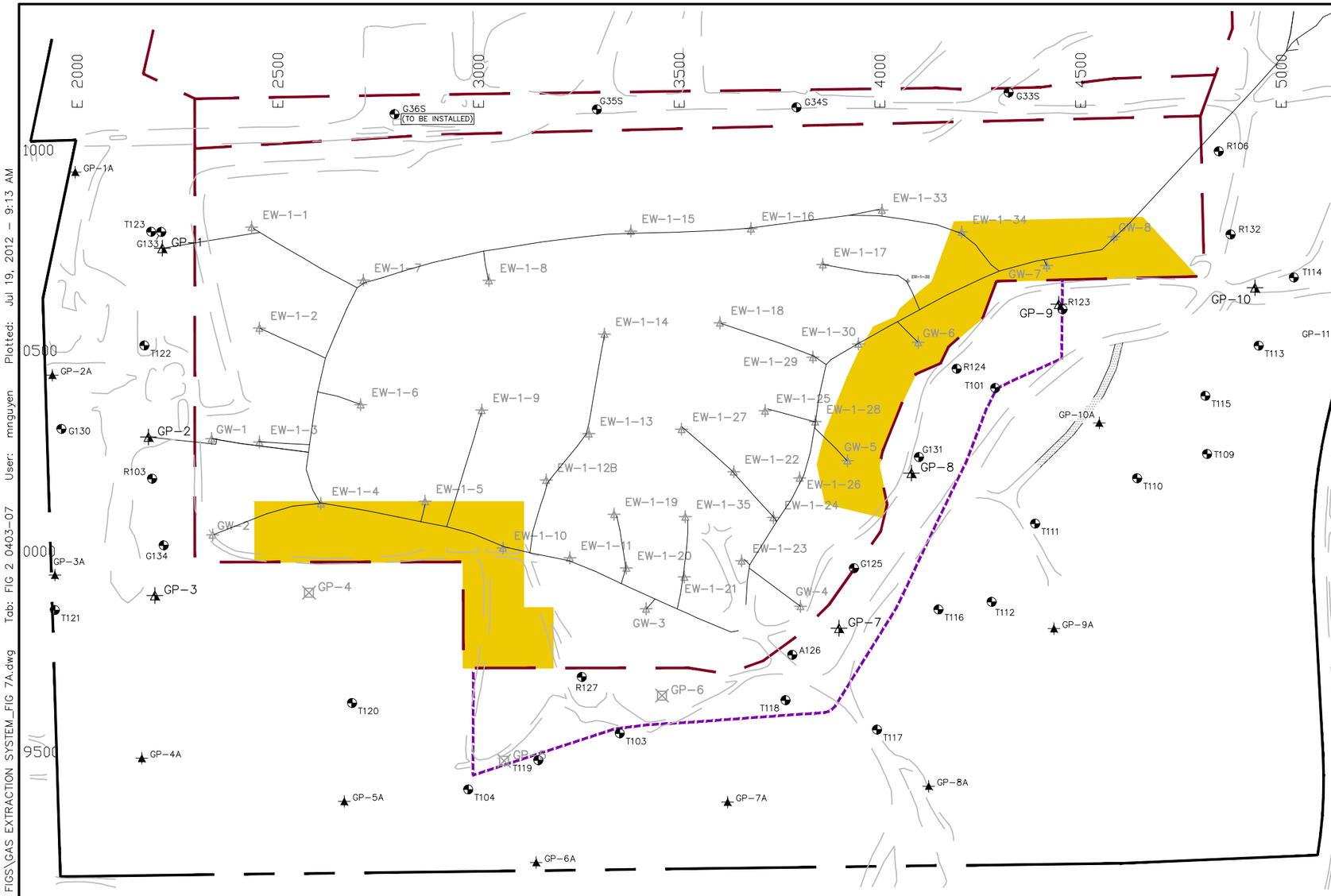
PLANS PREPARED FOR
BRICKYARD DISPOSAL & RECYCLING
DANVILLE, ILLINOIS

DATE: MARCH 2011

PROJECT ID: 89-115A

SHEET NUMBER:

FIG. 5



EXPLANATION

- PROPERTY BOUNDARY
- UNIT BOUNDARY
- EXISTING GROUNDWATER MANAGEMENT ZONE
- GW/EW — EXISTING GAS EXTRACTION WELL
- GP-9A — APPROXIMATE LOCATION OF REPLACEMENT GAS MONITORING PROBE
- GP-10 — EXISTING GAS MONITORING PROBE CONVERTED TO SUPPLEMENTAL GAS EXTRACTION WELL
- EXISTING CONDENSATE PUMP
- EXISTING GAS HEADER/LATERAL
- G133 — PERMITTED MONITORING WELL
- Txxx — TEMPORARY WELL
- APPROXIMATE AREA REQUIRING TEMPORARY WASTE RELOCATION TO ENSURE ADEQUATE SLOPE STABILITY IN THE EVENT THE EXTRANEOUS MATERIALS ARE REMOVED.

N

300 0 300 600

SCALE: IN FEET

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APPROVED BY: JLR | DESIGNED BY: JLR | DRAWN BY: WCU

UNIT 1 – GAS EXTRACTION SYSTEM

PLANS PREPARED FOR
BRICKYARD DISPOSAL & RECYCLING
DANVILLE, ILLINOIS

DATE: AUGUST 2011

PROJECT ID: 89-115A

SHEET NUMBER: FIG. 6

File: J:\1989\89-115A (Brickyard)\DWG\2011\REVISED FIGS\GAS EXTRACTION SYSTEM_FIG 7A.dwg Tab: FIG 2 0403-07 User: mnguyen Plotted: Jul 19, 2012 - 9:13 AM

UNIT 2

UNIT 1

PRIMARY GROUNDWATER FLOW DIRECTION

E 2000 E 2500 E 3000 E 3500 E 4000 E 4500 E 5000

N 51000 N 50500 N 50000 N 49500

G36S (TO BE INSTALLED) G35S G34S G33S R106 GP-12A R132 T114 R123 GP-11A T113 R124 T101 T115 GP-10A G131 T109 T110 T111 G125 T116 T112 GP-9A A126 R127 T118 T117 GP-8A T120 T103 T119 T104 GP-7A GP-5A GP-6A GP-4A G134 GP-3A T121 G130 R103 T122 GP-2A T123 G133 GP-1A

N

250 0 250 500

SCALE: IN FEET

EXPLANATION

- PROPERTY BOUNDARY UNIT
- APPROXIMATE WASTE BOUNDARY
- EXISTING GMZ
- PROPOSED COMPLIANCE BOUNDARY
- PERMITTED MONITORING WELL
- Txxx TEMPORARY WELL
- EXISTING GAS MONITORING PROBE
- AREA OF EXTRANEOUS MATERIALS

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APPROVED BY: JLR | DESIGNED BY: JLR | DRAWN BY: WCU

MAXIMUM COMPLIANCE BOUNDARY

PLANS PREPARED FOR
BRICKYARD DISPOSAL & RECYCLING
DANVILLE, ILLINOIS

DATE: AUGUST 2011

PROJECT ID: 89-115A

SHEET NUMBER:

FIG. 7

File: J:\1989\89-115A (Brickyard)\DWG\2011\REVISED FIGS\MONITORING PNT LOCATIONS_REV4_FIG 8A.dwg Tab: Layout1 User: mnguyen Plotted: Jul 20, 2012 - 2:55 PM

File: J:\1989\89-115A (Brickyard)\DWG\2011\Danville.dwg Tab: Layout1 User: wulewicz Plotted: Nov 03, 2011 - 12:05 PM

NOTE:
BACKGROUND IMAGE DERIVED FROM GOOGLE EARTH.
DATE OF PHOTOGRAPHY 6/27/2009.

FIG. 8

DANVILLE, IL AREA IMAGE

PLANS PREPARED FOR
BRICKYARD DISPOSAL & RECYCLING
DANVILLE, ILLINOIS

DATE: SEPTEMBER 2011
PROJECT ID: 1989-115A
SHEET NUMBER:

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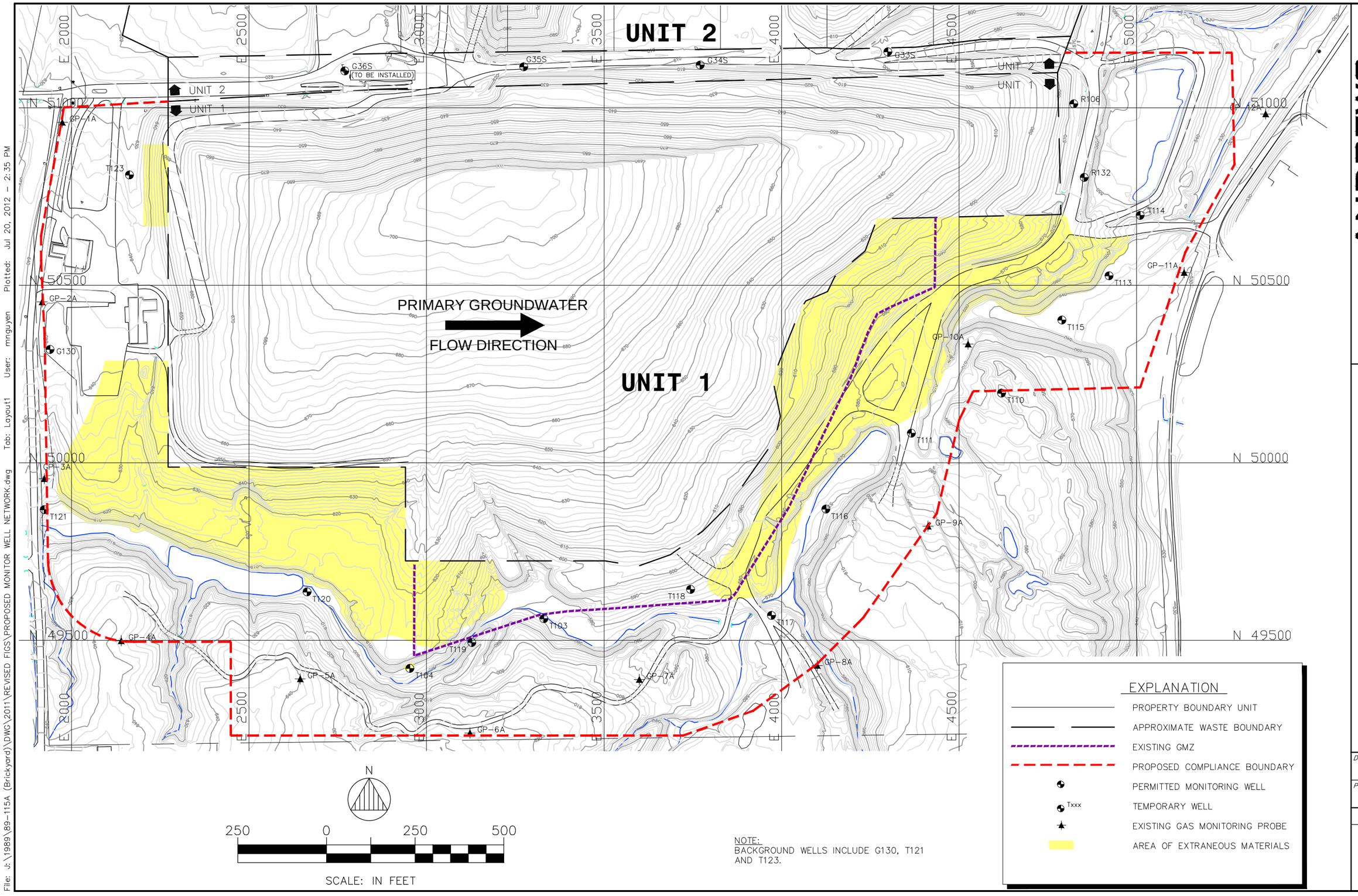
APPROVED BY: BJH | DESIGNED BY: BJH | DRAWN BY: MPN



N

250 0 250 500

SCALE: IN FEET

NOTE:
BACKGROUND WELLS INCLUDE G130, T121 AND T123.

EXPLANATION

- PROPERTY BOUNDARY UNIT
- APPROXIMATE WASTE BOUNDARY
- EXISTING GMZ
- PROPOSED COMPLIANCE BOUNDARY
- PERMITTED MONITORING WELL
- Txxx TEMPORARY WELL
- EXISTING GAS MONITORING PROBE
- AREA OF EXTRANEOUS MATERIALS

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APPROVED BY:	DESIGNED BY:	DRAWN BY:
JLR	JLR	WCU

PROPOSED MONITOR WELL NETWORK

PLANS PREPARED FOR
BRICKYARD DISPOSAL & RECYCLING
DANVILLE, ILLINOIS

DATE: MAY 2012
PROJECT ID: 89-115A
SHEET NUMBER:

FIG. 9

File: J:\1989\89-115A (Brickyard)\DWG\2011\REVISED FIGS\PROPOSED MONITOR WELL NETWORK.dwg Tab: Layout1 User: mnguyen Plotted: Jul 20, 2012 - 2:35 PM

TABLE

TABLE 1
BRICKYARD DISPOSAL AND RECYCLING
UNIT 1 EXTRANEOUS MATERIAL INVESTIGATION

Year	Test Pit/ Boring Number	Northing (ft)	Easting (ft)	Elevation (ft)	Total Depth of Test Pit/ Boring (ft)	Top of Material (ft)/Cover Thickness	Bottom of Material (ft)	Thickness of Material (ft)	Bottom Pit Elevation	Bottom of Material
1992	n/a	49900	2900	n/a	4	4	n/a	n/a	n/a	n/a
1992	n/a	49889	2900	n/a	16	n/a	n/a	n/a	n/a	n/a
1992	n/a	49800	2900	n/a	1	1	n/a	n/a	n/a	n/a
1992	n/a	49811	2879	n/a	7	7	n/a	n/a	n/a	n/a
1992	n/a	49714	2853	n/a	1.5	1.5	n/a	n/a	n/a	n/a
1992	n/a	49700	2900	n/a	3	3	n/a	n/a	n/a	n/a
1992	n/a	49592	2800	n/a	7	7	n/a	n/a	n/a	n/a
1992	n/a	49600	2900	n/a	15	n/a	n/a	n/a	n/a	n/a
1992	n/a	49456	2898	n/a	12	n/a	n/a	n/a	n/a	n/a
1992	n/a	49472	2892	n/a	12	n/a	n/a	n/a	n/a	n/a
1992	n/a	49520	2971	n/a	9	9	n/a	n/a	n/a	n/a
1992	n/a	49600	3000	n/a	15	n/a	n/a	n/a	n/a	n/a
1992	n/a	49700	3000	n/a	6	6	n/a	n/a	n/a	n/a
1992	n/a	49700	3100	n/a	8	8	n/a	n/a	n/a	n/a
1992	n/a	49679	3184	n/a	9	9	n/a	n/a	n/a	n/a
1992	n/a	49600	3100	n/a	15	n/a	n/a	n/a	n/a	n/a
1992	n/a	49700	3300	n/a	12	n/a	n/a	n/a	n/a	n/a
1992	n/a	49685	3415	n/a	9.5	n/a	n/a	n/a	n/a	n/a
1992	n/a	49700	3475	n/a	11	n/a	n/a	n/a	n/a	n/a
1992	n/a	49700	3600	n/a	25	n/a	n/a	n/a	n/a	n/a
1992	n/a	49700	3700	n/a	1	1	n/a	n/a	n/a	n/a
1992	n/a	49827	3711	n/a	10	n/a	n/a	n/a	n/a	n/a
1992	n/a	49917	3878	n/a	10.0	n/a	n/a	n/a	n/a	n/a
1992	n/a	50050	4005	n/a	10.0	n/a	n/a	n/a	n/a	n/a
1992	n/a	50138	4084	n/a	10.0	n/a	n/a	n/a	n/a	n/a
1992	n/a	50200	4000	n/a	4.0	4.0	n/a	n/a	n/a	n/a
1992	n/a	50300	4100	n/a	4.5	4.5	n/a	n/a	n/a	n/a
1992	n/a	50300	4200	n/a	4.0	4.0	n/a	n/a	n/a	n/a
1992	n/a	50400	4100	n/a	5.0	5.0	n/a	n/a	n/a	n/a
1992	n/a	50400	4200	n/a	7.0	7.0	n/a	n/a	n/a	n/a
1992	n/a	50500	4200	n/a	7.0	7.0	n/a	n/a	n/a	n/a
1992	n/a	50500	4300	n/a	7.5	n/a	n/a	n/a	n/a	n/a
1992	n/a	50600	4600	n/a	15.0	n/a	n/a	n/a	n/a	n/a
1992	n/a	50600	4500	n/a	20.0	n/a	n/a	n/a	n/a	n/a
1992	n/a	50600	4400	n/a	15.0	n/a	n/a	n/a	n/a	n/a
1992	n/a	50600	4300	n/a	5.0	n/a	n/a	n/a	n/a	n/a
2006	1	50059	4005	598.2	19.3	n/a	n/a	n/a	578.9	n/a
2006	2A	50219	4155	580.2	10.5	1.5	10.1	8.6	569.7	570.1
2006	2B	50186	4217	580.0	3.0	2.0	3.0	1.0	577.0	577.0
2006	2C	50155	4275	577.3	18.0	7.0	18.0	11.0	559.3	559.3

TABLE 1
BRICKYARD DISPOSAL AND RECYCLING
UNIT 1 EXTRANEOUS MATERIAL INVESTIGATION

Year	Test Pit/ Boring Number	Northing (ft)	Easting (ft)	Elevation (ft)	Total Depth of Test Pit/ Boring (ft)	Top of Material (ft)/Cover Thickness	Bottom of Material (ft)	Thickness of Material (ft)	Bottom Pit Elevation	Bottom of Material
2006	2D	50136	4384	576.2	16.0	n/a	n/a	n/a	560.2	n/a
2006	3A	50407	4301	576.5	17.0	3.0	17.0	14.0	559.5	559.5
2006	3B	50356	4362	575.1	16.0	5.0	16.0	11.0	559.1	559.1
2006	3C	50327	4430	574.0	19.0	n/a	n/a	n/a	555.0	n/a
2006	4A	50681	4563	585.5	12.0	9.0	12.0	3.0	573.5	573.5
2006	4B	50682	4667	579.8	12.0	7.0	12.0	5.0	567.8	567.8
2006	4C	50669	4727	574.3	18.0	7.0	8.0	1.0	556.3	566.3
2006	5	50619	4485	587.5	14.0	13.0	14.0	1.0	573.5	573.5
2006	6	50483	4348	578.6	18.0	11.0	18.0	7.0	560.6	560.6
2008	2	50930.21	4847.26	564.99	16.0	n/a	n/a	n/a	549.0	n/a
2008	3	50794.63	4811.97	566.14	17.0	n/a	n/a	n/a	549.1	n/a
2008	4	49922.46	3977.33	581.22	21.0	4.0	21.0	17.0	560.2	560.2
2008	4A	49892.32	4036.72	578.49	22.0	6.0	22.0	16.0	556.5	556.5
2008	5	49841.86	3862.76	592.41	14.0	n/a	n/a	n/a	578.4	n/a
2008	5A	49811.06	3914.58	580.79	22.0	6.0	22.0	16.0	558.8	558.8
2008	5B	49788.93	3966.82	580.54	24.0	10.0	24.0	14.0	556.5	556.5
2008	6	49725.86	3773.40	595.68	17.0	n/a	n/a	n/a	578.7	n/a
2008	6A	49672.88	3841.17	583.62	22.0	11.0	22.0	11.0	561.6	561.6
2008	6B	49626.65	3890.72	578.42	21.0	6.0	21.0	15.0	557.4	557.4
2008	7	49677.41	3728.55	593.02	21.0	n/a	n/a	n/a	572.0	n/a
2008	7A	49624.66	3771.00	581.70	15.0	n/a	n/a	n/a	566.7	n/a
2008	8	49669.04	3501.81	600.74	14.0	n/a	n/a	n/a	586.7	n/a
2008	8A	49616.85	3513.29	591.16	13.0	n/a	n/a	n/a	578.2	n/a
2008	9	49661.22	3310.08	581.07	18.0	n/a	n/a	n/a	563.1	n/a
2008	10	49612.38	3166.38	587.19	15.0	6.0	15.0	9.0	572.2	572.2
2008	11	49547.68	3089.57	600.35	11.0	n/a	n/a	n/a	589.4	n/a
2008	12	49506.09	2999.43	614.50	14.0	8.0	12.0	4.0	600.5	602.5
2008	13	49494.75	2900.10	615.27	12.0	n/a	n/a	n/a	603.3	n/a
2008	13A	49452.64	2892.78	615.14	10.0	n/a	n/a	n/a	605.1	n/a
2008	14	49520.42	2821.62	610.83	12.0	2.0	10.0	8.0	598.8	600.8
2008	15	49625.89	2774.86	610.36	17.0	3.0	16.0	13.0	593.4	594.4
2008	16	49692.04	2781.26	612.14	18.0	6.0	16.0	10.0	594.1	596.1
2008	16A	49706.96	2713.45	612.96	21.0	3.0	21.0	18.0	592.0	592.0
2008	16B	49720.25	2657.00	613.38	19.0	2.0	19.0	17.0	594.4	594.4
2008	16C	49733.29	2601.19	614.95	19.0	5.0	19.0	14.0	595.9	595.9
2008	17	49789.38	2806.95	615.54	19.0	4.0	15.0	11.0	596.5	600.5
2008	17A	49791.10	2738.35	614.21	15.0	2.0	12.0	10.0	599.2	602.2
2008	17B	49787.76	2679.77	614.27	12.0	2.0	12.0	10.0	602.3	602.3
2008	18	49887.71	2820.57	626.41	22.0	12.0	20.0	8.0	604.4	606.4

TABLE 1
BRICKYARD DISPOSAL AND RECYCLING
UNIT 1 EXTRANEOUS MATERIAL INVESTIGATION

Year	Test Pit/ Boring Number	Northing (ft)	Easting (ft)	Elevation (ft)	Total Depth of Test Pit/ Boring (ft)	Top of Material (ft)/Cover Thickness	Bottom of Material (ft)	Thickness of Material (ft)	Bottom Pit Elevation	Bottom of Material
2008	18A	49879.41	2767.64	623.65	18.0	12.0	15.0	3.0	605.6	608.6
2008	19	49968.90	2798.94	644.04	20.0	n/a	n/a	n/a	624.0	n/a
2008	20	49968.62	2637.16	647.26	18.0	n/a	n/a	n/a	629.3	n/a
2008	20A	49902.98	2638.32	631.18	19.0	8.0	16.0	8.0	612.2	615.2
2008	20B	49847.54	2641.56	618.68	13.0	n/a	n/a	n/a	605.7	n/a
2008	20C	49794.76	2633.45	615.01	11.0	n/a	n/a	n/a	604.0	n/a
2008	21	49968.74	2431.71	643.12	17.0	10.0	14.0	4.0	626.1	629.1
2008	21A	49910.03	2423.02	631.02	17.0	15.0	16.0	1.0	614.0	615.0
2008	21B	49858.84	2418.31	622.77	12.0	4.0	10.0	6.0	610.8	612.8
2008	21C	49810.96	2412.29	622.35	21.0	3.0	19.0	16.0	601.3	603.3
2008	22	49968.68	2245.84	633.39	11.0	0.0	6.0	6.0	622.4	627.4
2008	22A	49953.16	2185.93	625.30	16.0	1.0	7.0	6.0	609.3	618.3
2008	22B	49935.14	2129.22	628.72	23.5	4.0	22.0	18.0	605.2	606.7
2008	22C	49921.28	2088.12	626.54	26.0	8.0	26.0	18.0	600.5	600.5
2008	22D	49908.68	2041.86	624.98	25.0	8.0	25.0	17.0	600.0	600.0
2008	22E	49936.94	1985.74	622.54	12.0	4.0	9.0	5.0	610.5	613.5
2008	23	50108.87	2247.25	642.88	11.0	0.0	5.0	5.0	631.9	637.9
2008	23C	50088.58	2077.49	635.69	12.0	n/a	n/a	n/a	623.7	n/a
2008	23D	50065.07	2003.46	632.35	13.0	n/a	n/a	n/a	619.3	n/a
2008	24	50275.50	2247.13	642.54	13.0	2.0	4.0	2.0	629.5	638.5
2008	24A	50277.61	2214.63	639.85	7.5	2.0	3.0	1.0	632.3	636.8
2008	24B	50258.14	2156.71	638.54	14.0	4.0	8.0	4.0	624.5	630.5
2008	24C	50247.49	2093.19	639.14	15.0	3.0	5.0	2.0	624.1	634.1
2008	25	50546.80	2246.33	641.57	12.0	n/a	n/a	n/a	629.6	n/a
2008	26	50689.28	2246.39	645.75	14.0	6.0	8.0	2.0	631.7	637.7
2008	27	50856.19	2246.51	646.99	14.0	10.0	14.0	4.0	633.0	633.0
2008	27A	50836.93	2182.91	630.29	12.0	n/a	n/a	n/a	618.3	n/a
2008	28	50192.43	4406.94	576.11	12.0	n/a	n/a	n/a	564.1	n/a
2008	28A	50171.77	4242.80	578.33	18.0	2.0	18.0	16.0	560.3	560.3
2008	29	50392.47	4381.69	573.67	24.0	4.0	24.0	20.0	549.7	549.7

Shading indicates materials exceeded bottom of the trench.
Probe-trench locations shown in Figure 4.
NA Not applicable or information not available.

ATTACHMENT 1

Geologic Cross Sections (1993)

NOTES:

1. THE COORDINATES SHOWN REFLECT ILLINOIS STATE PLANER COORDINATES IN AN ABBREVIATED FORM.
   EXAMPLE: N 50,000 = N 1,250,000
   E 3,000 = E 703,000
2. THE UNIT 1 WASTE BOUNDARY WAS TAKEN FROM AN APPLICATION SUBMITTED BY CLARK ENGINEERING SERVICE, DATED DECEMBER 1986. THE ACTUAL IN PLACE WASTE BOUNDARY MAY DIFFER.
3. CONTOURS WERE DEVELOPED BY AERIAL PHOTOGRAMMETRIC METHODS PROVIDED BY ACCU-AIR SURVEYS, INC. FROM PHOTOGRAPHS DATED FEBRUARY 21, 1992. CONTOURS ARE SHOWN AT AN INTERVAL OF 2 FEET.
4. BENCHMARKS (VERTICAL CONTROL MONUMENTS), HORIZONTAL CONTROL, AND PROPERTY BOUNDARIES, WERE ESTABLISHED BY L. H. LOVING AND ASSOC. AND SHALL BE MAINTAINED BY A PROFESSIONAL LAND SURVEYOR.
5. CURRENT TOPOGRAPHY MAY DIFFER FROM THAT SHOWN DUE TO THE ONGOING LANDFILLING OPERATIONS SINCE THE DATE OF THE AERIAL SURVEY.
6. THE 100 YEAR FLOODPLAIN BOUNDARY IS APPROXIMATELY 530 FEET MSL AND IS BASED ON INFORMATION PROVIDED BY THE U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT-FLOOD HAZARD BOUNDARY MAP-PANEL NO. 170935 0006A EFFECTIVE DATE APRIL 21, 1978.
7. FOR CLARITY NOT ALL SITE FEATURES ARE SHOWN.
8. ACCESS TO EAST SIDE OF SITE IS RESTRICTED BY THE DANVILLE SANITARY PLANT GATES.

LEGEND

⊕BM-0	BENCHMARK (SEE DESCRIPTIONS THIS SHEET)
B	BORING LOCATION
—	CULVERT
⊕	GROUNDWATER MONITOR WELL (PVC)
⊡	GROUNDWATER MONITOR WELL (STAINLESS)
Ⓟ	GROUNDWATER PIEZOMETER
○	LEACHATE COLLECTION MANHOLE
Ⓛ	LEACHATE SAMPLING POINT
✿	LIGHT POLE
○	UTILITY POLE
——x——	FENCE
—·—·—	GAS LINE EASEMENT
— — —	PROPERTY BOUNDARY
~~	TREE LINE
— — —	WASTE BOUNDARY

BENCHMARK DESCRIPTIONS

BM-1	1" IRON ROD SET IN CONCRETE ON NORTH SIDE OF ENTRANCE ROAD AND EAST EDGE OF TREE LINE. N 51,086 E 1,987 ELEV. = 626.01 FEET MSL
TBM-2	"a" CHISELED ON SOUTHEAST END OF CONCRETE CURB AT BRIDGE ON THE NORTHEAST CORNER OF OF SITE ELEV. = 538.77 FEET MSL
TBM-3	TOP CENTER "H" AT SOUTH END OF GUARD RAIL EAST SIDE OF MURRAY CLARK ROAD. ELEV. = 620.43 FEET MSL
TBM-4	BOTTOM OF EAST CORNER OF 24TH RUNG FROM TOP OF OLD BRICK STACK. ELEV. = 578.33 FEET MSL

N

GRAPHIC SCALE

300 0 100 200 400 800

(IN FEET)
1 inch = 200 ft.

1 / A-1 EXISTING SITE CONDITIONS
SCALE: AS SHOWN

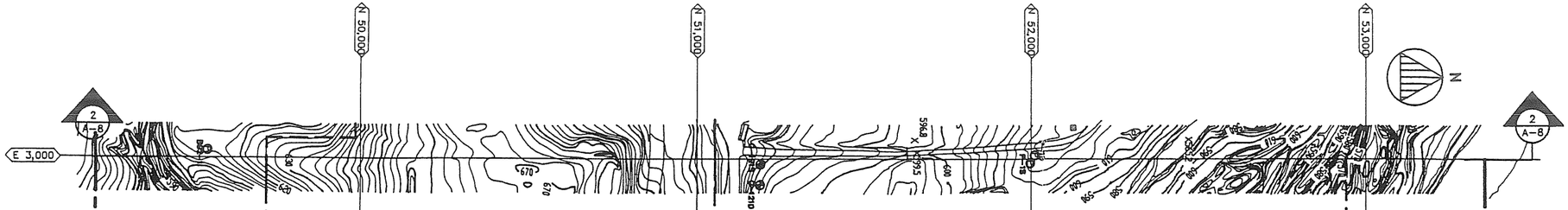
REVISIONS			
NO.	DATE	DESCRIPTION	BY

ANDREWS ENVIRONMENTAL ENGINEERING, INC.
3535 MAYFLOWER BOULEVARD
SPRINGFIELD, ILLINOIS 62707
(217)787-2334 FAX (217)787-9495

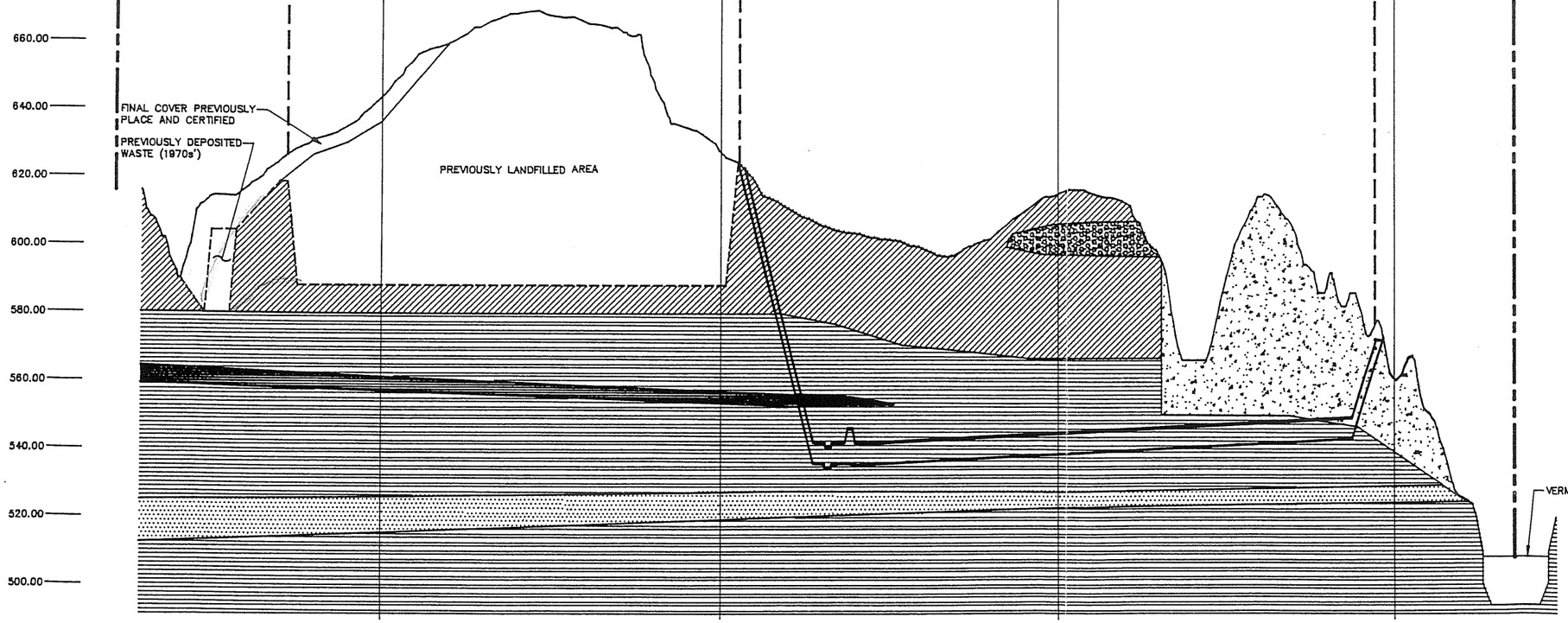
APPLICATION FOR SIGNIFICANT MODIFICATION TO PERMIT
BRICKYARD DISPOSAL AND RECYCLING, INC.
DANVILLE, VERMILION COUNTY, ILLINOIS

EXISTING SITE CONDITIONS
UNIT 1 AND UNIT 2

DRAWN BY: DJM	DATE: 1-93	SHEET NUMBER
DESIGNED BY: DRF	PROJECT # 89-115	A-1
APPROVED BY: JDA	FILE #\A1-93\A-1	



1 PLAN VIEW AT CROSS SECTION E 3,000
B-2 SCALE: 1"=200'



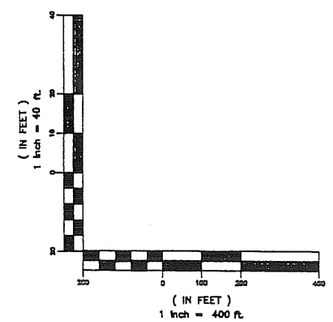
2 CROSS SECTION AT E 3,000
B-2 SCALE: AS SHOWN

NOTES:

1. SINCE THIS GEOLOGICAL CROSS SECTION INTERSECTS A LIMITED NUMBER OF SOIL BORINGS, THE GEOLOGICAL CONDITIONS SHOWN SHOULD BE CONSIDERED APPROXIMATE AND ACTUAL CONDITIONS MAY VARY.
2. THE STRATIGRAPHY ILLUSTRATED WAS COMPLETED BY THE USE OF BORING INFORMATION AND OUTCROPS (IN EXCAVATED AREAS) AND REPRESENTS GENERAL GEOLOGIC CONDITIONS.
3. DASHED LINES (FOR GEOLOGY ONLY) REPRESENT APPROXIMATE STRATIGRAPHIC CHANGES.
4. FOR CLARITY IN DEPICTING THE GEOLOGICAL FEATURES, SECTIONS HAVE BEEN DISTORTED BY A FACTOR OF 10 IN THE VERTICAL SCALE. THE TRUE PROFILE OF THE LANDFORM IS 1/10 THE PROFILE SHOWN IN THE VERTICAL DIMENSION.
5. THE COORDINATES SHOWN REFLECT STATE PLANAR COORDINATES IN AN ABBREVIATED FORM.
   EXAMPLE: N 50,000 = N 1,250,000
   E 3,000 = E 703,000
6. CONTOURS PRODUCED BY AERIAL MAPPING METHODS BY ACCU-AIR SURVEYS, INC. PHOTO DATE FEBRUARY 21, 1992.
7. FOR CLARITY, NOT ALL SITE FEATURES ARE SHOWN

LEGEND

- GROUNDWATER MONITOR WELL (PVC)
- GROUNDWATER MONITOR WELL (STAINLESS)
- GROUNDWATER PIEZOMETER
- PROPERTY BOUNDARY
- WASTE BOUNDARY
- SHALE
- SILTY CLAY
- COAL/VOIDS
- SAND
- SANDSTONE
- SPOIL/DISTURBED



GRAPHIC SCALE

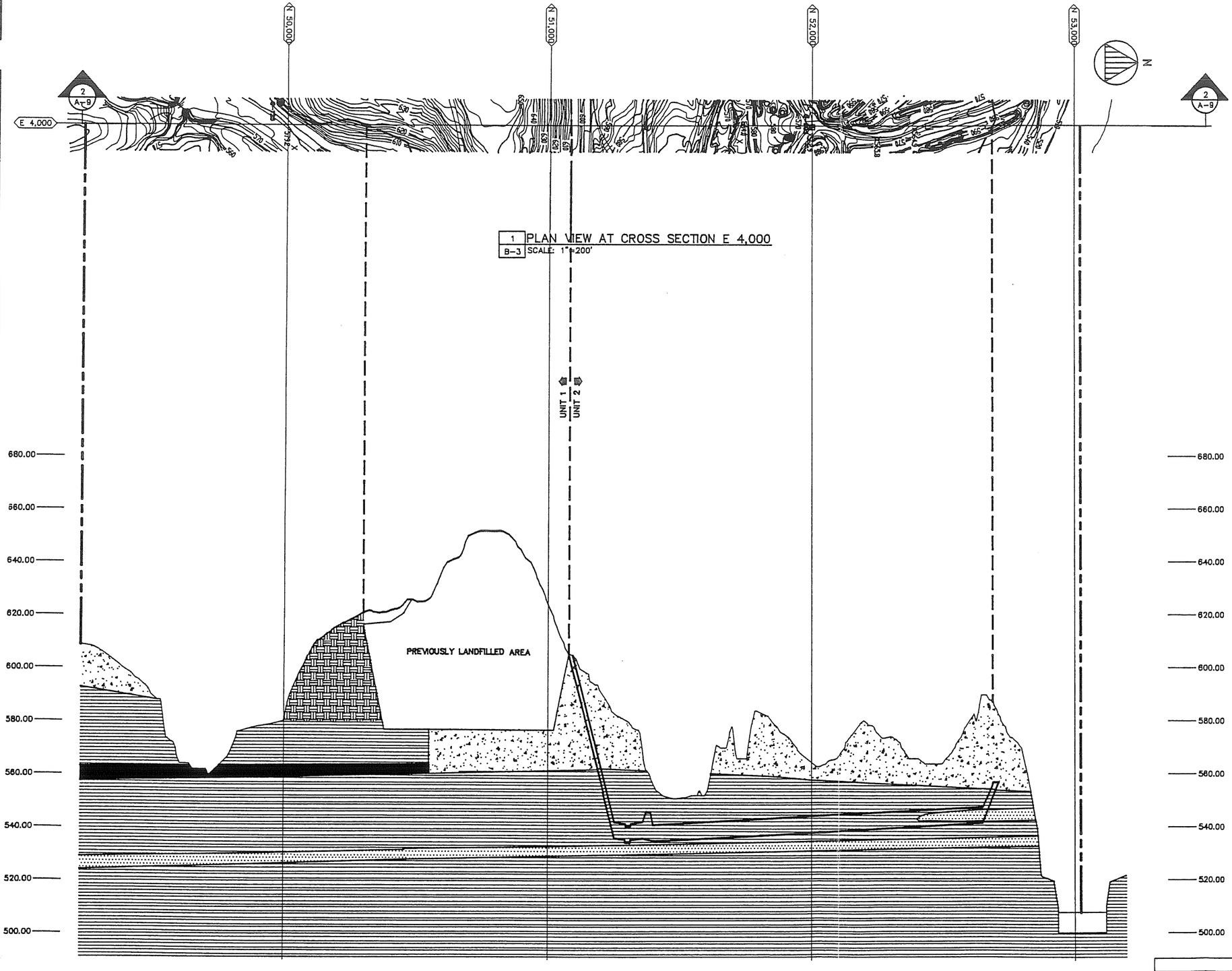
REVISIONS			
NO.	DATE	DESCRIPTION	BY

ANDREWS ENVIRONMENTAL ENGINEERING INC.
3535 MAYFLOWER BOULEVARD
SPRINGFIELD, ILLINOIS 62707
(217)787-2334 FAX (217)787-9495

APPLICATION FOR DEVELOPMENT PERMIT OF UNIT-2
BRICKYARD DISPOSAL AND RECYCLING, INC.
DANVILLE, ILLINOIS

CROSS SECTION AT E 3,000
UNIT 1 & 2

DRAWN BY:	DJM	DATE: 12-92	SHEET NUMBER
DESIGNED BY:	BJH	PROJECT # 89-115	B-2
APPROVED BY:	JDA	FILE #\A12-92\B-2	



1 PLAN VIEW AT CROSS SECTION E 4,000
B-3 SCALE: 1"=200'

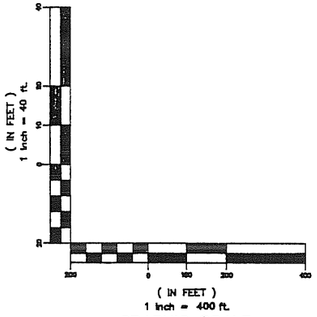
2 CROSS SECTION AT E 4,000
B-3 SCALE: AS SHOWN

NOTES:

1. SINCE THIS GEOLOGICAL CROSS SECTION INTERSECTS A LIMITED NUMBER OF SOIL BORINGS, THE GEOLOGICAL CONDITIONS SHOWN SHOULD BE CONSIDERED APPROXIMATE AND ACTUAL CONDITIONS MAY VARY.
2. THE STRATIGRAPHY ILLUSTRATED WAS COMPLETED BY THE USE OF BORING INFORMATION AND OUTCROPS (IN EXCAVATED AREAS) AND REPRESENTS GENERAL GEOLOGIC CONDITIONS.
3. DASHED LINES (FOR GEOLOGY ONLY) REPRESENT APPROXIMATE STRATIGRAPHIC CHANGES.
4. FOR CLARITY IN DEPICTING THE GEOLOGICAL FEATURES, SECTIONS HAVE BEEN DISTORTED BY A FACTOR OF 10 IN THE VERTICAL SCALE. THE TRUE PROFILE OF THE LANDFORM IS 1/10 THE PROFILE SHOWN IN THE VERTICAL DIMENSION.
5. THE COORDINATES SHOWN REFLECT STATE PLANAR COORDINATES IN AN ABBREVIATED FORM.
   EXAMPLE: N 50,000 = N 1,250,000
   E 3,000 = E 703,000
6. CONTOURS PRODUCED BY AERIAL MAPPING METHODS BY ACCU-AIR SURVEYS, INC. PHOTO DATE FEBRUARY 21, 1992.
7. FOR CLARITY, NOT ALL SITE FEATURES ARE SHOWN

LEGEND

- GROUNDWATER MONITOR WELL (PVC)
- GROUNDWATER MONITOR WELL (STAINLESS)
- GROUNDWATER PIEZOMETER
- PROPERTY BOUNDARY
- WASTE BOUNDARY
- SHALE
- COAL/VOIDS
- FILL MATERIAL
- SAND
- SANDSTONE
- SPOIL/DISTURBED



GRAPHIC SCALE

REVISIONS			
NO.	DATE	DESCRIPTION	BY

ANDREWS ENVIRONMENTAL ENGINEERING INC.
3535 MAYFLOWER BOULEVARD
SPRINGFIELD, ILLINOIS 62707
(217)787-2334 FAX (217)787-9495

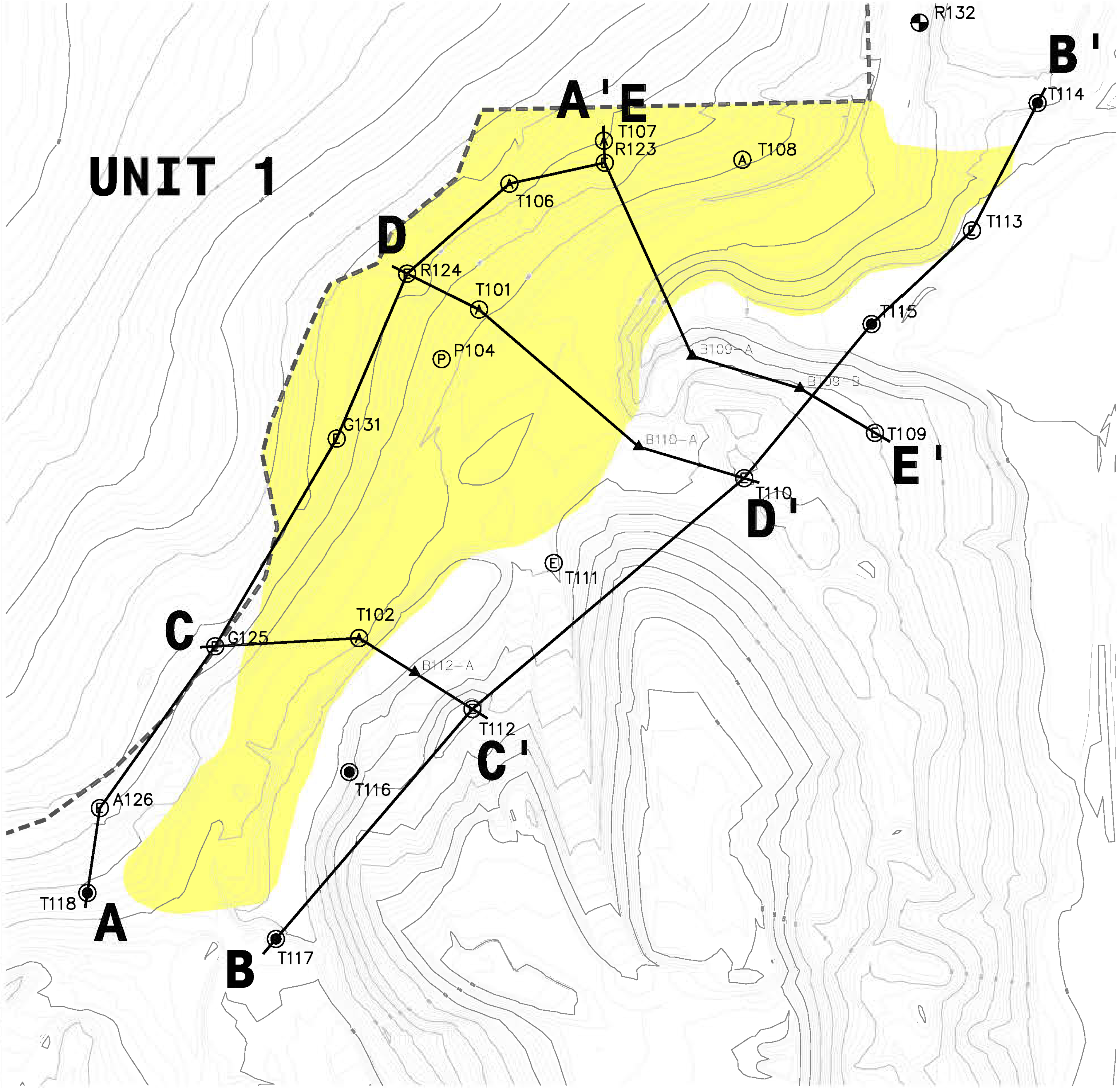
APPLICATION FOR DEVELOPMENT PERMIT OF UNIT-2
BRICKYARD DISPOSAL AND RECYCLING, INC.
DANVILLE, ILLINOIS

CROSS SECTION AT E 4,000
UNIT 1 & 2

DRAWN BY:	DJM	DATE: 12-92	SHEET NUMBER
DESIGNED BY:	BJH	PROJECT # 89-115	B-3
APPROVED BY:	JDA	FILE #\A12-92\B-3	

ATTACHMENT 2

Geologic Cross Sections (2010)



EXPLANATION

APPROXIMATE PERMITTED WASTE BOUNDARY

EXTRANEOUS MATERIALS

PIEZOMETER

BORING LOCATION

MONITORING POINT

NOTE:

TOPOGRAPHIC SURFACE TAKEN FROM AERIAL PROVIDED BY AEROCON PHOTOGRAMMETRIC SERVICES, INC. FLOWN ON MARCH 23, 2010.

N

150 0 150 300

SCALE: IN FEET

ANDREWS ENGINEERING, INC.
3300 Ginger Creek Drive, Springfield, IL 62711-7233
Tel (217) 787-2334 Fax (217) 787-9495
Pontiac, IL • Naperville, IL • Indianapolis, IN • Warrenton, MO

APPROVED BY: JLR DESIGNED BY: JLR DRAWN BY: WCU

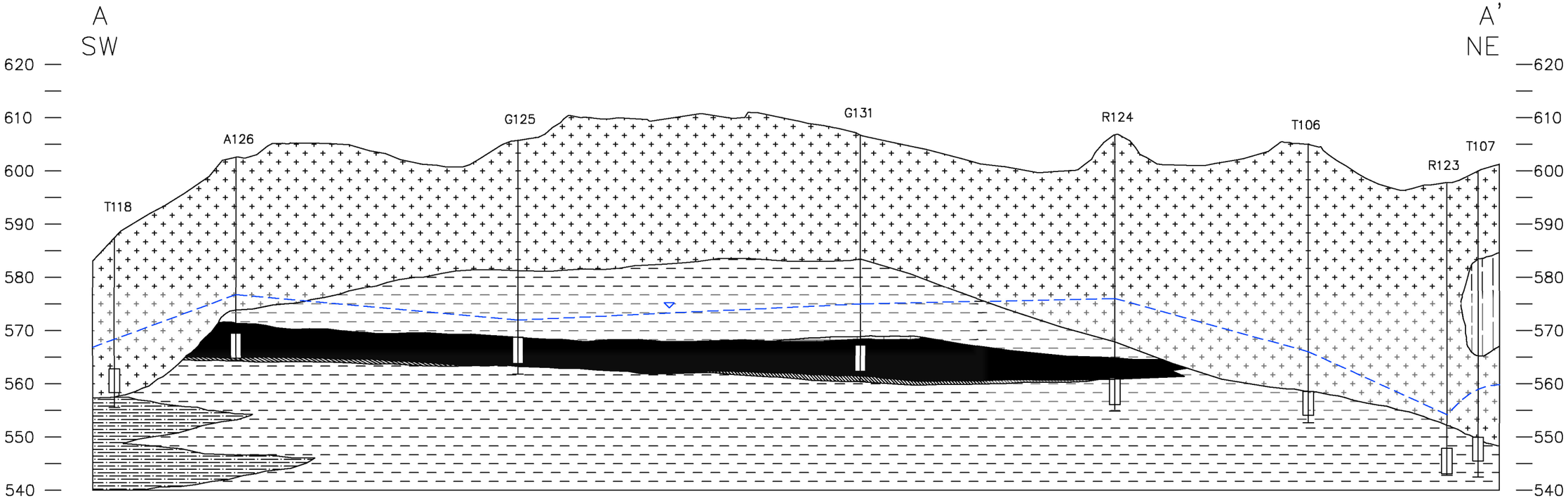
CROSS SECTIONS LOCATION MAP

PLANS PREPARED FOR
BRICKYARD DISPOSAL & RECYCLING
DANVILLE, ILLINOIS

DATE: JUNE 2010

PROJECT ID: 89-115A

SHEET NUMBER: 1



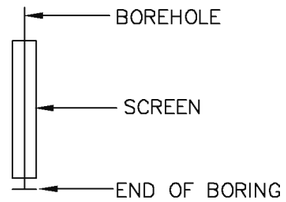
NOTES:

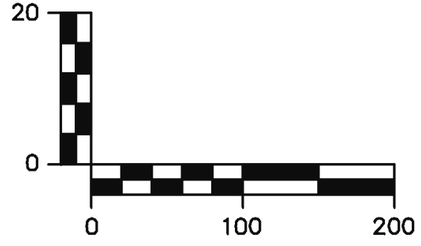
1. TOPOGRAPHIC SURFACE TAKEN FROM AERIAL PROVIDED BY AEROCON PHOTOGRAMMETRIC SERVICES, INC. FLOWN ON MARCH 23, 2010.
2. SOLID VERTICAL LINES REPRESENT BORINGS DRILLED FOR MONITORING WELL INSTALLATION.
3. R124 GEOLOGY BASED ON BORING LOG FOR G124. COAL AT R124 IS NOTED ON BORING LOG G124 AS PROBABLE SILTED-IN MINE CAVERN.
4. GROUNDWATER ELEVATIONS REPRESENT AN AVERAGE OF GROUNDWATER ELEVATIONS MEASURED FROM SECOND QUARTER 2009 TO FIRST QUARTER 2010. WELLS T114-T123 GROUNDWATER ELEVATIONS MEASURED DURING FIRST QUARTER 2010.
5. DEPTH AND THICKNESS OF SUBSURFACE STRATA WERE GENERALIZED FROM AND INTERPOLATED BETWEEN BORINGS. INFORMATION ON ACTUAL SUBSURFACE CONDITIONS EXISTS ONLY AT THE LOCATION OF THE BORING.
6. THE CROSS SECTIONS PROVIDE THE AREA STRATIGRAPHY. THE OVERFILL MATERIALS ENCOUNTERED DURING THE TEST PIT INVESTIGATIONS ARE NOT SHOWN.
7. OVERFILL AREA IDENTIFIED IN SHEET NO. 1 IS COMPOSED OF A COMBINATION OF MINE SPOIL/BACKFILL, RAILROAD TIES AND/OR OTHER MATERIALS.

EXPLANATION

- MINE SPOIL/DISTURBED
- SILTSTONE
- SHALE
- COAL
- LIMESTONE
- WOOD DEBRIS
- UNDERCLAY
- GROUNDWATER

WELL DIAGRAM





SCALE: IN FEET
10:1 V:H

ANDREWS ENGINEERING, INC.
3300 Ginger Creek Drive, Springfield, IL 62711-7233
Tel (217) 787-2334 Fax (217) 787-9495
Pontiac, IL • Naperville, IL • Indianapolis, IN • Warrenton, MO

APPROVED BY: JLR | DESIGNED BY: JLR | DRAWN BY: WCU

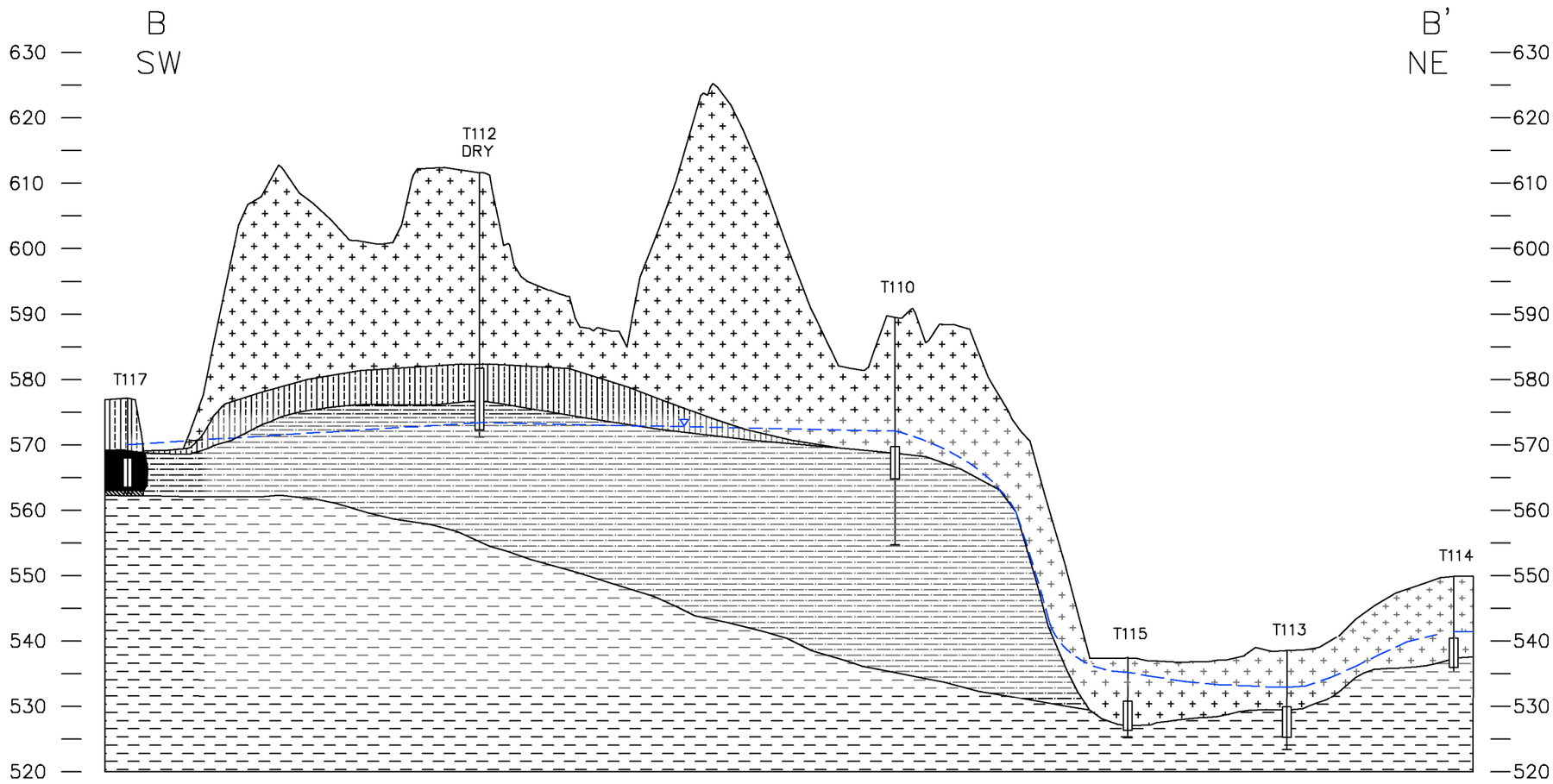
CROSS SECTION A-A'

PLANS PREPARED FOR
BRICKYARD DISPOSAL & RECYCLING
DANVILLE, ILLINOIS

DATE: JUNE 2010

PROJECT ID: 89-115A

SHEET NUMBER: 2



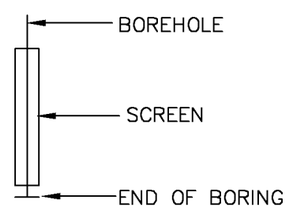
NOTES:

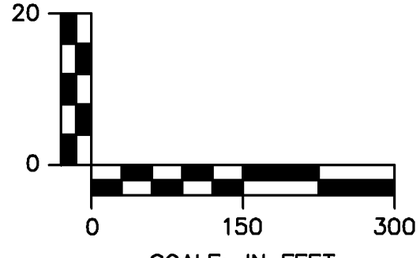
1. TOPOGRAPHIC SURFACE TAKEN FROM AERIAL PROVIDED BY AEROCON PHOTOGRAMMETRIC SERVICES, INC. FLOWN ON MARCH 23, 2010.
2. SOLID VERTICAL LINES REPRESENT BORINGS DRILLED FOR MONITORING WELL INSTALLATION.
3. GROUNDWATER ELEVATIONS REPRESENT AN AVERAGE OF GROUNDWATER ELEVATIONS MEASURED FROM SECOND QUARTER 2009 TO FIRST QUARTER 2010. WELLS T114–T123 GROUNDWATER ELEVATIONS MEASURED DURING FIRST QUARTER 2010.
4. DEPTH AND THICKNESS OF SUBSURFACE STRATA WERE GENERALIZED FROM AND INTERPOLATED BETWEEN BORINGS. INFORMATION ON ACTUAL SUBSURFACE CONDITIONS EXISTS ONLY AT THE LOCATION OF THE BORING.
5. OVERFILL AREA IDENTIFIED IN SHEET NO. 1 IS COMPOSED OF A COMBINATION OF MINE SPOIL/BACKFILL, RAILROAD TIES AND/OR OTHER MATERIALS.

EXPLANATION

- MINE SPOIL/DISTURBED
- SANDY SILT
- SILTSTONE
- SHALE
- COAL
- UNDERCLAY
- GROUNDWATER

WELL DIAGRAM





SCALE: IN FEET
10:1 V:H

ANDREWS ENGINEERING, INC.
3300 Ginger Creek Drive, Springfield, IL 62711–7233
Tel (217) 787–2334 Fax (217) 787–9495
Pontiac, IL • Naperville, IL • Indianapolis, IN • Warrenton, MO

APPROVED BY: JLR | DESIGNED BY: JLR | DRAWN BY: WCU

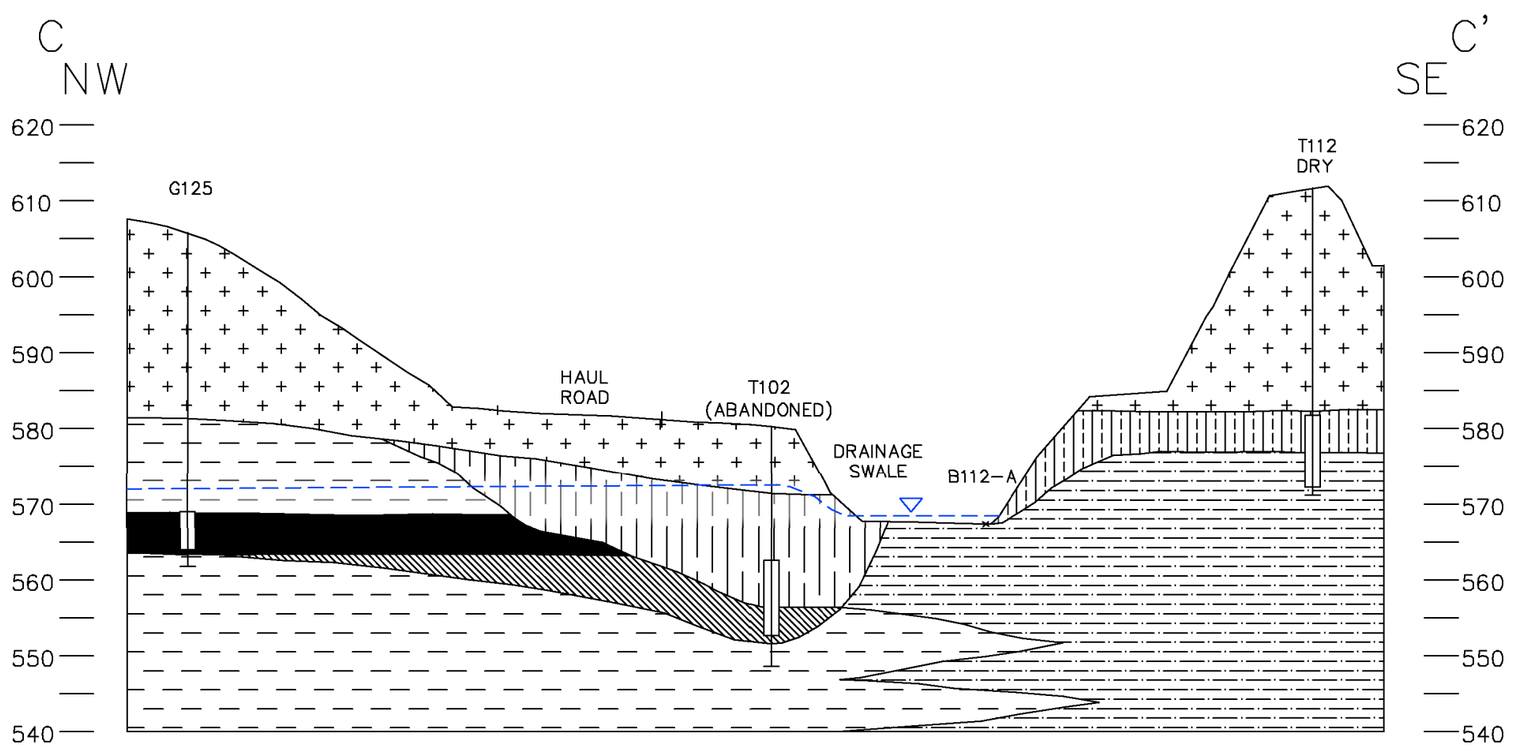
CROSS SECTION B–B'

PLANS PREPARED FOR
BRICKYARD DISPOSAL & RECYCLING
DANVILLE, ILLINOIS

DATE: JUNE 2010

PROJECT ID: 89–115A

SHEET NUMBER: 3



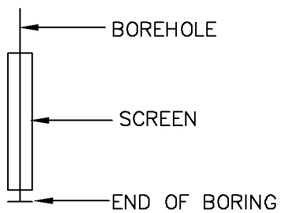
NOTES:

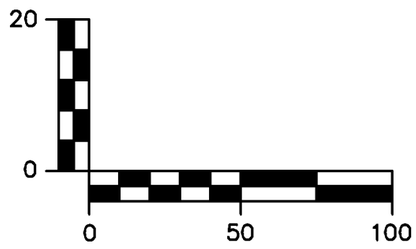
1. TOPOGRAPHIC SURFACE TAKEN FROM AERIAL PROVIDED BY AEROCON PHOTOGRAMMETRIC SERVICES, INC. FLOWN ON MARCH 23, 2010.
2. SOLID VERTICAL LINES REPRESENT BORINGS DRILLED FOR MONITORING WELL INSTALLATION.
3. GROUNDWATER ELEVATIONS REPRESENT AN AVERAGE OF GROUNDWATER ELEVATIONS MEASURED FROM SECOND QUARTER 2009 TO FIRST QUARTER 2010. WELLS T114–T123 GROUNDWATER ELEVATIONS MEASURED DURING FIRST QUARTER 2010.
4. DEPTH AND THICKNESS OF SUBSURFACE STRATA WERE GENERALIZED FROM AND INTERPOLATED BETWEEN BORINGS. INFORMATION ON ACTUAL SUBSURFACE CONDITIONS EXISTS ONLY AT THE LOCATION OF THE BORING.
5. OVERFILL AREA IDENTIFIED IN SHEET NO. 1 IS COMPOSED OF A COMBINATION OF MINE SPOIL/BACKFILL, RAILROAD TIES AND/OR OTHER MATERIALS.

EXPLANATION

- MINE SPOIL/DISTURBED
- SILTSTONE
- SHALE
- COAL
- WOOD DEBRIS
- SANDY SILT
- UNDERCLAY
- GROUNDWATER

WELL DIAGRAM





SCALE: IN FEET

5:1

ANDREWS ENGINEERING, INC.
3300 Ginger Creek Drive, Springfield, IL 62711-7233
Tel (217) 787-2334 Fax (217) 787-9495
Pontiac, IL • Naperville, IL • Indianapolis, IN • Warrenton, MO

APPROVED BY: JLR | DESIGNED BY: JLR | DRAWN BY: WCU

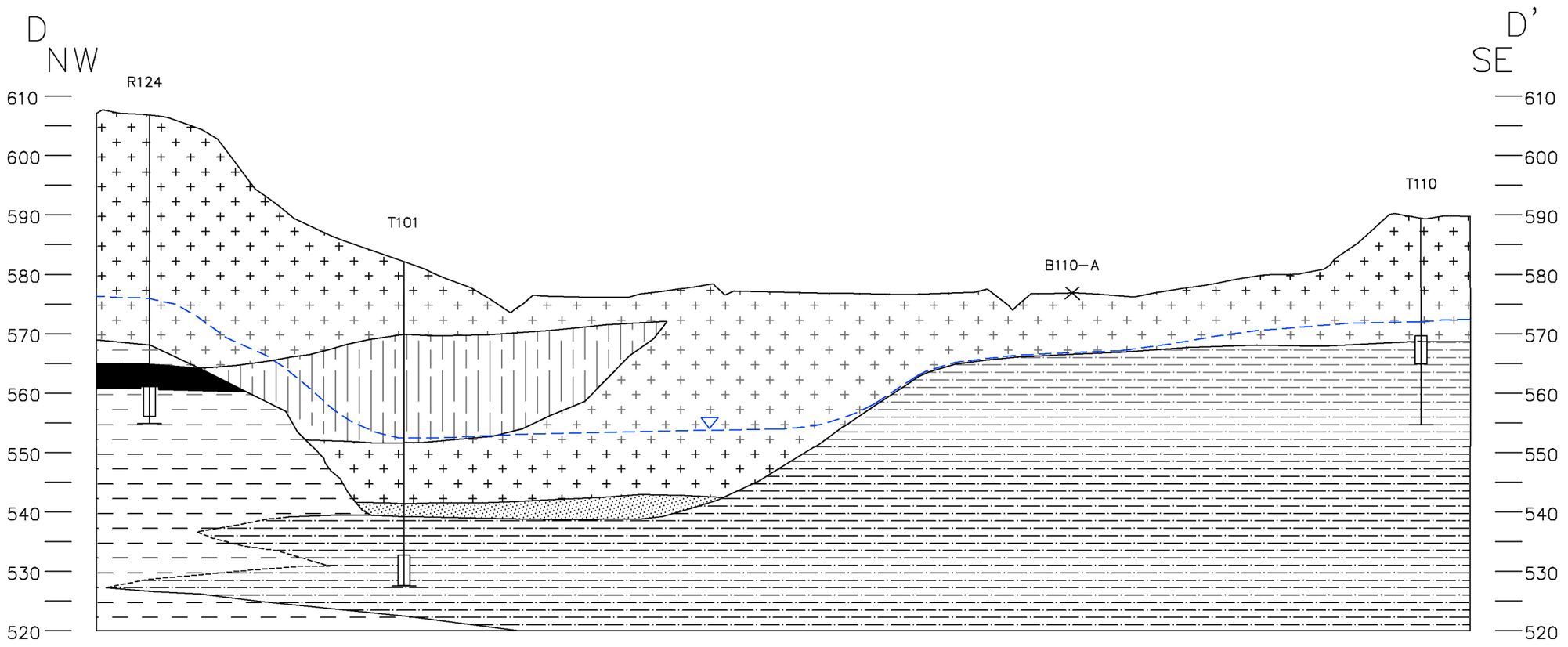
CROSS SECTION C–C'

PLANS PREPARED FOR
BRICKYARD DISPOSAL & RECYCLING
DANVILLE, ILLINOIS

DATE: JUNE 2010

PROJECT ID: 89-115A

SHEET NUMBER: 4



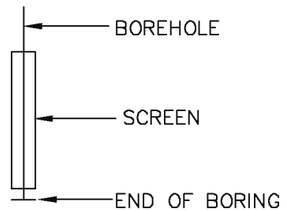
NOTES:

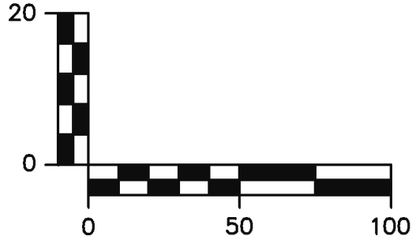
1. TOPOGRAPHIC SURFACE TAKEN FROM AERIAL PROVIDED BY AEROCON PHOTOGRAMMETRIC SERVICES, INC. FLOWN ON MARCH 23, 2010.
2. SOLID VERTICAL LINES REPRESENT BORINGS DRILLED FOR MONITORING WELL INSTALLATION.
3. GROUNDWATER ELEVATIONS REPRESENT AN AVERAGE OF GROUNDWATER ELEVATIONS MEASURED FROM SECOND QUARTER 2009 TO FIRST QUARTER 2010. WELLS T114–T123 GROUNDWATER ELEVATIONS MEASURED DURING FIRST QUARTER 2010.
4. DEPTH AND THICKNESS OF SUBSURFACE STRATA WERE GENERALIZED FROM AND INTERPOLATED BETWEEN BORINGS. INFORMATION ON ACTUAL SUBSURFACE CONDITIONS EXISTS ONLY AT THE LOCATION OF THE BORING.
5. B110–A GROUND SURFACE ELEVATION BASED ON 2010 AERIAL. BEDROCK WAS ENCOUNTERED LESS THAN 1.0 FOOT BELOW 2009 GROUND SURFACE ELEVATION (567.5 AMSL).
6. R124 GEOLOGY BASED ON BORING LOG FOR G124. COAL AT R124 IS NOTED ON BORING LOG G124 AS PROBABLE SILTED–IN MINE CAVERN.
7. OVERFILL AREA IDENTIFIED IN SHEET NO. 1 IS COMPOSED OF A COMBINATION OF MINE SPOIL/BACKFILL, RAILROAD TIES AND/OR OTHER MATERIALS.

EXPLANATION

- MINE SPOIL/DISTURBED
- SILTSTONE
- SHALE
- COAL
- WOOD DEBRIS
- SANDSTONE
- GROUNDWATER

WELL DIAGRAM





SCALE: IN FEET

10:1 V:H

ANDREWS ENGINEERING, INC.
3300 Ginger Creek Drive, Springfield, IL 62711–7233
Tel (217) 787–2334 Fax (217) 787–9495
Pontiac, IL • Naperville, IL • Indianapolis, IN • Warrenton, MO

APPROVED BY:	DESIGNED BY:	DRAWN BY:
JLR	JLR	WCU

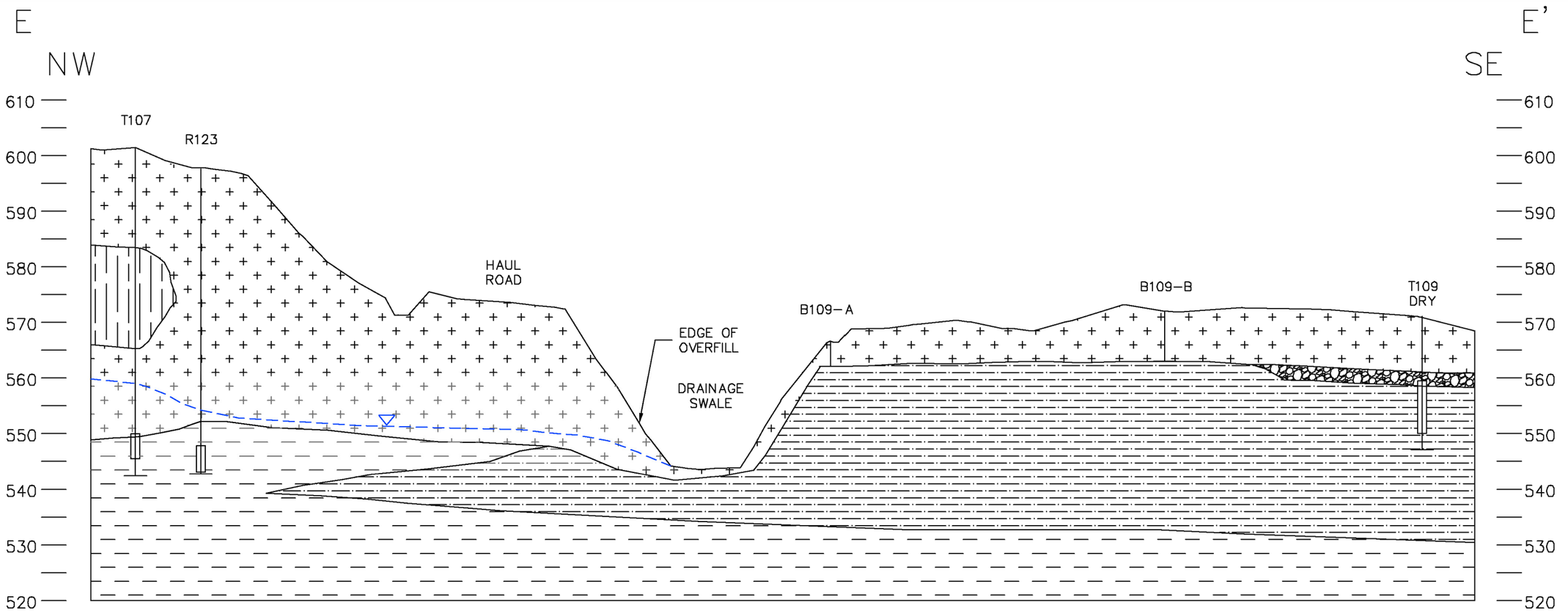
CROSS SECTION D–D'

PLANS PREPARED FOR
BRICKYARD DISPOSAL & RECYCLING
DANVILLE, ILLINOIS

DATE: JUNE 2010

PROJECT ID: 89–115A

SHEET NUMBER: 5



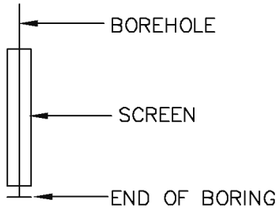
NOTES:

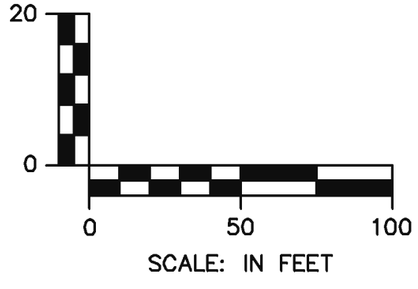
1. TOPOGRAPHIC SURFACE TAKEN FROM AERIAL PROVIDED BY AEROCON PHOTOGRAMMETRIC SERVICES, INC. FLOWN ON MARCH 23, 2010.
2. SOLID VERTICAL LINES REPRESENT BORINGS DRILLED FOR MONITORING WELL INSTALLATION.
3. GROUNDWATER ELEVATIONS REPRESENT AN AVERAGE OF GROUNDWATER ELEVATIONS MEASURED FROM SECOND QUARTER 2009 TO FIRST QUARTER 2010. WELLS T114–T123 GROUNDWATER ELEVATIONS MEASURED DURING FIRST QUARTER 2010.
4. B109–A AND B109–B, DRILLED IN ATTEMPT TO INSTALL T109 CLOSER TO WASTE BOUNDARY, ENCOUNTERED BEDROCK AT 4.5 AND 7 FEET BELOW GROUND SURFACE.
5. DEPTH AND THICKNESS OF SUBSURFACE STRATA WERE GENERALIZED FROM AND INTERPOLATED BETWEEN BORINGS. INFORMATION ON ACTUAL SUBSURFACE CONDITIONS EXISTS ONLY AT THE LOCATION OF THE BORING.
6. OVERFILL AREA IDENTIFIED IN SHEET NO. 1 IS COMPOSED OF A COMBINATION OF MINE SPOIL/BACKFILL, RAILROAD TIES AND/OR OTHER MATERIALS.

EXPLANATION

- MINE SPOIL/DISTURBED
- SILTSTONE
- SHALE
- WOOD DEBRIS
- SILTSTONE GRAVEL
- GROUNDWATER

WELL DIAGRAM





10:1 V:H

ANDREWS ENGINEERING, INC.
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DRAWN BY: WCU
DESIGNED BY: JLR
APPROVED BY: JLR

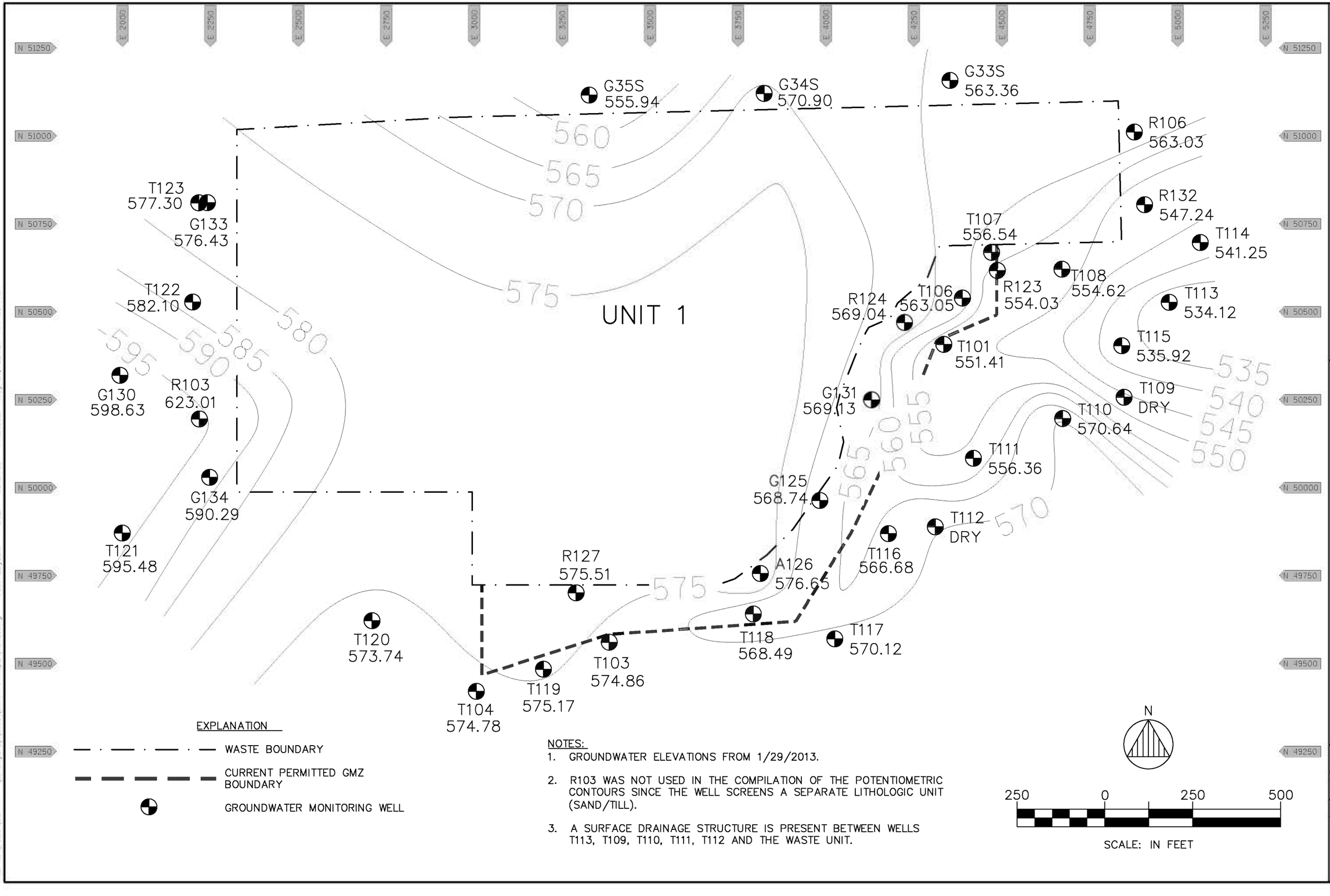
CROSS SECTION E–E'

PLANS PREPARED FOR
BRICKYARD DISPOSAL & RECYCLING
DANVILLE, ILLINOIS

DATE: JUNE 2010
PROJECT ID: 89–115A
SHEET NUMBER: 6

ATTACHMENT 3

Potentiometric Surface Maps



NOTES:

1. GROUNDWATER ELEVATIONS FROM 1/29/2013.
2. R103 WAS NOT USED IN THE COMPILATION OF THE POTENTIOMETRIC CONTOURS SINCE THE WELL SCREENS A SEPARATE LITHOLOGIC UNIT (SAND/TILL).
3. A SURFACE DRAINAGE STRUCTURE IS PRESENT BETWEEN WELLS T113, T109, T110, T111, T112 AND THE WASTE UNIT.

