# Longfield Estates Community Impact Study

**Project** 

**Potomac-Longfield Property** 

Location

Harpers Ferry District, Jefferson County, West Virginia

Client

Potomac Professional Services, LLC 36 Bakerton Road Harpers Ferry, WV 25425

> December 21, 2006 Revised January 24, 2007 Revised February 23, 2007

> > CEDG Project No. 06011

Prepared By:



CEDG, Inc.

5000 Ritter Road, Suite 203 • Mechanicsburg, PA 17055-4828

Telephone: 717.691.8050 • Fax: 717.691.8055

#### **LONGFIELD CIS**

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**Community Impact Statement** 

LONGFIELD SUBDIVISION

650' South of the Intersection of Route WV 230 and WV 33

Jefferson County, WV

#### INTRODUCTION

Presented herein are the results of a Community Impact Statement (CIS) investigation conducted by CEDG Engineers for a 266.6223-acre tract of land herein referenced as the Longfield Estates subdivision. The subject site is identified on a tract location map included in Appendix A.

#### **BASIC INFORMATION**

# 1. Name, Address and Telephone Number of Owner/Developer

#### Owner:

Patricia M. Sanderson c/o David L. Leonard 36 Bakerton Rd Harpers Ferry, WV 25425 (304) 725-3712

#### Developer:

Potomac Professional Services, LLC c/o Matthew Powell 36 Bakerton Rd Harpers Ferry, WV 25425 (304) 725-3712

# 2. Name, Address, and Telephone Number of Contact Person

CEDG Engineers c/o Todd Stager 5000 Ritter Road Mechanicsburg, PA 17055 (717) 691-8050

#### 3. Tract Size, Shape, Location, and Zoning

The subject site is a 266.6223-acre tract located approximately 650' south from the intersection of Route 230 (Shepherdstown Pike) and Route 33 (Uvilla Road) comprising four parcels labeled as Parcels 1 (containing Tract No. 2, Parcels 1 and 2), 3 and 4.2 on Map 1, Deed Book 976 and Page 167 of the Harpers Ferry District, and three (3) existing lots as shown on plat attached to merger deed dated October 6, 2006, recorded in Deed Book #1028, Pg 736. This property is located within a Rural Zoning District, bound on the West by Route 230, on the East by agriculture land and a connection to Route 31 and to the North and South by residential properties. The Longfield Subdivision project will encompass the entire 266.6223 acres.

#### 4. Project Design and Layout

This development will create an equestrian-themed single-family residential subdivision consisting of 31 lots (25 lots plus 3 existing parcel residues, 3 existing lots to be reconfigured through boundary line adjustment) with access from State Route 230. Exhibit 1 – "Longfield Estates Sketch Plan" in Appendix A shows the proposed site layout. The proposed subdivision will have an overall maximum density of 1 lot per 10 acres plus residues and existing lots.

The primary subdivision road, Longfield Drive, shall be constructed within a 50-foot right-of-way that loops within the subdivision. The road will consist of a 20-foot wide paved (asphalt) section with 3-foot wide shoulders on each side. The entrance will be 28-feet wide, approximately 200-feet into the subdivision from Rt. 230. Storm water runoff from within Longfield Drive will be collected within roadside ditches and directed to an appropriate outlet.

Storm Water Management control shall be designed and constructed in accordance to Section 8.2c of the Jefferson County Subdivision and Land Development Ordinance. The approximate locations of the Storm Water Management ponds are illustrated on the CIS Sketch Plan. The ponds are intended to retain surface waters and will become a permanent feature of the topography.

As a part of the equestrian theme, a trail easement around the exterior lots will be available to homeowners as a recreational walking/riding trail. Additional horse amenities are proposed to be provided as a part of this project on site. These facilities may include but are not limited to, a training track, training facility, riding facility, horse rehab facilities, and boarding paddocks and barn. The barns, training track, and associated facilities will be initially constructed for private use, but may be converted to commercial/public use in the future.

Each lot will be served by an on-site well and septic disposal system as approved by the local health department.

#### 5. Number, approximate size and location of proposed lots or building sites

The subdivision of this property will produce 25 lots plus the parcel residues and three (3) existing lots. The average lot size when considering all lots will be approximately 10 +/- acres with the largest being 145.13 acres and the smallest being 3.2 acres. The majority of the lots will range in size from 3-5 acres with most of the residential lots sited around the perimeter of the property and the residue located in the center.

#### 6. Topography

The elevations on this site range from 512 ft in the northwest portion of the site to 408 ft in the east. This site slopes outward in all directions from a high point (486 ft.) at the center of the west end of the property towards the property boundaries and which form several small subwatershed areas which drain directly offsite. The land is currently being used as an equestrian farm and cropland with one primary residence and caretaker dwelling. The site is gently rolling with multiple discharge locations, as shown and labeled on the attached CIS Sketch Plan. Drainage from the south of the site drains to Elk Branch and then to the Potomac River. Drainage from the north of the site drains to un-named tributaries and then proceeds to the Potomac River.

The site is underlain by soluble bedrock (i.e. limestone), and as such is considered karst terrain. There is one known sinkhole on the site, which appears to be currently "inactive" (i.e. not swallowing surface soils, lacking tension cracks around its discernable edge, and lacking surfaces of fresh soil within its edge.)

#### 7. Soil and Drainage Characteristics

See Appendix B – Soils Information. The summary of drainage characteristics and the limitations of soil use chart is located in Appendix B. The soils contained on-site are well-drained with moderate depth to bedrock, moderate permeability, and no concern to depth of seasonal water tables with low shrink-swell potential. The site soils are considered generally suitable for residential development by the USDA-NRCS Soil Survey of Jefferson County, WV.

#### 8. Existing Natural or Man-Made Features

The site is primarily open with grassed pastureland, with several small stands of peach trees. There is one known sinkhole. There are no significant rock outcroppings, bogs, pond or wetlands on the site.

# 9. General Location and Description of Existing Structures

A house, barn, pool, pool house, small ranch house, and miscellaneous agricultural outbuildings are located within the property near Route 230. An old house foundation is located in the eastern portion of this property. A small cemetery exists within the south central portion of the property. The cemetery will be buffered by pastures and maintained by the training facility. An easement will be provided and is shown on the CIS Sketch Plan.

# 10. General Location and Description of Existing Easements or Rights-of-Way

See Appendix A - Existing Easements or Rights-of way shown on Sketch Plan. Two proposed (50') foot access easements are provided to the east and south of the property that could be used to provide access for future development. The existing unimproved (40) foot extension of land will remain a part of the existing parcel and will be maintained and reserved for possible future

widening and improvement as a secondary connection to the public road. (additional property would be required to achieve the proper width). The existing access easement will be maintained by the HOA and neighboring homeowners.

#### 11. Existing Covenants or Restrictions

Research of the property deeds back to 1941 indicate that there are no existing covenants or restrictions.

#### 12. Approximate Size, Location and Purpose of Areas to be Dedicated

This project will have the use of approximately (13) acres of road right-of-way and 5-7 acres for a public hiking/riding trail. See the concept plan in Appendix A for locations.

#### 13. Intended Improvements

Approximately (12,000) linear feet of paved roadway shall be installed to serve the subdivision. Storm water runoff from roadways shall be controlled by roadside ditches then directed, as needed to storm water management ponds prior to entering the natural drainage system. As necessary, additional storm water culverts will be installed to safely direct storm water underneath roadways. A natural grass hiking/riding trail bordering the property is also proposed with this project. A mailbox and school bus area have been noted and are shown on the CIS Sketch Plan.

#### 14. Intended Land Uses

The subdivision shall create (25) residential lots, inclusive of (3) existing tract residues, and combined with the existing three (3) residential lots, providing a total of thirty-one (31) lots to accommodate single-family homes as allowed in the Rural Zoning District. House sizes are to be determined by the individual landowner. Equestrian facilities may offer a veterinarian center, a training tract, boarding and breeding stalls for stallions and mares and various training equipment for thoroughbred horses. At this time, the area is used for breeding & boarding, but future plans

may include opening to the public for boarding and training of horses or any other use allowed by Jefferson County ordinance.

#### 15. Intended Earthwork

Earthwork shall consist of the installation of subdivision roads, horse training facilities, driveways and storm water management facilities. The amount of site grading will be minimized to reduce the impact with the existing topography and to help maintain the aesthetic qualities of the site. It is anticipated that the grading within the lots will be limited to driveway and house pad construction with the remainder of the lot undisturbed.

Blasting shall be limited to those areas where bedrock cannot be removed by conventional earthmoving equipment and is expected to be minimal.

This site is considered karst terrain, however blasting is not expected to affect any subsurface conduits at the site. Nevertheless, as in any region with karst-prone bedrock, blasted areas will be thoroughly cleaned of loose, "shot" rock, and inspected for open fractures or voids prior to backfilling. Disturbed, blasted areas can act as pathways into the subsurface open fractures for soil raveling and the formation of new sinkholes or subsidence. If sinkholes, voids or fractures are intercepted by blasting they will be closed using concrete or pressure grouting techniques.

The site has been designed to balance, but if excess spoil material is encountered, it will be placed on the embankment east of the broodmare barn to improve the slopes around paddock area. It is expected that only 22.5% (60.0 acres) of the entire site will be disturbed by earthwork.

#### 16. Proposed Covenants and Restrictions

See Appendix C – Proposed Covenants and Restrictions

#### 17. Tentative Schedule

Construction of the barn and training facility may begin immediately and will continue through-out the subdivision approval process. The construction of the required residential development

improvements are planned to start upon completion of the barn and training facility. The construction of the building lots is expected to begin upon approval of the Final Subdivision Plat and engineering drawings. Construction is expected to be completed in a six-month period.

#### 18. Market Surveys and Feasibility Studies

#### See Appendix G for the Current MRIS Report.

A current market analysis utilizing the information available through the MRIS (Metropolitan Regional Information Systems, Inc.) and the local real estate community indicates that there is a great need for building lots between 3 and 5 acres.

- Our research shows that there are currently approximately 10 parcels on the market between 3 and 5 acres.
- ☐ Of these 10 parcels, 1 is under contract, which leaves only 9 lots available to be purchased.
- ☐ There have been approximately 23 parcels sold since January 1, 2004.
- ☐ At the current sales rate (23 + 1 = 24 lots sold/under contract over 12 months), there have been 17 three to five acre lots sold/under contract per month.

We have spoken with many local real estate agents that have indicated the need for the 3 to 5 acre tracts is greater than the current supply. It is our belief that the average sale per month would actually increase if there were more lots available from which to choose.

#### 19. Anticipated Project Costs

The anticipated project cost is \$380,000.00. The project consists of mainly earthwork and paving, and the developer believes that the earthwork can be minimized to reduce the costs.

#### 20. Anticipated Funding Sources

The project will be funded through private sources.

#### PHYSICAL, SOCIAL AND ECONOMIC IMPACTS

#### 1. Earthwork

Earthwork shall be limited to the installation of the subdivision road, horse training facilities, driveways and drainage control structures and will have minimal impact on the existing drainage patterns on the property. It is expected that only 22.5% (60.0 acres) of the entire site will be disturbed by earthwork. This site will be designed in a manner that balances the cuts and fills therefore eliminating the need for a "borrow" or waste area. Blasting shall be limited to those areas where bedrock cannot be removed by conventional earthmoving equipment and is expected to be minimal. If blasting is necessary, a licensed blaster will be acquired and adequate cover by earth or blasting mats will be provided for drilling and shooting. All karst terrain has been and will be taken into consideration if blasting is deemed necessary. All excess rock will be used in the deep fill locations, placed at the direction of a qualified soils engineer.

#### 2. Conversion of Farmland to Urban Use

The subject parcel is 95% (253.3 acres) open and has been used for agricultural and equestrian purposes within the past three years. Therefore with the development of the residential lots, 47% of the property shall be removed from agricultural production.

#### 3. Wildlife Populations and Endangered Species

Common native wildlife species expected to be encountered on this site are: white tailed deer, rabbits, squirrels, fox and various species of birds. According to a January 19, 2007 letter from the West Virginia Division of Natural Resources, Wildlife Resources Section Operations Center there are no known rare, threatened, or endangered (RTE) species within the project area. See letter in Appendix D. Since the historic use of this parcel has been for agriculture, there is no indication that the parcel contains any rare or endangered species to be further investigated at this time.

#### 4. Groundwater and Surface Water Resources

According to the National Wetland Inventory (NWI) map of the Charles Town, WV quadrangle, as prepared by US Department of the Interior, Fish & Wildlife Services, there are several small wetland areas located within a one-mile radius of the subject site, but none located on the subject property. No other major surface water sensitive areas, i.e., wetlands, marshes or ponds are located within a one mile radius of the subject site. A copy of the NWI map is included in Appendix A.

Stormwater detention ponds shall be designed to control runoff from the subdivision road prior to entering the natural drainage system. Stormwater management for each lot will be handled on an individual lot basis (if required). Stormwater will be controlled on the property and meet all requirements of Article VIII, Section 8.2.C and Table 8.C.1 of the Jefferson County Subdivision Ordinance and all state and federal regulations. In addition, soil erosion and sediment control shall be provided according to the West Virginia Erosion and Sediment Control Handbook for Developing Areas.

The site is underlain by soluble bedrock, and karst features have been identified at the site. As such, any stormwater management at the site will conform to the requirements of the West Virginia DEP Groundwater Protection Program Stormwater BMP Guidance Document (2005) as follows: All stormwater ponds or retention structures that will be lined with a WVDEP approved and certified GCL lining material, which are currently limited to Cetco Akwaseal™ GCL (or) Water Saver Corporation's PVC liner.

Alternately, all stormwater structure designed to infiltrate will be designed with a sedimentation forebay.

Jefferson County Health Department indicates, per a letter dated July 2, 2004, that there are no known contaminated wells within 1,000 feet of the proposed subdivision. The Jefferson County Health Department letter is available in Appendix E.

A review of reasonably available standard environmental record sources provided by Environmental Data Resources, Inc. (EDR) was conducted to identify reasonably apparent hazardous substances, petroleum products or recognized environmental conditions on the subject site and/or adjoining properties which may have an impact on ground or surface water resources in the vicinity of the subject site.

A review of the US EPA and West Virginia Department of Environmental Protection (WVDEP) file listing of NPLs, CORRACTS, CERCLIS sites, RCRA notifies, open dump sites, TRIS, ERNS, SCL, UST and AST facilities, and incidents of LUSTs did not disclose any documented violations, incidents, or investigations at the subject property. A copy of the EDR report is included as Appendix E. The following is a summary of the EDR search listings:

- There are no listed NPL facilities within a one-mile radius of the subject site.
- There are no listed CORRACTS TSDFs within a one-mile radius of the subject site.
- There are no listed CERCLIS facilities within a one-half mile radius of the subject site.
- There are no listed TRIS facilities within a one-quarter mile radius of the subject site.
- There are no listed RCRA TSDFs within a one-half mile radius of the subject site.
- There are no listed RCRA Large Quantity Generators within a one-eighth mile radius of the subject site.
- There are no listed RCRA Small Quantity Generators within a one-eighth mile radius of the subject site.
- There are no listed ERNS incidents within a one-eighth mile radius of the subject site.
- There are no listed West Virginia SCL (state equivalent to a CERCLIS facility) sites within a one-half mile radius of the subject site.
- There are no listed West Virginia Waste Sites within a one-half mile radius of the subject site.
- ASTM Practice E 1527-00 indicates that the "minimum" search distance for UST facilities is "property and adjoining property". However, VISTA compiles information on UST facilities

with a one-quarter mile radius of the subject site. There are no registered UST facilities listed within a one-quarter mile radius of the subject site.

# 5. Compatibility of Project with Surrounding Area (Land Use and Visual Appearance)

The land use surrounding the proposed development is rural residential, consisting of large tracts of land mixed with various sized smaller residential lots. The proposed development will create (25) lots, plus residues and existing lots,. Most of the lots will be from 3-5 acres each. A development with open pastures and large residential lots is consistent and compatible with the surrounding properties.

One single subdivision road, accessed from WV Route 230, will be created to serve the proposed subdivision. The existing access easement will be maintained by the HOA. The proposed entrance road will be 28 feet wide for the first 200' into the subdivision. The proposed loop road will be 20 feet paved section, 3-foot shoulders and open drainage ditches which is consistent with surrounding highways. The large lots will create a secluded residential setting similar to the surrounding properties.

In addition, the (40) foot wide strip of land remaining within the subdivision, located at the Eastern end of the loop road directly behind proposed lots 17 and 18, and connects with Rt. 31 Molers Rd, (also addressed in Item 10), is currently wooded and remains in its' natural state. No maintenance is required at this time, and exists if a second entrance is desired in the future.

#### 6. Impact on Sensitive Natural Areas

Based on a site reconnaissance, there are no known sensitive natural areas on the subject site or adjoining properties. In addition, a review of a sinkhole inventory map provided by the USDA Natural Resources Conservation Service shows one sinkhole on the site. Every effort shall be made to avoid construction in these areas. If construction in this area is unavoidable, a geotechnical investigation shall be performed and the sinkholes abated as part of the development plans. A copy of the NRCS sinkhole inventory map is included in Appendix A.

There are no known sensitive natural areas that would be impacted by the development of this site as proposed. If any sinkholes are discovered during construction, best management practices of sediment and erosion control will be implemented to ensure that those areas remain virtually undisturbed. Planned septic reserves will be located a minimum of 100-feet from the discernable edge of any sinkhole.

#### 7. Demand for Schools and Education Facilities

See Appendix H for Attached Letters.

Figures based on 25 lot subdivision:

Elementary (0.35 students/household) = 10 students

Junior High (0.16 students/household) = 5 students

High School (0.11 students/household) = 3 students

#### 8. Traffic Study

The most recent ADT figures (2005 West Virginia Department of Transportation Traffic Counts for Jefferson County) for the adjoining State Road (Route 33) are as follows:

Route 23 @ Reedson	3000 ADT	
Route 33 @ Uvilla	500 ADT	

See copy of West Virginia Department of Transportation Traffic Counts map in Appendix F.

A trip generation analysis was completed by The Traffic Group and is included in Appendix F.

The analysis has projected the following trip generation for the development:

31 Single family dwellings x 8 ADT = 248 ADT

31 Single family dwellings x 0.8 Peak Hour = 25 Peak Hour Trips

The analysis concludes that the proposed equestrian activities will have only "a minimal affect on peak hour trip generation."

The nearest key intersection is Route 33 and Route 230. Map 3 "Highway Problem Areas" within the Jefferson County Comprehensive Plan identifies this intersection as a "Bad Intersection."

#### 9. Demographic Impact

25 lots @ 2.4 people/household = 63 persons (approx.) will reside in this development upon completion.

#### 10. Health and Emergency Medical Services

See Appendix H for Attached Letters.

The subdivision can be served by one hospital, the nearest being Jefferson Memorial Hospital, approximately five (5) miles from the subdivision. The nearest concentration of health practitioners to the subject property is located 6 miles away on 5<sup>th</sup> Avenue in Ranson. Both Shepherdstown Fire Department as well as Friendship Fire Company in Harper's Ferry can provide EMS Services.

#### 11. Fire Protection

See Appendix H for Attached Letters.

The primary response fire station to the subject property is Shepherdstown Fire Company, located approximately 5 miles from the community. The back-up responding unit will be Friendship Fire Company, located 6.3 miles away.

#### 12. Police Protection

See Appendix H for Attached Letters.

The West Virginia State Police and Jefferson County Sheriff's Department are the primary law enforcement agencies that will serve the site. The community also has police protection close by with police stations within the cities of Ranson, Sheperdstown, Charles Town, and Harper's Ferry.

#### 13. Trash Removal

Trash removal is to be provided by Apple Valley Waste Services.

#### 14. Electric Power Services

Electric service will be supplied to the proposed development by Allegheny Power Company.

#### 15. Telephone Services

Telephone service will be supplied to the proposed development by Frontier Telecom.

#### 16. Water and Sewer Services

Water and sewer service will be provided by on-site well and septic system as approved by the local health department.

#### 17. Relationship to the Comprehensive Plan

According to page eight (8) of the Comprehensive Plan, the general goal is stated, "For our county to remain a vital, attractive community, new growth must include a balance of jobs and house and be respectful of the very qualities that are attracting new residents every year: the rural landscape, the natural beauty and the pleasing character of our town and villages." The proposed development will create 25 residential lots plus residues and existing lots, in the rural setting, which is consistent with the present surrounding land use, and in harmony with the Comprehensive Plan.

#### 18. Housing Supply and Demand

At this time, Crofts at Shepherdstown is the only other known subdivision of this type, which will provide 3 to 4 acres lots for sale within an equestrian development. It is anticipated that these lots will be in great demand and will sell rapidly. Due to the allowable lot yield in a rural area compared to property acreage, the proposed lots are inherently large premium lots and would be difficult to offer in an affordable housing market. We have attempted to address the affordable housing issue by petitioning the County Commissioners to change the ordinance to allow slightly higher density in rural areas; and there by making lots more readily available to the affordable

market. The proposed lots will meet the need for higher income families that desire to live in a rural setting.

#### 19. Proximity and Relationship to Know Historic Features

There are no listed historic structures located on the subject property. There are no known properties listed on the National Register of Historic Places located within 500 feet of the subject site.

There is cemetery located in the south central portion of this project. The cemetery will be maintained by the training facility and left undisturbed with permanent access provided.

#### 20. Recreation

A hiking/riding trail is proposed with this development for recreational purposes and will be made available for use to the training facility, boarded horses, and property owners alike.

#### 21. Property Tax Evaluation

The average appraised value for the building lot with improvements will be \$750,000. Based upon the 2004 tax rate, this would generate the following real estate tax revenue for Jefferson County:

Est. property value: \$750,000.00 X 60% Est. assessed value: \$450,000.00 Tax rate 1.2142/\$100: X .012142

Est. yearly tax revenue per lot: \$ 5,463.90 Number of additional lots: x 25

Estimated Yearly tax revenue for 25 lots = \$ 142,061.40

#### 22. Anticipated Bank Deposits and Loans

The new residential occupants of the development will likely utilize local banking facilities for deposits and loans.

### 23. Anticipated Local Spending

It is anticipated that local builders will be utilized to construct residential dwellings, using materials from local suppliers. The residents of the development will contribute to the local economy by adding to the local tax base and purchasing through local businesses.