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APPROVED BY: BJH | DESIGNED BY: BJH | DRAWN BY: MPN

UNIT 1 POTENTIOMETRIC SURFACE MAP
1ST QUARTER 2013

PLANS PREPARED FOR
BRICKYARD DISPOSAL & RECYCLING
DANVILLE, ILLINOIS

DATE: APRIL 2013
PROJECT ID: 1989-115A029
SHEET NUMBER: 1Q13

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N 51250 N 51000 N 50750 N 50500 N 50250 N 50000 N 49750 N 49500 N 49250

G35S 554.24
G34S 570.84
G33S 563.39
R106 554.8
R132 547.15
T114 541.20
T113 533.79
T115 535.83
T109 DRY
T110 570.08
T111 555.26
T112 572.41
T116 563.16
T107 557.25
T108 554.68
R123 553.97
T106 562.90
R124 568.66
T101 551.41
G131 568.71
G125 568.06
A126 575.94
T117 569.54
T118 567.56
T103 574.45
T119 574.71
T104 574.39
T120 572.88
R127 574.92
T123 577.22
G133 576.95
T122 582.20
R103 619.62
G130 593.42
G134 589.72
T121 593.41

555 560 565 570 575 580 585 590 595 570 565 560 555 550 545 540 535 575

UNIT 1

EXPLANATION

WASTE BOUNDARY

CURRENT PERMITTED GMZ BOUNDARY

GROUNDWATER MONITORING WELL

NOTES:

1. GROUNDWATER ELEVATIONS FROM 10/18/2012.
2. R103 WAS NOT USED IN THE COMPILATION OF THE POTENTIOMETRIC CONTOURS SINCE THE WELL SCREENS A SEPARATE LITHOLOGIC UNIT (SAND/TILL).
3. A SURFACE DRAINAGE STRUCTURE IS PRESENT BETWEEN WELLS T113, T109, T110, T111, T112 AND THE WASTE UNIT.

N

250 0 250 500

SCALE: IN FEET

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APPROVED BY: CRM DESIGNED BY: CRM DRAWN BY: WCU

UNIT 1 POTENTIOMETRIC SURFACE MAP
4TH QUARTER 2012

PLANS PREPARED FOR
BRICKYARD DISPOSAL & RECYCLING
DANVILLE, ILLINOIS

DATE: MAY 2013

PROJECT ID: 1989-115A029

SHEET NUMBER: 4Q12

File: J:\1989\89-115A (Brickyard)\DWG\Unit 1 Pmaps\4Q12A.dwg Tab: Layout1 User: mnguyen Plotted: May 31, 2013 - 12:42 PM

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N 51250 N 51000 N 50750 N 50500 N 50250 N 50000 N 49750 N 49500 N 49250

G35S 554.29
G34S 571.80
G33S 563.49
R106 554.74
R132 546.29
T114 538.98
T113 530.93
T115 534.42
T109 DRY
T110 570.44
T111 555.27
T112 572.84
T116 562.33
G125 568.10
T123 577.14
G133 577.12
T122 582.17
T107 557.54
R123 554.03
T108 554.60
T106 562.90
R124 568.77
T101 551.35
G131 568.79
G130 594.01
G134 589.57
T121 593.22
A126 576.11
R127 573.80
T118 566.95
T120 572.78
T103 572.93
T117 568.89
T104 573.49
T119 573.71

560 565 570 575 580 585 590 555 550 545 540 535

UNIT 1

EXPLANATION

WASTE BOUNDARY

CURRENT PERMITTED GMZ BOUNDARY

GROUNDWATER MONITORING WELL

NOTES:

1. GROUNDWATER ELEVATIONS FROM 7/10/2012.
2. R103 WAS NOT USED IN THE COMPILATION OF THE POTENTIOMETRIC CONTOURS SINCE THE WELL SCREENS A SEPARATE LITHOLOGIC UNIT (SAND/TILL).
3. A SURFACE DRAINAGE STRUCTURE IS PRESENT BETWEEN WELLS T113, T109, T110, T111, T112 AND THE WASTE UNIT.
4. G35S IN LOCATION OF DRAINED MINE AREA.

N

250 0 250 500

SCALE: IN FEET

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APPROVED BY: TPD | DESIGNED BY: MTH | DRAWN BY: MPN

UNIT 1 POTENTIOMETRIC SURFACE MAP
3RD QUARTER 2012

PLANS PREPARED FOR
BRICKYARD DISPOSAL & RECYLING
DANVILLE, ILLINOIS

DATE: OCTOBER 2012
PROJECT ID: 1989-115A029
SHEET NUMBER: 3Q12

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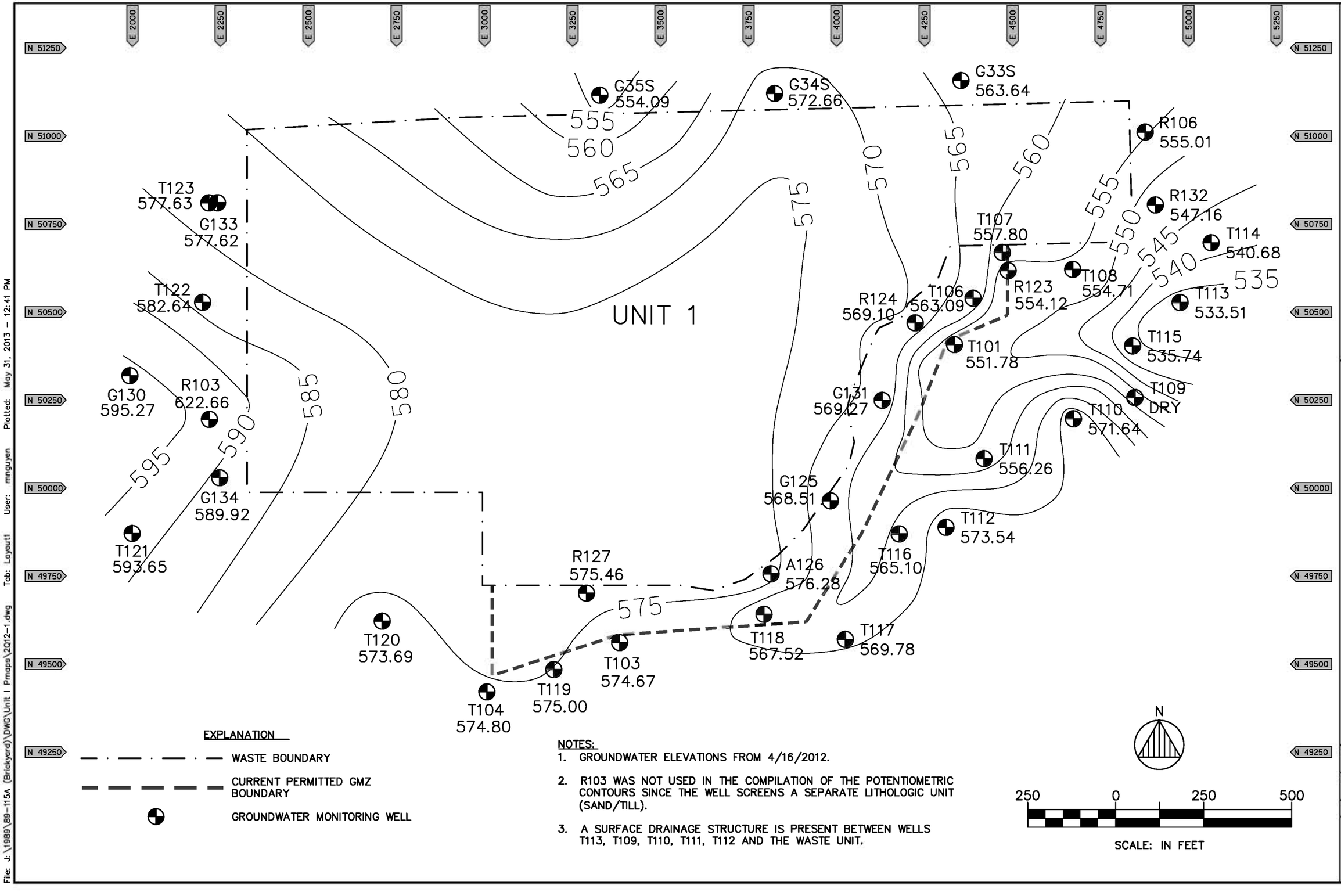

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APPROVED BY: TPD | DESIGNED BY: TPD | DRAWN BY: MPN

UNIT 1 POTENTIOMETRIC SURFACE MAP 2ND QUARTER 2012

PLANS PREPARED FOR
BRICKYARD DISPOSAL & RECYCLING
DANVILLE, ILLINOIS

DATE: AUGUST 2012
PROJECT ID: 1989-115A029
SHEET NUMBER: 2Q12

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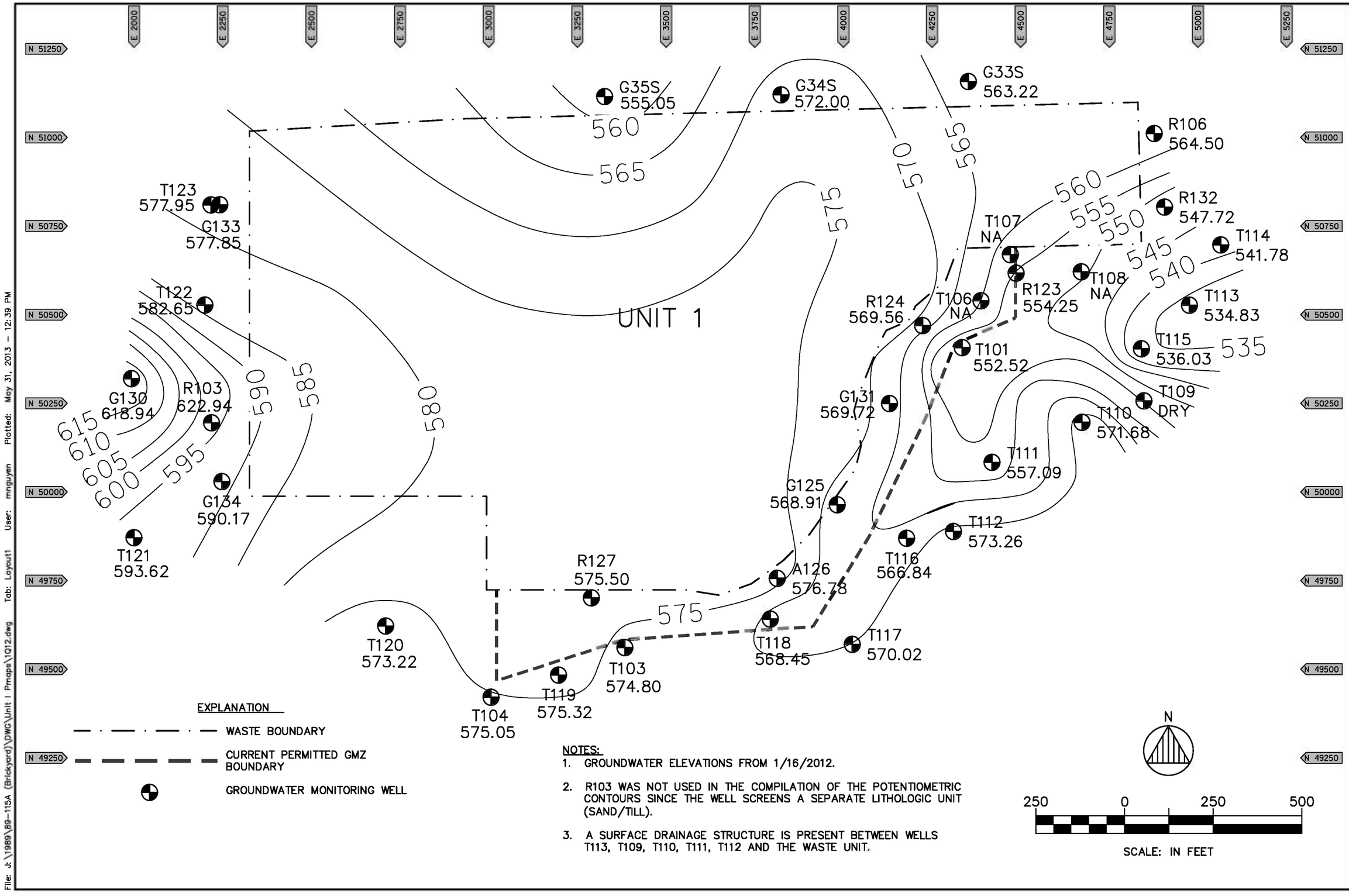

NOTES:

1. GROUNDWATER ELEVATIONS FROM 1/16/2012.
2. R103 WAS NOT USED IN THE COMPILATION OF THE POTENTIOMETRIC CONTOURS SINCE THE WELL SCREENS A SEPARATE LITHOLOGIC UNIT (SAND/TILL).
3. A SURFACE DRAINAGE STRUCTURE IS PRESENT BETWEEN WELLS T113, T109, T110, T111, T112 AND THE WASTE UNIT.

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APPROVED BY: TPD | DESIGNED BY: TPD | DRAWN BY: MPN

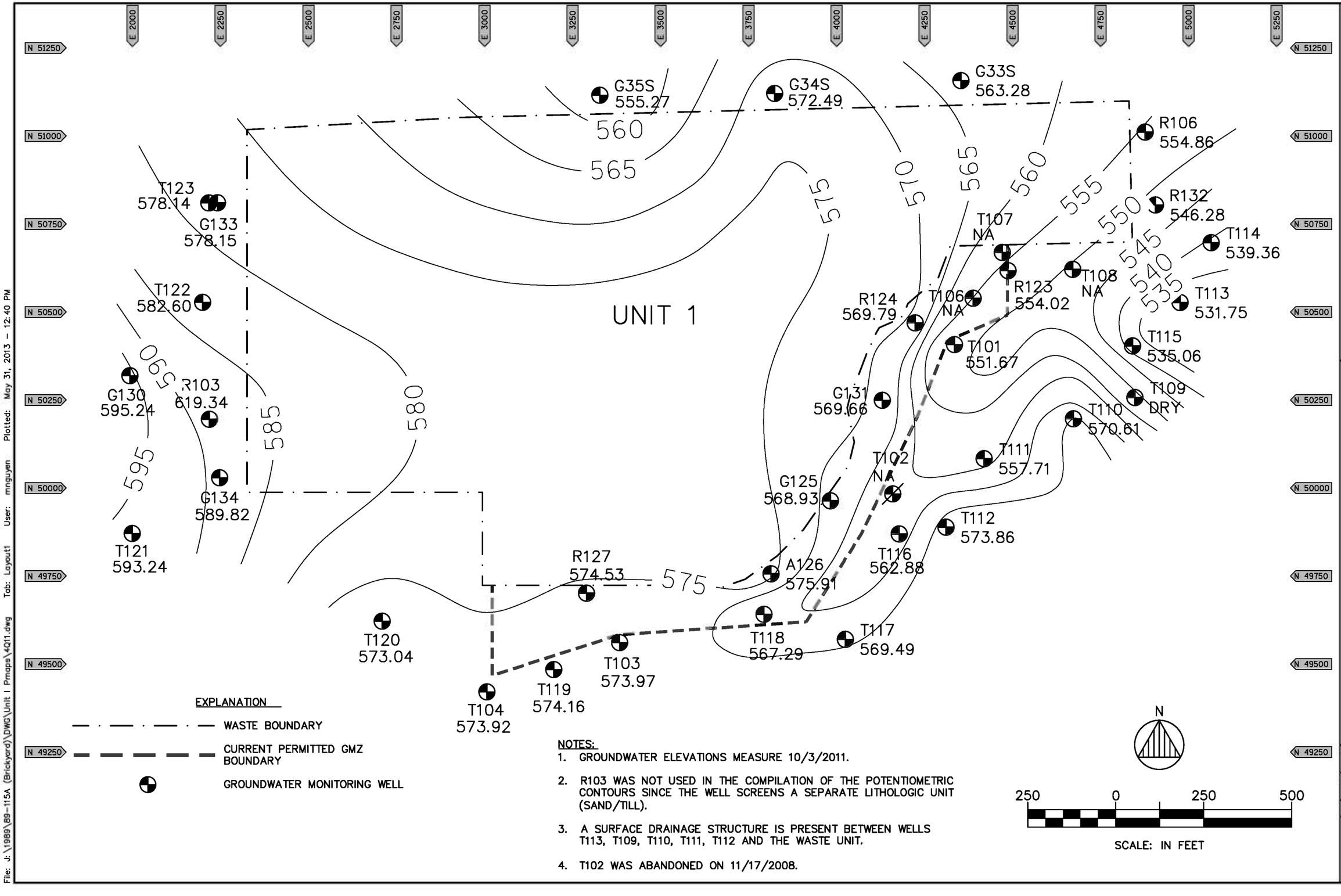
UNIT 1 POTENTIOMETRIC SURFACE MAP
1ST QUARTER 2012

PLANS PREPARED FOR
BRICKYARD DISPOSAL & RECYCLING
DANVILLE, ILLINOIS

DATE: AUGUST 2012

PROJECT ID: 1989-115A029

SHEET NUMBER: 1Q12



NOTES:

1. GROUNDWATER ELEVATIONS MEASURE 10/3/2011.
2. R103 WAS NOT USED IN THE COMPILATION OF THE POTENTIOMETRIC CONTOURS SINCE THE WELL SCREENS A SEPARATE LITHOLOGIC UNIT (SAND/TILL).
3. A SURFACE DRAINAGE STRUCTURE IS PRESENT BETWEEN WELLS T113, T109, T110, T111, T112 AND THE WASTE UNIT.
4. T102 WAS ABANDONED ON 11/17/2008.

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DRAWN BY: MPN
DESIGNED BY: TPD
APPROVED BY: TPD

UNIT 1 POTENTIOMETRIC SURFACE MAP 4TH QUARTER 2011

PLANS PREPARED FOR
BRICKYARD DISPOSAL & RECYLING
DANVILLE, ILLINOIS

DATE: AUGUST 2012
PROJECT ID: 1989-115A029
SHEET NUMBER: 4Q11

Plotted: May 31, 2013 - 12:40 PM
User: mnguyen
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N 51250 N 51000 N 50750 N 50500 N 50250 N 50000 N 49750 N 49500 N 49250

G35S 566.09
G34S 573.63
G33S 562.89
T123 578.57
G133 578.46
T122 583.60
G130 595.75
R103 622.65
G134 590.05
T121 593.54
T120 574.64
R127 575.41
T104 574.70
T119 575.04
T103 574.43
T118 568.03
A126 576.15
G125 569.78
T102 NA
T117 569.50
T116 566.65
T112 574.11
T111 557.29
T110 571.63
T109 550.41
T115 535.14
T113 532.62
T114 540.63
R132 547.99
R106 555.00
T107 NA
R123 554.20
T108 NA
T106 NA
R124 570.99
T101 552.43
G131 570.87

UNIT 1

595 590 585 580 575 570 565 560 555 550 545 540 535

EXPLANATION

- WASTE BOUNDARY
- CURRENT PERMITTED GMZ BOUNDARY
- GROUNDWATER MONITORING WELL

NOTES:

1. GROUNDWATER ELEVATIONS MEASURE 7/11/2011.
2. R103 WAS NOT USED IN THE COMPILATION OF THE POTENTIOMETRIC CONTOURS SINCE THE WELL SCREENS A SEPARATE LITHOLOGIC UNIT (SAND/TILL).
3. A SURFACE DRAINAGE STRUCTURE IS PRESENT BETWEEN WELLS T113, T109, T110, T111, T112 AND THE WASTE UNIT.
4. T102 WAS ABANDONED ON 11/17/2008.

N

250 0 250 500

SCALE: IN FEET

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DRAWN BY: MPN
DESIGNED BY: TPD
APPROVED BY: TPD

UNIT 1 POTENTIOMETRIC SURFACE MAP
3RD QUARTER 2011

PLANS PREPARED FOR
BRICKYARD DISPOSAL & RECYCLING
DANVILLE, ILLINOIS

DATE: AUGUST 2012
PROJECT ID: 1989-115A029
SHEET NUMBER: 3Q11

Plotted: May 31, 2013 - 12:37 PM
User: mnguyen
Tab: Layout1
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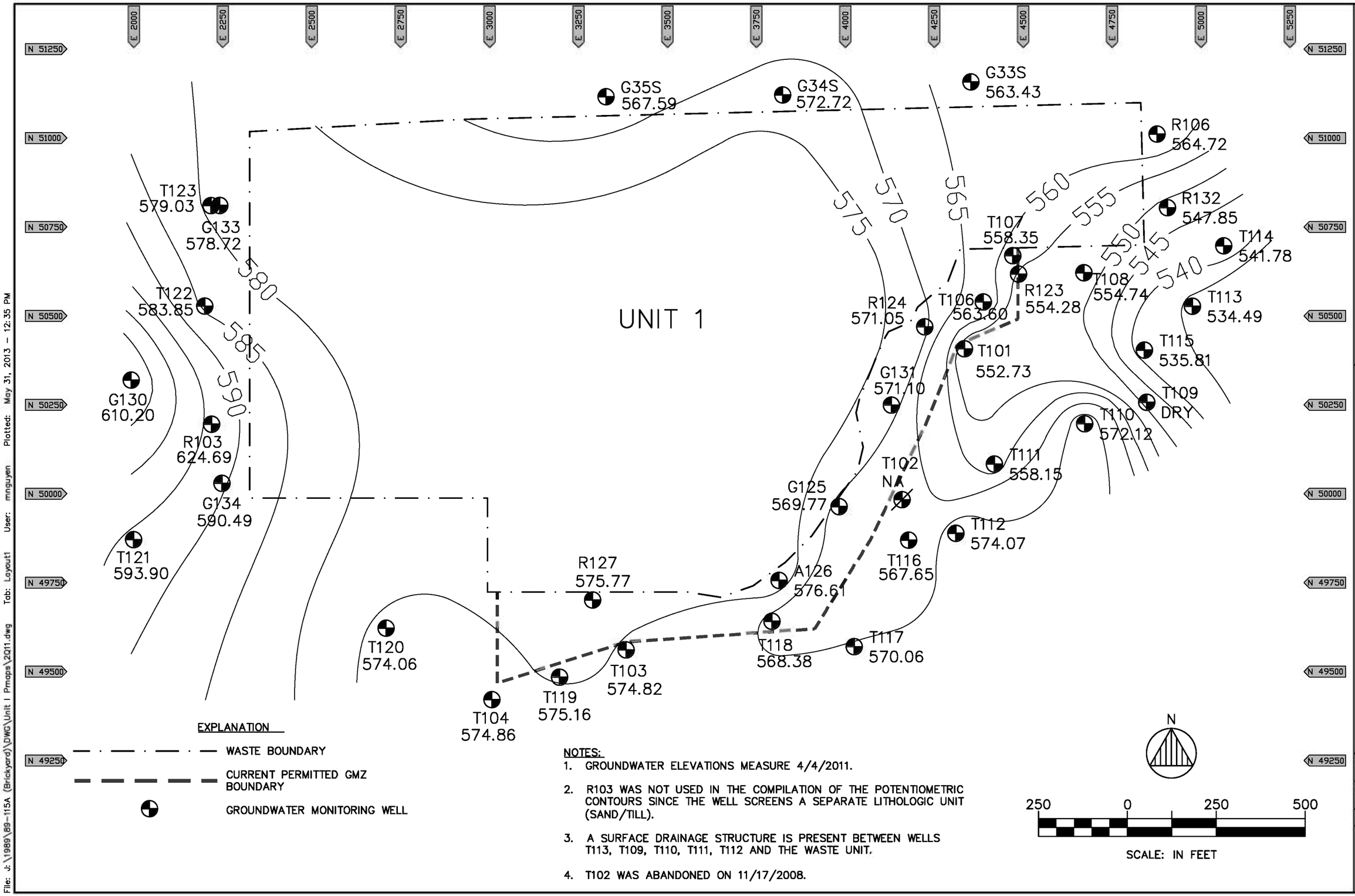

EXPLANATION

- WASTE BOUNDARY
- CURRENT PERMITTED GMZ BOUNDARY
- GROUNDWATER MONITORING WELL

NOTES:

1. GROUNDWATER ELEVATIONS MEASURE 4/4/2011.
2. R103 WAS NOT USED IN THE COMPILATION OF THE POTENTIOMETRIC CONTOURS SINCE THE WELL SCREENS A SEPARATE LITHOLOGIC UNIT (SAND/TILL).
3. A SURFACE DRAINAGE STRUCTURE IS PRESENT BETWEEN WELLS T113, T109, T110, T111, T112 AND THE WASTE UNIT.
4. T102 WAS ABANDONED ON 11/17/2008.

N

250 0 250 500

SCALE: IN FEET

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DRAWN BY: WCU
DESIGNED BY: JLR
APPROVED BY: JLR

UNIT 1 POTENTIOMETRIC SURFACE MAP
2ND QUARTER 2011

PLANS PREPARED FOR
BRICKYARD DISPOSAL & RECYCLING
DANVILLE, ILLINOIS

DATE: SEPTEMBER 2011
PROJECT ID: 1989-115A029
SHEET NUMBER: 2Q11

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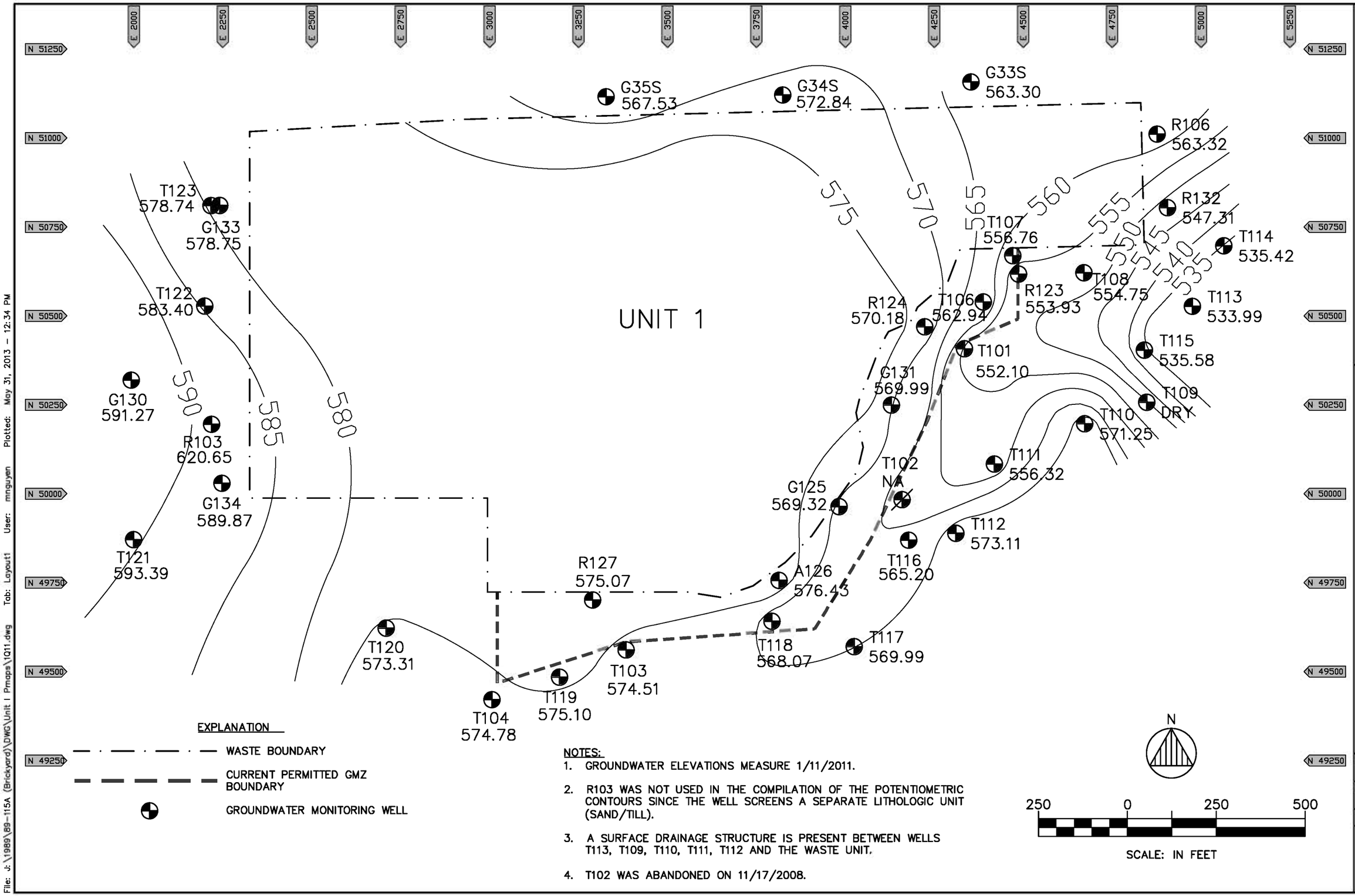

NOTES:

1. GROUNDWATER ELEVATIONS MEASURE 1/11/2011.
2. R103 WAS NOT USED IN THE COMPILATION OF THE POTENTIOMETRIC CONTOURS SINCE THE WELL SCREENS A SEPARATE LITHOLOGIC UNIT (SAND/TILL).
3. A SURFACE DRAINAGE STRUCTURE IS PRESENT BETWEEN WELLS T113, T109, T110, T111, T112 AND THE WASTE UNIT.
4. T102 WAS ABANDONED ON 11/17/2008.

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DESIGNED BY: MTH
APPROVED BY: MTH

UNIT 1 POTENTIOMETRIC SURFACE MAP
1ST QUARTER 2011

PLANS PREPARED FOR
BRICKYARD DISPOSAL & RECYCLING
DANVILLE, ILLINOIS

DATE: MARCH 2011
PROJECT ID: 1989-115A029
SHEET NUMBER: 1Q11

File: J:\1989\89-115A (Brickyard)\DWG\Unit 1 Pmaps\1Q11.dwg Tab: Layout1 User: mnguyen Plotted: May 31, 2013 - 12:34 PM

ATTACHMENT 4

1994 Soils Analyses

TABLE 2-6B
SUMMARY OF LABORATORY TEST RESULTS FOR MINE SPOIL

Boring/ Piezometer	Sample Number	Depth (ft)	USCS Symbol	Moisture Content (%)	Grain Size Analysis			Atterberg Limits			Dry Density (pcf)	Unconfined Compressive Strength (tsf)	Hydraulic Conductivity (cm/sec)	Cation Exchange Capacity (meq/100 gm)
					Gravel (%)	Sand (%)	Silt or Clay (%)	LL	PL	PI				
PZ-1-94	SS-2	2.0-4.0	CH	18.7				55	25	30				
PZ-1-94	SS-3	4.0-6.0	CH	29.2	0	5	52/43[1]							
PZ-2-94	SS-2	4.0-4.7	CL	7.2	0	20	69/11[1]	32	21	11				
B-2[2]	S-2	5.0-6.5		10.5							131.9		3.1×10^{-8}	3.2
B-2[2]	S-5	20.0-21.5		11.5							127.9			
B-4[2]	S-2	5.0-6.5		11.5							111.6		1.3×10^{-7}	
Number of Tests				6	2	2	2	2	2	2	3	0	2	1
Minimum				7.2	0	5	80	32	21	11	111.6		3.1×10^{-8}	
Maximum				29.2	0	20	95	55	25	30	131.9		1.3×10^{-7}	
Average				14.7	0	12.5	87.5	43.5	23	20.5	123.8		8.05×10^{-8}	
Median				11.5	0	12.5	87.5	43.5	23	20.5	127.9		8.05×10^{-8}	

Notes:
[1] Represent percentages of silt and clay based on hydrometer analysis.
[2] Based on 1980 Bartholomew Engineering Report.

TABLE 2-7
SUMMARY OF LABORATORY TEST RESULTS FOR UPPER CLAY

Boring/ Piezometer	Sample Number	Depth (ft)	USCS Symbol	Moisture Content (%)	Grain Size Analysis			Atterberg Limits			Dry Density (pcf)	Unconfined Compressive Strength (tsf) (Rimac)	Hydraulic Conductivity (cm/sec)	Total Organic Carbon (TOC) mg/g	Cation Exchange Capacity (meq/100 g)
					Gravel (%)	Sand (%)	Silt or Clay (%)	LL	PL	PI					
CB-1-94	Bag	2.0-10.0	CL-M	19.0-23.7											11.0
CB-1-94	SS-2	4.0-6.0	CL-ML	17.0										10.0	
CB-1-94	SS-3	6.0-8.0	CL-ML	11.7				21	15	6					
CB-2-94A	SS-2	4.0-6.0	CL	13.3				24	15	9				9.8	
CB-3-94	SS-2	4.0-6.0	CL	9.2										13.0	
CB-3-94	Bag	8.0-15.0	SC	8.8-10.1	4	50	33/13[1]								5.38
PZ-6-94	SS-4	6.0-8.0	CL	15.0	0	22	48/30[1]	36	22	14					
PZ-8-94	SS-1	2.0-4.0	CH	29.9				57	30	27		2.7			
PZ-8-94	SS-4	8.0-10.0	CL-ML	14.2								2.6			
PZ-8-94	SS-5	10.0-12.0	CL-ML	9.7								4.7			
B-11[2]	S-3	10.0-11.5	CL	10.0							123.4				6.20
B-16[2]	S-2	5.0-6.5	CL	9.5							122.6		$6.7x10^{-8}$		
P-3[3]		5.3	CL-ML		0	46	32/22[1]	16	12	4					
P-3[3]		7.2	ML		1	40	35/24[1]	17	14	3					
P-4[3]		0.6	CL-ML		3	32	39/25[1]	24	18	6					
				MC	G	S	S/C	LL	PL	PI	DD	Rimac	HC	TOC	CEC
Number of Tests				12	5	5	5	7	7	7	2	3	1	3	3
Minimum				8.8	0	22	46	16	12	3	122.6	2.6	$6.7x10^{-8}$	9.8	5.38
Maximum				29.9	4	50	78	57	30	27	123.4	4.7	$6.7x10^{-8}$	13.0	11.0
Average				14.4	1.6	38	60	27.9	18	9.9	123.0	3.3	$6.7x10^{-8}$	10.9	7.5
Median				10.9	1	40	59	24	15	6	123.0	2.6	$6.7x10^{-8}$	9.8	6.20

Notes:

[1] Represent percentages of silt and clay based on hydrometer analysis (clay < 0.002 mm).

[2] Based on 1980 Bartholomew Engineering Report.

[3] Based on 1991 Andrews Environmental Engineering Report.

TABLE 2-8
SUMMARY OF LABORATORY TEST RESULTS FOR GLACIAL SAND

Boring/ Piezometer	Sample Number	Depth (ft)	USCS Symbol	Moisture Content (%)	Grain Size Analysis			Atterberg Limits			Dry Density (pcf)	Unconfined Compressive Strength (Rimac) (tsf)	Hydraulic Conductivity (cm/sec)	Cation Exchange Capacity (meq/100 g)
					Gravel (%)	Sand (%)	Silt or Clay (%)	LL	PL	PI				
CB-1-94	SS-5	10.0-12.0	SP-SM		1	88	11							
CB-2-94A	SS-5	10.0-12.0	SC	8.8	13	52	24/11[1]	19	12	7				
CB-2-94A	SS-10	20.0-22.0	SP-SM	15.0	2	89	9							
PZ-7-94	SS-5	10.0-12.0	SM	17.1	7	56	27/10[1]							
PZ-7-94	SS-8	16.0-18.0	SW-SM	11.7	26	63	11							
PZ-8-94	3T-6	12.0-14.0	SM		14	49	27/10[1]	18	14	4				
PZ-8-94	SS-14A	28.0-30.0	SP	11.0	1	95	4					3.25		
GB-2-94	SS-6	10.0-12.0	SP-SM		0	88	12							
P-3[2]		3.2	SC-SM		2	50	26/22[1]	20	14	6				
P-3[2]		9.1	SM		0	51	32/17[1]	13	11	2				
P-3[2]		11.2	SM		5	48	30/17[1]	14	11	3				
P-3[2]		12.2	SM		16	54	19/11[1]	NP	NP	NP				
P-6[2]		4.5	SM		3	63	21/13[1]	NP	NP	NP				
				MC	G	S	S/C	LL	PL	PI	DD	Rimac	HC	TOC
Number of Tests				5	13	13	13	7	7	7	0	1	0	0
Minimum				8.8	0	48	4	13	11	2		3.25		
Maximum				17.1	26	95	49	20	14	7		3.25		
Average				12.7	6.9	65	28	16.8	12.4	4.4		3.25		
Median				11.7	3	56	34	18	12	4		3.25		

Notes:

[1] Represents percentages of silt and clay based hydrometer analysis (clay < 0.002 mm).

[2] Based on 1992 Andrews Environmental Engineering Report.

TABLE 2-9
SUMMARY OF LABORATORY TEST RESULTS FOR LOWER SILTY CLAY

Boring/ Piezometer	Sample Number	Depth (ft)	USCS Symbol	Moisture Content (%)	Grain Size Analysis			Atterberg Limits			Dry Density (pcf)	Unconfined Compressive Strength (tsf) (Rimac)	Uncompacted Hydraulic Conductivity (cm/sec)	Total Organic Carbon (TOC) mg/g	Cation Exchange Capacity (meq/100 gm)
					Gravel (%)	Sand (%)	Silt or Clay (%)	LL	PL	PI					
CB-1-94	SS-11	22.0-24.0	ML	12.7				38	22	16					
CB-1-94	SS-13	26.0-28.0	ML	12.0										1.6	
CB-1-94	SS-16	32.0-34.0	CL	12.3				34	15	19					
CB-1-94	SS-20	40.0-42.0	CL	24.4				33	20	13					
CB-2-94B	SS-15	30.0-32.0	ML	7.9				NP	NP	NP					
CB-2-94b	SS-16	32.0-34.0	ML	8.3										35.4	
CB-3-94	SS-7	14.0-16.0	CL-ML	10.1	3	45	38/41[1]	17	12	5					
CB-3-94	SS-9	18.0-20.0	CL-ML	10.4										71.0	
CB-3-94	SS-11	22.0-24.0	CL-ML	10.8				14	13	1					
PZ-5-94	SS-4	6.0-8.0	CL	9.3				42	20	22					
PZ-6-94	SS-6	10.0-12.0	CL	22.7				31	22	9					
PZ-6-94	SS-8	14.0-18.0	CH	22.5				69	29	40					
PZ-6-94	SS-10	18.0-20.0	CL	14.2	0	0	76/24[1]	40	23	17					
PZ-7-94	SS-10	20.0-22.0	CL	13.2				28	14	14					
PZ-7-94	SS-14	28.0-30.0	CL	12.5	2	18	51/29[1]	34	18	16					
PZ-7-94	SS-23	46.0-48.0	CH	23.6	0	0	51/49[1]	54	24	30					
PZ-7-94	SS-26B	52.0-54.0	CH	26.7				58	26	32					
PZ-7-94	SS-28	56.0-58.0	CL	23.0	3	23	60/14[1]								

Notes:
[1] Represents percentages of silt and clay based hydrometer analysis (clay < 0.002 mm).
[2] Based on 1980 Bartholomew Engineering Report.
[3] Based on 1991 Andrews Environmental Engineering Report.

TABLE 2-9 (continued)
SUMMARY OF LABORATORY TEST RESULTS FOR LOWER SILTY CLAY

Boring/ Piezometer	Sample Number	Depth (ft)	USCS Symbol	Moisture Content (%)	Grain Size Analysis			Atterberg Limits			Dry Density (pcf)	Unconfined Compressive Strength (tsf) (Rimac)	Uncompacted Hydraulic Conductivity (cm/sec)	Total Organic Carbon (TOC) mg/g	Cation Exchange Capacity (meq/100 gm)
					Gravel (%)	Sand (%)	Silt or Clay (%)	LL	PL	PI					
PZ-8-94	SS-10	20.0-22.0	ML	11.6				18	15	3		0.9			
PZ-8-94	SS-12	24.0-26.0	CL-ML	9.7	5	44	37/14[1]	17	12	5					
PZ-8-94	SS-18	36.0-40.0	CL	17.6	1	1	50/48[1]	49	26	23					
PZ-8-94	Bag	43.0-48.0	CL	17.2-13.2										6.4	
GB-2-94	SS-16	30.0-32.0	CL	13.3	11	18	43/28[1]	35	18	17					
GB-2-94	SS-25	48.0-50.0	CL	18.8				34	22	12					
GB-3-94	SS-13	24.0-26.0	CL	13.5	5	18	46/31[1]	35	19	16					
GB-4-94	SS-15	28.0-30.0	CL	13.3				40	23	17					
B-11[2]	S-7	30.0-31.5									112.6		$1.42x10^{-8}$		
B-11[2]	S-11	50.0-51.5									101.3		$1.62x10^{-9}$		
B-12[2]	S-12	55.0-56.5									105.1		$8.38x10^{-10}$		
B-12[2]	S-5	20.0-21.5									125.5				
B-12[2]	S-10	45.0-46.5									98.7				
B-13[2]	S-3	10.0-11.5									104.7		$7.24x10^{-9}$		
B-13[2]	S-7	30.0-31.5									109.1		$8.5x10^{-9}$		
B-13[2]	S-9	40.0-41.5									103.6				19.0
B-14[2]	S-4	15.0-16.5									126.4		$1.7x10^{-7}$		

Notes:
[1] Represent percentages of silt and clay based hydrometer analysis.
[2] Based on 1980 Bartholomew Engineering Report.
[3] Based on 1991 Andrews Environmental Engineering Report.

TABLE 2-9 (continued)
SUMMARY OF LABORATORY TEST RESULTS FOR LOWER SILTY CLAY UNIT

Boring/ Piezometer	Sample Number	Depth (ft)	USCS Symbol	Moisture Content (%)	Grain Size Analysis			Atterberg Limits			Dry Density (pcf)	Unconfined Compressive Strength (tsf) (Rimac)	Uncompacted Hydraulic Conductivity (cm/sec)	Total Organic Carbon (TOC) mg/g	Cation Exchange Capacity (meq/100 gm)
					Gravel (%)	Sand (%)	Silt or Clay (%)	LL	PL	PI					
B-14[2]	S-6	25.0-26.5									119.4		$1.1x10^{-7}$		
B-14[2]	S-10	45.0-46.5									118.9				
B-14[2]	S-13	60.0-61.5									110.3		$3.6x10^{-9}$		
B-15[2]	S-4	15.0-16.5									118.8				
B-15[2]	S-6	25.0-26.5									103.1				27.0
B-17[2]	S-4	15.0-16.5									109.2				8.8
B-17[2]	S-9	40.0-41.5									113.5				
P-3[3]		15.4	ML		1	47	33/18[1]	14	11	3					
P-3[3]		16.4	ML		2	44	35/20[1]	13	11	2					
P-3[3]		16.6	ML		1	30	48/21[1]								
P-6[3]		1.4	CL-ML		0	37	42/21[1]	20	15	5					
P-6[3]		2.5	CL		9	36	35/20[1]	21	6	15			$2.96x10^{-8}$		
P-6[3]		3.7	CL-ML		3	44	33/20[1]	20	15	5					
P-6[3]		6.5	CL		7	37	36/20[1]	31	22	9					

	MC	G	S	S/C	LL	PL	PI	DD	Rimac	HC	TOC	CEC
Number of Tests	26	16	16	16	27	27	27	16	1	9	4	3
Minimum	7.9	0	0	51	13	6	1	98.7	0	$8.38x10^{-10}$	1.6	8.8
Maximum	26.7	11	47	100	69	29	40	126.4	0.9	$1.7x10^{-7}$	71.0	27.0
Average	15.5	3.3	28	72	31	17	14	111.3	0.9	$1.42x10^{-8}$	28.6	18.3
Median	13.3	2.5	33	66	34	22	14	109.7	0.9	$1.42x10^{-8}$	20.9	19.0

Notes:
1 Represents percentages of silt and clay based hydrometer analysis (clay < 0.002 mm).
2 Based on 1980 Bartholomew Engineering Report.
3 Based on 1991 Andrews Environmental Engineering Report.

ATTACHMENT 5

Unit 1 Leachate Data

TABLE 5-1
LEACHATE DATA

BRICKYARD DISPOSAL AND RECYCLING

LEACHATE WELL L101 - SECOND QUARTER 2010

Parameter		Value	Units
1,1,1,2-Tetrachloroethane	<	5.0	ug/L
1,1,1-Trichloroethane	<	5.0	ug/L
1,1,2,2-Tetrachloroethane	<	5.0	ug/L
1,1,2-Trichloroethane	<	5.0	ug/L
1,1-Dichloroethane	<	5.0	ug/L
1,1-Dichloroethene	<	5.0	ug/L
1,1-Dichloropropene	<	5.0	ug/L
1,2,3-Trichlorobenzene	<	5.0	ug/L
1,2,3-Trichloropropane	<	5.0	ug/L
1,2,4-Trichlorobenzene	<	5.0	ug/L
1,2,4-Trimethylbenzene	<	5.0	ug/L
1,2-Dibromo-3-chloropropane	<	10.0	ug/L
1,2-Dibromoethane (EDB)	<	10.0	ug/L
1,2-Dichlorobenzene	<	10	ug/L
1,2-Dichloroethane	<	5.0	ug/L
1,2-Dichloropropane	<	5.0	ug/L
1,3-Dichlorobenzene	<	10	ug/L
1,3-Dichloropropane	<	5.0	ug/L
1,3-Dichloropropene (total)	<	5.0	ug/L
1,4-Dichlorobenzene	<	10	ug/L
2,2-Dichloropropane	<	5.0	ug/L
2,4-D	<	0.2	ug/L
2-Butanone (MEK)		11.4	ug/L
2-Chlorotoluene	<	5.0	ug/L
2-Hexanone	<	10.0	ug/L
3 & 4-Methylphenol	<	10	ug/L
4,4'-DDT	<	0.10	ug/L
4-Chlorotoluene	<	5.0	ug/L
4-Methyl-2-pentanone (MIBK)	<	10.0	ug/L
Acetone	<	100	ug/L
Acrolein	<	100	ug/L
Acrylonitrile	<	100	ug/L
Alachlor	<	5.0	ug/L
Aldicarb	<	10.0	ug/L
Aldrin	<	0.05	ug/L
alpha-BHC	<	0.1	ug/L
Aluminum		0.28	mg/L
Ammonia (as N)		44.3	mg/L
Ammonia (as N), Dissolved		43.5	mg/L
Antimony	<	0.006	mg/L
Aroclor 1016	<	0.50	ug/L

TABLE 5-1
LEACHATE DATA

BRICKYARD DISPOSAL AND RECYCLING

LEACHATE WELL L101 - SECOND QUARTER 2010

Parameter		Value	Units
Aroclor 1221	<	0.50	ug/L
Aroclor 1232	<	0.50	ug/L
Aroclor 1242	<	0.50	ug/L
Aroclor 1248	<	0.50	ug/L
Aroclor 1254	<	0.50	ug/L
Aroclor 1260	<	0.50	ug/L
Aroclor 1262	<	0.50	ug/L
Arsenic	<	0.002	mg/L
Atrazine	<	5.0	ug/L
Barium		0.553	mg/L
Benzo(a)pyrene	<	10	ug/L
Beryllium	<	0.001	mg/L
beta-BHC	<	0.1	ug/L
bis(2-Ethylhexyl)phthalate	<	10	ug/L
bis(Chloromethyl)ether	ND		ug/L
BOD, 5 Day		46	mg/L
Boron		1.72	mg/L
Bromobenzene	<	5.0	ug/L
Bromochloromethane	<	5.0	ug/L
Bromodichloromethane	<	1.0	ug/L
Bromoform	<	1.0	ug/L
Bromomethane	<	5.0	ug/L
Butyl benzyl phthalate	<	10	ug/L
Cadmium	<	0.001	mg/L
Calcium		233	mg/L
Carbofuran	<	10.0	ug/L
Carbon disulfide	<	5.0	ug/L
Carbon tetrachloride	<	5.0	ug/L
Chlordane (technical)	<	1.0	ug/L
Chloride		280	mg/L
Chlorodibromomethane	<	1.0	ug/L
Chloroethane	<	10.0	ug/L
Chloroform	<	1.0	ug/L
Chloromethane	<	10.0	ug/L
Chromium		0.003	mg/L
cis-1,3-Dichloropropene	<	1.0	ug/L
Cobalt		0.005	mg/L
COD		244	mg/L
Copper		0.041	mg/L
Cyanide, Total	<	0.005	mg/L
Dalapon	<	10	ug/L

TABLE 5-1
LEACHATE DATA

BRICKYARD DISPOSAL AND RECYCLING

LEACHATE WELL L101 - SECOND QUARTER 2010

Parameter		Value	Units
delta-BHC	<	0.1	ug/L
Dibromomethane	<	5.0	ug/L
Dichlorodifluoromethane	<	5.0	ug/L
Dieldrin	<	0.10	ug/L
Diethyl phthalate	<	10	ug/L
Dimethyl phthalate	<	10	ug/L
Di-n-butyl phthalate	<	10	ug/L
Dinoseb	<	3	ug/L
Endothall	<	9.0	ug/L
Endrin	<	0.10	ug/L
Fluoride	<	0.50	mg/L
gamma-BHC (Lindane)	<	0.05	ug/L
Heptachlor	<	0.05	ug/L
Heptachlor epoxide	<	0.05	ug/L
Hexachlorobutadiene	<	10	ug/L
Iodomethane	<	10.0	ug/L
Iron		29.6	mg/L
Isophorone	<	10	ug/L
Isopropylbenzene	<	5.0	ug/L
Lead		0.009	mg/L
Magnesium		180	mg/L
Manganese		1.19	mg/L
Mercury	<	0.0005	mg/L
Methoxychlor	<	0.50	ug/L
Methylene chloride	<	5.0	ug/L
Naphthalene	<	10	ug/L
n-Butylbenzene	<	5.0	ug/L
Nickel		0.030	mg/L
Nitrate (as N)		0.74	mg/L
Oil (Hexane soluble)	<	1	mg/L
Parathion	<	5.0	ug/L
Pentachlorophenol	<	10	ug/L
pH @ 25°C		7.14	Units
Phenols	<	50	ug/L
Picloram	<	3	ug/L
p-Isopropyltoluene	<	5.0	ug/L
Potassium		60.0	mg/L
sec-Butylbenzene	<	5.0	ug/L
Selenium	<	0.002	mg/L
Silver	<	0.001	mg/L
Silvex (2,4,5-TP)	<	0.1	ug/L

TABLE 5-1
LEACHATE DATA

BRICKYARD DISPOSAL AND RECYCLING

LEACHATE WELL L101 - SECOND QUARTER 2010

Parameter		Value	Units
Simazine	<	2.0	ug/L
Sodium		206	mg/L
Styrene	<	5.0	ug/L
Sulfate		82	mg/L
tert-Butylbenzene	<	5.0	ug/L
Tetrachloroethene	<	5.0	ug/L
Thallium	<	0.002	mg/L
Tin	<	0.02	mg/L
TOC		73	mg/L
Total Dissolved Solids		1920	mg/L
Total Suspended Solids		103	mg/L
Toxaphene	<	1.0	ug/L
trans-1,2-Dichloroethene	<	5.0	ug/L
trans-1,3-Dichloropropene	<	1.0	ug/L
trans-1,4-Dichloro-2-butene	<	5.0	ug/L
Trichloroethene	<	5.0	ug/L
Trichlorofluoromethane	<	5.0	ug/L
Vanadium	<	0.01	mg/L
Vinyl acetate	<	10.0	ug/L
Vinyl chloride	<	2.0	ug/L
Zinc		0.069	mg/L

TABLE 5-1
LEACHATE DATA

BRICKYARD DISPOSAL AND RECYCLING

LEACHATE WELL L102 - SECOND QUARTER 2008

Parameter		Value	Units
1,1,1,2-Tetrachloroethane	<	5	ug/L
1,1,1-Trichloroethane	<	5	ug/L
1,1,2,2-Tetrachloroethane	<	5	ug/L
1,1,2-Trichloroethane	<	5	ug/L
1,1-Dichloroethane	<	5	ug/L
1,1-Dichloroethene	<	5	ug/L
1,1-Dichloropropene	<	5	ug/L
1,2,3-Trichlorobenzene	<	5	ug/L
1,2,3-Trichloropropane	<	5	ug/L
1,2,4-Trichlorobenzene	<	5	ug/L
1,2,4-Trimethylbenzene	<	5	ug/L
1,2-Dibromo-3-chloropropane	<	10	ug/L
1,2-Dibromoethane (EDB)	<	10	ug/L
1,2-Dichlorobenzene	<	10	ug/L
1,2-Dichloroethane	<	5	ug/L
1,2-Dichloropropane	<	5	ug/L
1,3,5-Trimethylbenzene		18.1	ug/L
1,3-Dichlorobenzene	<	10	ug/L
1,3-Dichloropropane	<	5	ug/L
1,3-Dichloropropene (total)	<	5	ug/L
1,4-Dichlorobenzene	<	10	ug/L
2,2-Dichloropropane	<	5	ug/L
2-Chlorotoluene	<	5	ug/L
2-Hexanone	<	10	ug/L
3 & 4-Methylphenol	<	10	ug/L
4,4'-DDT	<	0.1	ug/L
4-Chlorotoluene	<	5	ug/L
4-Methyl-2-pentanone (MIBK)	<	10	ug/L
Acetone	<	100	ug/L
Acrolein	<	100	ug/L
Acrylonitrile	<	100	ug/L
Alachlor	<	5	ug/L
Aldicarb	<	10	ug/L
Aldrin	<	0.05	ug/L
alpha-BHC	<	0.1	ug/L
Aroclor 1016	<	0.5	ug/L
Aroclor 1221	<	0.5	ug/L
Aroclor 1232	<	0.5	ug/L
Aroclor 1242	<	0.5	ug/L
Aroclor 1248	<	0.5	ug/L

TABLE 5-1
LEACHATE DATA

BRICKYARD DISPOSAL AND RECYCLING

LEACHATE WELL L102 - SECOND QUARTER 2008

Parameter		Value	Units
Aroclor 1254	<	0.5	ug/L
Aroclor 1260	<	0.5	ug/L
Aroclor 1262	<	0.5	ug/L
Atrazine	<	5	ug/L
Benzene		5.1	ug/L
Benzo(a)pyrene	<	10	ug/L
beta-BHC	<	0.1	ug/L
bis(2-Ethylhexyl)phthalate	<	10	ug/L
bis(Chloromethyl)ether	ND		ug/L
Bromobenzene	<	5	ug/L
Bromochloromethane	<	5	ug/L
Bromodichloromethane	<	1	ug/L
Bromoform	<	1	ug/L
Bromomethane	<	5	ug/L
Butyl benzyl phthalate	<	10	ug/L
Carbofuran	<	10	ug/L
Carbon disulfide	<	5	ug/L
Carbon tetrachloride	<	5	ug/L
Chlordane (technical)	<	1	ug/L
Chlorobenzene		6.7	ug/L
Chlorodibromomethane	<	1	ug/L
Chloroethane	<	10	ug/L
Chloroform	<	1	ug/L
Chloromethane	<	10	ug/L
cis-1,2-Dichloroethene		5.3	ug/L
cis-1,3-Dichloropropene	<	1	ug/L
delta-BHC	<	0.1	ug/L
Dibromomethane	<	5	ug/L
Dichlorodifluoromethane	<	5	ug/L
Dieldrin	<	0.1	ug/L
Diethyl phthalate	<	10	ug/L
Dimethyl phthalate	<	10	ug/L
Di-n-butyl phthalate	<	10	ug/L
Endrin	<	0.1	ug/L
Ethylbenzene		54.4	ug/L
gamma-BHC (Lindane)	<	0.05	ug/L
Heptachlor	<	0.05	ug/L
Heptachlor epoxide	<	0.05	ug/L
Hexachlorobutadiene	<	10	ug/L
Iodomethane	<	10	ug/L

TABLE 5-1
LEACHATE DATA

BRICKYARD DISPOSAL AND RECYCLING

LEACHATE WELL L102 - SECOND QUARTER 2008

Parameter		Value	Units
Isophorone	<	10	ug/L
Isopropylbenzene	<	5	ug/L
m&p-Xylene		86	ug/L
Methoxychlor	<	0.5	ug/L
Methylene chloride	<	5	ug/L
Naphthalene	<	10	ug/L
n-Butylbenzene	<	5	ug/L
o-Xylene		34.3	ug/L
Parathion	<	5	ug/L
Pentachlorophenol	<	10	ug/L
p-Isopropyltoluene	<	5	ug/L
sec-Butylbenzene	<	5	ug/L
Simazine	<	2	ug/L
Styrene	<	5	ug/L
tert-Butylbenzene	<	5	ug/L
Tetrachloroethene	<	5	ug/L
Tetrahydrofuran		268	ug/L
Toluene		6.5	ug/L
Toxaphene	<	1	ug/L
trans-1,2-Dichloroethene	<	5	ug/L
trans-1,3-Dichloropropene	<	1	ug/L
trans-1,4-Dichloro-2-butene	<	5	ug/L
Trichloroethene	<	5	ug/L
Trichlorofluoromethane	<	5	ug/L
Vinyl acetate	<	10	ug/L
Vinyl chloride	<	2	ug/L
Xylene, Total		120	ug/L

TABLE 5-1
LEACHATE DATA

BRICKYARD DISPOSAL AND RECYCLING

LEACHATE WELL L103 - SECOND QUARTER 2011

Parameter		Value	Units
1,1,1,2-Tetrachloroethane	<	5	ug/L
1,1,1-Trichloroethane	<	5	ug/L
1,1,2,2-Tetrachloroethane	<	5	ug/L
1,1,2-Trichloroethane	<	5	ug/L
1,1-Dichloroethane	<	5	ug/L
1,1-Dichloroethene	<	5	ug/L
1,1-Dichloropropene	<	5	ug/L
1,2,3-Trichlorobenzene	<	5	ug/L
1,2,3-Trichloropropane	<	5	ug/L
1,2,4-Trichlorobenzene	<	5	ug/L
1,2,4-Trimethylbenzene	<	5	ug/L
1,2-Dibromo-3-chloropropane	<	10	ug/L
1,2-Dibromoethane (EDB)	<	10	ug/L
1,2-Dichlorobenzene	<	10	ug/L
1,2-Dichloroethane	<	5	ug/L
1,2-Dichloropropane	<	5	ug/L
1,3-Dichlorobenzene	<	10	ug/L
1,3-Dichloropropane	<	5	ug/L
1,3-Dichloropropene (total)	<	5	ug/L
1,4-Dichloro-2-butene	<	5	ug/L
1,4-Dichlorobenzene	<	10	ug/L
2,2-Dichloropropane	<	5	ug/L
2,4-D	<	0.2	ug/L
2-Chlorotoluene	<	5	ug/L
2-Hexanone	<	10	ug/L
3 & 4-Methylphenol	<	10	ug/L
4,4'-DDT	<	0.1	ug/L
4-Chlorotoluene	<	5	ug/L
4-Methyl-2-pentanone (MIBK)	<	10	ug/L
Acetone	<	100	ug/L
Acrolein	<	100	ug/L
Acrylonitrile	<	100	ug/L
Alachlor	<	5	ug/L
Aldicarb	<	10	ug/L
Aldrin	<	0.05	ug/L
alpha-BHC	<	0.1	ug/L
Antimony	<	0.006	mg/L
Aroclor 1016	<	0.5	ug/L
Aroclor 1221	<	0.5	ug/L
Aroclor 1232	<	0.5	ug/L

TABLE 5-1
LEACHATE DATA

BRICKYARD DISPOSAL AND RECYCLING

LEACHATE WELL L103 - SECOND QUARTER 2011

Parameter		Value	Units
Aroclor 1242	<	0.5	ug/L
Aroclor 1248	<	0.5	ug/L
Aroclor 1254	<	0.5	ug/L
Aroclor 1260	<	0.5	ug/L
Aroclor 1262	<	0.5	ug/L
Arsenic	<	0.002	mg/L
Atrazine	<	5	ug/L
Benzo(a)pyrene	<	10	ug/L
Beryllium	<	0.001	mg/L
beta-BHC	<	0.1	ug/L
bis(2-Ethylhexyl)phthalate	<	10	ug/L
bis(Chloromethyl)ether	ND		ug/L
Bromobenzene	<	5	ug/L
Bromochloromethane	<	5	ug/L
Bromodichloromethane	<	5	ug/L
Bromoform	<	1	ug/L
Bromomethane	<	10	ug/L
Butyl benzyl phthalate	<	10	ug/L
Cadmium	<	0.001	mg/L
Carbofuran	<	10	ug/L
Carbon disulfide	<	5	ug/L
Carbon tetrachloride	<	5	ug/L
Chlordane (technical)	<	1	ug/L
Chlorodibromomethane	<	1	ug/L
Chloroethane	<	10	ug/L
Chloroform	<	1	ug/L
Chloromethane	<	10	ug/L
cis-1,3-Dichloropropene	<	1	ug/L
Cyanide, Total	<	0.005	mg/L
Dalapon	<	10	ug/L
delta-BHC	<	0.1	ug/L
Dibromomethane	<	5	ug/L
Dichlorodifluoromethane	<	5	ug/L
Dieldrin	<	0.1	ug/L
Diethyl phthalate	<	10	ug/L
Dimethyl phthalate	<	10	ug/L
Di-n-butyl phthalate	<	10	ug/L
Dinoseb	<	3	ug/L
Endrin	<	0.1	ug/L
Fecal Coliform	<	1	MPN/100mL

TABLE 5-1
LEACHATE DATA

BRICKYARD DISPOSAL AND RECYCLING

LEACHATE WELL L103 - SECOND QUARTER 2011

Parameter		Value	Units
Fluoride	<	0.5	mg/L
gamma-BHC (Lindane)	<	0.05	ug/L
Heptachlor	<	0.05	ug/L
Heptachlor epoxide	<	0.05	ug/L
Hexachlorobutadiene	<	10	ug/L
Iodomethane	<	10	ug/L
Isophorone	<	10	ug/L
Isopropylbenzene	<	5	ug/L
Mercury	<	5E-04	mg/L
Methoxychlor	<	0.5	ug/L
Methylene chloride	<	5	ug/L
Naphthalene	<	10	ug/L
n-Butylbenzene	<	5	ug/L
Oil (Hexane soluble)	<	1	mg/L
Parathion	<	5	ug/L
Pentachlorophenol	<	10	ug/L
Phenols	<	50	ug/L
Picloram	<	3	ug/L
p-Isopropyltoluene	<	5	ug/L
sec-Butylbenzene	<	5	ug/L
Selenium	<	0.002	mg/L
Silver	<	0.001	mg/L
Silvex (2,4,5-TP)	<	0.1	ug/L
Simazine	<	5	ug/L
Styrene	<	5	ug/L
tert-Butylbenzene	<	5	ug/L
Tetrachloroethene	<	5	ug/L
Thallium	<	0.002	mg/L
Tin	<	0.02	mg/L
Toxaphene	<	1	ug/L
trans-1,2-Dichloroethene	<	5	ug/L
trans-1,3-Dichloropropene	<	1	ug/L
Trichloroethene	<	5	ug/L
Trichlorofluoromethane	<	5	ug/L
Vanadium	<	0.01	mg/L
Vinyl acetate	<	10	ug/L
Vinyl chloride	<	2	ug/L

TABLE 5-1
LEACHATE DATA

BRICKYARD DISPOSAL AND RECYCLING

LEACHATE WELL L104 - FOURTH QUARTER 2010

Parameter		Value	Units
1,1,1,2-Tetrachloroethane	<	5	ug/L
1,1,1-Trichloroethane	<	5	ug/L
1,1,2,2-Tetrachloroethane	<	5	ug/L
1,1,2-Trichloroethane	<	5	ug/L
1,1-Dichloroethane	<	5	ug/L
1,1-Dichloroethene	<	5	ug/L
1,1-Dichloropropene	<	5	ug/L
1,2,3-Trichlorobenzene	<	5	ug/L
1,2,3-Trichloropropane	<	5	ug/L
1,2,4-Trichlorobenzene	<	5	ug/L
1,2,4-Trimethylbenzene	<	5	ug/L
1,2-Dibromo-3-chloropropane	<	10	ug/L
1,2-Dibromoethane (EDB)	<	10	ug/L
1,2-Dichlorobenzene	<	10	ug/L
1,2-Dichloroethane	<	5	ug/L
1,2-Dichloropropane	<	5	ug/L
1,3-Dichlorobenzene	<	10	ug/L
1,3-Dichloropropane	<	5	ug/L
1,3-Dichloropropene (total)	<	5	ug/L
1,4-Dichloro-2-butene	<	5	ug/L
1,4-Dichlorobenzene	<	10	ug/L
2,2-Dichloropropane	<	5	ug/L
2,4-D	<	0.2	ug/L
2-Chlorotoluene	<	5	ug/L
2-Hexanone	<	10	ug/L
3 & 4-Methylphenol	<	10	ug/L
4,4'-DDT	<	0.1	ug/L
4-Chlorotoluene	<	5	ug/L
4-Methyl-2-pentanone (MIBK)	<	10	ug/L
Acetone	<	100	ug/L
Acrolein	<	100	ug/L
Acrylonitrile	<	100	ug/L
Alachlor	<	5	ug/L
Aldicarb	<	10	ug/L
Aldrin	<	0.05	ug/L
alpha-BHC	<	0.1	ug/L
Antimony	<	0.006	mg/L
Aroclor 1016	<	0.5	ug/L
Aroclor 1221	<	0.5	ug/L
Aroclor 1232	<	0.5	ug/L

TABLE 5-1
LEACHATE DATA

BRICKYARD DISPOSAL AND RECYCLING

LEACHATE WELL L104 - FOURTH QUARTER 2010

Parameter		Value	Units
Aroclor 1242	<	0.5	ug/L
Aroclor 1248	<	0.5	ug/L
Aroclor 1254	<	0.5	ug/L
Aroclor 1260	<	0.5	ug/L
Aroclor 1262	<	0.5	ug/L
Arsenic	<	0.002	mg/L
Atrazine	<	5	ug/L
Benzo(a)pyrene	<	10	ug/L
Beryllium	<	0.001	mg/L
beta-BHC	<	0.1	ug/L
bis(2-Ethylhexyl)phthalate	<	10	ug/L
bis(Chloromethyl)ether	ND		ug/L
Bromobenzene	<	5	ug/L
Bromochloromethane	<	5	ug/L
Bromodichloromethane	<	5	ug/L
Bromoform	<	1	ug/L
Bromomethane	<	10	ug/L
Butyl benzyl phthalate	<	10	ug/L
Cadmium	<	0.001	mg/L
Carbofuran	<	10	ug/L
Carbon disulfide	<	5	ug/L
Carbon tetrachloride	<	5	ug/L
Chlordane (technical)	<	1	ug/L
Chlorodibromomethane	<	1	ug/L
Chloroethane	<	10	ug/L
Chloroform	<	1	ug/L
Chloromethane	<	10	ug/L
cis-1,3-Dichloropropene	<	1	ug/L
Cyanide, Total	<	0.005	mg/L
Dalapon	<	10	ug/L
delta-BHC	<	0.1	ug/L
Dibromomethane	<	5	ug/L
Dichlorodifluoromethane	<	5	ug/L
Dieldrin	<	0.1	ug/L
Diethyl phthalate	<	10	ug/L
Dimethyl phthalate	<	10	ug/L
Di-n-butyl phthalate	<	10	ug/L
Dinoseb	<	3	ug/L
Endothall	<	9	ug/L
Endrin	<	0.1	ug/L

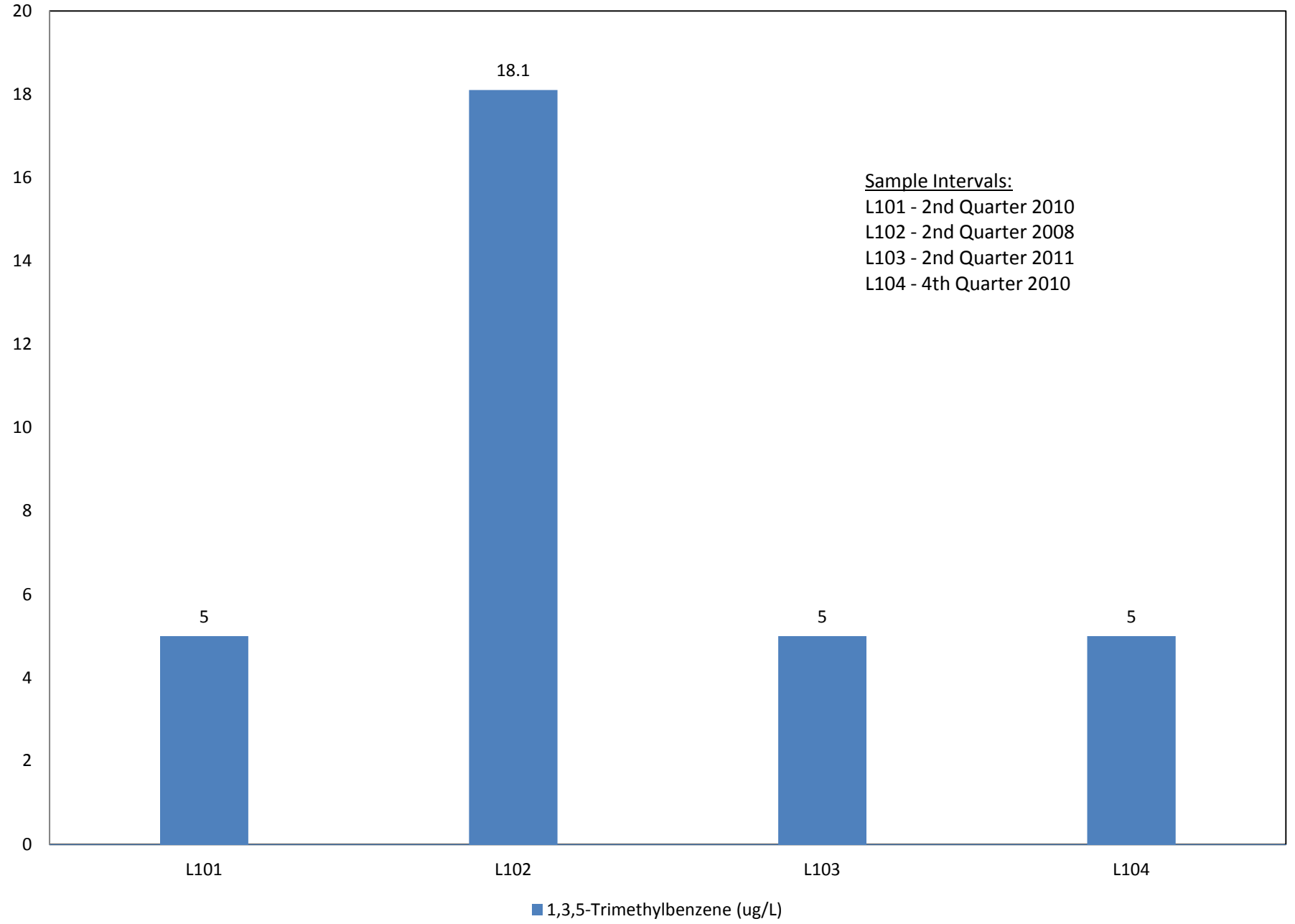
TABLE 5-1
LEACHATE DATA

BRICKYARD DISPOSAL AND RECYCLING

LEACHATE WELL L104 - FOURTH QUARTER 2010

Parameter		Value	Units
Fluoride	<	0.5	mg/L
gamma-BHC (Lindane)	<	0.05	ug/L
Heptachlor	<	0.05	ug/L
Heptachlor epoxide	<	0.05	ug/L
Hexachlorobutadiene	<	10	ug/L
Iodomethane	<	10	ug/L
Isophorone	<	10	ug/L
Isopropylbenzene	<	5	ug/L
Mercury	<	5E-04	mg/L
Methoxychlor	<	0.5	ug/L
Methylene chloride	<	5	ug/L
Naphthalene	<	10	ug/L
n-Butylbenzene	<	5	ug/L
Oil (Hexane soluble)	<	1	mg/L
Parathion	<	5	ug/L
Pentachlorophenol	<	10	ug/L
Phenols	<	50	ug/L
Picloram	<	3	ug/L
p-Isopropyltoluene	<	5	ug/L
sec-Butylbenzene	<	5	ug/L
Selenium	<	0.002	mg/L
Silver	<	0.001	mg/L
Silvex (2,4,5-TP)	<	0.1	ug/L
Simazine	<	5	ug/L
Styrene	<	5	ug/L
tert-Butylbenzene	<	5	ug/L
Tetrachloroethene	<	5	ug/L
Thallium	<	0.002	mg/L
Tin	<	0.02	mg/L
Toxaphene	<	1	ug/L
trans-1,2-Dichloroethene	<	5	ug/L
trans-1,3-Dichloropropene	<	1	ug/L
Trichloroethene	<	5	ug/L
Trichlorofluoromethane	<	5	ug/L
Vanadium	<	0.01	mg/L
Vinyl acetate	<	10	ug/L
Vinyl chloride	<	2	ug/L

Brickyard Disposal and Recycling



Detection Limit = 5 ug/L

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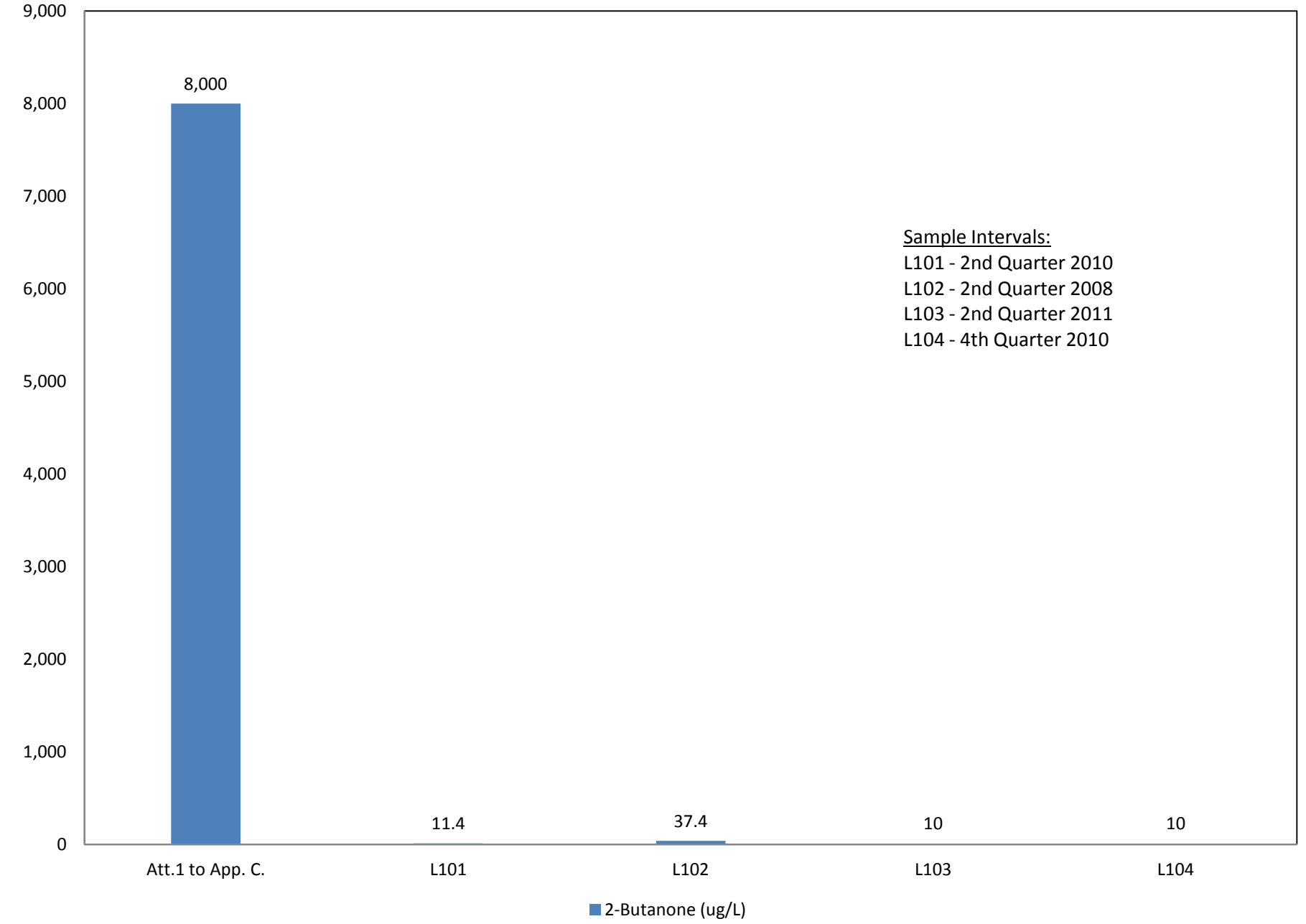
Andrews Engineering, Inc.

135-TMB

Brickyard Disposal and Recycling



Detection Limit = 10 ug/L

Andrews Engineering, Inc.