#### 24. Local Employment Implications

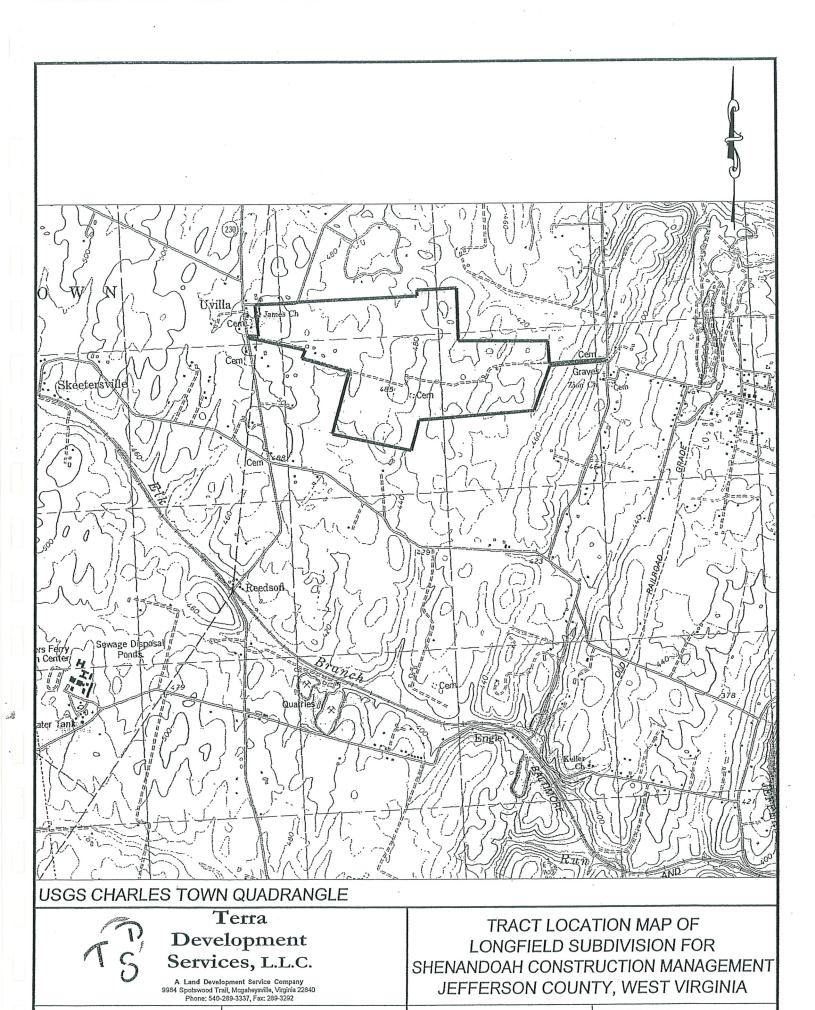
Typical subdivision residents would most likely commute out of the county for employment.

# 25. Expected Changes in Property Values

It is anticipated that the proposed development will increase the surrounding value of adjacent properties. It is our intention to develop the lots with improvements in this new subdivision which will be valued at \$750,000 or higher.

# **APPENDIX A: ILLUSTRATIONS**

- LOCATION MAP
  - SKETCH PLAN
- SINKHOLE INVENTORY MAP
- WETLANDS INVENTORY MAP



PROJECT#: 0206-030-SD

DATE:

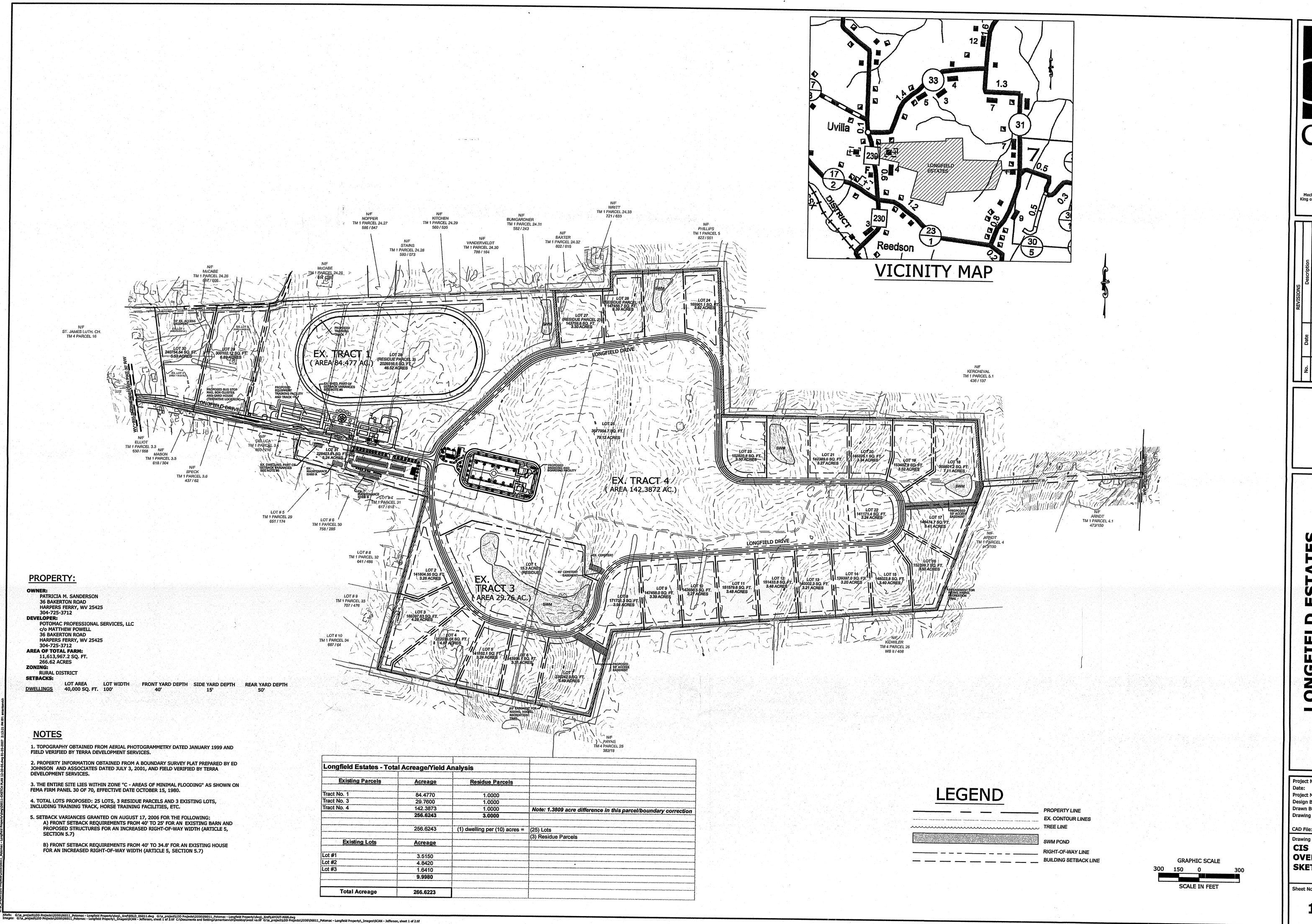
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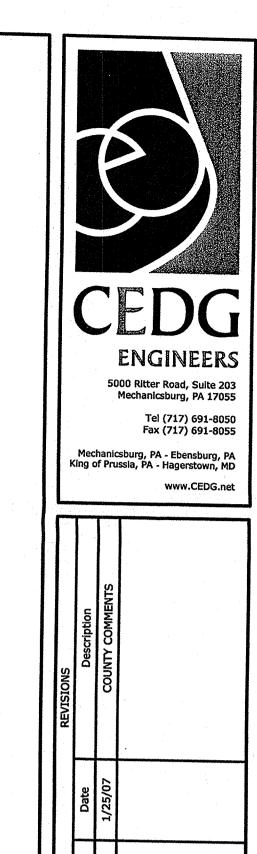
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1" = 2000

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AMS





LONGFIELD ESTATES
HARPERS FERRY DISTRICT, TAX MAP 1, DEED BK 976, PG 167
JEFFERSON COUNTY, WEST VIRGINA

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Date: 12-14-06
Project Manager: GL
Design By: MAN
Drawn By: MAN
Drawing Scale: 1"= 300'

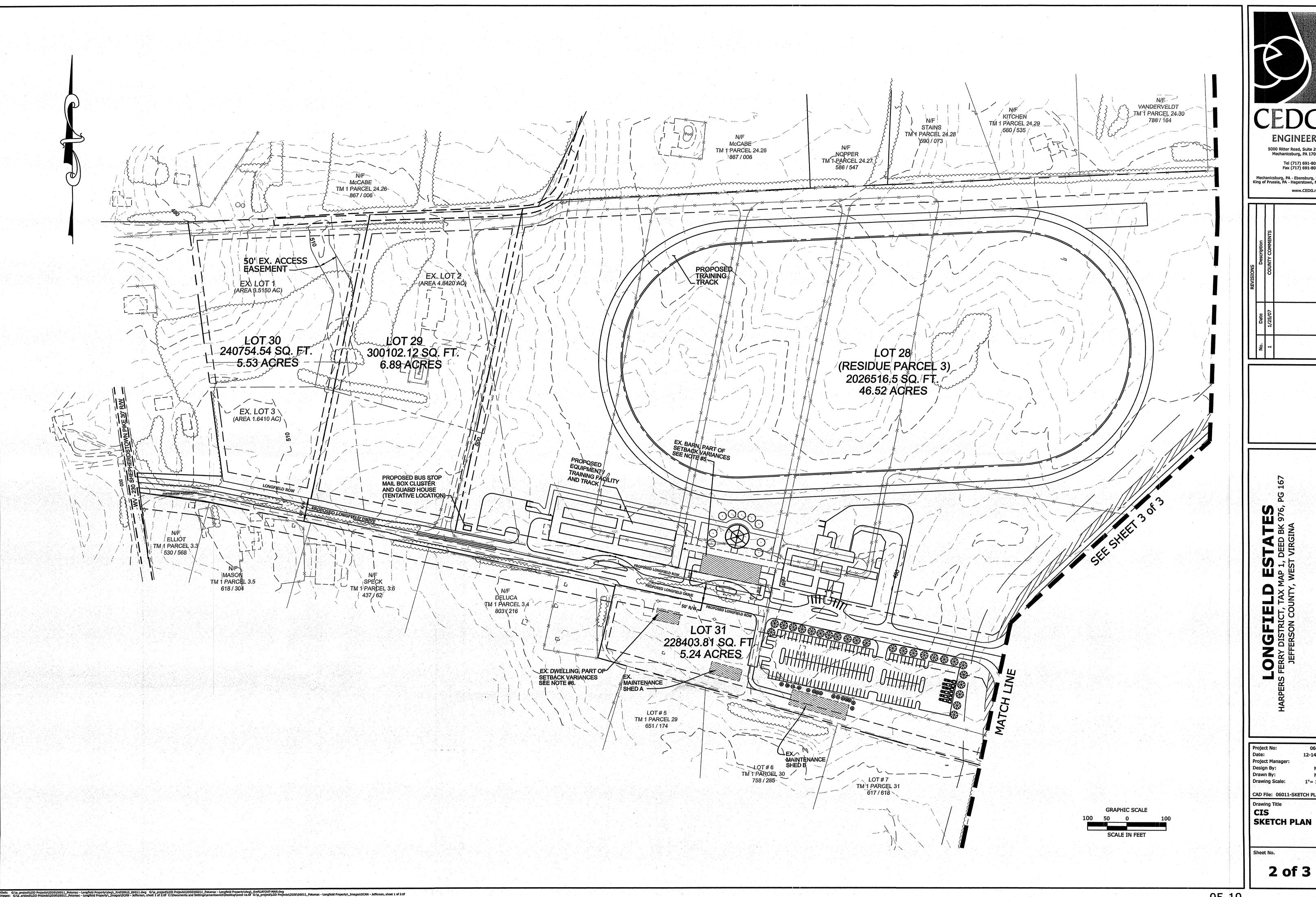
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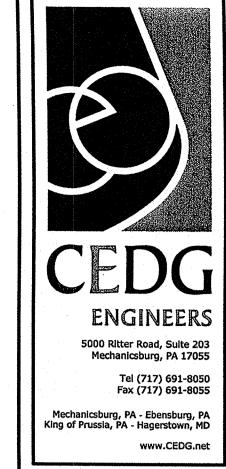
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OVERALL
SKETCH PLAN

Sheet No.

1 of 3





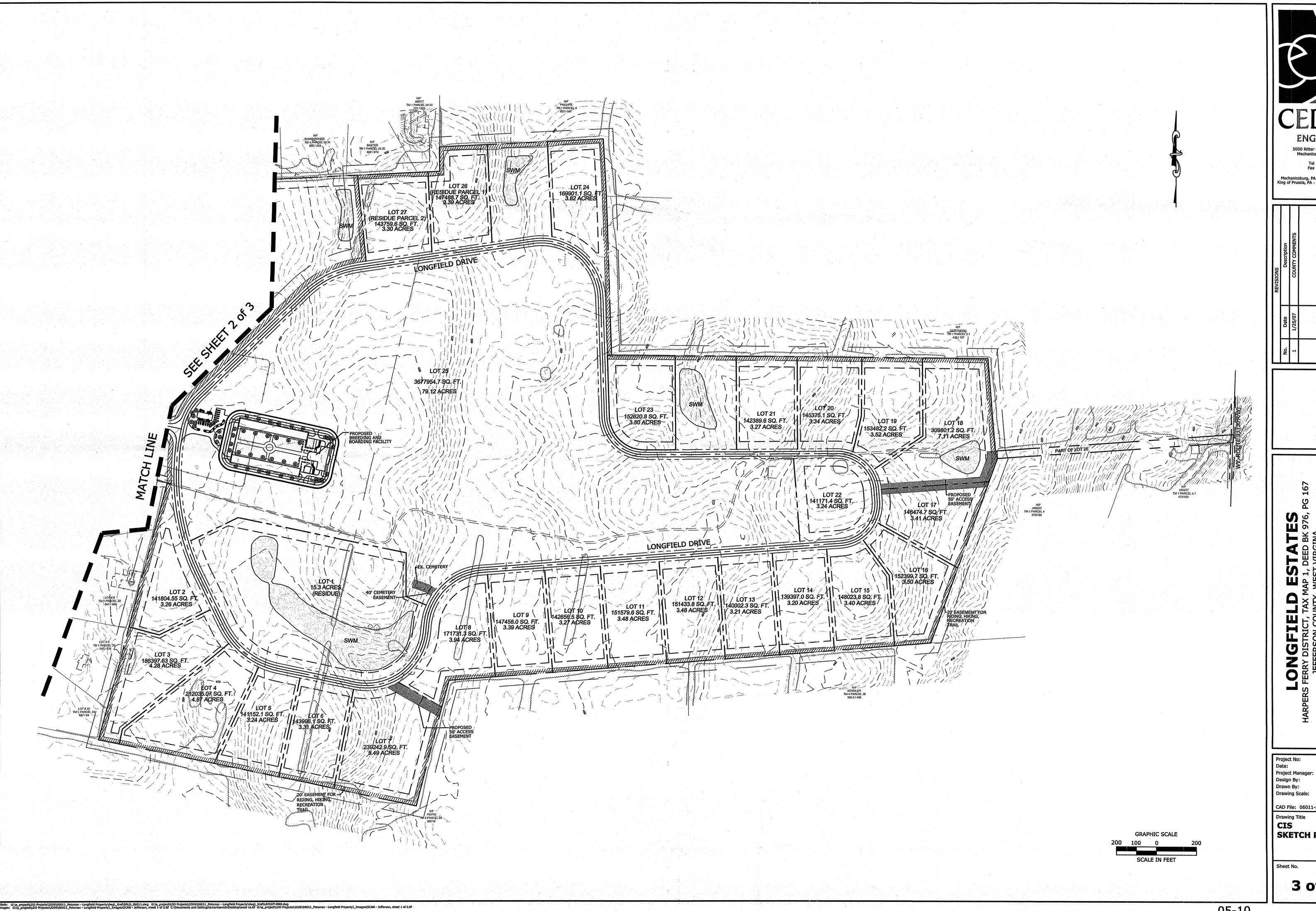
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No.	Date	Description	
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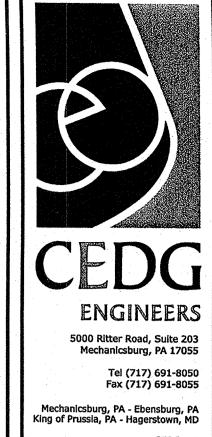
LONGFIELD ESTATES

ERS FERRY DISTRICT, TAX MAP 1, DEED BK 976,

JEFFERSON COUNTY, WEST VIRGINA

06011 12-14-06 Project Manager: Drawn By: 1"= 100' CAD File: 06011-SKETCH PLAN 12-20 CIS SKETCH PLAN

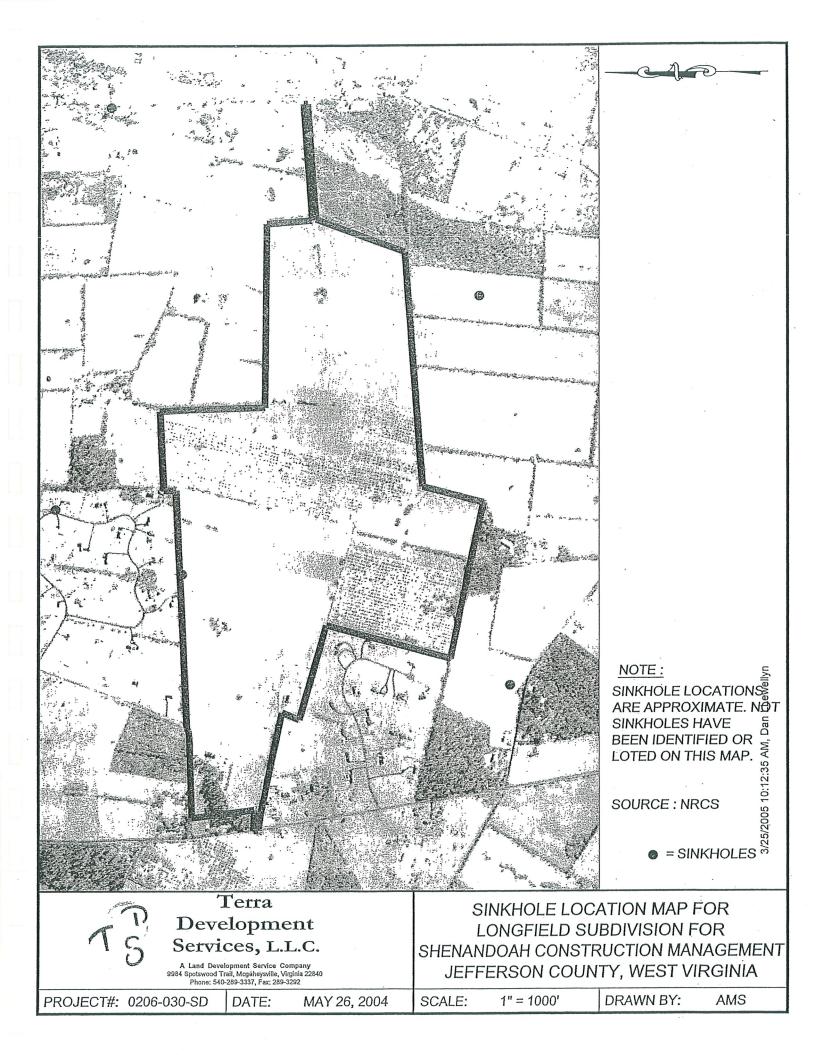


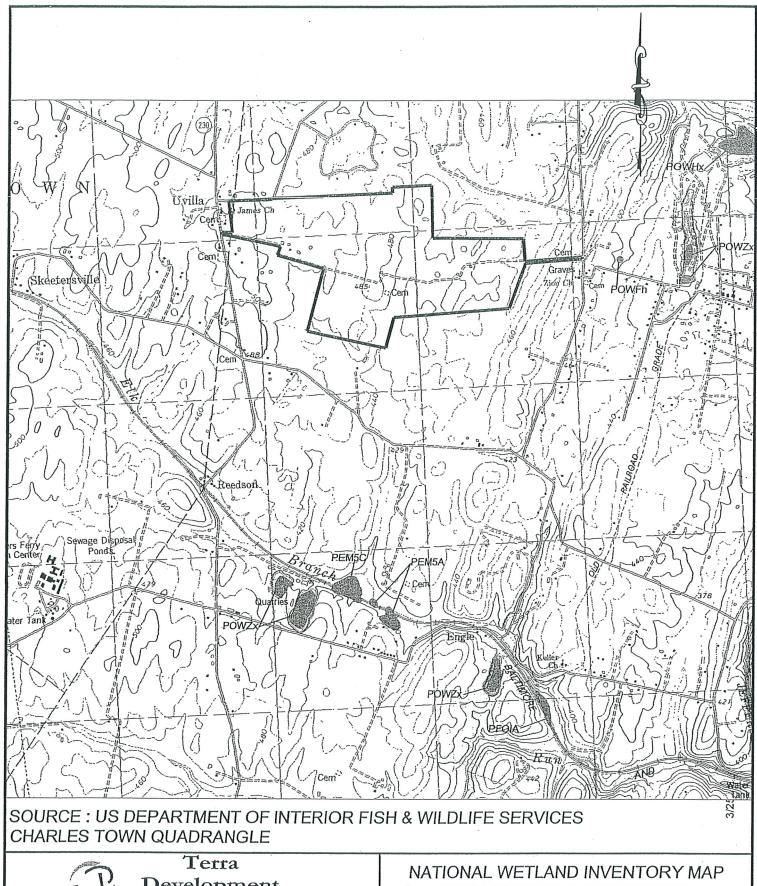


REVISIONS	Description	COUNTY COMMENTS	
	Date	1/25/07	
	No.	1	

LONGFIELD ESTATES
S FERRY DISTRICT, TAX MAP 1, DEED BK 976,
JEFFERSON COUNTY, WEST VIRGINA 12-14-06

CAD File: 06011-SKETCH PLAN 12-2 CIS
SKETCH PLAN 3 of 3





Development Services, L.L.C.

A Land Development Service Company 9984 Spotswood Trail, Mcgaheysville, Virginia 22840 Phone: 540-289-3337, Fax: 289-3292

FOR LONGFIELD SUBDIVISION SHENANDOAH CONSTRUCTION MANAGEMENT JEFFERSON COUNTY, WEST VIRGINIA

PROJECT#: 0206-030-SD

DATE:

MAY 26, 2004

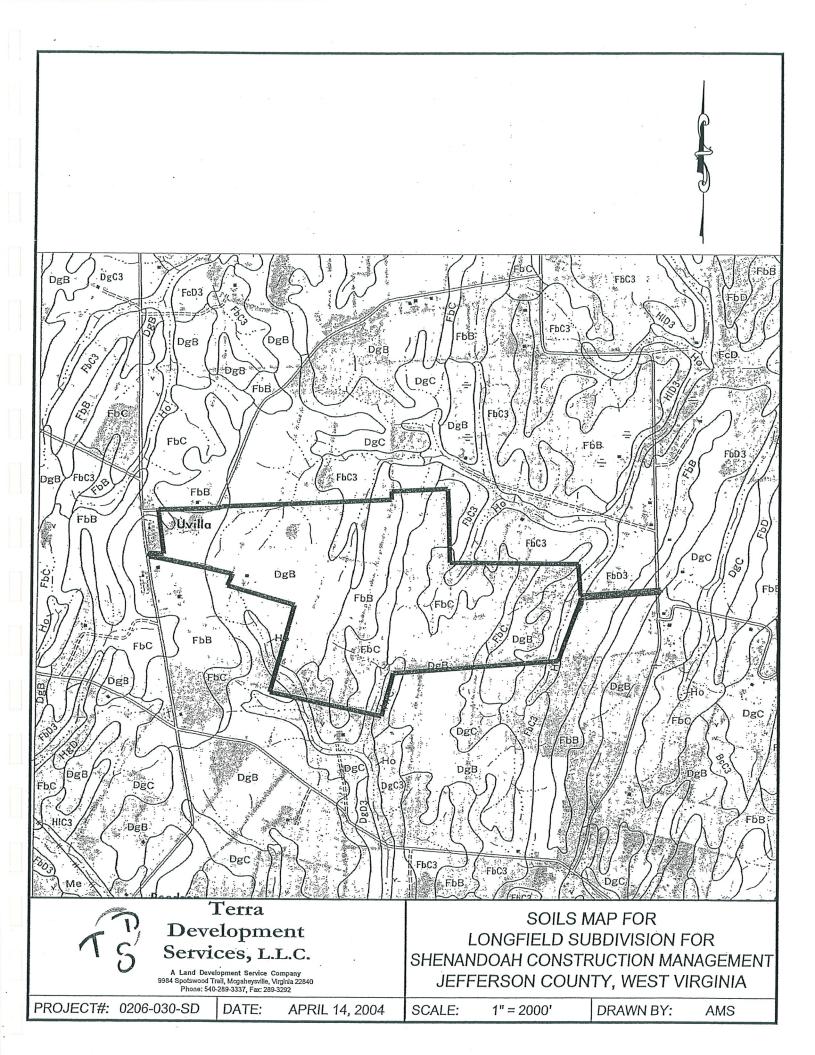
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**AMS** 

**APPENDIX B: SOILS INFORMATION** 



# Longfield Subdivision Charles Town District, Jefferson County, West Virginia

# Soils Information Summary

Map.	Soil Mapping Unit Name
Symbol	
DgB	Duffield silt loam, 2 to 6 percent slopes
DgC	Duffield silt loam, 6 to 12 percent slopes
FbB	Frankstown shaly silt loam, 2 to 6 percent slopes
FbC .	Frankstown shaly silt loam, 6 to 12 percent slopes
FbC3	Frankstown shaly silt loam, 6 to 12 percent slopes, severely eroded
Но	Huntington silt loam, local alluvium

Source: Soil Survey of Jefferson County, West Virginia, February 1973, Sheets 16, 19 and 25

droughtiness somewhat limit the choice of crops. Sodded waterways, contour stripcropping, and diversion terraces help to prevent excessive losses of soil and water. Trees grow fairly well, and they help in the control of erosion. Capability unit IIIe-12.

Dekalb channery fine sandy loam, 12 to 25 percent slopes (DcD).—This soil is near the crests of ridges. Included in mapping were small extremely channery soils

and stony areas.

Nearly all of this soil is either wooded or is becoming wooded. This soil is suited to crops, but its use is limited by droughtiness and low fertility. Growth of trees is good to poor, depending on aspect of the slope, but their presence provides adequate control of erosion. Capability unit IVe-5.

Dekalb channery fine sandy loam, 25 to 35 percent slopes (DcE).—This steep soil is on hillsides. Included in places in mapping were extremely stony areas. Also included were areas of Laidig soils and a few ledges of

This soil is wooded except for small areas around summer homes. It is suited to pasture, but such use is limited by droughtiness and low fertility. It is also suited to trees. This suitability is discussed in the section "Use of Soils as Woodland." Capability unit VIe-4.

Dekalb channery fine sandy loam, 35 to 55 percent slopes (DcF).—This very steep soil has the profile described as representative for the series. Included in mapping

were some sandstone ledges and very stony areas.

All of this soil is wooded. It is not suited to crops or pasture because of slope, droughtiness, and low fertility. Capability unit VIIe-2.

#### Duffield Series

The Duffield series consists of deep, well-drained soils. They formed in material weathered mainly from limestone that contained some silty shale. These soils are in a long area in the central part of the county. Slopes are

smooth and contain a few limestone outcrops.

In a representative profile the surface layer is very dark grayish-brown silt loam about 2 inches thick. The subsurface layer is light yellowish-brown silt loam about 6 inches thick. The subsoil is 33 inches thick. The upper 4 inches is yellowish-brown silt loam, the middle 18 inches is strong-brown silty clay loam, and the lower 11 inches is strong-brown and yellowish-red shaly silty clay loam. The substratum is strong-brown and yellowish-red shaly silty clay loam about 11 inches thick.

Duffield soils are easily worked and fertile. Permeability is moderate. Available moisture capacity is high.

These soils are used mainly for crops and orchards and are well suited to those uses. Dairy farming and commercial production of corn and alfalfa are common on these soils. Several areas are irrigated.

Representative profile of Duffield silt loam, 2 to 6 percent slopes, in a wooded area 11/4 miles west of Meyers-

town near State Route 21:

O1—1 inch to ½ inch, hardwood leaf litter. O2—½ inch to 0, black, partly decomposed leaf mull. A1—0 to 2 inches, very dark grayish-brown (10YR 3/2) silt loam; weak, fine, granular structure; loose; strongly

acid; abrupt, wavy boundary.

A2—2 to 8 inches, light yellowish-brown (10YR 6/4) silt loam; weak, fine, granular and very weak, thin,

platy structure; friable; many roots; strongly acid; clear, wavy boundary.

B1—8 to 12 inches, yellowish-brown (10YR 5/6) silt loam;

weak, fine and medium, subangular blocky structure; friable; common roots; strongly acid; clear, wavy boundary.

B21t-12 to 20 inches, strong-brown (7.5YR 5/6) light silty clay loam; moderate, medium, subangular blocky structure; friable to firm; few, fine, yellowish-brown

siltstone fragments; thin continuous clay films; strongly acid; gradual, wavy boundary.

B22t—20 to 30 inches, strong-brown (7.5YR 5/6) silty clay loam; common streaks and faces of yellowish red (5YR 4/6); moderate to strong, medium, subangular blocky structure; firm; slightly sticky; medium, continuous, brown (7.5YR 5/4) clay films; 10 percent fine yellowish-brown siltstone fragments; few manganese concretions and black films; medium acid; gradual,

wavy boundary. B3t—30 to 41 inches, strong brown (7.5YR 5/6) and yellowishred (5YR 4/6) shaly silty clay loam; weak, medium, subangular blocky structure; firm; medium patchy

clay films; 20 percent soft siltstone fragments; medium acid; gradual, wavy boundary.

C—41 to 52 inches +, strong-brown (7.5YR 5/6) and yellowish-red (5YR 4/6) shaly silty clay loam; very weak, fine and medium, subangular blocky structure; 35 percent soft siltstone fragments; thin very patchy clay films; few manganese concretions and black films; medium

The B horizon is yellowish-red to yellowish-brown silt loam or silty clay loam. The B2t horizon ranges from 18 to 32inches in thickness. Depth to bedrock ranges from 4 to 7 feet. Reaction is slightly acid to strongly acid throughout

Duffield soils are associated with Benevola, Frankstown, Frederick, and Hagerstown soils. They have a thicker subsoil than Frankstown soils and contain less shale fragments. Their subsoil is coarser textured and not so red as that of

Benevola, Frederick, and Hagerstown soils.

Duffield silt loam, 2 to 6 percent slopes (DgB).—This soil has the profile described as representative for the series. It is in large areas and has smooth, gentle slopes. Included in mapping were small, shaly, gravelly, and severely eroded spots. Also included were a few small areas where the soil is mottled in the lower part of the subsoil and areas on which are scattered a few white quartz and sandstone fragments. Small areas of Hagerstown and Frederick soils were also included.

Most of this soil has been cultivated for many years. It is well suited to all locally grown crops. It is well suited to orchards, but frost pockets are a hazard in some areas. A suitable cropping system, contour stripcropping, minimum tillage, and sodded waterways help to prevent excessive losses of soil and water. Capability unit IIe-1.

Duffield silt loam, 6 to 12 percent slopes (DgC).—This soil has a profile similar to that described as representative for the series, but it is strongly sloping and contains a few more shale chips. Slopes are short and fairly uniform. This soil commonly is between upland divides and local drainageways. Included in mapping were areas on which are scattered a few white quartz and sandstone fragments. Also included were small areas of Hagerstown, Frederick, Frankstown, and Huntington, local alluvium soils.

Most of the acreage of this soil is in crops or orchards. This soil is well suited to all locally grown crops and to orchards. A suitable cropping system, sodded waterways, minimum tillage, and return of crop and animal residues to the soil help to prevent excessive losses of soil and water. Capability unit IIIe-1.

Duffield silt loam, 6 to 12 percent slopes, severely eroded (DgC3).—About three-fourths of the original surface layer of this soil has been removed by erosion. This soil is not so deep to bedrock as the soil described as representative for the series. Slopes are short and fairly uniform. Included in mapping were some moderately eroded spots, shaly areas, limestone outcrops, and a few areas of Hagerstown, Frankstown, and Huntington, local alluvium soils.

Most of this soil is in crops, but a small part is in pasture. It is suited to all crops, pasture, and orchards. Slope and erosion limit use. A suitable cropping system, sodded waterways, minimum tillage, and return of crop and animal residue to the soil help to prevent further erosion.

Capability unit IVe-1.

Duffield silt loam, 12 to 25 percent slopes, severely eroded (DgD3).—This moderately steep soil is on short narrow breaks along drainageways. Most of the original surface layer has been removed by erosion. This soil is not so deep to bedrock as the soil described as representative for the series. Included in mapping were some moderately eroded areas, some shaly areas, and some limestone outcrops.

This soil is better suited to tall-grass or bluegrass pasture than to cultivated crops. Tall-grass pasture commonly grows well and affords adequate protection from erosion. Reseeding in alternate strips and leaving drainageways in sod help to reduce runoff and erosion where

renovation is needed. Capability unit VIe-1.

#### **Edgemont Series**

The Edgement series consists of deep, well-drained, very stony soils on side slopes of the Blue Ridge. These soils formed in material weathered from sandstone, quartzite, and siltstone.

In a representative profile, the surface layer is black very stony loam about 2 inches thick. The subsurface layer is brown very stony loam about 7 inches thick. The subsoil is yellowish brown. The upper 16 inches is very stony sandy clay loam, and the lower 4 inches is very stony sandy loam. The substratum is gravish-brown and yellowish-brown very stony sandy loam to a depth of 50 inches.

Permeability is moderate. Available moisture capacity is moderate to high, and natural fertility is moderately

These soils are not suited to cultivated crops or pasture because of stones and slopes. Most of these soils are wooded, and trees grow fairly well. Summer homes are scattered throughout areas of these soils.

Representative profile of Edgemont very stony loam, 6 to 25 percent slopes, in a wooded area above State Route 9 south at overlook on Blue Ridge near Keyes Gap:

O1—1½ inches to ½ inch, loose oak leaves. O2—½ inch to 0, black decomposed leaf mull and mineral material.

A1-0 to 2 inches, black (10YR 2/1) very stony loam; weak, fine, granular structure; loose; 15 percent stones up to 2 feet in diameter; many fine roots; strongly acid; abrupt, irregular boundary.

A2-2 to 9 inches, brown (10YR 5/3) very stony loam; weak, fine and medium, subangular blocky and very weak, thin, platy structure; very friable; 20 percent stones; many roots; strongly acid; clear, wavy

boundary.

B21t-9 to 16 inches, yellowish-brown (10YR 5/4) very stony sandy clay loam; weak, fine and medium, sub-angular blocky structure; friable; 20 percent sandstone and quartzite fragments up to 18 inches in diameter; common roots; thin patchy clay films; very strongly acid; clear, wavy boundary.

B22t—16 to 25 inches, yellowish-brown (10YR 5/6) very stony sandy clay loam; moderate, medium and fine

subangular blocky structure; friable but firmer than B21t horizon; 20 percent sandstone and quartzite fragments up to 18 inches in diameter; common roots; thin patchy clay films and clay flows in root holes; very strongly acid; clear, wavy boundary.

B3—25 to 29 inches, yellowish-brown (10YR 5/6) and pockets of yellowish brown (10YR 5/4) very stony sandy loam; weak, medium, subangular blocky structure; firm; 35 percent sandstone and quartite fragments with the 15 inches in dismeter; for reacted wars to the sandstone. up to 15 inches in diameter; few roots; very strongly acid; clear, wavy boundary

C-29 to 50 inches +, grayish-brown (10YR 5/2) and yellowish-brown (10YR 5/6) very stony sandy loam; massive; firm; 60 percent sandstone and quartzite fragments up to 15 inches in diameter; very strongly acid.

The B horizon is mainly sandy clay loam but ranges to sandy loam in the B22 and B3 horizons. Content of coarse fragments throughout the solum ranges from less than 15 percent to 35 percent. Depth to bedrock ranges from 42 to 60 inches. Reaction of soils in undisturbed areas ranges

from strongly acid to very strongly acid.

Edgemont soils are associated with shaly, moderately deep Berks soils; shaly, shallow Weikert soils; finer textured Laidig soils; and moderately deep Dekalb soils. Edgemont soils are deeper to bedrock and have a finer textured subsoil than Dekalb soils. They formed in residuum weathered from sandstone, quartzite, and siltstone, but the Laidig soils formed in colluvium from similar material. Edgemont soils contain more sand than Clifton soils.

Edgemont very stony loam, 6 to 25 percent slopes (EdD).—This soil (fig. 6) has the profile described as representative for the series. It is on mountain crests, benches, and tops of short spurs along the mountain. Included in mapping were extremely stony spots and small areas of Steep rock land. Also included were shallow sandy soils near breaks to steeper slopes.

Almost all of this soil is wooded. This soil is not suited to crops or pasture because of moderately low fertility, droughtiness, and stoniness. It is better suited to trees. In many places this soil is used as a site for summer

homes. Capability unit VIIs-2.

Edgement very stony loam, 25 to 50 percent slopes (EdF).—This soil has a profile similar to that described as representative for the series, except it contains more large stones. Included in mapping were small extremely stony areas and a few escarpments. Also included were moderately steep Edgemont and Laidig soils.

Except for the few areas around summer homes, all of this soil is wooded. Steepness of slope, moderately low fertility, and stoniness severely limit the use of this soil for crops and pasture. It is better suited to trees. Capa-

bility unit VIIs-2.

#### Frankstown Series

The Frankstown series consists of deep, well-drained soils. These soils formed in material weathered from silty limestone and interbedded limy shales. They are in a band extending northeast from the Virginia state line south of Rippon through the center of the county to the Potomac River. This area is characterized by low. rounded, parallel ridges.



Figure 6.—Area of Edgemont very stony loam, 6 to 25 percent slopes.

In a representative profile the surface layer is a dark grayish-brown shaly silt loam about 5 inches thick. The subsurface layer is yellowish-brown shaly silt loam about 7 inches thick. The subsoil extends to a depth of 29 inches. The upper 5 inches is yellowish-brown shaly silt loam and the lower 12 inches is a strong-brown shaly silty clay loam. Below this, to a depth of 60 inches, is strong-brown and dark-brown shaly silt loam which is underlain by siliceous limestone.

Frankstown soils are easily worked and are fertile. Permeability is moderate. Available moisture capacity is

These soils are suited to and used extensively for crops and pasture. They are well suited to orchards, and air drainage generally is good.

Representative profile of Frankstown shaly silt loam, 12 to 25 percent slopes, in a pasture east of Moler Crossroads 0.7 mile north of Shenandoah Junction:

Ap-0 to 5 inches, dark grayish-brown (10YR 4/2) shaly silt loam; weak, fine, granular structure; friable; many roots; 25 percent shale fragments up to 1 inch long; slightly acid; abrupt, smooth boundary.

A2-5 to 12 inches, yellowish-brown (10YR 5/4) shaly light silt loam; weak, medium, subangular blocky structure; friable; common fine roots; 30 percent shale

fragments up to 2 inches long; many fine pores;

slightly acid; clear, wavy boundary. B21t—12 to 17 inches, yellowish-brown (10YR 5/6) shaly silt loam; moderate, medium, subangular blocky structure; firm; few roots; 30 percent shale fragments up to 2 inches long; many fine pores; thin patchy clay films; medium acid; clear, wavy boundary.

B22t—17 to 26 inches, strong-brown (7.5YR 5/6) shaly silty clay loam; some yellowish-red (5YR 4/6) spots and streaks; moderate, medium, subangular blocky structure; firm, few roots; 30 percent shale fragments up to 2 inches long; common fine pores; medium continuous clay films; common black manganese faces; medium acid; gradual, wavy boundary.

B23t-26 to 29 inches, strong-brown (7.5YR 5/6) shaly silty clay loam; weak, medium, subangular blocky structure; firm; few fine roots; 35 percent shale fragments up to 2 inches long; common fine pores; thin patchy clay films; very strongly acid; gradual, wavy boundary.

B&C-29 to 60 inches, strong-brown (7.5YR 5/6) and dark-brown (7.5YR 4/4) shaly silt loam, common streaks and pockets of yellowish-red (5YR 4/6) silty clay; massive; firm; 40 percent shale fragments up to 3 inches that increase in quantity with depth; thin patchy clay films; strongly acid.

-60 inches, shaly buff-colored siliceous limestone.

The B horizon ranges from shaly silt loam to shaly silty clay loam, and from yellowish brown to strong brown. Coarse

near intermittent drainageways and in narrow bands along hillsides. Included in mapping were small, rocky, extremely rocky, and steep areas. Soils near the rock outcrops are redder and more clayey than in other areas, and a few areas are severely eroded.

Most areas of this unit are in trees or pasture. They are suited to pasture, but slope and rockiness make pasture

management difficult. Capability unit VIs-1.

Hagerstown and Frederick cherty silty clay loams, 6 to 12 percent slopes, severely eroded (HhC3).—These soils have profiles similar to those described as representative for their respective series, but most of the original surface layer has been removed by erosion. The present surface layer is finer textured, redder, and contains about 20 percent chert fragments. These soils are similar; they have similar requirements for proper use and management. They are scattered in association with the other Hagerstown soils, but many areas are on the points and sides of drainageways. Included in mapping were moderately steep and moderately eroded areas. Also included were small areas of Duffield, Huntington, local alluvial soils, and a few limestone outcrops.

Erosion has made tillage difficult, but this soil is suited to all locally grown crops. It is suited to row crops if grown in a cropping system with long-term hay. In some areas rock outcrops influence the direction of tillage. Intensive conservation practices are needed to help reduce runoff and control further excessive erosion. Capability

Hagerstown and Frederick very rocky silty clay loams, 6 to 12 percent slopes, severely eroded (HIC3).— These soils differ from those described as representative for their respective series by having outcropping limestone ledges and by having most of their original surface layer removed by erosion. The present surface layer is redder, more clayey, and does not take in water as readily as the original surface layer. These soils are similar and have similar requirements for use and management. Areas are Hagerstown soils, Frederick soils, or both. Limestone ledges are on about one-fifth of the surface. These soils are scattered in association with the other Hagerstown and Frederick soils, but many areas are on points and sides of drainageways where runoff has concentrated. Included in mapping were small moderately eroded areas and a few extremely rocky areas.

Much of the acreage of this unit is in crops, but soil losses and rock outcrops make cultivation impractical. Some areas extend into orchards and crop fields. These soils are better suited to pasture or trees than to crops. Proper management of tall-grass pasture is difficult in some areas, but bluegrass and white clover are suited.

Capability unit VIs-1.

Hagerstown and Frederick very rocky silty clay loams, 12 to 25 percent slopes, severely eroded (HID3).— The soils in this unit are similar to those described for their respective series, but limestone outcrops occupy about one-fifth of the surface and erosion has removed most of the original surface layer. The present surface layer is redder than the surface layer of the soil described as representative and does not absorb water readily. These soils are similar; they have similar requirements for use and management. These soils are generally on short breaks near small drainageways or in bands along the hills where water or livestock have cut through the

sod and runoff has removed much of the surface layer. Included in mapping were some moderately eroded spots

and a few extremely rocky areas.

Many areas of this unit are small and are managed with the surrounding soils. Most of these soils are in pasture, but they are difficult to manage properly because of rockiness and the severe erosion hazard. They are better suited to trees. Capability unit VIIs-1.

#### **Huntington Series**

The Huntington series consists of deep, nearly level, well-drained soils on flood plains of streams and along intermittent drainageways in the Limestone Valley. These soils formed in recent alluvium washed from lime-

stone uplands. They are subject to flooding.

In a representative profile the surface layer is darkbrown silt loam about 10 inches thick. The subsoil extends to a depth of 42 inches. The upper 11 inches is dark-brown silt loam, and the lower 21 inches is dark vellowish-brown silt loam that contains chert and sandstone fragments. The substratum is strong-brown and vellowish-red silty clay loam and silt loam.

Huntington soils are easily worked, and they are fertile. Permeability is moderate. Available moisture capac-

ity is high.

These soils are suited to corn, small grains, and alfalfa. Flooding and ponding occur during prolonged wet periods. Frost pockets severely limit use for orchards.

Representative profile of Huntington silt loam, local alluvium in pasture, one-half miles northwest of Shepherd College in Shepherdstown:

Ap-0 to 10 inches, dark-brown (10YR 3/3) silt loam; weak, fine, granular structure; friable; many roots; few, angular, sandstone and chert fragments; few pores; neutral; abrupt, smooth boundary. B1—10 to 21 inches, dark-brown (7.5YR 4/4) silt loam; weak,

medium, subangular blocky structure; friable; fine roots; common quartz grains; neutral; gradual, wavy

boundary.

B2—21 to 42 inches, dark yellowish-brown (10YR 4/4) silt loam; weak, fine, subangular blocky structure; firm; few roots; 15 percent chert and sandstone fragments less than 2 inches in diameter; common iron concretions, decreasing with depth; neutral; gradual,

wavy boundary.

IIC—42 to 52 inches, strong-brown (7.5YR 5/6) silty clay loam and silt loam mixed with some yellowish-red (5YR 4/6 to 5/6) heavy silty clay loam; massive; firm; few manganese concretions; slightly acid.