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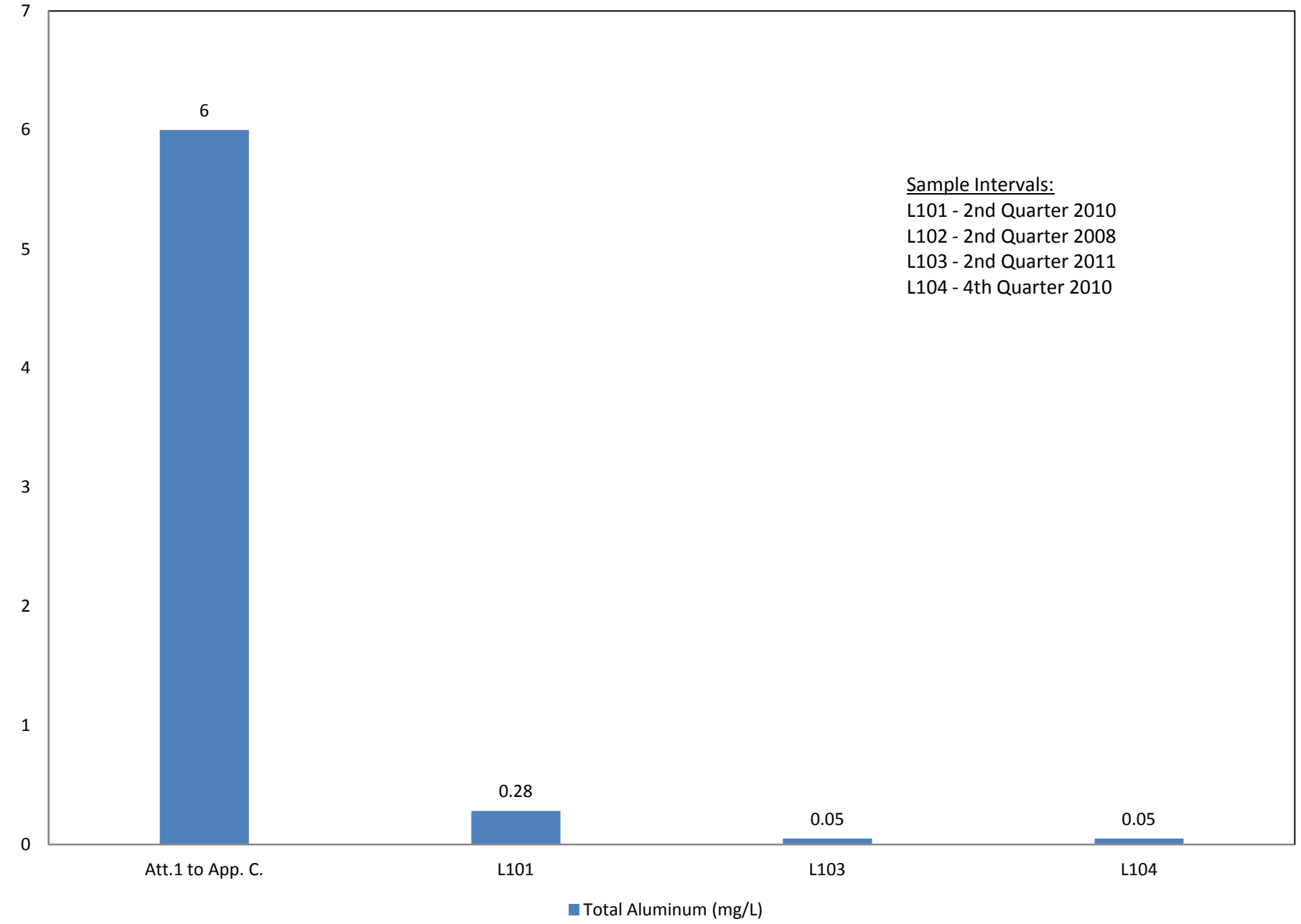
MEK

Brickyard Disposal and Recycling



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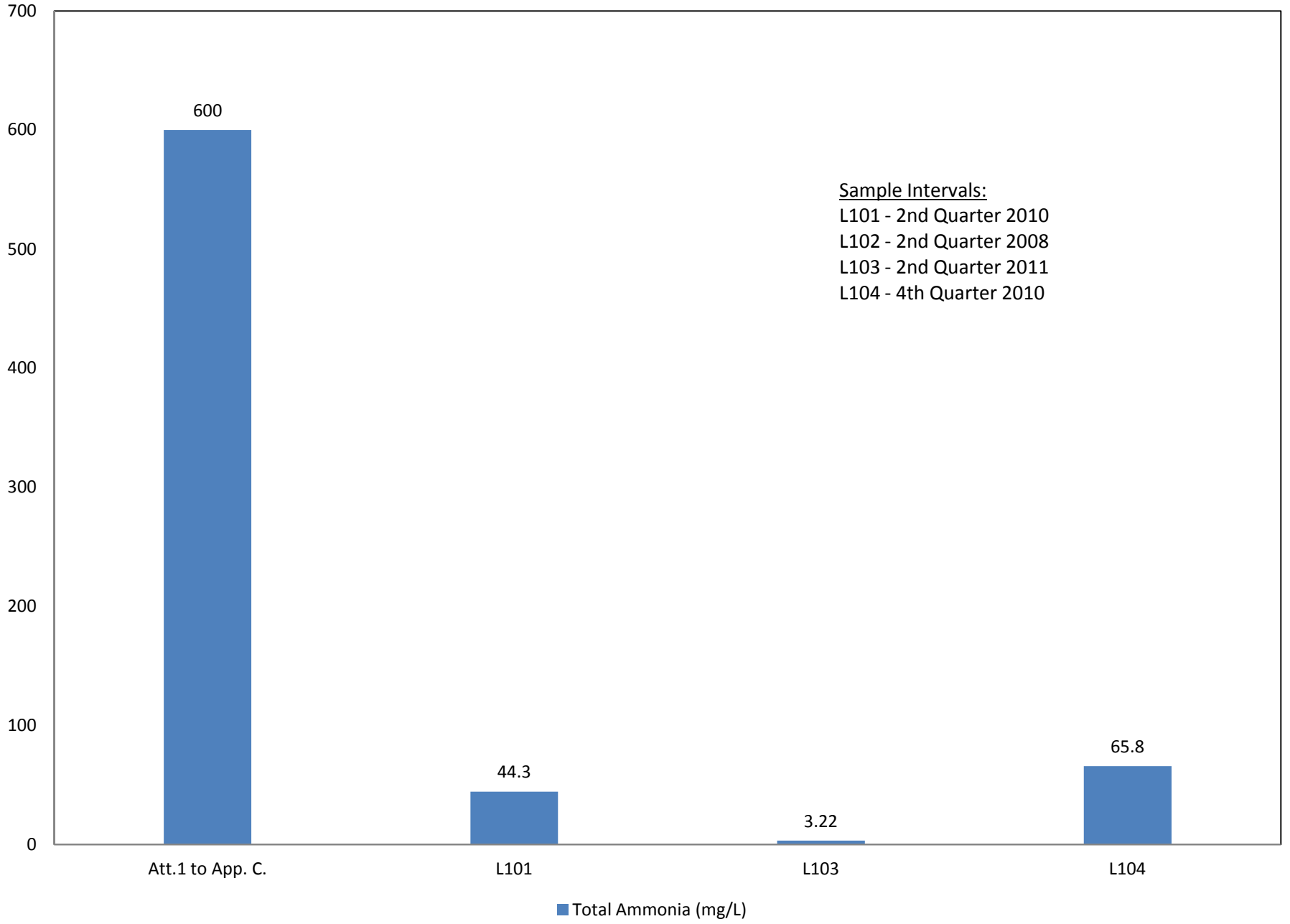

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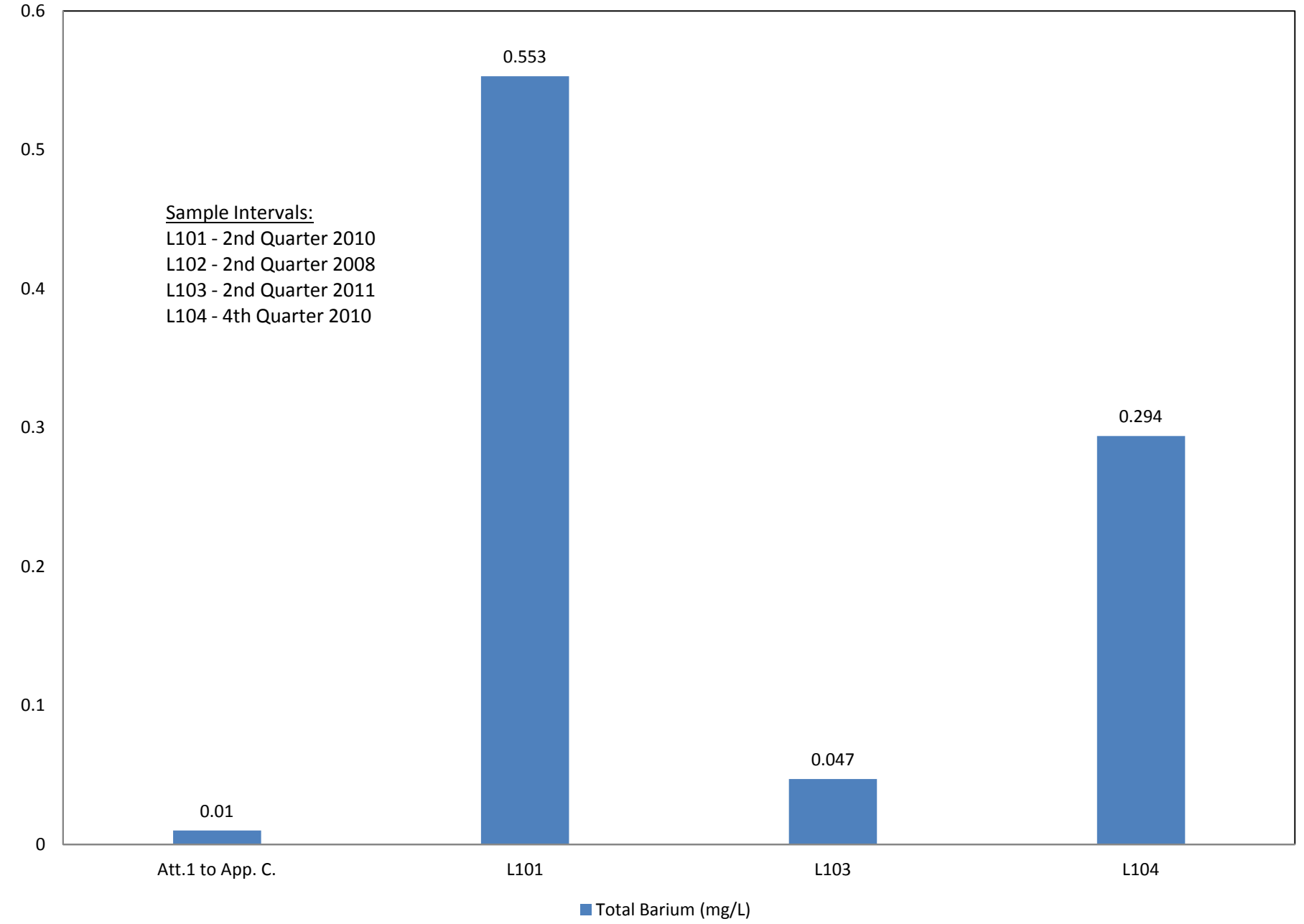

Andrews Engineering, Inc.

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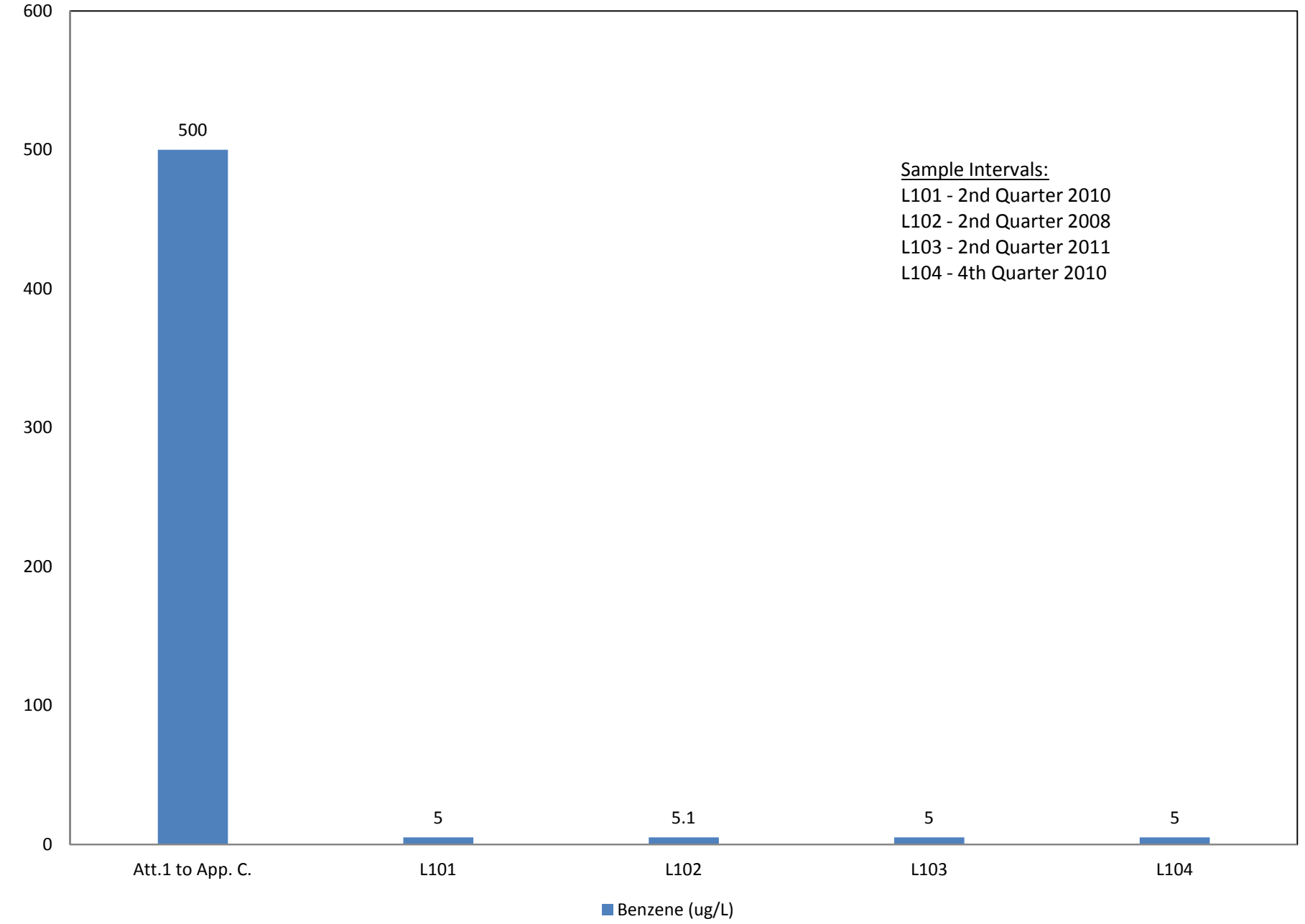
Barium

Brickyard Disposal and Recycling



Detection Limit = 5 ug/L

Andrews Engineering, Inc.

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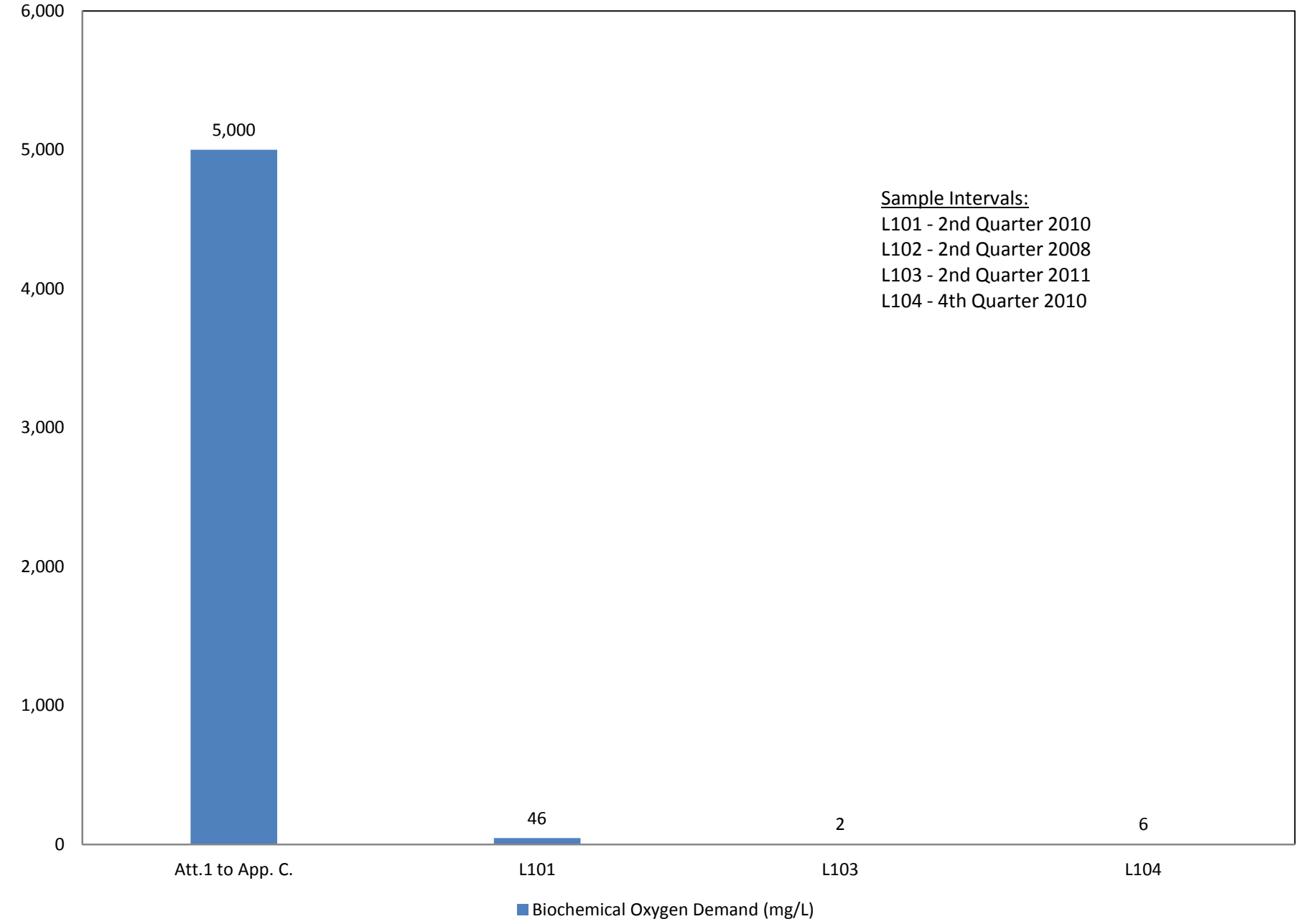
Benzene

Brickyard Disposal and Recycling



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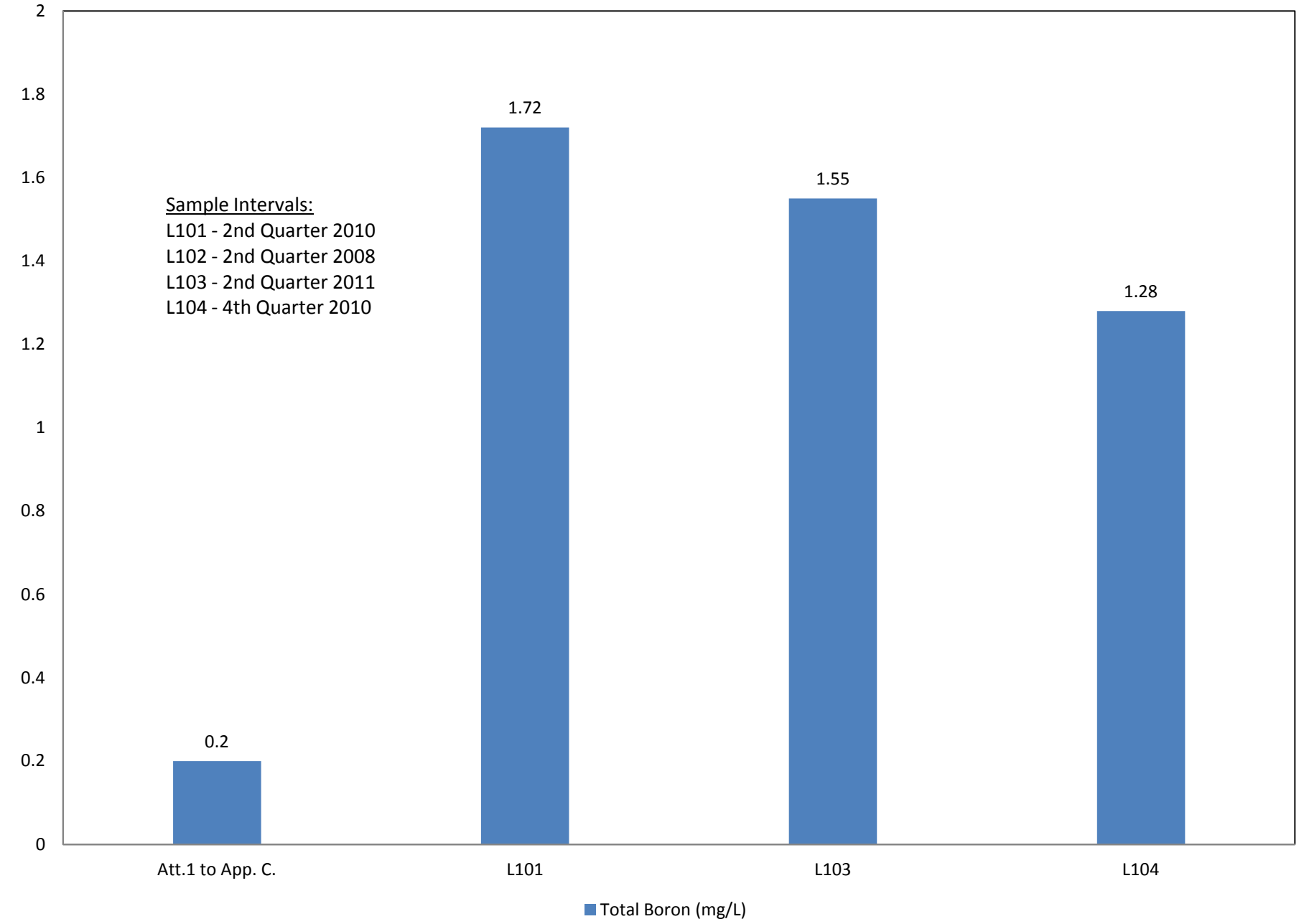

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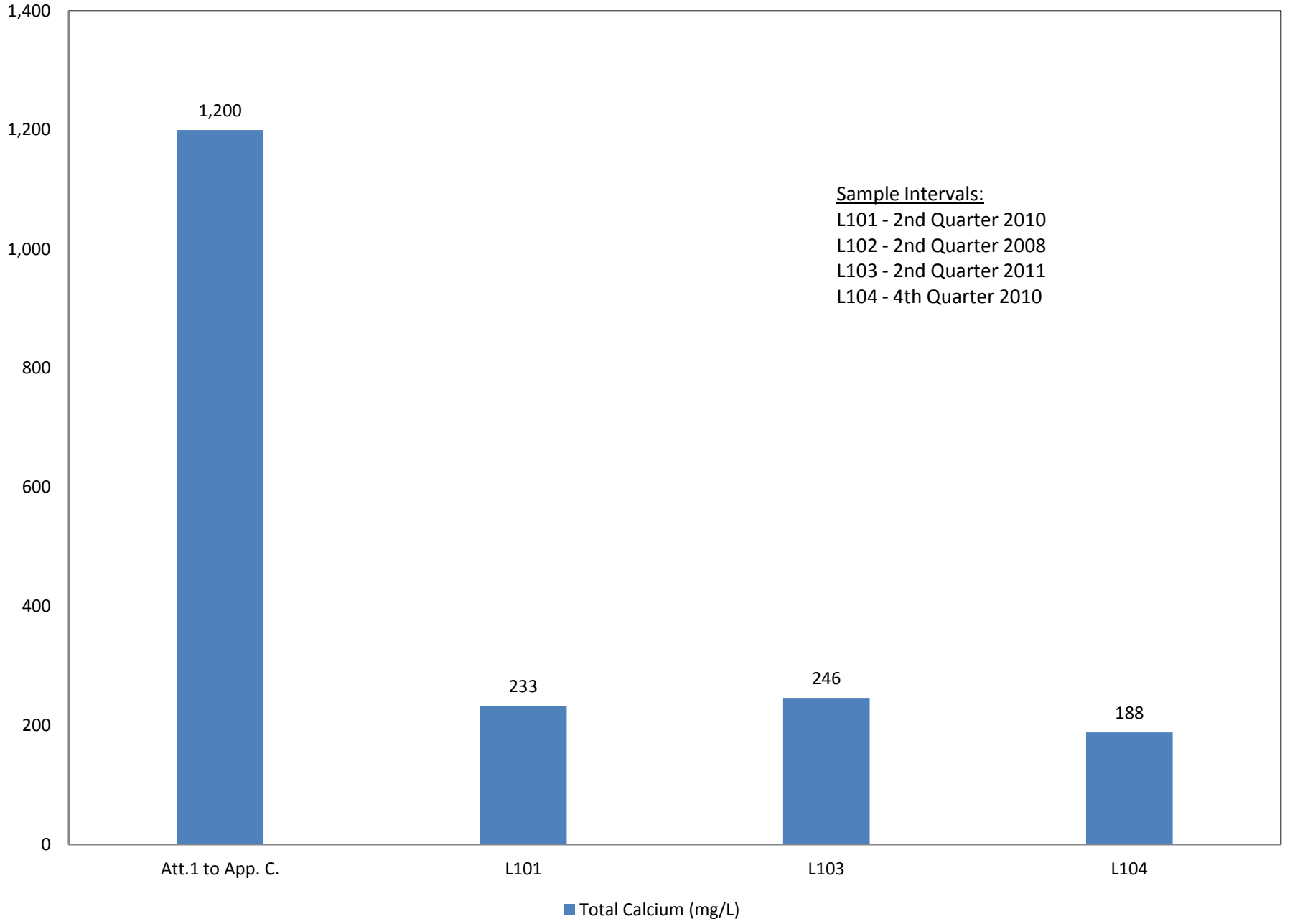

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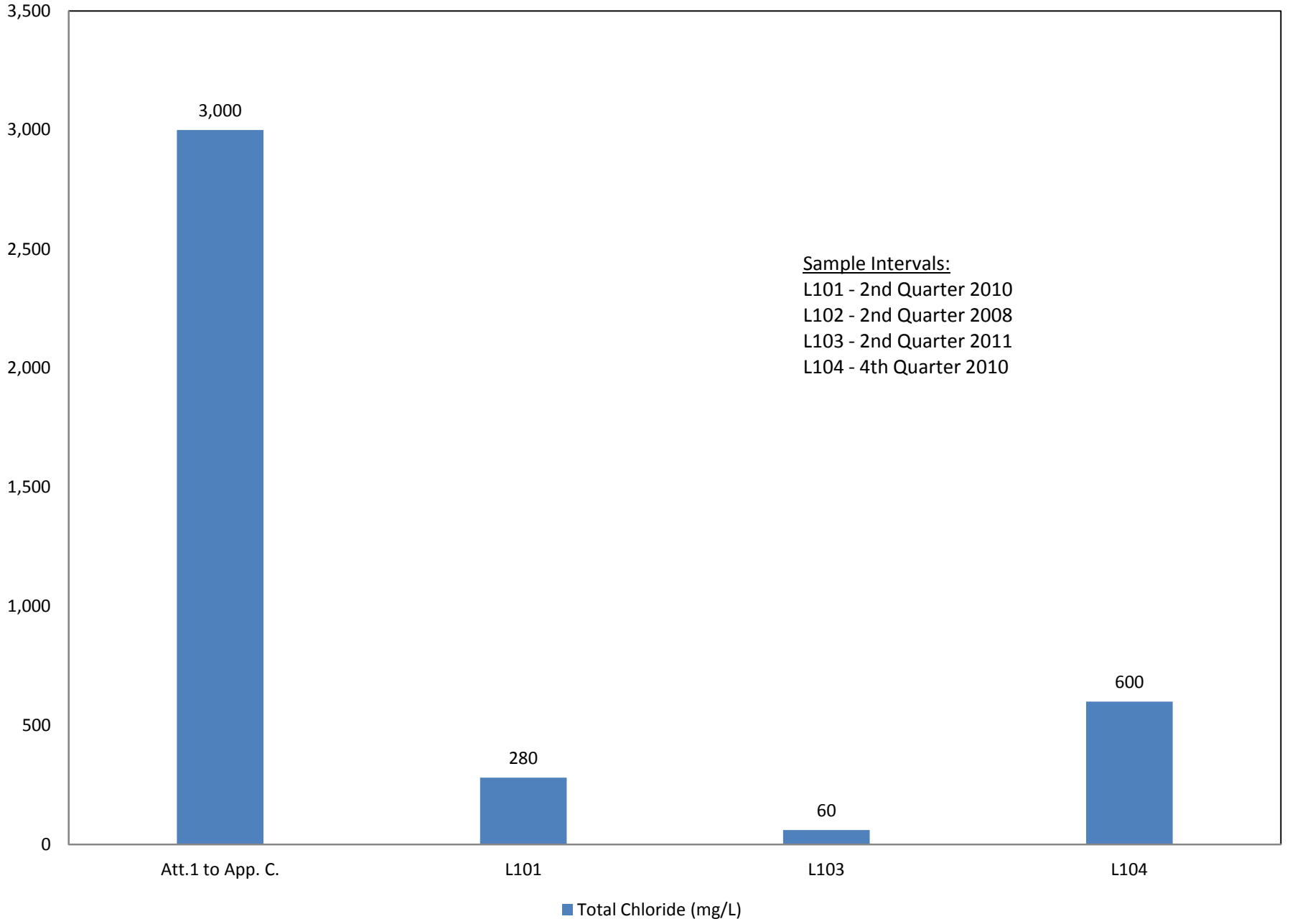

Andrews Engineering, Inc.

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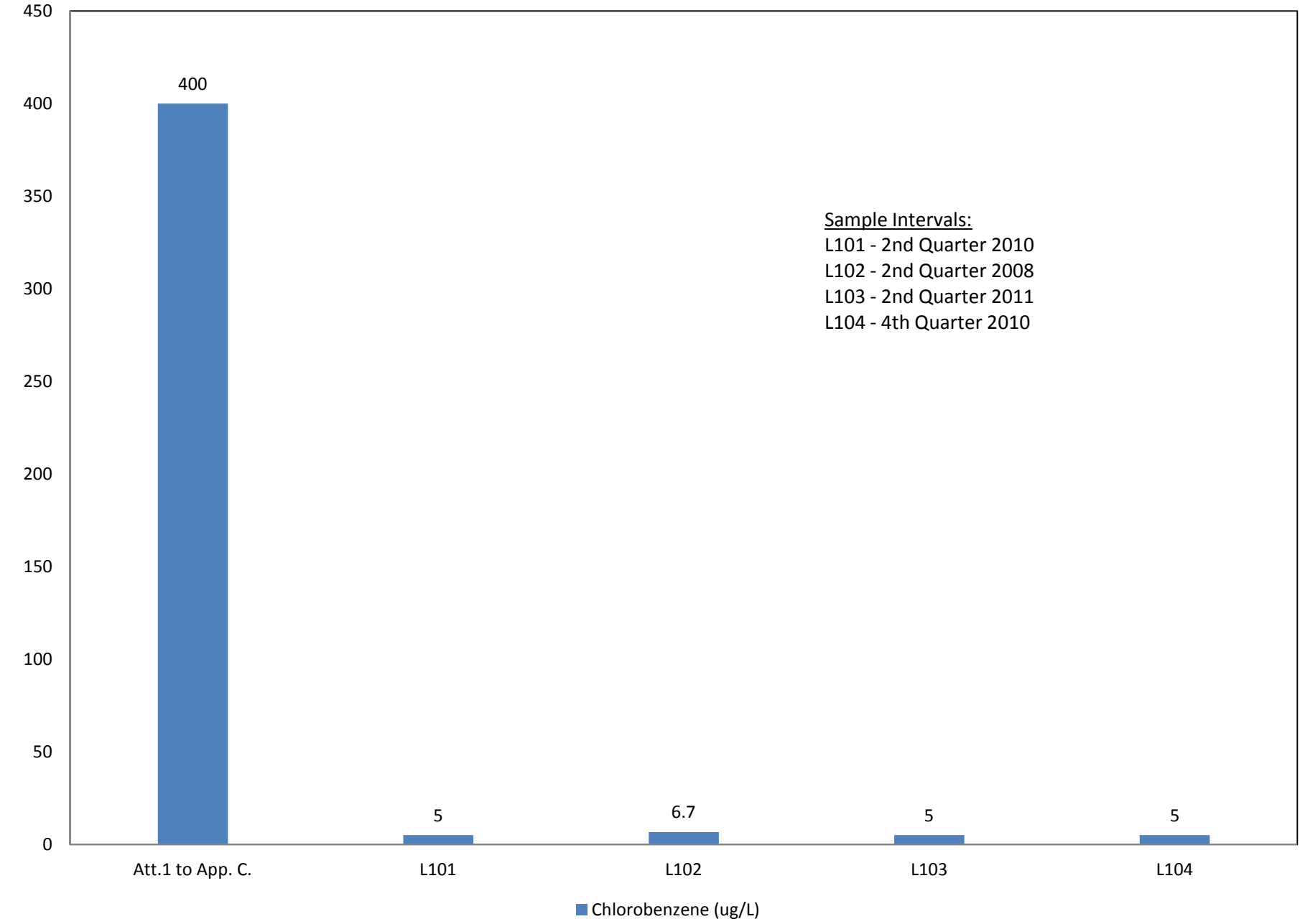
Chloride

Brickyard Disposal and Recycling



Detection Limit = 5 ug/L

Andrews Engineering, Inc.

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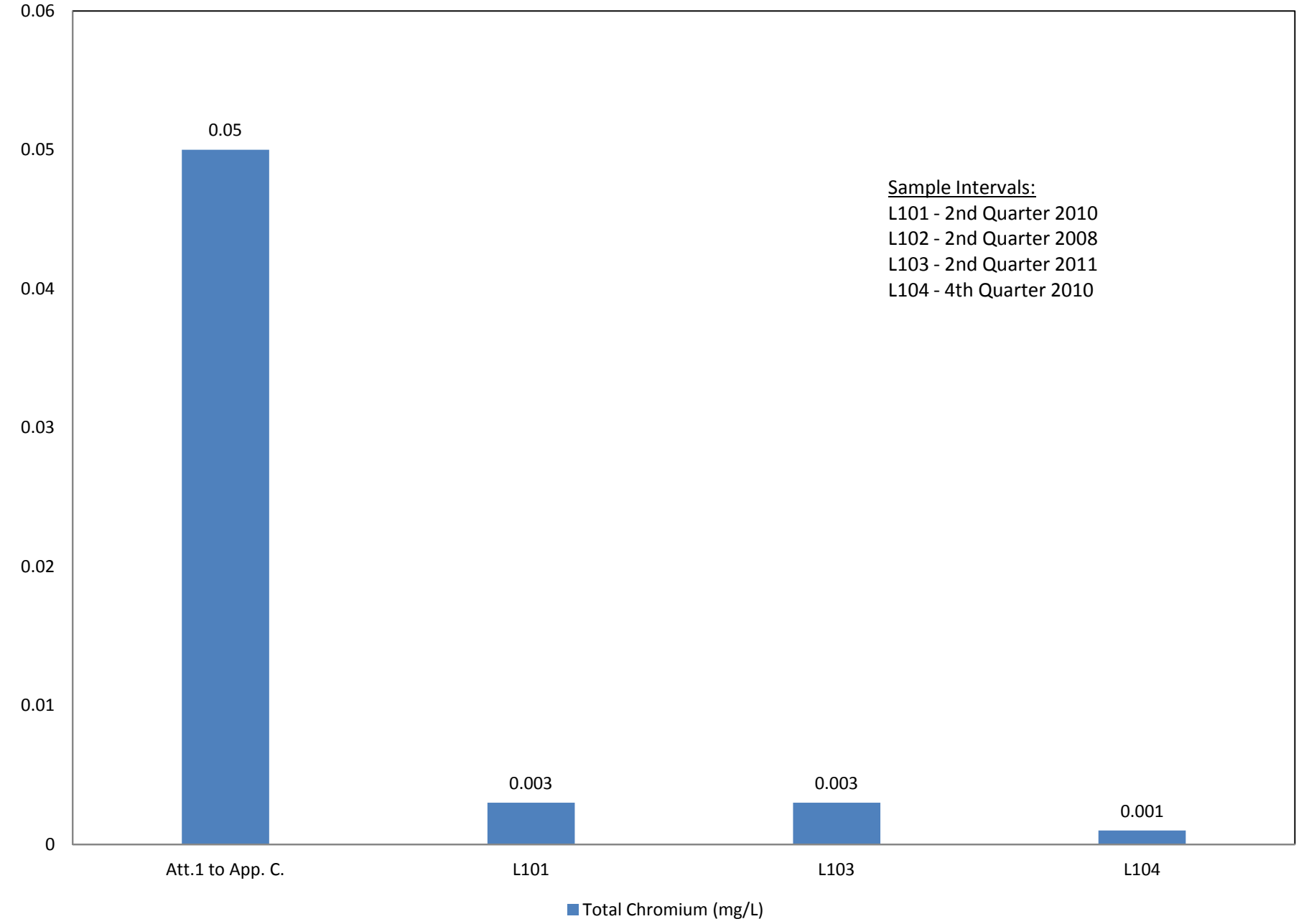
Chlorobenzene

Brickyard Disposal and Recycling



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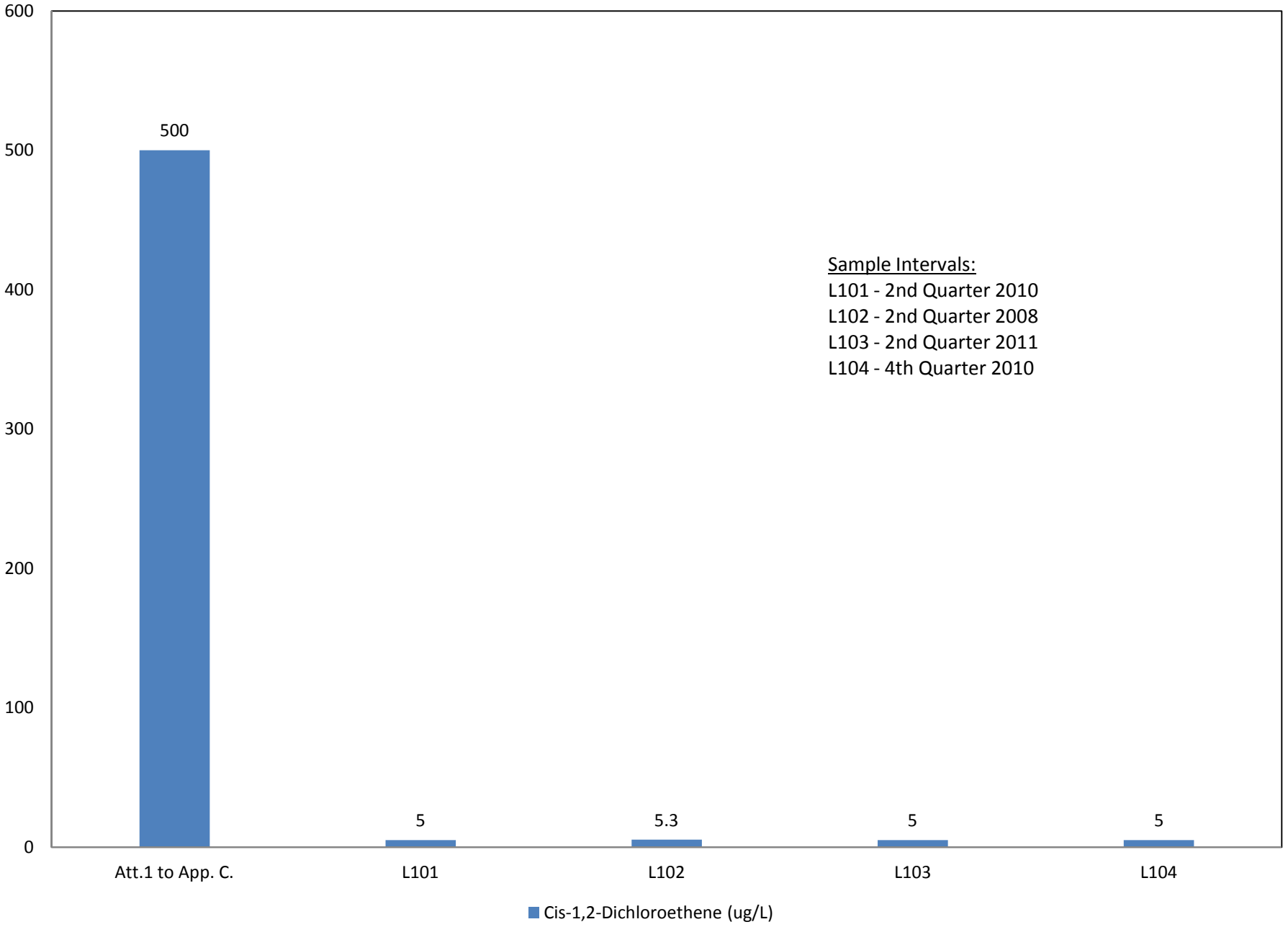

Detection Limit = 5 ug/L

Andrews Engineering, Inc.

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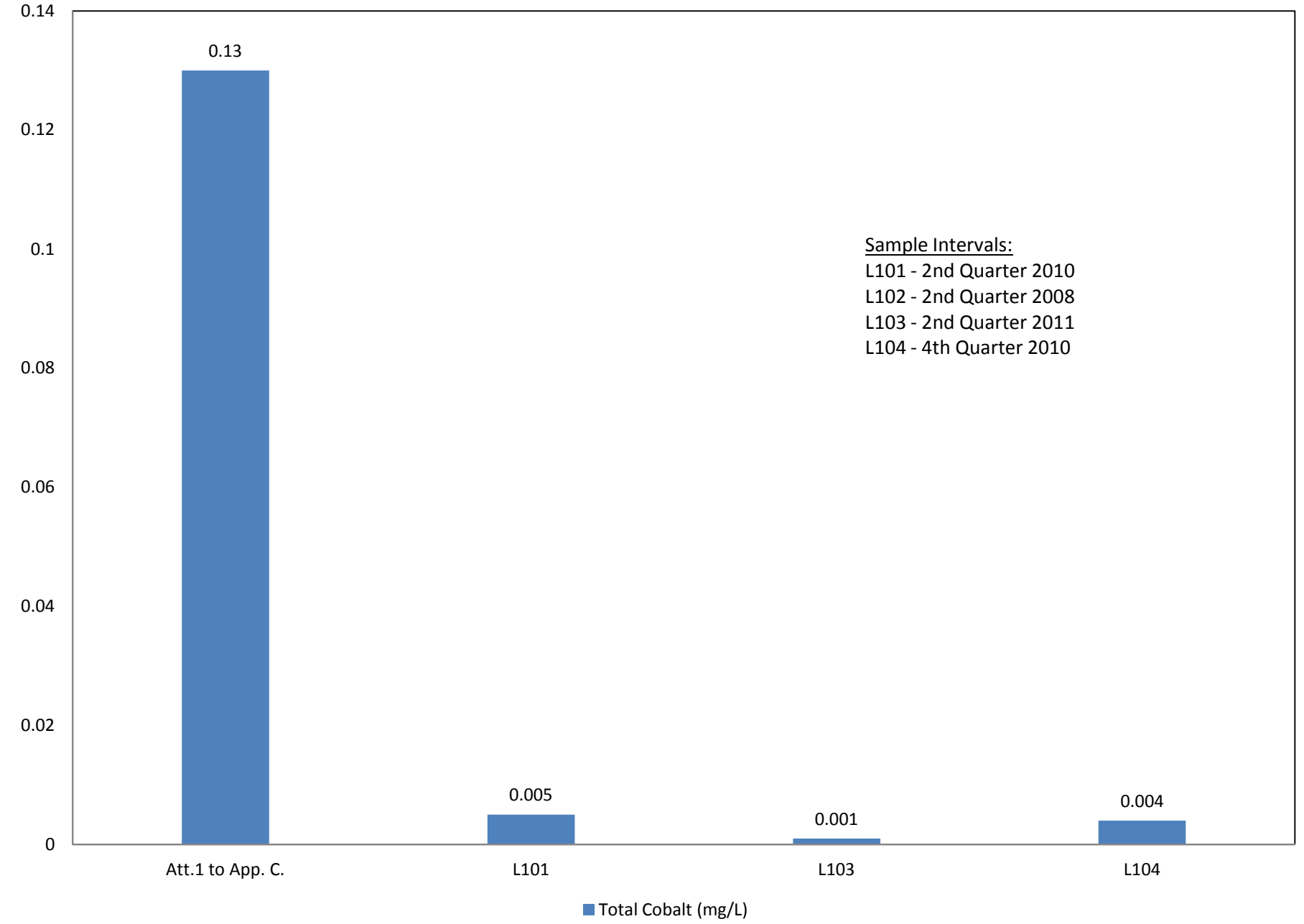
cis12dce

Brickyard Disposal and Recycling



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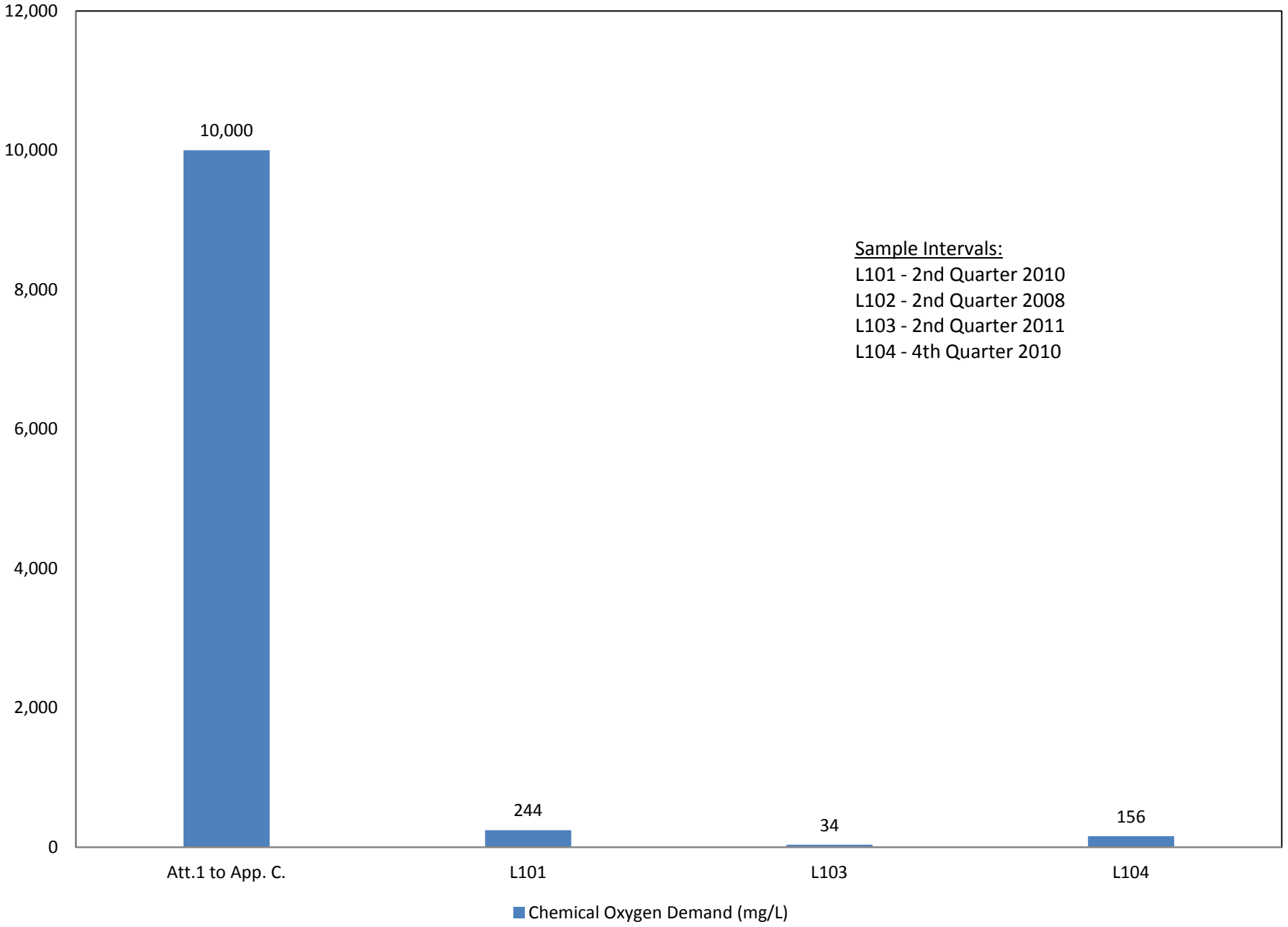
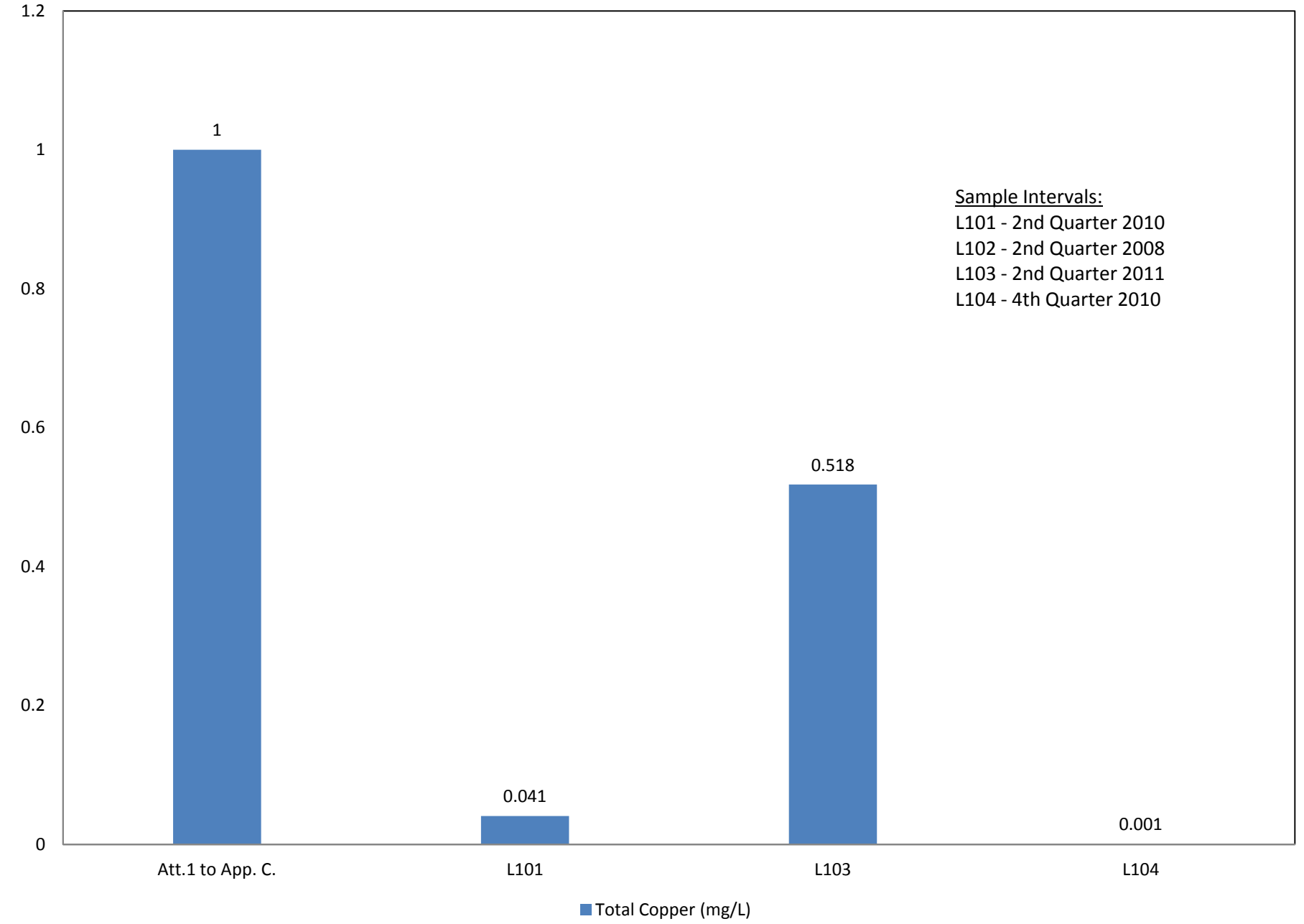
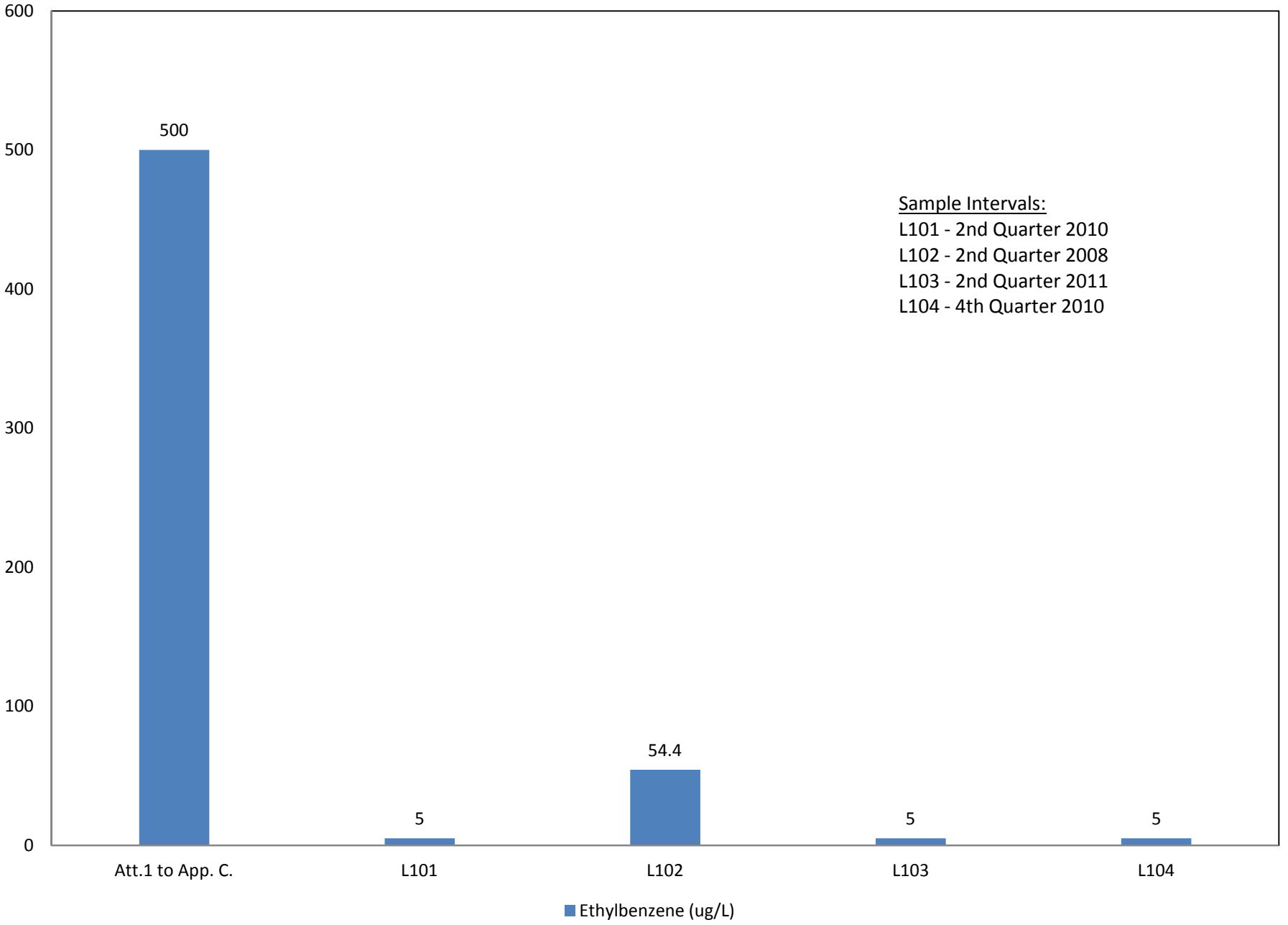


Brickyard Disposal and Recycling



Brickyard Disposal and Recycling



Detection Limit = 5 ug/L

Andrews Engineering, Inc.

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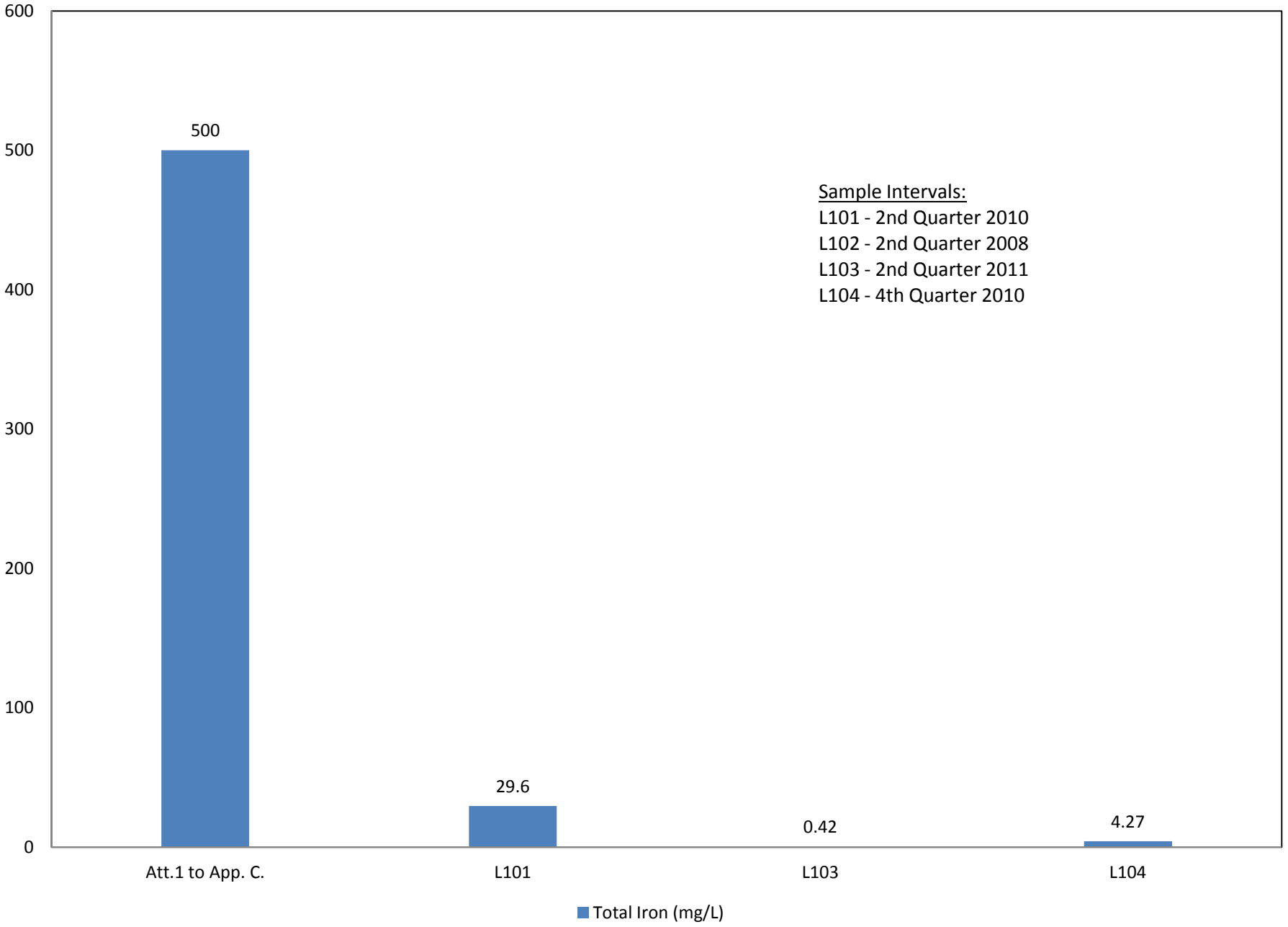
Ethylbenzene

Brickyard Disposal and Recycling



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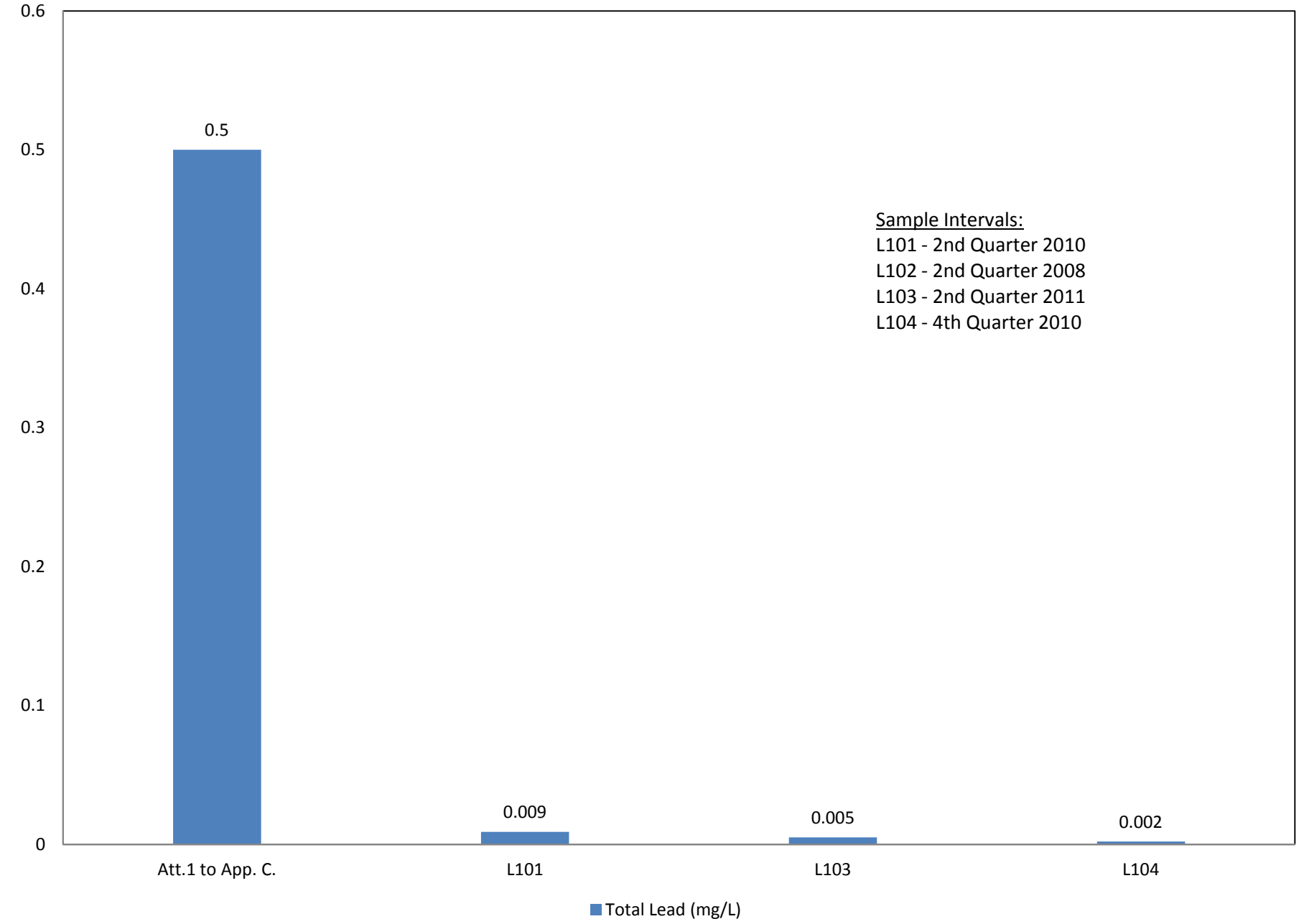

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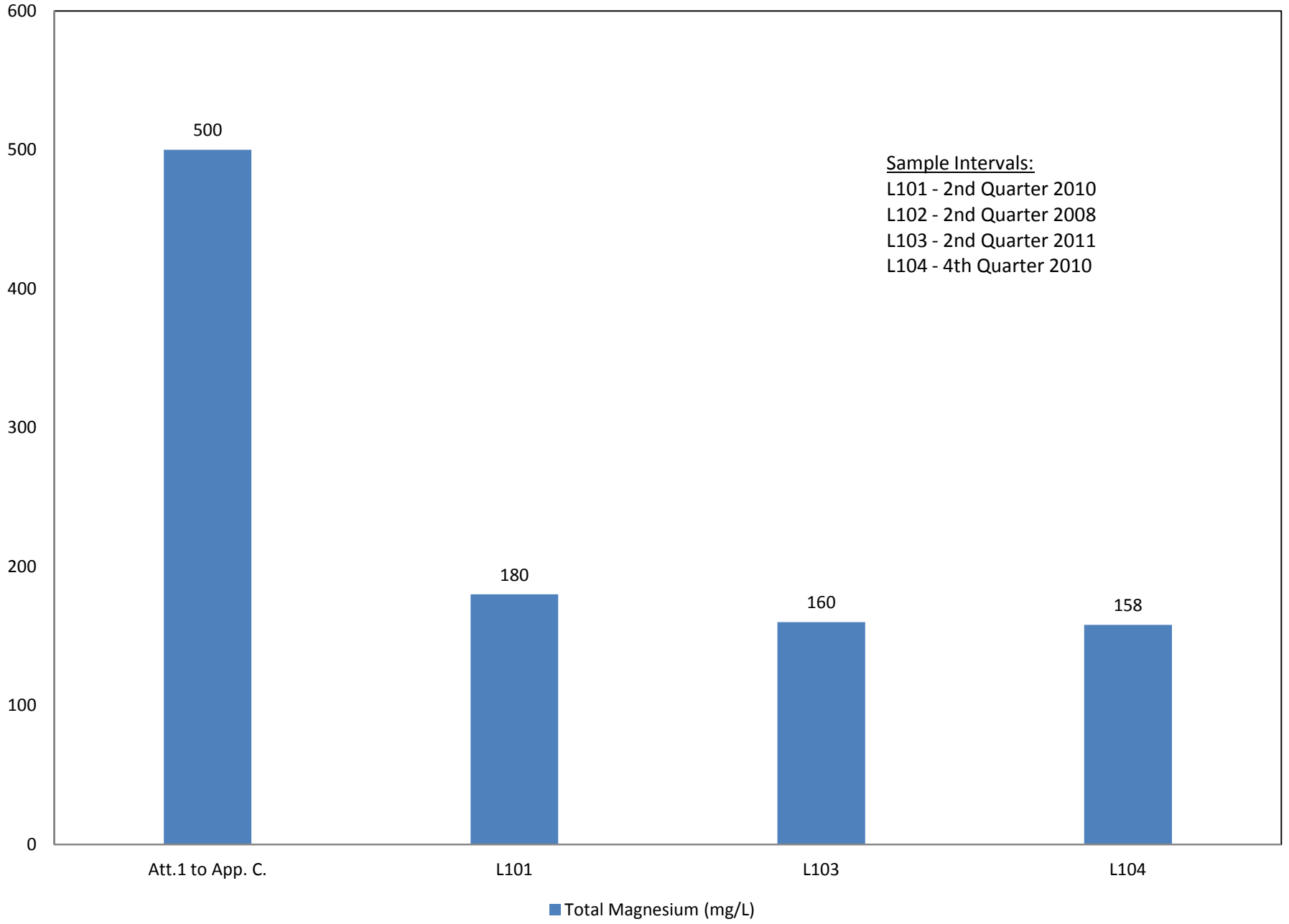

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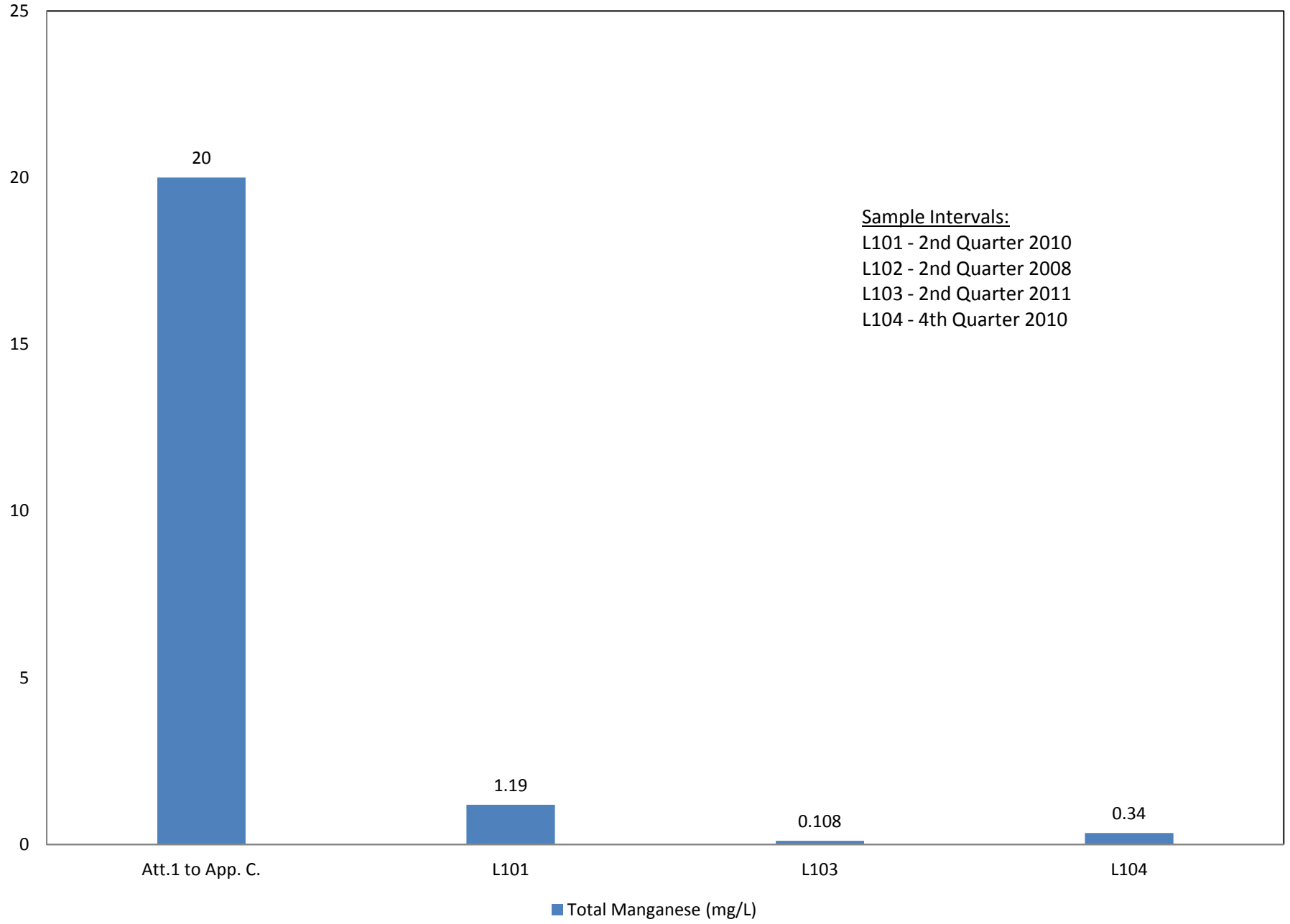
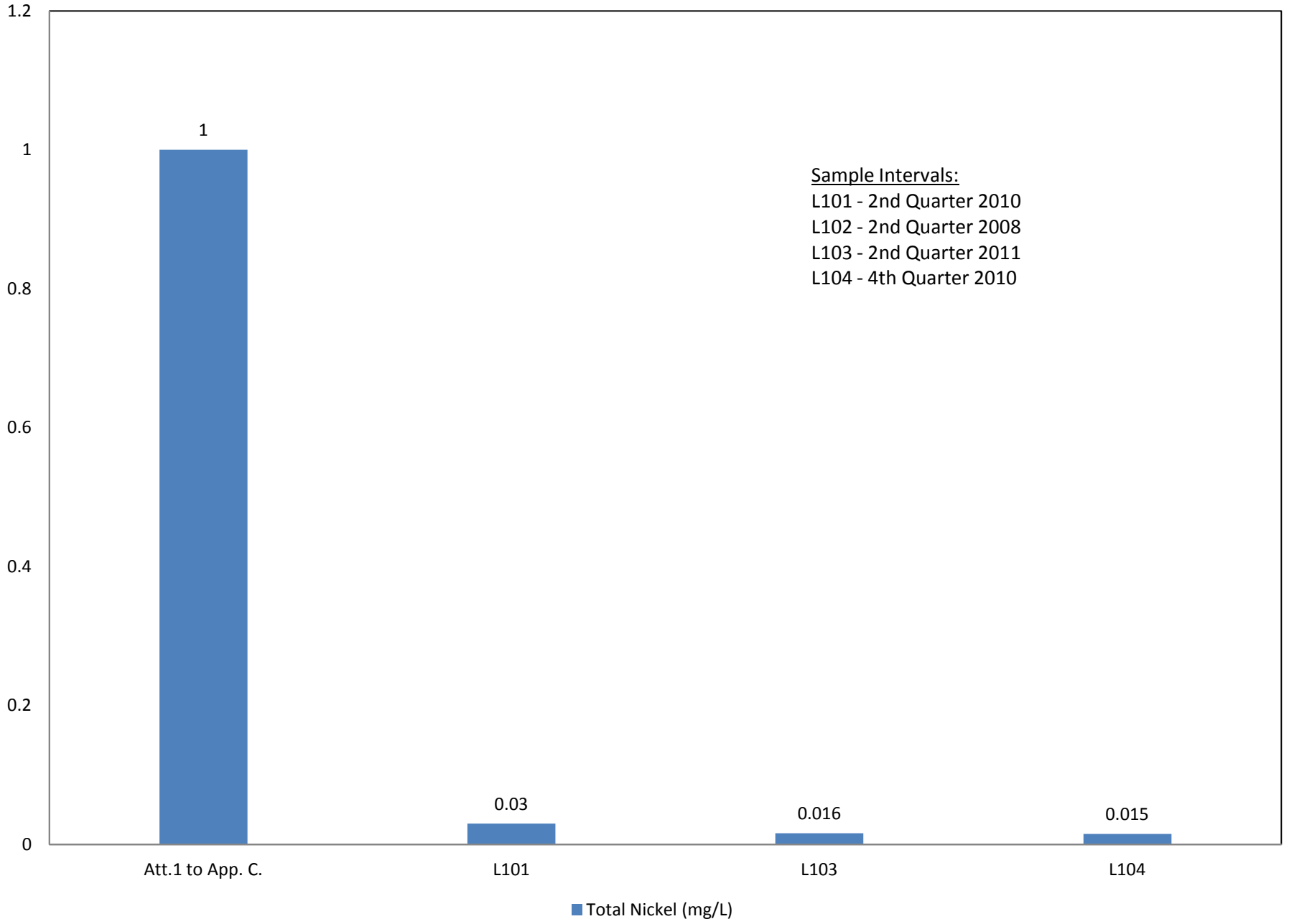


Brickyard Disposal and Recycling



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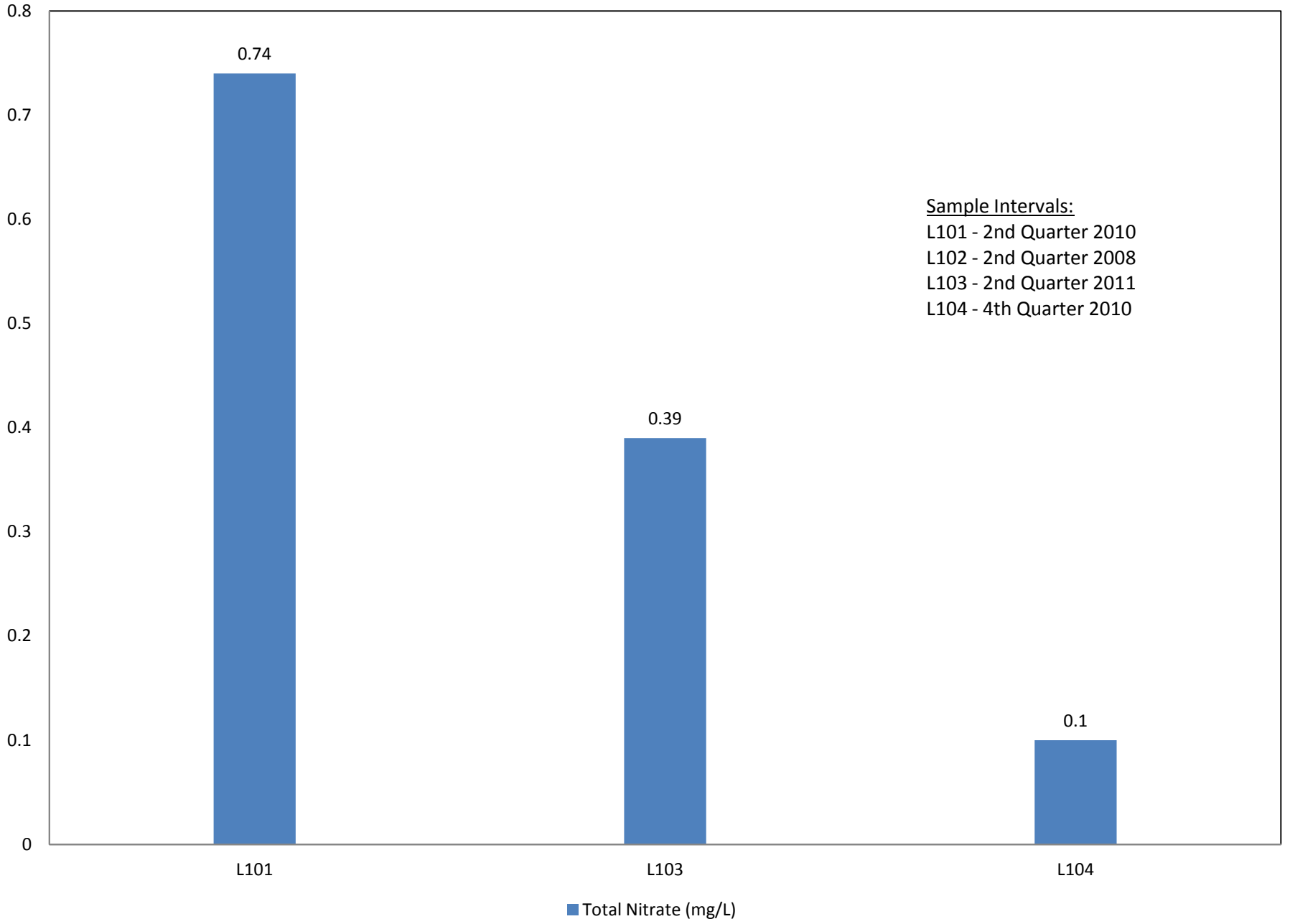

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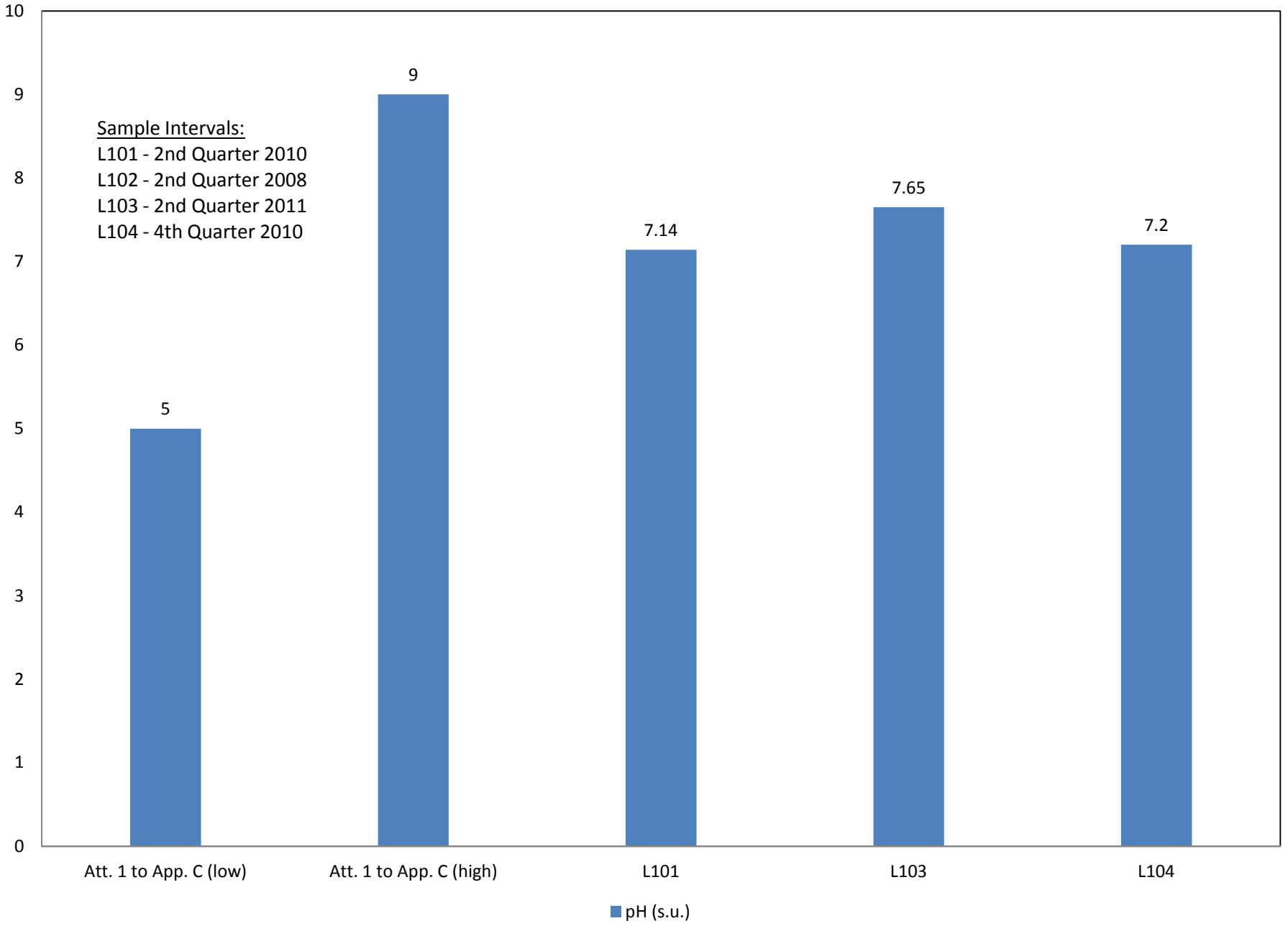

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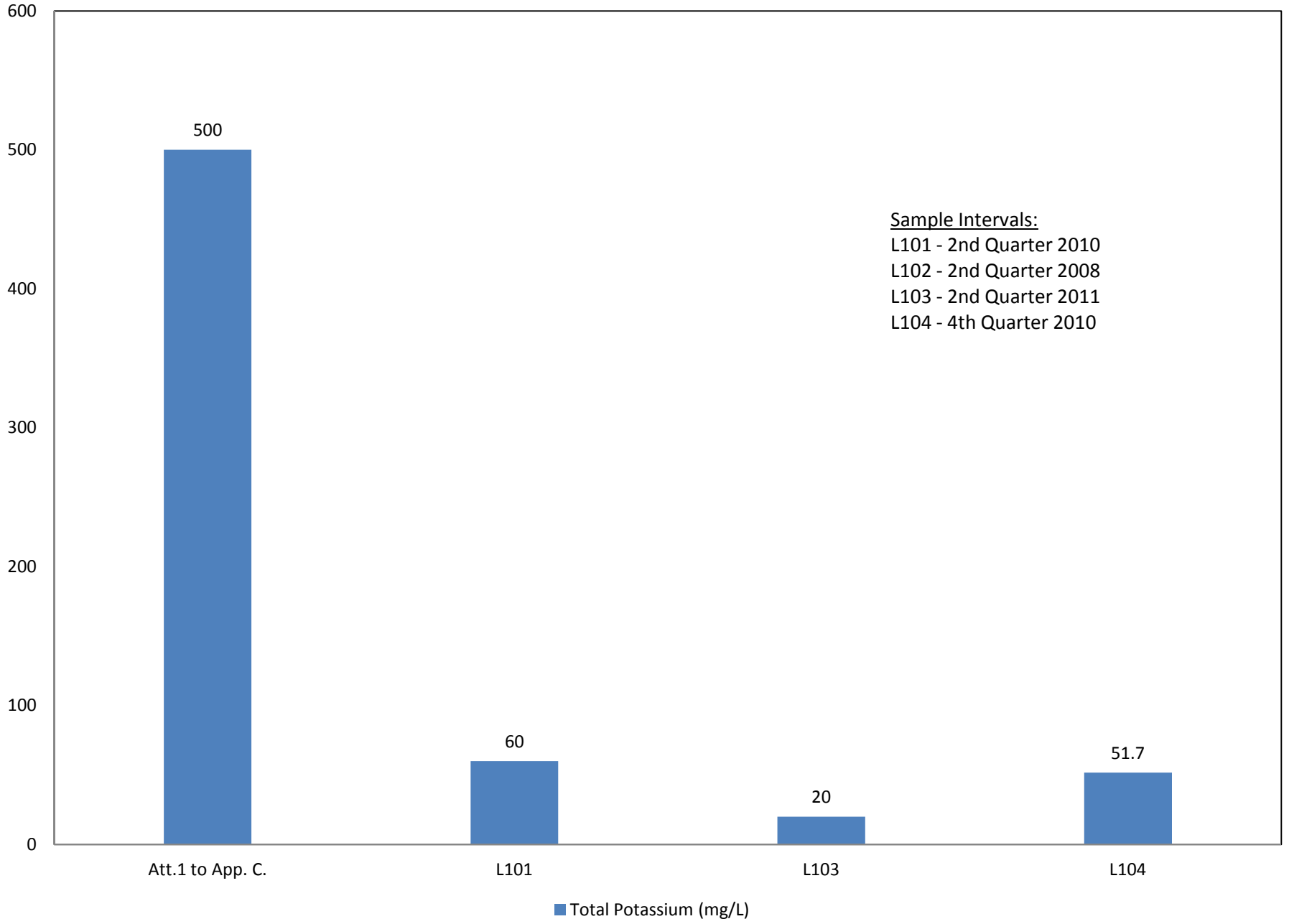