The A horizon ranges from very dark grayish brown to dark brown. The B horizon ranges from dark brown to dark yellowish brown. Depth to residual material or stratified alluvium ranges from 40 to 80 inches. Natural reaction ranges from slightly acid to neutral. The hazard of flooding

ranges from slight to moderate.

Huntington soils are associated with the moderately well drained Lindside and poorly drained Melvin soils. They contain less sand throughout than Landes soils that are along rivers. Huntington soils are slightly lower than Ashton soils, and they are flooded more frequently than the Ashton soils. Huntington soils are at lower elevations than Monongahela soils, and they lack the fragipan that is present in Monon-

Huntington silt loam (Hn).—This nearly level soil has a profile similar to that described as representative for the series, but the substratum consists of stratified sand and silt. It is along Opequon Creek and other permanent

streams. Included in mapping were a few areas of Lind-

side, Melvin, and Ashton soils.

This soil is subject to streambank cutting and scouring during periods of high water. The hazard of flooding is moderate. Most of the acreage of this soil is in crops or pasture. The soil is suited to all locally grown crops except orchard fruits. Row crops can be grown continuously but winter cover crops are needed to protect this soil from erosion and to help maintain tilth. Capability unit

Huntington silt loam, local alluvium (Ho).—This soil has the profile described as representative for the series. It is in narrow strips along intermittent drainageways. A few small chert and sandstone fragments are throughout the profile. Included in mapping were a few areas of Lindside soils, local alluvium, and a few areas of Allu-

vial land, marl substratum.

Short-term ponding occurs in some areas. This soil is suited to corn, small grains, and alfalfa. Use of this soil for orchards is severely limited because of frost pockets. This soil is in narrow strips and is generally managed along with surrounding soils. It can be farmed intensively, but winter cover crops help prevent erosion and maintain tilth. Capability unit I-6.

#### Laidig Series

The Laidig series consists of deep, well-drained, strongly sloping and moderately steep, gravelly or very stony soils on foot slopes. These soils formed in deep colluvium from quartzite, sandstone, and siltstone that

accumulated at the base of Blue Ridge.

In a representative profile the surface layer is very dark grayish-brown very stony loam about 3 inches thick. The subsurface layer is yellowish-brown fine sandy loam about 8 inches thick. The subsoil is about 25 inches thick and extends to a depth of 36 inches. It is strong-brown sandy clay loam that contains sandstone fragments throughout. The substratum or fragipan is a dense, brittle, very firm layer below a depth of 36 inches.

Available moisture capacity is high, and natural fertility is moderate in these soils. Permeability is moderate in the subsoil and moderately slow in the fragipan.

These soils are mostly wooded, but areas that are not stony are suited to row crops. The stony areas are suited to pasture. Some areas are used as building sites.

Representative profile of Laidig very stony loam, 6 to 12 percent slopes, in a wooded area near intersection of Moonshine and White Mule Lanes in Shannondale:

O1-1½ inches to ½ inch, loose hardwood leaves.
O2-½ inch to 0, black mull.
A1-0 to 3 inches, very dark grayish-brown (10YR 3/2) very stony loam; moderate, fine, granular structure; loose; many roots; 20 percent partly rounded sandstone fragments that have a maximum diameter of 12 inches; strongly acid; clear, smooth boundary.

A2—3 to 11 inches, yellowish-brown (10YR 5/4) fine sandy loam; weak, fine, subangular blocky structure and very weak, thin, platy structure; very friable; many fine roots; 30 percent sandstone fragments that have

a maximum diameter of 10 inches; strongly acid; clear, wavy boundary.

B1—11 to 16 inches, strong-brown (7.5YR 5/6) light sandy clay loam; brown (7.5YR 5/4) ped surfaces; weak, medium and fine, subangular blocky structure; friable; common roots; 30 percent partly rounded sandstone fragments that have a maximum diameter of

B21t—16 to 29 inches, strong-brown (7.5YR 5/6) sandy clay loam; moderate, medium and fine, subangular blocky structure; friable; few roots; 30 percent partly rounded sandstone fragments that have a maximum diameter of 5 inches; thin patchy clay films; strong diameter of 5 inches; thin, patchy clay films; strongly acid; clear, wavy boundary.

B22t-29 to 36 inches, strong-brown (7.5YR 5/6) sandy clay

loam; weak to moderate, medium, subangular blocky structure; firm; few roots; 30 percent partly rounded sandstone fragments that have a maximum diameter of 8 inches; thin, patchy clay films; strongly acid;

Cx—36 to 50 inches, tann, patchy cray mins, strongly actu; gradual, wavy boundary.

Cx—36 to 50 inches, variegated, yellowish-red (5YR 4/6), yellowish brown (10YR 5/4), and strong-brown (7.5YR 5/6) sandy loam; massive; very firm; 65 percent partly rounded sandstone fragments that have a maximum diameter of 8 inches; few silt coatings or clay films; strongly acid.

The B horizon ranges from clay loam to sandy clay loam and from yellowish red to yellowish brown. Coarse fragments range from 15 to 35 percent in the solum. Depth to the fragipan ranges from 30 to 45 inches, and depth to bedrock ranges from 6 to 20 feet. Natural reaction is strongly acid or very strongly acid.

Laidig soils are below the shallower Dekalb and Edgemont soils that have a coarser subsoil and lack a fragipan. The Laidig soils are deeper and contain less silt than Berks and Weikert soils. Laidig soils contain more sand than Clifton

Laidig gravelly loam, 6 to 12 percent slopes (LaC). This strongly sloping soil is gravelly, but the profile otherwise is similar to that described as representative for the series. It is commonly farther from the mountains than the more stony soils. Included in mapping were some gently sloping areas and a few stony areas.

Most of this soil is wooded, but the soil is suited to all locally grown crops. Diversion ditches are needed in places to control runoff from upslope areas. If this soil is cultivated, natural drainageways need to be maintained in sod. Cropping systems and contour stripcropping help to prevent excessive erosion. Capability unit IIIe-4.

Laidig gravelly loam, 12 to 25 percent slopes (LaD).— This soil contains fewer large stones, but the profile otherwise is similar to that described as representative for the series. In most places this soil is not close to the mountains. Included in mapping were a few stony areas along intermittent streams and a few areas of steep, gravelly Laidig soils.

Nearly all of this soil is wooded. If it is used for crops, diversion ditches, a suitable cropping system, and other fairly intensive conservation practices help to control

runoff. Capability unit IVe-3.

Laidig very stony loam, 6 to 12 percent slopes (LbC).— This soil has the profile described as representative for the series. It is along foot slopes of the mountains, and it formed in colluvium underlain by shale. During wet periods springs are common in many draws. Included in mapping were extremely stony spots and areas where the soil is gently sloping.

Nearly all of this soil is wooded. Several summer homes have been built on this soil. It is suitable for pasture or trees. Tree growth is good, but the extremely stony spots impose some limitations on use of equipment for harvest-

ing. Capability unit VIs-2.

Laidig very stony loam, 12 to 25 percent slopes (LbD).— This moderately steep soil is below steep mountain slopes.

APPENDIX C: PROPOSED COVENANTS
AND RESTRICTIONS

# **Longfield Estates**

#### RESTRICTIVE COVENANTS & CONDITIONS

#### ARCHITECTURAL & CONSTRUCTION

ARCHITECTURAL REVIEW. No building, residence, mailbox, fence, gate, hedge, privacy enclosure wall, retaining wall, driveway, sign, swimming pool, flag pole, water fountains, tank, hot tub, tennis court, sports court, barn, storage shed, greenhouse, antenna (including satellite-earth receivers), free-standing mailbox, gazebo, exterior sculpture, lawn art, or structure of any kind (collectively called "Structures") shall be commenced, placed, erected or maintained on the Property, nor shall any addition to (including awnings) or change or alteration therein (including alterations in exterior or prevailing landscaping of the Property be made, until the plans and specifications, in duplicate, showing the nature, kind, shape height, materials, color, locations and approximate cost of the Structure, addition or alteration shall have been submitted to and approved in writing by the Developer. The Developer shall consider applications for approval of plans, specifications, etc., upon the basis of conformity with this Declaration and shall be guided by the extent to which the proposed Structure, addition or alteration will ensure conformity and harmony in exterior design and appearance, based upon, among other things, the following factors: nature and durability of materials; harmony of external design with existing or planned Structures, choice of colors; change in topography, grade elevations and/or drainage; tree removal; factors of public health and safety; the effect of the proposed Structure, addition or alteration on the use, enjoyment and value of other neighboring properties, and/or on the outlook or view from adjacent or neighboring properties; and the suitability of the proposed Structure, addition or alteration taking into account the general aesthetic values of the surrounding area. One complete set of said proposed plans and specification shall be retained by Developer after review and approval thereof.

Notwithstanding the inclusion in this Declaration hereinafter of certain design parameters, restrictions and proscriptions, nothing containing in this Declaration shall be deemed to restrict the good-faith judgment and decisions of Developer in approving or disapproving said plans and specifications hereinabove-provided.

The Developer reserves the right to assign the ARCHITECTURAL REVIEW authority. This assignment will be at the discretion of the Developer.

IMPROVEMENT SETBACKS & HOUSE LOCATION. All improvements shall be built a minimum distance of 50 feet from the front property line and 25 feet from the side and rear property lines. In the event an owner buys more than one lot for the purpose of erecting only one residence thereon, the residence shall be erected within the building restriction lines of any one lot and shall not extend onto the adjoining lot unless both lots are merged. Only one residence will be built on any merged lot. The developer must approve house location on lot prior to groundbreaking.

CONSTRUCTION DEADLINE. Any and all buildings on a Lot, must be completed within one (1) year of said commencement date.

**DRIVEWAY.** All driveways, parking pads and turnarounds, must be paved with black asphalt, concrete, brick pavers, or of another material if approved by the Developer, and installed no later than one year from the date of completion of the residence. A circular driveway with two driveway access points assessing a Longfield Estates' subdivision road is permitted.

DWELLING SIZE & STYLE. The finished living area of the main structure, exclusive of basement, patio, porch, garage and loft (whether finished or unfinished), shall not be less than

three thousand (3,000) square feet for a one story home, nor less than four thousand five hundred (4,500) square feet for a two story home. The first floor of a two-story home shall not be less than two thousand five hundred (2,500) square feet. No mobile or modular homes are permitted even if placed on a permanent foundation; however, the Developer reserves the right put a sales trailer on the property for the purpose of marketing the lots within the subdivision.

FOUNDATION. All exterior foundation walls of all homes shall be finished with brick, stone, or poured concrete with a brick pattern. The terms "brick" and "stone" as used herein refers to individual units of brick and stone built by hand-labor on-site and fixed into place with mortar; including eldorado stone or its equivalent, said terms specifically exclude prefabricated brick or stone wall panels or units including, but not limited to such things as brick or stone facsimiles as Z-Brick, presto-brick, etc. Poured foundation walls with a brick pattern shall be painted and maintained to match the exterior color of the house. All exterior materials, color and design shall conform and contribute to the architecturally and aesthetic harmony of the other Lots; and shall, in any event, be subject to the approval of the Developer, or their assigns.

GARAGE. All residences must have, at a minimum, a two (2) car.

ROOF PITCH & SHINGLE MATERIAL. The main roof pitch of the residence and accessory buildings shall be no less than 7/12. Architectural asphalt shingles, wood shake shingles, and slate shall be used as the primary roof shingles. Copper & standing seam painted metal may be used as a secondary roof covering for accent purposes. Any other roofing material, if not listed, will require Developer's (or assign's) approval.

EXTERIOR COVERING. The exterior covering will be brick, stone (as described under foundation), stucco, or hardi-plank. No vinyl siding (except as accents approved by the Developer) shall be allowed as exterior covering. Any other exterior covering material must be approved by the developer.

SINGLE FAMILY RESIDENCE. The Lots and any building or structure, now or hereafter erected on a Lot, shall be occupied and used for single-family residence purposes only, and no building shall be erected, altered, placed, or permitted to remain on any Lot other than one detached single family dwelling house. Any two or more lots that are merged shall only be allowed to maintain one single family residence as defined herein.

UTILITIES. All public utility services shall be buried below ground on all Lots.

# AESTHETIC, ENVIRONMENTAL & SAFETY

ANIMALS. Common domestic house pets shall be allowed on the owner's Lot only, provided that a) the aggregate number of dogs and cats does not exceed four per household, b) that these animals are not kept or bred for any commercial purpose. Pets shall not be allowed to roam at large throughout the subdivision and must remain on the owner's property. Dog(s) are permitted to walk on a leash in the Subdivision or in the Common Recreational Area. Dog(s) shall be properly trained so that they do not excessively bark and interfere with the other Lot owners right to "Quiet Enjoyment". The owner of the animal is responsible for cleaning up after the animal within the subdivision.

Except for horses, no farm animals, livestock, swine, or poultry of any kind shall be kept, maintained or in any way allowed on any Lot. The Developer or Homeowners Association shall have absolute authority to prohibit unusual or exotic animals, birds, or reptiles from being kept on a lot or dwelling or in any accessory building located thereon, and shall have the authority to prohibit or regulate loud, noisy, and/or viscous pets that have had more than one biting incident. You may have up to 1 horse for each 2 acres, subject to a maximum of 2 horses per Lot.

ANTENNAS & SATELLITE DISHES. Satellite dishes and antennas are to be located in the "back yard" or mounted on the back portion of the house or accessory building. No antenna of any type or satellite dish may exceed the height of the residence's roof top and cannot

exceed two (2) square feet in diameter. Exceptions are permitted due to lack of adequate reception, upon written approval by the Developer.

BURNING. No open fires shall be permitted on any Lot except in compliance with all local, state and federal burning regulations. The allowed burning materials will be confined to vegetative matter such as leaves, tree branches and limbs. No household waste matter of any sort is to be burned. Burning restrictions do not preclude the use of outdoor grills.

CLOTHESLINE. Exterior clothes lines are not permitted.

EASEMENTS. Easements for installation and maintenance of utilities and drainage facilities are reserved as shown on the Record Plat. Within these easements, no structure, planting or other material shall be placed or permitted to remain which may damage or interfere with the installation and maintenance of utilities, or which may change the direction of the flow of drainage channels in the easements, or which may retard the flow of water through channels in the easement areas.

**FENCING.** All lots must be fenced with four-board, white vinyl fencing and installed no later than one year from the date of completion of the residence. The fencing shall be setback 5' from the property line in the front, back and sides.

Any other fencing type will require Developers written approval.

FIRE. Any dwelling, garage, or accessory building on any Lot which shall be destroyed in whole or in part by fire, windstorm, vandalism, or for any other cause or act of God, must be rebuilt, repaired or all debris removed and the Lot restored to a sightly condition with reasonable promptness, provided, however, that in no event shall such debris remain longer than sixty (60) days.

GARAGE. The garage may be used for minor car maintenance and repairs, storage of trash receptacles, garden equipment, bicycles, sporting equipment, boats, trailers, cars, and similar items. Garage doors are to be kept closed when not in use.

**HUNTING & TARGET SHOOTING.** No private or public hunting or target shooting with a firearm shall be permitted on any lot or within the developed or undeveloped land of the subdivision, including the Common Area.

LANDSCAPING. Within one growing season after construction of the residence, the "front yard" shall be landscaped with suitable grass, flowers, shrubs, & trees in order to create a neat, orderly and pleasing appearance. All improved lots are to be mowed regularly throughout the growing season. No artificial vegetation or grass shall be permitted on any portion of the Lot.

No trees, shrubs, or other vegetation shall be located on any Lot which blocks the view of operators of motor vehicles on the subdivision road so as to create a traffic hazard.

**LIGHTING.** Lamp post(s) porch lighting, landscape accent lighting, security lighting, and safety lighting for walkways and driveways are permitted. Holiday lighting may be installed after October 25 and removed no later than January 31.

MAINTENANCE. Each owner shall keep all lots owned by him, and all improvements therein or thereon, in good order and repair, including but not limited to the seeding, watering and mowing of all lawns, the pruning and cutting of all trees and shrubbery and the painting (or other appropriate external care) of all buildings and other improvements, all in a good manner and with much frequency as is consistent with good property management.

The exterior of each residence & accessory building shall be kept in good order and repair including but not limited to, replacement of broken windows, burned out light bulbs, roof shingle replacement, painting of exterior surfaces as necessary, etc.

NUISANCE. No noxious, illegal, hazardous, dangerous or offensive use, construction or activity shall be conducted on any Lot, nor become an annoyance or nuisance to the owners, tenants or occupants of other dwellings within or adjacent to the property by reason of unsightliness, or the excessive emission of fumes, odors, glare, excessive heat, vibration, gases,

vapors, chemicals, radiation, dust, liquid waste, noise (including but not limited to excessive barking of dogs).

PARKING. Except for temporary and unusual irregular overflow parking of cars from the garage and driveway of any Lot, no parking shall be permitted on the subdivision road. Motorized recreational vehicles, boat, boat trailer, or motor home may be parked on the driveway of the owner's Lot for a period not to exceed two (2) consecutive days for the sole purpose of preparing the vehicle for a trip.

QUIET ENJOYMENT. For the quiet and peaceful enjoyment for all Lot owners, no motorized dirt or trail bikes, three-wheelers, four-wheelers, motorized scooters, snow mobiles, go-cart, or similar off-road sport vehicles shall be operated on any Lot, subdivision road, or Common Areas, except when used for lot maintenance or used for the operation of the horse farm on lots 1, 28, 29, 30 or the residue lots.

SHEDS & STORAGE BUILDINGS. One (1) small tool or lawn shed may be placed or constructed in the rear yard only. Said shed shall have a pitched roof with roof covering to match the main residence. Sheds shall not be metal or aluminum, but shall have an exterior cover that is complementary to the residence.

SIGNAGE. No sign, billboard, or advertising device of any kind (unless exempted herein) shall be placed or maintained on any part of the property or on any structure except for the following which will be permitted: (a) dwelling address, (b) occupant's name, and (c) one sign advertising the Lot for sale or rent, provided that these signs do not exceed four (4) square feet.

STABLE. One small well-designed stable used for the housing of horses shall be permitted. Said stable shall contain no more than two (2) normal and reasonable horse stalls with a small tack room, a small grain storage room and a loft for the storage of hay, straw and other similar grasses. Such horse stables shall be subject to architectural review, and shall be designed and have a siding which is consistent with the natural and rural mountainous nature of the location.

STORAGE. All personal property (when not in active use), including but not limited to lawn mowers, lawn tools, bicycle(s) and all other household personal property shall be stored within the owner's dwelling, garage, or accessory building.

No property shall be used in whole or in part for the storage of rubbish of any character whatsoever, nor for the storage of any property or thing that will cause such property to appear in an unclear or untidy condition or that will be obnoxious to the eye.

**SWIMMING POOL.** Swimming pools must be properly screened and fenced. Location and design must receive architectural approval by the Developer, or assigns. No above ground pools, blow up pools, or temporary pools will be allowed.

TANKS. Fuel, oil, gas, propane, or similar tanks may be installed provided that they are buried below ground or properly screened and comply with County, State and Federal requirements.

TRASH. No lumber materials, metals, brick, block, dirt, sand, lawn clippings, garden debris, or other bulk materials (except firewood and mulch bags neatly stacked in the rear yard), refuse, or trash shall be kept, stored, or allowed to accumulate on any Lot except building materials during the course of construction. Trash, garbage, or other waste shall be kept in sanitary containers and such shall not be permitted to remain in public view except on days of scheduled trash collection. All containers or equipment for the storage or disposal of such materials shall be kept in a clean and sanitary condition. No dumping of trash, toxic materials, or garbage on any Lot is permitted. No incinerator shall be kept or maintained upon any Lot.

VEHICLES. No junked vehicles, vehicles without registration, non-operating vehicles & machinery, trailers, recreational vehicles, campers, boats, large machinery, large trucks (over 1 ton carrying capacity), buses or any other unsightly or obnoxious things publicly visible shall be

parked, stored or maintained at any time on any street or on any Lot except in a garage. Commercial vehicles in regular use, cars or trucks, as long as trucks are not greater than 1 ton or box vans with or without lettering on the vehicle are permitted on the Lot for use as transportation to and from a workplace. No snow mobiles, motorized dirt or trail bikes, motorized scooters, three-wheelers, four-wheelers or similar off-road sports vehicles shall be operated on the Lot, subdivision road, or Common Areas.

ROAD MAINTENANCE AND COMMON AREA MAINTENANCE FEE. The grantee, for himself and his heirs, successors or assigns, acknowledge that the property conveyed to them by deed and being a parcel of the subdivision shall be subject to an annual charge of assessment in such amount as will be fixed by the developer, grantor, his successors or assigns, in the sum of at least \$300.00 per lot for snow removal and for maintaining the road, entrance features, and common areas. If any lots are merged, the homeowner of the merged lots will pay the annual assessment times the original number of lots prior to the merger. If actual costs for the purpose referred to herein exceed the revenue received, the annual charge may be increased, but only so as to meet the actual costs.

FURTHER SUBDIVISION OF ANY LOT. No lot shall be split, divided, or subdivided for sale, gift, trade or transfer, except that the Developer reserves the right and privilege to further subdivide or re-subdivide any Lots owned by the Developer for the purpose of consolidating, enlarging, or decreasing the lot size of one or more of said Lots, for adding lots to the subdivision, extending the subdivision or for readjustment of property lines.

LEASE OF ANY PROPERTY. Any lease agreement between a Lot or home owner in Longfield Estates and a Lessee shall provide that the terms of the lease are subject in all respects to the provisions of this Declaration of Restrictive Covenants and Conditions, and the Articles of Incorporation and Bylaws of the Association, and that any failure by the Lessee to comply with the terms of such documents shall be a default under the lease.

**COMMON RECREATIONAL AREA.** Any playground or recreational features furnished or installed by the Association shall be used at the risk of the user, and the Association shall not be held liable to any Person for the claim, damage, or injury occurring thereon or related to use thereof.

#### **DEVELOPER'S RIGHTS & PRIVILEGES**

CHANGES TO RESTRICTIVE COVENANTS & RESTRICTIONS. The developer, his successors or assigns, reserves and retains the right to amend, modify, delete, change, or add to the restrictive covenants and restrictions applicable to all lots or on a lot-by-lot basis without the written permission of any Longfield Estates' lot owner as long as the developer, his successors or assigns, owns at least one lot in the Longfield Estates' subdivision or any extension thereof.

SUBDIVISION EXTENSION. The Developer reserves the right to extend Longfield Estates subdivision and add to the lots of Longfield Estates as long as the new extension to the subdivision will be subject to the same Covenants and Restrictions as that of the original Longfield Estates plus any additions to the Covenants and Restrictions made thereto. Any Lot owner in any future extension to Longfield Estates will have an easement over existing or planned Longfield Estates roads and will have access to existing Longfield Estates' common areas or amenities.

**EASEMENT.** The developer hereby reserves a 25 foot wide utility easement along the front, rear and sides.

EASEMENT FOR ACCESS. The developer, his successors or assigns, reserves a perpetual and non-exclusive easement or right-of-way for ingress, egress and access of all kinds over and across all of the Common Areas and general and exclusive Common Areas of the

properties to and from all points within the properties for all purposes. The developer, his successors or assigns, furthermore reserves the absolute right to grant easements for ingress and egress and access over all private streets within the properties and to use the common area within Longfield Estates

EASEMENT FOR CONSTRUCTION. So long as the Developer or Builder(s) are engaged in developing or improving any portion of the Properties, the Developer and Builder(s) and their employees, agents, and/or assigns shall have an easement of ingress, egress and use over any portion of the Properties not conveyed as a Lot to an Owner for occupancy for 1) movement and storage of building materials and equipment, 2) erection and maintenance of directional and promotional signs, and 3) conduct of sales activities, including maintenance of model living units. Such easement shall be subject to such rules as may be established by the Developer to maintain reasonable standards of safety, cleanliness, and general appearance of the Lots.

EASEMENT TO INSPECT. An easement is reserved for the Developer for ingress and egress on any Lot(s) to inspect such property for alleged violations of the Governing Documents, based on formal, written complaints, and/or compliance with architectural standards and/or compliance with architectural standards and/or approved plans for alterations and improvements, and to perform such maintenance as is required by this Declaration or the Supplementary Declaration for such Lot, provided the Owner of said Lot is given written notice of the purpose and time of inspection at least three (3) days in advance thereof and such inspection is performed during reasonable hours.

EASEMENT TO CORRECT DRAINAGE. For a period of seven (7) years from the date of submission of each Lot to this Declaration, the Developer reserves an easement and right on, over, and under the ground within each Lot to maintain and to correct drainage of surface water in order to maintain reasonable standards of health, safety, and appearance. Such right expressly includes the right to cut any trees, bushes or shrubbery, to perform any grading of the land, or to take any other similar action reasonably necessary following which the Developer shall restore the affected property to its original condition as nearly as is practicable. The Developer shall give reasonable notice of intent to take such action to all affected Lot owners, unless in the opinion of the Developer an emergency exists which precludes such notice. However, this shall not be misconstrued that the Developer will come onto the property after the Grantee/Lot Owner has performed excavation on their lot, to correct any drainage problem that may have resulted from the Grantee/Lot Owner's own subcontractor. Any correction required to fix something done by the Grantee/Lot Owner will be quickly completed at the expense of the Grantee/Lot Owner.

MODIFICATIONS. Developer, his successors or assigns, in his sole discretion, as to Lots owned by the Developer, reserves the right to restrict, move or otherwise modify the location, access and rights-of-way as shown on the Record Plat or to reconfigure to provide utility and street access to other adjoining lands.

MODEL HOME & SALES TRAILER. The developer and or his assigns reserve the right to construct and operate a model home or sales trailer on any lot in the subdivision.

RESUBDIVISION. The developer reserves the right and privilege to further subdivide or re-subdivide any Lots owned by the Developer for the purpose of consolidating, enlarging or decreasing the lot size of one or more of said Lots or for readjustment of property lines.

SIGNAGE. The signage of the Developer, builder, or their designated agent or assigns, is exempt from any size or other signage restrictions to promote the sale of improved or unimproved lots in the subdivision.

SUCCESSORS OF DEVELOPER. Any and all rights, reservations, easements, interests, exemptions, privileges and powers of the Developer hereunder, or any part of them,

may be assigned and transferred (exclusively or non-exclusively) by the Developer by instrument in writing, with or without notice to the Homeowners Association or any Grantee or Lot owner.

INVALID OR VOID COVENANT OR CONDITION. It is expressly agreed that if any covenant or condition contained herein, or any part thereof is invalid or void, such invalidity or voiding thereof shall in no way affect any other covenant or condition.

NOT SUBJECT TO THESE COVENANTS AND RESTRICTIONS. Lots 1, 28, 29, 30, or the residue parcels will remain totally unrestricted and not subject any of the limitations of the covenants and restrictions herein.

#### DISCLOSURES

It is understood that it is possible that the current training, boarding, riding, and breeding facility may expand and become commercial in nature. Additional features may be added to the current equestrian training/boarding/riding facility, including, but not limited to, an equestrian training track, additional barns, arenas, paddocks, apartments, on-site living quarters for equestrian related employees, etc... These additional features may be converted at a later date from personal use to commercial use. It is also understood that the Developer, his successors or assigns, reserves the right to have access over the subdivision roads, trails, and common areas for Developer's personal or commercial use for the aforementioned equestrian training/boarding facility or any expansion thereof.

APPENDIX D: RARE, THREATENED AND ENDANGERED SPECIES



#### DIVISION OF NATURAL RESOURCES

Wildlife Resources Section
Operations Center
P.O. Box 67
Elkins, West Virginia 26241-3235
Telephone (304) 637-0245
Fax (304) 637-0250

Ed Hamrick Director

Bob Wise Governor

June 24, 2004

Mr. Dan Llewellyn Terra Development Services, LLC 9984 Spotswood Trail McGaheysville, VA 22840

Dear Mr. Llewellyn:

We have reviewed our files for information on rare, threatened and endangered (RTE) species for the area of the proposed Longfield Subdivision in Jefferson County, WV.

We have no known records of any RTE species within the project area. The Wildlife Resources Section knows of no surveys that have been conducted in the area for rare species or rare species habitat. Consequently, this response is based on information currently available and should not be considered a comprehensive survey of the area under review.

Enclosed please find an invoice.

Thank you for your inquiry, and should you have any questions please feel free to contact me at the above number, extension 2048.

Sincerely,

Barbara Sargent

Environmental Resources Specialist

Wildlife Diversity Program

enclosure

g:\BDSInv\Terra.doc

APPENDIX E: GROUNDWATER AND SURFACE WATER RESOURCES REPORT

# Jefferson County Health Department

ROSEMARIE CANNARELLA, M.D., M.P.H. HEALTH OFFICER



1948 WILTSHIRE ROAD, SUITE 1 KEARNEYSVILLE, WV 25430 ENVIRONMENTAL: (304) 728-8415 FAX: (304) 728-3314 MEDICAL: (304) 728-8416 FAX: (304) 728-3319

July 2, 2004

Dan Llewellyn, Project Engineer Terra Development Services, LLC 9984 Spotswood Trail McGaheysville, VA 22840

Dear Mr. Llewellyn:

The Jefferson County Health Department has received your request for information regarding contaminated wells within 1000 feet of the proposed Longfield Subdivision located off of Route 230 in Uvilla.

A review of our records indicates that this department is unaware of any wells contaminated with coliform bacteria within this area.

If you have any further questions, please contact the Jefferson County Health Department at 728-8415.

Sincerely,

Rosemarie Cannarella, MD, MPH
Health Officer

Cc: Paul Raco, Jefferson County Planning, Zoning, & Engineering Richard Wheeler, District Sanitarian, WVBPH Lisa Dunn, Sanitarian Supervisor



# The EDR Radius Map with GeoCheck®

Longfield Subdivision Longfield Subdivision Shenandoah Junction, WV 25442

Inquiry Number: 01200693.1r

May 26, 2004

# The Standard in Environmental Risk Management Information

440 Wheelers Farms Road Milford, Connecticut 06460

## Nationwide Customer Service

Telephone: 1-800-352-0050 Fax: 1-800-231-6802 Internet: www.edrnet.com

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Thank you for your business.
Please contact EDR at 1-800-352-0050 with any questions or comments.

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#### **EXECUTIVE SUMMARY**

A search of available environmental records was conducted by Environmental Data Resources, Inc. (EDR). The report meets the government records search requirements of ASTM Standard Practice for Environmental Site Assessments, E 1527-00. Search distances are per ASTM standard or custom distances requested by the user.

#### TARGET PROPERTY INFORMATION

#### **ADDRESS**

LONGFIELD SUBDIVISION SHENANDOAH JUNCTION, WV 25442

#### COORDINATES

Latitude (North):

39.365100 - 39' 21' 54.4"

Longitude (West):

77.788700 - 77\* 47' 19.3"

Universal Tranverse Mercator: Zone 18 UTM X (Meters): UTM Y (Meters):

259742.5

4360794.5

Elevation:

479 ft. above sea level

#### USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property:

39077-C7 CHARLES TOWN, WV VA MD

Source:

USGS 7.5 min quad index

#### TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

#### DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ( "reasonably ascertainable ") government records either on the target property or within the ASTM E 1527-00 search radius around the target property for the following databases:

#### FEDERAL ASTM STANDARD

NPL	
Proposed NPL	Proposed National Priority List Sites
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information
	System
CERC-NFRAP	. CERCLIS No Further Remedial Action Planned
CORRACTS	Corrective Action Report
RCRIS-TSD	Resource Conservation and Recovery Information System
RCRIS-LQG	Resource Conservation and Recovery Information System
RCRIS-SQG	Resource Conservation and Recovery Information System
ERNS	Emergency Response Notification System

#### STATE ASTM STANDARD

SHWS\_\_\_\_\_ This state does not maintain a SHWS list. See the Federal CERCLIS list and Federal NPL list.

#### EXECUTIVE SUMMARY

SWF/LF\_\_\_\_List of M.S.W. Landfills/Transfer Station Listing LUST Leaking Underground Storage Tanks UST. Underground Storage Tank Database VCP. Voluntary Remediation Sites

#### FEDERAL ASTM SUPPLEMENTAL

CONSENT.....Superfund (CERCLA) Consent Decrees

ROD\_\_\_\_\_Records Of Decision

Delisted NPL......National Priority List Deletions

HMIRS Hazardous Materials Information Reporting System

MLTS Material Licensing Tracking System
MINES Mines Master Index File
NPL Liens Federal Superfund Liens PADS......PCB Activity Database System FUDS\_\_\_\_\_\_Formerly Used Defense Sites INDIAN RESERV\_\_\_\_\_Indian Reservations US BROWNFIELDS\_\_\_\_\_ A Listing of Brownfields Sites DOD Department of Defense Sites

RAATS\_\_\_\_\_\_RCRA Administrative Action Tracking System TRIS\_\_\_\_\_Toxic Chemical Release Inventory System

TSCA...... Toxic Substances Control Act SSTS\_\_\_\_\_Section 7 Tracking Systems

Rodenticide Act)/TSCĂ (Toxic Substances Control Act)

#### STATE OR LOCAL ASTM SUPPLEMENTAL

SPILLS......Spills Listing

#### EDR PROPRIETARY HISTORICAL DATABASES

Coal Gas ...... Former Manufactured Gas (Coal Gas) Sites

#### **BROWNFIELDS DATABASES**

US BROWNFIELDS..... A Listing of Brownfields Sites VCP...... Voluntary Remediation Sites

#### SURROUNDING SITES: SEARCH RESULTS

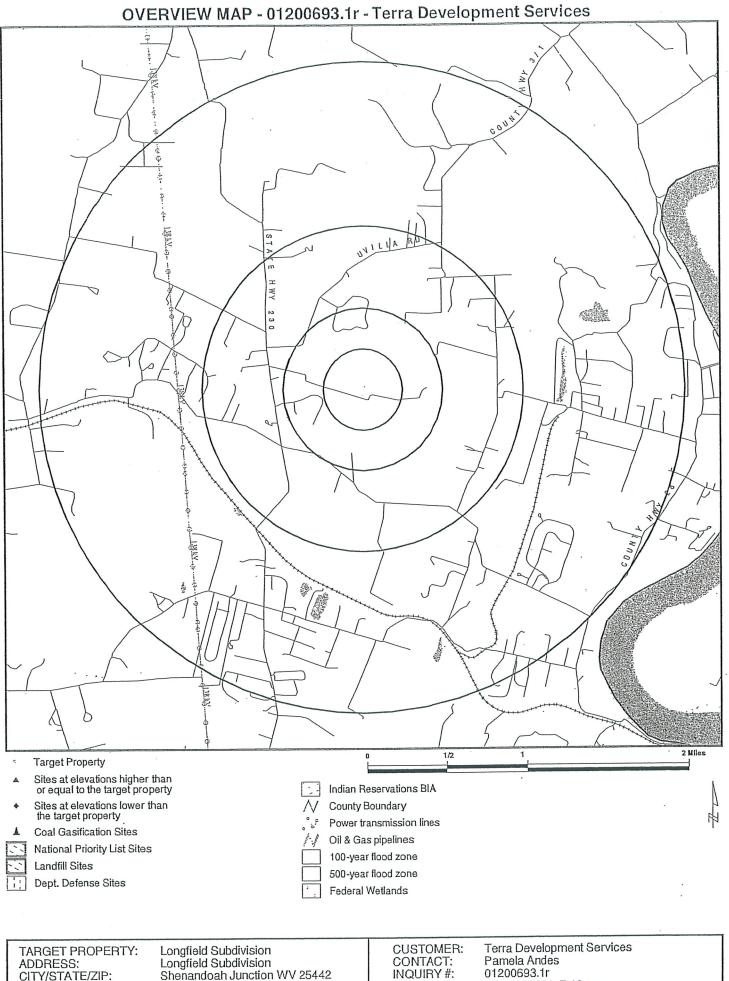
Surrounding sites were not identified.

Unmappable (orphan) sites are not considered in the foregoing analysis.

# **EXECUTIVE SUMMARY**

Due to poor or inadequate address information, the following sites were not mapped:

Site Name	Database(s)
HARPERS FERRY PESTICIDE DUMP JEFFERSON COUNTY D F BRIARPATCH LLC JEFFERSON CO SCHOOL BUS GARAGE FRANK'S BLUE RIDGE GROCERY BILL WEBER PEARL'S SHELL SHENANDOAH SALES AND SERVICE WINES EXXON FAST TRACK RACEWAY RONALD COOPER MOUNTAIN MAGIC STUDIO SNYDER ENVIRONMENTAL SVC DEANS LAWN MOWER SHOP UVILLA SMALL ENGINE REPAIR	CERC-NFRAP SWF/LF LUST, UST LUST, UST UST UST UST RCRIS-SQG, FINDS RCRIS-SQG, FINDS RCRIS-SQG, FINDS RCRIS-SQG, FINDS RCRIS-SQG, FINDS RCRIS-SQG, FINDS RCRIS-SQG, FINDS RCRIS-SQG, FINDS
JIMS CIRCLE TRANSMISSIONS	RCRIS-SQG, FINDS



CITY/STATE/ZIP:

LAT/LONG:

Shenandoah Junction WV 25442 39.3651 / 77.7887

01200693.1r May 26, 2004 7:10 pm DATE:

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DETAIL MAP - 01200693.1r - Terra Development Services UNNAMED STREET 1/4 Miles Target Property Sites at elevations higher than or equal to the target property Indian Reservations BIA County Boundary Sites at elevations lower than the target property Coal Gasification Sites Sensitive Receptors National Priority List Sites Landfill Sites Dept. Defense Sites Terra Development Services CUSTOMER: Longfield Subdivision TARGET PROPERTY: Pamela Andes CONTACT: Longfield Subdivision ADDRESS: 01200693.1r INQUIRY #:

CITY/STATE/ZIP: LAT/LONG:

Shenandoah Junction WV 25442 39.3651 / 77.7887

DATE:

May 26, 2004 7:11 pm

## MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	>1	Total Plotted
FEDERAL ASTM STANDARD	) -							
NPL Proposed NPL CERCLIS CERC-NFRAP CORRACTS RCRIS-TSD RCRIS Lg. Quan. Gen. RCRIS Sm. Quan. Gen. ERNS		1.500 1.500 1.000 0.750 1.500 1.000 0.750 0.750	0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0 NR	0 0 NR NR 0 NR NR NR	0 0 0 0 0 0 0
STATE ASTM STANDARD							<b>N</b> 1/A	b1/A
State Haz. Waste State Landfill LUST UST VCP		N/A 1.000 1.000 0.750 1.000	N/A 0 0 0 0	N/A 0 0 0 0	N/A 0 0 0 0	N/A 0 0 0 0	N/A NR NR NR NR	N/A 0 0 0 0
FEDERAL ASTM SUPPLEME	ENTAL							
CONSENT ROD Delisted NPL FINDS HMIRS MLTS MINES NPL Liens PADS FUDS INDIAN RESERV US BROWNFIELDS DOD RAATS TRIS TSCA SSTS FTTS		1.500 1.500 0.500 0.500 0.500 0.500 0.500 0.500 1.500 1.500 1.500 0.500 0.500 0.500 0.500 0.500	0 0 0 0 0 0 0 0 0 0			0 0 0 NR NR 0 NR 0 0 0 0 NR NR 0 NR NR 0 NR NR	0 0 0 NR NR NR NR 0 0 NR NR NR NR NR NR NR NR NR NR NR	0 0 0 0 0 0 0 0 0 0
STATE OR LOCAL ASTM SU	JPPLEMENTA	L						
SPILLS		0.500	0	0	0	NR	NR	0
EDR PROPRIETARY HISTO	RICAL DATAE	BASES						
Coal Gas		1.500	0	0	0	0	. 0	0

## MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted	
BROWNFIELDS DATABASES									
US BROWNFIELDS VCP		1.000 1.000	0	0 0	0 0	0	NR NR	0 0	

#### NOTES:

AQUIFLOW - see EDR Physical Setting Source Addendum

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

N/A = This State does not maintain a SHWS list. See the Federal CERCLIS list.

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

#### MAP FINDINGS

Database(s)

EDR ID Number EPA ID Number

Coal Gas Site Search: No site was found in a search of Real Property Scan's ENVIROHAZ database.

NO SITES FOUND

# ORPHAN SUMMARY

clty	EDR ID	Site Name	Site Address	Zip 25425	Database(s) RCRIS-SQG, FINDS	
HALLTOWN HARPERS FERRY HO03864596 HARPERS FERRY HO04802572 SHENANDOAH HO04802575 SHENANDOAH JUNCTION HO04802528 SHENANDOAH JUNCTION HO04802595 SHENANDOAH JUNCTION HO04802528	1004802551 U003348108 1004802699 1004802704 1004803055 U003760744 10003864607 10004804147 S105212267 1004802578 1004802578 1004802565 U004802955 U0034362286	1004802551 SHENANDOAH SALES AND SERVICE  U003348108 BILL WEBER  1004802699 WINES EXXON  1004802704 FAST TRACK RACEWAY  1003804607 HARPERS FERRY PESTICIDE DUMP  1000384596 DF BRIARPATCH LLC  10048024047 MOUNTAIN MAGIC STUDIO  1004802572 JEFFERSON COUNTY  1004802572 UVILLA SMALL ENGINE REPAIR  100480240 UVILLA SMALL ENGINE REPAIR  100480240 UVILLA SMALL ENGINE REPAIR  100480240 JIMS CIRCLE TRANSMISSIONS  1004802266 JEFFERSON CO SCHOOL BUS GARAGE	RT 1 BOX 872 RT 2 BOX 319 RT 3 BOX 41 RT 3 BOX 269 RT 3 BOX 1340 RT 9 RT 1 BOX 775 COUNTY RT 27 US RT 340 AT RT 340 & RT 230 ON RT 340 COUNTY RT .15/1 BESIDE THE ANIMAL SHELTE RT 18 1 MI OF RT 9 FLOWING SPRINGS RD RT 1 BOX 81 RT 18 DOX 38 M RT 18 A NEW RAILROAD RT 3 BOX 1374	25425 25425 25425 25425 25425 25425 25425 25426 25442 25442 25442 25442 25442 25442	UST  UST  RCRIS-SQG, FINDS  RCRIS-SQG, FINDS  UST  CERC-NFRAP  LUST, UST  RCRIS-SQG, FINDS  SWF/LF  RCRIS-SQG, FINDS  SWF/LF  RCRIS-SQG, FINDS  RCRIS-SQG, FINDS	

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Elapsed ASTM days: Provides confirmation that this EDR report meets or exceeds the 90-day updating requirement of the ASTM standard.

#### FEDERAL ASTM STANDARD RECORDS

NPL: National Priority List

Source: EPA Telephone: N/A

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 04/27/04 Date Made Active at EDR: 05/21/04

Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 05/04/04

Elapsed ASTM days: 17

Date of Last EDR Contact: 05/04/04

#### **NPL Site Boundaries**

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)

Telephone: 202-564-7333

**EPA Region 1** 

Telephone 617-918-1143

**EPA Region 3** 

Telephone 215-814-5418

**EPA Region 4** 

Telephone 404-562-8033

FPA Region 6

Telephone: 214-655-6659

**EPA Region 8** 

Telephone: 303-312-6774

Proposed NPL: Proposed National Priority List Sites

Source: EPA Telephone: N/A

> Date of Government Version: 04/27/04 Date Made Active at EDR: 05/21/04

Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 05/04/04

Elapsed ASTM days: 17

Date of Last EDR Contact: 05/04/04

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

Source: EPA

Telephone: 703-413-0223

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 02/26/04 Date Made Active at EDR: 04/02/04 Database Release Frequency: Quarterly Date of Data Arrival at EDR: 03/22/04 Elapsed ASTM days: 11

Date of Last EDR Contact: 03/22/04

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

Source: EPA

Telephone: 703-413-0223

As of February 1995, CERCLIS sites designated "No Further Remedial Action Planned" (NFRAP) have been removed from CERCLIS. NFRAP sites may be sites where, following an initial investigation, no contamination was found, contamination was removed quickly without the need for the site to be placed on the NPL, or the contamination was not serious enough to require Federal Superfund action or NPL consideration. EPA has removed approximately 25,000 NFRAP sites to lift the unintended barriers to the redevelopment of these properties and has archived them as historical records so EPA does not needlessly repeat the investigations in the future. This policy change is part of the EPA's Brownfields Redevelopment Program to help cities, states, private investors and affected citizens to promote economic redevelopment of unproductive urban sites.