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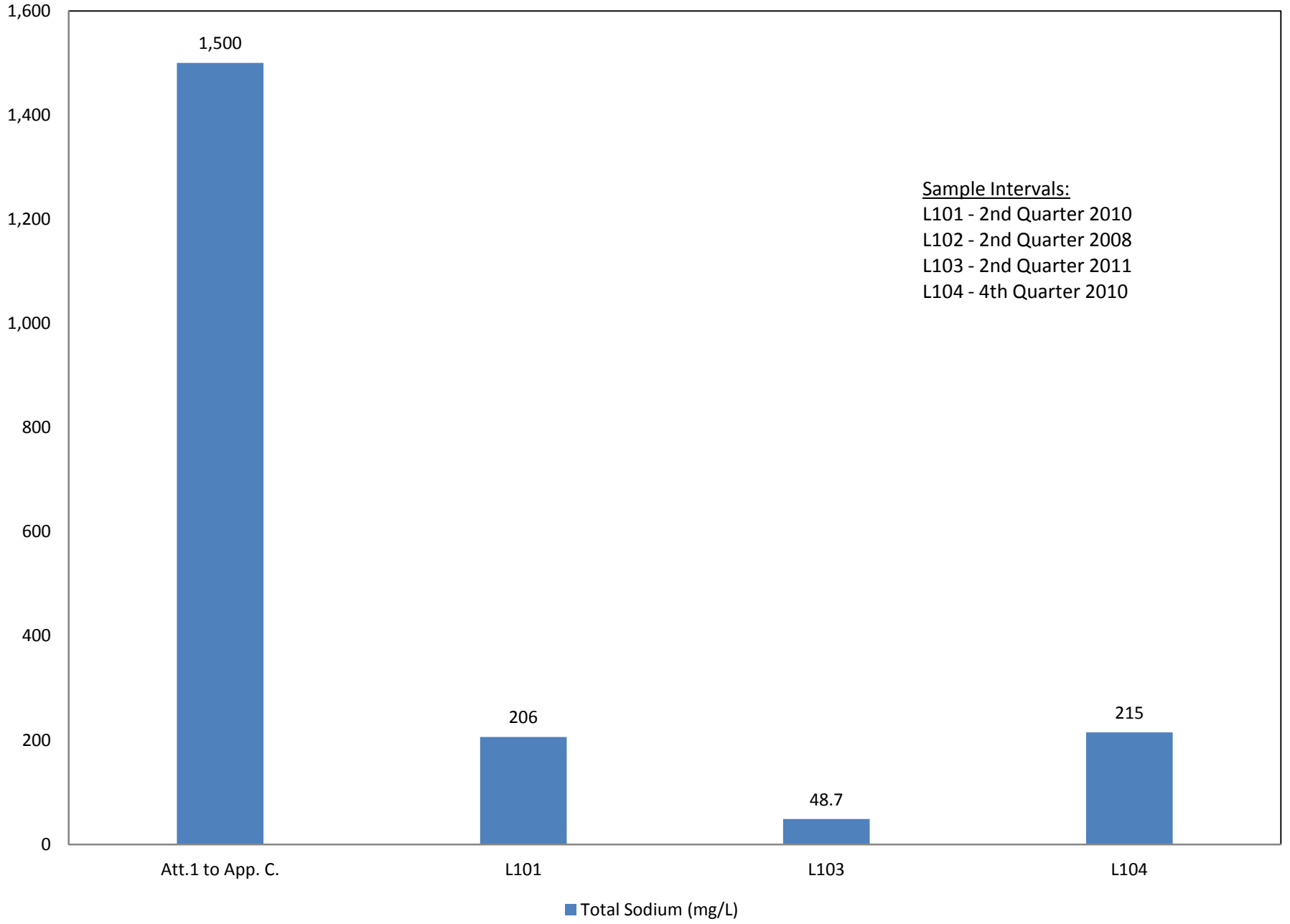
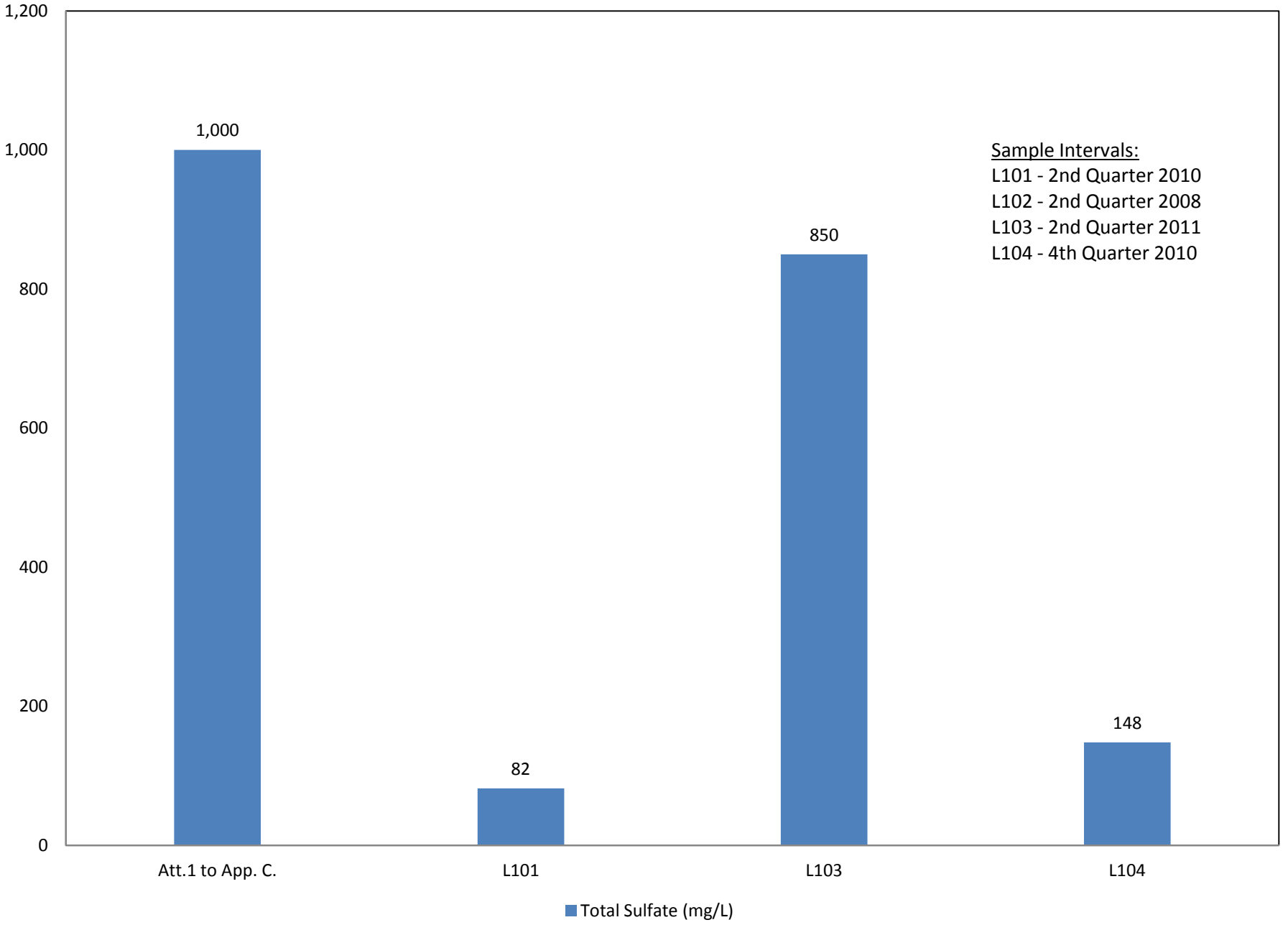
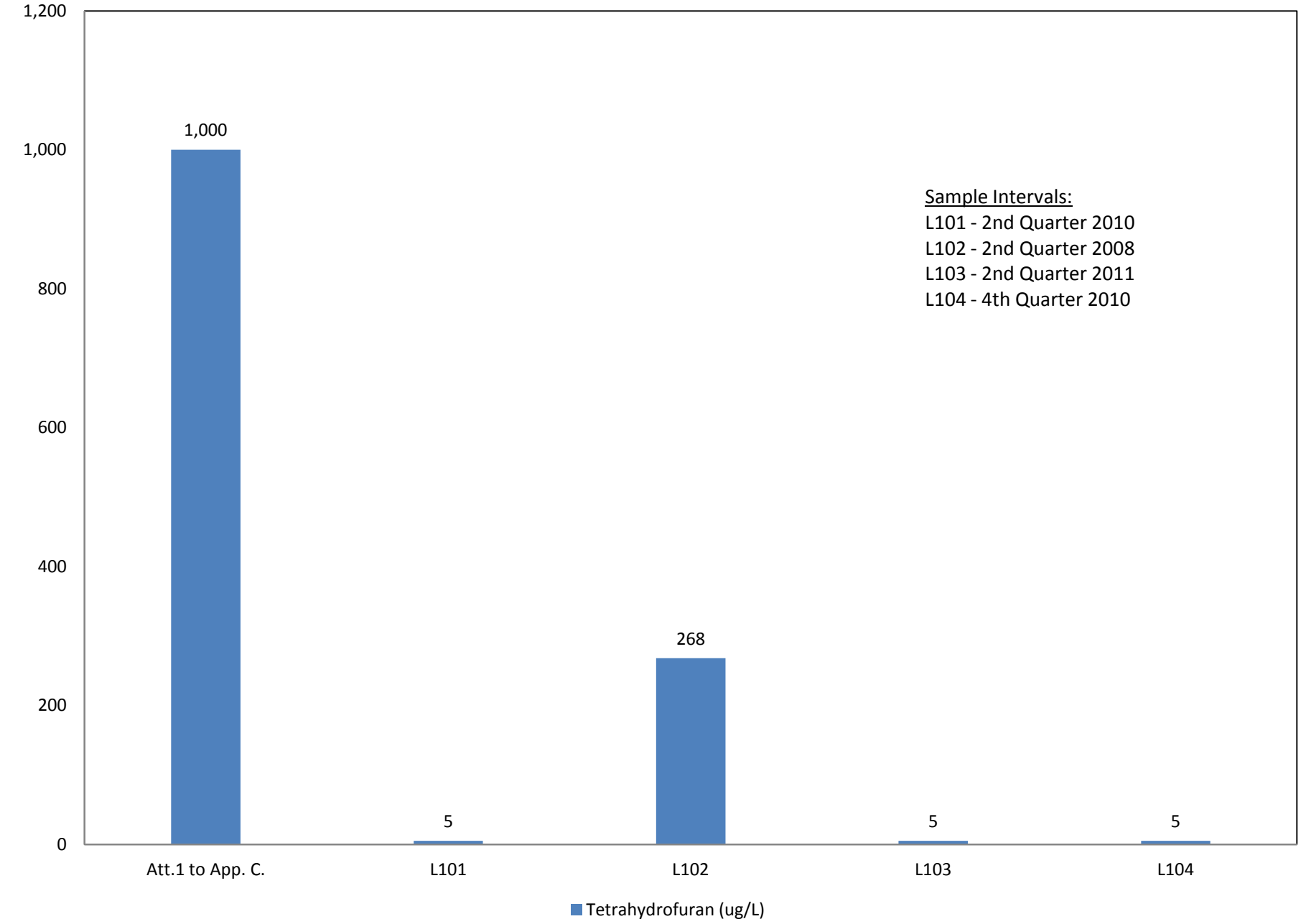


Brickyard Disposal and Recycling



Brickyard Disposal and Recycling

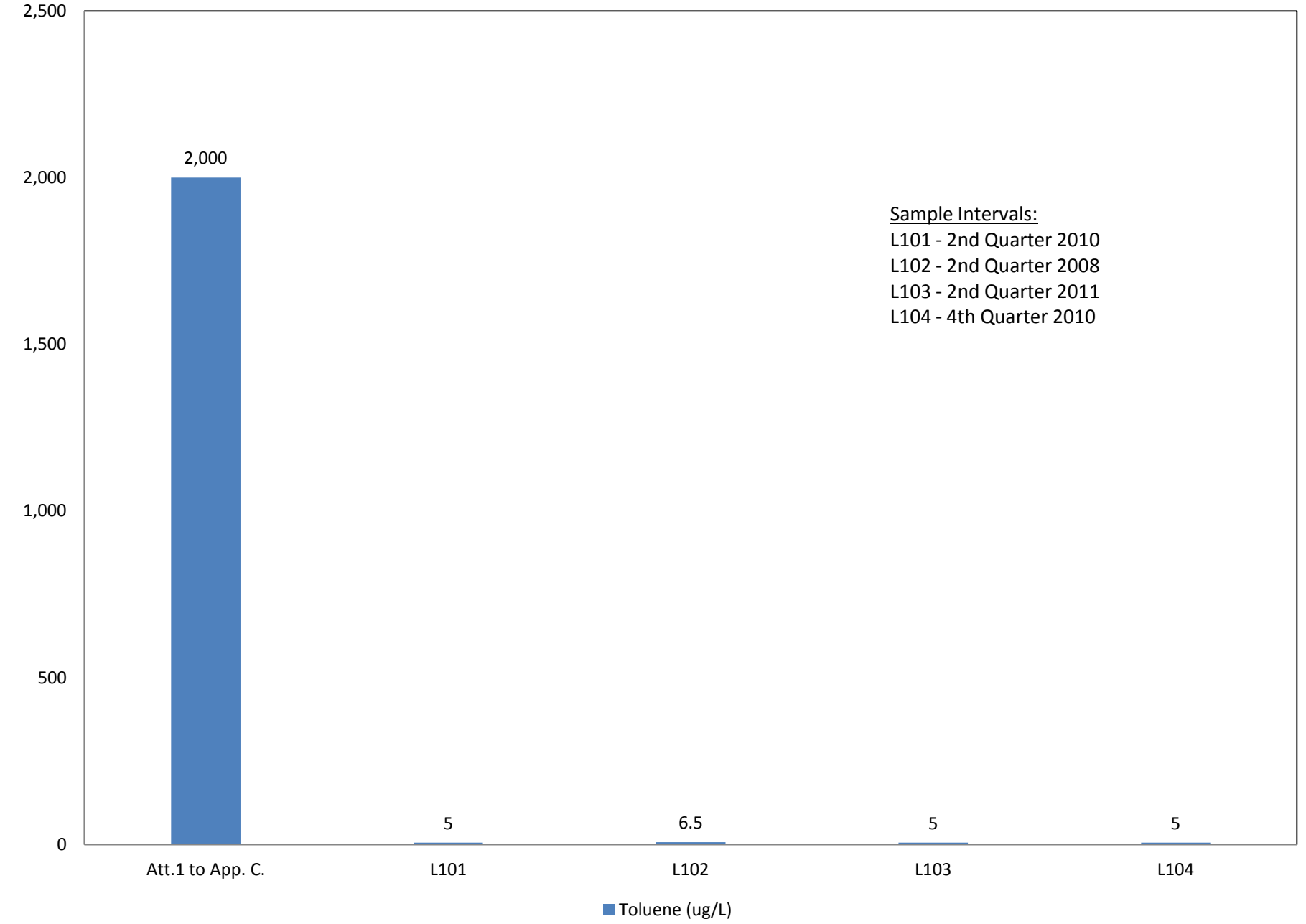


Detection Limit = 5 ug/L

Andrews Engineering, Inc.

J:\1989\89-115A (Brickyard)\MON\Requests\2011\Leachate Detections
Tetrahydrofuran

Brickyard Disposal and Recycling

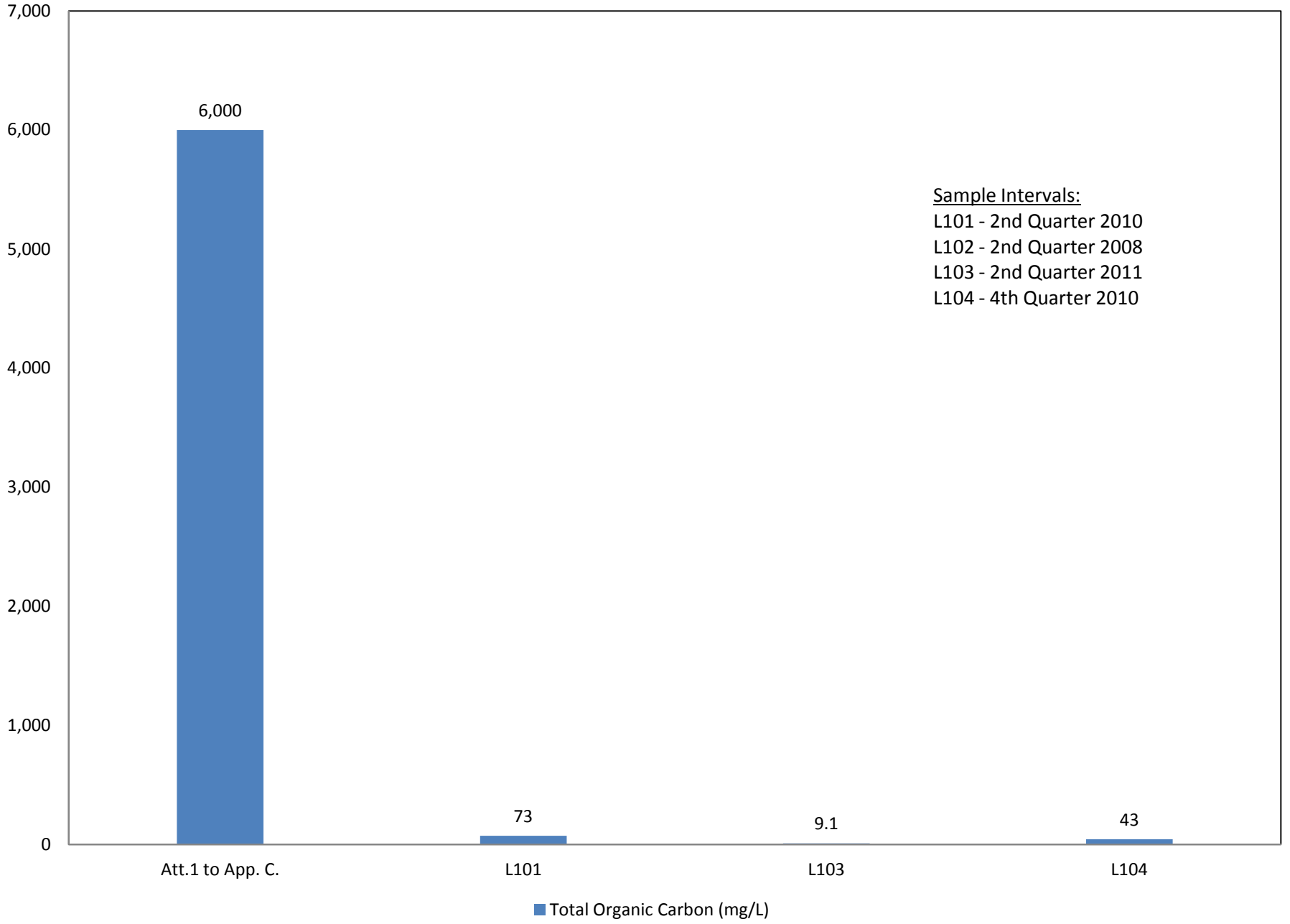


Detection Limit = 5 ug/L

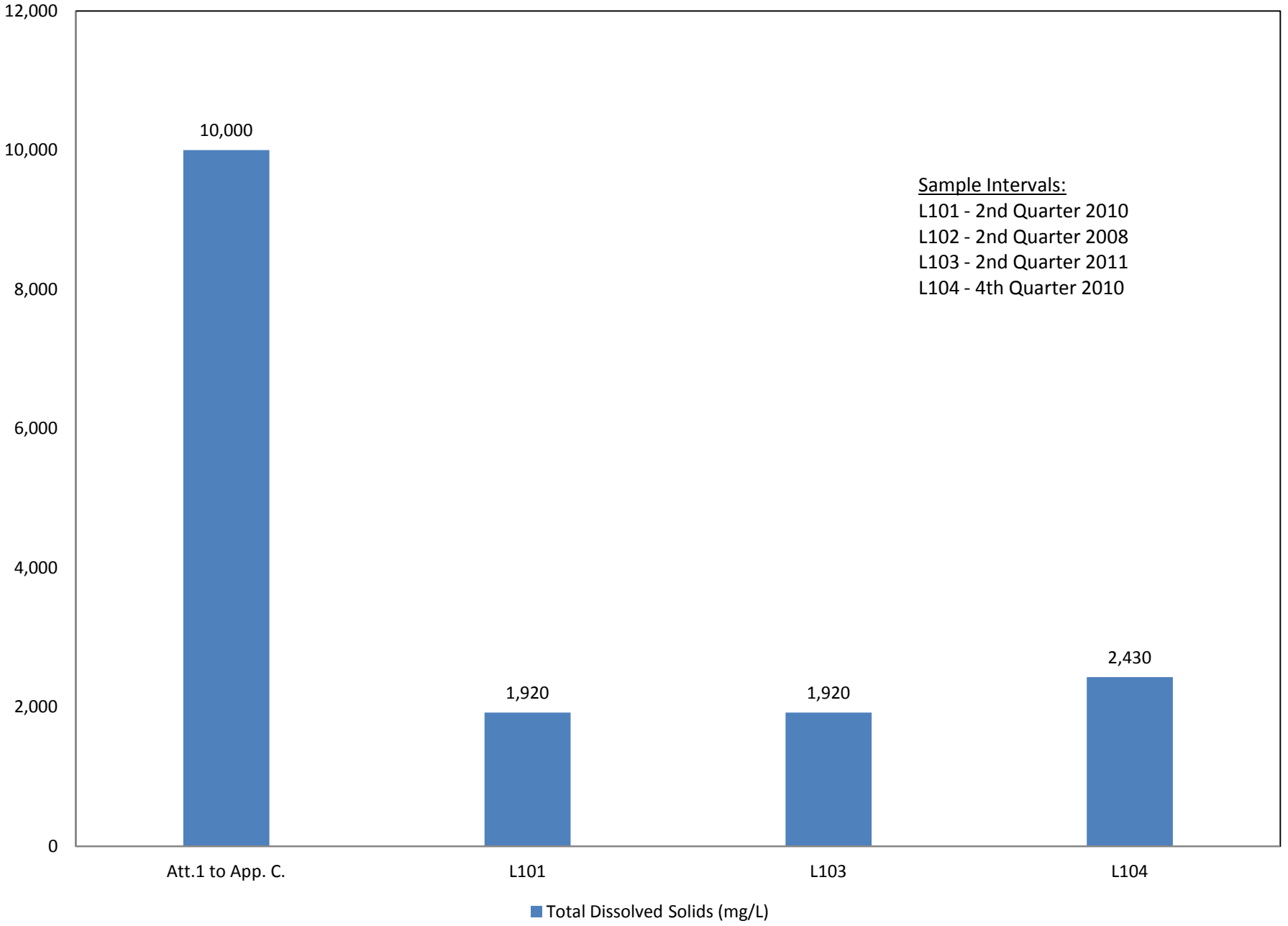
Andrews Engineering, Inc.

J:\1989\89-115A (Brickyard)\MON\Requests\2011\Leachate Detections
Toluene

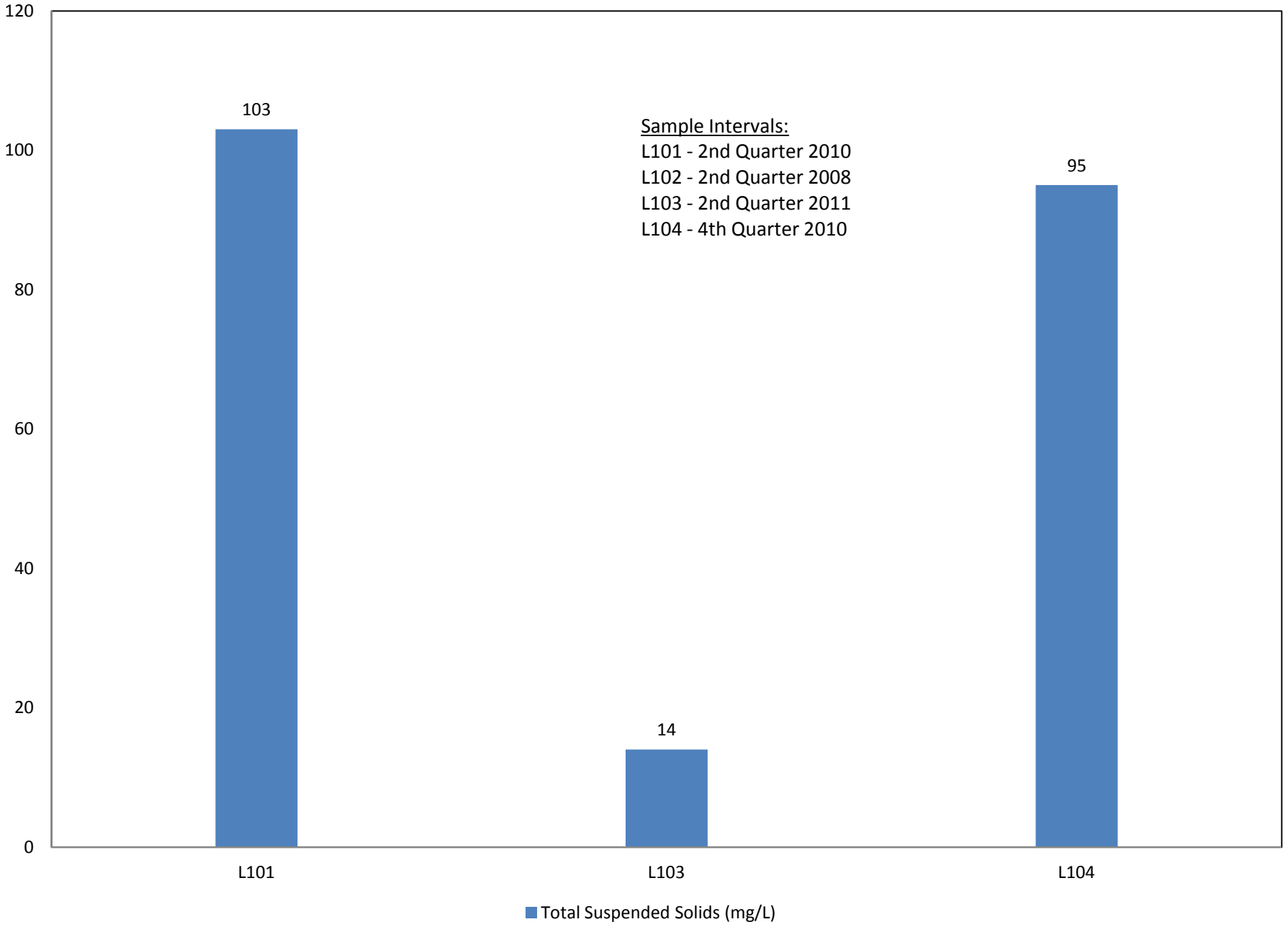
Brickyard Disposal and Recycling



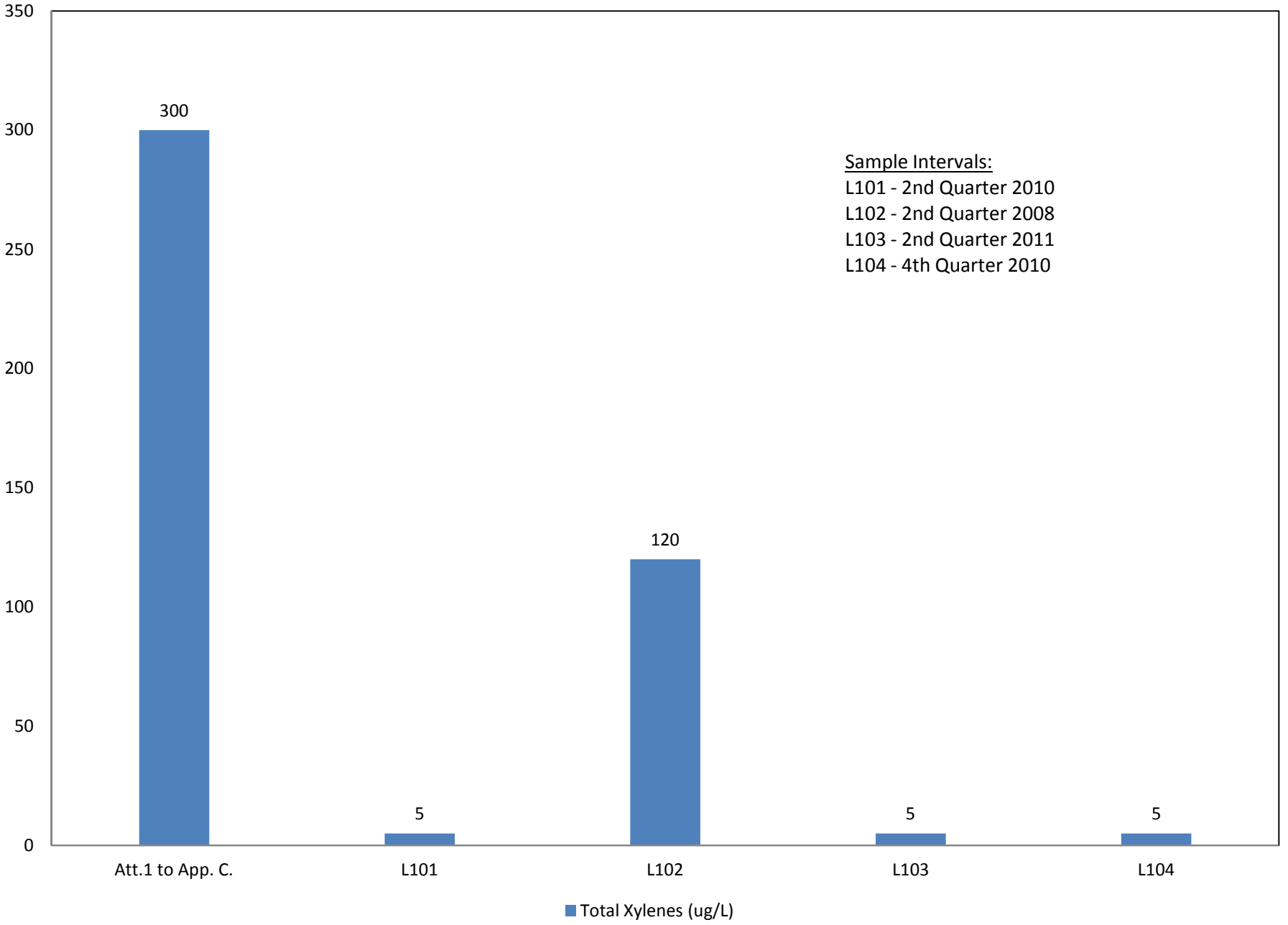
Brickyard Disposal and Recycling



Brickyard Disposal and Recycling



Brickyard Disposal and Recycling

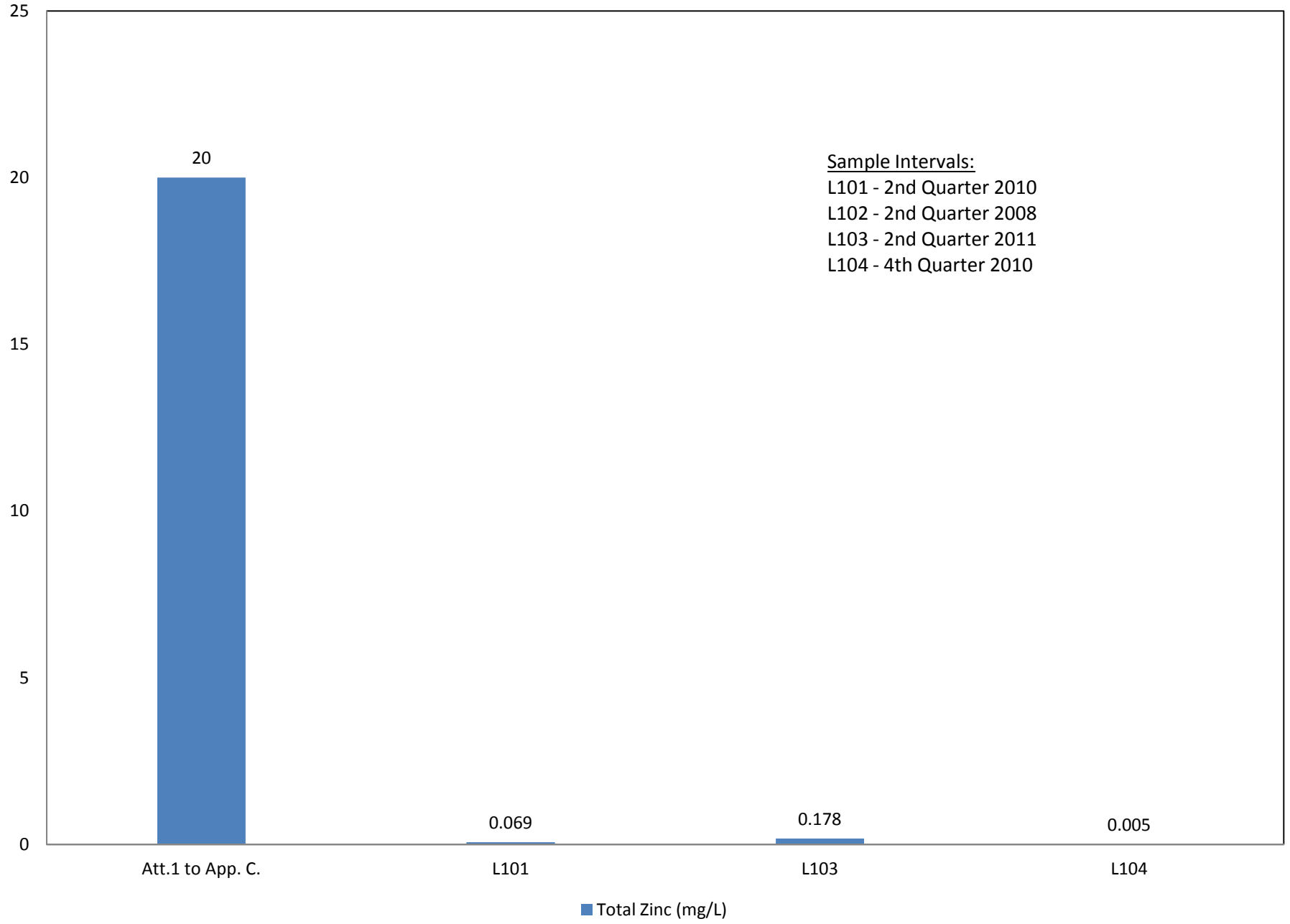


Detection Limit = 5 ug/L

Andrews Engineering, Inc.

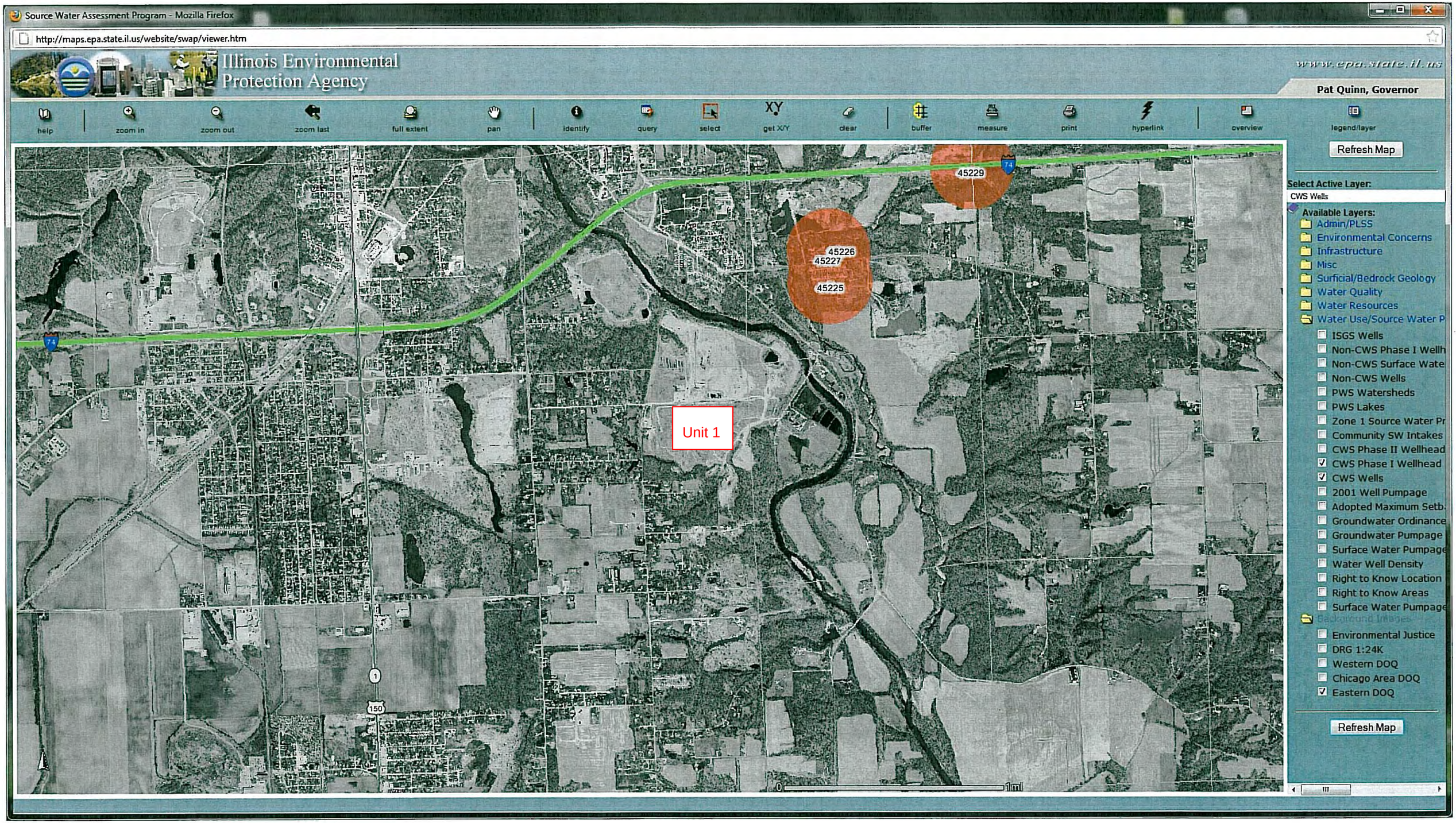
J:\1989\89-115A (Brickyard)\MON\Requests\2011\Leachate Detections
Xylenes

Brickyard Disposal and Recycling



ATTACHMENT 6

Source Water Assessment Program Data


Source Water Assessment Program - Mozilla Firefox
http://maps.epa.state.il.us/website/swap/viewer.htm
Illinois Environmental Protection Agency
www.epa.state.il.us
Pat Quinn, Governor
help
zoom in
zoom out
zoom last
full extent
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identify
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select
get X/Y
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buffer
measure
print
hyperlink
overview
legend/layer
Refresh Map
45229
45226
45227
45225
Unit 1
Select Active Layer:
CWS Wells
Available Layers:
Admin/PLSS
Environmental Concerns
Infrastructure
Misc
Surficial/Bedrock Geology
Water Quality
Water Resources
Water Use/Source Water P
ISGS Wells
Non-CWS Phase I Wellh
Non-CWS Surface Wate
Non-CWS Wells
PWS Watersheds
PWS Lakes
Zone 1 Source Water Pr
Community SW Intakes
CWS Phase II Wellhead
CWS Phase I Wellhead
CWS Wells
2001 Well Pumpage
Adopted Maximum Setb
Groundwater Ordinance
Groundwater Pumpage
Surface Water Pumpage
Water Well Density
Right to Know Location
Right to Know Areas
Surface Water Pumpage
Background Images
Environmental Justice
DRG 1:24K
Western DOQ
Chicago Area DOQ
Eastern DOQ
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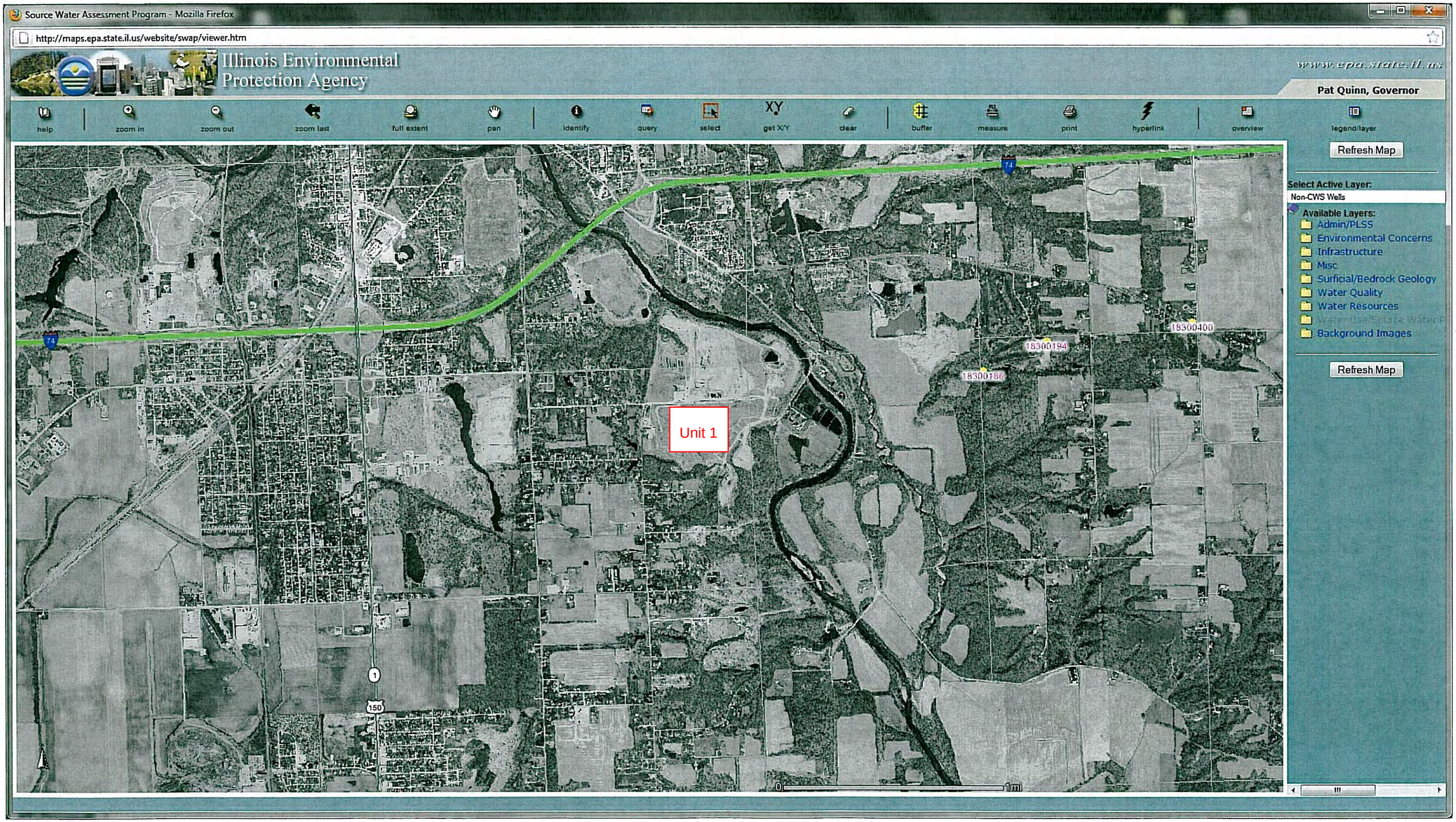
SHEET NO. 1


Source Water Assessment Program - Mozilla Firefox
http://maps.epa.state.il.us/website/swap/viewer.htm
Illinois Environmental Protection Agency
www.epa.state.il.us
Pat Quinn, Governor
help
zoom in
zoom out
zoom last
full extent
pan
identify
query
select
get X/Y
clear
buffer
measure
print
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legend/layer
Refresh Map
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Non-CWS Wells
Available Layers:
Admin/PLSS
Environmental Concerns
Infrastructure
Misc
Surficial/Bedrock Geology
Water Quality
Water Resources
Background Images
Refresh Map
Unit 1
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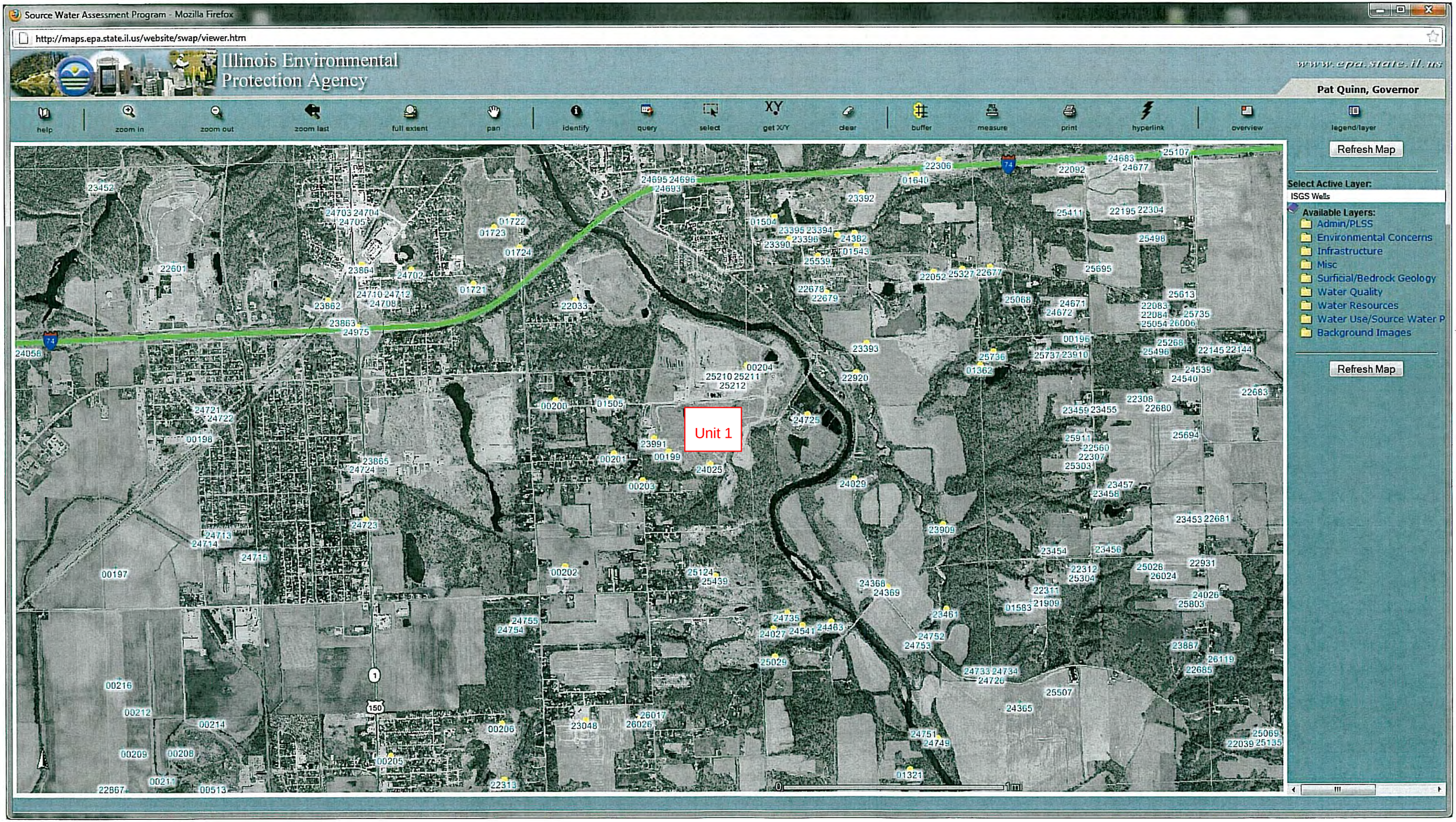
SHEET NO. 2


Source Water Assessment Program - Mozilla Firefox
http://maps.epa.state.il.us/website/swap/viewer.htm
Illinois Environmental Protection Agency
www.epa.state.il.us
Pat Quinn, Governor
help
zoom in
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zoom last
full extent
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query
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get X/Y
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hyperlink
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legend/layer
Refresh Map
Select Active Layer:
ISGS Wells
Available Layers:
Admin/PLSS
Environmental Concerns
Infrastructure
Misc
Surficial/Bedrock Geology
Water Quality
Water Resources
Water Use/Source Water P
Background Images
Refresh Map
Unit 1

SHEET NO. 3

TABLE 6-1

Illinois EPA SWAP Database - ISGS Wells

Brickyard Disposal Recycling, Danville, Illinois

Rec	base.sde.isgswells.API_NUMBER	base.sde.isgswells.TOTAL_DEPT	base.sde.isgswells.FARM_NAME	base.sde.isgswells.ELEVATION	base.sde.isgswells.STATUS	base.sde.isgswells.LAM_X	base.sde.isgswells.LAM_Y	base.sde.isgswells.LATITUDE	base.sde.isgswells.LONGITUDE	base.sde.isgswells.COUNTY_NO
1	121830154300	88	Rouse, John	0	WATER	3530571	2583920	40.109774	87.592965	1543
2	121830163500	76	Richardson Const. Co. 1	550	WATER	3531884	2585551	40.114198	87.588124	1635
3	121830164000	110	Richardson & Hegelar	445	WATER	3531994	2585603	40.114335	87.587725	1640
4	121830172100	47	Danville Municipal Land fil	621	WATER	3521442	2583025	40.107829	87.625834	1721
5	121830172200	12	Danville Municipal Land fil	578	WATER	3522391	2584626	40.112192	87.622306	1722
6	121830172300	47	H/L Landfill Co.	613	WATER	3521936	2584366	40.111501	87.62396	1723
7	121832203300	300	Thomas Sanitary Landfill	0	WATER	3523861	2582613	40.106554	87.617173	22033
8	121832205200	215	Lynch District Fire Dept.	0	WATER	3532403	2583291	40.107932	87.58643	22052
9	121830132100	48	Wengler,W. R.	0	WATER	3531834	2571436	40.075256	87.58937	1321
10	121830172400	31	Danville Municipal Land fil	600	WATER	3522545	2583889	40.11015	87.621807	1724
11	121830150400	57	Greer, Salvage	0	WATER	3528616	2584607	40.111783	87.599938	1504
12	121830150500	78	Hewes, Jim	0	WATER	3524704	2580279	40.100066	87.614318	1505
13	121832267700	200	Gilbreath, Vera	0	WATER	3533756	2583415	40.108196	87.581559	22677
14	121832267800	100	Rouse, Phil	0	WATER	3529846	2582803	40.106734	87.595654	22678
15	121832267900	105	Rouse, Phil	0	WATER	3529846	2582803	40.106734	87.595654	22679
16	121832292000	83	Danville Sanitary District	0	WATER	3530548	2580897	40.101434	87.593276	22920
17	121832304800	40	Hoaks, Paul	0	WATER	3524086	2572604	40.078925	87.61711	23048
18	121830136200	80	Vermilion Hills Country Club TH	575	WTST	3533520	2581065	40.101725	87.582585	1362
19	121832338900	48	Van Vuren, Don T.H.	0	WATER	3529430	2584213	40.110648	87.597043	23389
20	121832339000	78	Van Vuren, Don T.H.	0	WATER	3528966	2584070	40.110281	87.598721	23390
21	121832339100	55	Van Vuren, Don T.H.	0	WATER	3530115	2584177	40.110509	87.594584	23391
22	121832339200	118	Van Vuren, Don T.H.	0	WATER	3530696	2585167	40.113207	87.592422	23392
23	121832339300	90	Van Vuren, Don	0	WATER	3530799	2581596	40.103349	87.592321	23393
24	121832339400	138	Van Vuren, Don	550	WATER	3529376	2584194	40.110599	87.597238	23394
25	121832339500	125	Van Vuren, Don	0	WATER	3529376	2584194	40.110599	87.597238	23395
26	121832339600	40	Van Vuren, Don	0	WATER	3529376	2584194		87.597238	23396
27	121832346100	50	Swider, Leroy	0	WATER	3532700	2575252	40.085734	87.585971	23461
28	121832399100	103	Brickyard Disp & Recycle #G103	0	MONIT	3525740	2579319	40.097358	87.610668	23991
29	121832402500	39	Brickyard Disp & Recycl. #R126	0	MONIT	3527082	2578700	40.095573	87.605893	24025
30	121832402700	30	Bennett, Loren	0	WATER	3528589	2574781	40.084673	87.600773	24027
31	121832402900	97	Williams, Essie #1	0	WATER	3530504	2578351	40.094412	87.593626	24029
32	121832403000	45	Brickyard Disp. & Recy.#G131	605	WATER	3527051	2579364	40.097406	87.605955	24030
33	121832230600	112	Van Burren, Don	0	WATER	3532530	2585943	40.115242	87.585773	22306
34	121832231300	90	Lapenag, David	0	WATER	3522147	2571201	40.075164	87.624178	22313
35	121832446300	61	Swider, Penny	0	WATER	3529959	2574938	40.085027	87.59584	24463
36	121832436800	41	FAS-505 Sta. 21+83 Boring	517	ENG	3531300	2575766	40.087234	87.590961	24368
37	121832436900	51	FAS-505 Sta. 25+95 Boring	532	ENG	3531300	2575766	40.087234	87.590961	24369
38	121832438200	0	Van Vuren, Don	0	WTST	3530515	2584215	40.110591	87.593144	24382
39	121830019900	188	Danville Belt Coal Co. Land	0	COAL	3526084	2578999	40.096455	87.609456	199
40	121830020000	89	Danville Belt Coal Co. Land	630	COAL	3523390	2580233	40.100014	87.619043	200
41	121830020100	86	Danville Belt Coal Co. Land	620	COAL	3524773	2578954	40.096406	87.614169	201
42	121830020200	119	Danville Belt Coal Co. Land	645	COAL	3523609	2576264	40.08905	87.618551	202
43	121830020300	350	Beatty, John	0	COAL	3525462	2578313	40.094598	87.611742	203
44	121830020400	391	Western Brick Company T.H.	545	COAL	3527960	2581061	40.102036	87.602562	204
45	121830020500	128	Robinson, Mrs.	656	COAL	3519438	2571777	40.076907	87.633865	205
46	121830020600	100		649	COAL	3522097	2572535	40.078848	87.624259	206
47	121832386200	46	FAI 74	629	ENG	3517963	2582638	40.106958	87.638364	23862
48	121832386300	33	SBI 1 14th St. Subway	639	ENG	3518655	2582006	40.105175	87.635924	23863
49	121832390900	82	White, Dave	0	WATER	3532619	2577263	40.091288	87.58611	23909
50	121832386400	26	SBI-1	629	ENG	3518774	2583488	40.109258	87.635387	23864
51	121832386500	21	SBI RT. 1	631	ENG	3518795	2578708	40.096068	87.635664	23865
52	121832469200	45	Bowman Ave. / FAI-74	575	ENG	3526103	2585402	40.114121	87.608909	24692
53	121832469400	45	Bowman Ave. & FAI-74	597	ENG	3526103	2585402	40.114121	87.608909	24694
54	121832469500	41	Bowman Ave. & FAI-74	595	ENG	3526103	2585402	40.114121	87.608909	24695
55	121832469600	40	Bowman Ave. & FAI-74	574	ENG	3526103	2585402	40.114121	87.608909	24696
56	121832469700	30	SBI-1	632	ENG	3518568	2584630	40.11242	87.636043	24697
57	121832469800	31	SBI-1	631	ENG	3518568	2584630	40.11242	87.636043	24698
58	121832469900	21	SBI-1 Sec. 47K-1	631	ENG	3518568	2584630	40.11242	87.636043	24699
59	121832470000	24	SBI-1 Sec.47k-1	630	ENG	3518568	2584630	40.11242	87.636043	24700

TABLE 6-1

Illinois EPA SWAP Database - ISGS Wells

Brickyard Disposal Recycling, Danville, Illinois

Rec	base.sde.isgswells.API_NUMBER	base.sde.isgswells.TOTAL_DEPT	base.sde.isgswells.FARM_NAME	base.sde.isgswells.ELEVATION	base.sde.isgswells.STATUS	base.sde.isgswells.LAM_X	base.sde.isgswells.LAM_Y	base.sde.isgswells.LATITUDE	base.sde.isgswells.LONGITUDE	base.sde.isgswells.COUNTY_NO
60	121832470100	16	SBI-1 Sec.47K-1	631	ENG	3518568	2584630	40.11242	87.636043	24701
61	121832470200	14	SBI-1 Sec 47K-1	628	ENG	3519956	2583362	40.108843	87.631149	24702
62	121832470300	17	SBI-1 Sec. 47K-1	632	ENG	3518568	2584630	40.11242	87.636043	24703
63	121832470400	16	SBI-1 Sec. 47K-1	633	ENG	3518568	2584630	40.11242	87.636043	24704
64	121832472800	51	FAP 411 over TR 325	522	ENG	3533799	2573678	40.081327	87.582143	24728
65	121832472900	51	FAP 411 over TR 325	522	ENG	3533799	2573678	40.081327	87.582143	24729
66	121832473000	51	FAP 411 over TR 325	521	ENG	3533799	2573678	40.081327	87.582143	24730
67	121832473100	29	FAP 411 over TR 325	538	ENG	3533799	2573678	40.081327	87.582143	24731
68	121832473200	29	FAP 411 over TR 325	537	ENG	3533799	2573678	40.081327	87.582143	24732
69	121832473300	55	FAP 411 over TR 325	529	ENG	3533799	2573678	40.081327	87.582143	24733
70	121832473400	45	FAP 411 over TR 325	529	ENG	3533799	2573678	40.081327	87.582143	24734
71	121832473500	41	FAS 505 Station 23+50	516	ENG	3528916	2575153	40.08568	87.599571	24735
72	121832469300	45	Bowman Ave. & FAI-74	574	ENG	3526103	2585402	40.114121	87.608909	24693
73	121832470500	18	SBI-1 Sec. 47K-1	633	ENG	3518568	2584630	40.11242	87.636043	24705
74	121832470600	36	Pedestrian Overpass	630	ENG	3519304	2582686	40.107015	87.633542	24706
75	121832470700	36	FAI-74 Pedestrian Overpass	629	ENG	3519304	2582686	40.107015	87.633542	24707
76	121832470900	35	FAI-74 Pedestrian Overpass	626	ENG	3519304	2582686	40.107015	87.633542	24709
77	121832471000	18	FAI-74 Pedestrian Overpass	628	ENG	3519304	2582686	40.107015	87.633542	24710
78	121832471200	26	FAI-74 Pedestrian Overpass	611	ENG	3519304	2582686	40.107015	87.633542	24712
79	121832474200	24	FAP 411 Sta.3566+60	512	ENG	3532488	2572181	40.077273	87.586965	24742
80	121832474300	26	FAP 411 Sta.3565+90	514	ENG	3532488	2572181	40.077273	87.586965	24743
81	121832474400	31	FAP 411 Sta. 3665+24	516	ENG	3532488	2572181	40.077273	87.586965	24744
82	121832474500	21	FAP 411 Sta. 3562+50	537	ENG	3532488	2572181	40.077273	87.586965	24745
83	121832474600	16	FAP 411 Sta.3562+21	524	ENG	3532488	2572181	40.077273	87.586965	24746
84	121832474700	26	FAP 411 Sta.3562+90	516	ENG	3532488	2572181	40.077273	87.586965	24747
85	121832474800	21	FAP-411 Sta.3563+25	517	ENG	3532488	2572181	40.077273	87.586965	24748
86	121832475000	21	FAP 411 Sta.3565+58	512	ENG	3532488	2572181	40.077273	87.586965	24750
87	121832475200	62	TR-325 Sta.9+28	93	ENG	3532044	2574500	40.083697	87.588384	24752
88	121832475300	47	Danville Township Sta.10+62	93	ENG	3532044	2574500	40.083697	87.588384	24753
89	121832475500	36	Danville Rd. Dist. Sec. 76-3	622	ENG	3522346	2574884	40.085315	87.62319	24755
90	121832472300	24	TR 818A (Kings Rd.) over Grape Crk.	100	ENG	3518858	2577383	40.092408	87.635535	24723
91	121832472500	36	FAS-505 Sec.77-05123-05-BR	568	ENG	3529401	2579893	40.098731	87.597472	24725
92	121832472600	66	FAP 411 over TR 325	523	ENG	3533799	2573678	40.081327	87.582143	24726
93	121832475400	40	Danville Rd. Dist. Sec.76-3	622	ENG	3522346	2574884	40.085315	87.62319	24754
94	121832497500	33	SBI 1 Sta. 62+36.5 Sec 47-K	640	ENG	3518655	2582006	40.105175	87.635924	24975
95	121832454100	32	Swider, Penny	0	WATER	3529274	2574859	40.084848	87.598307	24541
96	121832472400	22	SBI Rt. 1 over Grape Creek	631	ENG	3518795	2578708	40.096068	87.635664	24724
97	121832470800	21	FAI-74 Pedestrian Overpass	629	ENG	3519304	2582686	40.107015	87.633542	24708
98	121832475100	21	FAP 411 Sta.3564+91	511	ENG	3532488	2572181	40.077273	87.586965	24751
99	121832502900	39	Swider, Penny & LeRoy	0	WATER	3528620	2574115	40.082833	87.600712	25029
100	121832512400	43	Eller, Troy	0	WATER	3527208	2576042	40.088232	87.605639	25124
101	121832532700	35	Pollert, Brad	0	WATER	3533088	2583367	40.108102	87.583963	25327
102	121832521000	77	Brickyard Displ/Recyclin	0	MONIT	3527646	2580716	40.101103	87.603716	25210
103	121832521100	57	Brickyard Displ/Recyclin	0	MONIT	3527646	2580716	40.101103	87.603716	25211
104	121832521200	51	Brickyard Displ/Recyclin	0	MONIT	3527646	2580716	40.101103	87.603716	25212
105	121832543900	44	Byerly, Tracey	0	WATER	3527208	2576042	40.088232	87.605639	25439
106	121832553900	98	Valley Run Mobile Home Par	0	WATER	3529650	2583677	40.109157	87.596293	25539
107	121832474900	21	FAP 411 Sta.3566+28	512	ENG	3532488	2572181	40.077273	87.586965	24749
108	121832573600	0	Wolfcreek Country Club	0	WATER	3533834	2581391	40.102607	87.581432	25736
109	121832601700	40	Sanks, Bud	0	DRYP	3525395	2572648	40.078971	87.612405	26017
110	121832602600	43	Sanks, Bud	0	WATER	3525395	2572648	40.078971	87.612405	26026

Shading indicates a water supply well. Non-shaded entries are borings, monitor wells, or other borings not used for water supply purposes.

Wells indicated by the shading may or may not be used for human consumption.

TABLE 6-2

Illinois EPA SWAP Database - CWS Wells

Brickyard Disposal Recycling, Danville, Illinois

Rec	bow.BOW.cws_wells.WELL_ID	bow.BOW.cws_wells.W_CWS_NUM	bow.BOW.cws_wells.W_CWS_NAME	bow.BOW.cws_wells.W_STATUS	bow.BOW.cws_wells.W_SUSCEPT	bow.BOW.cws_wells.W_POLICY	bow.BOW.cws_wells.W_MIN_SETB	bow.BOW.cws_wells.W_D_DEPTH	bow.BOW.cws_wells.W_AQUIFER	bow.BOW.cws_wells.AMB_WELL	bow.BOW.cws_wells.X_COORD	bow.BOW.cws_wells.Y_COORD	bow.BOW.cws_wells.PWS_STATUS	bow.BOW.cws_wells.SDWIS_WELL	bow.BOW.cws_wells.SYS_NUMBER	bow.BOW.cws_wells.API
1	45228	1835268	VERMILION HLS ESTS	A	AX	U	400	0		0	-87.58292	40.11469	I	WL45228	IL1835268	1.2183E+11
2	45229	1835268	VERMILION HLS ESTS	I	AX	U	400	0		0	-87.5829	40.11474	I	WL45229	IL1835268	1.2183E+11
3	45226	1835245	VALLEY RUN MHP	I	AX	U	400	88	101	0	-87.59535	40.10951	I	WL45226	IL1835245	1.2183E+11
4	45227	1835245	VALLEY RUN MHP	I	AX	U	400	98	101	0	-87.59532	40.1092	I	WL45227	IL1835245	1.21833E+11
5	45224	1835285	GLENDALE MHP	I	AX	U	400	100	101	0	-87.59537	40.10738	S	WL45224	IL1835285	1.21832E+11
6	45225	1835285	GLENDALE MHP	I	AX	U	400	105	101	0	-87.59517	40.1074	S	WL45225	IL1835285	1.21832E+11

Status A Active
I Inactive

Susceptibility Code AX Alluvium, a mixture of gravel, sand, silt, and clay along streams, variable in composition and thickness.

TABLE 6-3
Illinois EPA SWAP Database - Non-CWS Wells
Brickyard Disposal Recycling, Danville, Illinois

Rec	bow.BOW.noncws_wells.AREA_	bow.BOW.noncws_wells.PERIMETER	bow.BOW.noncws_wells.WELL_ID	bow.BOW.noncws_wells.X_COORD	bow.BOW.noncws_wells.Y_COORD	bow.BOW.noncws_wells.FAC_NAME	bow.BOW.noncws_wells.FACILITY_N	bow.BOW.noncws_wells.ADDR_ONE_T	bow.BOW.noncws_wells.ADDR_TWO_T	bow.BOW.noncws_wells.CITY_NAME	bow.BOW.noncws_wells.STATE_CODE	bow.BOW.noncws_wells.ZIP_CODE	bow.BOW.noncws_wells.FIPS_CD	bow.BOW.noncws_wells.PRN_CNTY	bow.BOW.noncws_wells.STATUS_CD	bow.BOW.noncws_wells.FED_TYPE_C	bow.BOW.noncws_wells.B_NAME	bow.BOW.noncws_wells.POP_CNT	bow.BOW.noncws_wells.LAT_DEC_DE	bow.BOW.noncws_wells.LONG_DEC_D	bow.BOW.noncws_wells.MERIDIAN	bow.BOW.noncws_wells.TOWNSHIP	bow.BOW.noncws_wells.RANGE	bow.BOW.noncws_wells.SECTION	bow.BOW.noncws_wells.UPDT_TS
1	0	0	18300186	3533590.5	2580945.75	WOLFCREEK COUNTRY CLUB	IL3014282	2521 PERRYSVILLE RD		DANVILLE	IL	61834	183	Vermilion	A	NC	RECREATION AREA	200	40.10139	-87.58222	2	19N	11W	23	Tue, 24 Oct 2006 00:00:00
2	0	0	18300194	3535107.75	2581658.25	WOLFCREEK COUNTRY CLUB	IL3014282	2521 PERRYSVILLE RD		DANVILLE	IL	61834	183	Vermilion	A	NC	RECREATION AREA	200	40.10333	-87.57694	2	19N	11W	23	Tue, 24 Oct 2006 00:00:00
3	0	0	18300400	3538570	2582105.75	MOON GLO	IL3123182	3124 PERRYSVILLE RD		DANVILLE	IL	61834	183	Vermilion	A	NC	RESTAURANT	50	40.10417	-87.56444	2	19N	11W	14	Tue, 26 Sep 2006 00:00:00

TABLE 6-4

Illinois EPA SWAP Database - RTK Area

Brickyard Disposal Recycling, Danville, Illinois

Rec	bow.BOW.RTKPoints.Id	bow.BOW.RTKPoints.Name	bow.BOW.RTKPoints.City	bow.BOW.RTKPoints.State	bow.BOW.RTKPoints.Zip	bow.BOW.RTKPoints.URL	bow.BOW.RTKPoints.Year	Shape.area	Shape.len
1	29	Valley Run MHP	Danville	IL	61832	http://www.idph.state.il.us/public/press08/4.4.08ValleyViewWaterTest.htm	2008	0	0

Illinois State Geological Survey (ISGS) Well Log Data

API Number 01505

For IEPA and USGS use only, do not quote or release.

CWS Well Id:

ISGS Header Table Data

County_No	Farm Name	Status	Twp	Tdir	Rng	Section	Quarters	Comp Date

ISGS Well Log Table

County_No	Formation	Thickness	Bottom
121830150500	yellow clay	13	13
121830150500	hard sandy gray clay	20	33
121830150500	fine sand	1	34
121830150500	hard gray clay	5	39
121830150500	soft gray sandy clay	28	67
121830150500	soft green clay	5	72
121830150500	gray clay	6	78

ISGS Pump Test Data Table

County_No	Pump gpm	Pump hrs	Stat levl	Pump levl	Wformation
121830150500	10	2	30	27	gray clay

ISGS Well Casing Data Table

County_No	Case diam	Case from	Case to	Case type
121830150500	4	0	77	BLACK IRON

ISGS Open Interval Data Table

County_No	Scrn diam	Scrn Lgth	Slot	Wfm from	Wfm to	Wformation
121830150500		0		77	78	gray clay

Illinois State Geological Survey (ISGS) Well Log Data

API Number 24029

For IEPA and USGS use only, do not quote or release.

CWS Well Id:

ISGS Header Table Data

County_No	Farm Name	Status	Twp	Tdir	Rng	Section	Quarters	Comp Date

ISGS Well Log Table

County_No	Formation	Thickness	Bottom
121832402900	brown clay	27	27
121832402900	blue clay	37	64
121832402900	blue clay	19	92
121832402900	sand no water	9	73
121832402900	sand & gravel (water)	5	97

ISGS Pump Test Data Table

County_No	Pump gpm	Pump hrs	Stat levl	Pump levl	Wformation
121832402900	0	3	70	78	sand & gravel

ISGS Well Casing Data Table

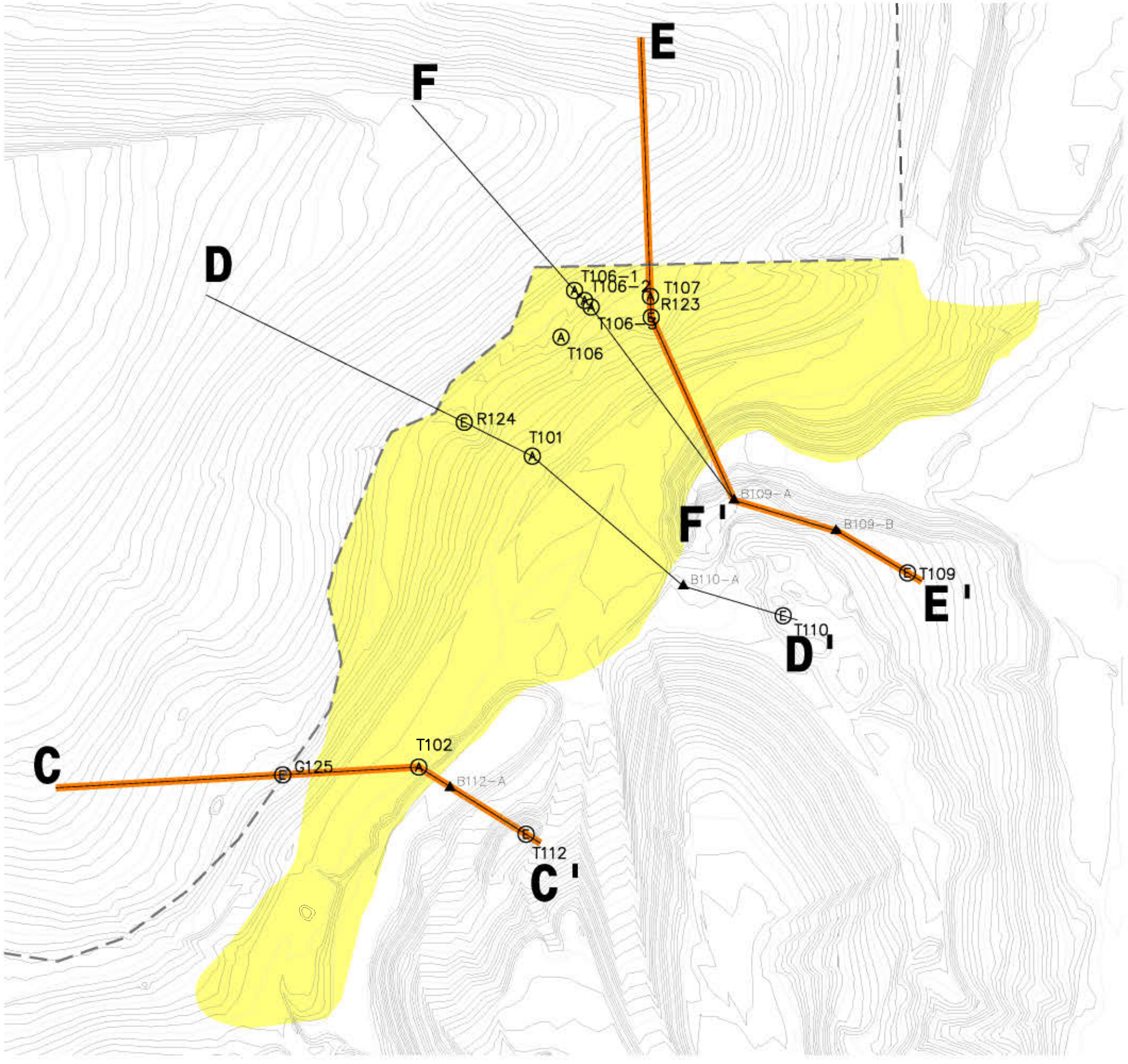
County_No	Case diam	Case from	Case to	Case type
121832402900	4	-1	93	STEEL 11#/FT

ISGS Open Interval Data Table

County_No	Scrn diam	Scrn Lgth	Slot	Wfm from	Wfm to	Wformation
121832402900	3	4	0	93	97	sand & gravel

ATTACHMENT 7

Slope Stability Evaluation



EXPLANATION

- APPROXIMATE PERMITTED WASTE BOUNDARY
- AREA OF EXTRANEOUS MATERIALS
- Ⓟ PIEZOMETER
- ▲ BORING LOCATION
- ◒ MONITORING POINT

NOTE:

TOPOGRAPHIC SURFACE TAKEN FROM AERIAL PROVIDED BY AEROCON PHOTOGRAMMETRIC SERVICES, INC. FLOWN ON MARCH 23, 2010.

N

150 0 150 300

SCALE: IN FEET

ANDREWS ENGINEERING, INC.
3300 Ginger Creek Drive, Springfield, IL 62711-7233
Tel: (217) 787-2334 Fax: (217) 787-9495
Pontiac, IL • Naperville, IL • Indianapolis, IN • Warrenton, MO

APPROVED BY:	DESIGNED BY:	DRAWN BY:
JLR	JLR	WCU

SLOPE STABILITY CROSS SECTION LOCATION MAP

PLANS PREPARED FOR
BRICKYARD DISPOSAL & RECYCLING
DANVILLE, ILLINOIS

DATE: JUNE 2010

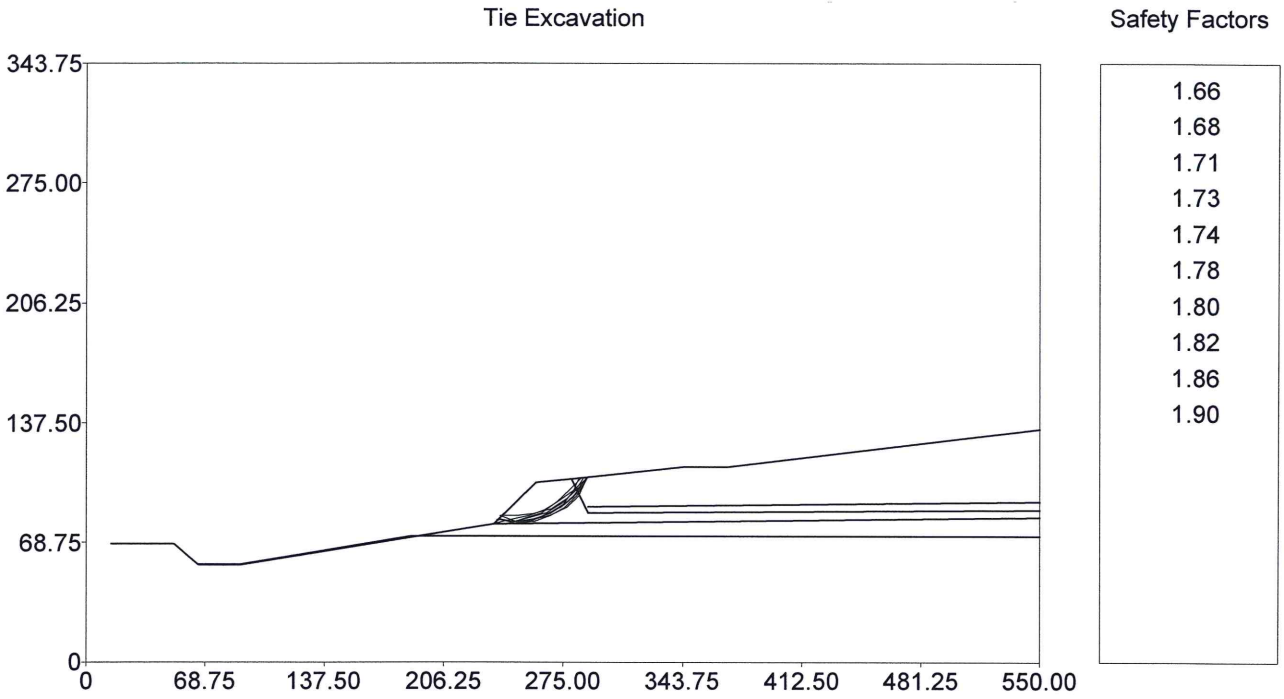
PROJECT ID: 89-115A

SHEET NUMBER:

FIG. 8-1

Section C-C’

Section C-C'
Janbu Circle (Seismic)



** PCSTABL6 **

by
Purdue University

modified by
Peter J. Bosscher
University of Wisconsin-Madison

--Slope Stability Analysis--
Simplified Janbu, Simplified Bishop
or Spencer's Method of Slices

PROBLEM DESCRIPTION Tie Excavation

BOUNDARY COORDINATES

9 Top Boundaries
12 Total Boundaries

Boundary No.	X-Left (ft)	Y-Left (ft)	X-Right (ft)	Y-Right (ft)	Soil Type Below Bnd
1	15.00	68.00	50.00	68.00	1
2	50.00	68.00	65.00	56.00	1
3	65.00	56.00	90.00	56.00	1
4	90.00	56.00	235.00	80.00	1
5	235.00	80.00	260.00	104.00	2
6	260.00	104.00	280.00	106.00	2
7	280.00	106.00	345.00	113.00	3
8	345.00	113.00	370.00	113.00	3
9	370.00	113.00	550.00	134.00	3
10	280.00	106.00	290.00	86.00	2
11	290.00	86.00	550.00	88.00	2
12	235.00	80.00	550.00	83.00	1

ISOTROPIC SOIL PARAMETERS

3 Type(s) of Soil

Soil Type No.	Total Unit Wt. (pcf)	Saturated Unit Wt. (pcf)	Cohesion Intercept (psf)	Friction Angle (deg)	Pore Pressure Param.	Pressure Constant (psf)	Piez. Surface No.
1	145.0	145.0	3000.0	0.0	0.00	0.0	1
2	135.0	135.0	1200.0	0.0	0.00	0.0	1
3	70.0	70.0	200.0	26.0	0.00	0.0	2

2 PIEZOMETRIC SURFACE(S) HAVE BEEN SPECIFIED

Unit Weight of Water = 62.40

Piezometric Surface No. 1 Specified by 4 Coordinate Points

Point No.	X-Water (ft)	Y-Water (ft)
1	65.00	57.00
2	90.00	57.00
3	188.00	73.00
4	550.00	73.00

Piezometric Surface No. 2 Specified by 2 Coordinate Points

Point No.	X-Water (ft)	Y-Water (ft)
1	290.00	90.00
2	550.00	92.00

A Horizontal Earthquake Loading Coefficient
Of0.100 Has Been Assigned

A Vertical Earthquake Loading Coefficient
Of0.000 Has Been Assigned

Cavitation Pressure = 0.0 psf

A Critical Failure Surface Searching Method, Using A Random Technique For Generating Circular Surfaces, Has Been Specified.

100 Trial Surfaces Have Been Generated.

10 Surfaces Initiate From Each Of 10 Points Equally Spaced Along The Ground Surface Between X = 230.00 ft.
and X = 240.00 ft.