Date of Government Version: 02/26/04 Date Made Active at EDR: 04/02/04 Database Release Frequency: Quarterly Date of Data Arrival at EDR: 03/22/04 Elapsed ASTM days: 11 Date of Last EDR Contact: 03/22/04

CORRACTS: Corrective Action Report

Source: EPA

Telephone: 800-424-9346

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 03/15/04 Date Made Active at EDR: 04/15/04

Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 03/25/04

Elapsed ASTM days: 21

Date of Last EDR Contact: 03/08/04

RCRIS: Resource Conservation and Recovery Information System

Source: EPA

Telephone: 800-424-9346

Resource Conservation and Recovery Information System. RCRIS includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs): generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month. Small quantity generators (SQGs): generate between 100 kg and 1,000 kg of hazardous waste per month. Large quantity generators (LQGs): generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month. Transporters are individuals or entities that move hazardous waste from the generator off-site to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 04/13/04 Date Made Active at EDR: 05/13/04 Database Release Frequency: Varies

Date of Data Arrival at EDR: 04/20/04 Elapsed ASTM days: 23 Date of Last EDR Contact: 04/20/04

ERNS: Emergency Response Notification System

Source: National Response Center, United States Coast Guard

Telephone: 202-260-2342

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/31/03 Date Made Active at EDR: 03/12/04 Database Release Frequency: Annually Date of Data Arrival at EDR: 01/26/04 Elapsed ASTM days: 46 Date of Last EDR Contact: 04/26/04

#### FEDERAL ASTM SUPPLEMENTAL RECORDS

**BRS:** Biennial Reporting System

Source: EPA/NTIS Telephone: 800-424-9346

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG)

and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/01/01 Database Release Frequency: Biennially Date of Last EDR Contact: 03/16/04 Date of Next Scheduled EDR Contact: 06/14/04

CONSENT: Superfund (CERCLA) Consent Decrees

Source: EPA Regional Offices

Telephone: Varies

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: N/A Database Release Frequency: Varies Date of Last EDR Contact: N/A Date of Next Scheduled EDR Contact: N/A

ROD: Records Of Decision

Source: EPA

Telephone: 703-416-0223

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical

and health information to aid in the cleanup.

Date of Government Version: 01/09/04

Database Release Frequency: Annually

Date of Last EDR Contact: 04/05/04

Date of Next Scheduled EDR Contact: 07/05/04

**DELISTED NPL:** National Priority List Deletions

Source: EPA Telephone: N/A

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the

NPL where no further response is appropriate.

Date of Government Version: 04/27/04
Database Release Frequency: Quarterly

Date of Last EDR Contact: 05/04/04

Date of Next Scheduled EDR Contact: 08/02/04

FINDS: Facility Index System/Facility Identification Initiative Program Summary Report

Source: EPA Telephone: N/A

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 04/08/04 Database Release Frequency: Quarterly Date of Last EDR Contact: 04/05/04
Date of Next Scheduled EDR Contact: 07/05/04

HMIRS: Hazardous Materials Information Reporting System

Source: U.S. Department of Transportation

Telephone: 202-366-4555

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 02/17/04 Database Release Frequency: Annually Date of Last EDR Contact: 04/20/04

Date of Next Scheduled EDR Contact: 07/19/04

MLTS: Material Licensing Tracking System Source: Nuclear Regulatory Commission

Telephone: 301-415-7169

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 01/15/04 Database Release Frequency: Quarterly Date of Last EDR Contact: 04/05/04 Date of Next Scheduled EDR Contact: 07/05/04

MINES: Mines Master Index File

Source: Department of Labor, Mine Safety and Health Administration

Telephone: 303-231-5959

Date of Government Version: 03/05/04 Database Release Frequency: Semi-Annually Date of Last EDR Contact: 03/30/04
Date of Next Scheduled EDR Contact: 06/28/04

NPL LIENS: Federal Superfund Liens

Source: EPA

Telephone: 202-564-4267

Federal Superfund Liens. Under the authority granted the USEPA by the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner receives notification of potential liability.

USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/91

Database Release Frequency: No Update Planned

Date of Last EDR Contact: 03/12/04 Date of Next Scheduled EDR Contact: 05/24/04

PADS: PCB Activity Database System

Source: EPA

Telephone: 202-564-3887

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers

of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 12/30/03

Database Release Frequency: Annually

Date of Last EDR Contact: 05/12/04

Date of Next Scheduled EDR Contact: 08/09/04

DOD: Department of Defense Sites

Source: USGS

Telephone: 703-692-8801

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 10/01/03

Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 02/02/04 Date of Next Scheduled EDR Contact: 05/10/04

STORMWATER: Storm Water General Permits Source: Environmental Protection Agency

Telephone: 202 564-0746

A listing of all facilities with Storm Water General Permits.

Date of Government Version: N/A Database Release Frequency: Quarterly Date of Last EDR Contact: N/A Date of Next Scheduled EDR Contact: N/A

INDIAN RESERV: Indian Reservations

Source: USGS

Telephone: 202-208-3710

This map layer portrays Indian administered lands of the United States that have any area equal to or greater

than 640 acres.

Date of Government Version: 10/01/03 Database Release Frequency: Semi-Annually Date of Last EDR Contact: 02/02/04

Date of Next Scheduled EDR Contact: 05/10/04

US BROWNFIELDS: A Listing of Brownfields Sites

Source: Environmental Protection Agency

Telephone: 202-566-2777

Included in the listing are brownfields properties addresses by Cooperative Agreement Recipients and brownfields properties addressed by Targeted Brownfields Assessments. Targeted Brownfields Assessments-EPA's Targeted Brownfields Assessments (TBA) program is designed to help states, tribes, and municipalities-especially those without EPA Brownfields Assessment Demonstration Pilots-minimize the uncertainties of contamination often associated with brownfields. Under the TBA program, EPA provides funding and/or technical assistance for environmental assessments at brownfields sites throughout the country. Targeted Brownfields Assessments supplement and work with other efforts under EPA's Brownfields Initiative to promote cleanup and redevelopment of brownfields. Cooperative Agreement Recipients-States, political subdivisions, territories, and Indian tribes become BCRLF cooperative agreement recipients when they enter into BCRLF cooperative agreements with the U.S. EPA. EPA selects BCRLF cooperative agreement recipients based on a proposal and application process. BCRLF cooperative agreement recipients must use EPA funds provided through BCRLF cooperative agreement for specified brownfields-related cleanup activities.

Date of Government Version: 04/14/04 Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 03/15/04 Date of Next Scheduled EDR Contact: 06/14/04

RMP: Risk Management Plans

Source: Environmental Protection Agency

Telephone: 202-564-8600

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: N/A Database Release Frequency: N/A Date of Last EDR Contact: N/A Date of Next Scheduled EDR Contact: N/A

FUDS: Formerly Used Defense Sites Source: U.S. Army Corps of Engineers

Telephone: 202-528-4285

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 10/01/03 Database Release Frequency: Varies

Date of Last EDR Contact: 04/26/04 Date of Next Scheduled EDR Contact: 07/05/04

RAATS: RCRA Administrative Action Tracking System

Source: EPA

Telephone: 202-564-4104

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/95

Database Release Frequency: No Update Planned

Date of Last EDR Contact: 03/08/04 Date of Next Scheduled EDR Contact: 06/07/04

TRIS: Toxic Chemical Release Inventory System

Source: EPA

Telephone: 202-566-0250

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/01 Database Release Frequency: Annually Date of Last EDR Contact: 03/23/04 Date of Next Scheduled EDR Contact: 06/21/04

TSCA: Toxic Substances Control Act

Source: EPA

Telephone: 202-260-5521

. Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant

Date of Government Version: 12/31/02 Database Release Frequency: Every 4 Years Date of Last EDR Contact: 03/05/04 Date of Next Scheduled EDR Contact: 06/07/04

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

Source: EPA

Telephone: 202-564-2501

Date of Government Version: 04/13/04 Database Release Frequency: Quarterly Date of Last EDR Contact: 03/22/04 Date of Next Scheduled EDR Contact: 06/21/04

SSTS: Section 7 Tracking Systems

Source: EPA

Telephone: 202-564-5008

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/01 Database Release Frequency: Annually Date of Last EDR Contact: 04/19/04 Date of Next Scheduled EDR Contact: 07/19/04

FTTS: FIFRA/TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act) Source: EPA/Office of Prevention, Pesticides and Toxic Substances

Telephone: 202-564-2501

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/13/04 Database Release Frequency: Quarterly Date of Last EDR Contact: 03/22/04 Date of Next Scheduled EDR Contact: 06/21/04

### STATE OF WEST VIRGINIA ASTM STANDARD RECORDS

SHWS: This state does not maintain a SHWS list. See the Federal CERCLIS list and Federal NPL list.

Source: EPA

Telephone: 703-413-0223

State Hazardous Waste Sites. State hazardous waste site records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. Available information varies by state.

Date of Government Version: N/A Date Made Active at EDR: N/A Database Release Frequency: N/A Date of Data Arrival at EDR: N/A Elapsed ASTM days: N/A Date of Last EDR Contact: 03/22/04

SWF/LF: List of M.S.W. Landfills/Transfer Station Listing

Source: Division of Environmental Protection

Telephone: 304-558-6350

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal

Date of Government Version: 10/03/02 Date Made Active at EDR: 11/25/02 Database Release Frequency: Varies

Date of Data Arrival at EDR: 10/29/02 Elapsed ASTM days: 27 Date of Last EDR Contact: 04/27/04

LUST: Leaking Underground Storage Tanks Source: Division of Environmental Protection

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 12/23/03 Date Made Active at EDR: 01/27/04 Database Release Frequency: Semi-Annually Date of Data Arrival at EDR: 01/15/04 Elapsed ASTM days: 12 Date of Last EDR Contact: 04/02/04

UST: Underground Storage Tank Database Source: Division of Environmental Protection

Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 04/13/04 Date Made Active at EDR: 04/28/04 Database Release Frequency: Annually Date of Data Arrival at EDR: 04/13/04 Elapsed ASTM days: 15 Date of Last EDR Contact: 03/30/04

VCP: Voluntary Remediation Sites

Source: Department of Environmental Protection

Telephone: 304-558-2745

Sites involved in the Voluntary Remediation Program.

Date of Government Version: 06/12/02 Date Made Active at EDR: 07/09/02 Database Release Frequency: Semi-Annually Date of Data Arrival at EDR: 06/13/02 Elapsed ASTM days: 26 Date of Last EDR Contact: 03/23/04

### STATE OF WEST VIRGINIA ASTM SUPPLEMENTAL RECORDS

SPILLS: Spills Listing

Source: Office of Emergency Services

A listing of spills and releases reported to the Office of Emergency Services, they do not include any TRI information.

Date of Government Version: 03/10/04 Database Release Frequency: Varies

Date of Last EDR Contact: 03/10/04 Date of Next Scheduled EDR Contact: N/A

#### EDR PROPRIETARY HISTORICAL DATABASES

Former Manufactured Gas (Coal Gas) Sites: The existence and location of Coal Gas sites is provided exclusively to EDR by Real Property Scan, Inc. @Copyright 1993 Real Property Scan, Inc. For a technical description of the types of hazards which may be found at such sites, contact your EDR customer service representative.

#### Disclaimer Provided by Real Property Scan, Inc.

The information contained in this report has predominantly been obtained from publicly available sources produced by entities other than Real Property Scan. While reasonable steps have been taken to insure the accuracy of this report, Real Property Scan does not guarantee the accuracy of this report. Any liability on the part of Real Property Scan is strictly limited to a refund of the amount paid. No claim is made for the actual existence of toxins at any site. This report does not constitute a legal opinion.

#### **BROWNFIELDS DATABASES**

VCP: Voluntary Remediation Sites

Source: Department of Environmental Protection

Telephone: 304-558-2745

Sites involved in the Voluntary Remediation Program.

Date of Government Version: 06/12/02 Database Release Frequency: Semi-Annually Date of Last EDR Contact: 03/23/04 Date of Next Scheduled EDR Contact: 06/21/04

US BROWNFIELDS: A Listing of Brownfields Sites

Source: Environmental Protection Agency

Telephone: 202-566-2777

Included in the listing are brownfields properties addresses by Cooperative Agreement Recipients and brownfields properties addressed by Targeted Brownfields Assessments. Targeted Brownfields Assessments-EPA's Targeted Brownfields Assessments (TBA) program is designed to help states, tribes, and municipalities--especially those without EPA Brownfields Assessment Demonstration Pilots-minimize the uncertainties of contamination often associated with brownfields. Under the TBA program, EPA provides funding and/or technical assistance for environmental assessments at brownfields sites throughout the country. Targeted Brownfields Assessments supplement and work with other efforts under EPA's Brownfields Initiative to promote cleanup and redevelopment of brownfields. Cooperative Agreement Recipients-States, political subdivisions, territories, and Indian tribes become BCRLF cooperative agreement recipients when they enter into BCRLF cooperative agreements with the U.S. EPA. EPA selects BCRLF cooperative agreement recipients based on a proposal and application process. BCRLF cooperative agreement recipients must use EPA funds provided through BCRLF cooperative agreement for specified brownfields-related cleanup activities.

Date of Government Version: N/A

Database Release Frequency: Semi-Annually

Date of Last EDR Contact: N/A Date of Next Scheduled EDR Contact: N/A

#### OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

Oil/Gas Pipelines: This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines.

#### Electric Power Transmission Line Data

Source: PennWell Corporation

Telephone: (800) 823-6277 This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

#### AHA Hospitals:

Source: American Hospital Association, Inc.

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

#### Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services

Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

#### **Nursing Homes**

Source: National Institutes of Health

Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

#### **Public Schools**

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

#### **Private Schools**

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

#### Daycare Centers: Day Care Center List Source: Office of Social Services

Telephone: 304-558-7980

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 from the U.S. Fish and Wildlife Service.

#### STREET AND ADDRESS INFORMATION

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# GEOCHECK®- PHYSICAL SETTING SOURCE ADDENDUM

#### TARGET PROPERTY ADDRESS

LONGFIELD SUBDIVISION LONGFIELD SUBDIVISION SHENANDOAH JUNCTION, WV 25442

#### TARGET PROPERTY COORDINATES

Latitude (North):

39.365101 - 39' 21' 54.4"

Longitude (West):

77.788696 - 77° 47' 19.3"

Universal Tranverse Mercator:

Zone 18

UTM X (Meters): UTM Y (Meters): 259742.5 4360794.5

Elevation:

479 ft, above sea level

EDR's GeoCheck Physical Setting Source Addendum has been developed to assist the environmental professional with the collection of physical setting source information in accordance with ASTM 1527-00, Section 7.2.3. Section 7.2.3 requires that a current USGS 7.5 Minute Topographic Map (or equivalent, such as the USGS Digital Elevation Model) be reviewed. It also requires that one or more additional physical setting sources be sought when (1) conditions have been identified in which hazardous substances or petroleum products are likely to migrate to or from the property, and (2) more information than is provided in the current USGS 7.5 Minute Topographic Map (or equivalent) is generally obtained, pursuant to local good commercial or customary practice, to assess the impact of migration of recognized environmental conditions in connection with the property. Such additional physical setting sources generally include information about the topographic, hydrologic, hydrogeologic, and geologic characteristics of a site, and wells in the area.

Assessment of the impact of contaminant migration generally has two principle investigative components:

- 1. Groundwater flow direction, and
- 2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata. EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

#### GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

#### TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

#### TARGET PROPERTY TOPOGRAPHY

USGS Topographic Map: General Topographic Gradient:

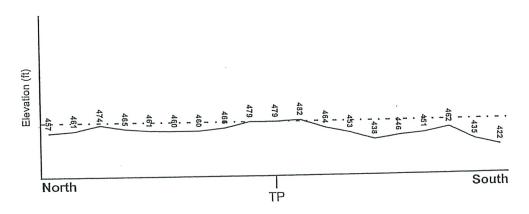
Source:

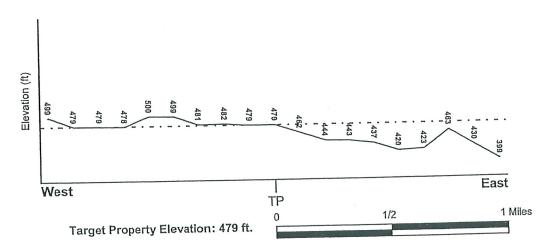
39077-C7 CHARLES TOWN, WV VA MD

General East

USGS 7.5 min quad index

#### SURROUNDING TOPOGRAPHY: ELEVATION PROFILES





Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

#### HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

FEMA Flood

Target Property County

Electronic Data

JEFFERSON, WV

Not Available

Flood Plain Panel at Target Property:

Not Reported

Additional Panels in search area:

Not Reported

NATIONAL WETLAND INVENTORY

**NWI Electronic** 

NWI Quad at Target Property

Data Coverage

**CHARLES TOWN** 

YES - refer to the Overview Map and Detail Map

#### HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

#### **AQUIFLOW®**

Search Radius: 1.000 Mile.

Not Reported

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID

LOCATION FROM TP

GENERAL DIRECTION GROUNDWATER FLOW

#### GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

### GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

#### ROCK STRATIGRAPHIC UNIT

GEOLOGIC AGE IDENTIFICATION

Era:

Paleozoic

Category: Stratified Sequence

System: Series:

Cambrian Cambrian

Code:

(decoded above as Era, System & Series)

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

## DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

Soil Component Name:

**HAGERSTOWN** 

Soil Surface Texture:

silt loam

Hydrologic Group:

Class B - Moderate infiltration rates. Deep and moderately deep,

moderately well and well drained soils with moderately coarse

textures.

Soil Drainage Class:

Well drained. Soils have intermediate water holding capacity. Depth to

water table is more than 6 feet.

Hydric Status: Soil does not meet the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel: MODERATE

Depth to Bedrock Min:

> 60 inches

Depth to Bedrock Max:

> 80 inches

			Soil Layer	Information		· . I	
	Bour	ndary		Classification		,	
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	Permeability Rate (in/hr)	Soil Reaction (pH)
1 .	0 inches	8 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 6.00 Min: 0.60	Max: 6.50 Min: 4.50
2	8 inches	20 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Min: 0.60	Min: 4.50
3	20 inches	72 inches	clay	Solls. Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 2.00 Min: 0.60	Max: 7.30 Min: 5.10

#### OTHER SOIL TYPES IN AREA

Based on Soil Conservation Service STATSGO data, the following additional subordinant soil types may appear within the general area of target property.

Soil Surface Textures: silty clay loam

Surficial Soil Types: silty clay loam

Shallow Soil Types:

silt loam

Deeper Soil Types:

channery - silt loam

stratified

unweathered bedrock

### ADDITIONAL ENVIRONMENTAL RECORD SOURCES

According to ASTM E 1527-00, Section 7.2.2, "one or more additional state or local sources of environmental records may be checked, in the discretion of the environmental professional, to enhance and supplement federal and state sources... Factors to consider in determining which local or additional state records, if any, should be checked include (1) whether they are reasonably ascertainable, (2) whether they are sufficiently useful, accurate, and complete in light of the objective of the records review (see 7.1.1), and (3) whether they are obtained, pursuant to local, good commercial or customary practice." One of the record sources listed in Section 7.2.2 is water well information. Water well information can be used to assist the environmental professional in assessing sources that may impact groundwater flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

#### WELL SEARCH DISTANCE INFORMATION

DATABASE

SEARCH DISTANCE (miles)

Federal USGS

1 000

Federal FRDS PWS

Nearest PWS within 1 mile

State Database

1.000

#### FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
1 2	USGS1151822 USGS1151834	1/4 - 1/2 Mile South
3	USGS1151838	1/2 - 1 Mile ENE 1/2 - 1 Mile NNE
4 5	USGS1151909 USGS1151887	1/2 - 1 Mile ESE
6	USGS1151881	1/2 - 1 Mile SE

#### FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID

WELL ID

LOCATION FROM TP

No PWS System Found

Note: PWS System location is not always the same as well location.

#### STATE DATABASE WELL INFORMATION

MAP ID

WELL ID

LOCATION FROM TP

No Wells Found

PHYSICAL SETTING SOURCE MAP - 01200693.1r 1 Miles 1/4 County Boundary Major Roads Groundwater Flow Direction (61) Indeterminate Groundwater Flow at Location Contour Lines Earthquake epicenter, Richter 5 or greater GV Groundwater Flow Varies at Location Water Wells ₩ Public Water Supply Wells **P** Cluster of Multiple Icons

TARGET PROPERTY: ADDRESS: CITY/STATE/ZIP:

LAT/LONG:

Longfield Subdivision Longfield Subdivision Shenandoah Junction WV 25442 39.3651/77.7887

CUSTOMER: CONTACT: INQUIRY#:

DATE:

Terra Development Services Pamela Andes 01200693.1r

May 26, 2004 7:11 pm

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction EDR ID Number Distance Database Elevation USGS1151822 FED USGS South 1/4 - 1/2 Mile Lower 392134077472201 Site ID: USGS Agency: Jef-0342 Site Name: 39.35954 Dec. Latitude: -77.78916 Dec. Longitude: Coord Sys: NAD83 WV State: Jefferson County County: 470.00 Altitude: 02070004 Hydrologic code: Undulating Topographic: Ground-water other than Spring Site Type: Not Reported Inven Date: 19600101 Const Date: Single well, other than collector or Ranney type Well Type: Not Reported Primary Aquifer: Not Reported Aquifer type: Well depth: 180 owner Source: Not Reported Hole depth: Not Reported Project no: Ground-water levels, Number of Measurements: 0 USGS1151834 **FED USGS** WNW 1/2 - 1 Mile Higher 392210077480001 Site ID: USGS Agency: Site Name: Jef-0359 39.36954 Dec. Latitude: -77,79972 Dec. Longitude: NAD83 Coord Sys: WV State: Jefferson County County: 490.00 Altitude: 02070004 Hydrologic code: Hillside (slope) Topographic: Ground-water other than Spring Site Type: Not Reported Inven Date: Not Reported Const Date: Single well, other than collector or Ranney type Well Type: Primary Aquifer: Not Reported Not Reported Aquifer type: Well depth: 220 Not Reported Source: Not Reported Hole depth: Not Reported Project no: Ground-water levels, Number of Measurements: 0 USGS1151838 **FED USGS** ENE

1/2 - 1 Mile Lower

TC01200693.1r Page A-8

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Agency:

USGS

Site ID:

392214077463401

Site Name:

Jef-0361

Dec. Latitude: Dec. Longitude: 39.37066 -77.77583

Coord Sys: State:

NAD83 WV

County:

Jefferson County 425.00

Altitude: Hydrologic code: Topographic:

02070004 Hillside (slope)

Site Type:

Ground-water other than Spring

Const Date:

19250101

Inven Date:

Not Reported

Well Type: Primary Aquifer: Single well, other than collector or Ranney type Not Reported

Aquifer type:

Not Reported

Well depth: Hole depth:

120 Not Reported

Source:

Not Reported

Project no:

Not Reported

Ground-water levels, Number of Measurements: 0

4 NNE

1/2 - 1 Mile Lower

Site ID:

392231077464901

FED USGS

Agency: Site Name: USGS Jef-0372 39.37538

Dec. Latitude: Dec. Longitude: Coord Sys:

-77.77999 NAD83 WV

State: County:

Jefferson County

Altitude: Hydrologic code: 460.00 02070004

Topographic:

Hilltop

Site Type: Const Date: Ground-water other than Spring

19660101

Inven Date: Single well, other than collector or Ranney type

Well Type: Primary Aquifer:

Not Reported Not Reported

Aquifer type: Well depth: Hole depth:

135

Not Reported

Source:

owner

Not Reported

Project no:

Not Reported

Ground-water levels, Number of Measurements: 0

5 ESE 1/2 - 1 Mile Lower

**FED USGS** 

USGS1151887

USGS1151909

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Agency:

USGS

Site ID:

392128077462901

Site Name: Dec. Latitude: Jef-0337 39.35788 -77.77444

Dec. Longitude: Coord Sys:

NAD83 WV

State: County:

Jefferson County

Altitude: Hydrologic code: 465.00 02070004

Topographic: Site Type:

Hilltop

Const Date:

Ground-water other than Spring

19680101

Inven Date: Single well, other than collector or Ranney type

Well Type: Primary Aquifer: Aquifer type: Well depth:

**377WSBR** Not Reported 120.00

Not Reported Hole depth: Not Reported Project no:

Not Reported

owner

Ground-water levels, Number of Measurements: 0

1/2 - 1 Mile

Lower

USGS

Site ID:

Source:

USGS1151881 **FED USGS** 

Agency:

Jef-0334 Site Name: 39.35593 Dec. Latitude: -77.77638 NAD83

Dec. Longitude: Coord Sys: State:

wv Jefferson County County: 445.00 Altitude: 02070004

Hydrologic code: Topographic:

Hillside (slope)

Site Type:

Ground-water other than Spring

Const Date: Well Type:

Inven Date: 19200101 Single well, other than collector or Ranney type

Primary Aquifer:

Not Reported Not Reported

Aquifer type: Well depth: Hole depth:

Project no:

82.0

Not Reported Not Reported

Source:

Not Reported

Not Reported

392121077463601

Ground-water levels, Number of Measurements: 0

# GEOCHECK®-PHYSICAL SETTING SOURCE MAP FINDINGS RADON

### AREA RADON INFORMATION

EPA Region 3 Statistical Summary Readings for Zip Code: 25442

Number of sites tested: 25.