Each Surface Terminates Between X = 275.00 ft.
and X = 290.00 ft.

Unless Further Limitations Were Imposed, The Minimum Elevation At Which A Surface Extends Is Y = 0.00 ft.

10.00 ft. Line Segments Define Each Trial Failure Surface.

Following Are Displayed The Ten Most Critical Of The Trial Failure Surfaces Examined. They Are Ordered - Most Critical First.

* * Safety Factors Are Calculated By The Modified Janbu Method * *

Failure Surface Specified By 8 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	235.56	80.53
2	245.54	80.06
3	255.45	81.45
4	264.92	84.64
5	273.65	89.53
6	281.31	95.96
7	287.65	103.69
8	289.48	107.02

*** 1.663 ***

Failure Surface Specified By 8 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	237.78	82.67
2	247.61	80.83
3	257.60	81.36
4	267.18	84.20
5	275.83	89.22
6	283.07	96.12
7	288.49	104.52
8	289.36	107.01

*** 1.682 ***

Failure Surface Specified By 8 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)

1	237.78	82.67
2	247.69	81.32
3	257.65	82.23
4	267.15	85.35
5	275.71	90.51
6	282.90	97.46
7	288.34	105.85
8	288.74	106.94

*** 1.712 ***

Failure Surface Specified By 8 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	236.67	81.60
2	246.66	81.27
3	256.53	82.89
4	265.89	86.40
5	274.40	91.66
6	281.71	98.48
7	287.56	106.59
8	287.66	106.83

*** 1.730 ***

Failure Surface Specified By 8 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	238.89	83.73
2	248.61	81.38
3	258.61	81.57
4	268.23	84.28
5	276.86	89.33
6	283.93	96.41
7	288.98	105.04
8	289.53	107.03

*** 1.735 ***

Failure Surface Specified By 8 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	235.56	80.53
2	245.54	79.89
3	255.46	81.15

4	264.96	84.26
5	273.70	89.11
6	281.37	95.53
7	287.69	103.28
8	289.72	107.05

*** 1.785 ***

Failure Surface Specified By 7 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	237.78	82.67
2	247.59	80.76
3	257.56	81.57
4	266.94	85.04
5	275.03	90.91
6	281.24	98.75
7	284.48	106.48

*** 1.801 ***

Failure Surface Specified By 8 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	235.56	80.53
2	245.49	81.68
3	255.18	84.15
4	264.45	87.90
5	273.14	92.85
6	281.08	98.93
7	288.14	106.01
8	288.86	106.95

*** 1.818 ***

Failure Surface Specified By 7 Coordinate Points

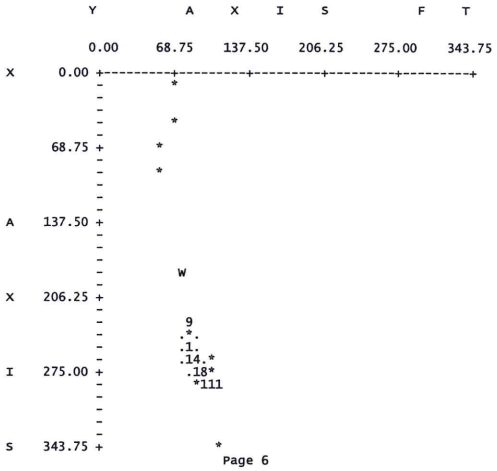
Point No.	X-Surf (ft)	Y-Surf (ft)
1	234.44	79.91
2	244.42	80.62
3	254.14	82.98
4	263.33	86.91
5	271.75	92.31
6	279.16	99.02
7	285.10	106.55

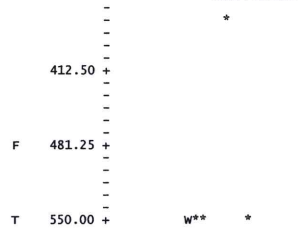
*** 1.860 ***

Failure Surface Specified By 7 Coordinate Points

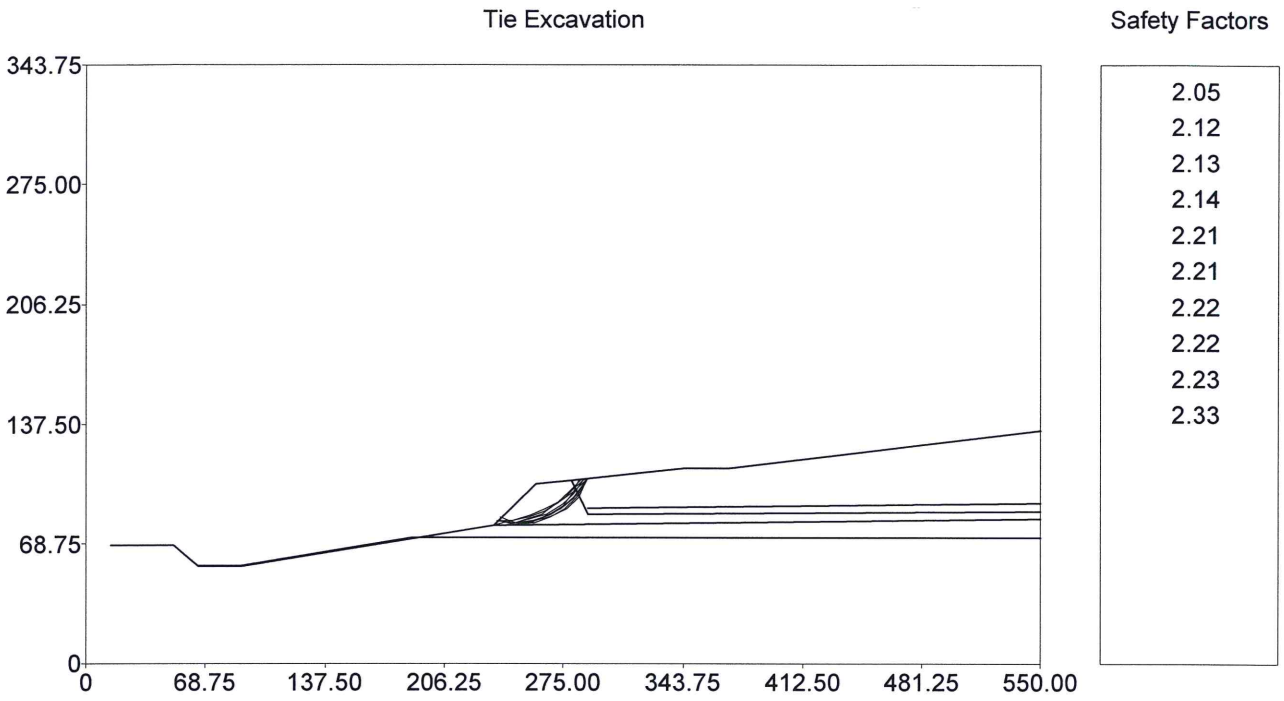
Point No.	X-Surf (ft)	Y-Surf (ft)
1	238.89	83.73
2	248.89	83.72
3	258.74	85.46
4	268.12	88.91
5	276.76	93.95
6	284.38	100.43
7	289.85	107.06

*** 1.903 ***





Section C-C'
Janbu Circle



** PCSTABL6 **

by
Purdue University

modified by
Peter J. Bosscher
University of Wisconsin-Madison

--Slope Stability Analysis--
Simplified Janbu, Simplified Bishop
or Spencer's Method of Slices

PROBLEM DESCRIPTION Tie Excavation

BOUNDARY COORDINATES

9 Top Boundaries
12 Total Boundaries

Boundary No.	X-Left (ft)	Y-Left (ft)	X-Right (ft)	Y-Right (ft)	Soil Type Below Bnd
1	15.00	68.00	50.00	68.00	1
2	50.00	68.00	65.00	56.00	1
3	65.00	56.00	90.00	56.00	1
4	90.00	56.00	235.00	80.00	1
5	235.00	80.00	260.00	104.00	2
6	260.00	104.00	280.00	106.00	2
7	280.00	106.00	345.00	113.00	3
8	345.00	113.00	370.00	113.00	3
9	370.00	113.00	550.00	134.00	3
10	280.00	106.00	290.00	86.00	2
11	290.00	86.00	550.00	88.00	2
12	235.00	80.00	550.00	83.00	1

ISOTROPIC SOIL PARAMETERS

3 Type(s) of Soil

Soil Type No.	Total Unit Wt. (pcf)	Saturated Unit Wt. (pcf)	Cohesion Intercept (psf)	Friction Angle (deg)	Pore Pressure Param.	Pressure Constant (psf)	Piez. Surface No.
1	145.0	145.0	3000.0	0.0	0.00	0.0	1
2	135.0	135.0	1200.0	0.0	0.00	0.0	1
3	70.0	70.0	200.0	26.0	0.00	0.0	2

2 PIEZOMETRIC SURFACE(S) HAVE BEEN SPECIFIED

Unit Weight of Water = 62.40

Piezometric Surface No. 1 Specified by 4 Coordinate Points

Point No.	X-Water (ft)	Y-Water (ft)
1	65.00	57.00
2	90.00	57.00
3	188.00	73.00
4	550.00	73.00

Piezometric Surface No. 2 Specified by 2 Coordinate Points

Point No.	X-Water (ft)	Y-Water (ft)
1	290.00	90.00
2	550.00	92.00

A Critical Failure Surface Searching Method, Using A Random Technique For Generating Circular Surfaces, Has Been Specified.

100 Trial Surfaces Have Been Generated.

10 Surfaces Initiate From Each Of 10 Points Equally Spaced Along The Ground Surface Between X = 230.00 ft.
and X = 240.00 ft.

Each Surface Terminates Between X = 275.00 ft.
and X = 290.00 ft.

Unless Further Limitations Were Imposed, The Minimum Elevation At Which A Surface Extends Is Y = 0.00 ft.

10.00 ft. Line Segments Define Each Trial Failure Surface.

Following Are Displayed The Ten Most Critical Of The Trial Failure Surfaces Examined. They Are Ordered - Most Critical First.

* * Safety Factors Are Calculated By The Modified Janbu Method * *

Failure Surface Specified By 8 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	235.56	80.53
2	245.54	80.06
3	255.45	81.45
4	264.92	84.64
5	273.65	89.53
6	281.31	95.96
7	287.65	103.69
8	289.48	107.02

*** 2.054 ***

Failure Surface Specified By 8 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	237.78	82.67
2	247.61	80.83
3	257.60	81.36
4	267.18	84.20
5	275.83	89.22
6	283.07	96.12
7	288.49	104.52
8	289.36	107.01

*** 2.124 ***

Failure Surface Specified By 8 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	236.67	81.60
2	246.66	81.27
3	256.53	82.89
4	265.89	86.40
5	274.40	91.66
6	281.71	98.48
7	287.56	106.59
8	287.66	106.83

*** 2.125 ***

Failure Surface Specified By 8 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	237.78	82.67
2	247.69	81.32
3	257.65	82.23
4	267.15	85.35
5	275.71	90.51
6	282.90	97.46
7	288.34	105.85
8	288.74	106.94

*** 2.142 ***

Failure Surface Specified By 7 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	237.78	82.67
2	247.59	80.76
3	257.56	81.57
4	266.94	85.04
5	275.03	90.91
6	281.24	98.75
7	284.48	106.48

*** 2.209 ***

Failure Surface Specified By 8 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	235.56	80.53
2	245.54	79.89
3	255.46	81.15
4	264.96	84.26
5	273.70	89.11
6	281.37	95.53
7	287.69	103.28
8	289.72	107.05

*** 2.210 ***

Failure Surface Specified By 8 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	235.56	80.53
2	245.49	81.68
3	255.18	84.15
4	264.45	87.90
5	273.14	92.85
6	281.08	98.93
7	288.14	106.01
8	288.86	106.95

*** 2.217 ***

Failure Surface Specified By 8 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	238.89	83.73
2	248.61	81.38
3	258.61	81.57
4	268.23	84.28
5	276.86	89.33
6	283.93	96.41
7	288.98	105.04
8	289.53	107.03

*** 2.218 ***

Failure Surface Specified By 7 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	234.44	79.91
2	244.42	80.62
3	254.14	82.98
4	263.33	86.91
5	271.75	92.31
6	279.16	99.02
7	285.10	106.55

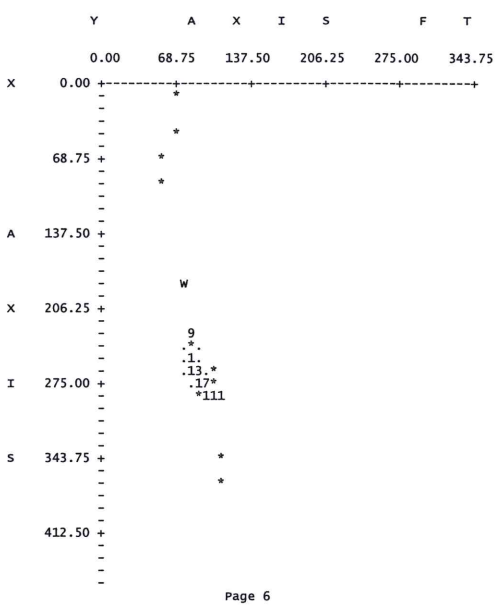
*** 2.232 ***

Failure Surface Specified By 7 Coordinate Points

Point	X-Surf	Y-Surf

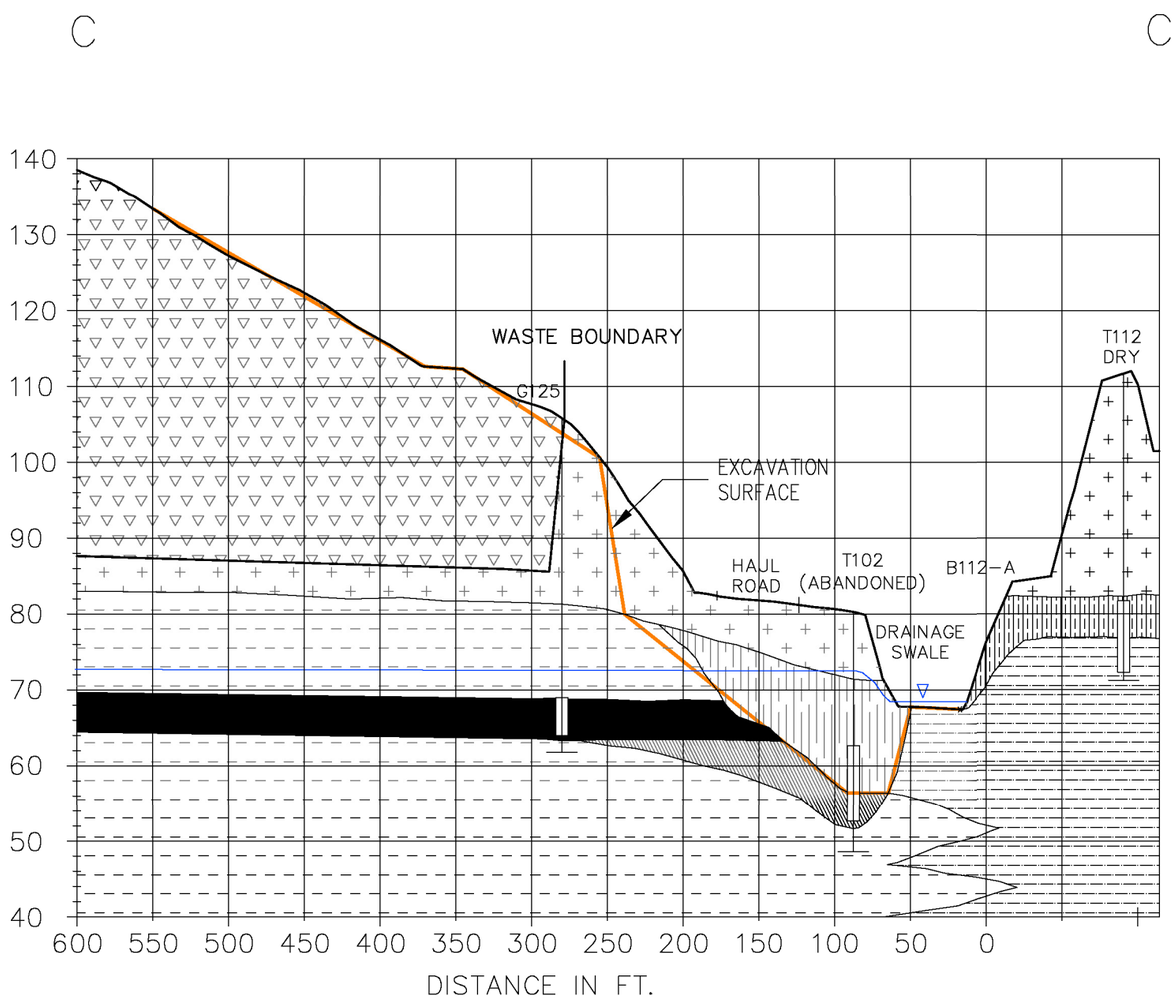
No.	(ft)	(ft)
1	236.67	81.60
2	246.60	82.79
3	256.27	85.31
4	265.52	89.11
5	274.18	94.12
6	282.08	100.25
7	288.62	106.93

*** 2.331 ***



F 481.25

T 550.00 W** *



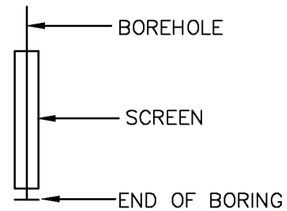
NOTES:

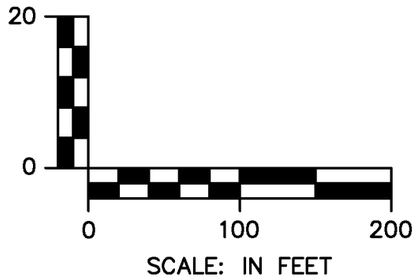
1. TOPOGRAPHIC SURFACE TAKEN FROM AERIAL PROVIDED BY AEROCON PHOTOGRAMMETRIC SERVICES, INC. FLOWN ON MARCH 23, 2010.
2. SOLID VERTICAL LINES REPRESENT BORINGS DRILLED FOR MONITORING WELL INSTALLATION.
3. GROUNDWATER ELEVATIONS REPRESENT AN AVERAGE OF GROUNDWATER ELEVATIONS MEASURED FROM SECOND QUARTER 2009 TO FIRST QUARTER 2010. WELLS T114–T123 GROUNDWATER ELEVATIONS MEASURED DURING FIRST QUARTER 2010.
4. DEPTH AND THICKNESS OF SUBSURFACE STRATA WERE GENERALIZED FROM AND INTERPOLATED BETWEEN BORINGS. INFORMATION ON ACTUAL SUBSURFACE CONDITIONS EXISTS ONLY AT THE LOCATION OF THE BORING.
5. B110–A GROUND SURFACE ELEVATION BASED ON 2010 AERIAL. BEDROCK WAS ENCOUNTERED LESS THAN 1.0 FOOT BELOW 2009 GROUND SURFACE ELEVATION (567.5 AMSL).
6. R124 GEOLOGY BASED ON BORING LOG FOR G124. COAL AT R124 IS NOTED ON BORING LOG G124 AS PROBABLE SILTED–IN MINE CAVERN.
7. OVERFILL AREA IDENTIFIED IN SHEET NO. 1 IS COMPOSED OF A COMBINATION OF MINE SPOIL/BACKFILL, RAILROAD TIES AND/OR OTHER MATERIALS.

EXPLANATION

- MINE SPOIL/DISTURBED
- SILTSTONE
- SHALE
- COAL
- WOOD DEBRIS
- SANDY SILT
- UNDERCLAY
- WASTE FILL
- GROUNDWATER

WELL DIAGRAM





ANDREWS ENGINEERING, INC.
3300 Ginger Creek Drive, Springfield, IL 62711–7233
Tel (217) 787–2334 Fax (217) 787–9495
Pontiac, IL • Naperville, IL • Indianapolis, IN • Warrenton, MO

APPROVED BY: JLR | DESIGNED BY: JLR | DRAWN BY: WCU

SLOPE STABILITY CROSS SECTION C–C'

PLANS PREPARED FOR
BRICKYARD DISPOSAL & RECYCLING
DANVILLE, ILLINOIS

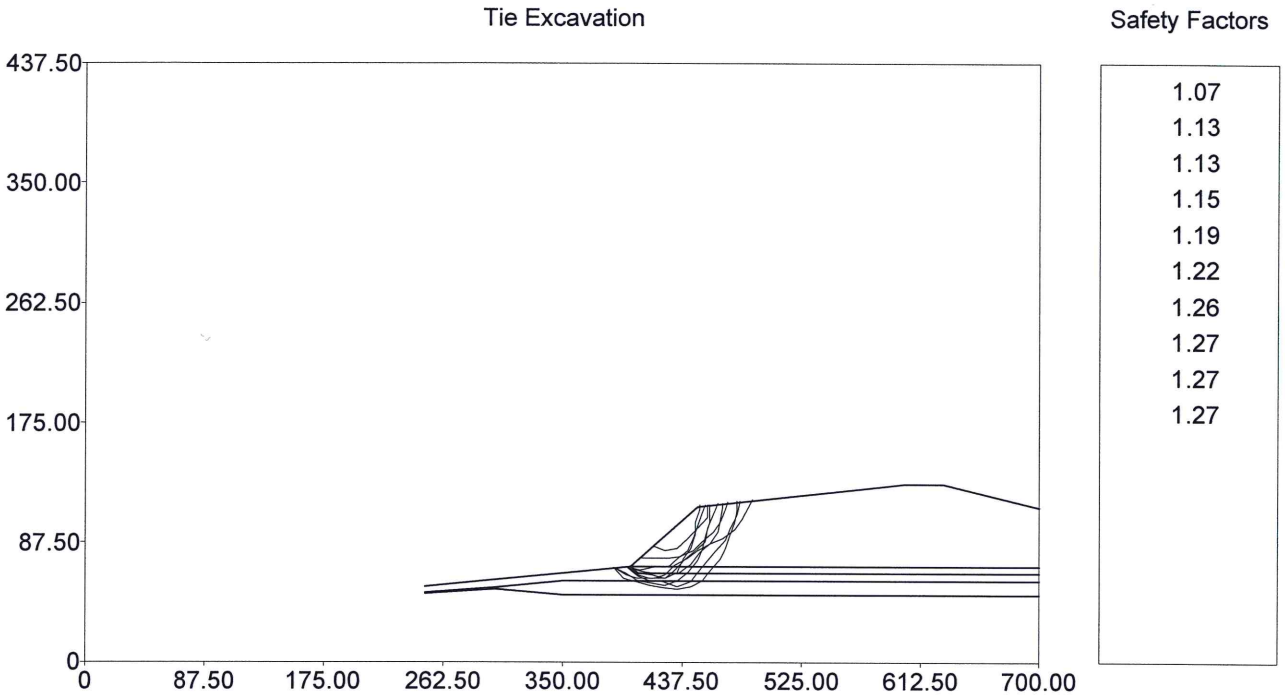
DATE: JUNE 2010

PROJECT ID: 89–115A

SHEET NUMBER: C–C'

Section E-E’

Section E-E"
Random Janbu (Seismic)



** PCSTABL6 **

by
Purdue University

modified by
Peter J. Bosscher
University of Wisconsin-Madison

--Slope Stability Analysis--
Simplified Janbu, Simplified Bishop
or Spencer's Method of Slices

PROBLEM DESCRIPTION Tie Excavation

BOUNDARY COORDINATES

5 Top Boundaries
10 Total Boundaries

Boundary No.	X-Left (ft)	Y-Left (ft)	X-Right (ft)	Y-Right (ft)	Soil Type Below Bnd
1	250.00	56.00	400.00	70.00	1
2	400.00	70.00	450.00	115.00	2
3	450.00	115.00	600.00	130.00	2
4	600.00	130.00	630.00	130.00	2
5	630.00	130.00	700.00	114.00	2
6	400.00	70.00	405.00	65.00	2
7	405.00	65.00	700.00	65.00	2
8	250.00	51.00	300.00	53.00	3
9	300.00	53.00	350.00	50.00	3
10	350.00	50.00	700.00	50.00	3

ISOTROPIC SOIL PARAMETERS

3 Type(s) of Soil

Soil Type No.	Total Unit Wt. (pcf)	Saturated Unit Wt. (pcf)	Cohesion Intercept (psf)	Friction Angle (deg)	Pore Pressure Param.	Pressure Constant (psf)	Piez. Surface No.
1	135.0	135.0	1200.0	0.0	0.00	0.0	1
2	70.0	70.0	200.0	26.0	0.00	0.0	2

3	145.0	145.0	3000.0	0.0	0.00	0.0	1

2 PIEZOMETRIC SURFACE(S) HAVE BEEN SPECIFIED

Unit Weight of Water = 62.40

Piezometric Surface No. 1 Specified by 4 Coordinate Points

Point No.	X-Water (ft)	Y-Water (ft)
1	250.00	52.00
2	300.00	54.00
3	350.00	60.00
4	700.00	60.00

Piezometric Surface No. 2 Specified by 2 Coordinate Points

Point No.	X-Water (ft)	Y-Water (ft)
1	400.00	70.00
2	700.00	70.00

A Horizontal Earthquake Loading Coefficient
Of0.100 Has Been Assigned

A Vertical Earthquake Loading Coefficient
Of0.000 Has Been Assigned

Cavitation Pressure = 0.0 psf

A Critical Failure Surface Searching Method, Using A Random Technique For Generating Irregular Surfaces, Has Been Specified.

100 Trial Surfaces Have Been Generated.

10 Surfaces Initiate From Each Of 10 Points Equally Spaced Along The Ground Surface Between X = 350.00 ft.
and X = 435.00 ft.

Each Surface Terminates Between X = 450.00 ft.
and X = 500.00 ft.

Unless Further Limitations Were Imposed, The Minimum Elevation At Which A Surface Extends Is Y = 0.00 ft.

10.00 ft. Line Segments Define Each Trial Failure Surface.

Following Are Displayed The Ten Most Critical Of The Trial Failure Surfaces Examined. They Are Ordered - Most Critical First.

* * Safety Factors Are Calculated By The Modified Janbu Method * *

Failure Surface Specified By 11 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	397.22	69.74
2	405.05	63.52
3	414.93	62.00
4	424.92	62.51
5	433.38	67.85
6	440.55	74.82
7	447.28	82.22
8	454.45	89.19
9	456.53	98.97
10	460.11	108.31
11	464.74	116.47

*** 1.066 ***

Failure Surface Specified By 14 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	397.22	69.74
2	404.70	63.10
3	414.38	60.60
4	424.13	58.36
5	433.78	55.75
6	443.27	58.92
7	449.42	66.81
8	455.66	74.62
9	462.00	82.35
10	468.63	89.84
11	473.24	98.71
12	477.82	107.60
13	479.22	117.50
14	479.28	117.93

*** 1.128 ***

Failure Surface Specified By 12 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	397.22	69.74
2	406.95	67.43
3	416.48	64.40
4	426.47	64.99
5	436.36	66.41
6	444.14	72.70
7	450.71	80.23
8	458.06	87.02
9	463.93	95.11
10	466.76	104.71
11	467.89	114.64
12	467.94	116.79

*** 1.128 ***

Failure Surface Specified By 10 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	406.67	76.00
2	416.67	75.85
3	426.64	76.53
4	436.50	78.20
5	445.56	82.43
6	453.22	88.86
7	460.84	95.33
8	466.65	103.47
9	469.28	113.12
10	470.79	117.08

*** 1.149 ***

Failure Surface Specified By 10 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	397.22	69.74
2	407.15	68.56
3	417.15	68.84
4	427.15	68.96
5	434.67	75.56
6	442.72	81.49
7	445.83	90.99
8	449.63	100.24
9	452.83	109.72
10	454.26	115.43

*** 1.191 ***

Failure Surface Specified By 14 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	387.78	68.86
2	396.36	63.72
3	406.20	61.93
4	416.18	62.40
5	426.02	64.19
6	433.05	71.30
7	441.57	76.55
8	449.56	82.56
9	458.61	86.81
10	467.48	91.43
11	475.87	96.87
12	481.48	105.15
13	486.64	113.72
14	490.23	119.02

*** 1.216 ***

Failure Surface Specified By 11 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	397.22	69.74
2	405.92	64.80
3	415.85	63.61
4	425.76	62.29
5	435.00	66.11
6	439.19	75.19
7	443.52	84.20
8	446.96	93.59
9	448.37	103.49
10	450.93	113.16
11	451.55	115.16

*** 1.259 ***

Failure Surface Specified By 13 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	387.78	68.86
2	396.72	64.37

3	406.01	60.67
4	415.61	57.89
5	425.55	56.78
6	435.06	59.89
7	442.43	66.65
8	449.17	74.03
9	452.75	83.37
10	455.37	93.02
11	457.38	102.82
12	458.48	112.76
13	458.60	115.86

*** 1.270 ***

Failure Surface Specified By 7 Coordinate Points

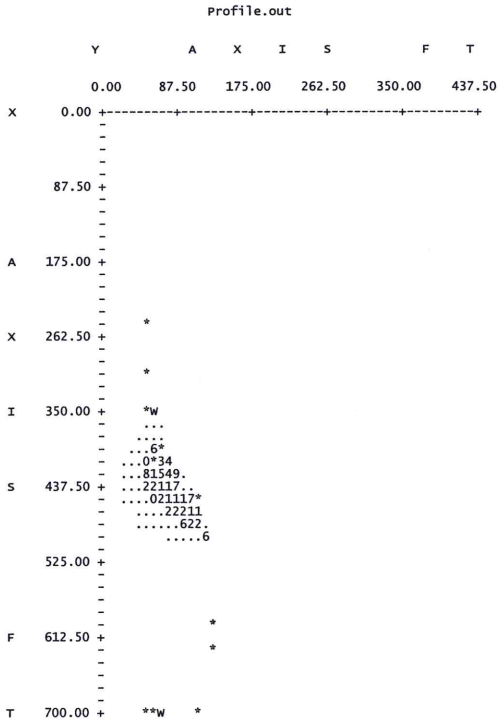
Point No.	X-Surf (ft)	Y-Surf (ft)
1	416.11	84.50
2	425.66	81.53
3	435.27	84.31
4	442.72	90.97
5	449.64	98.20
6	455.64	106.19
7	456.75	115.68

*** 1.273 ***

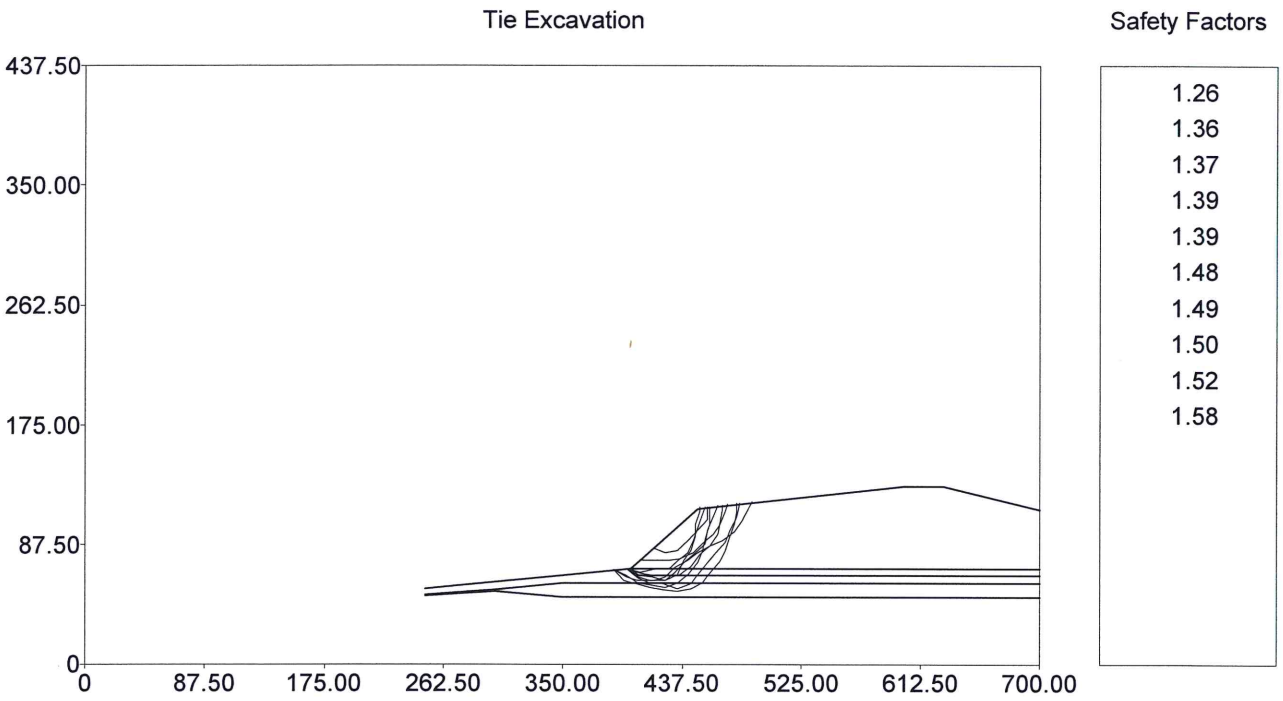
Failure Surface Specified By 15 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	387.78	68.86
2	394.85	61.79
3	404.26	58.40
4	414.11	56.72
5	423.88	54.54
6	433.85	53.77
7	443.52	56.30
8	452.93	59.68
9	458.81	67.77
10	465.14	75.51
11	469.79	84.37
12	473.40	93.69
13	477.01	103.02
14	478.30	112.94
15	478.76	117.88

*** 1.275 ***



Section E-E'
Random Janbu



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5	630.00	130.00	700.00	114.00	2
6	400.00	70.00	405.00	65.00	2
7	405.00	65.00	700.00	65.00	2
8	250.00	51.00	300.00	53.00	3
9	300.00	53.00	350.00	50.00	3
10	350.00	50.00	700.00	50.00	3

ISOTROPIC SOIL PARAMETERS

3 Type(s) of Soil

Soil Type No.	Total Unit Wt. (pcf)	Saturated Unit Wt. (pcf)	Cohesion Intercept (psf)	Friction Angle (deg)	Pore Pressure Param.	Pressure Constant (psf)	Piez. Surface No.
1	135.0	135.0	1200.0	0.0	0.00	0.0	1
2	70.0	70.0	200.0	26.0	0.00	0.0	2

3	145.0	145.0	3000.0	0.0	0.00	0.0	1

2 PIEZOMETRIC SURFACE(S) HAVE BEEN SPECIFIED

Unit Weight of Water = 62.40

Piezometric Surface No. 1 Specified by 4 Coordinate Points

Point No.	X-Water (ft)	Y-Water (ft)
1	250.00	52.00
2	300.00	54.00
3	350.00	60.00
4	700.00	60.00

Piezometric Surface No. 2 Specified by 2 Coordinate Points

Point No.	X-Water (ft)	Y-Water (ft)
1	400.00	70.00
2	700.00	70.00

A Critical Failure Surface Searching Method, Using A Random Technique For Generating Irregular Surfaces, Has Been Specified.

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* * Safety Factors Are Calculated By The Modified Janbu Method * *

Failure Surface Specified By 11 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	397.22	69.74
2	405.05	63.52
3	414.93	62.00
4	424.92	62.51
5	433.38	67.85
6	440.55	74.82
7	447.28	82.22
8	454.45	89.19
9	456.53	98.97
10	460.11	108.31
11	464.74	116.47

*** 1.263 ***

Failure Surface Specified By 12 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	397.22	69.74
2	406.95	67.43
3	416.48	64.40
4	426.47	64.99
5	436.36	66.41
6	444.14	72.70
7	450.71	80.23
8	458.06	87.02
9	463.93	95.11
10	466.76	104.71
11	467.89	114.64
12	467.94	116.79

*** 1.361 ***

Failure Surface Specified By 14 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	397.22	69.74
2	404.70	63.10
3	414.38	60.60
4	424.13	58.36
5	433.78	55.75

6	443.27	58.92
7	449.42	66.81
8	455.66	74.62
9	462.00	82.35
10	468.63	89.84
11	473.24	98.71
12	477.82	107.60
13	479.22	117.50
14	479.28	117.93

*** 1.368 ***

Failure Surface Specified By 10 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	397.22	69.74
2	407.15	68.56
3	417.15	68.84
4	427.15	68.96
5	434.67	75.56
6	442.72	81.49
7	445.83	90.99
8	449.63	100.24
9	452.83	109.72
10	454.26	115.43

*** 1.393 ***

Failure Surface Specified By 10 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	406.67	76.00
2	416.67	75.85
3	426.64	76.53
4	436.50	78.20
5	445.56	82.43
6	453.22	88.86
7	460.84	95.33
8	466.65	103.47
9	469.28	113.12
10	470.79	117.08

*** 1.394 ***

Failure Surface Specified By 11 Coordinate Points

Point	X-Surf	Y-Surf

No.	(ft)	(ft)
1	397.22	69.74
2	405.92	64.80
3	415.85	63.61
4	425.76	62.29
5	435.00	66.11
6	439.19	75.19
7	443.52	84.20
8	446.96	93.59
9	448.37	103.49
10	450.93	113.16
11	451.55	115.16

*** 1.482 ***

Failure Surface Specified By 14 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	387.78	68.86
2	396.36	63.72
3	406.20	61.93
4	416.18	62.40
5	426.02	64.19
6	433.05	71.30
7	441.57	76.55
8	449.56	82.56
9	458.61	86.81
10	467.48	91.43
11	475.87	96.87
12	481.48	105.15
13	486.64	113.72
14	490.23	119.02

*** 1.491 ***

Failure Surface Specified By 7 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	416.11	84.50
2	425.66	81.53
3	435.27	84.31
4	442.72	90.97
5	449.64	98.20
6	455.64	106.19
7	456.75	115.68

*** 1.504 ***

Failure Surface Specified By 13 Coordinate Points

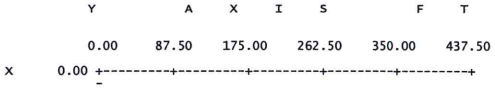
Point No.	X-Surf (ft)	Y-Surf (ft)
1	387.78	68.86
2	396.72	64.37
3	406.01	60.67
4	415.61	57.89
5	425.55	56.78
6	435.06	59.89
7	442.43	66.65
8	449.17	74.03
9	452.75	83.37
10	455.37	93.02
11	457.38	102.82
12	458.48	112.76
13	458.60	115.86

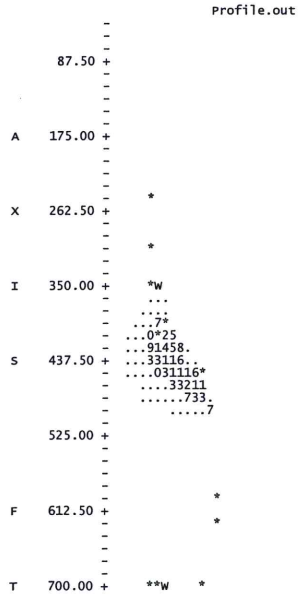
*** 1.523 ***

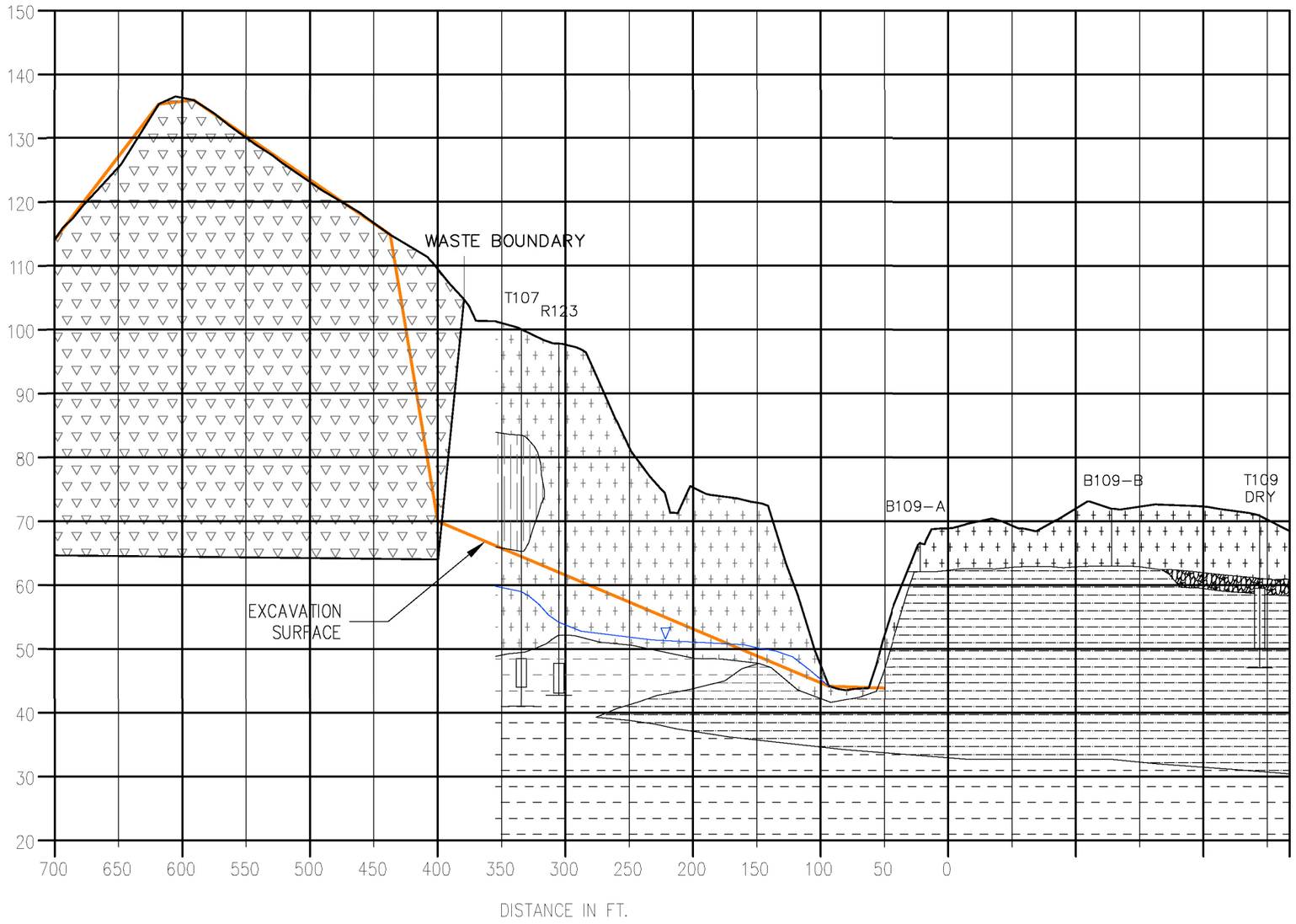
Failure Surface Specified By 15 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	387.78	68.86
2	394.85	61.79
3	404.26	58.40
4	414.11	56.72
5	423.88	54.54
6	433.85	53.77
7	443.52	56.30
8	452.93	59.68
9	458.81	67.77
10	465.14	75.51
11	469.79	84.37
12	473.40	93.69
13	477.01	103.02
14	478.30	112.94
15	478.76	117.88

*** 1.584 ***







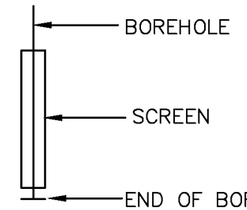
NOTES:

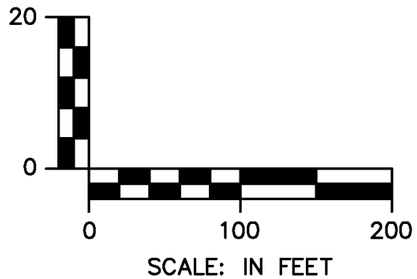
1. TOPOGRAPHIC SURFACE TAKEN FROM AERIAL PROVIDED BY AEROCON PHOTOGRAMMETRIC SERVICES, INC. FLOWN ON MARCH 23, 2010.
2. SOLID VERTICAL LINES REPRESENT BORINGS DRILLED FOR MONITORING WELL INSTALLATION.
3. GROUNDWATER ELEVATIONS REPRESENT AN AVERAGE OF GROUNDWATER ELEVATIONS MEASURED FROM SECOND QUARTER 2009 TO FIRST QUARTER 2010. WELLS T114–T123 GROUNDWATER ELEVATIONS MEASURED DURING FIRST QUARTER 2010.
4. DEPTH AND THICKNESS OF SUBSURFACE STRATA WERE GENERALIZED FROM AND INTERPOLATED BETWEEN BORINGS. INFORMATION ON ACTUAL SUBSURFACE CONDITIONS EXISTS ONLY AT THE LOCATION OF THE BORING.
5. B110–A GROUND SURFACE ELEVATION BASED ON 2010 AERIAL. BEDROCK WAS ENCOUNTERED LESS THAN 1.0 FOOT BELOW 2009 GROUND SURFACE ELEVATION (567.5 AMSL).
6. R124 GEOLOGY BASED ON BORING LOG FOR G124. COAL AT R124 IS NOTED ON BORING LOG G124 AS PROBABLE SILTED–IN MINE CAVERN.
7. OVERFILL AREA IDENTIFIED IN SHEET NO. 1 IS COMPOSED OF A COMBINATION OF MINE SPOIL/BACKFILL, RAILROAD TIES AND/OR OTHER MATERIALS.

EXPLANATION

- MINE SPOIL/DISTURBED
- SILTSTONE
- SHALE
- COAL
- WOOD DEBRIS
- SANDSTONE
- WASTE FILL
- GROUNDWATER

WELL DIAGRAM





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APPROVED BY: JLR | DESIGNED BY: JLR | DRAWN BY: WCU

SLOPE STABILITY CROSS SECTION E–E'

PLANS PREPARED FOR
BRICKYARD DISPOSAL & RECYCLING
DANVILLE, ILLINOIS

DATE: JUNE 2010

PROJECT ID: 89–115A

SHEET NUMBER:

E–E'

File: J:\1989\89-115A (Brickyard)\DWG\2011\RR X-SECTIONS_SLOPE STABILITY.dwg Tab: Layout4 User: mnguyen Plotted: Jul 20, 2012 - 8:58 AM

ATTACHMENT 8

USGS Gage Station Data

Brickyard Disposal and Recycling
Historical River Elevations
Average Annual Maximum Elevation 519.14 '

Maximum Elevation	Date	6/23/1960														
523.06	Gage Height	19.32														
	Elevation	523.06														
Maximum Elevation	Date	4/21/1964														
528.52	Gage Height	24.78														
	Elevation	528.52														
Maximum Elevation	Date	12/9/1966														
523.19	Gage Height	19.45														
	Elevation	523.19														
Maximum Elevation	Date	8/5/1968	9/11/1968	10/11/1968	11/12/1968	12/2/1968										
520.86	Gage Height	17.12	2.52	2.46	2.41	4.36										
	Elevation	520.86	506.26	506.2	506.15	508.1										
Maximum Elevation	Date	1/21/1969	2/10/1969	3/13/1969	4/7/1969	5/16/1969	6/9/1969	7/8/1969	8/14/1969	9/9/1969	10/3/1969	10/6/1969	11/6/1969	11/6/1969	12/4/1969	12/5/1969
512.54	Gage Height	5.2	8.8	3.4	8.2	4.24	3.31	3.26	2.44	2.3	2.09	2.39	3.39	4.4	3.71	4.16
	Elevation	508.94	512.54	507.14	511.94	507.98	507.05	507	506.18	506.04	505.83	506.13	507.13	508.14	507.45	507.9
Maximum Elevation	Date	1/12/1970	1/13/1970	2/11/1970	2/11/1970	3/11/1970	3/17/1970	4/14/1970	4/14/1970	5/20/1970	5/20/1970	6/11/1970	6/15/1970	7/7/1970	7/15/1970	8/6/1970
	Gage Height	3.28	2.8	3.46	4.34	3.61	4.02	6.89	5.5	4.87	4.96	3.79	4.21	3.25	2.66	3.03
	Elevation	507.02	506.54	507.2	508.08	507.35	507.76	510.63	509.24	508.61	508.7	507.53	507.95	506.99	506.4	506.77
510.63	Date	8/13/1970	9/1/1970	9/3/1970	10/7/1970	10/7/1970	11/10/1970	11/10/1970	12/3/1970	12/9/1970						
	Gage Height	1.96	1.55	2.37	3.39	1.92	3.79	3.21	3.92	3.48						
	Elevation	505.7	505.29	506.11	507.13	505.66	507.53	506.95	507.66	507.22						
Maximum Elevation	Date	1/6/1971	1/7/1971	2/2/1971	2/5/1971	3/2/1971	3/4/1971	4/6/1971	4/8/1971	5/4/1971	5/13/1971	6/8/1971	6/9/1971	7/7/1971	7/19/1971	8/2/1971
	Gage Height	4.38	3.38	2.64	8.88	5.81	4.2	3.8	3.44	2.7	7.06	3.25	3.03	5.33	6.2	4.62
	Elevation	508.12	507.12	506.38	512.62	509.55	507.94	507.54	507.18	506.44	510.8	506.99	506.77	509.07	509.94	508.36
515.28	Date	8/3/1971	9/10/1971	9/13/1971	10/5/1971	10/5/1971	11/2/1971	11/10/1971	12/1/1971	12/7/1971	12/16/1971					
	Gage Height	2.93	1.87	2.57	2.6	2.24	2.45	2.17	2.5	2.73	11.54					
	Elevation	506.67	505.61	506.31	506.34	505.98	506.19	505.91	506.24	506.47	515.28					
Maximum Elevation	Date	1/10/1972	1/12/1972	2/9/1972	2/17/1972	3/22/1972	4/4/1972	4/11/1972	4/20/1972	4/21/1972	5/8/1972	5/15/1972	6/1/1972	6/8/1972	7/10/1972	7/13/1972
	Gage Height	4.39	4.77	3.71	3.48	4.11	4.88	5.82	9.2	12.46	4.03	4.41	3.99	4.1	2.93	3.21
	Elevation	508.13	508.51	507.45	507.22	507.85	508.62	509.56	512.94	516.2	507.77	508.15	507.73	507.84	506.67	506.95
516.2	Date	8/8/1972	8/16/1972	9/8/1972	9/11/1972	10/6/1972	10/10/1972	11/3/1972	11/20/1972	12/1/1972	12/14/1972					
	Gage Height	2.68	2.64	8.1	3.34	6.86	3.8	10.74	6.18	5.26	9.2					
	Elevation	506.42	506.38	511.84	507.08	510.6	507.54	514.48	509.92	509	512.94					
Maximum Elevation	Date	1/9/1973	1/12/1973	2/6/1973	2/7/1973	3/5/1973	3/19/1973	4/11/1973	4/17/1973	4/23/1973	5/14/1973	5/16/1973	6/6/1973	6/8/1973	7/11/1973	7/13/1973
	Gage Height	5.81	4.17	6.14	5.06	4.57	8.07	5.82	5.5	12.81	4.39	3.95	8.6	8.96	3.96	3.38
	Elevation	509.55	507.91	509.88	508.8	508.31	511.81	509.56	509.24	516.55	508.13	507.69	512.34	512.7	507.7	507.12
516.55	Date	8/7/1973	8/13/1973	9/10/1973	9/11/1973	10/8/1973	10/9/1973	11/1/1973	11/5/1973	12/10/1973	12/12/1973					
	Gage Height	4.03	3.76	2.82	2.62	3.13	3.48	3.68	2.88	5.44	3.89					
	Elevation	507.77	507.5	506.56	506.36	506.87	507.22	507.42	506.62	509.18	507.63					
Maximum Elevation	Date	1/14/1974	1/21/1974	2/8/1974	2/11/1974	3/7/1974	3/8/1974	4/1/1974	4/5/1974	5/2/1974	5/8/1974	6/4/1974	6/6/1974	6/23/1974	6/23/1974	6/24/1974
	Gage Height	3.94	19.83	5.46	4.7	8.48	6.28	6.5	7.7	4.1	4.18	5.15	5.7	16.44	16.55	14.29
	Elevation	507.68	523.57	509.2	508.44	512.22	510.02	510.24	511.44	507.84	507.92	508.89	509.44	520.18	520.29	518.03
523.57	Date	7/2/1974	7/3/1974	8/6/1974	8/9/1974	9/12/1974	9/13/1974	10/2/1974	10/4/1974	11/5/1974	11/5/1974	12/2/1974	12/4/1974			
	Gage Height	5.1	5.03	2.63	2.7	2.56	3.39	2.38	2.51	4.06	4.08	3.4	3.46			
	Elevation	508.84	508.77	506.37	506.44	506.3	507.13	506.12	506.25	507.8	507.82	507.14	507.2			

Base Elevation = 503.74'
All Units in Feet (')
From USGS Station 03339000

Brickyard Disposal and Recycling
Historical River Elevations
Average Annual Maximum Elevation 519.14 '

Maximum Elevation	Date	1/6/1975	1/7/1975	1/16/1975	2/4/1975	2/20/1975	3/18/1975	4/4/1975	5/1/1975	5/8/1975	6/9/1975	6/23/1975	8/5/1975	8/11/1975	9/26/1975	9/30/1975
	Gage Height	4.6	4.39	6.27	6.17	5.76	4.37	5.5	5.44	3.9	3.44	4.27	2.8	3.03	3.14	3.01
	Elevation	508.34	508.13	510.01	509.91	509.5	508.11	509.24	509.18	507.64	507.18	508.01	506.54	506.77	506.88	506.75
514.7	Date	11/7/1975	11/14/1975	12/16/1975	12/22/1975											
	Gage Height	2.88	3.24	10.96	5.46											
	Elevation	506.62	506.98	514.7	509.2											
Maximum Elevation	Date	1/19/1976	1/30/1976	2/17/1976	2/20/1976	3/3/1976	3/23/1976	4/7/1976	5/6/1976	5/18/1976	6/18/1976	7/8/1976	7/29/1976	8/6/1976	9/7/1976	9/27/1976
	Gage Height	3.9	3.58	13.86	8.78	4.98	4.5	3.97	3.11	3.75	2.62	3.39	2.74	2.84	1.59	2.2
	Elevation	507.64	507.32	517.6	512.52	508.72	508.24	507.71	506.85	507.49	506.36	507.13	506.48	506.58	505.33	505.94
517.6	Date	10/13/1976	11/1/1976	11/30/1976	12/22/1976											
	Gage Height	1.95	2.24	2.1	2.2											
	Elevation	505.69	505.98	505.84	505.94											
Maximum Elevation	Date	1/4/1977	2/3/1977	2/25/1977	2/28/1977	3/29/1977	3/30/1977	5/3/1977	5/17/1977	6/23/1977	7/5/1977	7/29/1977	8/1/1977	8/29/1977	9/10/1977	10/3/1977
	Gage Height	1.89	2.16	4.24	2.78	9.32	7.95	3.28	4.07	2.3	2.24	1.54	2.25	2.44	3.11	16.26
	Elevation	505.63	505.9	507.98	506.52	513.06	511.69	507.02	507.81	506.04	505.98	505.28	505.99	506.18	506.85	520
520	Date	10/13/1977	10/26/1977	11/22/1977	12/1/1977											
	Gage Height	5.34	7.16	3.12	4.13											
	Elevation	509.08	510.9	506.86	507.87											
Maximum Elevation	Date	1/5/1978	1/17/1978	2/17/1978	2/27/1978	4/3/1978	4/11/1978	5/9/1978	5/15/1978	5/22/1978	5/22/1978	6/7/1978	6/21/1978	6/22/1978	7/28/1978	8/3/1978
	Gage Height	3.8	3.44	3.3	2.89	5.45	5.71	6.87	9.56	4.65	5.67	3.64	3.12	7.19	5.03	11.84
	Elevation	507.54	507.18	507.04	506.63	509.19	509.45	510.61	513.3	508.39	509.41	507.38	506.86	510.93	508.77	515.58
515.58	Date	8/15/1978	9/6/1978	9/20/1978	10/4/1978	10/31/1978	11/20/1978	12/13/1978								
	Gage Height	3.12	2.37	3.14	2.18	2.34	5	3.22								
	Elevation	506.86	506.11	506.88	505.92	506.08	508.74	506.96								
Maximum Elevation	Date	1/8/1979	1/22/1979	1/30/1979	2/21/1979	3/8/1979	4/12/1979	4/17/1979	5/16/1979	6/5/1979	7/3/1979	8/7/1979	8/17/1979	9/13/1979	10/10/1979	10/24/1979
	Gage Height	3.94	2.87	3.11	3.25	11.75	13.87	7.98	4.39	3.42	2.28	4.81	2.49	3.03	1.91	2.57
	Elevation	507.68	506.61	506.85	506.99	515.49	517.61	511.72	508.13	507.16	506.02	508.55	506.23	506.77	505.65	506.31
517.61	Date	11/20/1979	12/10/1979													
	Gage Height	2.3	2.89													
	Elevation	506.04	506.63													
Maximum Elevation	Date	1/3/1980	1/9/1980	2/3/1980	2/20/1980	3/20/1980	3/27/1980	5/8/1980	5/8/1980	6/4/1980	6/12/1980	6/19/1980	7/30/1980	8/12/1980	9/4/1980	10/3/1980
	Gage Height	3.22	3.02	2.41	2.8	6.61	6.31	3.48	3.33	20.12	3.6	4.22	1.7	2.39	1.98	2.25
	Elevation	506.96	506.76	506.15	506.54	510.35	510.05	507.22	507.07	523.86	507.34	507.96	505.44	506.13	505.72	505.99
523.86	Date	10/28/1980	11/13/1980	11/17/1980	11/24/1980											
	Gage Height	1.85	2.22	2.26	1.98											
	Elevation	505.59	505.96	506	505.72											
Maximum Elevation	Date	1/7/1981	1/14/1981	2/18/1981	3/5/1981	3/18/1981	4/3/1981	4/30/1981	5/13/1981	7/1/1981	8/12/1981	8/20/1981	8/28/1981	9/3/1981	9/23/1981	10/15/1981
	Gage Height	2.24	2.39	7.75	3.82	2.94	2.44	10.85	8.41	4.84	7.75	4.74	6.8	7.9	2.63	4.16
	Elevation	505.98	506.13	511.49	507.56	506.68	506.18	514.59	512.15	508.58	511.49	508.48	510.54	511.64	506.37	507.9
514.59	Date	12/1/1981	12/22/1981													
	Gage Height	3.8	3.29													
	Elevation	507.54	507.03													
Maximum Elevation	Date	2/8/1982	3/16/1982	4/27/1982	6/9/1982	7/20/1982	8/3/1982	10/13/1982	12/14/1982							
515.71	Gage Height	4.94	11.97	4.54	4.95	10.48	2.76	2.62	5.23							
	Elevation	508.68	515.71	508.28	508.69	514.22	506.5	506.36	508.97							
Maximum Elevation	Date	1/12/1983	3/3/1983	4/15/1983	5/3/1983	5/19/1983	6/27/1983	8/11/1983	9/13/1983	10/21/1983	12/5/1983					
527.28	Gage Height	4.41	3.61	13.24	23.54	5.58	3.86	2.48	2.1	2.27	6.22					
	Elevation	508.15	507.35	516.98	527.28	509.32	507.6	506.22	505.84	506.01	509.96					

Base Elevation = 503.74'
All Units in Feet (')
From USGS Station 03339000

Brickyard Disposal and Recycling
Historical River Elevations
Average Annual Maximum Elevation 519.14 '

Maximum Elevation 515.99	Date	1/24/1984	2/23/1984	4/6/1984	5/23/1984	6/21/1984	8/8/1984	10/11/1984	11/6/1984	12/27/1984						
	Gage Height	3.34	6.37	7.88	12.25	3.12	2.41	2.11	2.31	3.73						
	Elevation	507.08	510.11	511.62	515.99	506.86	506.15	505.85	506.05	507.47						
Maximum Elevation 508.85	Date	2/14/1985	3/20/1985	5/2/1985	6/13/1985	7/24/1985	9/10/1985	10/10/1985								
	Gage Height	3.08	5.11	3.9	3.06	2.62	2.94	2.13								
	Elevation	506.82	508.85	507.64	506.8	506.36	506.68	505.87								
Maximum Elevation 513.39	Date	1/15/1986	2/25/1986	4/4/1986	5/8/1986	6/24/1986	9/23/1986	11/4/1986	11/8/1986	12/9/1986	12/15/1986					
	Gage Height	3.22	4.18	3.71	9.65	3.46	2.54	2.88	2.22	5.14	4.18					
	Elevation	506.96	507.92	507.45	513.39	507.2	506.28	506.62	505.96	508.88	507.92					
Maximum Elevation 515.64	Date	1/22/1987	3/6/1987	4/20/1987	6/1/1987	7/10/1987	8/20/1987	10/2/1987	11/18/1987	12/22/1987						
	Gage Height	4.04	3.92	5.22	3.5	2.8	2.12	2.25	2.09	11.9						
	Elevation	507.78	507.66	508.96	507.24	506.54	505.86	505.99	505.83	515.64						
Maximum Elevation 507.9	Date	3/18/1988	5/4/1988	6/13/1988	7/13/1988	7/19/1988	7/27/1988	8/10/1988	9/2/1988	9/13/1988	10/11/1988	11/7/1988	12/13/1988			
	Gage Height	4.16	3.23	2.22	1.89	1.86	2.52	1.8	1.75	1.85	1.78	2.42	2.42			
	Elevation	507.9	506.97	505.96	505.63	505.6	506.26	505.54	505.49	505.59	505.52	506.16	506.16			
Maximum Elevation 512.94	Date	1/26/1989	3/8/1989	4/5/1989	4/17/1989	5/30/1989	7/17/1989	8/14/1989	10/2/1989	11/8/1989	12/18/1989					
	Gage Height	3.66	4.35	9.2	4.35	6.95	2.1	1.94	2.3	2.3	2.17					
	Elevation	507.4	508.09	512.94	508.09	510.69	505.84	505.68	506.04	506.04	505.91					
Maximum Elevation 528.24	Date	1/29/1990	3/12/1990	4/23/1990	5/17/1990	7/23/1990	10/4/1990	12/5/1990								
	Gage Height	3.13	22.44	4.75	24.5	7.41	2.23	6.58								
	Elevation	506.87	526.18	508.49	528.24	511.15	505.97	510.32								
Maximum Elevation 511.31	Date	3/20/1991	5/13/1991	7/22/1991	8/27/1991	10/10/1991	12/3/1991									
	Gage Height	7.57	4.59	2.12	1.95	2.05	4.65									
	Elevation	511.31	508.33	505.86	505.69	505.79	508.39									
Maximum Elevation 518.8	Date	1/21/1992	3/16/1992	5/8/1992	7/6/1992	7/27/1992	7/31/1992	10/5/1992	12/3/1992							
	Gage Height	3.18	3.62	3.44	2.97	8.03	15.06	2.33	4.93							
	Elevation	506.92	507.36	507.18	506.71	511.77	518.8	506.07	508.67							
Maximum Elevation 518.72	Date	1/25/1993	3/24/1993	6/2/1993	7/22/1993	9/14/1993	10/1/1993	10/2/1993	10/3/1993	10/4/1993	10/5/1993	10/6/1993	10/7/1993	10/8/1993	10/9/1993	10/10/1993
	Gage Height	10.61	11.63	4.83	5.26	3.88	5.76	5.45	5.1	4.76	4.5	4.38	4.22	4.17	5.34	7.92
	Elevation	514.35	515.37	508.57	509	507.62	509.5	509.19	508.84	508.5	508.24	508.12	507.96	507.91	509.08	511.66
	Date	10/11/1993	10/12/1993	10/13/1993	10/14/1993	10/15/1993	10/16/1993	10/17/1993	10/18/1993	10/19/1993	10/20/1993	10/21/1993	10/22/1993	10/23/1993	10/24/1993	10/25/1993
	Gage Height	6.83	5.85	5.49	4.85	4.58	4.82	12.64	14.98	13.97	11.74	11.9	10.67	8.46	7.2	6.55
	Elevation	510.57	509.59	509.23	508.59	508.32	508.56	516.38	518.72	517.71	515.48	515.64	514.41	512.2	510.94	510.29
	Date	10/26/1993	10/27/1993	10/28/1993	10/29/1993	10/30/1993	10/31/1993	11/1/1993	11/2/1993	11/3/1993	11/4/1993	11/5/1993	11/6/1993	11/7/1993	11/8/1993	11/9/1993
	Gage Height	5.97	5.73	5.38	5.1	4.87	4.62	4.5	4.38	4.34	4.33	4.29	4.21	4.01	3.83	3.79
	Elevation	509.71	509.47	509.12	508.84	508.61	508.36	508.24	508.12	508.08	508.07	508.03	507.95	507.75	507.57	507.53
	Date	11/10/1993	11/11/1993	11/12/1993	11/13/1993	11/14/1993	11/15/1993	11/16/1993	11/17/1993	11/18/1993	11/19/1993	11/20/1993	11/21/1993	11/22/1993	11/23/1993	11/24/1993
	Gage Height	3.76	3.74	3.81	3.93	4.95	8.83	7.85	9.78	12.93	11.11	8.77	7.24	6.26	5.85	5.59
	Elevation	507.5	507.48	507.55	507.67	508.69	512.57	511.59	513.52	516.67	514.85	512.51	510.98	510	509.59	509.33
	Date	11/25/1993	11/26/1993	11/27/1993	11/28/1993	11/29/1993	11/30/1993	12/1/1993	12/2/1993	12/3/1993	12/4/1993	12/5/1993	12/6/1993	12/7/1993	12/8/1993	12/9/1993
	Gage Height	5.64	9.96	12.18	9.29	7.56	6.79	6.05	6.54	9.85	9.13	9.59	8.21	7.05	6.16	5.84
	Elevation	509.38	513.7	515.92	513.03	511.3	510.53	509.79	510.28	513.59	512.87	513.33	511.95	510.79	509.9	509.58
	Date	12/10/1993	12/11/1993	12/12/1993	12/13/1993	12/14/1993	12/15/1993	12/16/1993	12/17/1993	12/18/1993	12/19/1993	12/20/1993	12/21/1993	12/22/1993	12/23/1993	12/24/1993
	Gage Height	5.65	5.32	4.93	4.84	5.07	5.59	5.94	5.49	5.31	5.42	5.51	5.84	5.59	5.23	4.9
	Elevation	509.39	509.06	508.67	508.58	508.81	509.33	509.68	509.23	509.05	509.16	509.25	509.58	509.33	508.97	508.64
	Date	12/25/1993	12/26/1993	12/27/1993	12/28/1993	12/29/1993	12/30/1993	12/31/1993								
	Gage Height	4.67	4.55	4.53	4.53	4.42	4.14	4.17								
	Elevation	508.41	508.29	508.27	508.27	508.16	507.88	507.91								

Base Elevation = 503.74'
All Units in Feet (')
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Brickyard Disposal and Recycling
Historical River Elevations
Average Annual Maximum Elevation 519.14 '

Maximum Elevation	Date	1/1/1994	1/2/1994	1/3/1994	1/4/1994	1/5/1994	1/6/1994	1/7/1994	1/8/1994	1/9/1994	1/10/1994	1/11/1994	1/12/1994	1/13/1994	1/14/1994	1/15/1994
	Gage Height	4.56	4.43	4.23	4.04	3.92	3.86	3.84	3.45	3.41	3.88	3.73	3.72	3.69	3.54	3.2
	Elevation	508.3	508.17	507.97	507.78	507.66	507.6	507.58	507.19	507.15	507.62	507.47	507.46	507.43	507.28	506.94
	Date	1/16/1994	1/17/1994	1/18/1994	1/19/1994	1/20/1994	1/21/1994	1/26/1994	1/27/1994	1/28/1994	1/29/1994	1/30/1994	1/31/1994	2/1/1994	2/2/1994	2/3/1994
	Gage Height	3.42	3.71	3.7	3.68	3.61	3.71	7.19	6.96	14.35	13.14	8.19	5.49	4.31	4.3	4.4
	Elevation	507.16	507.45	507.44	507.42	507.35	507.45	510.93	510.7	518.09	516.88	511.93	509.23	508.05	508.04	508.14
	Date	2/4/1994	2/5/1994	2/6/1994	2/7/1994	2/8/1994	2/9/1994	2/10/1994	2/11/1994	2/12/1994	2/13/1994	2/14/1994	2/15/1994	2/16/1994	2/17/1994	2/18/1994
	Gage Height	4.18	3.94	3.75	3.85	3.84	3.71	3.49	3.62	3.44	3.35	3.32	4.42	6.12	5.99	5.81
	Elevation	507.92	507.68	507.49	507.59	507.58	507.45	507.23	507.36	507.18	507.09	507.06	508.16	509.86	509.73	509.55
	Date	2/19/1994	2/20/1994	2/21/1994	2/22/1994	2/23/1994	2/24/1994	2/25/1994	2/26/1994	2/27/1994	2/28/1994	3/1/1994	3/2/1994	3/3/1994	3/4/1994	3/5/1994
	Gage Height	6.06	6.13	6.15	5.47	4.9	4.58	3.91	3.66	3.42	3.71	3.73	3.65	3.65	4.03	5.71
	Elevation	509.8	509.87	509.89	509.21	508.64	508.32	507.65	507.4	507.16	507.45	507.47	507.39	507.39	507.77	509.45
	Date	3/6/1994	3/7/1994	3/8/1994	3/9/1994	3/10/1994	3/11/1994	3/12/1994	3/13/1994	3/14/1994	3/15/1994	3/16/1994	3/17/1994	3/18/1994	3/19/1994	3/20/1994
	Gage Height	6.68	8.23	10.05	8.09	6.71	6.1	5.54	5.4	5.29	5.17	4.97	4.73	4.65	4.56	4.4
	Elevation	510.42	511.97	513.79	511.83	510.45	509.84	509.28	509.14	509.03	508.91	508.71	508.47	508.39	508.3	508.14
	Date	3/21/1994	3/22/1994	3/23/1994	3/24/1994	3/25/1994	3/26/1994	3/27/1994	3/28/1994	3/29/1994	3/30/1994	3/31/1994	4/1/1994	4/2/1994	4/3/1994	4/4/1994
	Gage Height	4.31	4.19	4.11	4.08	4.03	3.96	4.08	4.4	4.37	4.18	4.05	4.03	4.03	4.15	4.41
	Elevation	508.05	507.93	507.85	507.82	507.77	507.7	507.82	508.14	508.11	507.92	507.79	507.77	507.77	507.89	508.15
	Date	4/5/1994	4/6/1994	4/7/1994	4/8/1994	4/9/1994	4/10/1994	4/11/1994	4/12/1994	4/13/1994	4/14/1994	4/15/1994	4/16/1994	4/17/1994	4/18/1994	4/19/1994
	Gage Height	4.41	4.62	4.67	5.03	5.45	7.67	10.54	26.62	30.92	26.5	19.92	15.13	11.32	9.33	8.67
	Elevation	508.15	508.36	508.41	508.77	509.19	511.41	514.28	530.36	534.66	530.24	523.66	518.87	515.06	513.07	512.41
	Date	4/20/1994	4/21/1994	4/22/1994	4/23/1994	4/24/1994	4/25/1994	4/26/1994	4/27/1994	4/28/1994	4/29/1994	4/30/1994	5/1/1994	5/2/1994	5/3/1994	5/4/1994
	Gage Height	7.88	7.37	6.88	6.63	6.35	6.1	5.93	8.08	10.32	12.04	10.59	11.28	9.9	8.33	7.7
	Elevation	511.62	511.11	510.62	510.37	510.09	509.84	509.67	511.82	514.06	515.78	514.33	515.02	513.64	512.07	511.44
534.66	Date	5/5/1994	5/6/1994	5/7/1994	5/8/1994	5/9/1994	5/10/1994	5/11/1994	5/12/1994	5/13/1994	5/14/1994	5/15/1994	5/16/1994	5/17/1994	5/18/1994	5/19/1994
	Gage Height	6.94	6.87	8.85	10.36	8.98	7.91	6.94	6.67	6.41	6.21	6.09	5.81	5.56	5.19	5.05
	Elevation	510.68	510.61	512.59	514.1	512.72	511.65	510.68	510.41	510.15	509.95	509.83	509.55	509.3	508.93	508.79
	Date	5/20/1994	5/21/1994	5/22/1994	5/23/1994	5/24/1994	5/25/1994	5/26/1994	5/27/1994	5/28/1994	5/29/1994	5/30/1994	5/31/1994	6/1/1994	6/2/1994	6/3/1994
	Gage Height	5.07	5.08	5.01	4.91	4.85	6.86	6.43	5.62	5.05	4.84	4.71	4.64	4.89	4.45	4.35
	Elevation	508.81	508.82	508.75	508.65	508.59	510.6	510.17	509.36	508.79	508.58	508.45	508.38	508.63	508.19	508.09
	Date	6/4/1994	6/5/1994	6/6/1994	6/7/1994	6/8/1994	6/9/1994	6/10/1994	6/11/1994	6/12/1994	6/13/1994	6/14/1994	6/15/1994	6/16/1994	6/17/1994	6/18/1994
	Gage Height	4.3	4.22	4.14	4.1	4.08	4.27	4.45	4.26	4.19	4.14	4.18	5.65	4.77	4.37	4.1
	Elevation	508.04	507.96	507.88	507.84	507.82	508.01	508.19	508	507.93	507.88	507.92	509.39	508.51	508.11	507.84
	Date	6/19/1994	6/20/1994	6/21/1994	6/22/1994	6/23/1994	6/24/1994	6/25/1994	6/26/1994	6/27/1994	6/28/1994	6/29/1994	6/30/1994	7/1/1994	7/2/1994	7/3/1994
	Gage Height	4.02	3.86	4.15	4.15	3.82	3.99	4.39	4.23	3.96	3.72	3.59	3.76	3.57	3.51	3.66
	Elevation	507.76	507.6	507.89	507.89	507.56	507.73	508.13	507.97	507.7	507.46	507.33	507.5	507.31	507.25	507.4
	Date	7/4/1994	7/5/1994	7/6/1994	7/7/1994	7/8/1994	7/9/1994	7/10/1994	7/11/1994	7/12/1994	7/13/1994	7/14/1994	7/15/1994	7/16/1994	7/17/1994	7/18/1994
	Gage Height	3.82	3.69	4.03	4.61	4.12	3.97	3.62	3.47	3.33	3.2	3.16	3.09	3.08	3.08	3.04
	Elevation	507.56	507.43	507.77	508.35	507.86	507.71	507.36	507.21	507.07	506.94	506.9	506.83	506.82	506.82	506.78
	Date	7/19/1994	7/20/1994	7/21/1994	7/22/1994	7/23/1994	7/24/1994	7/25/1994	7/26/1994	7/27/1994	7/28/1994	7/29/1994	7/30/1994	7/31/1994	8/1/1994	8/2/1994
	Gage Height	3.02	3.02	3.33	3.39	3.25	3.11	3.06	2.93	2.89	2.86	2.74	2.74	2.72	2.67	2.68
	Elevation	506.76	506.76	507.07	507.13	506.99	506.85	506.8	506.67	506.63	506.6	506.48	506.48	506.46	506.41	506.42
	Date	8/3/1994	8/4/1994	8/5/1994	8/6/1994	8/7/1994	8/8/1994	8/9/1994	8/10/1994	8/11/1994	8/12/1994	8/13/1994	8/14/1994	8/15/1994	8/16/1994	8/17/1994
	Gage Height	2.76	2.7	2.77	2.93	2.82	2.71	2.65	2.63	2.86	2.68	2.69	2.81	3.1	2.97	2.79
	Elevation	506.5	506.44	506.51	506.67	506.56	506.45	506.39	506.37	506.6	506.42	506.43	506.55	506.84	506.71	506.53
	Date	8/23/1994	8/24/1994	8/25/1994	8/26/1994	8/27/1994	8/28/1994	8/29/1994	8/30/1994	8/31/1994	9/1/1994	9/2/1994	9/3/1994	9/4/1994	9/5/1994	9/6/1994
	Gage Height	3.32	3.2	2.66	2.62	2.63	2.65	2.74	3.02	2.96	2.97	3.09	2.79	2.68	2.8	2.72
	Elevation	507.06	506.94	506.4	506.36	506.37	506.39	506.48	506.76	506.7	506.71	506.83	506.53	506.42	506.54	506.46

Base Elevation = 503.74'
All Units in Feet (')
From USGS Station 03339000

Brickyard Disposal and Recycling
Historical River Elevations
Average Annual Maximum Elevation 519.14 '

Maximum Elevation	Date	9/7/1994	9/8/1994	9/9/1994	9/10/1994	9/11/1994	9/12/1994	9/13/1994	9/14/1994	9/15/1994	9/16/1994	9/17/1994	9/18/1994	9/19/1994	9/20/1994	10/6/1994
	Gage Height	2.86	2.75	2.64	2.64	2.6	2.56	2.6	2.61	2.59	2.59	2.77	2.88	2.87	2.64	2.54
	Elevation	506.6	506.49	506.38	506.38	506.34	506.3	506.34	506.35	506.33	506.33	506.51	506.62	506.61	506.38	506.28
	Date	10/7/1994	10/8/1994	10/9/1994	10/10/1994	10/11/1994	10/12/1994	10/13/1994	10/14/1994	10/15/1994	10/16/1994	10/17/1994	10/18/1994	10/19/1994	10/20/1994	10/27/1994
	Gage Height	2.54	2.6	2.74	3.11	3.04	2.83	2.77	2.8	2.72	2.66	2.63	2.62	2.64	2.64	2.76
	Elevation	506.28	506.34	506.48	506.85	506.78	506.57	506.51	506.54	506.46	506.4	506.37	506.36	506.38	506.38	506.5
	Date	11/5/1994	11/6/1994	11/7/1994	11/8/1994	11/9/1994	11/10/1994	11/11/1994	11/12/1994	11/13/1994	11/14/1994	11/15/1994	11/16/1994	11/17/1994	11/18/1994	11/19/1994
	Gage Height	3.46	4.31	4.44	3.78	3.67	4.26	4.86	4.15	3.76	3.67	3.63	3.72	3.61	3.5	3.43
	Elevation	507.2	508.05	508.18	507.52	507.41	508	508.6	507.89	507.5	507.41	507.37	507.46	507.35	507.24	507.17
534.66	Date	11/20/1994	11/21/1994	11/22/1994	11/23/1994	11/24/1994	11/25/1994	11/26/1994	11/27/1994	11/28/1994	11/29/1994	11/30/1994	12/1/1994	12/2/1994	12/3/1994	12/4/1994
	Gage Height	3.37	3.4	3.53	3.68	3.58	3.49	3.44	3.54	4.55	4.86	4.21	3.88	3.76	3.68	3.62
	Elevation	507.11	507.14	507.27	507.42	507.32	507.23	507.18	507.28	508.29	508.6	507.95	507.62	507.5	507.42	507.36
	Date	12/5/1994	12/6/1994	12/7/1994	12/8/1994	12/9/1994	12/10/1994	12/11/1994	12/12/1994	12/13/1994	12/14/1994	12/15/1994	12/16/1994	12/17/1994	12/18/1994	12/19/1994
	Gage Height	3.55	3.53	4.64	7.22	6.38	5.7	5.35	4.7	4.44	4.3	4.1	4.14	4.74	5.37	4.88
	Elevation	507.29	507.27	508.38	510.96	510.12	509.44	509.09	508.44	508.18	508.04	507.84	507.88	508.48	509.11	508.62
	Date	12/20/1994	12/21/1994	12/22/1994	12/23/1994	12/24/1994	12/25/1994	12/26/1994	12/27/1994	12/28/1994	12/29/1994	12/30/1994	12/31/1994			
	Gage Height	4.53	4.39	4.29	4.2	4.09	3.89	3.83	3.79	3.76	3.73	3.73	3.72			
	Elevation	508.27	508.13	508.03	507.94	507.83	507.63	507.57	507.53	507.5	507.47	507.47	507.46			

Maximum Elevation	Date	1/1/1995	1/2/1995	1/3/1995	1/4/1995	1/5/1995	1/6/1995	1/7/1995	1/8/1995	1/9/1995	1/10/1995	1/11/1995	1/12/1995	1/13/1995	1/14/1995	1/15/1995
	Gage Height	3.73	3.55	3.4	3.33	3.49	3.53	3.54	3.55	3.59	3.97	3.76	3.64	4.83	9.41	10.42
	Elevation	507.47	507.29	507.14	507.07	507.23	507.27	507.28	507.29	507.33	507.71	507.5	507.38	508.57	513.15	514.16
	Date	1/16/1995	1/17/1995	1/18/1995	1/19/1995	1/20/1995	1/21/1995	1/22/1995	1/23/1995	1/24/1995	1/30/1995	1/31/1995	2/1/1995	2/4/1995	2/10/1995	2/11/1995
	Gage Height	8.66	7.12	6.26	6.13	8.54	8.38	6.73	5.68	5.22	4.06	4.48	4.49	3.99	3.96	3.82
	Elevation	512.4	510.86	510	509.87	512.28	512.12	510.47	509.42	508.96	507.8	508.22	508.23	507.73	507.7	507.56
	Date	2/12/1995	2/13/1995	2/17/1995	2/18/1995	2/19/1995	2/27/1995	3/28/1995	3/29/1995	3/30/1995	3/31/1995	4/1/1995	4/2/1995	4/3/1995	4/4/1995	4/5/1995
	Gage Height	3.58	3.44	3.62	3.6	3.58	3.48	4.85	5.17	4.79	4.63	4.49	4.42	4.3	4.22	4.16
	Elevation	507.32	507.18	507.36	507.34	507.32	507.22	508.59	508.91	508.53	508.37	508.23	508.16	508.04	507.96	507.9
	Date	4/6/1995	4/7/1995	4/8/1995	4/9/1995	4/10/1995	4/11/1995	4/22/1995	4/23/1995	4/24/1995	4/25/1995	4/26/1995	4/27/1995	4/28/1995	4/29/1995	4/30/1995
	Gage Height	4.1	4.12	4.21	4.76	4.98	6.41	7.81	6.61	6.21	5.75	5.38	5.26	5.16	4.77	4.87
	Elevation	507.84	507.86	507.95	508.5	508.72	510.15	511.55	510.35	509.95	509.49	509.12	509	508.9	508.51	508.61
	Date	5/1/1995	5/2/1995	5/3/1995	5/4/1995	5/5/1995	5/6/1995	5/7/1995	5/8/1995	5/9/1995	5/10/1995	5/11/1995	5/12/1995	5/13/1995	5/14/1995	5/15/1995
	Gage Height	4.88	4.78	4.66	4.55	4.44	4.25	4.2	4.26	4.42	6.13	7.13	7.11	6.14	7.65	9.19
	Elevation	508.62	508.52	508.4	508.29	508.18	507.99	507.94	508	508.16	509.87	510.87	510.85	509.88	511.39	512.93
521.97	Date	5/16/1995	5/17/1995	5/18/1995	5/19/1995	5/20/1995	5/21/1995	5/22/1995	5/23/1995	5/24/1995	5/25/1995	5/26/1995	5/27/1995	5/28/1995	6/3/1995	6/4/1995
	Gage Height	7.59	16.49	16.6	18.23	15.56	12.03	8.89	7.55	9.06	13.25	13.67	12.26	12.44	5.96	5.63
	Elevation	511.33	520.23	520.34	521.97	519.3	515.77	512.63	511.29	512.8	516.99	517.41	516	516.18	509.7	509.37
	Date	6/5/1995	6/7/1995	6/8/1995	6/9/1995	6/15/1995	6/16/1995	6/17/1995	6/18/1995	6/19/1995	6/20/1995	6/21/1995	6/22/1995	6/23/1995	6/24/1995	6/25/1995
	Gage Height	5.37	5.15	5.04	4.81	4.64	4.49	4.33	4.24	4.18	4.15	4.22	4.26	4.1	4.12	5.39
	Elevation	509.11	508.89	508.78	508.55	508.38	508.23	508.07	507.98	507.92	507.89	507.96	508	507.84	507.86	509.13
	Date	6/26/1995	6/27/1995	6/28/1995	6/29/1995	6/30/1995	7/1/1995	7/2/1995	7/3/1995	7/4/1995	7/5/1995	7/6/1995	7/7/1995	7/8/1995	7/9/1995	7/10/1995
	Gage Height	4.85	5.94	4.97	4.68	5.17	4.69	4.28	4.04	3.97	3.99	3.9	3.76	3.61	3.55	3.95
	Elevation	508.59	509.68	508.71	508.42	508.91	508.43	508.02	507.78	507.71	507.73	507.64	507.5	507.35	507.29	507.69
	Date	7/11/1995	7/12/1995	7/13/1995	7/14/1995	7/15/1995	7/16/1995	7/17/1995	7/18/1995	7/19/1995	7/20/1995	7/21/1995	7/22/1995	7/23/1995	7/24/1995	7/25/1995
	Gage Height	3.7	3.55	3.42	3.34	3.27	3.22	3.17	3.1	3.04	3.02	3.03	3.01	3.14	3.01	3.02
	Elevation	507.44	507.29	507.16	507.08	507.01	506.96	506.91	506.84	506.78	506.76	506.77	506.75	506.88	506.75	506.76
	Date	7/26/1995	7/27/1995	7/28/1995	7/29/1995	7/30/1995	7/31/1995	8/1/1995	8/2/1995	8/3/1995	8/4/1995	8/5/1995	8/6/1995	8/7/1995	8/8/1995	8/9/1995
	Gage Height	2.87	2.76	2.75	2.7	2.93	2.76	2.68	2.95	2.93	2.82	3.01	3.36	3.99	5.28	4.6
	Elevation	506.61	506.5	506.49	506.44	506.67	506.5	506.42	506.69	506.67	506.56	506.75	507.1	507.73	509.02	508.34

Base Elevation = 503.74'
All Units in Feet (')
From USGS Station 03339000

Brickyard Disposal and Recycling
Historical River Elevations
Average Annual Maximum Elevation 519.14 '

Maximum Elevation	Date	8/10/1995	8/11/1995	8/12/1995	8/13/1995	8/14/1995	8/15/1995	8/16/1995	8/17/1995	8/18/1995	8/19/1995	8/20/1995	8/21/1995	8/22/1995	8/23/1995	8/24/1995
	Gage Height	5.81	5.05	4.11	3.62	3.33	3.11	3.26	3.13	3.08	3.81	4.09	3.98	3.81	3.42	3.18
	Elevation	509.55	508.79	507.85	507.36	507.07	506.85	507	506.87	506.82	507.55	507.83	507.72	507.55	507.16	506.92
	Date	8/25/1995	8/26/1995	8/27/1995	8/28/1995	8/29/1995	8/30/1995	8/31/1995	9/1/1995	9/2/1995	9/3/1995	9/4/1995	9/5/1995	9/6/1995	9/7/1995	9/8/1995
	Gage Height	3	2.87	2.8	2.71	2.67	2.65	2.61	2.58	2.52	2.51	2.48	2.42	2.4	2.39	2.5
	Elevation	506.74	506.61	506.54	506.45	506.41	506.39	506.35	506.32	506.26	506.25	506.22	506.16	506.14	506.13	506.24
	Date	9/9/1995	9/10/1995	9/11/1995	9/12/1995	9/13/1995	9/14/1995	9/15/1995	9/16/1995	9/17/1995	9/18/1995	9/19/1995	9/20/1995	9/21/1995	9/22/1995	9/23/1995
	Gage Height	2.63	2.64	2.47	2.42	2.4	2.41	2.4	2.38	2.39	2.41	2.35	2.47	2.43	2.4	2.38
	Elevation	506.37	506.38	506.21	506.16	506.14	506.15	506.14	506.12	506.13	506.15	506.09	506.21	506.17	506.14	506.12
	Date	9/24/1995	9/25/1995	9/26/1995	9/27/1995	9/28/1995	9/29/1995	9/30/1995	10/1/1995	10/2/1995	10/3/1995	10/4/1995	10/5/1995	10/6/1995	10/7/1995	10/8/1995
	Gage Height	2.41	2.39	2.36	2.35	2.33	2.31	2.29	2.25	2.21	2.62	2.56	2.64	2.68	2.49	2.39
	Elevation	506.15	506.13	506.1	506.09	506.07	506.05	506.03	505.99	505.95	506.36	506.3	506.38	506.42	506.23	506.13
	Date	10/9/1995	10/10/1995	10/11/1995	10/12/1995	10/13/1995	10/14/1995	10/15/1995	10/16/1995	10/17/1995	10/18/1995	10/19/1995	10/20/1995	10/21/1995	10/22/1995	10/23/1995
	Gage Height	2.39	2.33	2.31	2.3	2.31	2.32	2.3	2.29	2.59	2.35	2.32	2.45	2.38	2.69	2.55
	Elevation	506.13	506.07	506.05	506.04	506.05	506.06	506.04	506.03	506.33	506.09	506.06	506.19	506.12	506.43	506.29
521.97	Date	10/24/1995	10/25/1995	10/26/1995	10/27/1995	10/28/1995	10/29/1995	10/30/1995	10/31/1995	11/1/1995	11/2/1995	11/3/1995	11/4/1995	11/5/1995	11/6/1995	11/7/1995
	Gage Height	2.41	2.42	2.46	2.62	2.47	2.94	2.74	2.77	2.75	3.34	3.71	3.98	3.48	3.54	3.19
	Elevation	506.15	506.16	506.2	506.36	506.21	506.68	506.48	506.51	506.49	507.08	507.45	507.72	507.22	507.28	506.93
	Date	11/8/1995	11/9/1995	11/10/1995	11/11/1995	11/12/1995	11/13/1995	11/14/1995	11/15/1995	11/16/1995	11/17/1995	11/18/1995	11/19/1995	11/20/1995	11/21/1995	11/22/1995
	Gage Height	3.04	3.03	2.92	3.14	3.93	4.5	4.15	3.89	3.65	3.56	3.75	3.9	3.72	3.55	3.39
	Elevation	506.78	506.77	506.66	506.88	507.67	508.24	507.89	507.63	507.39	507.3	507.49	507.64	507.46	507.29	507.13
	Date	11/23/1995	11/24/1995	11/25/1995	11/26/1995	11/27/1995	11/28/1995	11/29/1995	11/30/1995	12/1/1995	12/2/1995	12/3/1995	12/4/1995	12/5/1995	12/6/1995	12/7/1995
	Gage Height	3.27	3.2	3.13	3.04	3.04	3.03	3.03	2.99	2.93	2.93	2.93	2.88	2.82	2.79	2.76
	Elevation	507.01	506.94	506.87	506.78	506.78	506.77	506.77	506.73	506.67	506.67	506.67	506.62	506.56	506.53	506.5
	Date	12/8/1995	12/9/1995	12/10/1995	12/11/1995	12/12/1995	12/13/1995	12/14/1995	12/15/1995	12/16/1995	12/17/1995	12/18/1995	12/19/1995	12/20/1995	12/21/1995	12/22/1995
	Gage Height	2.7	2.55	2.58	2.63	2.6	2.6	2.7	2.76	2.78	2.8	2.94	3.21	3.45	3.41	3.11
	Elevation	506.44	506.29	506.32	506.37	506.34	506.34	506.44	506.5	506.52	506.54	506.68	506.95	507.19	507.15	506.85
	Date	12/23/1995	12/24/1995	12/25/1995	12/26/1995	12/27/1995	12/28/1995	12/29/1995	12/30/1995	12/31/1995						
	Gage Height	3.06	2.94	2.87	2.96	2.79	2.77	2.66	2.67	2.71						
	Elevation	506.8	506.68	506.61	506.7	506.53	506.51	506.4	506.41	506.45						

Maximum Elevation	Date	1/1/1996	1/2/1996	1/3/1996	1/4/1996	1/5/1996	1/6/1996	1/7/1996	1/8/1996	1/9/1996	1/10/1996	1/11/1996	1/12/1996	1/13/1996	1/14/1996	1/15/1996
	Gage Height	2.76	3.02	2.95	2.94	2.78	2.76	2.77	2.73	2.7	2.67	2.7	2.73	2.79	2.88	2.95
	Elevation	506.5	506.76	506.69	506.68	506.52	506.5	506.51	506.47	506.44	506.41	506.44	506.47	506.53	506.62	506.69
	Date	1/16/1996	1/17/1996	1/18/1996	1/19/1996	1/20/1996	1/21/1996	1/22/1996	1/23/1996	1/24/1996	1/25/1996	1/26/1996	1/27/1996	1/28/1996	1/29/1996	1/30/1996
	Gage Height	3	3.21	6.2	9.14	6.53	5.32	4.96	4.76	5.32	5.28	4.72	4.82	4.38	4.47	4.18
	Elevation	506.74	506.95	509.94	512.88	510.27	509.06	508.7	508.5	509.06	509.02	508.46	508.56	508.12	508.21	507.92
	Date	1/31/1996	2/1/1996	2/2/1996	2/3/1996	2/4/1996	2/5/1996	2/6/1996	2/7/1996	2/8/1996	2/9/1996	2/10/1996	2/11/1996	2/12/1996	2/13/1996	2/14/1996
524.58	Gage Height	3.78	4.3	4.41	3.86	3.61	3.47	3.38	3.4	3.56	3.72	3.96	3.9	3.76	3.51	3.37
	Elevation	507.52	508.04	508.15	507.6	507.35	507.21	507.12	507.14	507.3	507.46	507.7	507.64	507.5	507.25	507.11
	Date	2/15/1996	2/16/1996	2/17/1996	2/18/1996	2/19/1996	2/20/1996	2/21/1996	2/22/1996	2/23/1996	2/24/1996	2/25/1996	2/26/1996	2/27/1996	2/28/1996	2/29/1996
	Gage Height	3.35	3.31	3.23	3.24	3.21	3.28	3.25	3.2	3.2	3.27	3.35	3.4	4.65	5.23	4.95
	Elevation	507.09	507.05	506.97	506.98	506.95	507.02	506.99	506.94	506.94	507.01	507.09	507.14	508.39	508.97	508.69
	Date	3/1/1996	3/2/1996	3/3/1996	3/4/1996	3/5/1996	3/6/1996	3/7/1996	3/8/1996	3/9/1996	3/10/1996	3/11/1996	3/12/1996	3/13/1996	3/14/1996	3/15/1996
	Gage Height	4.34	4.07	3.85	3.54	4.09	4.86	4.79	4.05	4.03	4.3	3.88	3.78	3.76	3.71	3.76
	Elevation	508.08	507.81	507.59	507.28	507.83	508.6	508.53	507.79	507.77	508.04	507.62	507.52	507.5	507.45	507.5

Base Elevation = 503.74'
All Units in Feet (')
From USGS Station 03339000

Brickyard Disposal and Recycling
Historical River Elevations
Average Annual Maximum Elevation 519.14 '

Maximum Elevation	Date	3/16/1996	3/17/1996	3/18/1996	3/19/1996	3/20/1996	3/21/1996	3/22/1996	3/23/1996	3/24/1996	3/25/1996	3/26/1996	3/27/1996	3/28/1996	3/29/1996	3/30/1996
	Gage Height	3.69	3.68	3.69	3.65	3.72	3.63	3.56	3.63	3.85	4.61	4.5	3.86	3.75	3.69	3.63
	Elevation	507.43	507.42	507.43	507.39	507.46	507.37	507.3	507.37	507.59	508.35	508.24	507.6	507.49	507.43	507.37
	Date	3/31/1996	4/1/1996	4/2/1996	4/3/1996	4/4/1996	4/5/1996	4/6/1996	4/7/1996	4/8/1996	4/9/1996	4/10/1996	4/11/1996	4/12/1996	4/13/1996	4/14/1996
	Gage Height	3.99	5.56	5.57	5.17	4.81	4.44	4.12	4.03	3.97	3.84	3.7	3.65	3.65	3.68	3.64
	Elevation	507.73	509.3	509.31	508.91	508.55	508.18	507.86	507.77	507.71	507.58	507.44	507.39	507.39	507.42	507.38
	Date	4/15/1996	4/16/1996	4/17/1996	4/18/1996	4/19/1996	4/20/1996	4/21/1996	4/22/1996	4/23/1996	4/24/1996	4/25/1996	4/26/1996	4/27/1996	4/28/1996	4/29/1996
	Gage Height	3.58	3.68	3.56	3.45	3.47	3.86	4.28	5.34	7.33	6.5	5.77	5.38	4.84	4.69	7.25
	Elevation	507.32	507.42	507.3	507.19	507.21	507.6	508.02	509.08	511.07	510.24	509.51	509.12	508.58	508.43	510.99
	Date	4/30/1996	5/1/1996	5/2/1996	5/3/1996	5/4/1996	5/5/1996	5/6/1996	5/7/1996	5/8/1996	5/9/1996	5/10/1996	5/11/1996	5/12/1996	5/13/1996	5/14/1996
	Gage Height	7.63	6.52	5.78	5.35	5.86	6.86	7.9	7.2	7.43	10.14	14.32	20.84	17.07	13.03	9.17
	Elevation	511.37	510.26	509.52	509.09	509.6	510.6	511.64	510.94	511.17	513.88	518.06	524.58	520.81	516.77	512.91
	Date	5/15/1996	5/16/1996	5/20/1996	5/21/1996	5/22/1996	5/23/1996	5/24/1996	5/25/1996	5/26/1996	5/27/1996	5/28/1996	5/29/1996	5/30/1996	5/31/1996	6/1/1996
	Gage Height	8.36	8.26	5.86	5.56	5.23	5.22	5.07	5.73	6.15	10.18	12.37	12.18	10.22	7.7	6.72
	Elevation	512.1	512	509.6	509.3	508.97	508.96	508.81	509.47	509.89	513.92	516.11	515.92	513.96	511.44	510.46
	Date	6/2/1996	6/3/1996	6/4/1996	6/5/1996	6/6/1996	6/7/1996	6/8/1996	6/9/1996	6/10/1996	6/11/1996	6/21/1996	6/22/1996	6/23/1996	6/24/1996	6/25/1996
	Gage Height	6.54	7.71	7.13	6.23	6.02	6.01	5.63	5.99	8.56		5.59	5.3	5.2	5.17	5.12
	Elevation	510.28	511.45	510.87	509.97	509.76	509.75	509.37	509.73	512.3	503.74	509.33	509.04	508.94	508.91	508.86
	Date	6/26/1996	6/27/1996	6/28/1996	6/29/1996	6/30/1996	7/1/1996	7/9/1996	7/10/1996	7/11/1996	7/12/1996	7/13/1996	7/14/1996	7/15/1996	7/16/1996	7/17/1996
	Gage Height	4.69	4.49	4.39	4.28	4.15	4.04	3.41	3.32	3.24	3.19	3.15	3.23	3.38	3.21	3.09
	Elevation	508.43	508.23	508.13	508.02	507.89	507.78	507.15	507.06	506.98	506.93	506.89	506.97	507.12	506.95	506.83
	Date	7/18/1996	7/19/1996	7/20/1996	7/21/1996	7/22/1996	7/23/1996	7/24/1996	7/25/1996	7/26/1996	7/27/1996	7/28/1996	7/29/1996	7/30/1996	7/31/1996	8/1/1996
	Gage Height	3.02	3.27	3.19	3.36	4.78	5.14	4.25	3.89	3.76	3.51	3.33	3.85	4.7	4.43	3.93
	Elevation	506.76	507.01	506.93	507.1	508.52	508.88	507.99	507.63	507.5	507.25	507.07	507.59	508.44	508.17	507.67
524.58	Date	8/2/1996	8/3/1996	8/4/1996	8/5/1996	8/6/1996	8/7/1996	8/8/1996	8/9/1996	8/10/1996	8/11/1996	8/12/1996	8/13/1996	8/14/1996	8/15/1996	8/16/1996
	Gage Height	3.61	3.41	3.18	3.06	2.99	2.95	3.27	3.11	2.98	2.78	2.67	2.6	2.57	2.62	2.52
	Elevation	507.35	507.15	506.92	506.8	506.73	506.69	507.01	506.85	506.72	506.52	506.41	506.34	506.31	506.36	506.26
	Date	8/17/1996	8/18/1996	8/19/1996	8/20/1996	8/21/1996	8/22/1996	8/23/1996	8/24/1996	8/25/1996	8/26/1996	8/27/1996	8/28/1996	8/29/1996	8/30/1996	8/31/1996
	Gage Height	2.49	2.8	4.07	3.66	3.17	2.95	2.81	2.71	2.64	2.57	2.51	2.5	2.73	2.64	2.53
	Elevation	506.23	506.54	507.81	507.4	506.91	506.69	506.55	506.45	506.38	506.31	506.25	506.24	506.47	506.38	506.27
	Date	9/1/1996	9/2/1996	9/3/1996	9/4/1996	9/5/1996	9/6/1996	9/7/1996	9/8/1996	9/9/1996	9/10/1996	9/11/1996	9/12/1996	9/13/1996	9/14/1996	9/15/1996
	Gage Height	2.46	2.43	2.39	2.38	2.35	2.34	2.46	2.43	2.43	2.51	2.46	2.4	2.33	2.31	2.3
	Elevation	506.2	506.17	506.13	506.12	506.09	506.08	506.2	506.17	506.17	506.25	506.2	506.14	506.07	506.05	506.04
	Date	9/16/1996	9/17/1996	9/18/1996	9/19/1996	9/20/1996	9/21/1996	9/22/1996	9/23/1996	9/24/1996	9/25/1996	9/26/1996	9/27/1996	9/28/1996	9/29/1996	9/30/1996
	Gage Height	2.35	2.48	2.41	2.41	2.38	2.35	2.33	2.3	2.38	2.28	2.38	2.39	2.47	2.75	2.59
	Elevation	506.09	506.22	506.15	506.15	506.12	506.09	506.07	506.04	506.12	506.02	506.12	506.13	506.21	506.49	506.33
	Date	10/1/1996	10/2/1996	10/3/1996	10/4/1996	10/5/1996	10/6/1996	10/7/1996	10/8/1996	10/9/1996	10/10/1996	10/11/1996	10/12/1996	10/13/1996	10/14/1996	10/15/1996
	Gage Height	2.5	2.37	2.37	2.37	2.37	2.36	2.34	2.33	2.32	2.31	2.33	2.34	2.28	2.26	2.34
	Elevation	506.24	506.11	506.11	506.11	506.11	506.1	506.08	506.07	506.06	506.05	506.07	506.08	506.02	506	506.08
	Date	10/16/1996	10/17/1996	10/18/1996	10/19/1996	10/20/1996	10/21/1996	10/22/1996	10/23/1996	10/24/1996	10/25/1996	10/26/1996	10/27/1996	10/28/1996	10/29/1996	10/30/1996
	Gage Height	2.32	2.44	2.59	2.42	2.55	2.49	2.42	2.46	2.46	2.66	2.59	2.48	2.43	2.37	2.48
	Elevation	506.06	506.18	506.33	506.16	506.29	506.23	506.16	506.2	506.2	506.4	506.33	506.22	506.17	506.11	506.22
	Date	10/31/1996	11/1/1996	11/2/1996	11/3/1996	11/4/1996	11/5/1996	11/6/1996	11/7/1996	11/8/1996	11/9/1996	11/10/1996	11/11/1996	11/12/1996	11/13/1996	11/14/1996
	Gage Height	2.35	2.39	2.44	2.39	2.36	2.34	2.37	3.03	3.48	3.57	3.19	2.96	2.79	2.68	2.64
	Elevation	506.09	506.13	506.18	506.13	506.1	506.08	506.11	506.77	507.22	507.31	506.93	506.7	506.53	506.42	506.38
	Date	11/15/1996	11/16/1996	11/17/1996	11/18/1996	11/19/1996	11/20/1996	11/21/1996	11/22/1996	11/23/1996	11/24/1996	11/25/1996	11/26/1996	11/27/1996	11/28/1996	11/29/1996
	Gage Height	2.59	2.54	2.59	2.57	2.62	2.67	2.6	2.56	2.52	2.56	2.75	2.99	3.05	3.02	2.98
	Elevation	506.33	506.28	506.33	506.31	506.36	506.41	506.34	506.3	506.26	506.3	506.49	506.73	506.79	506.76	506.72

Base Elevation = 503.74'
All Units in Feet (')
From USGS Station 03339000

Brickyard Disposal and Recycling
Historical River Elevations
Average Annual Maximum Elevation 519.14 '

Maximum Elevation	Date	11/30/1996	12/1/1996	12/2/1996	12/3/1996	12/4/1996	12/5/1996	12/6/1996	12/7/1996	12/8/1996	12/9/1996	12/10/1996	12/11/1996	12/12/1996	12/13/1996	12/14/1996
	Gage Height	3.41	4.39	4.72	4.43	4.11	3.96	3.7	3.47	3.43	3.43	3.4	3.64	5.31	5.17	4.52
	Elevation	507.15	508.13	508.46	508.17	507.85	507.7	507.44	507.21	507.17	507.17	507.14	507.38	509.05	508.91	508.26
	Date	12/15/1996	12/16/1996	12/17/1996	12/18/1996	12/19/1996	12/21/1996	12/22/1996	12/23/1996	12/24/1996	12/25/1996	12/26/1996	12/27/1996	12/28/1996	12/29/1996	12/30/1996
524.58	Gage Height	4.21	4.29	4.54	4.26	3.63	3.78	3.81	3.84	4.4	4.47	4.26	4.13	4.19	4.05	3.88
	Elevation	507.95	508.03	508.28	508	507.37	507.52	507.55	507.58	508.14	508.21	508	507.87	507.93	507.79	507.62
	Date	12/31/1996														
	Gage Height	3.76														
	Elevation	507.5														

Maximum Elevation	Date	1/1/1997	1/2/1997	1/3/1997	1/4/1997	1/5/1997	1/6/1997	1/7/1997	1/8/1997	1/9/1997	1/10/1997	1/11/1997	1/12/1997	1/13/1997	1/14/1997	1/15/1997
	Gage Height	3.72	3.77	3.94	4.07	4.68	4.79	4.36	3.78	3.91	3.88	3.35	3.9	3.85	3.98	3.97
	Elevation	507.46	507.51	507.68	507.81	508.42	508.53	508.1	507.52	507.65	507.62	507.09	507.64	507.59	507.72	507.71
	Date	1/16/1997	1/17/1997	1/18/1997	1/19/1997	1/20/1997	1/21/1997	1/22/1997	1/23/1997	1/24/1997	1/25/1997	1/26/1997	1/27/1997	1/28/1997	1/29/1997	1/30/1997
	Gage Height	3.92	3.81	3.63	3.53	3.53	3.71	5.9	9.89	8.52	6.78	5.53	5.21	4.73	4.59	4.58
	Elevation	507.66	507.55	507.37	507.27	507.27	507.45	509.64	513.63	512.26	510.52	509.27	508.95	508.47	508.33	508.32
	Date	1/31/1997	2/1/1997	2/2/1997	2/3/1997	2/4/1997	2/5/1997	2/6/1997	2/7/1997	2/8/1997	2/9/1997	2/10/1997	2/11/1997	2/12/1997	2/13/1997	2/14/1997
	Gage Height	4.57	4.44	4.61	6.33	8.21	9.47	7.37	5.97	5.31	4.93	4.67	4.52	4.46	4.27	4.14
	Elevation	508.31	508.18	508.35	510.07	511.95	513.21	511.11	509.71	509.05	508.67	508.41	508.26	508.2	508.01	507.88
	Date	2/15/1997	2/16/1997	2/17/1997	2/18/1997	2/19/1997	2/20/1997	2/21/1997	2/22/1997	2/23/1997	2/24/1997	2/25/1997	2/26/1997	2/27/1997	2/28/1997	3/1/1997
	Gage Height	4.11	4.01	3.89	3.93	4.79	6.49	11.28	12.48	11.08	8.51	6.88	6.99	16.25	16.27	13.68
	Elevation	507.85	507.75	507.63	507.67	508.53	510.23	515.02	516.22	514.82	512.25	510.62	510.73	519.99	520.01	517.42
	Date	3/2/1997	3/3/1997	3/4/1997	3/5/1997	3/6/1997	3/7/1997	3/8/1997	3/9/1997	3/10/1997	3/11/1997	3/12/1997	3/13/1997	3/22/1997	3/23/1997	3/24/1997
	Gage Height	9.8	8.17	7.28	6.69	6.16	5.7	5.41	6.19	9.25	8.22	6.92	6.26	5.37	5.05	4.94
	Elevation	513.54	511.91	511.02	510.43	509.9	509.44	509.15	509.93	512.99	511.96	510.66	510	509.11	508.79	508.68
	Date	3/25/1997	3/26/1997	3/27/1997	3/28/1997	3/29/1997	3/30/1997	3/31/1997	4/1/1997	4/2/1997	4/3/1997	4/4/1997	4/5/1997	4/6/1997	4/7/1997	4/8/1997
	Gage Height	4.81	4.83	4.71	4.7	4.85	4.59	4.46	4.5	4.43	4.41	4.39	4.47	4.6	4.5	4.26
	Elevation	508.55	508.57	508.45	508.44	508.59	508.33	508.2	508.24	508.17	508.15	508.13	508.21	508.34	508.24	508
	Date	4/9/1997	4/10/1997	4/11/1997	4/12/1997	4/13/1997	4/14/1997	4/15/1997	4/16/1997	4/17/1997	4/18/1997	4/19/1997	4/20/1997	4/21/1997	4/22/1997	4/23/1997
520.01	Gage Height	4.17	4.13	4.09	4.11	4.19	4.17	3.97	3.92	3.9	3.89	4.09	4.12	4.08	4.01	3.95
	Elevation	507.91	507.87	507.83	507.85	507.93	507.91	507.71	507.66	507.64	507.63	507.83	507.86	507.82	507.75	507.69
	Date	4/24/1997	4/25/1997	4/26/1997	4/27/1997	4/28/1997	4/29/1997	4/30/1997	5/1/1997	5/2/1997	5/3/1997	5/7/1997	5/8/1997	5/9/1997	5/10/1997	5/11/1997
	Gage Height	3.87	3.76	3.67	3.62	3.73	3.76	3.74	3.73	3.77	4.26	5.23	4.88	4.67	4.38	4.23
	Elevation	507.61	507.5	507.41	507.36	507.47	507.5	507.48	507.47	507.51	508	508.97	508.62	508.41	508.12	507.97
	Date	5/12/1997	5/13/1997	5/14/1997	5/15/1997	5/16/1997	5/17/1997	5/18/1997	5/19/1997	5/20/1997	5/21/1997	5/22/1997	5/23/1997	5/24/1997	5/25/1997	5/26/1997
	Gage Height	4.25	4.2	4.12	4.05	3.92	3.79	3.77	3.94	4.17	4.19	3.82	3.65	3.61	3.85	5.99
	Elevation	507.99	507.94	507.86	507.79	507.66	507.53	507.51	507.68	507.91	507.93	507.56	507.39	507.35	507.59	509.73
	Date	5/27/1997	5/28/1997	5/29/1997	5/30/1997	5/31/1997	6/1/1997	6/2/1997	6/3/1997	6/4/1997	6/5/1997	6/6/1997	6/7/1997	6/8/1997	6/9/1997	6/10/1997
	Gage Height	7.2	7.63	6.6	6.25	5.84	5.88	6.64	7.27	6.52	5.74	5.46	7.63	9.27	9.99	8.69
	Elevation	510.94	511.37	510.34	509.99	509.58	509.62	510.38	511.01	510.26	509.48	509.2	511.37	513.01	513.73	512.43
	Date	6/11/1997	6/12/1997	6/13/1997	6/14/1997	6/15/1997	6/16/1997	6/17/1997	6/18/1997	6/19/1997	6/21/1997	6/22/1997	6/23/1997	6/24/1997	6/26/1997	6/27/1997
	Gage Height	6.78	6.1	8.65	10.81	7.85	6.3	5.79	5.4	5.05	4.72	4.6	4.45	4.23	4.2	5.08
	Elevation	510.52	509.84	512.39	514.55	511.59	510.04	509.53	509.14	508.79	508.46	508.34	508.19	507.97	507.94	508.82
	Date	6/28/1997	6/29/1997	6/30/1997	7/1/1997	7/2/1997	7/3/1997	7/4/1997	7/5/1997	7/6/1997	7/7/1997	7/8/1997	7/9/1997	7/10/1997	7/11/1997	7/12/1997
	Gage Height	4.58	4.19	4.03	5.19	7.26	5.68	4.33	4.09	3.94	3.84	3.71	4.09	6.25	4.95	4.1
	Elevation	508.32	507.93	507.77	508.93	511	509.42	508.07	507.83	507.68	507.58	507.45	507.83	509.99	508.69	507.84
	Date	7/13/1997	7/14/1997	7/15/1997	7/16/1997	7/17/1997	7/18/1997	7/19/1997	7/20/1997	7/21/1997	7/22/1997	7/23/1997	7/24/1997	7/25/1997	7/26/1997	7/27/1997
	Gage Height	3.8	3.63	3.76	3.86	3.51	3.29	3.23	3.19	3.06	3.2	3.33	3.57	3.26	3.06	2.93
	Elevation	507.54	507.37	507.5	507.6	507.25	507.03	506.97	506.93	506.8	506.94	507.07	507.31	507	506.8	506.67

Base Elevation = 503.74'
All Units in Feet (')
From USGS Station 03339000

Brickyard Disposal and Recycling
Historical River Elevations
Average Annual Maximum Elevation 519.14 '

Maximum Elevation	Date	7/28/1997	7/29/1997	7/30/1997	7/31/1997	8/1/1997	8/2/1997	8/3/1997	8/4/1997	8/5/1997	8/6/1997	8/7/1997	8/8/1997	8/9/1997	8/10/1997	8/11/1997
	Gage Height	2.84	2.74	2.67	2.62	2.58	2.56	2.53	2.51	2.49		2.47	2.44	2.45	2.48	2.46
	Elevation	506.58	506.48	506.41	506.36	506.32	506.3	506.27	506.25	506.23	503.74	506.21	506.18	506.19	506.22	506.2
	Date	8/12/1997	8/13/1997	8/14/1997	8/15/1997	8/16/1997	8/17/1997	8/18/1997	8/19/1997	8/20/1997	8/21/1997	8/22/1997	8/23/1997	8/24/1997	8/25/1997	8/26/1997
	Gage Height	2.48	2.47	2.61	2.54	2.45	2.99	5.11	5.01	3.93	3.53	3.25	3.02	2.91	2.85	3.13
	Elevation	506.22	506.21	506.35	506.28	506.19	506.73	508.85	508.75	507.67	507.27	506.99	506.76	506.65	506.59	506.87
	Date	8/27/1997	8/28/1997	8/29/1997	8/30/1997	8/31/1997	9/1/1997	9/2/1997	9/3/1997	9/4/1997	9/5/1997	9/6/1997	9/7/1997	9/8/1997	9/9/1997	9/10/1997
	Gage Height	2.94	2.79	2.69	2.66	2.59	2.55	2.53	2.73	3.59	3.04	2.81	2.65	2.6	2.68	2.83
	Elevation	506.68	506.53	506.43	506.4	506.33	506.29	506.27	506.47	507.33	506.78	506.55	506.39	506.34	506.42	506.57
	Date	9/11/1997	9/12/1997	9/13/1997	9/14/1997	9/15/1997	9/16/1997	9/17/1997	9/18/1997	9/19/1997	9/20/1997	9/21/1997	9/22/1997	9/23/1997	9/24/1997	9/25/1997
	Gage Height	2.99	2.87	2.71	2.6	2.52	2.48	2.46	2.43	2.43	2.52	2.64	2.7	2.57	2.52	2.55
	Elevation	506.73	506.61	506.45	506.34	506.26	506.22	506.2	506.17	506.17	506.26	506.38	506.44	506.31	506.26	506.29
	Date	9/26/1997	9/27/1997	9/28/1997	9/29/1997	9/30/1997	10/1/1997	10/2/1997	10/3/1997	10/4/1997	10/5/1997	10/6/1997	10/7/1997	10/8/1997	10/9/1997	10/10/1997
	Gage Height	2.51	2.44	2.44	2.42	2.38	2.35	2.36	2.4	2.36	2.34	2.34	2.32	2.3	2.36	2.37
	Elevation	506.25	506.18	506.18	506.16	506.12	506.09	506.1	506.14	506.1	506.08	506.08	506.06	506.04	506.1	506.11
	Date	10/11/1997	10/12/1997	10/13/1997	10/14/1997	10/15/1997	10/16/1997	10/17/1997	10/18/1997	10/19/1997	10/20/1997	10/21/1997	10/22/1997	10/23/1997	10/24/1997	10/25/1997
520.01	Gage Height	2.35	2.47	2.4	2.36	2.37	2.52	2.37	2.42	2.43	2.4	2.35	2.34	2.34	2.37	2.35
	Elevation	506.09	506.21	506.14	506.1	506.11	506.26	506.11	506.16	506.17	506.14	506.09	506.08	506.08	506.11	506.09
	Date	10/26/1997	10/27/1997	10/28/1997	10/29/1997	10/30/1997	10/31/1997	11/1/1997	11/2/1997	11/3/1997	11/4/1997	11/5/1997	11/6/1997	11/7/1997	11/8/1997	11/9/1997
	Gage Height	2.43	2.5	2.59	2.66	2.54	2.46	2.5	2.46	2.53	2.55	2.46	2.49	2.45	2.62	2.68
	Elevation	506.17	506.24	506.33	506.4	506.28	506.2	506.24	506.2	506.27	506.29	506.2	506.23	506.19	506.36	506.42
	Date	11/10/1997	11/11/1997	11/12/1997	11/13/1997	11/14/1997	11/15/1997	11/16/1997	11/17/1997	11/18/1997	11/19/1997	11/20/1997	11/21/1997	11/22/1997	11/23/1997	11/24/1997
	Gage Height	2.6	2.56	2.52	2.5	2.52	2.53	2.53	2.51	2.52	2.5	2.47	2.49	2.51	2.49	2.49
	Elevation	506.34	506.3	506.26	506.24	506.26	506.27	506.27	506.25	506.26	506.24	506.21	506.23	506.25	506.23	506.23
	Date	11/25/1997	11/26/1997	11/27/1997	11/28/1997	11/29/1997	11/30/1997	12/1/1997	12/2/1997	12/3/1997	12/4/1997	12/5/1997	12/6/1997	12/7/1997	12/8/1997	12/9/1997
	Gage Height	2.49	2.45	2.42	2.62	2.61	2.91	3.23	3.36	3.17	3.02	2.93	2.86	2.79	2.73	2.72
	Elevation	506.23	506.19	506.16	506.36	506.35	506.65	506.97	507.1	506.91	506.76	506.67	506.6	506.53	506.47	506.46
	Date	12/10/1997	12/11/1997	12/12/1997	12/13/1997	12/14/1997	12/15/1997	12/16/1997	12/17/1997	12/18/1997	12/19/1997	12/20/1997	12/21/1997	12/22/1997	12/23/1997	12/24/1997
	Gage Height	2.85	3.05	3.24	3.11	3.01	2.96	2.91	2.89	2.85	2.8	2.78	2.77	2.81	2.8	3.13
	Elevation	506.59	506.79	506.98	506.85	506.75	506.7	506.65	506.63	506.59	506.54	506.52	506.51	506.55	506.54	506.87
	Date	12/25/1997	12/26/1997	12/27/1997	12/28/1997	12/29/1997	12/30/1997	12/31/1997								
	Gage Height	3.23	4.1	3.88	3.59	3.42	3.34	3.26								
	Elevation	506.97	507.84	507.62	507.33	507.16	507.08	507								

Maximum Elevation	Date	1/1/1998	1/2/1998	1/3/1998	1/4/1998	1/5/1998	1/6/1998	1/7/1998	1/8/1998	1/9/1998	1/12/1998	1/15/1998	1/16/1998	1/17/1998	1/18/1998	1/19/1998
	Gage Height	3.21	3.17	3.1	3.12	3.17	4.1	5.48	5.72	7.52	5.26	4.36	4.3	4.08	3.93	3.75
	Elevation	506.95	506.91	506.84	506.86	506.91	507.84	509.22	509.46	511.26	509	508.1	508.04	507.82	507.67	507.49
	Date	1/20/1998	1/21/1998	1/22/1998	1/23/1998	1/24/1998	1/25/1998	1/26/1998	1/27/1998	1/28/1998	1/29/1998	1/30/1998	1/31/1998	2/1/1998	2/2/1998	2/3/1998
	Gage Height	3.68	3.64	3.64	3.66	3.57	3.5	3.43	3.4	3.49	3.77	4	3.99	3.89	3.85	3.8
	Elevation	507.42	507.38	507.38	507.4	507.31	507.24	507.17	507.14	507.23	507.51	507.74	507.73	507.63	507.59	507.54
	Date	2/4/1998	2/5/1998	2/6/1998	2/7/1998	2/8/1998	2/9/1998	2/10/1998	2/11/1998	2/12/1998	2/13/1998	2/14/1998	2/15/1998	2/16/1998	2/17/1998	2/18/1998
520.38	Gage Height	3.71	3.68	3.63	3.55	3.49	3.43	3.4	3.46	3.7	4.15	4.04	3.83	3.73	3.85	4.71
	Elevation	507.45	507.42	507.37	507.29	507.23	507.17	507.14	507.2	507.44	507.89	507.78	507.57	507.47	507.59	508.45
	Date	2/19/1998	2/20/1998	2/21/1998	2/22/1998	2/23/1998	2/24/1998	2/25/1998	2/26/1998	2/27/1998	2/28/1998	3/1/1998	3/2/1998	3/3/1998	3/4/1998	3/5/1998
	Gage Height	5.69	5.33	5.04	4.77	4.57	4.48	4.36	4.23	4.26	4.28	4.2	4.08	4.01	4.03	3.91
	Elevation	509.43	509.07	508.78	508.51	508.31	508.22	508.1	507.97	508	508.02	507.94	507.82	507.75	507.77	507.65
	Date	3/6/1998	3/7/1998	3/8/1998	3/13/1998	3/14/1998	3/15/1998	3/16/1998	3/17/1998	3/18/1998	3/19/1998	3/20/1998	3/21/1998	3/22/1998	3/23/1998	3/24/1998
	Gage Height	3.75	3.67	3.83	5.84	5.72	5.69	5.66	7.21	13.15	13.13	13.58	15.12	13.36	10.84	8.78
	Elevation	507.49	507.41	507.57	509.58	509.46	509.43	509.4	510.95	516.89	516.87	517.32	518.86	517.1	514.58	512.52

Base Elevation = 503.74'
All Units in Feet (')
From USGS Station 03339000

Brickyard Disposal and Recycling
Historical River Elevations
Average Annual Maximum Elevation 519.14 '

Maximum Elevation	Date	3/25/1998	3/26/1998	3/27/1998	3/28/1998	3/29/1998	3/30/1998	3/31/1998	4/1/1998	4/2/1998	4/3/1998	4/4/1998	4/5/1998	4/6/1998	4/7/1998	4/8/1998
	Gage Height	7.56	6.83	6.22	11.24	15.03	11.84	8.72	8.51	8.14	7.2	7.24	6.96	6.36	6.05	7.2
	Elevation	511.3	510.57	509.96	514.98	518.77	515.58	512.46	512.25	511.88	510.94	510.98	510.7	510.1	509.79	510.94
	Date	4/9/1998	4/11/1998	4/12/1998	4/13/1998	4/14/1998	4/15/1998	4/16/1998	4/17/1998	4/18/1998	4/19/1998	4/20/1998	4/21/1998	4/22/1998	4/23/1998	4/24/1998
	Gage Height	7.77	6.4	6.02	5.65	5.82	6.45	5.92	5.6	5.27	5.05	4.94	4.94	5.1	4.98	4.73
	Elevation	511.51	510.14	509.76	509.39	509.56	510.19	509.66	509.34	509.01	508.79	508.68	508.68	508.84	508.72	508.47
	Date	4/25/1998	4/26/1998	4/27/1998	4/28/1998	4/29/1998	4/30/1998	5/1/1998	5/2/1998	5/3/1998	5/4/1998	5/5/1998	5/6/1998	5/7/1998	5/8/1998	5/9/1998
	Gage Height	4.64	4.6	4.49	4.31	4.65	7.88	9.27	8.55	12.2	16.64	14.84	11.87	9.55	12.02	13.1
	Elevation	508.38	508.34	508.23	508.05	508.39	511.62	513.01	512.29	515.94	520.38	518.58	515.61	513.29	515.76	516.84
	Date	5/10/1998	5/11/1998	5/12/1998	5/13/1998	5/14/1998	5/15/1998	5/16/1998	5/17/1998	5/18/1998	5/19/1998	5/20/1998	5/21/1998	5/22/1998	5/23/1998	5/24/1998
	Gage Height	12.31	8.99	7.19	6.64	6.39	5.76	5.42	5.18	5.01	5.11	10.2	7.54	6.16	7.37	9.1
	Elevation	516.05	512.73	510.93	510.38	510.13	509.5	509.16	508.92	508.75	508.85	513.94	511.28	509.9	511.11	512.84
	Date	5/25/1998	5/26/1998	5/27/1998	5/28/1998	5/29/1998	5/30/1998	5/31/1998	6/1/1998	6/2/1998	6/3/1998	6/4/1998	6/5/1998	6/6/1998	6/7/1998	6/8/1998
	Gage Height	9.36	7.7	6.36	5.76	5.38	5.65	5.47	5.07	4.77	4.67	4.55	4.5	4.34	4.15	4.2
	Elevation	513.1	511.44	510.1	509.5	509.12	509.39	509.21	508.81	508.51	508.41	508.29	508.24	508.08	507.89	507.94
	Date	6/9/1998	6/10/1998	6/20/1998	6/23/1998	6/24/1998	6/25/1998	6/26/1998	6/27/1998	6/28/1998	6/29/1998	6/30/1998	7/1/1998	7/2/1998	7/3/1998	7/4/1998
	Gage Height	4.8	6.1	11.19	7.54	7.83	6.58	5.98	5.55	5.26	5.47	6.44	6.69	5.4	5.02	6.73
	Elevation	508.54	509.84	514.93	511.28	511.57	510.32	509.72	509.29	509	509.21	510.18	510.43	509.14	508.76	510.47
	Date	7/5/1998	7/6/1998	7/7/1998	7/8/1998	7/9/1998	7/10/1998	7/11/1998	7/12/1998	7/13/1998	7/14/1998	7/21/1998	7/22/1998	7/23/1998	7/24/1998	7/25/1998
	Gage Height	7.64	7.61	11.29	10.25	8.13	6.47	5.74	5.31	4.92	4.68	3.74	4.17	6.53	5.92	4.7
	Elevation	511.38	511.35	515.03	513.99	511.87	510.21	509.48	509.05	508.66	508.42	507.48	507.91	510.27	509.66	508.44
	Date	7/26/1998	7/27/1998	7/28/1998	7/29/1998	7/30/1998	7/31/1998	8/1/1998	8/2/1998	8/3/1998	8/4/1998	8/5/1998	8/6/1998	8/7/1998	8/8/1998	8/9/1998
520.38	Gage Height	4.15	3.97	3.81	3.72	3.63	3.5	3.44	3.41	3.4	10.78	8.66	8.26	8.5	9.46	7.96
	Elevation	507.89	507.71	507.55	507.46	507.37	507.24	507.18	507.15	507.14	514.52	512.4	512	512.24	513.2	511.7
	Date	8/10/1998	8/11/1998	8/12/1998	8/13/1998	8/14/1998	8/15/1998	8/16/1998	8/17/1998	8/18/1998	8/19/1998	8/20/1998	8/21/1998	8/22/1998	8/23/1998	8/24/1998
	Gage Height	7.08	5.86	5.16	4.68	4.2	3.94	3.84	3.9	3.78	3.6	3.44	3.26	3.08	3	2.86
	Elevation	510.82	509.6	508.9	508.42	507.94	507.68	507.58	507.64	507.52	507.34	507.18	507	506.82	506.74	506.6
	Date	8/25/1998	8/27/1998	8/28/1998	8/29/1998	8/30/1998	8/31/1998	9/1/1998	9/2/1998	9/3/1998	9/4/1998	9/5/1998	9/6/1998	9/7/1998	9/8/1998	9/9/1998
	Gage Height	2.8	2.73	2.71	2.7	2.73	2.65	2.59	2.56	2.53	2.52	2.5	2.48	2.45	2.41	2.37
	Elevation	506.54	506.47	506.45	506.44	506.47	506.39	506.33	506.3	506.27	506.26	506.24	506.22	506.19	506.15	506.11
	Date	9/10/1998	9/11/1998	9/12/1998	9/13/1998	9/14/1998	9/15/1998	9/16/1998	9/17/1998	9/18/1998	9/19/1998	9/20/1998	9/21/1998	9/22/1998	9/23/1998	9/24/1998
	Gage Height	2.52	2.41	2.39	2.37	2.4	2.43	2.45	2.43	2.44	2.43	2.62	2.93	2.72	2.69	2.55
	Elevation	506.26	506.15	506.13	506.11	506.14	506.17	506.19	506.17	506.18	506.17	506.36	506.67	506.46	506.43	506.29
	Date	9/25/1998	9/26/1998	9/27/1998	9/28/1998	9/29/1998	9/30/1998	10/1/1998	10/2/1998	10/3/1998	10/4/1998	10/5/1998	10/6/1998	10/7/1998	10/8/1998	10/9/1998
	Gage Height	2.52	2.52	2.56	2.47	2.41	2.42	2.41	2.37	2.41	2.43	2.48	4.2	4.11	3.69	3.42
	Elevation	506.26	506.26	506.3	506.21	506.15	506.16	506.15	506.11	506.15	506.17	506.22	507.94	507.85	507.43	507.16
	Date	10/10/1998	10/11/1998	10/12/1998	10/13/1998	10/14/1998	10/15/1998	10/16/1998	10/17/1998	10/18/1998	10/19/1998	10/20/1998	10/21/1998	10/22/1998	10/23/1998	10/24/1998
	Gage Height	3.04	2.73	2.6	2.55	2.68	2.68	2.56	2.52	2.63	2.62	2.65	2.61	2.52	2.51	2.49
	Elevation	506.78	506.47	506.34	506.29	506.42	506.42	506.3	506.26	506.37	506.36	506.39	506.35	506.26	506.25	506.23
	Date	10/25/1998	10/26/1998	10/27/1998	10/28/1998	10/31/1998	11/1/1998	11/10/1998	11/11/1998	11/12/1998	11/13/1998	11/14/1998	11/15/1998	11/16/1998	11/17/1998	11/18/1998
	Gage Height	2.48	2.49	2.5	2.59	3.25	3.24	4.27	4.96	4.44	3.86	3.67	3.57	3.44	3.26	3.16
	Elevation	506.22	506.23	506.24	506.33	506.99	506.98	508.01	508.7	508.18	507.6	507.41	507.31	507.18	507	506.9
	Date	11/19/1998	11/20/1998	11/21/1998	11/22/1998	11/23/1998	11/24/1998	11/25/1998	11/26/1998	11/27/1998	11/28/1998	11/29/1998	11/30/1998	12/1/1998	12/2/1998	12/3/1998
	Gage Height	3.13	3.08	3.01	2.91	2.88	2.87	2.92	3.04	3.12	3.04	2.88	2.87	2.85	2.8	2.81
	Elevation	506.87	506.82	506.75	506.65	506.62	506.61	506.66	506.78	506.86	506.78	506.62	506.61	506.59	506.54	506.55

Base Elevation = 503.74'
All Units in Feet (')
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Brickyard Disposal and Recycling
Historical River Elevations
Average Annual Maximum Elevation 519.14 '

Maximum Elevation	Date	12/4/1998	12/5/1998	12/6/1998	12/7/1998	12/8/1998	12/9/1998	12/10/1998	12/11/1998	12/12/1998	12/13/1998	12/14/1998	12/15/1998	12/16/1998	12/17/1998	12/18/1998
	Gage Height	2.78	2.81	2.95	3.31	3.04	2.91	2.82	2.78	2.75	2.75	2.73	2.89	2.71	2.7	2.7
	Elevation	506.52	506.55	506.69	507.05	506.78	506.65	506.56	506.52	506.49	506.49	506.47	506.63	506.45	506.44	506.44
520.38	Date	12/19/1998	12/20/1998	12/21/1998	12/22/1998	12/25/1998	12/26/1998	12/27/1998	12/28/1998	12/29/1998						
	Gage Height	2.73	2.72	2.78	2.7	2.73	2.73	2.71	2.69	2.72						
	Elevation	506.47	506.46	506.52	506.44	506.47	506.47	506.45	506.43	506.46						
Maximum Elevation	Date	1/2/1999	1/6/1999	1/8/1999	1/12/1999	1/13/1999	1/14/1999	1/15/1999	1/16/1999	1/17/1999	1/18/1999	1/19/1999	1/20/1999	1/21/1999	1/22/1999	1/23/1999
	Gage Height	2.83	2.81	2.85	2.87	2.97	2.96	2.94	2.95	3.04	5.53	6.48	5.94	5.58	12.14	16.57
	Elevation	506.57	506.55	506.59	506.61	506.71	506.7	506.68	506.69	506.78	509.27	510.22	509.68	509.32	515.88	520.31
	Date	1/24/1999	1/25/1999	1/26/1999	1/27/1999	1/28/1999	1/29/1999	1/30/1999	1/31/1999	2/1/1999	2/2/1999	2/3/1999	2/4/1999	2/5/1999	2/6/1999	2/7/1999
	Gage Height	16.35	13.47	9.91	8.2	7.75	6.94	6.23	5.86	6.87	7.41	7.02	6.45	5.71	5.21	8.39
	Elevation	520.09	517.21	513.65	511.94	511.49	510.68	509.97	509.6	510.61	511.15	510.76	510.19	509.45	508.95	512.13
	Date	2/8/1999	2/9/1999	2/10/1999	2/11/1999	2/12/1999	2/14/1999	2/15/1999	2/16/1999	2/17/1999	2/18/1999	2/19/1999	2/20/1999	2/21/1999	2/22/1999	2/23/1999
	Gage Height	12.73	10.87	8.62	7.43	7.44	6.02	5.68	5.64	5.45	5.26	5.07	4.9	4.72	4.61	4.49
	Elevation	516.47	514.61	512.36	511.17	511.18	509.76	509.42	509.38	509.19	509	508.81	508.64	508.46	508.35	508.23
	Date	2/24/1999	2/25/1999	2/26/1999	2/27/1999	2/28/1999	3/1/1999	3/2/1999	3/3/1999	3/4/1999	3/5/1999	3/6/1999	3/7/1999	3/8/1999	3/9/1999	3/10/1999
	Gage Height	4.4	4.51	4.41	4.36	4.52	4.96	4.66	6.07	6.99	6.1	6.45	6.82	6	5.68	5.44
	Elevation	508.14	508.25	508.15	508.1	508.26	508.7	508.4	509.81	510.73	509.84	510.19	510.56	509.74	509.42	509.18
	Date	3/11/1999	3/12/1999	3/13/1999	3/14/1999	3/15/1999	3/16/1999	3/17/1999	3/18/1999	3/19/1999	3/20/1999	3/21/1999	3/22/1999	3/23/1999	3/24/1999	3/25/1999
	Gage Height	5.06	4.85	5	5.15	5.14	5.09	6	5.73	4.98	4.88	4.81	4.67	4.4	4.35	4.38
	Elevation	508.8	508.59	508.74	508.89	508.88	508.83	509.74	509.47	508.72	508.62	508.55	508.41	508.14	508.09	508.12
	Date	3/26/1999	3/27/1999	3/28/1999	3/29/1999	3/30/1999	3/31/1999	4/1/1999	4/2/1999	4/3/1999	4/4/1999	4/5/1999	4/6/1999	4/7/1999	4/8/1999	4/9/1999
	Gage Height	4.27	4.07	4.17	4.22	3.97	3.93	4	4.07	4	4.22	3.97	3.84	3.86	3.9	4.32
	Elevation	508.01	507.81	507.91	507.96	507.71	507.67	507.74	507.81	507.74	507.96	507.71	507.58	507.6	507.64	508.06
	Date	4/10/1999	4/11/1999	4/12/1999	4/13/1999	4/14/1999	4/15/1999	4/16/1999	4/17/1999	4/18/1999	4/19/1999	4/20/1999	4/21/1999	4/22/1999	4/23/1999	4/24/1999
	Gage Height	4.58	5	5.67	4.95	4.6	5.31	10.77	13.71	12.86	10.22	8.04	7.6	7.92	7.1	6.41
	Elevation	508.32	508.74	509.41	508.69	508.34	509.05	514.51	517.45	516.6	513.96	511.78	511.34	511.66	510.84	510.15
520.31	Date	4/25/1999	4/26/1999	4/27/1999	4/28/1999	4/29/1999	4/30/1999	5/1/1999	5/2/1999	5/3/1999	5/4/1999	5/5/1999	5/6/1999	5/7/1999	5/8/1999	5/9/1999
	Gage Height	5.92	5.65	5.5	5.29	5.2	5.11	4.86	4.76	4.68	4.57	4.51	4.64	5.49	5.1	4.63
	Elevation	509.66	509.39	509.24	509.03	508.94	508.85	508.6	508.5	508.42	508.31	508.25	508.38	509.23	508.84	508.37
	Date	5/10/1999	5/11/1999	5/12/1999	5/13/1999	5/14/1999	5/15/1999	5/16/1999	5/17/1999	5/18/1999	5/19/1999	5/20/1999	5/21/1999	5/22/1999	5/23/1999	5/24/1999
	Gage Height	4.44	4.31	4.27	5.8	7.48	6.48	5.72	5.29	5.06	5.01	4.73	4.61	5.64	6.18	5.53
	Elevation	508.18	508.05	508.01	509.54	511.22	510.22	509.46	509.03	508.8	508.75	508.47	508.35	509.38	509.92	509.27
	Date	5/25/1999	5/26/1999	5/27/1999	5/28/1999	5/29/1999	5/30/1999	5/31/1999	6/1/1999	6/2/1999	6/3/1999	6/4/1999	6/5/1999	6/6/1999	6/7/1999	6/8/1999
	Gage Height	5.13	4.86	4.57	4.34	4.25	4.18	4.16	4.37	7.48	8.25	6.53	6.21	6.42	5.45	5.08
	Elevation	508.87	508.6	508.31	508.08	507.99	507.92	507.9	508.11	511.22	511.99	510.27	509.95	510.16	509.19	508.82
	Date	6/9/1999	6/10/1999	6/11/1999	6/12/1999	6/13/1999	6/14/1999	6/15/1999	6/16/1999	6/18/1999	6/19/1999	6/20/1999	6/21/1999	6/22/1999	6/23/1999	6/24/1999
	Gage Height	4.79	4.57	4.72	4.59	5.43	7.66	6.02	4.97	4.26	4.1	4.04	3.96	3.88	3.74	3.86
	Elevation	508.53	508.31	508.46	508.33	509.17	511.4	509.76	508.71	508	507.84	507.78	507.7	507.62	507.48	507.6
	Date	6/25/1999	6/26/1999	6/27/1999	6/28/1999	6/29/1999	6/30/1999	7/1/1999	7/2/1999	7/3/1999	7/4/1999	7/5/1999	7/6/1999	7/8/1999	7/9/1999	7/11/1999
	Gage Height	4.1	4.28	4.19	4.59	4.04	3.71	3.53	3.72	3.94	3.62	3.4	3.2	3.04	2.92	2.79
	Elevation	507.84	508.02	507.93	508.33	507.78	507.45	507.27	507.46	507.68	507.36	507.14	506.94	506.78	506.66	506.53
	Date	7/15/1999	7/16/1999	7/17/1999	7/18/1999	7/19/1999	7/20/1999	7/21/1999	7/22/1999	7/28/1999	7/29/1999	7/30/1999	7/31/1999	8/1/1999	8/2/1999	8/3/1999
	Gage Height	2.59	2.56	2.62	2.6	2.62	3.39	2.92	2.86	2.76	2.87	2.93	2.59	2.48	2.4	2.36
	Elevation	506.33	506.3	506.36	506.34	506.36	507.13	506.66	506.6	506.5	506.61	506.67	506.33	506.22	506.14	506.1
	Date	8/4/1999	8/5/1999	8/6/1999	8/7/1999	8/8/1999	8/9/1999	8/10/1999	8/11/1999	8/12/1999	8/13/1999	8/14/1999	8/15/1999	8/16/1999	8/17/1999	8/18/1999
	Gage Height	2.33	2.31	2.3	2.3	2.32	2.3	2.35	2.3	2.28	2.71	3.37	2.88	2.56	2.42	2.35
	Elevation	506.07	506.05	506.04	506.04	506.06	506.04	506.09	506.04	506.02	506.45	507.11	506.62	506.3	506.16	506.09

Base Elevation = 503.74'
All Units in Feet (')
From USGS Station 03339000

Brickyard Disposal and Recycling
Historical River Elevations
Average Annual Maximum Elevation 519.14 '

Maximum Elevation	Date	8/19/1999	8/20/1999	8/21/1999	8/22/1999	8/23/1999	8/24/1999	8/25/1999	8/26/1999	8/27/1999	8/28/1999	8/29/1999	8/30/1999	8/31/1999	9/1/1999	9/2/1999
	Gage Height	2.32	2.28	2.26	2.27	2.26	2.25	2.26	2.39	2.43	2.39	2.4	2.36	2.29	2.23	2.23
	Elevation	506.06	506.02	506	506.01	506	505.99	506	506.13	506.17	506.13	506.14	506.1	506.03	505.97	505.97
	Date	9/3/1999	9/4/1999	9/5/1999	9/6/1999	9/7/1999	9/8/1999	9/9/1999	9/10/1999	9/11/1999	9/12/1999	9/13/1999	9/14/1999	9/15/1999	9/16/1999	9/17/1999
	Gage Height	2.22	2.22	2.23	2.22	2.19	2.17	2.15	2.16	2.29	2.36	2.25	2.19	2.19	2.19	2.18
	Elevation	505.96	505.96	505.97	505.96	505.93	505.91	505.89	505.9	506.03	506.1	505.99	505.93	505.93	505.93	505.92
	Date	9/18/1999	9/19/1999	9/20/1999	9/21/1999	9/22/1999	9/23/1999	9/24/1999	9/25/1999	9/26/1999	9/27/1999	9/28/1999	9/29/1999	9/30/1999	10/1/1999	10/2/1999
	Gage Height	2.18	2.17	2.16	2.16	2.15	2.16	2.13	2.11	2.11	2.11	2.19	2.39	2.63	2.75	2.45
	Elevation	505.92	505.91	505.9	505.9	505.89	505.9	505.87	505.85	505.85	505.85	505.93	506.13	506.37	506.49	506.19
	Date	10/3/1999	10/4/1999	10/5/1999	10/6/1999	10/7/1999	10/8/1999	10/9/1999	10/10/1999	10/11/1999	10/12/1999	10/13/1999	10/14/1999	10/15/1999	10/16/1999	10/17/1999
	Gage Height	2.41	2.4	2.37	2.54	2.4	2.4	2.45	2.55	2.62	2.47	2.38	2.35	2.31	2.3	2.34
	Elevation	506.15	506.14	506.11	506.28	506.14	506.14	506.19	506.29	506.36	506.21	506.12	506.09	506.05	506.04	506.08
	Date	10/18/1999	10/19/1999	10/20/1999	10/21/1999	10/22/1999	10/23/1999	10/24/1999	10/25/1999	10/26/1999	10/27/1999	10/28/1999	10/29/1999	10/30/1999	10/31/1999	11/1/1999
520.31	Gage Height	2.3	2.28	2.28	2.27	2.24	2.22	2.22	2.22	2.22	2.19	2.2	2.23	2.23	2.24	2.27
	Elevation	506.04	506.02	506.02	506.01	505.98	505.96	505.96	505.96	505.96	505.93	505.94	505.97	505.97	505.98	506.01
	Date	11/2/1999	11/3/1999	11/4/1999	11/5/1999	11/6/1999	11/7/1999	11/8/1999	11/9/1999	11/10/1999	11/11/1999	11/12/1999	11/13/1999	11/14/1999	11/15/1999	11/16/1999
	Gage Height	2.44	2.34	2.31	2.37	2.28	2.23	2.23	2.25	2.25	2.21	2.21	2.23	2.25	2.24	2.23
	Elevation	506.18	506.08	506.05	506.11	506.02	505.97	505.97	505.99	505.99	505.95	505.95	505.97	505.99	505.98	505.97
	Date	11/17/1999	11/18/1999	11/19/1999	11/20/1999	11/21/1999	11/22/1999	11/23/1999	11/24/1999	11/25/1999	11/26/1999	11/27/1999	11/28/1999	11/29/1999	11/30/1999	12/1/1999
	Gage Height	2.23	2.22	2.23	2.23	2.23	2.24	2.26	2.29	2.26	2.29	2.33	2.25	2.21	2.19	2.19
	Elevation	505.97	505.96	505.97	505.97	505.97	505.98	506	506.03	506	506.03	506.07	505.99	505.95	505.93	505.93
	Date	12/2/1999	12/3/1999	12/4/1999	12/5/1999	12/6/1999	12/7/1999	12/8/1999	12/9/1999	12/10/1999	12/11/1999	12/12/1999	12/13/1999	12/14/1999	12/15/1999	12/16/1999
	Gage Height	2.19	2.19	2.2	2.29	2.37	2.64	2.56	2.4	2.36	2.31	2.34	2.29	2.46	2.38	2.52
	Elevation	505.93	505.93	505.94	506.03	506.11	506.38	506.3	506.14	506.1	506.05	506.08	506.03	506.2	506.12	506.26
	Date	12/17/1999	12/18/1999	12/19/1999	12/20/1999	12/21/1999	12/22/1999	12/23/1999	12/26/1999	12/27/1999	12/28/1999	12/29/1999	12/30/1999	12/31/1999		
	Gage Height	2.45	2.41	2.35	2.31	2.21	2.19	2.2	2.18	2.17	2.14	2.18	2.19	2.21		
	Elevation	506.19	506.15	506.09	506.05	505.95	505.93	505.94	505.92	505.91	505.88	505.92	505.93	505.95		

Maximum Elevation	Date	1/1/2000	1/2/2000	1/3/2000	1/4/2000	1/5/2000	1/6/2000	1/7/2000	1/8/2000	1/9/2000	1/10/2000	1/11/2000	1/12/2000	1/13/2000	1/14/2000	1/15/2000
	Gage Height	2.21	2.25	2.39	2.42	2.46	2.73	2.4	2.37	2.38	2.31	2.26	2.23	2.2	2.16	2.13
	Elevation	505.95	505.99	506.13	506.16	506.2	506.47	506.14	506.11	506.12	506.05	506	505.97	505.94	505.9	505.87
	Date	1/16/2000	1/17/2000	1/18/2000	1/19/2000	1/22/2000	1/23/2000	1/26/2000	1/29/2000	1/30/2000	1/31/2000	2/1/2000	2/2/2000	2/3/2000	2/4/2000	2/5/2000
	Gage Height	2.19	2.12	2.2	2.11	2.17	2.18	2.21	2.22	2.28	2.28	2.3	2.32	2.35	2.37	2.36
	Elevation	505.93	505.86	505.94	505.85	505.91	505.92	505.95	505.96	506.02	506.02	506.04	506.06	506.09	506.11	506.1
	Date	2/6/2000	2/7/2000	2/8/2000	2/9/2000	2/10/2000	2/11/2000	2/12/2000	2/13/2000	2/14/2000	2/15/2000	2/16/2000	2/17/2000	2/18/2000	2/19/2000	2/20/2000
	Gage Height	2.36	2.4	2.36	2.35	2.46	2.52	2.63	2.85	2.72	2.65	2.63	2.69	3.1	4.27	4.5
	Elevation	506.1	506.14	506.1	506.09	506.2	506.26	506.37	506.59	506.46	506.39	506.37	506.43	506.84	508.01	508.24
	Date	2/21/2000	2/22/2000	2/23/2000	2/24/2000	2/25/2000	2/26/2000	2/27/2000	2/28/2000	2/29/2000	3/1/2000	3/2/2000	3/3/2000	3/4/2000	3/5/2000	3/6/2000
515.43	Gage Height	3.97	3.5	3.46	3.41	3.31	3.28	3.56	3.94	3.59	3.41	3.29	3.14	3.05	3	2.93
	Elevation	507.71	507.24	507.2	507.15	507.05	507.02	507.3	507.68	507.33	507.15	507.03	506.88	506.79	506.74	506.67
	Date	3/7/2000	3/8/2000	3/9/2000	3/10/2000	3/11/2000	3/12/2000	3/13/2000	3/14/2000	3/15/2000	3/16/2000	3/17/2000	3/18/2000	3/19/2000	3/20/2000	3/21/2000
	Gage Height	2.87	2.93	2.94	2.92	2.83	2.81	2.78	2.83	2.9	2.89	2.88	2.79	2.86	4.09	5.03
	Elevation	506.61	506.67	506.68	506.66	506.57	506.55	506.52	506.57	506.64	506.63	506.62	506.53	506.6	507.83	508.77
	Date	3/22/2000	3/23/2000	3/24/2000	3/25/2000	3/26/2000	3/27/2000	3/28/2000	3/29/2000	3/30/2000	3/31/2000	4/1/2000	4/2/2000	4/3/2000	4/4/2000	4/5/2000
	Gage Height	4.48	4.01	3.8	3.67	3.53	3.57	3.58	3.42	3.21	3.11	3.02	2.96	2.98	2.97	3.03
	Elevation	508.22	507.75	507.54	507.41	507.27	507.31	507.32	507.16	506.95	506.85	506.76	506.7	506.72	506.71	506.77
	Date	4/6/2000	4/7/2000	4/8/2000	4/9/2000	4/10/2000	4/11/2000	4/12/2000	4/13/2000	4/14/2000	4/15/2000	4/16/2000	4/17/2000	4/18/2000	4/19/2000	4/20/2000
	Gage Height	2.95	2.97	3	3.03	2.96	3.03	3	2.93	2.8	2.74	2.76	3.43	4.4	4.08	3.78
	Elevation	506.69	506.71	506.74	506.77	506.7	506.77	506.74	506.67	506.54	506.48	506.5	507.17	508.14	507.82	507.52

Base Elevation = 503.74'
All Units in Feet (')
From USGS Station 03339000

Brickyard Disposal and Recycling
Historical River Elevations
Average Annual Maximum Elevation 519.14 '

Maximum Elevation	Date	4/21/2000	4/22/2000	4/23/2000	4/24/2000	4/25/2000	4/26/2000	4/27/2000	4/28/2000	4/29/2000	4/30/2000	5/1/2000	5/2/2000	5/3/2000	5/4/2000	5/5/2000
	Gage Height	3.75	3.99	3.85	3.7	3.62	3.55	3.42	3.34	3.27	3.21	3.17	3.32	3.37	3.36	3.26
	Elevation	507.49	507.73	507.59	507.44	507.36	507.29	507.16	507.08	507.01	506.95	506.91	507.06	507.11	507.1	507
	Date	5/6/2000	5/7/2000	5/8/2000	5/9/2000	5/10/2000	5/11/2000	5/12/2000	5/13/2000	5/14/2000	5/15/2000	5/16/2000	5/17/2000	5/18/2000	5/19/2000	5/20/2000
	Gage Height	3.18	3.12	3.1	3.5	3.74	3.56	3.57	3.83	3.3	3.16	3.07	3.08	3.36	3.71	4.04
	Elevation	506.92	506.86	506.84	507.24	507.48	507.3	507.31	507.57	507.04	506.9	506.81	506.82	507.1	507.45	507.78
	Date	5/21/2000	5/22/2000	5/23/2000	5/24/2000	5/27/2000	5/28/2000	5/29/2000	5/30/2000	5/31/2000	6/1/2000	6/2/2000	6/3/2000	6/4/2000	6/5/2000	6/6/2000
	Gage Height	4.1	3.73	3.55	3.48	5.76	11.69	9.39	7.11	6.05	5.38	4.94	4.62	4.33	4.39	4.43
	Elevation	507.84	507.47	507.29	507.22	509.5	515.43	513.13	510.85	509.79	509.12	508.68	508.36	508.07	508.13	508.17
	Date	6/7/2000	6/8/2000	6/9/2000	6/10/2000	6/11/2000	6/12/2000	6/13/2000	6/14/2000	6/15/2000	6/16/2000	6/17/2000	6/18/2000	6/19/2000	6/20/2000	6/21/2000
	Gage Height	4.08	3.89	3.79	3.76	3.82	3.66	3.66	4.45	4.65	4.39	3.99	3.74	3.53	3.43	5.48
	Elevation	507.82	507.63	507.53	507.5	507.56	507.4	507.4	508.19	508.39	508.13	507.73	507.48	507.27	507.17	509.22
	Date	6/22/2000	6/23/2000	6/24/2000	6/25/2000	6/26/2000	6/27/2000	6/28/2000	6/29/2000	6/30/2000	7/1/2000	7/2/2000	7/3/2000	7/4/2000	7/5/2000	7/6/2000
	Gage Height	6.89	6.04	5.62	7.6	6.5	5.38	4.69	4.4	4.17	3.92	3.73	3.63	3.56	4.2	5.42
	Elevation	510.63	509.78	509.36	511.34	510.24	509.12	508.43	508.14	507.91	507.66	507.47	507.37	507.3	507.94	509.16
	Date	7/7/2000	7/8/2000	7/9/2000	7/10/2000	7/21/2000	7/22/2000	7/23/2000	7/26/2000	7/27/2000	7/28/2000	7/29/2000	7/30/2000	7/31/2000	8/1/2000	8/2/2000
	Gage Height	4.65	4	3.63	3.53	2.6	2.57	2.48	2.25	2.42	2.38	2.35	2.27	2.93	3.25	2.92
	Elevation	508.39	507.74	507.37	507.27	506.34	506.31	506.22	505.99	506.16	506.12	506.09	506.01	506.67	506.99	506.66
	Date	8/3/2000	8/4/2000	8/5/2000	8/6/2000	8/7/2000	8/8/2000	8/9/2000	8/10/2000	8/11/2000	8/12/2000	8/13/2000	8/14/2000	8/15/2000	8/16/2000	8/17/2000
	Gage Height	2.75	2.66	2.67	2.74	2.62	2.31	2.28	2.22	2.19	2.16	2.16	2.15	2.12	2.11	2.11
	Elevation	506.49	506.4	506.41	506.48	506.36	506.05	506.02	505.96	505.93	505.9	505.9	505.89	505.86	505.85	505.85
	Date	8/18/2000	8/19/2000	8/20/2000	8/21/2000	8/22/2000	8/23/2000	8/24/2000	8/25/2000	8/26/2000	8/27/2000	8/28/2000	8/29/2000	8/30/2000	8/31/2000	9/1/2000
	Gage Height	2.16	2.12	2.19	2.21	2.14	2.14	2.69	2.73	2.45	2.3	2.24	2.22	2.19	2.19	2.14
	Elevation	505.9	505.86	505.93	505.95	505.88	505.88	506.43	506.47	506.19	506.04	505.98	505.96	505.93	505.93	505.88
515.43	Date	9/2/2000	9/3/2000	9/4/2000	9/5/2000	9/6/2000	9/7/2000	9/8/2000	9/9/2000	9/10/2000	9/11/2000	9/12/2000	9/13/2000	9/14/2000	9/15/2000	9/16/2000
	Gage Height	2.12	2.11	2.15	2.1	2.03	2.03	2.04	2.12	2.18	2.17	2.5	2.49	2.62	2.34	2.22
	Elevation	505.86	505.85	505.89	505.84	505.77	505.77	505.78	505.86	505.92	505.91	506.24	506.23	506.36	506.08	505.96
	Date	9/18/2000	9/19/2000	9/20/2000	9/21/2000	9/22/2000	9/23/2000	9/24/2000	9/25/2000	9/26/2000	9/27/2000	9/28/2000	9/29/2000	9/30/2000	10/1/2000	10/2/2000
	Gage Height	2.16	2.11	2.08	2.08	2.11	2.16	2.23	2.4	2.42	2.68	2.41	2.27	2.26	2.22	2.17
	Elevation	505.9	505.85	505.82	505.82	505.85	505.9	505.97	506.14	506.16	506.42	506.15	506.01	506	505.96	505.91
	Date	10/3/2000	10/4/2000	10/5/2000	10/7/2000	10/8/2000	10/9/2000	10/10/2000	10/11/2000	10/12/2000	10/13/2000	10/14/2000	10/15/2000	10/16/2000	10/17/2000	10/18/2000
	Gage Height	2.14	2.16	2.4	2.79	2.53	2.37	2.31	2.28	2.26	2.23	2.21	2.25	2.23	2.43	2.34
	Elevation	505.88	505.9	506.14	506.53	506.27	506.11	506.05	506.02	506	505.97	505.95	505.99	505.97	506.17	506.08
	Date	10/19/2000	10/20/2000	10/21/2000	10/22/2000	10/23/2000	10/24/2000	10/25/2000	10/26/2000	10/27/2000	10/29/2000	10/30/2000	10/31/2000	11/1/2000	11/2/2000	11/3/2000
	Gage Height	2.27	2.22	2.19	2.17	2.18	2.17	2.16	2.17	2.16	2.17	2.18	2.17	2.17	2.18	2.23
	Elevation	506.01	505.96	505.93	505.91	505.92	505.91	505.9	505.91	505.9	505.91	505.92	505.91	505.91	505.92	505.97
	Date	11/4/2000	11/5/2000	11/6/2000	11/7/2000	11/8/2000	11/9/2000	11/10/2000	11/11/2000	11/12/2000	11/13/2000	11/14/2000	11/15/2000	11/16/2000	11/17/2000	11/18/2000
	Gage Height	2.18	2.14	2.18	2.28	2.31	2.75	2.8	3.89	3.84	3.55	3.22	3.42	3.23	3.04	2.98
	Elevation	505.92	505.88	505.92	506.02	506.05	506.49	506.54	507.63	507.58	507.29	506.96	507.16	506.97	506.78	506.72
	Date	11/19/2000	11/20/2000	11/21/2000	11/22/2000	11/23/2000	11/24/2000	11/25/2000	11/26/2000	11/27/2000	11/28/2000	11/29/2000	11/30/2000	12/1/2000	12/2/2000	12/3/2000
	Gage Height	2.92	2.83	2.72	2.48	2.45	2.5	2.64	3.09	2.84	2.8	2.73	2.69	2.7	2.76	2.75
	Elevation	506.66	506.57	506.46	506.22	506.19	506.24	506.38	506.83	506.58	506.54	506.47	506.43	506.44	506.5	506.49
	Date	12/4/2000	12/5/2000	12/6/2000	12/7/2000	12/8/2000	12/9/2000	12/10/2000	12/11/2000	12/12/2000	12/13/2000	12/14/2000	12/15/2000	12/16/2000	12/17/2000	12/18/2000
	Gage Height	2.7	2.62	2.52	2.54	2.53	2.68	2.77	2.9	3.09	3.33	3.39	3.26	3.27	3.14	3.08
	Elevation	506.44	506.36	506.26	506.28	506.27	506.42	506.51	506.64	506.83	507.07	507.13	507	507.01	506.88	506.82
	Date	12/19/2000	12/20/2000	12/21/2000	12/22/2000	12/23/2000	12/24/2000	12/25/2000	12/26/2000	12/27/2000	12/28/2000	12/29/2000	12/30/2000	12/31/2000		
	Gage Height	2.85	2.91	2.85	2.66	2.65	2.58	2.64	2.85	2.83	2.75	2.8	2.8	2.74		
	Elevation	506.59	506.65	506.59	506.4	506.39	506.32	506.38	506.59	506.57	506.49	506.54	506.54	506.48		

Base Elevation = 503.74'
All Units in Feet (')
From USGS Station 03339000

Brickyard Disposal and Recycling
Historical River Elevations
Average Annual Maximum Elevation 519.14 '