Maximum Radon Level: 19.0 pCi/L. Minimum Radon Level: 1.2 pCi/L.

pCi/L	pCi/L	pCi/L	pCi/L	pCi/L	>100
<4	4-10	10-20	20-50	50-100	
7 (28.00%)	13 (52.00%)	5 (20.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

#### TOPOGRAPHIC INFORMATION

#### USGS 7.5' Digital Elevation Model (DEM)

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002. 7.5-Minute DEMs correspond to the USGS

1:24,000- and 1:25,000-scale topographic quadrangle maps.

#### HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 from the U.S. Fish and Wildlife Service.

#### HYDROGEOLOGIC INFORMATION

#### AQUIFLOWR Information System

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

#### GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit

Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Services

The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

#### ADDITIONAL ENVIRONMENTAL RECORD SOURCES

#### **FEDERAL WATER WELLS**

PWS: Public Water Systems

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)

This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

#### STATE RECORDS

## West Virginia Water Well Information

Source: Bureau of Public Health Telephone: 304-558-6765

#### RADON

#### Area Radon Information

Source: USGS

Telephone: 703-356-4020

The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

#### **EPA Radon Zones**

Source: EPA

Telephone: 703-356-4020

Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor

## EPA Region 3 Statistical Summary Readings

Source: Region 3 EPA Telephone: 215-814-2082

Radon readings for Delaware, D.C., Maryland, Pennsylvania, Virginia and West Virginia.

#### OTHER

Airport Landing Facilities: Private and public use landing facilities

Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater

Source: Department of Commerce, National Oceanic and Atmospheric Administration

APPENDIX F: TRAFFIC ANALYSIS WITH WEST VIRGINIA DEPARTMENT OF HIGHWAYS TRAFFIC DATA MAP



Corporate Office:
Baltimore, MD
Suite H
9900 Franklin Square Drive
Baltimore, Maryland 21236
410.931.6601
1.800.563.8411

Delmarva Region Sulte 102 11202 Racelrack Road Ocean Pinas, Maryland 21811 410.208.4190 ax: 410.208.4192 1,800.396.4491

Virginia 7853 Coppermine Drive Manassas, Virginia 20109 703.365.8340 fax: 703.365.8341 1.988.365.8340 February 19, 2007

Mr. Matt Powell Potomac Professional Services, LLC 36 Bakerton Road Harpers Ferry, West Virginia 25425

RE:

Longfield Estates

Jefferson County, WV

Job#: Pending

Dear Mr. Powell:

At your request the Traffic Group, Inc has reviewed the proposed Longfield Estates subdivision located on approximately 266 acres, 650 feet south of the intersection of Route 230 (Sheperdstown Pike) and Route 33 (Uvilla Road) in Jefferson County, WV. The site is proposed to be developed with a total of 31 single family residential homes. The development will feature an equestrian theme and will provide horse amenities on site included but not limited to a training track, training facility, riding facility, horse rehabilitation facilities, boarding paddocks, and a barn. Initially, the facilities will be constructed for private use but may be converted to commercial/public use in the future.

Based on information contained in Jefferson County's Subdivision Ordinance, a total of 8.0 trips per unit are projected for each single family detached dwelling unit. Therefore, the subject site is projected to generate a total of 248 daily trips. During the peak hour 0.8 trips are projected per dwelling unit corresponding to a total of 25 peak hour trips.

The equestrian uses on site are not quantified in the trip generation figures from the Subdivision Ordinance. Similarly, the Institute of Transportation Engineers (ITE) <u>Trip Generation</u> 7<sup>th</sup> Edition does not contain projected trip information for these uses.

Horse training activity typically takes place during the early morning hours, significantly before the morning peak hour, it is expected to be completed prior to the evening peak hour. Therefore it is our opinion that the proposed equestrian uses on-site will have a minimal affect on peak hour trip generation.

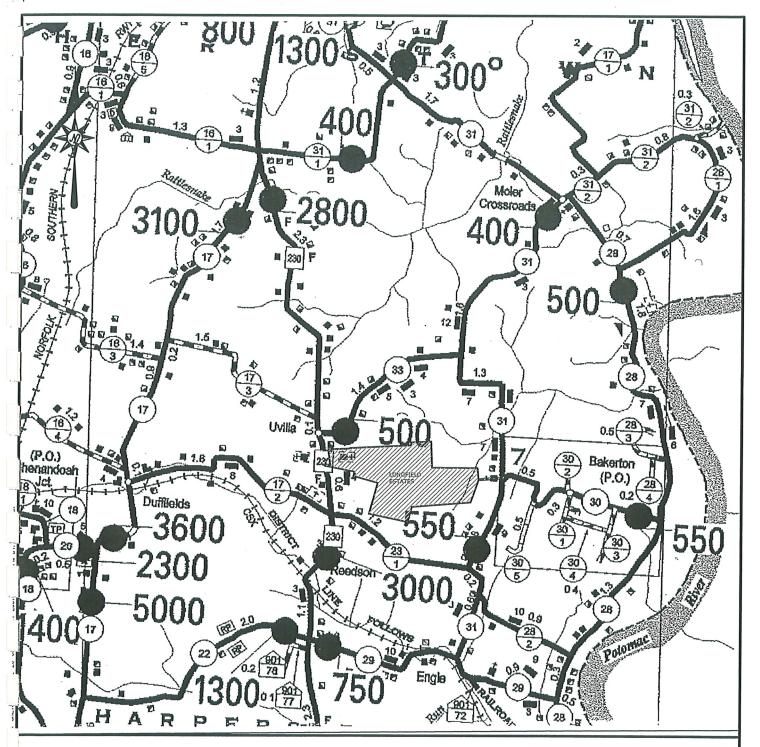
Should you have any questions regarding this information please do not hesitate to contact us,

Sincerely,

Carl R. Wilson, Jr. Project Manager

Carl R Wilson for

CRW/jew



SITE LOCATION MAP

# WEST VIRGINA DEPARTMENT OF HIGHWAYS TRAFFIC DATA MAP 2005



5000 Ritter Road, Suite 203 Mechanicsburg, PA 17055

> Tel (717) 691-8050 Fax (717) 691-8055

Mechanicsburg, PA - Ebensburg, PA King of Prussia, PA -Hagerstown, MD

www.CEDG.net

# LONGFIELD ESTATES HARPESRSFERRY DISTRICT

JEFFERSON COUNTY, WEST VIRGINIA

SCALE: 1" = 1"=4000'

APPENDIX G: MARKET SURVEYS AND FEASABLITITY STUDY

## Longfield Estates - Community Impact Statement - revised feasibility

## 18. Market Surveys and Feasibility Studies

A current market analysis utilizing the information available through the MRIS (Metropolitan Regional Information Systems, Inc.) and the local real estate community indicates that there is a great need for building lots between 3 and 5 acres.

- Our research shows that there are currently approximately 10 parcels on the market between 3 and 5 acres.
- Of these 10 parcels, 1 is under contract, which leaves only 9 lots available to be purchased.
- □ There have been approximately 23 parcels sold since January 1, 2004.
- At the current sales rate (23 + 1 = 24 lots sold/under contract over 12 months), there have been 2 three to five acre lots sold/under contract per month.

We have spoken with many local real estate agents that have indicated the need for the 3 to 5 acre tracts is greater than the current supply. It is our belief that the average sale per month would actually increase if there were more lots available from which to choose.

#### Lot-Land



#### Metropolitan Regional Information Systems, Inc.

#### Gallery - Agent (4 UP)

Set Date:

**Total Taxes:** 

Status: ACTIVE

Page: 1

Date: 26-Jan-2005

List Price: \$80,000

Time: 12:12 Old Map: NA



38 LEISURE WAY, SHEPHERDSTOWN, WV 25446 Status: ACTIVE

MLS#: JF4693824

Contr Date:

Adv. Sub: LEISURE ACRES Tax ID#: N/A LS-SF/Acre: 139,392/3.20

Lot Description: Present Use: Residential

H Fuel/C Fuel: None/ Water Front/View/Access: // List/Upd: 05-Dec-2003/9-Nov-2004 Ownship: Fee Simple, Sale

Sold/Rented:

HOA: Tax Year: Road Frontage:

Topography: Dev Status: Finished Lots Wtr/Swr: None/None

Dock Conveys: DOMM/DOMP: 382 / 382 Subsidy: TBM Map: NA Area: N/A

Building Sites/Lots: /

Vacation: No

List Price: \$199,000

TBM Map: 2873C4

Building Sites/Lots: 1/

List Price; \$450,000

Building Sites/Lots: /

List Price: \$248,000

Building Sites/Lots: /

Old Map: N/A

TBM Map: N/A

Subsidy:

Area: N/A

Old Map: N/A

TBM Map: N/A

Subsidy:

Area: N/A

Old Map: N/A

Subsidy:

Area: N/A

Remarks: Call ERA for a complete list and plat of the other lots available in this over access community. Seller Will Not pay for West Virginia transfer stamps. This will be a cost to the buyer.

Directions: FROM RT 45W, RIGHT AT 4-WAY STOP IN SHEPHERDSTOWN, BEAR LEFT ON SHEPHERD GRADE RD., FOLLOW TO RIGHT INTO RIVERFIELD AT . LEISURE ACRES.



MOUNTAINSIDE COURT, HARPERS FERRY, WV 25425

MLS#: JF4825817 Contr Date:

Set Date:

Adv. Sub: JOHN BROWN FARM

Tax ID#: 1902021D00560000

LS-SF/Acre: 205,168/4.71

Lot Description: Trees/Wooded, Water Access, Water Fron

Present Use: Other

H Fuel/C Fuel: None/None

Water Front/View/Access: Yes/Yes/Yes List/Upd: 30-Apr-2004/26-Nov-2004

Ownship: Fee Simple, Sale

Sold/Rented:

HOA:

Tax Year:

Road Frontage: 270

Topography: Downhill, Level

Dev Status: Plat Approved, Plat Recorded, Utilities at Site

Wtr/Swr: Well/None

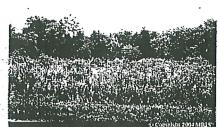
Dock Conveys: No DOMM/DOMP: 236 / 236 Vacation: No

Remarks: Spectacular panoramic mountain & Shenandoah River Views great building site cleared & ready. Jeff. Co. Health Dept. approved well. \$100 for

buyer to reinstate approved septic paperwork. Very private 385' frontage recreation area. Electric, phone & cable at site. Only 4 miles from the Virginia line. Directions: RT. 9 E. OF CHARLES TOWN, APPROX. 5 MILES TO RIGHT ONTO MISSION ROAD, GO 8/10 MILE TO SECOND ENTRANCE ONTO MOUNTAINSIDE RD., AT TOP OF HILL, TURN LEFT, PROPERTY ON RIGHT, SEE SIGN. . .

Set Date:

**Total Taxes:** 



HALLTOWN ROAD, HARPERS FERRY, WV 25425 Status: ACTIVE

MLS#: JF4860178 Contr Date:

Adv. Sub: NONE

Tax ID#: 00000000000000000

LS-SF/Acre: 183,823/4.22 Lot Description:

Present Use: Other H Fuel/C Fuel: None/None Water Front/View/Access: //

List/Upd: 28-May-2004/22-Nov-2004 Listing Co: RE/MAX 1ST REALTY

Ownship: Fee Simple, Sale

Sold/Rented: . . HOA:

Tax Year:

Road Frontage:

Topography: Dev Status: Raw Land

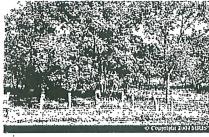
Wtr/Swr: None/None

Dock Conveys: DOMM/DOMP: 233 / 233

Vacation: No

Remarks: Public water & sewer not yet at site.

Directions: RT. 340, NORTH, TURN LEFT ONTO HALLTOWN ROAD, PROPERTY ON LEFT.



KABLETOWN & MT. HAMMOND RD, CHARLES TOWN, WV 25414 Ownship: Fee Simple, Sale Status: ACTIVE

Set Date:

MLS#: JF4926557 Contr Date:

Adv. Sub: NONE Tax ID#: N/A

LS-SF/Acre: 176,418/4.05

Lot Description: Present Use: Other H Fuel/C Fuel: None/

Water Front/View/Access: // List/Upd: 26-Jul-2004/31-Jul-2004

Listing Co: ERA LIBERTY REALTY

HOA: \$0 Tax Year: Total Taxes:

Road Frontage:

Topography:

Sold/Rented:

Dev Status: Plat Approved, Plat Recorded

Wtr/Swr: Other/Other

Dock Conveys:

DOMM/DOMP: 184 / 184

Vacation: No

Remarks: Lovely building site waiting for your dream home!

Directions: RT. 9 TO RIGHT KABLETOWN ROAD, GO ABOUT 2 MILES TO LOT ON LEFT.

#### Metropolitan Regional Information Systems, Inc.

#### Gallery - Agent (4 UP)

Page: 2

Subsidy:

Area: N/A

Date: 26-Jan-2005

Time: 12:12 List Price: \$99,900 Old Map: 000

TBM Map: 000

Building Sites/Lots: /

35 ELLA DR, SHEPHERDSTOWN, WV 25443

MLS#: JF4960641 Contr Date:

Status: ACTIVE Set Date:

Adv. Sub: LEISURE ACRES Tax ID#: 1909000200310000

Total Taxes: \$369

LS-SF/Acre: 140,263/3.22 Lot Description: Cleared, Trees/Wooded

Present Use: Residential H Fuel/C Fuel: None/

Water Front/View/Access: // List/Upd: 30-Aug-2004/3-Jan-2005

Listing Co: LONG & FOSTER REAL ESTATE, INC

Ownship: Fee Simple, Sale Sold/Rented:

HOA: \$17 Tax Year: 2004 Road Frontage:

Topography: Dev Status: Plat Approved, Plat Recorded

Wtr/Swr: None/Septic

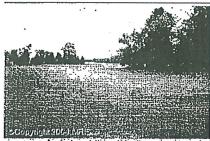
Dock Conveys:

DOMM/DOMP: 149 / 149

Vacation: No

Remarks: Gorgeous 3.22 acre Residential Building lot just outside Historic Shepherdstown, Perk is on file at Health Dept. Minimum SF to build is 1800 single story and 2200 two story. Approx half wooded.

Directions: L ON GRADE RD IN SHEPHERDSTOWN 4 MILES TO R INTO SD, AT LEISURE ACRES L ON ELLA TO SIGN ON LEFT ELLA DRIVE



LOT 12 LEISURE WAY, SHEPHERDSTOWN, WV 25443 Status: ACTIVE

Set Date:

**Total Taxes:** 

Set Date: 15-Feb-2005

Total Taxes:

MLS#: JF4976439

Contr Date:

Adv. Sub: LEISURE ACRES. Tax ID#: 1909002002700000

LS-SF/Acre: 135,907/3.12

Lot Description: Present Use: Residential

H Fuel/C Fuel; None/ Water Front/View/Access: // List/Upd: 14-Sep-2004/3-Jan=2005

Listing Co: GREENTREE ASSOCIATES OF SHEPHE

Ownship: Fee Simple, Sale Sold/Rented:

HOA: . . Tax Year:

Road Frontage: Topography:

Dev Status: Plat Approved Wtr/Swr: None/None Dock Conveys:

DOMM/DOMP: 132-/ 132

List Price: \$169,900 ·

Old Map: 0000 Subsidy:

TBM Map: 0000 Area: N/A

List Price: \$169.900

Building Sites/Lots: /

List Price: \$189,500

Old Map: N/A

Subsidy: TBM Map: N/A

Area: N/A

Old Map: N/A

TBM Map: N/A

Subsidy:

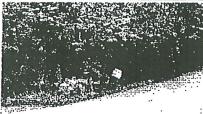
Area: N/A

Building Sites/Lots: /

Vacation: No

Remarks: Beautiful 3.12 acre lot (cleared) at the entrenace of Leisure Acres. Community offers river access. This is a must see property! Only moments from Shepherdstown!

Directions: FROM GTR, MAKE RIGHT @ 4-WAY, TAKE LEFT ONTO SHEPHERD GRADE RD. FOLLOW PAST NCTC, TURN RIGHT INTO LEISURE ACRES. FIRST LOT ON RIGHT.



Congress 2004 (JPIS 6)

JOHN BROWN ROAD, CHARLES TOWN, WV 25414 Status: CONTRACT

MLS#: JF5038292 Contr Date: 20-Dec-2004 Adv. Sub: N/A

Tax ID#: 0000 1234 LS-SF/Acre: 203,425/4.67

Lot Description: Present Use: Recreation H Fuel/C Fuel: None/

Water Front/View/Access: // List/Upd: 23-Sep-2004/24-Jan-2005 Listing Co: J A JIM BAYLISS REALTY

Ownship: Fee Simple, Sale Sold/Rented:

HOA: Tax Year: Road Frontage:

Topography: Dev Status: Finished Lots Wtr/Swr: Well/Septic Dock Conveys:

DOMM/DOMP: 89 / 89

Vacation: No

Remarks: Beautiful 4.67 acre corner lot near Charlestown, WV with towering hardwoods and easy access. This could be the best buy land bargain in

Directions: FROM CHARLES TOWN FOLLOW RT.9 E. TO RIGHT ON MISSION ROAD APPROX, 4 1/2 MI. TO RIGHT ON JOHN BROWN ROAD. GO APPROX. TO CORNER OF JOHN BROWN ROAD AND JOHN BROWN CT. SIGN ON PROPERTY.



GRANDVIEW COURT, HARPERS FERRY, WV 25425-1638 MLS#: JF5086226 Status: ACTIVE

Set Date:

Contr Date:

Adv. Sub: MISSION RIDGE

Tax ID#: 1902002100010000

**Total Taxes:** LS-SF/Acre: 153,767/3.53

Lot Description: Cul-de-sac, Trees/Wooded, Water Access Present Use: Residential H Fuel/C Fuel: None/

Water Front/View/Access: // List/Upd: 02-Nov-2004/16-Nov-2004 Listing Co: RE/MAX 1ST REALTY

Ownship: Fee Simple, Sale Sold/Rented:

HOA: \$25 Tax Year: 2004

Road Frontage:

Building Sites/Lots: / Topography: Rolling, Topo Plat

Dev Status: Plat Approved, Plat Recorded, Utilities at Site

Wtr/Swr: None/None

Dock Conveys: DOMM/DOMP: 85 / 85

Vacation: No

Remarks: Mission Ridge is a new estate community located on scenic Mountain Mission. With over 100 acres of natural mountainous reserve land including nature trails, you will enjoy acres of protected wooded land with spectacular vistas. Directly East of the Shenandoah, Mission Ridge is located only two miles from the Virginia State Line. Riverfont access common area. Protective covenants, wooded lots.

Directions: RT. 9, EAST OF CHARLES TOWN, AFTER CROSSING SHENANDOAH RIVER BRIDGE FOLLOW UP HILL, PROPERTY ON RIGHT, SEE SIGN.

#### Lot-Land

energy and rema

### Metropolitan Regional Information Systems, Inc

#### Gallery - Agent (4 UP)

Page: 3

Date: 26-Jan-2005

List Price: \$259,000

Building Sites/Lots: /

Time: 12:12

ť

MISSION RIDGE DR, HARPERS FERRY, WV 25425

MLS#: JF5089569

Contr Date: Adv. Sub: MISSION RIDGE Status: ACTIVE

Set Date: **Total Taxes:**  Ownship: Fee Simple, Sale Sold/Rented: HOA: \$25

Old Map: N/A Subsidy: TBM Map: N/A Area: N/A

Tax ID#: N/A LS-SF/Acre: 182,516/4.19

Lot Description:

Present Use: Residential H Fuel/C Fuel: Other/

Water Front/View/Access: No/Yes/Yes List/Upd: 05-Nov-2004/30-Nov-2004 Listing Co: ERA LIBERTY REALTY

Topography: Dev Status: Plat Approved, Plat Recorded, Zoned

Wtr/Swr: Other/Other Dock Conveys: No DOMM/DOMP: 82 / 82

Tax Year:

Road Frontage:

Vacation: No

Remarks: Mission Ridge is a new estate community located on scenic mountain mission, with over 100 Acres of natural mountains reserve land including riding stables and nature trails. You will enjoy acres of protected wooded land with spectacular vistas located only two miles from the Virgina State Line. Directions: RT. 9 EAST TO RIGHT INTO MISSION RIDGE S/D, FOLLOW 6 MILES STAYING TO THE RIGHT, LOT ON LEFT # 18, SEE SIGN,

> No Photo. Available

BILLMYER ROAD ACRES N, SHEPHERDSTOWN, WV 25443 MLS#: JF5142454 Contr Date:

Status: ACTIVE Set Date:

Ownship: Fee Simple, Sale Sold/Rented:

List Price: \$299.000 Old Map: 00 Subsidy: TBM Map: 0 .