Maximum Elevation	Date	1/1/2001	1/2/2001	1/3/2001	1/4/2001	1/5/2001	1/6/2001	1/7/2001	1/8/2001	1/9/2001	1/10/2001	1/11/2001	1/12/2001	1/13/2001	1/14/2001	1/15/2001
	Gage Height	2.75	2.73	2.71	2.7	2.69	2.73	2.75	2.75	2.73	2.6	2.57	2.58	2.62	2.66	2.93
	Elevation	506.49	506.47	506.45	506.44	506.43	506.47	506.49	506.49	506.47	506.34	506.31	506.32	506.36	506.4	506.67
	Date	1/16/2001	1/17/2001	1/18/2001	1/19/2001	1/31/2001	2/1/2001	2/2/2001	2/3/2001	2/4/2001	2/5/2001	2/6/2001	2/7/2001	2/8/2001	2/9/2001	2/10/2001
	Gage Height	3.54	3.96	3.67	3.3	9.8	8.39	6.73	5.69	4.9	4.76	4.8	4.53	5.03	7.94	11.44
	Elevation	507.28	507.7	507.41	507.04	513.54	512.13	510.47	509.43	508.64	508.5	508.54	508.27	508.77	511.68	515.18
	Date	2/11/2001	2/12/2001	2/14/2001	2/15/2001	2/16/2001	2/17/2001	2/18/2001	2/19/2001	2/20/2001	2/21/2001	2/22/2001	2/23/2001	2/24/2001	2/25/2001	2/26/2001
	Gage Height	9.93	7.33	6.45	9.56	8.28	6.92	5.82	5.23	4.77	4.59	4.49	4.42	4.6	12.97	14.69
	Elevation	513.67	511.07	510.19	513.3	512.02	510.66	509.56	508.97	508.51	508.33	508.23	508.16	508.34	516.71	518.43
	Date	2/27/2001	2/28/2001	3/1/2001	3/2/2001	3/3/2001	3/4/2001	3/5/2001	3/6/2001	3/7/2001	3/8/2001	3/9/2001	3/10/2001	3/11/2001	3/12/2001	3/13/2001
	Gage Height	13.3	9.68	7.12	6.24	5.75	5.39	5.07	4.77	4.5	4.37	4.28	4.11	3.97	3.94	3.98
	Elevation	517.04	513.42	510.86	509.98	509.49	509.13	508.81	508.51	508.24	508.11	508.02	507.85	507.71	507.68	507.72
	Date	3/14/2001	3/15/2001	3/16/2001	3/17/2001	3/18/2001	3/19/2001	3/20/2001	3/21/2001	3/22/2001	3/23/2001	3/24/2001	3/25/2001	3/26/2001	3/27/2001	3/28/2001
	Gage Height	3.96	3.79	4.14	4.79	5.32	5.18	4.87	4.71	4.57	4.42	4.22	4.08	3.95	3.9	3.83
	Elevation	507.7	507.53	507.88	508.53	509.06	508.92	508.61	508.45	508.31	508.16	507.96	507.82	507.69	507.64	507.57
	Date	3/30/2001	3/31/2001	4/1/2001	4/2/2001	4/3/2001	4/4/2001	4/5/2001	4/6/2001	4/7/2001	4/11/2001	4/12/2001	4/13/2001	4/14/2001	4/15/2001	4/16/2001
	Gage Height	3.84	3.8	3.88	3.73	3.57	3.52	3.46	3.62	5.97	5.4	6.96	5.82	4.99	4.65	4.59
	Elevation	507.58	507.54	507.62	507.47	507.31	507.26	507.2	507.36	509.71	509.14	510.7	509.56	508.73	508.39	508.33
	Date	4/17/2001	4/18/2001	4/19/2001	4/20/2001	4/21/2001	4/22/2001	4/23/2001	4/24/2001	4/25/2001	4/26/2001	4/27/2001	4/28/2001	4/29/2001	4/30/2001	5/1/2001
	Gage Height	4.37	4.11	3.98	3.92	3.92	3.87	3.76	3.82	3.71	3.56	3.55	3.49	3.37	3.3	3.37
	Elevation	508.11	507.85	507.72	507.66	507.66	507.61	507.5	507.56	507.45	507.3	507.29	507.23	507.11	507.04	507.11
	Date	5/2/2001	5/3/2001	5/4/2001	5/5/2001	5/6/2001	5/7/2001	5/8/2001	5/9/2001	5/10/2001	5/11/2001	5/12/2001	5/13/2001	5/14/2001	5/15/2001	5/16/2001
	Gage Height	3.39	3.28	3.13	3.07	3.24	3.27	3.18	3.17	3.06	3.04	3.23	3.17	2.96	2.95	2.82
	Elevation	507.13	507.02	506.87	506.81	506.98	507.01	506.92	506.91	506.8	506.78	506.97	506.91	506.7	506.69	506.56
518.43	Date	5/17/2001	5/18/2001	5/19/2001	5/20/2001	5/21/2001	5/22/2001	5/23/2001	5/24/2001	5/25/2001	5/26/2001	5/27/2001	5/28/2001	5/29/2001	5/30/2001	5/31/2001
	Gage Height	2.93	3.73	4.55	4.42	3.92	3.7	3.58	3.41	3.37	3.36	3.53	4.19	3.96	3.54	3.47
	Elevation	506.67	507.47	508.29	508.16	507.66	507.44	507.32	507.15	507.11	507.1	507.27	507.93	507.7	507.28	507.21
	Date	6/1/2001	6/2/2001	6/3/2001	6/4/2001	6/5/2001	6/6/2001	6/15/2001	6/16/2001	6/17/2001	6/18/2001	6/19/2001	7/3/2001	7/4/2001	7/5/2001	7/6/2001
	Gage Height	3.66	3.98	4.07	4.24	4.41	5.47	3.88	3.76	3.61	3.4	3.35	2.85	3.73	3.93	3.62
	Elevation	507.4	507.72	507.81	507.98	508.15	509.21	507.62	507.5	507.35	507.14	507.09	506.59	507.47	507.67	507.36
	Date	7/7/2001	7/8/2001	7/9/2001	7/10/2001	7/11/2001	7/12/2001	7/13/2001	7/14/2001	7/15/2001	7/16/2001	7/17/2001	7/18/2001	7/19/2001	7/20/2001	7/21/2001
	Gage Height	3.2	3.18	3.22	3.88	3.71	3.28	2.95	2.78	2.7	2.64	2.52	2.45	2.42	2.52	2.55
	Elevation	506.94	506.92	506.96	507.62	507.45	507.02	506.69	506.52	506.44	506.38	506.26	506.19	506.16	506.26	506.29
	Date	7/22/2001	7/23/2001	7/24/2001	7/25/2001	7/26/2001	7/27/2001	7/28/2001	7/29/2001	7/30/2001	7/31/2001	8/1/2001	8/2/2001	8/3/2001	8/4/2001	8/5/2001
	Gage Height	2.45	2.58	2.61	2.7	2.81	2.56	2.88	3.42	3.03	2.84	2.73	2.66	2.59	2.78	2.79
	Elevation	506.19	506.32	506.35	506.44	506.55	506.3	506.62	507.16	506.77	506.58	506.47	506.4	506.33	506.52	506.53
	Date	8/6/2001	8/7/2001	8/8/2001	8/9/2001	8/10/2001	8/11/2001	8/12/2001	8/13/2001	8/14/2001	8/15/2001	8/16/2001	8/17/2001	8/18/2001	8/19/2001	8/20/2001
	Gage Height	2.6	2.5	2.46	2.52	2.47	2.45	2.46	2.45	2.44	2.44	2.45	2.48	2.49	2.5	2.49
	Elevation	506.34	506.24	506.2	506.26	506.21	506.19	506.2	506.19	506.18	506.18	506.19	506.22	506.23	506.24	506.23
	Date	8/21/2001	8/22/2001	8/23/2001	8/24/2001	8/25/2001	8/26/2001	8/27/2001	8/28/2001	8/29/2001	8/30/2001	8/31/2001	9/1/2001	9/2/2001	9/3/2001	9/4/2001
	Gage Height	2.61	2.54	2.57	2.5	2.84	2.64	2.85	2.57	2.37	2.35	4.08	4.42	3.68	3.02	2.51
	Elevation	506.35	506.28	506.31	506.24	506.58	506.38	506.59	506.31	506.11	506.09	507.82	508.16	507.42	506.76	506.25
	Date	9/5/2001	9/6/2001	9/7/2001	9/8/2001	9/9/2001	9/10/2001	9/11/2001	9/12/2001	9/13/2001	9/14/2001	9/15/2001	9/16/2001	9/17/2001	9/18/2001	9/19/2001
	Gage Height	2.57	2.53	2.5	2.92	3.63	4.19	3.78	3.26	2.98	2.68	2.61	2.57	2.5	2.42	2.81
	Elevation	506.31	506.27	506.24	506.66	507.37	507.93	507.52	507	506.72	506.42	506.35	506.31	506.24	506.16	506.55
	Date	9/20/2001	9/21/2001	9/22/2001	9/23/2001	9/24/2001	9/25/2001	9/26/2001	9/27/2001	9/28/2001	9/29/2001	9/30/2001	10/1/2001	10/2/2001	10/3/2001	10/4/2001
	Gage Height	2.78	2.86	2.68	2.48	2.44	2.39	2.29	2.19	2.21	2.2	2.21	2.38	2.46	2.12	2.09
	Elevation	506.52	506.6	506.42	506.22	506.18	506.13	506.03	505.93	505.95	505.94	505.95	506.12	506.2	505.86	505.83

Base Elevation = 503.74'
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Brickyard Disposal and Recycling
Historical River Elevations
Average Annual Maximum Elevation 519.14 '

Maximum Elevation	Date	10/5/2001	10/6/2001	10/7/2001	10/8/2001	10/9/2001	10/10/2001	10/11/2001	10/12/2001	10/13/2001	10/14/2001	10/15/2001	10/16/2001	10/17/2001	10/18/2001	10/19/2001
	Gage Height	2.48	2.6	3.48	3.12	2.7	2.72	2.88	4.2	6.05	12.61	12.86	10.54	9.57	7.75	6.47
	Elevation	506.22	506.34	507.22	506.86	506.44	506.46	506.62	507.94	509.79	516.35	516.6	514.28	513.31	511.49	510.21
	Date	10/20/2001	10/21/2001	10/22/2001	10/23/2001	10/24/2001	10/25/2001	10/26/2001	10/27/2001	10/28/2001	10/29/2001	10/30/2001	10/31/2001	11/1/2001	11/2/2001	11/3/2001
	Gage Height	5.61	5.31	5.03	5.2	7.6	11.41	10.29	8.66	6.37	5.77	5.37	4.85	4.73	4.64	4.44
	Elevation	509.35	509.05	508.77	508.94	511.34	515.15	514.03	512.4	510.11	509.51	509.11	508.59	508.47	508.38	508.18
	Date	11/4/2001	11/5/2001	11/6/2001	11/7/2001	11/8/2001	11/9/2001	11/10/2001	11/11/2001	11/12/2001	11/13/2001	11/14/2001	11/15/2001	11/16/2001	11/17/2001	11/18/2001
	Gage Height	4.33	4.25	4.09	3.94	3.96	3.88	3.81	3.82	3.6	3.54	3.56	3.53	3.41	3.4	3.46
	Elevation	508.07	507.99	507.83	507.68	507.7	507.62	507.55	507.56	507.34	507.28	507.3	507.27	507.15	507.14	507.2
518.43	Date	11/19/2001	11/20/2001	11/21/2001	11/22/2001	11/23/2001	11/24/2001	11/25/2001	11/26/2001	11/27/2001	11/28/2001	11/29/2001	11/30/2001	12/1/2001	12/2/2001	12/3/2001
	Gage Height	3.29	3.41	3.25	3.31	3.38	3.32	3.74	3.58	3.45	3.67	3.61	5.7	6.89	5.84	5.1
	Elevation	507.03	507.15	506.99	507.05	507.12	507.06	507.48	507.32	507.19	507.41	507.35	509.44	510.63	509.58	508.84
	Date	12/4/2001	12/5/2001	12/6/2001	12/7/2001	12/8/2001	12/9/2001	12/10/2001	12/11/2001	12/12/2001	12/13/2001	12/14/2001	12/15/2001	12/16/2001	12/17/2001	12/18/2001
	Gage Height	4.85	4.53	4.43	4.31	4.11	3.92	3.82	3.79	3.73	3.92	4.56	5.94	5.85	8.25	9.86
	Elevation	508.59	508.27	508.17	508.05	507.85	507.66	507.56	507.53	507.47	507.66	508.3	509.68	509.59	511.99	513.6
	Date	12/19/2001	12/20/2001	12/21/2001	12/22/2001	12/23/2001	12/24/2001	12/25/2001	12/26/2001	12/27/2001	12/28/2001	12/29/2001	12/30/2001	12/31/2001		
	Gage Height	8.03	6.68	5.84	5.49	5.33	5.29	4.98	4.69	4.61	4.47	4.3	4.01	4.03		
	Elevation	511.77	510.42	509.58	509.23	509.07	509.03	508.72	508.43	508.35	508.21	508.04	507.75	507.77		

Maximum Elevation	Date	1/1/2002	1/3/2002	1/4/2002	1/5/2002	1/6/2002	1/7/2002	1/8/2002	1/9/2002	1/10/2002	1/11/2002	1/12/2002	1/13/2002	1/14/2002	1/15/2002	1/16/2002
	Gage Height	4	4.08	3.99	3.79	3.84	3.72	3.5	3.7	3.64	3.61	3.46	3.51	3.53	3.49	3.34
	Elevation	507.74	507.82	507.73	507.53	507.58	507.46	507.24	507.44	507.38	507.35	507.2	507.25	507.27	507.23	507.08
	Date	1/17/2002	1/18/2002	1/19/2002	1/20/2002	1/21/2002	1/22/2002	1/23/2002	1/24/2002	1/25/2002	1/26/2002	1/27/2002	1/28/2002	1/29/2002	1/30/2002	1/31/2002
	Gage Height	3.26	3.2	3.2	3.25	3.34	3.3	3.18	3.25	3.23	3.16	3.08	3.1	3.32	3.74	9.57
	Elevation	507	506.94	506.94	506.99	507.08	507.04	506.92	506.99	506.97	506.9	506.82	506.84	507.06	507.48	513.31
	Date	2/1/2002	2/2/2002	2/3/2002	2/4/2002	2/5/2002	2/6/2002	2/7/2002	2/8/2002	2/9/2002	2/10/2002	2/11/2002	2/12/2002	2/13/2002	2/14/2002	2/15/2002
	Gage Height	14.96	13.64	10.08	7.65	6.51	5.83	5.32	5.09	4.68	4.78	4.68	4.79	4.59	4.36	4.27
	Elevation	518.7	517.38	513.82	511.39	510.25	509.57	509.06	508.83	508.42	508.52	508.42	508.53	508.33	508.1	508.01
	Date	2/16/2002	2/17/2002	2/18/2002	2/19/2002	2/20/2002	2/21/2002	2/22/2002	2/23/2002	2/24/2002	2/25/2002	2/26/2002	2/27/2002	2/28/2002	3/1/2002	3/2/2002
	Gage Height	4.26	4.03	3.92	5.34	13.19	13.42	10.64	8.02	7	6.44	6.1	5.82	5.39	5.3	5.63
	Elevation	508	507.77	507.66	509.08	516.93	517.16	514.38	511.76	510.74	510.18	509.84	509.56	509.13	509.04	509.37
	Date	3/3/2002	3/4/2002	3/5/2002	3/6/2002	3/7/2002	3/8/2002	3/9/2002	3/10/2002	3/11/2002	3/12/2002	3/13/2002	3/14/2002	3/15/2002	3/16/2002	3/17/2002
	Gage Height	8.61	6.87	6.65	6.4	7.05	6.98	8.54	10.63	8.35	6.82	6.46	6.03	5.86	5.6	5.41
	Elevation	512.35	510.61	510.39	510.14	510.79	510.72	512.28	514.37	512.09	510.56	510.2	509.77	509.6	509.34	509.15
521.95	Date	3/18/2002	3/19/2002	3/20/2002	3/21/2002	3/22/2002	3/23/2002	3/24/2002	3/25/2002	3/26/2002	3/27/2002	3/28/2002	3/29/2002	3/30/2002	3/31/2002	4/1/2002
	Gage Height	5.32	5.08	5	4.91	4.65	4.55	4.57	4.79	4.94	4.75	4.89	7.14	10.72	10.78	8.52
	Elevation	509.06	508.82	508.74	508.65	508.39	508.29	508.31	508.53	508.68	508.49	508.63	510.88	514.46	514.52	512.26
	Date	4/2/2002	4/3/2002	4/4/2002	4/5/2002	4/6/2002	4/7/2002	4/8/2002	4/9/2002	4/10/2002	4/11/2002	4/12/2002	4/13/2002	4/14/2002	4/15/2002	4/16/2002
	Gage Height	7.3	6.7	6.08	5.6	5.39	5.2	5.56	7.09	6.65	6.04	6	6.26	5.69	5.41	5.11
	Elevation	511.04	510.44	509.82	509.34	509.13	508.94	509.3	510.83	510.39	509.78	509.74	510	509.43	509.15	508.85
	Date	4/17/2002	4/18/2002	4/19/2002	4/20/2002	4/21/2002	4/22/2002	4/23/2002	4/24/2002	4/25/2002	4/26/2002	4/27/2002	4/28/2002	4/29/2002	4/30/2002	5/1/2002
	Gage Height	4.95	4.73	4.68	4.65	5.26	6.56	6.06	5.53	5.61	5.44	6.56	13.1	12.29	9.75	7.62
	Elevation	508.69	508.47	508.42	508.39	509	510.3	509.8	509.27	509.35	509.18	510.3	516.84	516.03	513.49	511.36
	Date	5/2/2002	5/3/2002	5/4/2002	5/5/2002	5/6/2002	5/7/2002	5/8/2002	5/9/2002	5/10/2002	5/11/2002	5/12/2002	5/13/2002	5/14/2002	5/15/2002	5/16/2002
	Gage Height	6.81	6.41	5.93	5.55	5.54	6.88	7.68	8.87	9.53	7.93	13.07	18.21	15.99	12.25	8.94
	Elevation	510.55	510.15	509.67	509.29	509.28	510.62	511.42	512.61	513.27	511.67	516.81	521.95	519.73	515.99	512.68
	Date	5/17/2002	5/18/2002	5/21/2002	5/22/2002	5/23/2002	5/24/2002	5/25/2002	5/26/2002	5/27/2002	5/28/2002	5/29/2002	5/30/2002	5/31/2002	6/1/2002	6/2/2002
	Gage Height	8.82	8.51	6.29	5.92	5.65	5.48	5.32	5.07	4.85	4.88	5.68	5.43	5.14	4.84	4.64
	Elevation	512.56	512.25	510.03	509.66	509.39	509.22	509.06	508.81	508.59	508.62	509.42	509.17	508.88	508.58	508.38

Base Elevation = 503.74'
All Units in Feet (')
From USGS Station 03339000

Brickyard Disposal and Recycling
Historical River Elevations
Average Annual Maximum Elevation 519.14 '

Maximum Elevation	Date	6/3/2002	6/4/2002	6/5/2002	6/6/2002	6/7/2002	6/8/2002	6/9/2002	6/10/2002	6/11/2002	6/12/2002	6/13/2002	6/14/2002	6/15/2002	6/16/2002	6/17/2002
	Gage Height	4.52	4.32	4.77	5.52	5.1	4.68	4.55	4.35	5.33	8.12	7.6	7.97	7.38	6.68	5.93
	Elevation	508.26	508.06	508.51	509.26	508.84	508.42	508.29	508.09	509.07	511.86	511.34	511.71	511.12	510.42	509.67
	Date	6/18/2002	6/19/2002	6/20/2002	6/21/2002	6/22/2002	6/23/2002	6/24/2002	6/25/2002	6/26/2002	6/27/2002	6/28/2002	6/29/2002	6/30/2002	7/1/2002	7/2/2002
	Gage Height	5.25	4.9	4.64	4.45	4.24	4.3	4.08	4.25	4.55	4.84	4.68	4.44	3.92	3.78	3.66
	Elevation	508.99	508.64	508.38	508.19	507.98	508.04	507.82	507.99	508.29	508.58	508.42	508.18	507.66	507.52	507.4
	Date	7/3/2002	7/4/2002	7/5/2002	7/6/2002	7/7/2002	7/8/2002	7/9/2002	7/10/2002	7/11/2002	7/12/2002	7/13/2002	7/14/2002	7/15/2002	7/16/2002	7/17/2002
	Gage Height	3.48	3.36	3.49	3.13	3	2.92	2.85	2.83	2.86	2.93	2.79	2.68	2.58	2.46	2.41
	Elevation	507.22	507.1	507.23	506.87	506.74	506.66	506.59	506.57	506.6	506.67	506.53	506.42	506.32	506.2	506.15
	Date	7/18/2002	7/19/2002	7/20/2002	7/21/2002	7/23/2002	7/24/2002	7/25/2002	7/26/2002	7/27/2002	7/28/2002	7/29/2002	7/30/2002	7/31/2002	8/1/2002	8/2/2002
	Gage Height	2.41	2.81	3.35	2.89	3.59	3.67	3.39	2.8	3.21	3.69	4.06	3.89	3.11	2.94	2.86
	Elevation	506.15	506.55	507.09	506.63	507.33	507.41	507.13	506.54	506.95	507.43	507.8	507.63	506.85	506.68	506.6
	Date	8/3/2002	8/5/2002	8/6/2002	8/7/2002	8/8/2002	8/9/2002	8/10/2002	8/11/2002	8/12/2002	8/13/2002	8/14/2002	8/15/2002	8/16/2002	8/17/2002	8/18/2002
	Gage Height	2.7	2.82	2.42	2.38	2.31	2.29	2.3	2.31	2.28	2.2	2.19	2.29	2.44	2.64	2.76
	Elevation	506.44	506.56	506.16	506.12	506.05	506.03	506.04	506.05	506.02	505.94	505.93	506.03	506.18	506.38	506.5
	Date	8/19/2002	8/20/2002	8/21/2002	8/22/2002	8/23/2002	8/24/2002	8/25/2002	8/26/2002	8/27/2002	8/28/2002	8/29/2002	8/30/2002	8/31/2002	9/1/2002	9/2/2002
	Gage Height	8.65	14.52	11.38	6.56	13.24	13.41	11.26	9.24	6.26	5.19	4.6	4.11	3.73	3.56	3.32
	Elevation	512.39	518.26	515.12	510.3	516.98	517.15	515	512.98	510	508.93	508.34	507.85	507.47	507.3	507.06
	Date	9/3/2002	9/4/2002	9/5/2002	9/6/2002	9/7/2002	9/8/2002	9/9/2002	9/10/2002	9/11/2002	9/12/2002	9/13/2002	9/14/2002	9/15/2002	9/16/2002	9/17/2002
	Gage Height	3.12	3.06	2.88	2.82	2.79	2.74	2.68	2.55	2.43	2.39	2.36	2.35	2.38	2.49	2.53
	Elevation	506.86	506.8	506.62	506.56	506.53	506.48	506.42	506.29	506.17	506.13	506.1	506.09	506.12	506.23	506.27
521.95	Date	9/18/2002	9/19/2002	9/20/2002	9/21/2002	9/22/2002	9/23/2002	9/24/2002	9/25/2002	9/26/2002	9/27/2002	9/28/2002	9/29/2002	9/30/2002	10/1/2002	10/2/2002
	Gage Height	2.54	2.62	2.92	3.2	2.84	2.54	2.39	2.33	2.41	2.35	2.4	2.37	2.34	2.33	2.25
	Elevation	506.28	506.36	506.66	506.94	506.58	506.28	506.13	506.07	506.15	506.09	506.14	506.11	506.08	506.07	505.99
	Date	10/3/2002	10/4/2002	10/5/2002	10/6/2002	10/7/2002	10/8/2002	10/9/2002	10/10/2002	10/11/2002	10/12/2002	10/13/2002	10/14/2002	10/15/2002	10/16/2002	10/17/2002
	Gage Height	2.37	2.46	2.45	2.47	2.47	2.36	2.29	2.3	2.26	2.34	2.35	2.4	2.27	2.27	2.26
	Elevation	506.11	506.2	506.19	506.21	506.21	506.1	506.03	506.04	506	506.08	506.09	506.14	506.01	506.01	506
	Date	10/18/2002	10/19/2002	10/20/2002	10/21/2002	10/22/2002	10/23/2002	10/24/2002	10/25/2002	10/26/2002	10/27/2002	10/28/2002	10/29/2002	10/30/2002	10/31/2002	11/1/2002
	Gage Height	2.26	2.48	2.45	2.59	2.33	2.35	2.33	2.43	2.49	2.6	2.56	2.5	2.49	2.59	2.58
	Elevation	506	506.22	506.19	506.33	506.07	506.09	506.07	506.17	506.23	506.34	506.3	506.24	506.23	506.33	506.32
	Date	11/2/2002	11/3/2002	11/4/2002	11/5/2002	11/6/2002	11/7/2002	11/8/2002	11/9/2002	11/10/2002	11/11/2002	11/12/2002	11/13/2002	11/14/2002	11/15/2002	11/16/2002
	Gage Height	2.51	2.44	2.4	2.46	2.62	2.66	2.57	2.48	2.52	2.69	2.61	2.43	2.44	2.46	2.4
	Elevation	506.25	506.18	506.14	506.2	506.36	506.4	506.31	506.22	506.26	506.43	506.35	506.17	506.18	506.2	506.14
	Date	11/17/2002	11/18/2002	11/19/2002	11/20/2002	11/21/2002	11/22/2002	11/23/2002	11/24/2002	11/25/2002	11/26/2002	11/27/2002	11/28/2002	11/29/2002	11/30/2002	12/1/2002
	Gage Height	2.37	2.37	2.34	2.34	2.35	2.36	2.35	2.38	2.61	2.35	2.38	2.35	2.31	2.28	2.27
	Elevation	506.11	506.11	506.08	506.08	506.09	506.1	506.09	506.12	506.35	506.09	506.12	506.09	506.05	506.02	506.01
	Date	12/2/2002	12/3/2002	12/4/2002	12/5/2002	12/6/2002	12/7/2002	12/8/2002	12/9/2002	12/10/2002	12/11/2002	12/12/2002	12/13/2002	12/14/2002	12/15/2002	12/16/2002
	Gage Height	2.27	2.24	2.21	2.29	2.28	2.29	2.29	2.28	2.28	2.29	2.28	2.28	2.28	2.28	2.29
	Elevation	506.01	505.98	505.95	506.03	506.02	506.03	506.03	506.02	506.02	506.03	506.02	506.02	506.02	506.02	506.03
	Date	12/17/2002	12/18/2002	12/19/2002	12/20/2002	12/21/2002	12/22/2002	12/23/2002	12/24/2002	12/25/2002	12/26/2002	12/27/2002	12/29/2002	12/30/2002	12/31/2002	
	Gage Height	2.28	2.38	2.65	2.98	3.23	2.95	2.74	2.62	2.51	2.69	2.75	2.59	2.54	3	
	Elevation	506.02	506.12	506.39	506.72	506.97	506.69	506.48	506.36	506.25	506.43	506.49	506.33	506.28	506.74	
Maximum Elevation	Date	1/1/2003	1/2/2003	1/3/2003	1/4/2003	1/5/2003	1/6/2003	1/7/2003	1/8/2003	1/9/2003	1/10/2003	1/11/2003	1/12/2003	1/13/2003	1/14/2003	1/15/2003
	Gage Height	3.95	3.6	3.47	3.14	3.1	2.97	2.94	2.91	3.29	3.65	3.29	3.13	3.41	3.15	3.12
	Elevation	507.69	507.34	507.21	506.88	506.84	506.71	506.68	506.65	507.03	507.39	507.03	506.87	507.15	506.89	506.86
519.56	Date	1/16/2003	1/17/2003	1/18/2003	1/19/2003	1/20/2003	1/21/2003	1/22/2003	1/23/2003	1/24/2003	1/25/2003	1/28/2003	1/29/2003	1/31/2003	2/1/2003	2/2/2003
	Gage Height	3.05	3.1	2.99	2.92	3.03	2.95	2.84	2.79	2.69	2.67	2.85	2.92	2.84	2.91	3.08
	Elevation	506.79	506.84	506.73	506.66	506.77	506.69	506.58	506.53	506.43	506.41	506.59	506.66	506.58	506.65	506.82

Base Elevation = 503.74'
All Units in Feet (')
From USGS Station 03339000

Brickyard Disposal and Recycling
Historical River Elevations
Average Annual Maximum Elevation 519.14 '

Maximum Elevation	Date	2/3/2003	2/4/2003	2/5/2003	2/6/2003	2/7/2003	2/8/2003	2/9/2003	2/10/2003	2/11/2003	2/12/2003	2/13/2003	2/14/2003	2/15/2003	2/16/2003	2/17/2003
	Gage Height	3.31	3.91	4.12	3.8	3.33	3.19	2.97	2.94	3	2.91	2.89	2.8	2.96	3.01	3.07
	Elevation	507.05	507.65	507.86	507.54	507.07	506.93	506.71	506.68	506.74	506.65	506.63	506.54	506.7	506.75	506.81
	Date	2/18/2003	2/19/2003	2/20/2003	2/21/2003	2/22/2003	2/23/2003	2/24/2003	2/26/2003	2/27/2003	2/28/2003	3/1/2003	3/2/2003	3/3/2003	3/5/2003	3/6/2003
	Gage Height	2.62	2.71	2.88	3.21	3.9	4.75	4.45	3.42	3.29	3.14	3.12	3.16	3.23	3.43	3.93
	Elevation	506.36	506.45	506.62	506.95	507.64	508.49	508.19	507.16	507.03	506.88	506.86	506.9	506.97	507.17	507.67
	Date	3/7/2003	3/8/2003	3/9/2003	3/10/2003	3/11/2003	3/12/2003	3/13/2003	3/14/2003	3/15/2003	3/16/2003	3/17/2003	3/18/2003	3/19/2003	3/20/2003	3/21/2003
	Gage Height	3.96	4.16	4.79	4.43	3.81	3.7	4.7	5.63	4.92	4.6	4.37	4.28	4.16	4.02	3.9
	Elevation	507.7	507.9	508.53	508.17	507.55	507.44	508.44	509.37	508.66	508.34	508.11	508.02	507.9	507.76	507.64
	Date	3/22/2003	3/23/2003	3/24/2003	3/25/2003	3/26/2003	3/27/2003	3/28/2003	4/1/2003	4/2/2003	4/3/2003	4/4/2003	4/5/2003	4/6/2003	4/7/2003	4/8/2003
	Gage Height	3.87	3.92	3.68	3.52	3.57	3.43	3.4	3.08	3.12	3.2	3.19	3.59	5	4.58	5.41
	Elevation	507.61	507.66	507.42	507.26	507.31	507.17	507.14	506.82	506.86	506.94	506.93	507.33	508.74	508.32	509.15
	Date	4/9/2003	4/10/2003	4/11/2003	4/12/2003	4/13/2003	4/14/2003	4/15/2003	4/16/2003	4/17/2003	4/18/2003	4/19/2003	4/20/2003	4/21/2003	4/22/2003	4/23/2003
	Gage Height	5.17	4.69	4.26	4.11	3.9	3.65	3.58	3.52	3.62	3.41	3.37	3.52	3.37	3.51	3.23
	Elevation	508.91	508.43	508	507.85	507.64	507.39	507.32	507.26	507.36	507.15	507.11	507.26	507.11	507.25	506.97
	Date	4/24/2003	4/25/2003	4/26/2003	4/27/2003	4/28/2003	4/29/2003	4/30/2003	5/1/2003	5/2/2003	5/3/2003	5/4/2003	5/5/2003	5/6/2003	5/7/2003	5/8/2003
	Gage Height	3.31	3.67	4.16	4.06	3.86	3.87	3.64	3.63	3.52	3.51	3.38	5.89	6.81	5.93	5.17
	Elevation	507.05	507.41	507.9	507.8	507.6	507.61	507.38	507.37	507.26	507.25	507.12	509.63	510.55	509.67	508.91
	Date	5/9/2003	5/10/2003	5/11/2003	5/12/2003	5/13/2003	5/14/2003	5/15/2003	5/16/2003	5/17/2003	5/18/2003	5/19/2003	5/20/2003	5/21/2003	5/22/2003	5/23/2003
	Gage Height	5.93	7.75	9.43	7.97	6.37	5.65	5.69	5.64	5.1	4.67	4.47	4.52	4.38	4.33	4.11
	Elevation	509.67	511.49	513.17	511.71	510.11	509.39	509.43	509.38	508.84	508.41	508.21	508.26	508.12	508.07	507.85
	Date	5/24/2003	5/25/2003	5/26/2003	5/27/2003	5/28/2003	5/29/2003	5/30/2003	5/31/2003	6/1/2003	6/2/2003	6/3/2003	6/4/2003	6/5/2003	6/6/2003	6/7/2003
	Gage Height	3.97	3.88	3.78	3.67	3.64	4.29	4.08	4.63	4.95	4.38	4.09	3.94	3.76	3.6	3.55
	Elevation	507.71	507.62	507.52	507.41	507.38	508.03	507.82	508.37	508.69	508.12	507.83	507.68	507.5	507.34	507.29
519.56	Date	6/8/2003	6/9/2003	6/10/2003	6/11/2003	6/12/2003	6/13/2003	6/14/2003	6/15/2003	6/16/2003	6/17/2003	6/18/2003	6/19/2003	6/20/2003	6/21/2003	6/22/2003
	Gage Height	3.51	3.41	3.21	3.34	6.28	7.78	9.71	8.38	6.12	5.22	4.82	4.52	4.17	3.94	3.79
	Elevation	507.25	507.15	506.95	507.08	510.02	511.52	513.45	512.12	509.86	508.96	508.56	508.26	507.91	507.68	507.53
	Date	6/23/2003	6/24/2003	6/25/2003	6/26/2003	6/27/2003	6/28/2003	6/29/2003	6/30/2003	7/1/2003	7/2/2003	7/3/2003	7/4/2003	7/5/2003	7/6/2003	7/7/2003
	Gage Height	3.72	3.59	3.53	3.32	3.4	3.23	3.18	3.25	2.99	3.18	3.18	3.04	2.99	4.36	7.14
	Elevation	507.46	507.33	507.27	507.06	507.14	506.97	506.92	506.99	506.73	506.92	506.92	506.78	506.73	508.1	510.88
	Date	7/8/2003	7/9/2003	7/10/2003	7/11/2003	7/12/2003	7/13/2003	7/14/2003	7/15/2003	7/16/2003	7/17/2003	7/18/2003	7/19/2003	7/20/2003	7/21/2003	7/22/2003
	Gage Height	6.22	7.54	13.41	13.28	12.75	9.75	6.6	5.97	5.73	4.95	8.1	10.74	8.67	6.82	6.97
	Elevation	509.96	511.28	517.15	517.02	516.49	513.49	510.34	509.71	509.47	508.69	511.84	514.48	512.41	510.56	510.71
	Date	7/23/2003	7/24/2003	7/25/2003	7/26/2003	7/27/2003	7/28/2003	7/29/2003	7/30/2003	7/31/2003	8/1/2003	8/2/2003	8/3/2003	8/4/2003	8/5/2003	8/6/2003
	Gage Height	5.96	5.12	4.64	4.3	4.03	3.97	3.74	3.73	3.43	3.46	3.22	3.34	5.32	5.3	4.28
	Elevation	509.7	508.86	508.38	508.04	507.77	507.71	507.48	507.47	507.17	507.2	506.96	507.08	509.06	509.04	508.02
	Date	8/7/2003	8/8/2003	8/9/2003	8/10/2003	8/11/2003	8/12/2003	8/13/2003	8/14/2003	8/15/2003	8/16/2003	8/17/2003	8/18/2003	8/19/2003	8/20/2003	8/21/2003
	Gage Height	3.9	3.78	3.76	3.52	3.21	3.05	3.05	3.04	3.01	3.02	2.76	2.66	2.6	2.54	2.63
	Elevation	507.64	507.52	507.5	507.26	506.95	506.79	506.79	506.78	506.75	506.76	506.5	506.4	506.34	506.28	506.37
	Date	8/22/2003	8/23/2003	8/24/2003	8/25/2003	8/26/2003	8/27/2003	8/28/2003	8/29/2003	8/30/2003	8/31/2003	9/1/2003	9/3/2003	9/4/2003	9/5/2003	9/6/2003
	Gage Height	2.5	2.43	2.4	2.37	2.36	2.34	2.31	3.69	9.41	6.31	15.03	15.82	10.83	8	6.47
	Elevation	506.24	506.17	506.14	506.11	506.1	506.08	506.05	507.43	513.15	510.05	518.77	519.56	514.57	511.74	510.21
	Date	9/7/2003	9/8/2003	9/9/2003	9/10/2003	9/11/2003	9/12/2003	9/13/2003	9/14/2003	9/15/2003	9/16/2003	9/17/2003	9/18/2003	9/19/2003	9/20/2003	9/21/2003
	Gage Height	5.79	5.22	4.79	4.44	4.16	4.01	3.87	3.84	3.67	3.49	3.53	3.32	3.39	3.26	3.1
	Elevation	509.53	508.96	508.53	508.18	507.9	507.75	507.61	507.58	507.41	507.23	507.27	507.06	507.13	507	506.84
	Date	9/22/2003	9/23/2003	9/24/2003	9/25/2003	9/26/2003	9/27/2003	9/28/2003	9/29/2003	9/30/2003	10/1/2003	10/2/2003	10/3/2003	10/4/2003	10/5/2003	10/6/2003
	Gage Height	3.41	3.34	3.95	4.82	4.85	10.72	10.37	7.3	6.15	5.49	5.05	4.81	4.68	4.42	4.17
	Elevation	507.15	507.08	507.69	508.56	508.59	514.46	514.11	511.04	509.89	509.23	508.79	508.55	508.42	508.16	507.91

Base Elevation = 503.74'
All Units in Feet (')
From USGS Station 03339000

Brickyard Disposal and Recycling
Historical River Elevations
Average Annual Maximum Elevation 519.14 '

Maximum Elevation	Date	10/7/2003	10/8/2003	10/9/2003	10/10/2003	10/11/2003	10/12/2003	10/13/2003	10/14/2003	10/15/2003	10/16/2003	10/17/2003	10/18/2003	10/19/2003	10/20/2003	10/21/2003
	Gage Height	4.01	3.94	3.89	3.84	3.8	3.78	3.65	3.91	4.31	4.52	4.21	4.02	3.98	3.75	3.74
	Elevation	507.75	507.68	507.63	507.58	507.54	507.52	507.39	507.65	508.05	508.26	507.95	507.76	507.72	507.49	507.48
	Date	10/22/2003	10/23/2003	10/24/2003	10/25/2003	10/26/2003	10/27/2003	10/28/2003	10/29/2003	10/30/2003	10/31/2003	11/1/2003	11/2/2003	11/3/2003	11/4/2003	11/5/2003
	Gage Height	3.71	3.66	3.55	3.57	3.54	3.45	3.74	3.54	3.56	3.41	3.41	3.22	3.39	3.2	3.56
	Elevation	507.45	507.4	507.29	507.31	507.28	507.19	507.48	507.28	507.3	507.15	507.15	506.96	507.13	506.94	507.3
	Date	11/6/2003	11/7/2003	11/8/2003	11/9/2003	11/10/2003	11/11/2003	11/12/2003	11/13/2003	11/14/2003	11/15/2003	11/16/2003	11/17/2003	11/18/2003	11/19/2003	11/20/2003
	Gage Height	3.48	3.62	3.61	3.29	3.38	3.28	3.49	3.92	3.82	3.57	3.49	3.37	5.41	13.21	12.87
	Elevation	507.22	507.36	507.35	507.03	507.12	507.02	507.23	507.66	507.56	507.31	507.23	507.11	509.15	516.95	516.61
519.56	Date	11/21/2003	11/22/2003	11/23/2003	11/24/2003	11/25/2003	11/26/2003	11/27/2003	11/28/2003	11/29/2003	11/30/2003	12/1/2003	12/2/2003	12/3/2003	12/4/2003	12/5/2003
	Gage Height	10.25	7.66	7.11	10.71	10.33	8.1	7.12	6.57	6.03	5.78	5.45	5.04	4.84	4.85	4.91
	Elevation	513.99	511.4	510.85	514.45	514.07	511.84	510.86	510.31	509.77	509.52	509.19	508.78	508.58	508.59	508.65
	Date	12/6/2003	12/7/2003	12/8/2003	12/9/2003	12/10/2003	12/11/2003	12/12/2003	12/13/2003	12/14/2003	12/15/2003	12/16/2003	12/17/2003	12/18/2003	12/19/2003	12/20/2003
	Gage Height	4.95	4.98	5.04	5	5.1	5.48	5.36	4.93	4.85	4.63	4.7	4.49	4.38	4.28	4.09
	Elevation	508.69	508.72	508.78	508.74	508.84	509.22	509.1	508.67	508.59	508.37	508.44	508.23	508.12	508.02	507.83
	Date	12/21/2003	12/22/2003	12/23/2003	12/24/2003	12/25/2003	12/26/2003	12/27/2003	12/28/2003	12/29/2003	12/30/2003	12/31/2003				
	Gage Height	4.04	4.09	6.42	9.31	7.44	6.2	5.58	5.38	9.34	10.87	8.38				
	Elevation	507.78	507.83	510.16	513.05	511.18	509.94	509.32	509.12	513.08	514.61	512.12				

Maximum Elevation	Date	1/1/2004	1/2/2004	1/3/2004	1/4/2004	1/5/2004	1/7/2004	1/8/2004	1/9/2004	1/10/2004	1/11/2004	1/12/2004	1/13/2004	1/14/2004	1/15/2004	1/16/2004
	Gage Height	6.98	6.36	6.15	11.06	15.33	7.95	6.66	5.97	5.54	5.28	5.24	4.98	4.87	4.84	4.62
	Elevation	510.72	510.1	509.89	514.8	519.07	511.69	510.4	509.71	509.28	509.02	508.98	508.72	508.61	508.58	508.36
	Date	1/17/2004	1/18/2004	1/19/2004	1/20/2004	1/21/2004	1/22/2004	1/23/2004	1/24/2004	1/25/2004	1/26/2004	1/27/2004	1/28/2004	1/29/2004	2/1/2004	2/2/2004
	Gage Height	4.61	4.74	4.59	4.31	4.36	4.22	4.05	4.11	4.26	3.96	4.1	4.11	3.83	3.79	3.73
	Elevation	508.35	508.48	508.33	508.05	508.1	507.96	507.79	507.85	508	507.7	507.84	507.85	507.57	507.53	507.47
	Date	2/3/2004	2/4/2004	2/5/2004	2/6/2004	2/7/2004	2/8/2004	2/9/2004	2/10/2004	2/12/2004	2/13/2004	2/14/2004	2/15/2004	2/16/2004	2/17/2004	2/18/2004
	Gage Height	3.69	3.8	3.67	3.54	3.64	3.52	3.62	3.36	3.37	3.54	3.42	3.43	3.42	3.35	3.3
	Elevation	507.43	507.54	507.41	507.28	507.38	507.26	507.36	507.1	507.11	507.28	507.16	507.17	507.16	507.09	507.04
	Date	2/19/2004	2/20/2004	2/21/2004	2/22/2004	2/23/2004	2/24/2004	2/25/2004	2/26/2004	2/27/2004	2/28/2004	2/29/2004	3/1/2004	3/2/2004	3/3/2004	3/4/2004
	Gage Height	3.64	4.88	5.66	4.93	4.16	4.09	4.14	3.94	3.8	3.78	3.67	4.05	4.79	4.5	4.9
	Elevation	507.38	508.62	509.4	508.67	507.9	507.83	507.88	507.68	507.54	507.52	507.41	507.79	508.53	508.24	508.64
	Date	3/5/2004	3/6/2004	3/7/2004	3/8/2004	3/9/2004	3/10/2004	3/11/2004	3/12/2004	3/13/2004	3/14/2004	3/15/2004	3/16/2004	3/17/2004	3/18/2004	3/19/2004
	Gage Height	9.86	9.99	7.76	6.51	5.78	5.21	5	4.7	4.45	4.44	4.28	4.28	4.25	4.18	4.07
	Elevation	513.6	513.73	511.5	510.25	509.52	508.95	508.74	508.44	508.19	508.18	508.02	508.02	507.99	507.92	507.81
524.14	Date	3/20/2004	3/21/2004	3/22/2004	3/23/2004	3/24/2004	3/25/2004	3/26/2004	3/27/2004	3/28/2004	3/29/2004	3/30/2004	3/31/2004	4/1/2004	4/2/2004	4/3/2004
	Gage Height	4.02	3.91	3.71	3.79	3.79	3.92	9.59	17.99	15.48	13.58	10.86	9.9	9.78	8.25	7.11
	Elevation	507.76	507.65	507.45	507.53	507.53	507.66	513.33	521.73	519.22	517.32	514.6	513.64	513.52	511.99	510.85
	Date	4/4/2004	4/5/2004	4/7/2004	4/8/2004	4/9/2004	4/10/2004	4/11/2004	4/12/2004	4/13/2004	4/14/2004	4/15/2004	4/16/2004	4/17/2004	4/18/2004	4/19/2004
	Gage Height	6.37	5.81	5.27	5.02	4.82	4.54	4.48	4.37	4.29	4.18	4.02	3.99	4.01	3.83	3.83
	Elevation	510.11	509.55	509.01	508.76	508.56	508.28	508.22	508.11	508.03	507.92	507.76	507.73	507.75	507.57	507.57
	Date	4/20/2004	4/21/2004	4/22/2004	4/23/2004	4/24/2004	4/25/2004	4/26/2004	4/27/2004	4/28/2004	4/29/2004	4/30/2004	5/1/2004	5/2/2004	5/3/2004	5/4/2004
	Gage Height	4.04	4.13	4.34	4.43	4.33	4.25	4.25	4.08	3.81	3.88	3.81	4.15	4.16	4.08	3.96
	Elevation	507.78	507.87	508.08	508.17	508.07	507.99	507.99	507.82	507.55	507.62	507.55	507.89	507.9	507.82	507.7
	Date	5/5/2004	5/6/2004	5/7/2004	5/8/2004	5/9/2004	5/10/2004	5/11/2004	5/12/2004	5/13/2004	5/14/2004	5/15/2004	5/16/2004	5/17/2004	5/18/2004	5/19/2004
	Gage Height	3.95	3.85	3.78	3.52	3.55	3.59	3.98	4.26	4.2	4.16	5.73	5.87	5.12	4.77	6.13
	Elevation	507.69	507.59	507.52	507.26	507.29	507.33	507.72	508	507.94	507.9	509.47	509.61	508.86	508.51	509.87
	Date	5/20/2004	5/22/2004	5/23/2004	5/24/2004	5/25/2004	5/26/2004	5/27/2004	5/28/2004	5/29/2004	5/30/2004	5/31/2004	6/1/2004	6/2/2004	6/3/2004	6/4/2004
	Gage Height	6.47	4.99	5.12	5.12	5	6.24	5.84	5.03	4.54	4.36	6.33	7.7	7.59	5.62	4.87
	Elevation	510.21	508.73	508.86	508.86	508.74	509.98	509.58	508.77	508.28	508.1	510.07	511.44	511.33	509.36	508.61

Base Elevation = 503.74'
All Units in Feet (')
From USGS Station 03339000

Brickyard Disposal and Recycling
Historical River Elevations
Average Annual Maximum Elevation 519.14 '

Maximum Elevation	Date	6/5/2004	6/6/2004	6/7/2004	6/8/2004	6/9/2004	6/10/2004	6/11/2004	6/12/2004	6/13/2004	6/14/2004	6/15/2004	6/16/2004	6/17/2004	6/18/2004	6/19/2004
	Gage Height	4.51	4.25	3.99	3.94	3.81	3.92	13.87	20.4	19.97	17.55	10.81	10.18	12.81	13.58	9.82
	Elevation	508.25	507.99	507.73	507.68	507.55	507.66	517.61	524.14	523.71	521.29	514.55	513.92	516.55	517.32	513.56
	Date	6/20/2004	6/21/2004	6/22/2004	6/23/2004	6/24/2004	6/25/2004	6/26/2004	6/27/2004	6/28/2004	6/29/2004	6/30/2004	7/1/2004	7/2/2004	7/3/2004	7/4/2004
	Gage Height	7.16	6.3	5.91	5.46	5.15	4.96	4.84	4.6	4.43	4.17	4.05	3.98	3.9	3.98	4.87
	Elevation	510.9	510.04	509.65	509.2	508.89	508.7	508.58	508.34	508.17	507.91	507.79	507.72	507.64	507.72	508.61
	Date	7/5/2004	7/6/2004	7/7/2004	7/8/2004	7/9/2004	7/10/2004	7/11/2004	7/12/2004	7/13/2004	7/14/2004	7/15/2004	7/16/2004	7/17/2004	7/18/2004	7/19/2004
	Gage Height	5.06	4.41	5.2	5.05	4.56	11.81	12.43	9.37	6.67	7	6.71	5.74	4.94	4.91	4.85
	Elevation	508.8	508.15	508.94	508.79	508.3	515.55	516.17	513.11	510.41	510.74	510.45	509.48	508.68	508.65	508.59
	Date	7/20/2004	7/21/2004	7/22/2004	7/23/2004	7/24/2004	7/25/2004	7/26/2004	7/27/2004	7/28/2004	7/29/2004	7/30/2004	7/31/2004	8/1/2004	8/2/2004	8/3/2004
	Gage Height	4.34	4.09	3.92	3.75	3.51	3.41	3.41	3.23	3.16	3.12	3.11	3.09	3.12	2.99	2.92
	Elevation	508.08	507.83	507.66	507.49	507.25	507.15	507.15	506.97	506.9	506.86	506.85	506.83	506.86	506.73	506.66
	Date	8/4/2004	8/5/2004	8/6/2004	8/7/2004	8/8/2004	8/9/2004	8/10/2004	8/11/2004	8/12/2004	8/13/2004	8/14/2004	8/15/2004	8/17/2004	8/18/2004	8/19/2004
	Gage Height	3.15	3.14	3.19	2.93	2.72	2.66	2.68	2.89	2.82	2.64	2.58	2.54	2.48	2.46	2.45
	Elevation	506.89	506.88	506.93	506.67	506.46	506.4	506.42	506.63	506.56	506.38	506.32	506.28	506.22	506.2	506.19
	Date	8/20/2004	8/21/2004	8/22/2004	8/23/2004	8/24/2004	8/25/2004	8/26/2004	8/27/2004	8/28/2004	8/29/2004	8/30/2004	8/31/2004	9/1/2004	9/3/2004	9/4/2004
	Gage Height	2.5	2.51	2.53	2.53	2.44	2.49	3.81	5.18	5.24	5.96	6.6	5.13	4.34	3.47	3.26
	Elevation	506.24	506.25	506.27	506.27	506.18	506.23	507.55	508.92	508.98	509.7	510.34	508.87	508.08	507.21	507
	Date	9/5/2004	9/6/2004	9/7/2004	9/8/2004	9/9/2004	9/10/2004	9/11/2004	9/12/2004	9/13/2004	9/14/2004	9/15/2004	9/17/2004	9/18/2004	9/19/2004	9/20/2004
	Gage Height	3.17	2.88	2.98	2.71	2.69	2.69	2.74	2.69	2.64	2.47	2.44	2.86	2.69	2.59	2.42
	Elevation	506.91	506.62	506.72	506.45	506.43	506.43	506.48	506.43	506.38	506.21	506.18	506.6	506.43	506.33	506.16
524.14																
	Date	9/21/2004	9/22/2004	9/23/2004	9/24/2004	9/25/2004	9/26/2004	9/27/2004	9/28/2004	9/29/2004	9/30/2004	10/1/2004	10/2/2004	10/3/2004	10/4/2004	10/5/2004
	Gage Height	2.34	2.3	2.34	2.46	2.28	2.38	2.25	2.28	2.38	2.3	2.33	2.24	2.32	2.32	2.32
	Elevation	506.08	506.04	506.08	506.2	506.02	506.12	505.99	506.02	506.12	506.04	506.07	505.98	506.06	506.06	506.06
	Date	10/6/2004	10/7/2004	10/8/2004	10/9/2004	10/10/2004	10/11/2004	10/13/2004	10/14/2004	10/15/2004	10/16/2004	10/17/2004	10/18/2004	10/19/2004	10/20/2004	10/21/2004
	Gage Height	2.25	2.22	2.22	2.24	2.23	2.26	2.31	2.46	2.55	2.62	2.4	2.62	3.37	4.06	3.64
	Elevation	505.99	505.96	505.96	505.98	505.97	506	506.05	506.2	506.29	506.36	506.14	506.36	507.11	507.8	507.38
	Date	10/22/2004	10/23/2004	10/24/2004	10/25/2004	10/26/2004	10/27/2004	10/28/2004	10/29/2004	10/30/2004	10/31/2004	11/1/2004	11/2/2004	11/3/2004	11/4/2004	11/5/2004
	Gage Height	3.42	3.21	4.82	4.51	3.81	4.02	4.36	4.46	4.84	5.54	5.03	7.27	8.28	8.07	7.72
	Elevation	507.16	506.95	508.56	508.25	507.55	507.76	508.1	508.2	508.58	509.28	508.77	511.01	512.02	511.81	511.46
	Date	11/6/2004	11/7/2004	11/8/2004	11/9/2004	11/10/2004	11/11/2004	11/12/2004	11/13/2004	11/14/2004	11/15/2004	11/16/2004	11/19/2004	11/20/2004	11/21/2004	11/23/2004
	Gage Height	6.5	5.86	5.2	4.81	4.5	4.61	4.35	4.13	3.99	3.89	3.89	3.95	4.26	4.4	4.07
	Elevation	510.24	509.6	508.94	508.55	508.24	508.35	508.09	507.87	507.73	507.63	507.63	507.69	508	508.14	507.81
	Date	11/24/2004	11/25/2004	11/26/2004	11/27/2004	11/28/2004	11/30/2004	12/1/2004	12/2/2004	12/3/2004	12/4/2004	12/5/2004	12/6/2004	12/7/2004	12/8/2004	12/9/2004
	Gage Height	5.35	10.68	10.23	10.19	12.21	10.69	12.77	12.11	10.17	8.17	7.32	6.96	11.36	14.05	12.62
	Elevation	509.09	514.42	513.97	513.93	515.95	514.43	516.51	515.85	513.91	511.91	511.06	510.7	515.1	517.79	516.36
	Date	12/10/2004	12/11/2004	12/12/2004	12/13/2004	12/14/2004	12/15/2004	12/16/2004	12/19/2004	12/20/2004	12/21/2004	12/22/2004	12/23/2004	12/25/2004	12/26/2004	12/27/2004
	Gage Height	10.68	8.19	7.15	6.58	5.94	5.55	5.37	4.83	4.65	4.58	4.5	4.09	4.09	4.44	4.38
	Elevation	514.42	511.93	510.89	510.32	509.68	509.29	509.11	508.57	508.39	508.32	508.24	507.83	507.83	508.18	508.12
	Date	12/28/2004	12/29/2004	12/30/2004	12/31/2004											
	Gage Height	4.23	4.19	4.12	4.16											
	Elevation	507.97	507.93	507.86	507.9											
Maximum Elevation	Date	1/1/2005	1/2/2005	1/3/2005	1/4/2005	1/5/2005	1/6/2005	1/7/2005	1/8/2005	1/9/2005	1/10/2005	1/11/2005	1/12/2005	1/13/2005	1/15/2005	1/19/2005
	Gage Height	4.06	4.03	4.78	9.5	13.78	17.72	16.25	11.87	8.45	7.83	9.29	17.57	19.62	19.83	6.78
	Elevation	507.8	507.77	508.52	513.24	517.52	521.46	519.99	515.61	512.19	511.57	513.03	521.31	523.36	523.57	510.52
523.57																
	Date	1/20/2005	1/21/2005	1/22/2005	1/23/2005	1/24/2005	1/25/2005	1/26/2005	1/27/2005	1/28/2005	1/29/2005	1/30/2005	1/31/2005	2/1/2005	2/2/2005	2/3/2005
	Gage Height	6.3	5.89	5.61	5.2	5.08	5.13	5.27	5.3	4.8	4.78	4.71	4.49	4.39	4.3	4.22
	Elevation	510.04	509.63	509.35	508.94	508.82	508.87	509.01	509.04	508.54	508.52	508.45	508.23	508.13	508.04	507.96

Base Elevation = 503.74'
All Units in Feet (')
From USGS Station 03339000

Brickyard Disposal and Recycling
Historical River Elevations
Average Annual Maximum Elevation 519.14 '

Maximum Elevation	Date	2/4/2005	2/5/2005	2/6/2005	2/7/2005	2/8/2005	2/9/2005	2/10/2005	2/11/2005	2/12/2005	2/13/2005	2/14/2005	2/15/2005	2/16/2005	2/17/2005	2/18/2005
	Gage Height	4.18	4.3	5.01	6.08	8.46	8.85	7.61	6.62	6.22	6.65	13.01	12.48	11.49	9.09	7.62
	Elevation	507.92	508.04	508.75	509.82	512.2	512.59	511.35	510.36	509.96	510.39	516.75	516.22	515.23	512.83	511.36
	Date	2/19/2005	2/20/2005	2/21/2005	2/22/2005	2/23/2005	2/24/2005	2/25/2005	2/26/2005	2/27/2005	2/28/2005	3/1/2005	3/2/2005	3/3/2005	3/4/2005	3/5/2005
	Gage Height	6.6	6.21	6.2	6.29	5.94	5.68	5.55	5.28	5.05	5.1	4.92	4.76	4.49	4.57	4.49
	Elevation	510.34	509.95	509.94	510.03	509.68	509.42	509.29	509.02	508.79	508.84	508.66	508.5	508.23	508.31	508.23
	Date	3/6/2005	3/8/2005	3/9/2005	3/10/2005	3/11/2005	3/12/2005	3/13/2005	3/14/2005	3/15/2005	3/16/2005	3/17/2005	3/18/2005	3/19/2005	3/20/2005	3/21/2005
	Gage Height	4.36	4.35	4.16	4	4.16	4.15	4.01	3.82	3.82	3.85	3.76	3.76	3.8	3.79	3.59
	Elevation	508.1	508.09	507.9	507.74	507.9	507.89	507.75	507.56	507.56	507.59	507.5	507.5	507.54	507.53	507.33
	Date	3/22/2005	3/23/2005	3/24/2005	3/25/2005	3/26/2005	3/27/2005	3/28/2005	3/29/2005	3/30/2005	3/31/2005	4/1/2005	4/2/2005	4/3/2005	4/4/2005	4/5/2005
	Gage Height	3.75	3.74	3.98	4.43	5.19	5.17	4.79	4.59	4.31	4.32	4.24	4.27	4.34	4.21	4.11
	Elevation	507.49	507.48	507.72	508.17	508.93	508.91	508.53	508.33	508.05	508.06	507.98	508.01	508.08	507.95	507.85
	Date	4/6/2005	4/7/2005	4/8/2005	4/9/2005	4/10/2005	4/12/2005	4/13/2005	4/14/2005	4/15/2005	4/16/2005	4/17/2005	4/18/2005	4/19/2005	4/20/2005	4/21/2005
	Gage Height	4.14	4.07	3.87	3.87	3.82	3.95	4.38	4.59	4.32	4.15	3.98	3.96	3.79	3.97	5.44
	Elevation	507.88	507.81	507.61	507.61	507.56	507.69	508.12	508.33	508.06	507.89	507.72	507.7	507.53	507.71	509.18
	Date	4/22/2005	4/23/2005	4/24/2005	4/25/2005	4/26/2005	4/27/2005	4/28/2005	4/29/2005	4/30/2005	5/1/2005	5/2/2005	5/3/2005	5/4/2005	5/5/2005	5/6/2005
	Gage Height	8.09	7.9	6.91	6.06	5.65	5.28	4.83	4.66	4.55	4.43	4.3	4.17	4.08	3.97	3.84
	Elevation	511.83	511.64	510.65	509.8	509.39	509.02	508.57	508.4	508.29	508.17	508.04	507.91	507.82	507.71	507.58
	Date	5/7/2005	5/8/2005	5/9/2005	5/10/2005	5/11/2005	5/12/2005	5/13/2005	5/14/2005	5/15/2005	5/16/2005	5/17/2005	5/18/2005	5/19/2005	5/20/2005	5/21/2005
	Gage Height	3.98	3.85	3.85	3.78	3.83	3.71	3.73	3.75	3.64	3.53	3.47	3.44	3.79	3.93	4.31
	Elevation	507.72	507.59	507.59	507.52	507.57	507.45	507.47	507.49	507.38	507.27	507.21	507.18	507.53	507.67	508.05
	Date	5/22/2005	5/23/2005	5/24/2005	5/25/2005	5/26/2005	5/27/2005	5/28/2005	5/29/2005	5/30/2005	5/31/2005	6/1/2005	6/2/2005	6/4/2005	6/5/2005	6/6/2005
	Gage Height	3.86	3.72	3.62	3.51	3.45	3.39	3.35	3.32	3.23	3.13	3.1	3.16	3.1	3.01	3.03
	Elevation	507.6	507.46	507.36	507.25	507.19	507.13	507.09	507.06	506.97	506.87	506.84	506.9	506.84	506.75	506.77
523.57	Date	6/7/2005	6/8/2005	6/9/2005	6/10/2005	6/11/2005	6/12/2005	6/13/2005	6/14/2005	6/15/2005	6/16/2005	6/17/2005	6/18/2005	6/19/2005	6/20/2005	6/21/2005
	Gage Height	3.07	4.15	5.27	4.24	3.9	3.8	3.55	4.57	5.39	4.6	4.06	3.7	3.47	3.36	3.17
	Elevation	506.81	507.89	509.01	507.98	507.64	507.54	507.29	508.31	509.13	508.34	507.8	507.44	507.21	507.1	506.91
	Date	6/22/2005	6/23/2005	6/24/2005	6/25/2005	6/26/2005	6/27/2005	6/28/2005	6/29/2005	6/30/2005	7/1/2005	7/2/2005	7/3/2005	7/4/2005	7/5/2005	7/6/2005
	Gage Height	3.23	3.01	2.97	2.91	2.95	3.03	3.02	3.49	3.39	3.18	2.91	2.77	2.67	2.46	2.41
	Elevation	506.97	506.75	506.71	506.65	506.69	506.77	506.76	507.23	507.13	506.92	506.65	506.51	506.41	506.2	506.15
	Date	7/7/2005	7/8/2005	7/9/2005	7/10/2005	7/11/2005	7/12/2005	7/13/2005	7/14/2005	7/15/2005	7/16/2005	7/17/2005	7/18/2005	7/19/2005	7/20/2005	7/21/2005
	Gage Height	2.46	2.47	2.56	2.31	2.22	2.33	2.42	3.24	2.95	2.82	2.77	3.02	3.21	3.36	3.64
	Elevation	506.2	506.21	506.3	506.05	505.96	506.07	506.16	506.98	506.69	506.56	506.51	506.76	506.95	507.1	507.38
	Date	7/22/2005	7/23/2005	7/24/2005	7/25/2005	7/26/2005	7/27/2005	7/28/2005	7/29/2005	7/30/2005	7/31/2005	8/1/2005	8/2/2005	8/3/2005	8/4/2005	8/5/2005
	Gage Height	6.73	7.44	6.27	4.3	3.76	3.88	4.52	3.97	3.49	3.16	2.87	2.83	2.74	2.69	2.65
	Elevation	510.47	511.18	510.01	508.04	507.5	507.62	508.26	507.71	507.23	506.9	506.61	506.57	506.48	506.43	506.39
	Date	8/6/2005	8/7/2005	8/8/2005	8/9/2005	8/10/2005	8/11/2005	8/12/2005	8/13/2005	8/14/2005	8/15/2005	8/16/2005	8/17/2005	8/18/2005	8/19/2005	8/20/2005
	Gage Height	2.61	2.52	2.45	2.42	2.36	2.36	2.69	2.51	2.64	2.78	2.69	2.48	2.38	2.38	2.41
	Elevation	506.35	506.26	506.19	506.16	506.1	506.1	506.43	506.25	506.38	506.52	506.43	506.22	506.12	506.12	506.15
	Date	8/21/2005	8/22/2005	8/23/2005	8/24/2005	8/25/2005	8/26/2005	8/27/2005	8/28/2005	8/29/2005	8/30/2005	8/31/2005	9/1/2005	9/2/2005	9/3/2005	9/5/2005
	Gage Height	2.72	2.71	2.42	2.31	2.27	2.23	2.23	2.22	2.21	2.2	2.18	2.15	2.14	2.13	2.11
	Elevation	506.46	506.45	506.16	506.05	506.01	505.97	505.97	505.96	505.95	505.94	505.92	505.89	505.88	505.87	505.85
	Date	9/6/2005	9/7/2005	9/8/2005	9/9/2005	9/10/2005	9/11/2005	9/12/2005	9/13/2005	9/14/2005	9/15/2005	9/16/2005	9/17/2005	9/18/2005	9/19/2005	9/20/2005
	Gage Height	2.1	2.13	2.1	2.12	2.1	2.09	2.07	2.08	2.11	2.14	2.39	2.65	2.55	2.41	2.4
	Elevation	505.84	505.87	505.84	505.86	505.84	505.83	505.81	505.82	505.85	505.88	506.13	506.39	506.29	506.15	506.14
	Date	9/21/2005	9/22/2005	9/23/2005	9/24/2005	9/25/2005	9/26/2005	9/27/2005	9/28/2005	9/29/2005	9/30/2005	10/1/2005	10/2/2005	10/3/2005	10/4/2005	10/5/2005
	Gage Height	2.35	2.44	2.3	2.3	2.45	2.6	3.41	3.3	3.11	3.2	3.14	3.17	4.07	3.9	3.09
	Elevation	506.09	506.18	506.04	506.04	506.19	506.34	507.15	507.04	506.85	506.94	506.88	506.91	507.81	507.64	506.83

Base Elevation = 503.74'
All Units in Feet (')
From USGS Station 03339000

Brickyard Disposal and Recycling
Historical River Elevations
Average Annual Maximum Elevation 519.14 '

Maximum Elevation	Date	10/6/2005	10/7/2005	10/8/2005	10/9/2005	10/10/2005	10/11/2005	10/12/2005	10/13/2005	10/14/2005	10/15/2005	10/20/2005	10/21/2005	10/22/2005	10/23/2005	10/24/2005
	Gage Height	3.14	3.11	2.61	2.6	2.58	2.56	2.53	2.52	2.34	2.3	2.46	2.67	3.1	3.03	2.92
	Elevation	506.88	506.85	506.35	506.34	506.32	506.3	506.27	506.26	506.08	506.04	506.2	506.41	506.84	506.77	506.66
	Date	10/25/2005	10/26/2005	10/27/2005	11/4/2005	11/5/2005	11/6/2005	11/7/2005	11/8/2005	11/9/2005	11/10/2005	11/11/2005	11/12/2005	11/13/2005	11/14/2005	11/15/2005
	Gage Height	2.73	2.65	2.44	3.71	3.3	3.43	3.22	3.59	3.48	3.19	3.04	2.92	2.86	2.89	3.17
	Elevation	506.47	506.39	506.18	507.45	507.04	507.17	506.96	507.33	507.22	506.93	506.78	506.66	506.6	506.63	506.91
	Date	11/16/2005	11/17/2005	11/18/2005	11/19/2005	11/20/2005	11/21/2005	11/22/2005	11/23/2005	11/24/2005	11/25/2005	11/26/2005	11/27/2005	11/28/2005	11/29/2005	11/30/2005
523.57	Gage Height	4.03	4.6	4.27	3.69	3.56	3.42	3.36	3.11	3.36	2.99	2.83	3.04	3.05	4.91	5.37
	Elevation	507.77	508.34	508.01	507.43	507.3	507.16	507.1	506.85	507.1	506.73	506.57	506.78	506.79	508.65	509.11
	Date	12/1/2005	12/2/2005	12/3/2005	12/4/2005	12/5/2005	12/6/2005	12/7/2005	12/8/2005	12/9/2005	12/10/2005	12/11/2005	12/12/2005	12/13/2005	12/14/2005	12/15/2005
	Gage Height	4.68	4.24	3.82	3.82	3.38	3.19	3.53	3.22	3.21	3.43	3.24	3.22	3.18	3.1	3.07
	Elevation	508.42	507.98	507.56	507.56	507.12	506.93	507.27	506.96	506.95	507.17	506.98	506.96	506.92	506.84	506.81
	Date	12/16/2005	12/17/2005	12/18/2005	12/19/2005	12/20/2005	12/21/2005	12/22/2005	12/23/2005	12/24/2005	12/25/2005	12/27/2005	12/28/2005	12/29/2005	12/30/2005	12/31/2005
	Gage Height	3.3	3.17	3.2	3.19	2.98	3.01	3.05	2.98	2.99	3.34	4.57	4.99	6.76	6.53	6.19
	Elevation	507.04	506.91	506.94	506.93	506.72	506.75	506.79	506.72	506.73	507.08	508.31	508.73	510.5	510.27	509.93
Maximum Elevation	Date	1/1/2006	1/2/2006	1/3/2006	1/4/2006	1/5/2006	1/6/2006	1/7/2006	1/8/2006	1/9/2006	1/10/2006	1/11/2006	1/12/2006	1/13/2006	1/14/2006	1/15/2006
	Gage Height	6.32	5.8	5.64	5.18	4.92	4.56	4.39	4.16	4.19	3.97	3.87	3.78	3.96	3.99	4.34
	Elevation	510.06	509.54	509.38	508.92	508.66	508.3	508.13	507.9	507.93	507.71	507.61	507.52	507.7	507.73	508.08
	Date	1/16/2006	1/17/2006	1/18/2006	1/19/2006	1/20/2006	1/21/2006	1/22/2006	1/23/2006	1/24/2006	1/25/2006	1/26/2006	1/27/2006	1/28/2006	1/29/2006	1/30/2006
	Gage Height	4.52	4.61	5.06	4.98	4.7	5.43	6.52	6.08	5.54	5.1	4.63	4.35	4.25	5.27	7.02
	Elevation	508.26	508.35	508.8	508.72	508.44	509.17	510.26	509.82	509.28	508.84	508.37	508.09	507.99	509.01	510.76
	Date	1/31/2006	2/1/2006	2/2/2006	2/3/2006	2/4/2006	2/5/2006	2/6/2006	2/7/2006	2/8/2006	2/9/2006	2/10/2006	2/11/2006	2/12/2006	2/13/2006	2/14/2006
	Gage Height	6.45	5.78	5.25	4.98	4.79	4.6	4.37	4.14	4.07	3.99	3.9	3.85	3.87	3.6	3.65
	Elevation	510.19	509.52	508.99	508.72	508.53	508.34	508.11	507.88	507.81	507.73	507.64	507.59	507.61	507.34	507.39
	Date	2/15/2006	2/16/2006	2/17/2006	2/18/2006	2/19/2006	2/20/2006	2/21/2006	2/22/2006	2/23/2006	2/24/2006	2/25/2006	2/26/2006	2/27/2006	2/28/2006	3/1/2006
	Gage Height	3.67	3.72	5.1	5.68	4.58	4.43	4.92	4.37	4.18	3.94	3.87	3.63	3.59	3.7	3.68
	Elevation	507.41	507.46	508.84	509.42	508.32	508.17	508.66	508.11	507.92	507.68	507.61	507.37	507.33	507.44	507.42
	Date	3/2/2006	3/3/2006	3/4/2006	3/5/2006	3/6/2006	3/7/2006	3/8/2006	3/9/2006	3/10/2006	3/11/2006	3/12/2006	3/13/2006	3/14/2006	3/15/2006	3/16/2006
	Gage Height	3.54	3.6	3.42	3.37	3.4	3.34	3.6	4.88	9.32	9.11	12.87	13.85	11.72	9.96	8.4
	Elevation	507.28	507.34	507.16	507.11	507.14	507.08	507.34	508.62	513.06	512.85	516.61	517.59	515.46	513.7	512.14
	Date	3/17/2006	3/18/2006	3/19/2006	3/20/2006	3/21/2006	3/22/2006	3/23/2006	3/24/2006	3/25/2006	3/26/2006	3/27/2006	3/28/2006	3/29/2006	3/30/2006	3/31/2006
518.73	Gage Height	6.92	6.16	5.59	5.39	5.25	4.99	4.81	4.67	4.65	4.43	4.23	4.38	4.35	4.2	4.27
	Elevation	510.66	509.9	509.33	509.13	508.99	508.73	508.55	508.41	508.39	508.17	507.97	508.12	508.09	507.94	508.01
	Date	4/1/2006	4/2/2006	4/3/2006	4/4/2006	4/5/2006	4/6/2006	4/7/2006	4/8/2006	4/9/2006	4/10/2006	4/11/2006	4/12/2006	4/13/2006	4/14/2006	4/15/2006
	Gage Height	4.3	4.37	4.6	5.63	5.57	5.51	7.69	8.34	6.81	5.92	5.41	5.1	4.87	6.55	7.97
	Elevation	508.04	508.11	508.34	509.37	509.31	509.25	511.43	512.08	510.55	509.66	509.15	508.84	508.61	510.29	511.71
	Date	4/16/2006	4/17/2006	4/18/2006	4/19/2006	4/20/2006	4/22/2006	4/23/2006	4/24/2006	4/25/2006	4/26/2006	4/27/2006	4/28/2006	4/29/2006	4/30/2006	5/1/2006
	Gage Height	7.56	10.94	12.62	11.67	9.45	6.62	6.05	5.53	5.33	4.99	4.8	4.56	4.44	4.52	4.57
	Elevation	511.3	514.68	516.36	515.41	513.19	510.36	509.79	509.27	509.07	508.73	508.54	508.3	508.18	508.26	508.31
	Date	5/2/2006	5/3/2006	5/4/2006	5/5/2006	5/6/2006	5/7/2006	5/8/2006	5/9/2006	5/10/2006	5/11/2006	5/12/2006	5/13/2006	5/14/2006	5/15/2006	5/16/2006
	Gage Height	4.86	5.39	5.15	4.73	4.56	4.36	4.22	3.97	4.24	5.66	5.74	5.56	5.37	5.57	6.04
	Elevation	508.6	509.13	508.89	508.47	508.3	508.1	507.96	507.71	507.98	509.4	509.48	509.3	509.11	509.31	509.78
	Date	5/17/2006	5/18/2006	5/19/2006	5/20/2006	5/21/2006	5/22/2006	5/23/2006	5/24/2006	5/25/2006	5/26/2006	5/27/2006	5/28/2006	5/29/2006	5/30/2006	5/31/2006
	Gage Height	5.61	5.59	5.24	4.72	4.54	4.14	4.1	4.03	4.36	6.4	5.5	4.79	4.3	5.26	6.65
	Elevation	509.35	509.33	508.98	508.46	508.28	507.88	507.84	507.77	508.1	510.14	509.24	508.53	508.04	509	510.39
	Date	6/1/2006	6/2/2006	6/3/2006	6/4/2006	6/5/2006	6/6/2006	6/7/2006	6/8/2006	6/9/2006	6/10/2006	6/11/2006	6/12/2006	6/13/2006	6/14/2006	6/15/2006
	Gage Height	7.44	6.07	5.34	4.81	4.5	4.2	4.07	3.81	3.71	3.77	3.74	3.64	3.51	3.5	3.19
	Elevation	511.18	509.81	509.08	508.55	508.24	507.94	507.81	507.55	507.45	507.51	507.48	507.38	507.25	507.24	506.93

Base Elevation = 503.74'
All Units in Feet (')
From USGS Station 03339000

Brickyard Disposal and Recycling
Historical River Elevations
Average Annual Maximum Elevation 519.14 '

Maximum Elevation	Date	6/16/2006	6/17/2006	6/18/2006	6/19/2006	6/20/2006	6/21/2006	6/22/2006	6/23/2006	6/24/2006	6/25/2006	6/26/2006	6/27/2006	6/29/2006	6/30/2006	7/1/2006
	Gage Height	3.26	3.03	3.29	4.05	4.27	3.77	3.58	3.33	3.29	3.17	3.1	3.39	3.39	2.81	2.77
	Elevation	507	506.77	507.03	507.79	508.01	507.51	507.32	507.07	507.03	506.91	506.84	507.13	507.13	506.55	506.51
	Date	7/2/2006	7/3/2006	7/4/2006	7/5/2006	7/6/2006	7/7/2006	7/8/2006	7/9/2006	7/10/2006	7/11/2006	7/12/2006	7/13/2006	7/14/2006	7/15/2006	7/16/2006
	Gage Height	2.77	2.67	4.24	5	4.07	3.42	3.02	2.87	2.76	3.74	4.12	6.66	6.72	4.78	3.98
	Elevation	506.51	506.41	507.98	508.74	507.81	507.16	506.76	506.61	506.5	507.48	507.86	510.4	510.46	508.52	507.72
	Date	7/17/2006	7/18/2006	7/19/2006	7/20/2006	7/21/2006	7/22/2006	7/23/2006	7/24/2006	7/25/2006	7/26/2006	7/27/2006	7/28/2006	7/29/2006	7/30/2006	7/31/2006
	Gage Height	3.51	3.18	2.96	2.85	3.16	3.23	2.92	2.66	2.47	2.37	2.59	4.67	6.08	4.84	4.31
	Elevation	507.25	506.92	506.7	506.59	506.9	506.97	506.66	506.4	506.21	506.11	506.33	508.41	509.82	508.58	508.05
	Date	8/1/2006	8/2/2006	8/3/2006	8/4/2006	8/5/2006	8/6/2006	8/7/2006	8/8/2006	8/9/2006	8/10/2006	8/11/2006	8/12/2006	8/13/2006	8/14/2006	8/15/2006
	Gage Height	3.68	3.26	2.99	2.78	2.61	2.47	2.45	2.41	2.39	2.42	2.66	3.77	3.09	3.05	2.58
	Elevation	507.42	507	506.73	506.52	506.35	506.21	506.19	506.15	506.13	506.16	506.4	507.51	506.83	506.79	506.32
	Date	8/16/2006	8/17/2006	8/18/2006	8/19/2006	8/20/2006	8/21/2006	8/22/2006	8/23/2006	8/24/2006	8/25/2006	8/26/2006	8/27/2006	8/28/2006	8/29/2006	8/30/2006
	Gage Height	2.73	2.36	2.48	2.65	2.68	2.39	2.31	2.22	2.18	2.15	2.13	2.11	2.66	2.82	2.96
	Elevation	506.47	506.1	506.22	506.39	506.42	506.13	506.05	505.96	505.92	505.89	505.87	505.85	506.4	506.56	506.7
	Date	8/31/2006	9/1/2006	9/2/2006	9/3/2006	9/4/2006	9/5/2006	9/7/2006	9/8/2006	9/9/2006	9/10/2006	9/11/2006	9/12/2006	9/13/2006	9/14/2006	9/15/2006
	Gage Height	2.61	2.49	2.39	2.23	2.18	2.15	2.65	2.77	2.55	2.35	2.33	2.52	5.57	5.59	3.86
	Elevation	506.35	506.23	506.13	505.97	505.92	505.89	506.39	506.51	506.29	506.09	506.07	506.26	509.31	509.33	507.6
	Date	9/16/2006	9/17/2006	9/18/2006	9/19/2006	9/20/2006	9/21/2006	9/22/2006	9/23/2006	9/24/2006	9/25/2006	9/26/2006	9/27/2006	9/28/2006	9/29/2006	9/30/2006
	Gage Height	3.45	2.98	3.26	2.98	2.92	2.5	2.64	2.46	2.66	2.51	2.36	2.34	2.69	2.42	2.33
	Elevation	507.19	506.72	507	506.72	506.66	506.24	506.38	506.2	506.4	506.25	506.1	506.08	506.43	506.16	506.07
518.73																
	Date	10/1/2006	10/2/2006	10/3/2006	10/4/2006	10/5/2006	10/6/2006	10/7/2006	10/8/2006	10/9/2006	10/10/2006	10/11/2006	10/12/2006	10/13/2006	10/14/2006	10/15/2006
	Gage Height	2.33	2.15	2.66	3.08	3.66	2.73	2.52	2.4	2.7	2.27	2.59	2.72	2.43	2.41	2.35
	Elevation	506.07	505.89	506.4	506.82	507.4	506.47	506.26	506.14	506.44	506.01	506.33	506.46	506.17	506.15	506.09
	Date	10/16/2006	10/17/2006	10/18/2006	10/19/2006	10/20/2006	10/21/2006	10/22/2006	10/23/2006	10/24/2006	10/25/2006	10/26/2006	10/27/2006	10/28/2006	10/29/2006	10/30/2006
	Gage Height	2.62	4.89	6.96	6.49	5.15	4.52	4.15	3.82	3.59	3.37	3.44	3.94	5.03	4.95	4.37
	Elevation	506.36	508.63	510.7	510.23	508.89	508.26	507.89	507.56	507.33	507.11	507.18	507.68	508.77	508.69	508.11
	Date	10/31/2006	11/1/2006	11/2/2006	11/3/2006	11/4/2006	11/5/2006	11/6/2006	11/7/2006	11/8/2006	11/9/2006	11/10/2006	11/11/2006	11/12/2006	11/13/2006	11/14/2006
	Gage Height	4.23	3.78	3.63	3.25	3.73	2.97	3.15	3.4	3.04	3.26	3.26	3.35	3.49	3.79	3.64
	Elevation	507.97	507.52	507.37	506.99	507.47	506.71	506.89	507.14	506.78	507	507	507.09	507.23	507.53	507.38
	Date	11/15/2006	11/16/2006	11/17/2006	11/18/2006	11/19/2006	11/20/2006	11/21/2006	11/22/2006	11/23/2006	11/24/2006	11/25/2006	11/26/2006	11/27/2006	11/28/2006	11/29/2006
	Gage Height	3.55	5.03	8.88	7.59	6.42	5.45	5.13	4.57	4.66	4.11	4.17	4.06	3.96	3.57	3.86
	Elevation	507.29	508.77	512.62	511.33	510.16	509.19	508.87	508.31	508.4	507.85	507.91	507.8	507.7	507.31	507.6
	Date	11/30/2006	12/1/2006	12/2/2006	12/3/2006	12/4/2006	12/5/2006	12/6/2006	12/7/2006	12/8/2006	12/9/2006	12/10/2006	12/11/2006	12/12/2006	12/13/2006	12/14/2006
	Gage Height	4.46	11.42	12.97	10.83	7.75	6.44	5.51	5.1	4.61	4.53	4.3	4.06	4.41	6.61	6.92
	Elevation	508.2	515.16	516.71	514.57	511.49	510.18	509.25	508.84	508.35	508.27	508.04	507.8	508.15	510.35	510.66
	Date	12/15/2006	12/16/2006	12/17/2006	12/18/2006	12/19/2006	12/20/2006	12/21/2006	12/22/2006	12/23/2006	12/24/2006	12/25/2006	12/26/2006	12/27/2006	12/28/2006	12/29/2006
	Gage Height	6.17	5.29	4.91	4.86	4.91	4.71	6.18	12.8	14.99	12.93	9.55	7.62	6.56	5.96	5.45
	Elevation	509.91	509.03	508.65	508.6	508.65	508.45	509.92	516.54	518.73	516.67	513.29	511.36	510.3	509.7	509.19
	Date	12/30/2006	12/31/2006													
	Gage Height	5.11	6.5													
	Elevation	508.85	510.24													

Maximum Elevation	Date	1/1/2007	1/2/2007	1/3/2007	1/4/2007	1/5/2007	1/6/2007	1/7/2007	1/8/2007	1/9/2007	1/10/2007	1/11/2007	1/12/2007	1/17/2007	1/18/2007	1/19/2007
	Gage Height	10.56	9.48	7.58	6.95	8.43	9.16	7.58	6.92	6.46	6.05	5.73	5.31	12.66	8.27	6.94
	Elevation	514.3	513.22	511.32	510.69	512.17	512.9	511.32	510.66	510.2	509.79	509.47	509.05	516.4	512.01	510.68
517.09																
	Date	1/20/2007	1/21/2007	1/22/2007	1/23/2007	1/24/2007	1/25/2007	1/26/2007	1/27/2007	1/28/2007	1/29/2007	1/30/2007	1/31/2007	2/1/2007	2/2/2007	2/3/2007
	Gage Height	6.29	5.84	5.63	5.31	5.13	4.88	4.73	4.72	4.73	4.28	4.44	4.27	4.31	4.39	4.21
	Elevation	510.03	509.58	509.37	509.05	508.87	508.62	508.47	508.46	508.47	508.02	508.18	508.01	508.05	508.13	507.95

Base Elevation = 503.74'
All Units in Feet (')
From USGS Station 03339000

Brickyard Disposal and Recycling
Historical River Elevations
Average Annual Maximum Elevation 519.14 '

Maximum Elevation	Date	2/4/2007	2/5/2007	2/6/2007	2/7/2007	2/8/2007	2/9/2007	2/10/2007	2/11/2007	2/12/2007	2/13/2007	2/14/2007	2/15/2007	2/16/2007	2/17/2007	2/18/2007
	Gage Height	3.98	4.01	4.13	4.2	4.17	4.07	3.87	3.82	3.71	3.98	3.75	3.56	3.82	3.77	4.14
	Elevation	507.72	507.75	507.87	507.94	507.91	507.81	507.61	507.56	507.45	507.72	507.49	507.3	507.56	507.51	507.88
	Date	2/19/2007	2/20/2007	2/21/2007	2/22/2007	2/23/2007	2/24/2007	2/25/2007	2/26/2007	2/27/2007	2/28/2007	3/1/2007	3/2/2007	3/3/2007	3/4/2007	3/5/2007
	Gage Height	4.11	3.81	3.63	3.77	4.03	4.19	6.1	10.04	9.73	7.61	8.12	13.35	11.61	8.1	6.3
	Elevation	507.85	507.55	507.37	507.51	507.77	507.93	509.84	513.78	513.47	511.35	511.86	517.09	515.35	511.84	510.04
	Date	3/6/2007	3/7/2007	3/8/2007	3/9/2007	3/10/2007	3/11/2007	3/12/2007	3/13/2007	3/14/2007	3/15/2007	3/16/2007	3/17/2007	3/18/2007	3/19/2007	3/20/2007
	Gage Height	5.72	5.4	4.96	4.99	5.61	6.34	5.85	5.62	5.47	5.53	5.32	4.94	4.66	4.76	5.33
	Elevation	509.46	509.14	508.7	508.73	509.35	510.08	509.59	509.36	509.21	509.27	509.06	508.68	508.4	508.5	509.07
	Date	3/21/2007	3/22/2007	3/23/2007	3/24/2007	3/25/2007	3/26/2007	3/27/2007	3/28/2007	3/29/2007	3/30/2007	3/31/2007	4/1/2007	4/2/2007	4/3/2007	4/4/2007
	Gage Height	5.14	5.08	8.05	11.78	12.64	10.95	8.26	7.03	6.52	6.01	5.67	5.42	5.44	5.37	5.23
	Elevation	508.88	508.82	511.79	515.52	516.38	514.69	512	510.77	510.26	509.75	509.41	509.16	509.18	509.11	508.97
	Date	4/5/2007	4/6/2007	4/7/2007	4/8/2007	4/9/2007	4/10/2007	4/11/2007	4/12/2007	4/13/2007	4/14/2007	4/15/2007	4/16/2007	4/17/2007	4/18/2007	4/19/2007
	Gage Height	4.89	4.67	4.49	4.35	4.25	4.22	4.38	5.27	5.33	5.18	5.4	5.34	4.99	4.82	4.6
	Elevation	508.63	508.41	508.23	508.09	507.99	507.96	508.12	509.01	509.07	508.92	509.14	509.08	508.73	508.56	508.34
	Date	4/20/2007	4/21/2007	4/22/2007	4/23/2007	4/24/2007	4/25/2007	4/26/2007	4/27/2007	4/28/2007	4/29/2007	4/30/2007	5/1/2007	5/2/2007	5/3/2007	5/4/2007
	Gage Height	4.43	4.24	4.21	4.14	4.07	4.77	8.76	9.27	8.03	6.52	5.81	5.37	5.03	4.78	4.61
	Elevation	508.17	507.98	507.95	507.88	507.81	508.51	512.5	513.01	511.77	510.26	509.55	509.11	508.77	508.52	508.35
	Date	5/5/2007	5/6/2007	5/7/2007	5/8/2007	5/9/2007	5/10/2007	5/11/2007	5/12/2007	5/13/2007	5/14/2007	5/15/2007	5/16/2007	5/17/2007	5/18/2007	5/19/2007
	Gage Height	4.48	4.36	4.09	4	4.05	3.97	3.92	3.79	3.73	3.54	3.67	3.69	3.66	3.52	3.45
	Elevation	508.22	508.1	507.83	507.74	507.79	507.71	507.66	507.53	507.47	507.28	507.41	507.43	507.4	507.26	507.19
	Date	5/20/2007	5/21/2007	5/22/2007	5/23/2007	5/24/2007	5/25/2007	5/26/2007	5/27/2007	5/28/2007	5/29/2007	5/30/2007	5/31/2007	6/1/2007	6/2/2007	6/3/2007
	Gage Height	3.36	3.26	3.23	3.43	3.12	3.08	3.37	3.78	4.89	4.43	4	3.75	3.65	3.55	3.5
	Elevation	507.1	507	506.97	507.17	506.86	506.82	507.11	507.52	508.63	508.17	507.74	507.49	507.39	507.29	507.24
517.09	Date	6/4/2007	6/5/2007	6/6/2007	6/7/2007	6/8/2007	6/9/2007	6/10/2007	6/11/2007	6/12/2007	6/13/2007	6/14/2007	6/15/2007	6/16/2007	6/17/2007	6/18/2007
	Gage Height	3.55	3.62	3.62	3.39	3.4	3.11	3.14	3.05	3	2.8	3.02	2.7	2.63	2.61	2.57
	Elevation	507.29	507.36	507.36	507.13	507.14	506.85	506.88	506.79	506.74	506.54	506.76	506.44	506.37	506.35	506.31
	Date	6/19/2007	6/20/2007	6/21/2007	6/22/2007	6/23/2007	6/24/2007	6/25/2007	6/26/2007	6/27/2007	6/28/2007	6/29/2007	6/30/2007	7/1/2007	7/2/2007	7/3/2007
	Gage Height	2.8	3.04	2.83	2.92	3.02	3.39	3.56	3.25	3.17	3.98	4.03	4.08	3.52	3.19	2.99
	Elevation	506.54	506.78	506.57	506.66	506.76	507.13	507.3	506.99	506.91	507.72	507.77	507.82	507.26	506.93	506.73
	Date	7/4/2007	7/5/2007	7/6/2007	7/7/2007	7/8/2007	7/9/2007	7/10/2007	7/11/2007	7/12/2007	7/13/2007	7/14/2007	7/15/2007	7/16/2007	7/17/2007	7/18/2007
	Gage Height	2.86	2.78	2.72	2.65	2.57	2.54	2.5	2.43	2.42	2.37	2.31	2.29	2.27	2.34	2.67
	Elevation	506.6	506.52	506.46	506.39	506.31	506.28	506.24	506.17	506.16	506.11	506.05	506.03	506.01	506.08	506.41
	Date	7/19/2007	7/20/2007	7/21/2007	7/22/2007	7/23/2007	7/24/2007	7/25/2007	7/26/2007	7/27/2007	7/28/2007	7/29/2007	7/30/2007	7/31/2007	8/1/2007	8/2/2007
	Gage Height	3.23	4.63	4.38	3.43	2.97	2.7	2.56	2.44	2.42	2.38	2.51	2.38	2.33	2.26	2.23
	Elevation	506.97	508.37	508.12	507.17	506.71	506.44	506.3	506.18	506.16	506.12	506.25	506.12	506.07	506	505.97
	Date	8/3/2007	8/4/2007	8/5/2007	8/6/2007	8/7/2007	8/8/2007	8/9/2007	8/10/2007	8/11/2007	8/12/2007	8/13/2007	8/14/2007	8/15/2007	8/16/2007	8/17/2007
	Gage Height	2.2	2.15	2.16	2.22	2.23	2.12	2.11	2.05	2.02	2	1.99	2	1.98	2.04	2.14
	Elevation	505.94	505.89	505.9	505.96	505.97	505.86	505.85	505.79	505.76	505.74	505.73	505.74	505.72	505.78	505.88
	Date	8/18/2007	8/19/2007	8/20/2007	8/21/2007	8/22/2007	8/23/2007	8/24/2007	8/25/2007	8/26/2007	8/27/2007	8/28/2007	8/29/2007	8/30/2007	8/31/2007	9/1/2007
	Gage Height	2.05	2.01	2.26	2.22	2.35	2.41	2.33	2.28	2.29	2.39	2.24	2.14	2.1	2.06	2.02
	Elevation	505.79	505.75	506	505.96	506.09	506.15	506.07	506.02	506.03	506.13	505.98	505.88	505.84	505.8	505.76
	Date	9/2/2007	9/3/2007	9/4/2007	9/5/2007	9/6/2007	9/7/2007	9/11/2007	9/12/2007	9/13/2007	9/14/2007	9/15/2007	9/16/2007	9/17/2007	9/18/2007	9/19/2007
	Gage Height	2.01	2.02	1.96	1.94	1.9	1.93	2.38	2.2	2.15	2.08	2.12	2.04	1.98	1.97	1.96
	Elevation	505.75	505.76	505.7	505.68	505.64	505.67	506.12	505.94	505.89	505.82	505.86	505.78	505.72	505.71	505.7
	Date	9/20/2007	9/21/2007	9/22/2007	9/23/2007	9/24/2007	9/25/2007	9/26/2007	9/27/2007	9/28/2007	9/29/2007	9/30/2007	10/1/2007	10/2/2007	10/3/2007	10/4/2007
	Gage Height	1.92	1.93	1.91	1.91	1.93	1.96	2.07	1.99	2.06	2.11	2.05	1.95	1.92	1.98	2.03
	Elevation	505.66	505.67	505.65	505.65	505.67	505.7	505.81	505.73	505.8	505.85	505.79	505.69	505.66	505.72	505.77

Base Elevation = 503.74'
All Units in Feet (')
From USGS Station 03339000

Brickyard Disposal and Recycling
Historical River Elevations
Average Annual Maximum Elevation 519.14 '

Maximum Elevation	Date	10/5/2007	10/6/2007	10/7/2007	10/8/2007	10/9/2007	10/10/2007	10/11/2007	10/12/2007	10/13/2007	10/14/2007	10/15/2007	10/16/2007	10/17/2007	10/18/2007	10/19/2007
	Gage Height	2.32	2.17	2.07	2.02	2	2	2.02	2.05	1.98	1.97	1.95	1.96	1.94	2.23	2.33
	Elevation	506.06	505.91	505.81	505.76	505.74	505.74	505.76	505.79	505.72	505.71	505.69	505.7	505.68	505.97	506.07
	Date	10/20/2007	10/21/2007	10/22/2007	10/23/2007	10/24/2007	10/25/2007	10/26/2007	10/27/2007	10/28/2007	10/29/2007	10/30/2007	10/31/2007	11/1/2007	11/2/2007	11/3/2007
	Gage Height	2.61	2.4	2.28	2.38	2.3	2.28	2.26	2.24	2.2	2.33	2.27	2.22	2.18	2.17	2.14
	Elevation	506.35	506.14	506.02	506.12	506.04	506.02	506	505.98	505.94	506.07	506.01	505.96	505.92	505.91	505.88
	Date	11/4/2007	11/5/2007	11/6/2007	11/7/2007	11/8/2007	11/9/2007	11/10/2007	11/15/2007	11/16/2007	11/17/2007	11/18/2007	11/19/2007	11/20/2007	11/21/2007	11/22/2007
	Gage Height	2.12	2.13	2.25	2.12	2.05	2.04	2.16	2.65	2.82	2.42	2.49	2.35	2.07	2.78	7.79
	Elevation	505.86	505.87	505.99	505.86	505.79	505.78	505.9	506.39	506.56	506.16	506.23	506.09	505.81	506.52	511.53
517.09	Date	11/23/2007	11/24/2007	11/25/2007	11/26/2007	11/27/2007	11/28/2007	11/29/2007	11/30/2007	12/1/2007	12/2/2007	12/3/2007	12/4/2007	12/5/2007	12/6/2007	12/7/2007
	Gage Height	7.55	5.42	4.55	4.34	5.02	4.56	4.27	3.77	3.58	3.63	3.97	4.35	4.22	3.78	3.69
	Elevation	511.29	509.16	508.29	508.08	508.76	508.3	508.01	507.51	507.32	507.37	507.71	508.09	507.96	507.52	507.43
	Date	12/8/2007	12/9/2007	12/10/2007	12/11/2007	12/12/2007	12/13/2007	12/14/2007	12/15/2007	12/16/2007	12/17/2007	12/18/2007	12/19/2007	12/20/2007	12/21/2007	12/22/2007
	Gage Height	3.45	3.72	4.45	5.33	9.24	10.07	9.17	7.53	6.14	5.41	4.89	4.74	4.57	4.67	6.26
	Elevation	507.19	507.46	508.19	509.07	512.98	513.81	512.91	511.27	509.88	509.15	508.63	508.48	508.31	508.41	510
	Date	12/23/2007	12/24/2007	12/25/2007	12/26/2007	12/27/2007	12/28/2007	12/29/2007	12/30/2007	12/31/2007						
	Gage Height	8.41	7.93	6.23	5.26	4.98	4.98	5.83	5.75	5.34						
	Elevation	512.15	511.67	509.97	509	508.72	508.72	509.57	509.49	509.08						

Maximum Elevation	Date	1/1/2008	1/2/2008	1/3/2008	1/4/2008	1/5/2008	1/6/2008	1/7/2008	1/9/2008	1/10/2008	1/11/2008	1/12/2008	1/13/2008	1/14/2008	1/15/2008	1/16/2008
	Gage Height	5.17	4.46	4.19	4.67	4.72	5.01	5.99	14.9	16.06	13.56	10.83	8.13	6.85	6.09	5.51
	Elevation	508.91	508.2	507.93	508.41	508.46	508.75	509.73	518.64	519.8	517.3	514.57	511.87	510.59	509.83	509.25
	Date	1/17/2008	1/18/2008	1/19/2008	1/20/2008	1/21/2008	1/22/2008	1/23/2008	1/24/2008	1/25/2008	1/26/2008	1/27/2008	1/28/2008	1/29/2008	1/30/2008	1/31/2008
	Gage Height	5.27	5.03	4.57	4.02	4.07	4.58	4.39	4.23	3.86	3.72	3.75	3.92	4.05	4	4.1
	Elevation	509.01	508.77	508.31	507.76	507.81	508.32	508.13	507.97	507.6	507.46	507.49	507.66	507.79	507.74	507.84
	Date	2/1/2008	2/2/2008	2/3/2008	2/4/2008	2/5/2008	2/6/2008	2/7/2008	2/8/2008	2/9/2008	2/10/2008	2/11/2008	2/12/2008	2/13/2008	2/14/2008	2/15/2008
	Gage Height	3.55	3.76	3.97	4.82	14.65	23.68	25.26	20.61	14.68	10.43	8.2	7.11	6.48	5.9	5.51
	Elevation	507.29	507.5	507.71	508.56	518.39	527.42	529	524.35	518.42	514.17	511.94	510.85	510.22	509.64	509.25
	Date	2/16/2008	2/17/2008	2/18/2008	2/19/2008	2/20/2008	2/21/2008	2/22/2008	2/23/2008	2/24/2008	2/25/2008	2/26/2008	2/27/2008	2/28/2008	2/29/2008	3/1/2008
	Gage Height	5.07	6.4	9.75	8.16	6.15	5.35	5.15	5.01	4.67	4.57	4.7	4.45	4.42	4.37	4.71
	Elevation	508.81	510.14	513.49	511.9	509.89	509.09	508.89	508.75	508.41	508.31	508.44	508.19	508.16	508.11	508.45
	Date	3/2/2008	3/3/2008	3/4/2008	3/5/2008	3/6/2008	3/7/2008	3/8/2008	3/9/2008	3/10/2008	3/11/2008	3/12/2008	3/13/2008	3/14/2008	3/15/2008	3/16/2008
	Gage Height	6.56	11.09	11.56	8.53	6.89	6.48	5.91	5.43	5.15	5.12	5.26	5.49	5.91	5.84	5.46
	Elevation	510.3	514.83	515.3	512.27	510.63	510.22	509.65	509.17	508.89	508.86	509	509.23	509.65	509.58	509.2
529	Date	3/17/2008	3/18/2008	3/19/2008	3/20/2008	3/21/2008	3/22/2008	3/23/2008	3/24/2008	3/25/2008	3/26/2008	3/27/2008	3/28/2008	3/29/2008	3/30/2008	3/31/2008
	Gage Height	5.3	6.65	10.25	10.09	8.1	6.98	6.2	5.76	5.42	5.26	5.22	7.53	7.34	6.33	6.36
	Elevation	509.04	510.39	513.99	513.83	511.84	510.72	509.94	509.5	509.16	509	508.96	511.27	511.08	510.07	510.1
	Date	4/1/2008	4/2/2008	4/3/2008	4/4/2008	4/5/2008	4/6/2008	4/7/2008	4/8/2008	4/9/2008	4/10/2008	4/11/2008	4/12/2008	4/13/2008	4/14/2008	4/15/2008
	Gage Height	8.89	7.61	6.55	6.21	5.77	5.44	5.18	4.99	5	5.08	8.81	9.16	7.27	6.44	5.89
	Elevation	512.63	511.35	510.29	509.95	509.51	509.18	508.92	508.73	508.74	508.82	512.55	512.9	511.01	510.18	509.63
	Date	4/16/2008	4/17/2008	4/18/2008	4/19/2008	4/20/2008	4/21/2008	4/22/2008	4/23/2008	4/24/2008	4/25/2008	4/26/2008	4/27/2008	4/28/2008	4/29/2008	4/30/2008
	Gage Height	5.57	5.37	5.12	5.13	4.94	4.85	4.65	4.6	4.37	4.4	4.51	4.39	4.45	4.26	4.17
	Elevation	509.31	509.11	508.86	508.87	508.68	508.59	508.39	508.34	508.11	508.14	508.25	508.13	508.19	508	507.91
	Date	5/1/2008	5/2/2008	5/3/2008	5/4/2008	5/5/2008	5/6/2008	5/7/2008	5/8/2008	5/9/2008	5/10/2008	5/11/2008	5/12/2008	5/13/2008	5/14/2008	5/15/2008
	Gage Height	4.09	4.11	4.49	4.25	4.18	3.9	3.95	4.37	5.49	5.12	5.76	7.87	7.45	6.43	6.08
	Elevation	507.83	507.85	508.23	507.99	507.92	507.64	507.69	508.11	509.23	508.86	509.5	511.61	511.19	510.17	509.82
	Date	5/16/2008	5/17/2008	5/18/2008	5/19/2008	5/20/2008	5/21/2008	5/22/2008	5/23/2008	5/24/2008	5/25/2008	5/26/2008	5/27/2008	5/28/2008	5/29/2008	6/3/2008
	Gage Height	9.12	8.69	7.12	6.32	5.93	5.64	5.37	5.14	5.49	5.59	5.37	5.18	4.94	4.78	9.3
	Elevation	512.86	512.43	510.86	510.06	509.67	509.38	509.11	508.88	509.23	509.33	509.11	508.92	508.68	508.52	513.04

Base Elevation = 503.74'
All Units in Feet (')
From USGS Station 03339000

Brickyard Disposal and Recycling
Historical River Elevations
Average Annual Maximum Elevation 519.14 '

Maximum Elevation	Date	6/6/2008	6/7/2008	6/8/2008	6/9/2008	6/10/2008	6/11/2008	6/12/2008	6/13/2008	6/14/2008	6/15/2008	6/16/2008	6/17/2008	6/18/2008	6/19/2008	6/20/2008
	Gage Height	15.07	17.52	20.75	15.39	10.72	7.48	6.4	6.58	5.93	5.37	4.97	4.67	4.51	4.33	4.24
	Elevation	518.81	521.26	524.49	519.13	514.46	511.22	510.14	510.32	509.67	509.11	508.71	508.41	508.25	508.07	507.98
	Date	6/21/2008	6/22/2008	6/23/2008	6/24/2008	6/25/2008	6/26/2008	6/27/2008	6/28/2008	6/29/2008	6/30/2008	7/1/2008	7/10/2008	7/11/2008	7/12/2008	7/13/2008
	Gage Height	4.24	4.3	4.37	4.24	4.32	4.19	4.33	8.22	6.27	5.08	4.56	7.26	5.51	5.72	8.05
	Elevation	507.98	508.04	508.11	507.98	508.06	507.93	508.07	511.96	510.01	508.82	508.3	511	509.25	509.46	511.79
	Date	7/14/2008	7/15/2008	7/16/2008	7/17/2008	7/18/2008	7/19/2008	7/20/2008	7/21/2008	7/22/2008	7/23/2008	7/24/2008	7/25/2008	7/26/2008	8/5/2008	8/6/2008
	Gage Height	6.92	5.24	4.46	3.99	3.75	3.46	3.63	3.7	4.97	5.2	4.27	3.65	3.53	3.23	3.24
	Elevation	510.66	508.98	508.2	507.73	507.49	507.2	507.37	507.44	508.71	508.94	508.01	507.39	507.27	506.97	506.98
	Date	8/7/2008	8/8/2008	8/9/2008	8/10/2008	8/11/2008	8/12/2008	8/13/2008	8/14/2008	8/15/2008	8/16/2008	8/17/2008	8/18/2008	8/19/2008	8/20/2008	8/21/2008
	Gage Height	3.04	2.96	2.84	2.74	2.68	2.63	2.59	2.59	2.61	2.6	2.55	2.52	2.59	2.53	2.45
	Elevation	506.78	506.7	506.58	506.48	506.42	506.37	506.33	506.33	506.35	506.34	506.29	506.26	506.33	506.27	506.19
	Date	8/22/2008	8/23/2008	8/24/2008	8/25/2008	8/26/2008	8/27/2008	8/28/2008	8/29/2008	8/30/2008	8/31/2008	9/1/2008	9/2/2008	9/3/2008	9/4/2008	9/5/2008
	Gage Height	2.66	2.72	2.52	2.47	2.42	2.41	2.41	2.47	2.48	2.48	2.42	2.37	2.36	2.52	2.78
	Elevation	506.4	506.46	506.26	506.21	506.16	506.15	506.15	506.21	506.22	506.22	506.16	506.11	506.1	506.26	506.52
	Date	9/6/2008	9/7/2008	9/8/2008	9/9/2008	9/10/2008	9/11/2008	9/12/2008	9/13/2008	9/14/2008	9/15/2008	9/16/2008	9/17/2008	9/18/2008	9/19/2008	9/20/2008
	Gage Height	4.12	3.54	3.18	3.01	2.77	2.7	2.78	2.78	4.39	11.03	11.75	12.12	9.25	5.69	4.83
	Elevation	507.86	507.28	506.92	506.75	506.51	506.44	506.52	506.52	508.13	514.77	515.49	515.86	512.99	509.43	508.57
	Date	9/21/2008	9/22/2008	9/23/2008	9/24/2008	9/25/2008	9/26/2008	9/27/2008	9/28/2008	9/29/2008	9/30/2008	10/1/2008	10/2/2008	10/3/2008	10/4/2008	10/5/2008
529	Gage Height	4.65	4.31	3.95	3.72	3.49	3.5	3.36	3.26	3.12	3.05	3	2.97	3.04	2.89	2.93
	Elevation	508.39	508.05	507.69	507.46	507.23	507.24	507.1	507	506.86	506.79	506.74	506.71	506.78	506.63	506.67
	Date	10/6/2008	10/7/2008	10/10/2008	10/11/2008	10/12/2008	10/13/2008	10/14/2008	10/15/2008	10/16/2008	10/17/2008	10/18/2008	10/19/2008	10/20/2008	10/21/2008	10/22/2008
	Gage Height	2.83	2.83	3.25	3.08	2.99	2.93	2.81	2.84	3.12	2.98	2.95	2.9	2.87	2.92	2.84
	Elevation	506.57	506.57	506.99	506.82	506.73	506.67	506.55	506.58	506.86	506.72	506.69	506.64	506.61	506.66	506.58
	Date	10/23/2008	10/24/2008	10/25/2008	10/26/2008	10/27/2008	10/28/2008	10/29/2008	10/30/2008	10/31/2008	11/1/2008	11/2/2008	11/3/2008	11/4/2008	11/5/2008	11/6/2008
	Gage Height	2.82	2.92	3.4	4.43	4.06	3.66	3.41	3.29	3.24	3.16	3.11	3.34	3.04	3.02	3.02
	Elevation	506.56	506.66	507.14	508.17	507.8	507.4	507.15	507.03	506.98	506.9	506.85	507.08	506.78	506.76	506.76
	Date	11/7/2008	11/8/2008	11/9/2008	11/10/2008	11/11/2008	11/12/2008	11/13/2008	11/17/2008	11/18/2008	11/19/2008	11/20/2008	11/21/2008	11/22/2008	11/23/2008	11/24/2008
	Gage Height	3.04	3.05	3.06	2.98	2.92	2.89	2.87	3.07	3.14	2.92	3.04	2.87	2.93	2.8	2.84
	Elevation	506.78	506.79	506.8	506.72	506.66	506.63	506.61	506.81	506.88	506.66	506.78	506.61	506.67	506.54	506.58
	Date	11/25/2008	11/26/2008	11/27/2008	11/28/2008	11/29/2008	11/30/2008	12/1/2008	12/2/2008	12/3/2008	12/4/2008	12/5/2008	12/6/2008	12/7/2008	12/8/2008	12/9/2008
	Gage Height	2.83	2.88	2.85	2.79	2.76	2.78	2.8	2.85	2.89	2.85	2.81	2.78	2.75	2.83	3.01
	Elevation	506.57	506.62	506.59	506.53	506.5	506.52	506.54	506.59	506.63	506.59	506.55	506.52	506.49	506.57	506.75
	Date	12/10/2008	12/11/2008	12/12/2008	12/13/2008	12/14/2008	12/15/2008	12/16/2008	12/17/2008	12/18/2008	12/19/2008	12/20/2008	12/21/2008	12/22/2008	12/23/2008	12/24/2008
	Gage Height	3.58	4.82	4.34	4.07	3.62	3.75	3.5	3.48	3.37	4.74	7.76	6.8	5.14	4.93	7.59
	Elevation	507.32	508.56	508.08	507.81	507.36	507.49	507.24	507.22	507.11	508.48	511.5	510.54	508.88	508.67	511.33
	Date	12/25/2008	12/26/2008	12/27/2008	12/28/2008	12/29/2008	12/30/2008	12/31/2008								
	Gage Height	9.33	7.23	9.78	17.11	18.25	15.48	10.85								
	Elevation	513.07	510.97	513.52	520.85	521.99	519.22	514.59								

Maximum Elevation	Date	1/1/2009	1/2/2009	1/3/2009	1/4/2009	1/5/2009	1/6/2009	1/7/2009	1/8/2009	1/9/2009	1/10/2009	1/11/2009	1/12/2009	1/13/2009	1/17/2009	1/18/2009
	Gage Height	8.07	7.04	6.26	5.75	5.52	5.17	5.16	4.86	4.48	4.52	4.27	4.19	4.12	4.27	4.11
	Elevation	511.81	510.78	510	509.49	509.26	508.91	508.9	508.6	508.22	508.26	508.01	507.93	507.86	508.01	507.85
	Date	1/22/2009	1/23/2009	1/24/2009	1/25/2009	1/26/2009	1/27/2009	1/28/2009	1/29/2009	1/30/2009	1/31/2009	2/1/2009	2/7/2009	2/8/2009	2/9/2009	2/10/2009
524.12	Gage Height	3.84	3.84	3.94	3.67	3.6	3.68	3.7	3.67	3.73	3.6	3.59	3.9	5.08	5.26	5.16
	Elevation	507.58	507.58	507.68	507.41	507.34	507.42	507.44	507.41	507.47	507.34	507.33	507.64	508.82	509	508.9
	Date	2/11/2009	2/12/2009	2/13/2009	2/14/2009	2/15/2009	2/16/2009	2/17/2009	2/18/2009	2/19/2009	2/20/2009	2/21/2009	2/22/2009	2/23/2009	2/24/2009	2/25/2009
	Gage Height	9.53	14	11.8	8.3	7.13	6.37	5.72	5.58	5.42	5.25	4.94	4.66	4.3	4.34	4.18
	Elevation	513.27	517.74	515.54	512.04	510.87	510.11	509.46	509.32	509.16	508.99	508.68	508.4	508.04	508.08	507.92

Base Elevation = 503.74'
All Units in Feet (')
From USGS Station 03339000

Brickyard Disposal and Recycling
Historical River Elevations
Average Annual Maximum Elevation 519.14 '

Maximum Elevation	Date	2/26/2009	2/27/2009	2/28/2009	3/1/2009	3/2/2009	3/3/2009	3/4/2009	3/5/2009	3/6/2009	3/7/2009	3/8/2009	3/9/2009	3/10/2009	3/11/2009	3/12/2009
	Gage Height	4.27	4.87	5.95	5.52	4.81	4.55	4.48	4.23	4.35	4.28	4.97	7.42	6.99	10.76	12.39
	Elevation	508.01	508.61	509.69	509.26	508.55	508.29	508.22	507.97	508.09	508.02	508.71	511.16	510.73	514.5	516.13
	Date	3/13/2009	3/14/2009	3/15/2009	3/16/2009	3/17/2009	3/18/2009	3/19/2009	3/20/2009	3/21/2009	3/22/2009	3/23/2009	3/24/2009	3/25/2009	3/26/2009	3/27/2009
	Gage Height	10.42	7.28	6.48	5.96	5.57	5.32	5.08	4.72	4.57	4.52	4.36	4.31	4.45	4.49	4.28
	Elevation	514.16	511.02	510.22	509.7	509.31	509.06	508.82	508.46	508.31	508.26	508.1	508.05	508.19	508.23	508.02
	Date	3/28/2009	3/29/2009	3/30/2009	3/31/2009	4/1/2009	4/2/2009	4/3/2009	4/4/2009	4/5/2009	4/6/2009	4/7/2009	4/8/2009	4/9/2009	4/10/2009	4/11/2009
	Gage Height	4.23	4.91	5.66	5.39	6.96	6.74	7.47	7.93	7.13	9.52	9.12	7.72	6.74	6.26	6.03
	Elevation	507.97	508.65	509.4	509.13	510.7	510.48	511.21	511.67	510.87	513.26	512.86	511.46	510.48	510	509.77
	Date	4/12/2009	4/13/2009	4/14/2009	4/15/2009	4/16/2009	4/17/2009	4/18/2009	4/19/2009	4/20/2009	4/21/2009	4/22/2009	4/23/2009	4/24/2009	4/25/2009	4/26/2009
	Gage Height	5.68	6.32	8.84	8.58	7.24	6.43	6.02	5.88	6.59	7.82	7.22	6.48	6.01	5.61	5.32
	Elevation	509.42	510.06	512.58	512.32	510.98	510.17	509.76	509.62	510.33	511.56	510.96	510.22	509.75	509.35	509.06
	Date	4/27/2009	4/28/2009	4/29/2009	4/30/2009	5/1/2009	5/2/2009	5/3/2009	5/4/2009	5/5/2009	5/6/2009	5/7/2009	5/8/2009	5/9/2009	5/10/2009	5/11/2009
	Gage Height	5.23	6.34	8.45	8.9	12.95	12.66	10.15	7.91	6.9	6.36	5.93	6.43	6.57	5.93	5.55
	Elevation	508.97	510.08	512.19	512.64	516.69	516.4	513.89	511.65	510.64	510.1	509.67	510.17	510.31	509.67	509.29
	Date	5/12/2009	5/13/2009	5/14/2009	5/15/2009	5/16/2009	5/17/2009	5/18/2009	5/19/2009	5/20/2009	5/21/2009	5/22/2009	5/23/2009	5/24/2009	5/25/2009	5/26/2009
	Gage Height	5.23	6.79	13.63	13.57	18.31	20.38	16.27	11.19	8.1	7.04	6.52	5.99	5.67	5.46	5.27
	Elevation	508.97	510.53	517.37	517.31	522.05	524.12	520.01	514.93	511.84	510.78	510.26	509.73	509.41	509.2	509.01
	Date	5/27/2009	5/28/2009	5/29/2009	5/30/2009	5/31/2009	6/1/2009	6/2/2009	6/3/2009	6/4/2009	6/5/2009	6/6/2009	6/7/2009	6/8/2009	6/9/2009	6/10/2009
	Gage Height	5.13	4.99	4.77	4.63	4.53	4.39	4.87	6.23	6.43	5.8	5.09	4.83	4.61	4.42	4.35
	Elevation	508.87	508.73	508.51	508.37	508.27	508.13	508.61	509.97	510.17	509.54	508.83	508.57	508.35	508.16	508.09
	Date	6/11/2009	6/12/2009	6/13/2009	6/14/2009	6/15/2009	6/16/2009	6/17/2009	6/18/2009	6/19/2009	6/20/2009	6/21/2009	6/22/2009	6/23/2009	6/24/2009	6/25/2009
	Gage Height	4.6	5.61	4.75	4.58	4.23	4.32	4.16	4.3	6.05	7.7	8.08	6.79	6.67	5.79	5.14
	Elevation	508.34	509.35	508.49	508.32	507.97	508.06	507.9	508.04	509.79	511.44	511.82	510.53	510.41	509.53	508.88
524.12	Date	6/26/2009	6/27/2009	6/28/2009	6/29/2009	6/30/2009	7/1/2009	7/2/2009	7/3/2009	7/4/2009	7/5/2009	7/6/2009	7/7/2009	7/8/2009	7/9/2009	7/10/2009
	Gage Height	4.84	4.54	4.39	4.2	3.99	3.97	3.84	3.72	3.93	4.4	4.49	3.99	4.02	4.86	5.03
	Elevation	508.58	508.28	508.13	507.94	507.73	507.71	507.58	507.46	507.67	508.14	508.23	507.73	507.76	508.6	508.77
	Date	7/11/2009	7/12/2009	7/13/2009	7/14/2009	7/15/2009	7/16/2009	7/17/2009	7/18/2009	7/19/2009	7/20/2009	7/21/2009	7/22/2009	7/23/2009	7/24/2009	7/25/2009
	Gage Height	4.72	4.77	4.63	4.06	4.13	4.62	4.31	3.9	3.65	3.58	3.37	3.24	3.23	3.24	3.31
	Elevation	508.46	508.51	508.37	507.8	507.87	508.36	508.05	507.64	507.39	507.32	507.11	506.98	506.97	506.98	507.05
	Date	7/26/2009	7/27/2009	7/28/2009	7/29/2009	7/30/2009	7/31/2009	8/1/2009	8/2/2009	8/3/2009	8/4/2009	8/5/2009	8/6/2009	8/7/2009	8/8/2009	8/9/2009
	Gage Height	3.48	3.25	3.13	3.18	4.16	3.37	3.06	2.94	2.85	2.99	3.09	3.03	2.96	2.8	2.71
	Elevation	507.22	506.99	506.87	506.92	507.9	507.11	506.8	506.68	506.59	506.73	506.83	506.77	506.7	506.54	506.45
	Date	8/10/2009	8/11/2009	8/12/2009	8/13/2009	8/14/2009	8/15/2009	8/16/2009	8/17/2009	8/18/2009	8/19/2009	8/20/2009	8/21/2009	8/22/2009	8/23/2009	8/24/2009
	Gage Height	2.66	2.6	2.54	2.52	2.45	2.44	2.41	2.5	2.81	3.3	3.65	3.59	3.25	2.94	2.78
	Elevation	506.4	506.34	506.28	506.26	506.19	506.18	506.15	506.24	506.55	507.04	507.39	507.33	506.99	506.68	506.52
	Date	8/25/2009	8/26/2009	8/27/2009	8/28/2009	8/29/2009	8/30/2009	8/31/2009	9/1/2009	9/2/2009	9/3/2009	9/4/2009	9/5/2009	9/6/2009	9/7/2009	9/8/2009
	Gage Height	2.67	2.59	2.53	2.75	5.95	5.06	4.05	3.53	3.22	3.02	2.9	2.79	2.72	2.64	2.59
	Elevation	506.41	506.33	506.27	506.49	509.69	508.8	507.79	507.27	506.96	506.76	506.64	506.53	506.46	506.38	506.33
	Date	9/9/2009	9/10/2009	9/11/2009	9/12/2009	9/13/2009	9/14/2009	9/15/2009	9/16/2009	9/17/2009	9/18/2009	9/19/2009	9/20/2009	9/21/2009	9/22/2009	9/23/2009
	Gage Height	2.55	2.52	2.5	2.47	2.43	2.39	2.38	2.38	2.37	2.36	2.31	2.35	2.4	2.51	2.5
	Elevation	506.29	506.26	506.24	506.21	506.17	506.13	506.12	506.12	506.11	506.1	506.05	506.09	506.14	506.25	506.24
	Date	9/24/2009	9/25/2009	9/26/2009	9/27/2009	9/28/2009	9/29/2009	9/30/2009	10/1/2009	10/2/2009	10/3/2009	10/4/2009	10/5/2009	10/6/2009	10/7/2009	10/8/2009
	Gage Height	2.58	2.54	2.46	2.43	2.39	2.34	2.32	2.36	2.51	2.63	2.66	2.49	2.47	2.46	2.71
	Elevation	506.32	506.28	506.2	506.17	506.13	506.08	506.06	506.1	506.25	506.37	506.4	506.23	506.21	506.2	506.45
	Date	10/9/2009	10/10/2009	10/11/2009	10/12/2009	10/13/2009	10/14/2009	10/15/2009	10/16/2009	10/17/2009	10/18/2009	10/19/2009	10/20/2009	10/21/2009	10/22/2009	10/23/2009
	Gage Height	3.83	6.1	5.74	4.81	4.32	3.97	4.04	4.25	4.2	3.95	3.73	3.6	3.5	3.41	6.42
	Elevation	507.57	509.84	509.48	508.55	508.06	507.71	507.78	507.99	507.94	507.69	507.47	507.34	507.24	507.15	510.16

Base Elevation = 503.74'
All Units in Feet (')
From USGS Station 03339000

Brickyard Disposal and Recycling
Historical River Elevations
Average Annual Maximum Elevation 519.14 '

Maximum Elevation	Date	10/24/2009	10/25/2009	10/26/2009	10/27/2009	10/28/2009	10/29/2009	10/30/2009	10/31/2009	11/1/2009	11/2/2009	11/3/2009	11/4/2009	11/5/2009	11/6/2009	11/7/2009
	Gage Height	9.88	9.32	7.38	6.01	5.69	5.82	7.27	12.17	11.82	11.03	8.03	6.43	5.77	5.28	5.13
	Elevation	513.62	513.06	511.12	509.75	509.43	509.56	511.01	515.91	515.56	514.77	511.77	510.17	509.51	509.02	508.87
	Date	11/8/2009	11/9/2009	11/10/2009	11/11/2009	11/12/2009	11/13/2009	11/14/2009	11/15/2009	11/16/2009	11/17/2009	11/18/2009	11/19/2009	11/20/2009	11/21/2009	11/22/2009
	Gage Height	4.89	4.78	4.38	4.38	4.3	4.19	4.25	5.24	5.89	10.06	12.76	11.77	10.25	8.06	7.04
	Elevation	508.63	508.52	508.12	508.12	508.04	507.93	507.99	508.98	509.63	513.8	516.5	515.51	513.99	511.8	510.78
	Date	11/23/2009	11/24/2009	11/25/2009	11/26/2009	11/27/2009	11/28/2009	11/29/2009	11/30/2009	12/1/2009	12/2/2009	12/3/2009	12/4/2009	12/5/2009	12/6/2009	12/7/2009
524.12	Gage Height	6.41	5.92	6.25	7.21	6.66	6.04	5.74	5.46	5.14	5.11	5.55	5.42	5.07	4.79	4.72
	Elevation	510.15	509.66	509.99	510.95	510.4	509.78	509.48	509.2	508.88	508.85	509.29	509.16	508.81	508.53	508.46
	Date	12/8/2009	12/11/2009	12/12/2009	12/13/2009	12/14/2009	12/15/2009	12/16/2009	12/17/2009	12/18/2009	12/19/2009	12/20/2009	12/21/2009	12/22/2009	12/23/2009	12/24/2009
	Gage Height	4.6	5.86	5.3	6.05	6.74	6.4	5.79	5.3	5.1	4.91	4.75	4.48	4.39	4.5	6.04
	Elevation	508.34	509.6	509.04	509.79	510.48	510.14	509.53	509.04	508.84	508.65	508.49	508.22	508.13	508.24	509.78
	Date	12/25/2009	12/26/2009	12/27/2009	12/28/2009	12/30/2009	12/31/2009									
	Gage Height	10.99	12.61	11.15	7.96	5.89	5.61									
	Elevation	514.73	516.35	514.89	511.7	509.63	509.35									

Maximum Elevation	Date	1/1/2010	1/2/2010	1/3/2010	1/4/2010	1/5/2010	1/6/2010	1/7/2010	1/8/2010	1/9/2010	1/10/2010	1/11/2010	1/12/2010	1/13/2010	1/14/2010	1/15/2010
	Gage Height	5.26	4.75	4.52	4.91	5.18	5.12	4.64	4.27	4.11	4.12	4.23	4.15	4	4.01	4
	Elevation	509	508.49	508.26	508.65	508.92	508.86	508.38	508.01	507.85	507.86	507.97	507.89	507.74	507.75	507.74
	Date	1/16/2010	1/17/2010	1/18/2010	1/19/2010	1/20/2010	1/21/2010	1/22/2010	1/23/2010	1/24/2010	1/25/2010	1/26/2010	1/27/2010	1/28/2010	1/29/2010	1/30/2010
	Gage Height	4.05	4.03	3.95	4.05	3.94	4.09	5.88	7.15	10.6	12.24	10.96	7.97	6.39	5.53	5.19
	Elevation	507.79	507.77	507.69	507.79	507.68	507.83	509.62	510.89	514.34	515.98	514.7	511.71	510.13	509.27	508.93
	Date	1/31/2010	2/1/2010	2/2/2010	2/3/2010	2/4/2010	2/5/2010	2/6/2010	2/7/2010	2/8/2010	2/9/2010	2/10/2010	2/11/2010	2/12/2010	2/13/2010	2/14/2010
	Gage Height	5.23	4.98	4.7	4.51	4.3	4.33	4.35	4.16	4.02	4.09	3.96	3.7	3.82	3.91	3.99
	Elevation	508.97	508.72	508.44	508.25	508.04	508.07	508.09	507.9	507.76	507.83	507.7	507.44	507.56	507.65	507.73
	Date	2/15/2010	2/16/2010	2/17/2010	2/18/2010	2/19/2010	2/20/2010	2/21/2010	2/22/2010	2/23/2010	2/24/2010	2/25/2010	2/26/2010	2/27/2010	2/28/2010	3/1/2010
	Gage Height	3.91	3.78	3.74	3.66	3.57	3.63	3.66	6.41	9.65	8.32	6.57	5.65	5.23	4.91	5.02
	Elevation	507.65	507.52	507.48	507.4	507.31	507.37	507.4	510.15	513.39	512.06	510.31	509.39	508.97	508.65	508.76
	Date	3/2/2010	3/3/2010	3/4/2010	3/5/2010	3/6/2010	3/7/2010	3/8/2010	3/9/2010	3/10/2010	3/11/2010	3/12/2010	3/13/2010	3/16/2010	3/17/2010	3/18/2010
	Gage Height	5.44	5.44	5.25	5.3	5.38	5.32	5.66	6	6.14	6.63	7.38	8.64	7.81	6.83	6.21
	Elevation	509.18	509.18	508.99	509.04	509.12	509.06	509.4	509.74	509.88	510.37	511.12	512.38	511.55	510.57	509.95
	Date	3/19/2010	3/20/2010	3/21/2010	3/22/2010	3/23/2010	3/24/2010	3/25/2010	3/26/2010	3/27/2010	3/28/2010	3/29/2010	3/30/2010	3/31/2010	4/1/2010	4/2/2010
519.39	Gage Height	5.86	5.45	5.13	4.93	4.81	4.62	4.78	5.64	5.88	7.47	10.64	8.79	7.06	6.32	5.75
	Elevation	509.6	509.19	508.87	508.67	508.55	508.36	508.52	509.38	509.62	511.21	514.38	512.53	510.8	510.06	509.49
	Date	4/3/2010	4/4/2010	4/5/2010	4/6/2010	4/7/2010	4/8/2010	4/9/2010	4/10/2010	4/11/2010	4/12/2010	4/13/2010	4/14/2010	4/15/2010	4/16/2010	4/17/2010
	Gage Height	5.63	5.94	5.75	5.41	5.39	5.38	5.25	4.8	4.66	4.53	4.49	4.32	4.24	4.26	4.15
	Elevation	509.37	509.68	509.49	509.15	509.13	509.12	508.99	508.54	508.4	508.27	508.23	508.06	507.98	508	507.89
	Date	4/18/2010	4/19/2010	4/20/2010	4/21/2010	4/22/2010	4/23/2010	4/24/2010	4/25/2010	4/26/2010	4/27/2010	4/28/2010	4/29/2010	4/30/2010	5/1/2010	5/2/2010
	Gage Height	3.97	4	3.92	3.9	3.87	3.83	3.96	4.24	4.92	5.11	4.57	4.14	4.11	4.11	4.13
	Elevation	507.71	507.74	507.66	507.64	507.61	507.57	507.7	507.98	508.66	508.85	508.31	507.88	507.85	507.85	507.87
	Date	5/3/2010	5/4/2010	5/5/2010	5/6/2010	5/7/2010	5/8/2010	5/9/2010	5/10/2010	5/11/2010	5/12/2010	5/13/2010	5/14/2010	5/15/2010	5/16/2010	5/17/2010
	Gage Height	4.23	4.28	4.44	4.09	3.98	3.87	3.76	3.69	4.4	6.75	6.17	5.37	4.88	4.62	4.96
	Elevation	507.97	508.02	508.18	507.83	507.72	507.61	507.5	507.43	508.14	510.49	509.91	509.11	508.62	508.36	508.7
	Date	5/18/2010	5/19/2010	5/20/2010	5/21/2010	5/22/2010	5/23/2010	5/24/2010	5/25/2010	5/26/2010	5/27/2010	5/28/2010	5/29/2010	5/30/2010	5/31/2010	6/1/2010
	Gage Height	8.1	7.98	6.54	6.68	11.1	9.95	6.99	6.09	5.53	5.81	5.92	5.12	4.83	5.29	5.83
	Elevation	511.84	511.72	510.28	510.42	514.84	513.69	510.73	509.83	509.27	509.55	509.66	508.86	508.57	509.03	509.57
	Date	6/2/2010	6/3/2010	6/4/2010	6/5/2010	6/6/2010	6/7/2010	6/8/2010	6/9/2010	6/10/2010	6/11/2010	6/12/2010	6/13/2010	6/14/2010	6/15/2010	6/16/2010
	Gage Height	5.73	5.76	5.2	4.85	4.83	4.97	4.5	6.69	8.53	7.31	7.6	7.42	9.69	15.14	15.65
	Elevation	509.47	509.5	508.94	508.59	508.57	508.71	508.24	510.43	512.27	511.05	511.34	511.16	513.43	518.88	519.39

Base Elevation = 503.74'
All Units in Feet (')
From USGS Station 03339000

Brickyard Disposal and Recycling
Historical River Elevations
Average Annual Maximum Elevation 519.14 '

Maximum Elevation	Date	6/17/2010	6/18/2010	6/19/2010	6/20/2010	6/21/2010	6/22/2010	6/23/2010	6/24/2010	6/25/2010	6/26/2010	6/27/2010	6/28/2010	6/29/2010	6/30/2010	7/1/2010
	Gage Height	13.79	12.07	13.53	12.1	10.68	9.55	11.09	10.24	8.76	7.32	6.5	5.9	5.4	5.09	4.72
	Elevation	517.53	515.81	517.27	515.84	514.42	513.29	514.83	513.98	512.5	511.06	510.24	509.64	509.14	508.83	508.46
	Date	7/2/2010	7/3/2010	7/4/2010	7/5/2010	7/6/2010	7/7/2010	7/8/2010	7/9/2010	7/10/2010	7/11/2010	7/12/2010	7/13/2010	7/14/2010	7/15/2010	7/16/2010
	Gage Height	4.55	4.41	4.3	4.12	4.05	3.79	4.07	4.18	3.87	3.69	3.77	3.59	3.71	3.58	4.06
	Elevation	508.29	508.15	508.04	507.86	507.79	507.53	507.81	507.92	507.61	507.43	507.51	507.33	507.45	507.32	507.8
	Date	7/17/2010	7/18/2010	7/19/2010	7/20/2010	7/21/2010	7/22/2010	7/23/2010	7/24/2010	7/25/2010	7/26/2010	7/27/2010	7/28/2010	7/29/2010	7/30/2010	7/31/2010
	Gage Height	4.01	3.58	3.41	3.48	3.69	3.46	3.36	3.25	3.21	3.22	3.08	2.92	2.77	2.71	2.7
	Elevation	507.75	507.32	507.15	507.22	507.43	507.2	507.1	506.99	506.95	506.96	506.82	506.66	506.51	506.45	506.44
	Date	8/1/2010	8/2/2010	8/3/2010	8/4/2010	8/5/2010	8/6/2010	8/7/2010	8/8/2010	8/9/2010	8/10/2010	8/11/2010	8/12/2010	8/13/2010	8/14/2010	8/15/2010
	Gage Height	2.64	2.56	2.64	2.84	2.97	2.72	2.58	2.45	2.41	2.5	2.74	2.68	2.6	2.38	2.33
	Elevation	506.38	506.3	506.38	506.58	506.71	506.46	506.32	506.19	506.15	506.24	506.48	506.42	506.34	506.12	506.07
	Date	8/16/2010	8/17/2010	8/18/2010	8/19/2010	8/20/2010	8/21/2010	8/22/2010	8/23/2010	8/24/2010	8/25/2010	8/26/2010	8/27/2010	8/28/2010	8/29/2010	8/30/2010
	Gage Height	2.33	2.31	2.25	2.23	2.21	2.31	2.29	2.5	2.32	2.22	2.17	2.16	2.12	2.21	2.19
	Elevation	506.07	506.05	505.99	505.97	505.95	506.05	506.03	506.24	506.06	505.96	505.91	505.9	505.86	505.95	505.93
	Date	8/31/2010	9/1/2010	9/2/2010	9/3/2010	9/4/2010	9/5/2010	9/6/2010	9/7/2010	9/8/2010	9/9/2010	9/10/2010	9/11/2010	9/12/2010	9/13/2010	9/14/2010
	Gage Height	2.13	2.13	2.43	2.6	3.13	2.9	2.54	2.35	2.27	2.2	2.14	2.14	2.15	2.15	2.16
	Elevation	505.87	505.87	506.17	506.34	506.87	506.64	506.28	506.09	506.01	505.94	505.88	505.88	505.89	505.89	505.9
519.39																
	Date	9/15/2010	9/16/2010	9/17/2010	9/18/2010	9/19/2010	9/20/2010	9/21/2010	9/22/2010	9/23/2010	9/24/2010	9/25/2010	9/26/2010	9/27/2010	9/28/2010	9/29/2010
	Gage Height	2.1	2.1	2.11	2.11	2.13	2.13	2.08	2.21	2.26	2.51	2.32	2.22	2.22	2.21	2.15
	Elevation	505.84	505.84	505.85	505.85	505.87	505.87	505.82	505.95	506	506.25	506.06	505.96	505.96	505.95	505.89
	Date	9/30/2010	10/1/2010	10/2/2010	10/3/2010	10/4/2010	10/5/2010	10/6/2010	10/7/2010	10/8/2010	10/9/2010	10/10/2010	10/11/2010	10/12/2010	10/13/2010	10/14/2010
	Gage Height	2.1	2.08	2.07	2.08	2.08	2.16	2.1	2.07	2.07	2.08	2.06	2.06	2.03	2.07	2.11
	Elevation	505.84	505.82	505.81	505.82	505.82	505.9	505.84	505.81	505.81	505.82	505.8	505.8	505.77	505.81	505.85
	Date	10/15/2010	10/16/2010	10/17/2010	10/18/2010	10/19/2010	10/20/2010	10/21/2010	10/22/2010	10/23/2010	10/24/2010	10/25/2010	10/26/2010	10/27/2010	10/28/2010	10/29/2010
	Gage Height	2.05	2.16	2.08	2.06	2.05	2.1	2.15	2.12	2.1	2.1	2.12	2.16	2.16	2.43	2.39
	Elevation	505.79	505.9	505.82	505.8	505.79	505.84	505.89	505.86	505.84	505.84	505.86	505.9	505.9	506.17	506.13
	Date	10/30/2010	10/31/2010	11/1/2010	11/2/2010	11/3/2010	11/4/2010	11/5/2010	11/6/2010	11/7/2010	11/8/2010	11/9/2010	11/10/2010	11/11/2010	11/12/2010	11/13/2010
	Gage Height	2.21	2.14	2.19	2.21	2.21	2.16	2.14	2.17	2.19	2.23	2.22	2.15	2.1	2.11	2.12
	Elevation	505.95	505.88	505.93	505.95	505.95	505.9	505.88	505.91	505.93	505.97	505.96	505.89	505.84	505.85	505.86
	Date	11/14/2010	11/15/2010	11/16/2010	11/17/2010	11/18/2010	11/19/2010	11/20/2010	11/21/2010	11/22/2010	11/23/2010	11/24/2010	11/25/2010	11/26/2010	11/27/2010	11/28/2010
	Gage Height	2.12	2.1	2.11	2.13	2.19	2.15	2.12	2.1	2.11	2.38	2.57	3.27	4.51	4.28	3.53
	Elevation	505.86	505.84	505.85	505.87	505.93	505.89	505.86	505.84	505.85	506.12	506.31	507.01	508.25	508.02	507.27
	Date	11/29/2010	11/30/2010	12/1/2010	12/2/2010	12/3/2010	12/4/2010	12/5/2010	12/30/2010	12/31/2010						
	Gage Height	3.25	3.26	4.27	3.84	3.47	3.32	3.11	3.17	6.97						
	Elevation	506.99	507	508.01	507.58	507.21	507.06	506.85	506.91	510.71						

Maximum Elevation	Date	1/1/2011	1/2/2011	1/3/2011	1/4/2011	1/5/2011	2/15/2011	2/16/2011	2/17/2011	2/18/2011	2/19/2011	2/20/2011	2/21/2011	2/22/2011	2/23/2011	2/24/2011
	Gage Height	8.48	6.97	5.46	5.07	4.34	3.75	5.16	9.56	12.32	9.91	7.65	8.13	9.33	7.82	6.91
	Elevation	512.22	510.71	509.2	508.81	508.08	507.49	508.9	513.3	516.06	513.65	511.39	511.87	513.07	511.56	510.65
	Date	2/25/2011	2/26/2011	2/27/2011	2/28/2011	3/1/2011	3/2/2011	3/3/2011	3/4/2011	3/5/2011	3/6/2011	3/7/2011	3/8/2011	3/9/2011	3/10/2011	3/11/2011
	Gage Height	6.62	6.14	6.1	8.8	9.53	7.74	6.55	5.99	7.75	9.72	8.23	7.17	7.29	8.19	7.31
	Elevation	510.36	509.88	509.84	512.54	513.27	511.48	510.29	509.73	511.49	513.46	511.97	510.91	511.03	511.93	511.05
522.64																
	Date	3/12/2011	3/13/2011	3/14/2011	3/15/2011	3/16/2011	3/17/2011	3/18/2011	3/19/2011	3/20/2011	3/21/2011	3/22/2011	3/23/2011	3/24/2011	3/25/2011	3/26/2011
	Gage Height	6.49	5.85	5.45	5.62	6.34	5.99	5.61	5.13	4.86	4.86	4.72	4.69	4.55	4.26	4.18
	Elevation	510.23	509.59	509.19	509.36	510.08	509.73	509.35	508.87	508.6	508.6	508.46	508.43	508.29	508	507.92
	Date	3/27/2011	3/28/2011	3/29/2011	3/30/2011	3/31/2011	4/1/2011	4/2/2011	4/3/2011	4/4/2011	4/5/2011	4/6/2011	4/7/2011	4/8/2011	4/9/2011	4/10/2011
	Gage Height	4.08	3.96	3.89	3.84	3.84	3.84	3.84	3.55	3.9	3.86	3.6	3.63	3.88	4.44	4.33
	Elevation	507.82	507.7	507.63	507.58	507.58	507.58	507.58	507.29	507.64	507.6	507.34	507.37	507.62	508.18	508.07

Base Elevation = 503.74'
All Units in Feet (')
From USGS Station 03339000

Brickyard Disposal and Recycling
Historical River Elevations
Average Annual Maximum Elevation 519.14 '

Maximum Elevation	Date	4/11/2011	4/12/2011	4/13/2011	4/14/2011	4/15/2011	4/16/2011	4/17/2011	4/18/2011	4/19/2011	4/20/2011	4/21/2011	4/22/2011	4/23/2011	4/24/2011	4/25/2011
	Gage Height	4.62	5.24	5.05	4.59	4.33	4.36	4.31	4.12	5.65	12.05	11.61	10.54	13.25	12.85	10.76
	Elevation	508.36	508.98	508.79	508.33	508.07	508.1	508.05	507.86	509.39	515.79	515.35	514.28	516.99	516.59	514.5
	Date	4/27/2011	4/28/2011	4/29/2011	4/30/2011	5/1/2011	5/2/2011	5/3/2011	5/4/2011	5/5/2011	5/6/2011	5/7/2011	5/8/2011	5/9/2011	5/10/2011	5/11/2011
	Gage Height	15.45	18.9	17.6	11.63	8.82	7.69	6.94	6.33	5.9	5.7	5.82	7.27	6.6	5.82	5.35
	Elevation	519.19	522.64	521.34	515.37	512.56	511.43	510.68	510.07	509.64	509.44	509.56	511.01	510.34	509.56	509.09
	Date	5/12/2011	5/13/2011	5/14/2011	5/15/2011	5/16/2011	5/17/2011	5/18/2011	5/19/2011	5/20/2011	5/21/2011	5/22/2011	5/23/2011	5/24/2011	5/25/2011	5/26/2011
	Gage Height	5.06	4.9	5.16	6.62	7.26	6.76	5.85	5.29	4.97	4.79	4.62	4.56	4.48	4.88	9.55
	Elevation	508.8	508.64	508.9	510.36	511	510.5	509.59	509.03	508.71	508.53	508.36	508.3	508.22	508.62	513.29
	Date	5/27/2011	5/28/2011	5/29/2011	5/30/2011	5/31/2011	6/1/2011	6/2/2011	6/3/2011	6/4/2011	6/5/2011	6/6/2011	6/7/2011	6/8/2011	6/9/2011	6/10/2011
	Gage Height	11.41	10.97	14.44	12.53	9.43	7.41	6.55	5.99	5.62	5.49	5.73	5.54	5.07	4.75	4.68
	Elevation	515.15	514.71	518.18	516.27	513.17	511.15	510.29	509.73	509.36	509.23	509.47	509.28	508.81	508.49	508.42
	Date	6/11/2011	6/12/2011	6/13/2011	6/14/2011	6/15/2011	6/16/2011	6/17/2011	6/18/2011	6/19/2011	6/20/2011	6/21/2011	6/22/2011	6/23/2011	6/24/2011	6/25/2011
	Gage Height	5.09	4.96	4.56	4.31	4.7	5.94	5.78	4.98	4.67	4.54	4.93	4.59	4.46	4.16	3.95
	Elevation	508.83	508.7	508.3	508.05	508.44	509.68	509.52	508.72	508.41	508.28	508.67	508.33	508.2	507.9	507.69
	Date	6/26/2011	6/27/2011	6/28/2011	6/29/2011	6/30/2011	7/1/2011	7/2/2011	7/3/2011	7/4/2011	7/5/2011	7/6/2011	7/8/2011	7/9/2011	7/10/2011	7/11/2011
	Gage Height	3.85	4.11	4.61	4.31	3.92	3.91	4.13	4.11	3.74	3.52	3.46	3.91	3.32	3.27	3
	Elevation	507.59	507.85	508.35	508.05	507.66	507.65	507.87	507.85	507.48	507.26	507.2	507.65	507.06	507.01	506.74
	Date	7/12/2011	7/13/2011	7/14/2011	7/15/2011	7/16/2011	7/17/2011	7/18/2011	7/19/2011	7/20/2011	7/21/2011	7/22/2011	7/23/2011	7/24/2011	7/25/2011	7/26/2011
	Gage Height	3.01	2.83	2.76	2.73	2.66	2.61	2.58	2.52	2.44	2.34	2.36	2.31	2.31	2.36	2.68
	Elevation	506.75	506.57	506.5	506.47	506.4	506.35	506.32	506.26	506.18	506.08	506.1	506.05	506.05	506.1	506.42
	Date	7/27/2011	7/28/2011	7/29/2011	7/30/2011	7/31/2011	8/1/2011	8/2/2011	8/3/2011	8/4/2011	8/5/2011	8/6/2011	8/7/2011	8/8/2011	8/9/2011	8/10/2011
	Gage Height	2.44	2.35	2.28	2.26	2.23	2.21	2.18	2.11	2.1	2.07	2.07	2.1	2.07	2.06	2.04
	Elevation	506.18	506.09	506.02	506	505.97	505.95	505.92	505.85	505.84	505.81	505.81	505.84	505.81	505.8	505.78
522.64	Date	8/11/2011	8/12/2011	8/13/2011	8/14/2011	8/15/2011	8/16/2011	8/17/2011	8/18/2011	8/19/2011	8/20/2011	8/21/2011	8/22/2011	8/23/2011	8/24/2011	8/25/2011
	Gage Height	2.13	2.04	2.03	2.06	2.06	2.1	2.08	2.01	1.97	1.99	2.03	2.03	1.99	2.1	2.47
	Elevation	505.87	505.78	505.77	505.8	505.8	505.84	505.82	505.75	505.71	505.73	505.77	505.77	505.73	505.84	506.21
	Date	8/26/2011	8/27/2011	8/28/2011	8/29/2011	8/30/2011	8/31/2011	9/1/2011	9/2/2011	9/3/2011	9/4/2011	9/5/2011	9/6/2011	9/7/2011	9/8/2011	9/9/2011
	Gage Height	2.29	2.1	2.05	2.02	1.97	1.93	1.92	1.9	1.91	1.93	1.92	1.89	1.86	1.85	1.97
	Elevation	506.03	505.84	505.79	505.76	505.71	505.67	505.66	505.64	505.65	505.67	505.66	505.63	505.6	505.59	505.71
	Date	9/10/2011	9/11/2011	9/12/2011	9/13/2011	9/14/2011	9/15/2011	9/16/2011	9/17/2011	9/18/2011	9/19/2011	9/20/2011	9/21/2011	9/22/2011	9/23/2011	9/24/2011
	Gage Height	1.97	2.08	2.08	1.97	1.92	2.03	2.03	2.05	2.06	2.01	2	2.04	2.03	1.99	1.98
	Elevation	505.71	505.82	505.82	505.71	505.66	505.77	505.77	505.79	505.8	505.75	505.74	505.78	505.77	505.73	505.72
	Date	9/25/2011	9/26/2011	9/27/2011	9/28/2011	9/29/2011	9/30/2011	10/1/2011	10/2/2011	10/3/2011	10/4/2011	10/5/2011	10/6/2011	10/7/2011	10/8/2011	10/9/2011
	Gage Height	1.99	2.14	2.2	2.28	2.45	2.17	2.12	2.12	2.07	2.04	2.03	1.99	1.98	1.96	1.97
	Elevation	505.73	505.88	505.94	506.02	506.19	505.91	505.86	505.86	505.81	505.78	505.77	505.73	505.72	505.7	505.71
	Date	10/10/2011	10/11/2011	10/12/2011	10/13/2011	10/14/2011	10/15/2011	10/16/2011	10/17/2011	10/18/2011	10/19/2011	10/20/2011	10/21/2011	10/22/2011	10/23/2011	10/24/2011
	Gage Height	1.97	1.96	1.96	1.98	1.97	1.94	2.2	2.16	2.08	2.16	2.35	2.41	2.53	2.27	2.16
	Elevation	505.71	505.7	505.7	505.72	505.71	505.68	505.94	505.9	505.82	505.9	506.09	506.15	506.27	506.01	505.9
	Date	10/25/2011	10/26/2011	10/27/2011	10/28/2011	10/29/2011	10/30/2011	10/31/2011	11/1/2011	11/2/2011	11/3/2011	11/4/2011	11/5/2011	11/6/2011	11/7/2011	11/8/2011
	Gage Height	2.09	2.06	2.04	2.05	2.03	2.02	2.03	2.01	1.98	2.09	2.18	2.52	2.38	2.26	2.2
	Elevation	505.83	505.8	505.78	505.79	505.77	505.76	505.77	505.75	505.72	505.83	505.92	506.26	506.12	506	505.94
	Date	11/9/2011	11/10/2011	11/11/2011	11/12/2011	11/13/2011	11/14/2011	11/15/2011	11/16/2011	11/17/2011	11/18/2011	11/19/2011	11/20/2011	11/21/2011	11/22/2011	11/23/2011
	Gage Height	2.23	2.34	2.27	2.24	2.13	2.25	2.3	2.25	2.42	2.26	2.17	2.22	2.16	2.25	2.37
	Elevation	505.97	506.08	506.01	505.98	505.87	505.99	506.04	505.99	506.16	506	505.91	505.96	505.9	505.99	506.11
	Date	11/24/2011	11/25/2011	11/26/2011	11/27/2011	11/28/2011	11/29/2011	11/30/2011	12/1/2011	12/2/2011	12/3/2011	12/4/2011	12/5/2011	12/6/2011	12/7/2011	12/8/2011
	Gage Height	2.54	2.53	2.34	2.5	2.45	3.29	4.1	3.76	3.33	2.91	3.1	3.16	3.02	2.86	2.83
	Elevation	506.28	506.27	506.08	506.24	506.19	507.03	507.84	507.5	507.07	506.65	506.84	506.9	506.76	506.6	506.57

Base Elevation = 503.74'
All Units in Feet (')
From USGS Station 03339000

Brickyard Disposal and Recycling
Historical River Elevations
Average Annual Maximum Elevation 519.14 '

Maximum Elevation	Date	12/9/2011	12/10/2011	12/11/2011	12/12/2011	12/13/2011	12/14/2011	12/15/2011	12/16/2011	12/17/2011	12/18/2011	12/19/2011	12/20/2011	12/21/2011	12/22/2011	12/23/2011
	Gage Height	2.81	2.71	2.5	2.49	2.51	2.61	4.43	5.69	4.82	4.04	3.78	4.14	5.16	4.73	4.23
	Elevation	506.55	506.45	506.24	506.23	506.25	506.35	508.17	509.43	508.56	507.78	507.52	507.88	508.9	508.47	507.97
522.64	Date	12/24/2011	12/25/2011	12/26/2011	12/27/2011	12/28/2011	12/29/2011	12/30/2011	12/31/2011							
	Gage Height	3.87	3.64	3.57	3.47	3.46	3.63	3.72	4.09							
	Elevation	507.61	507.38	507.31	507.21	507.2	507.37	507.46	507.83							

Maximum Elevation	Date	1/1/2012	1/3/2012	1/4/2012	1/5/2012	1/6/2012	1/7/2012	1/8/2012	1/9/2012	1/10/2012	1/11/2012	1/12/2012	1/13/2012	1/14/2012	1/15/2012	1/16/2012
	Gage Height	4.36	3.47	3.51	3.54	3.41	3.41	3.14	3.17	2.99	3.18	3.1	2.92	2.89	2.85	2.96
	Elevation	508.1	507.21	507.25	507.28	507.15	507.15	506.88	506.91	506.73	506.92	506.84	506.66	506.63	506.59	506.7
	Date	1/17/2012	1/18/2012	1/19/2012	1/20/2012	1/21/2012	1/22/2012	1/23/2012	1/24/2012	1/25/2012	1/26/2012	1/27/2012	1/28/2012	1/29/2012	1/30/2012	1/31/2012
	Gage Height	7.15	8.1	6.11	4.96	4.35	4.37	6.64	8.4	6.66	7.03	9.91	8.59	7.14	6.06	5.59
	Elevation	510.89	511.84	509.85	508.7	508.09	508.11	510.38	512.14	510.4	510.77	513.65	512.33	510.88	509.8	509.33
	Date	2/1/2012	2/2/2012	2/3/2012	2/4/2012	2/5/2012	2/6/2012	2/7/2012	2/8/2012	2/11/2012	2/12/2012	2/13/2012	2/14/2012	2/15/2012	2/16/2012	2/17/2012
	Gage Height	5.31	4.99	4.68	4.59	4.78	4.96	4.81	4.54	4.25	3.88	3.96	4.21	3.97	3.94	3.98
	Elevation	509.05	508.73	508.42	508.33	508.52	508.7	508.55	508.28	507.99	507.62	507.7	507.95	507.71	507.68	507.72
	Date	2/18/2012	2/19/2012	2/20/2012	2/21/2012	2/22/2012	2/23/2012	2/24/2012	2/25/2012	2/26/2012	2/27/2012	2/28/2012	2/29/2012	3/1/2012	3/2/2012	3/3/2012
	Gage Height	3.95	3.82	3.76	3.79	3.86	3.87	3.81	3.64	3.42	3.41	3.38	3.44	3.62	3.89	3.97
	Elevation	507.69	507.56	507.5	507.53	507.6	507.61	507.55	507.38	507.16	507.15	507.12	507.18	507.36	507.63	507.71
	Date	3/4/2012	3/5/2012	3/6/2012	3/7/2012	3/8/2012	3/9/2012	3/10/2012	3/11/2012	3/13/2012	3/14/2012	3/15/2012	3/16/2012	3/17/2012	3/18/2012	3/19/2012
	Gage Height	3.97	3.74	3.45	3.46	3.69	3.44	3.38	3.32	3.51	3.34	3.3	3.34	3.33	3.28	3.25
	Elevation	507.71	507.48	507.19	507.2	507.43	507.18	507.12	507.06	507.25	507.08	507.04	507.08	507.07	507.02	506.99
	Date	3/20/2012	3/21/2012	3/22/2012	3/23/2012	3/24/2012	3/25/2012	3/26/2012	3/27/2012	3/28/2012	3/29/2012	3/30/2012	3/31/2012	4/1/2012	4/2/2012	4/3/2012
	Gage Height	3.23	3.2	3.17	3.4	3.6	4.13	3.67	3.48	3.52	3.31	3.41	3.29	3.27	3.59	3.45
	Elevation	506.97	506.94	506.91	507.14	507.34	507.87	507.41	507.22	507.26	507.05	507.15	507.03	507.01	507.33	507.19
	Date	4/4/2012	4/5/2012	4/6/2012	4/7/2012	4/8/2012	4/9/2012	4/10/2012	4/11/2012	4/12/2012	4/13/2012	4/14/2012	4/15/2012	4/16/2012	4/17/2012	4/18/2012
	Gage Height	3.25	3.17	3.07	3.02	3.06	2.95	2.93	2.93	2.91	2.75	2.96	2.97	3.21	3.36	3.29
	Elevation	506.99	506.91	506.81	506.76	506.8	506.69	506.67	506.67	506.65	506.49	506.7	506.71	506.95	507.1	507.03
513.65	Date	4/19/2012	4/20/2012	4/21/2012	4/22/2012	4/23/2012	4/24/2012	4/25/2012	4/26/2012	4/27/2012	4/28/2012	4/29/2012	4/30/2012	5/1/2012	5/2/2012	5/3/2012
	Gage Height	3.1	3.22	3.08	3.06	2.92	2.84	2.83	3.02	2.86	2.72	2.71	2.91	3.74	5.45	5.41
	Elevation	506.84	506.96	506.82	506.8	506.66	506.58	506.57	506.76	506.6	506.46	506.45	506.65	507.48	509.19	509.15
	Date	5/4/2012	5/5/2012	5/6/2012	5/7/2012	5/8/2012	5/9/2012	5/10/2012	5/11/2012	5/12/2012	5/13/2012	5/14/2012	5/15/2012	5/16/2012	5/17/2012	5/18/2012
	Gage Height	4.69	4.26	4.04	4.81	6.39	5.89	5	4.39	4.05	3.81	3.73	3.52	3.49	3.38	3.19
	Elevation	508.43	508	507.78	508.55	510.13	509.63	508.74	508.13	507.79	507.55	507.47	507.26	507.23	507.12	506.93
	Date	5/19/2012	5/20/2012	5/21/2012	5/22/2012	5/23/2012	5/24/2012	5/25/2012	5/26/2012	5/27/2012	5/28/2012	5/29/2012	5/30/2012	5/31/2012	6/1/2012	6/2/2012
	Gage Height	3.32	3.12	3.58	4.18	3.87	3.64	3.42	3.27	3.09	2.96	3.12	3.16	3.1	3.08	3.21
	Elevation	507.06	506.86	507.32	507.92	507.61	507.38	507.16	507.01	506.83	506.7	506.86	506.9	506.84	506.82	506.95
	Date	6/3/2012	6/4/2012	6/5/2012	6/6/2012	6/7/2012	6/8/2012	6/9/2012	6/10/2012	6/11/2012	6/12/2012	6/13/2012	6/14/2012	6/15/2012	6/16/2012	6/17/2012
	Gage Height	3.12	3	2.79	2.72	2.65	2.71	2.65	2.58	2.46	2.42	2.46	2.39	2.29	2.25	2.38
	Elevation	506.86	506.74	506.53	506.46	506.39	506.45	506.39	506.32	506.2	506.16	506.2	506.13	506.03	505.99	506.12
	Date	6/18/2012	6/19/2012	6/20/2012	6/21/2012	6/22/2012	6/23/2012	6/24/2012	6/25/2012	6/26/2012	6/27/2012	6/28/2012	6/29/2012	6/30/2012	7/1/2012	7/2/2012
	Gage Height	2.64	3.01	2.61	2.41	2.35	2.29	2.19	2.13	2.22	2.07	2	1.97	1.96	1.95	1.95
	Elevation	506.38	506.75	506.35	506.15	506.09	506.03	505.93	505.87	505.96	505.81	505.74	505.71	505.7	505.69	505.69
	Date	7/3/2012	7/4/2012	7/5/2012	7/6/2012	7/7/2012	7/8/2012	7/9/2012	7/10/2012	7/11/2012	7/12/2012	7/13/2012	7/14/2012	7/15/2012	7/16/2012	7/17/2012
	Gage Height	1.94	1.92	1.89	1.95	1.9	2.12	1.95	1.9	1.95	1.92	1.85	1.83	1.84	1.84	1.99
	Elevation	505.68	505.66	505.63	505.69	505.64	505.86	505.69	505.64	505.69	505.66	505.59	505.57	505.58	505.58	505.73
	Date	7/18/2012														
	Gage Height	1.89														
	Elevation	505.63														

Base Elevation = 503.74'
All Units in Feet (')
From USGS Station 03339000

ATTACHMENT 9

Curriculum Vitae

Bradley J. Hunsberger, L.P.G.

Director of Hydrogeological Services
Project Coordinator IV

Years with Andrews Engineering: 25

Education

Bachelor of Science - Geology, Illinois State University, Normal, Illinois

Professional Registrations / Certifications

Licensed Professional Geologist – Illinois
Registered Geologist – Missouri
Professional Geologist – Tennessee
Professional Geologist – Wisconsin
Professional Geologist – Indiana
Certified Professional Geologist (AIPG)
OSHA Hazardous Waste Site Worker Certification – IL (40 hr)
OSHA Hazardous Waste Site Worker Refresher – IL (8 hr)

Specialties

Hydrogeologic Investigations for Local Siting and Regulatory Permitting
Computer Simulations of Groundwater and Solute Transport
Groundwater Monitoring Programs
Assessment Monitoring Programs
Remediation Systems Design and Implementation
Solid Waste Management

Professional Summary

Mr. Hunsberger has over 25 years of experience in environmental consulting. As Director of Hydrogeological Services, he is responsible for the management and oversight of geologic and hydrogeologic related services for Andrews' Illinois and Missouri projects. The projects include design of subsurface investigations, field classification of soil and rock, oversight of installation of monitoring wells and other subsurface detection devices, aquifer characterization, and design and implementation of various types of monitoring, remediation, and dewatering programs. Mr. Hunsberger also provides oversight for groundwater/leachate sampling services, as well as analytical database management, data evaluation, and related regulatory reporting. Services are typically provided for environmentally sensitive sites, which include solid waste disposal facilities, CCDD facilities, compost facilities, CCB sites, Leaking Underground Storage Tank (LUST) sites, and industrial facilities. As a hydrogeologist at Andrews Engineering, Mr. Hunsberger has directly provided hydrogeologic related services for over 80 landfill facilities in Illinois.

Mr. Hunsberger utilizes various computer models to determine groundwater movement and chemical fate transport. Although this type of modeling is primarily associated with solid waste disposal facilities, contaminant transport models have also been used to determine plume migration at agrichemical facilities and LUST sites. He has also used flow models for dewatering design for excavations and cell development related to waste disposal and for remediation design.

Mr. Hunsberger has prepared descriptive reports, boring logs, fence diagrams, cross sections, potentiometric surface maps, flow nets and statistical studies of groundwater and soil characteristics for submittal to private and governmental entities.

Mr. Hunsberger has extensive experience in project management. His responsibilities under this role include planning, budgeting and scheduling, oversight of site investigations, groundwater studies and modeling. He has also provided expert testimony for projects regarding geologic and hydrogeologic issues relating to public health, safety, and welfare.

Representative Project Experience

ADS/McLean County Landfill, Bloomington, Illinois
Project Hydrogeologist
Responsibilities included conducting site hydrogeologic investigations and reports for regulatory permitting requirements and facility development. The investigations included boring and well/piezometer installation oversight for revisions to the groundwater monitor well network and the proposed expansion of the facility, and test pit evaluations for liner construction planning. Mr. Hunsberger conducted the initial liner evaluation including identification of useable soils for liner construction in the South Fill Area. He was also the on-site quality control representative for construction of the Initial Fill Area (first cell), which included oversight of the cell excavation, and placement of the clay liner, leachate collection pipe, and sand drainage layer. Mr. Hunsberger has conducted work at the facility since 1987, providing continuity with three facility owners.

Sangamon Valley Landfill, Springfield, Illinois
Project Hydrogeologist
Responsibilities included conducting a site hydrogeologic investigation and permitting to open a new disposal unit at a closed landfill that contains in excess of 60 wells. The applications included a Report of Hydrogeologic Investigation, Groundwater Impact Assessment (two-dimensional flow (MODFLOW) and contaminant transport modeling), and a Groundwater Monitoring Program. The flow modeling aided in the design of the Unit 1 montior well network, including placement of subsequent assessment and Groundwater Management Zone wells. Mr. Hunsberger provided oversight for further assessments and designed a series of injection wells to augment approved corrective measures.

Livingston Landfill, Pontiac, Illinois
Project Hydrogeologist
Mr. Hunsberger provided oversight and review for the hydrogeological aspects of the county siting application submitted on behalf of Envirite Corporation. Subsequent to the siting approval, Mr. Hunsberger was the project hydrogeologist for the initial significant modification application, including design of the Groundwater Monitoring Program and review and oversight of the Groundwater Impact Assessment. He also designed the Groundwater Monitoring Program for the initial Parcel D expansion and provided assistance with the Parcel D Groundwater Impact Assessment for the Illinois Environmental Protection Agency application. Mr. Hunsberger designed and supervised drilling operations for a 50 million cubic yard expansion, which included the installation of 54 wells and piezometers in 2001. Other responsibilities at the facility have included monitor well installations, boring oversight, field hydraulic conductivity tests, methane migration investigations, slurry wall design, and groundwater quality evaluations and related documentation and reporting in accordance with regulatory requirements. The subject responsibilities resulted in the publication titled Reconciling Old Liner Designs with New Liner Standards (MSW Management/March-April 2004).

Dixon/GROP Landfill No. 2, Lee County, Illinois
Project Hydrogeologist
Responsibilities included regulatory permit applications for an approximately 40-acre fill area containing four separate units and 30 wells. This work included subsurface investigations and a Report of Hydrogeologic Investigation, Groundwater Impact Assessment (peer review), Groundwater Monitoring Program, and dewatering feasibility studies of a confined aquifer (affecting design and construction activities). He designed the remedial investigation that resulted in the installation of a slurry wall around an old waste unit. Mr. Hunsberger contiues to provide oversight for the evaluation of the effectiveness of the corrective measures required on an annual basis.

Winnebago Landfill, Rockford, Illinois
Project Hydrogeologist
Mr. Hunsberger has provided hydrogeologic related services for Winnebago Landfill since 1990. Responsibilities included design and implementation of the subsurface investigation for an expansion of the Northern Unit which had been designated as a CERCLA site by the US EPA. The subsurface investigation included the installation of monitor wells and piezometers and acquifer characterization testing. Mr. Hunsberger provided peer review of the Groundwater Impact Assessment and completed the Groundwater Monitoring Plan. He also provided test liner oversight and subsequent documentation/reporting. He has assisted in two subsequent facility expansions by providing peer review of draft applications and related materials. Mr. Hunsberger provides oversight for groundwater and leachate quality review and regulatory reporting, including review of residential well analyses. He completed/provided oversight of the five-year corrective action status reports and assists with the evaluation of the draft US EPA's Five-Year Review Report prior to publishing.

Envirofil of Illinois Recycling and Disposal Facility, McDonough County, Illinois
Project Hydrogeologist
Mr. Hunsberger was responsible for site hydrogeologic investigation and reports for local siting requests and regulatory permit applications of an approximately 75.6-acre area containing 28 wells. This included a Report of Hydrogeologic Investigation and Groundwater Monitoring Program. Additional investigations included aquifer analysis for potential offsite contaminant source and the utilization of an electromagnetic survey. Mr. Hunsberger continues to provide oversight for the evaluation of the effectiveness of the corrective measures required on an annual basis.

Streator Area Landfill No. 3, Livingston County, Illinois
Project Hydrogeologist
Mr. Hunsberger was responsible for conducting a site hydrogeologic investigation and reports for local siting requests and regulatory permit application for an approximately 20-acre fill area with 15 wells. This included a Report of Hydrogeologic Investigation, and coordination and review of the Groundwater Impact Assessment and Groundwater Monitoring Program. This facility was undermined by coal mining operations and contained surface mines due to shale mining for brick productions. His responsibilities also included construction oversight of test liners and dewatering feasibility studies for the coal seam and mined areas. He also designed and directed studies for methane migration through the shale and till units.

Macon County Landfill, Existing Unit 1, Macon County, Illinois
Project Hydrogeologist
Responsibilities included regulatory permit applications to combine the existing Unit 1 with the horizontal expansion area of approximately 20 acres of fill and 12 wells. This work included feasibility studies for the separation of a pre-Illinois Environmental Protection Agency contiguous landfill from Unit 1. Applications included a Groundwater Impact Assessment (using one- and two-dimensional contaminant transport modeling for multiple liner configurations), Groundwater Monitoring Program, and hydrogeologic evaluation for off-site groundwater quality degradation sources. He also provided review and comments on the hydrogeologic aspects of the siting application and provided expert testimony during the hearing.

Honeywell – Metropolis Works, Metropolis, Illinois
Project Hydrogeologist
Responsibilities included design and implementation, subsurface investigations, and design of the environmental monitoring program for an on-site landfill (adjacent to manufacturing facility). Additional responsibilities included design and implementation of a three-phased RCRA soils and groundwater investigation at the plant, installation of lysimeters (via angle drilling), and investigation of subsurface contamination due to surface infiltration of process waters. The investigation included revisions to their Part B RCRA permit.