Adv. Sub: NONE

Tax ID#: 000467007540 LS-SF/Acre: 187,308/4.30 ·

**Total Taxes:** 

HOA: \$0 Tax Year: Road Frontage: Topography: Rolling Dev Status: Raw Land

Area: Building Sites/Lots: /

Lot Description: Present Use: Other H Fuel/C Fuel: None/

Water Front/View/Access: // List/Upd: 21-Jan-2005/21-Jan-2005 Wtr/Swr: None/None Dock Conveys: DOMM/DOMP: 5/5

Vacation: No

Listing Co: LONG & FOSTER REAL ESTATE, INC

Remarks: Shepherdstown area in Jefferson County off Rt. 45. Private 4.30 acres with trees, 3 perks with Health Dept. approval. Stem easement off of Billmyer Rd. DEER HAVEN-Naturalist's private setting!!! Well and septic not installed. "

Directions: RT. 45, INTERSECTION TURN RIGHT GO TO INTERSECTION, LOG HOME, TURN RIGHT, GO 2 MILES, ON RIGHT.

# Metropolitan Regional Information Systems, Inc

## Lot-Land

## Listing Summary

	P. 01 . 11	A delegan	ListPrice	Postal City	Lot SF	Lot AC	Zoning	Perc Type/Sites
Status	ML#	Address	\$73,899	KEARNEYSVILLE	130,680	3.00	R	Approved Perc / 1
SOLD	JF4465634	Lady Bug Lane	\$90,000	KEARNEYSVILLE	130,680	3.00	0000	Unknown
SOLD	JF4562041	Lady Bug Lane	\$99,900	SHEPHERDSTOW	152,460	3.50	RR	Unknown j
SOLD	JF4684951	Shepherd Grd Rd	\$109,950	SUMMIT POINT	163,350	3.75	R	1
SOLD	JF4688016	Kelcor	\$80,000	SHEPHERDSTOW	132,858	3.05	N/A	1 .
SOLD	JF4693634	20 Ella Drive	\$65,000	SHEPHERDSTOW	162,043	3.72	N/A	1
SOLD	JF4693770	21 Ella Drive	\$65,000 \$65,000	SHEPHERDSTOW	140,263	3.22	N/A	1
SOLD	JF4693722	35 Ella Drive	•	SHEPHERDSTOW	153,767	3.53	N/A	ī
SOLD	JF4694014	41 May Court	\$110,000	SUMMIT POINT	200,376	4.60	RR	Ī
SOLD	JF4722709	23 Paula'S Circle	\$112,500	SUMMIT POINT	145,490	3.34	RR	,
SOLD	JF4725328	22 Paula'S Circle	\$127,500		138,521	3.18	RR	
SOLD	JF4726694	28 Paula'S Circle	\$112,500	SUMMIT POINT		3,23	N/A	Unknown /
SOLD	JF4731629	Little Fir Trail	\$39,000	HARPERS FERRY	140,699	3.52	RES	1
SOLD	JF4738389	Millwright Rd	\$95,000	KEARNEYSVILLE	153,288		N/A	Unknown <i>i</i>
SOLD	JF4756925	Marcum Lane	\$148,000	HARPERS FERRY	212,573	4.88		
SOLD	JF4772550	General Rogers Road	\$124,900					
SOLD	JF4829282	Sandpiper Lane	\$80,000		•			
SOLD	JF4829429	Sandpiper Lane	\$80,000					
SOLD	JF4868010	Chessie Lane	\$149,900					and the second second second second
SOLD	JF4875020	Mission Rd	\$160,000					Approved Percy
	JF4926557	Kabletown And Mt. Harr	\$248,000	CHARLES TOWN	•			1 1
	JF5027668	General Rogers	\$149,900	CHARLES TOWN	5 60 00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			Approved Perc
	JF5111235	9 Mcmurran Farm Lane	\$105,000	SHEPHERDSTOW	228,690			1
		Mcmurran Farm Lane	\$140,000	SHEPHERDSTOW	227,819	5.23	0	I
SOLD SOLD SOLD	JF4772550 JF4829282 JF4829429 JF4868010 JF4875020 JF4926557	General Rogers Road Sandpiper Lane Sandpiper Lane Chessie Lane Mission Rd Kabletown And Mt. Harr General Rogers 9 Mcmurran Farm Lane	\$124,900 \$80,000 \$80,000 \$149,900 \$160,000 \$248,000 \$149,900 \$105,000	CHARLES TOWN SHEPHERDSTOW SHEPHERDSTOW HARPERS FERRY HARPERS FERRY CHARLES TOWN GHARLES TOWN SHEPHERDSTOW		5.35 5.00 5.00 3.50 3.80 4.05 3.30 5.25 5.23	RA R RUA 000 RR 9999 0	Approved Perc; 1 Verify Perc; Verify Perc; Approved Perc; 1 Approved Perc; I Approved Perc; I I I

(c) 2005 Metropolitan Regional Information Systems, Inc.
Information is believed to be accurate, but should not be relied upon without verification.
Accuracy of square footage, lot size and other information is not guaranteed.

# Metropolitan Regional Information Systems, Inc

## Lot-Land

## **Listing Summary**

12/10/10								
Status	MIL#	Address	ListPrice	Postal City	Lot SF	Lot AC	Zoning	Perc Type/Sites
SOLD	JF4465634	Lady Bug Lane	\$73,899	KEARNEYSVILLE	130,680	3.00	R	Approved Perc 1
SOLD	JF4562041	Lady Bug Lane	\$90,000	KEARNEYSVILLE	130,680	3.00	0000	Unknown <sub>1</sub>
SOLD	JF4684951	Shepherd Grd Rd	\$99,900	SHEPHERDSTOW	152,460	3.50	RR	Unknown
SOLD	JF4688016	Kelcor	\$109,950	SUMMIT POINT	163,350	3.75	R	1
SOLD	JF4693634	20 Ella Drive	\$80,000	SHEPHERDSTOW	132,858	3.05	N/A	. 1
SOLD	JF4693770	21 Ella Drive	\$65,000	SHEPHERDSTOW	162,043	3.72	N/A	1
SOLD	JF4693722	35 Ella Drive	\$65,000	SHEPHERDSTOW	140,263	3.22	N/A	1
SOLD	JF4694014	41 May Court	\$110,000	SHEPHERDSTOW	153,767	3.53	N/A	1
SOLD	JF4722709	23 Paula'S Circle	\$112,500	SUMMIT POINT	200,376	4.60	RR	1
SOLD	JF4725328	22 Paula'S Circle	\$127,500	SUMMIT POINT	145,490	3.34	RR	1
SOLD	JF4726694	28 Paula'S Circle	\$112,500	SUMMIT POINT	138,521	3.18	RR	I
SOLD	JF4731629	Little Fir Trail	\$39,000	HARPERS FERRY	140,699	3.23	N/A	Unknown
SOLD	JF4738389	Millwright Rd	\$95,000	KEARNEYSVILLE	153,288	3.52	RES	1
SOLD	JF4756925	Marcum Lane	\$148,000	HARPERS FERRY	212,573	4.88	N/A	Unknown
SOLD	JF4772550	General Rogers Road	\$124,900	CHARLES TOWN	232,959	5.35	RA	Approved Perc 1
SOLD	JF4829282	Sandpiper Lane	\$80,000	SHEPHERDSTOW	217,800	5.00	R	Verify Perc <sub>1</sub>
SOLD	JF4829429	Sandpiper Lane	\$80,000	SHEPHERDSTOW	217,800	5.00	R	Verify Perc <sub>1</sub>
SOLD	JF4868010	Chessie Lane	\$149,900	HARPERS FERRY	152,460	3.50	RUA	Approved Perc 1
SOLD	JF4875020	Mission Rd	\$160,000	HARPERS FERRY	165,528	3.80	000	Approved Perc
SOLD	JF4926557	Kabletown And Mt. Harr	\$248,000	CHARLES TOWN	176,418	4.05	RR	1
SOLD	JF5027668	General Rogers	\$149,900	CHARLES TOWN	143,748	3.30	9999	Approved Perci
SOLD	JF5111235	9 Mcmurran Farm Lane	\$105,000	SHEPHERDSTOW	228,690	5.25	0	1
SOLD	JF5112841	Mcmurran Farm Lane	\$140,000	SHEPHERDSTOW	227,819	5.23	0	1

(c) 2005 Metropolitan Regional Information Systems, Inc. Information is believed to be accurate, but should not be relied upon without verification. Accuracy of square footage, lot size and other information is not guaranteed.

# **APPENDIX H: AGENCY LETTERS**

- HEALTH AND EMERGENCY MEDICAL
   FIRE PROTECTION
  - POLICE PROTECTION



December 13, 3006

Via Certified Mail

Roger Eitelman WVUH-East 300 South Preston Street Ranson, WV 25438

Attn:

Roger Eitelman, President/CEO

Re:

Longfield Farm Development

Subj:

**Approval Letter for Hospital Services** 

Dear Mr. Eitelman:

Patricia Sanderson is in the process of planning a development in the Jefferson County area. As part of that process, we want to ascertain that you will be able to provide hospital and medical services to the proposed subdivision. I have attached a description and small drawing showing the location of this development for your use.

As a condition of the approval process through the Jefferson County Planning, Zoning and Engineering Department, it is necessary for your institution to provide a letter stating your approval and ability to provide necessary medical services for the Longfield Farm development. On behalf of Patricia Sanderson, we would be most appreciative to receive this letter so we may proceed with planning for this project. If we do not receive any type of response from your institution by December 31, 2006, we will assume your approval for this project.

To expedite this process, please fax your approval to our office at 304-724-9150. Please mail the original to Patricia Sanderson to the following address:

36 Bakerton Road Harpers Ferry, WV 25425

Thank you in advance for your quick response.

Sincerely,

POTOMAC PROFESSIONAL SERVICES, LLC

On behalf of Patricia Sanderson

Jennifer Brant

Assistant Project Manager

Attachments: Location Map

Summary – Longfield Farm Subdivision



# JEFFERSON COUNTY AMBULANCE AUTHORITY

208 S. Mildred Street

Ranson, WV 25438

E-mail – jeffcoamb@citlink.net Telephone – 304-728-3287 Fax – 304-728-6221

December 14, 2006

Patricia Sanderson Potomac Professional Services 36 Bakerton Rd Harpers Ferry WV 25425

Subject: Longfield Farm Development

Dear Ms Patricia Sanderson,

I have reviewed the preliminary plans of the Longfield Farm Development relating to residential growth and the effects on Emergency Medical Services.

This development will have the Shepherdstown Fire Department as the primary Ambulance provider. The Ambulance Authority supplements the Volunteers with career staffing during the day and at other times from Ranson.

Our EMS System is nearing maximum capability due to continued population growth. Low density growth such as Longfield Farm Development will have a minimal impact on service with the current average of I incident per 10 households.

However, I must state with the overall growth in Jefferson County, we can not assure any given response time, but with the assistance of the other Jefferson County EMS units, we will continue to provide the Emergency Medical Services. The average time for an ambulance to respond to this proposed development will be 12-15 minutes.

Edwin D. Smith

Operations Manager

Cc: Jefferson County Planning Commission

MATT



December 21, 2006

Via E-mail Attachment

Chief Ross Morgan Shepherdstown Fire Department 8052 Martinsburg Pike Shepherdstown, WV 25443-3710

Attn:

Chief Ross Morgan

Re:

Longfield Farm Development

Subi:

**Approval Letter for Fire Services** 

Dear Chief Morgan:

Patricia Sanderson is in the process of planning a development in the Jefferson County area. As part of that process, we want to ascertain that you will be able to provide fire services to the proposed subdivision. I have attached a description and small drawing showing the location of this development for your use.

As a condition of the approval process through the Jefferson County Planning, Zoning and Engineering Department, it is necessary for your company to provide a letter stating your approval and ability to provide fire services for the Longfield Farm development. On behalf of Patricia Sanderson, we would be most appreciative to receive this letter so we may proceed with planning for this project. If we do not receive any type of response from your company by December 31, 2006, we will assume your approval of this project.

To expedite this process, please fax your approval to our office at 304-724-9150. Please mail the original to Patricia Sanderson to the following address:

36 Bakerton Road Harpers Ferry, WV 25425

Thank you in advance for your quick response.

Sincerely,

POTOMAC PROFESSIONAL SERVICES, LLC

On behalf of Patricia Sanderson, LLC

Jennifer Brant

Assistant Project Manager

Attachments: Location Map

Summary - Longfield Farm Subdivision



December 21, 2006

Via Fax 304-728-3299

Sheriff Sheriff of Jefferson County PO Box 9 Charles Town, WV 25414

Attn:

Sheriff

Re:

Longfield Farm Development

Subj:

**Approval Letter for Police Services** 

Dear Sir:

Patricia Sanderson is in the process of planning a development in the Jefferson County area. As part of that process, we want to ascertain that you will be able to provide police services to the proposed subdivision. I have attached a description and small drawing showing the location of this development for your use.

As a condition of the approval process through the Jefferson County Planning, Zoning and Engineering Department, it is necessary for your office to provide a letter stating your approval and ability to provide police services for the Longfield Farm development. On behalf of Patricia Sanderson, we would be most appreciative to receive this letter so we may proceed with planning for this project. If we do not receive any type of response from your office by December 31, 2006, we will assume your approval of this project.

To expedite this process, please fax your approval to our office at 304-724-9150. Please mail the original to Patricia Sanderson to the following address:

> 36 Bakerton Road Harpers Ferry, WV 25425

Thank you in advance for your quick response.

Sincerely,

POTOMAC PROFESSIONAL SERVICES, LLC

On behalf of Patricia Sanderson, LLC

Jennifer Brant

Assistant Project Manager

Attachments: Location Map

Summary - Longfield Farm Subdivision



December 21, 2006

Via Certified Mail

Sergeant E.D. Anderson West Virginia State Police 409 Industrial Boulevard Kearneysville, WV 25430

Attn:

Sgt. E.D. Anderson

Re:

Longfield Farm Development

Subi:

**Approval Letter for Police Services** 

Dear Sgt. Anderson:

Patricia Sanderson is in the process of planning a development in the Jefferson County area. As part of that process, we want to ascertain that you will be able to provide police services to the proposed subdivision. I have attached a description and small drawing showing the location of this development for your use.

As a condition of the approval process through the Jefferson County Planning, Zoning and Engineering Department, it is necessary for your office to provide a letter stating your approval and ability to provide police services for the Longfield Farm development. On behalf of Patricia Sanderson, we would be most appreciative to receive this letter so we may proceed with planning for this project. If we do not receive any type of response from your office by December 31, 2006, we will assume your approval of this project.

To expedite this process, please fax your approval to our office at 304-724-9150. Please mail the original to Patricia Sanderson to the following address:

> 36 Bakerton Road Harpers Ferry, WV 25425

Thank you in advance for your quick response.

Sincerely,

POTOMAC PROFESSIONAL SERVICES, LLC

On behalf of Patricia Sanderson, LLC

Jennifer Brant

Assistant Project Manager

Attachments: Location Map

Summary - Longfield Farm Subdivision



December 15, 2006

RE: Longfield Farm Development

Patricia Sanderson Potomac Professional Services, LLC 36 Bakerton Rd Harpers Ferry, WV 25425

Dear Ms. Sanderson:

Apple Valley Waste Service, Inc. maintains a motor carrier certificate from the WV Public Service Commission to haul residential waste in Berkeley and Jefferson Counties. We are ready and able to provide residential refuse collection for the Longfield Farm Development in Jefferson County West Virginia, and any other developments in Berkeley and Jefferson Counties located outside the corporate limits of the following municipalities — the Town of Bolivar, the City of Charles Town, the Town of Harpers Ferry, the City of Ranson, and the Town of Shepherdstown. The refuse will be disposed at LCS Landfill, Moutnainview Landfill, Old Dominion Transfer Station, Jefferson County Transfer Station (when completed) or any other permitted site capable of receiving municipal solid waste from the State of WV.

Please contact Waste Management of West Virginia to get a statement regarding the same for commercial services.

Sincere

James P. Phillips General Manager

Apple Valley Waste Service, Inc.

APPENDIX I: COMMUNITY IMPACT STUDY
- REVISION #2

ADDENDUM #1



February 20, 2007

Via Hand Delivery

Jefferson County Division of Planning and Zoning 104 E. Washington St. P.O. Box 338 Charles Town, WV 25414

Attn:

Mr. Paul Raco

Executive Director

Re:

Longfield Estates Subdivision

Subi:

Community Impact Statement - Revision #2

Addendum #1

Dear Mr. Raco,

Potomac Professional Services, LLC (PPS), on behalf the Owner, Patricia M. Sanderson, have reviewed and addressed all comments per the Community Impact Statement Review Checklist returned on February 16, 2007. Our responses are below.

1) Item #17 – Relationship to the Comprehensive Plan.

- a) A downloaded version of the Comprehensive Plan from the Jefferson County website indicated that Page #9 was the correct page that the quoted language was sited from. The hard copy County Comprehensive Plan, obtained from the Jefferson County offices, reflects that there was a small scanning error and that Page #8 should be the correct page number sited that includes this language. The attachments include both the downloaded version and the hard copy version for comparison. Please let this letter serve as the corrected version, and that the correct Page number, per the original comprehensive plan, should be Page #8.
- 2) Item #8b, 8e, 8f, 8g Request for traffic counts PHT/ADT for proposed uses in addition to residential.
  - a) In response to the request for additional traffic counts for the proposed future training facilities and boarding/breeding facilities, PPS employed the services of a traffic consultant, The Traffic Group (TTG), to further clarify the Average Daily Trips (ADT) and Peak Hour Trips (PHT) for these proposed uses.

After review, TTG and PPS did confirm, and does concur with County Engineer, Mr. Roger Goodwin, that no information exists in any of the preferred engineering manuals to quantify trip generation for these proposed uses. In an effort to address the request, we have conferred with our traffic consultant and

provided input from our experience in the equestrian industry for their conclusions for PHT.

It is our experience that the equestrian facility will only generate minimal ADT, and will only have minimal affect on the PHT due to the nature of the services provided. It is anticipated that much of the work will be handled by personnel coming from within the development and facility and should not generate many offsite trips. As described within the attached letter, much of the daily activity in this industry will happen in the early morning hours, significantly prior to morning peak hour.

Please let this letter and attachments serve as an Addendum to the Community Impact Statement for Longfield Estates, per the last receipt of Staff comments. If you have any further questions or comments, please contact the undersigned at 1(304) 725-3712.

Sincerely,

POTOMAC PROFESSIONAL SERVICES, LLC

Matthew R. Powell

Vice President Development



Corporate Office: Baltimore, MD Suite H 9900 Franklin Square Drive Baltimore, Maryland 21236 410.931.6600 fax: 410.931.6601 1.800.563.8411

Delmarva Region Sulte 102 11202 Racetrack Road Ocean Pines, Maryland 21811 410.203.4190 fax: 410.208.4192 1.000.396.4491

Virginia 7853 Coppermine Drive Manassas, Virginia 20109 703.365.8340 fax: 703.365.8341 1.888.365.8340 February 19, 2007

Mr. Matt Powell Potomac Professional Services, LLC 36 Bakerton Road Harpers Ferry, West Virginia 25425

RE: Longf

Longfield Estates

Jefferson County, WV

Job#: Pending

Dear Mr. Powell:

At your request the Traffic Group, Inc has reviewed the proposed Longfield Estates subdivision located on approximately 266 acres, 650 feet south of the intersection of Route 230 (Sheperdstown Pike) and Route 33 (Uvilla Road) in Jefferson County, WV. The site is proposed to be developed with a total of 31 single family residential homes. The development will feature an equestrian theme and will provide horse amenities on site included but not limited to a training track, training facility, riding facility, horse rehabilitation facilities, boarding paddocks, and a barn. Initially, the facilities will be constructed for private use but may be converted to commercial/public use in the future.

Based on information contained in Jefferson County's Subdivision Ordinance, a total of 8.0 trips per unit are projected for each single family detached dwelling unit. Therefore, the subject site is projected to generate a total of 248 daily trips. During the peak hour 0.8 trips are projected per dwelling unit corresponding to a total of 25 peak hour trips.

The equestrian uses on site are not quantified in the trip generation figures from the Subdivision Ordinance. Similarly, the Institute of Transportation Engineers (ITE) <u>Trip Generation</u> 7<sup>th</sup> Edition does not contain projected trip information for these uses.

Horse training activity typically takes place during the early morning hours, significantly before the morning peak hour, it is expected to be completed prior to the evening peak hour. Therefore it is our opinion that the proposed equestrian uses on-site will have a minimal affect on peak hour trip generation.

## JEFFERSON COUNTY -A VISION

Jefferson County is in transition. For most of its history, Jefferson County has been an agricultural community. The 50 miles separating Jefferson County from the Washington DC metropolitan area allowed the rural traditions and agricultural landscape to remain intact until the late 1980s. Since that time, the willingness of workers to commute further, the expansion of the boundaries of the DC metro areas, the addition of more commuter trains and the attractiveness of Jefferson County as a place to live have resulted in the population growing by 20%. The population is anticipated to increase by 20,000 residents in the next two decades.

Ironically, the natural beauty and rural setting of Jefferson County, the qualities that are so attractive to new residents, are the very qualities that are most threatened by a rapid pace of growth. Farming is no longer the driving economic force in our county and in the mid 1980s, new residents from other places outnumbered long time residents for the first time. With houses coming at a far faster pace than jobs, Jefferson County is facing a future as just another bedroom community in the larger metropolitan area.

The intent of this plan is not to recreate or recapture the past but to shape future growth in a manner that preserves the most important features of Jefferson County: the rural landscape, the natural beauty of the rivers, the rolling terrain and the strong sense of community. Perhaps the biggest challenge of all is to provide an economic base that provides enough job opportunities to allow people to both live and work here. Jefferson County is home to people of different income levels and professions-from crafts people to mill workers to employees of national consulting firms. The rising cost of housing threatens this diversity.

#### PLAN VISION

This Plan recognizes that for our county to remain a vital, attractive community, new growth must include

a balance of jobs and housing and be respectful of the very qualities that are attracting new residents every year: the rural landscape, the natural beauty and the pleasing character of our towns and villages.

#### PLAN POLICIES

This Plan encourages new development patterns that foster mixed-use neighborhoods so that a sense of community begins at the subdivision level.

This Plan recommends that Jefferson County's natural features, particularly stream valleys, be conserved as green space and that significant natural features be afforded protection as development proceeds.

This Plan encourages economic development so that residents can live and work in the County.

This Plan encourages the opportunity to farm and recognizes the changing shift in agriculture to include large family owned farms and smaller agricultural operations.

This Plan recognizes existing population centers as the focus of new, more intense development and the importance of working with municipalities to assure a pattern of development consistent with the Plan vision.

This Plan emphasizes the importance of providing opportunities for people of all income levels to live in the county and proposes affordable housing to be a component of all future residential growth.

This Plan identifies strategies to assure that community facilities and transportation infrastructure are provided in sequence with new development.

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