

# BIG LOVELY



# MOUNTAIN TRAIL



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CIVIL ENGINEERING MINING ENGINEERING ARCHITECTURE SURVEYING

# **BIG LOVELY MOUNTAIN TRAIL**

## ***FEASIBILITY STUDY***

### ***VOLUME I OF II***

**A “Rails to Trails” Adventure  
by Johnson, Magoffin, and Breathitt Counties**

**Prepared for**

**Big Sandy Area Development District**

**Prepared by**



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## SECTION 1 – EXECUTIVE SUMMARY

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### 1.1 PURPOSE

The fiscal courts of Johnson, Magoffin, and Breathitt County intend to form a tri-county Big Lovely Mountain Trail Authority to purchase the “rail banked” Dawkins railroad right of way from R. J. Corman of Nicholasville, Kentucky (It is noted that the Authority may change the trail name once they are formally organized.). The Big Lovely Mountain Trail Authority will then develop the abandoned railroad right of way as a non-motorized recreational trail. The Trail Authority hopes that the recreational trail will make a positive contribution to public health by encouraging exercise, will promote the local economy through the development of micro enterprises that support the trail, and will foster tourism that attracts non-locals to the community. This study is prepared at the request of the Big Sandy Area Development District to document the right of way, prepare a conceptual plan of development, and assess potential development costs for the Trail Authority.

### 1.2 CONCLUSIONS & RECOMMENDATIONS

Key findings of this study are:

1. R. J. Corman track removal operations were not complete when this study was prepared. Consequently, this report can not state the condition of the right of way to be received at purchase. For example, bridges that appeared sound in August may be damaged as rail is removed later this year. Ballast that was present in August may be trucked out later this year.
2. A detailed assessment of the condition of pipe drainage structures of the Dawkins line was beyond the scope of this study. Due diligence would dictate that the Authority should investigate these drainage structures for soundness and obstructions.
3. The right of way to be acquired is approximately thirty-six (36) miles in length. However, the “dead end” sections of trail beyond the trail heads at either end will probably not be utilized. The actual length of trail developed will probably only be about 34.5 miles in length.
4. Coal loadouts can be an environmental concern. Fueling and maintenance of equipment at these industrial facilities can result in environmental contamination. Many coal loadouts were once operated on the Dawkins line. However, they were generally on sidings which were abandoned in advance of the project being rail banked.
5. The single remaining active coal preparation plant at Evanston may be a “poor” trail neighbor.
6. The metal scrap yard at Ivyton is an aesthetic detriment to the trail and should be screened.
7. No buildings of historic significance were noted along the trail. Most structures associated with the railroad and with past coal mining activities have been removed.

8. At least two of the thirty five timber rail bridges have suffered extensive damage from fires. Whether these fires were accidental, or deliberate, can not be ascertained. Some rail bridges were slightly damaged by track removal operations. Structural repairs to existing bridges will be necessary.
9. The right of way includes a twenty (20) acre woodland in Narrows Branch of Jennys Creek. Consideration should be given to development of this woodland as a nature walk.
10. A large wetland ( $\pm$  two acres) is located about 100 feet left of centerline near Evanston. This wetland will not be disturbed by trail development. However, consideration should be given to developing this wetland as a nature walk.
11. The projected cost to acquire and develop the trail is approximately \$3.1 million. This represents an expenditure of roughly \$90,000 per mile of right of way.
12. The Trail Authority should consider (plan) for future extension of the trail to link with elk viewing and other ecotourism activities in Breathitt and Knott Counties.
13. While this report was in preparation, the Kentucky Department of Fish and Wildlife announced a new 9,280-acre wildlife management area in Breathitt County, the Howard Wildlife Management Area. This area is in close proximity to the proposed Big Lovely Trail (Map 2-2).
14. Currently, the State of Kentucky has implemented six (6) rail to trail initiatives and created a total of 12.9 miles of trail. With at least 34 miles of trail, the Big Lovely Project would quadruple Kentucky's mileage and immediately become the largest rail to trail project in the State ([www.railstrails.org/news/trailfacts/stamilcount.asp](http://www.railstrails.org/news/trailfacts/stamilcount.asp))



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## SECTION 2 – THE TRAIL

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### 2.1 ALIGNMENT / RIGHT OF WAY

The right of way for the Dawkins Line is located in Johnson, Magoffin, and Breathitt Counties in eastern Kentucky (See Map 2-1). The old railroad alignment is about thirty-six (36) miles in length and has an average right of way width of forty (40) feet. Mile 0.0 of the right of way begins at the intersection with the CSX mainline near West Van Lear in Johnson County, Kentucky and extends south through Johnson County, over Hager Hill (Mile 1.0), up the Jennys Creek drainage basin, and past the former community of Riceville to the Narrows Branch of Jennys Creek. The right of way crosses the Johnson/Magoffin county line at Mile 12.0 and descends Middle Creek crossing the Mountain Parkway at Mile 13.5 and descending Gun Creek to Royalton (Mile 18.0). From Royalton the right of way crosses the Licking River and ascends Oakley Creek crossing the Magoffin / Breathitt county line at Tip Top (or Carver at Mile 26.0). The last stretch of the right of way descends the Laurel Fork of Quicksand Creek to the Appalachian Fuels Mine Tipple (Mile 33.5) near Evanston, Kentucky (Mile 35.0).

Map 2-2 in the Pocket at the back of this report contains a foldout map of the Dawkins right of way. This map illustrates the relationship between the right of way and key features of local significance. Volume II of this report (provided under separate cover) provides a detailed right of way map superimposed on 2004 aerial photography. This detailed right of way exhibit consists of thirty-five sheets, organized as one mile to the sheet.

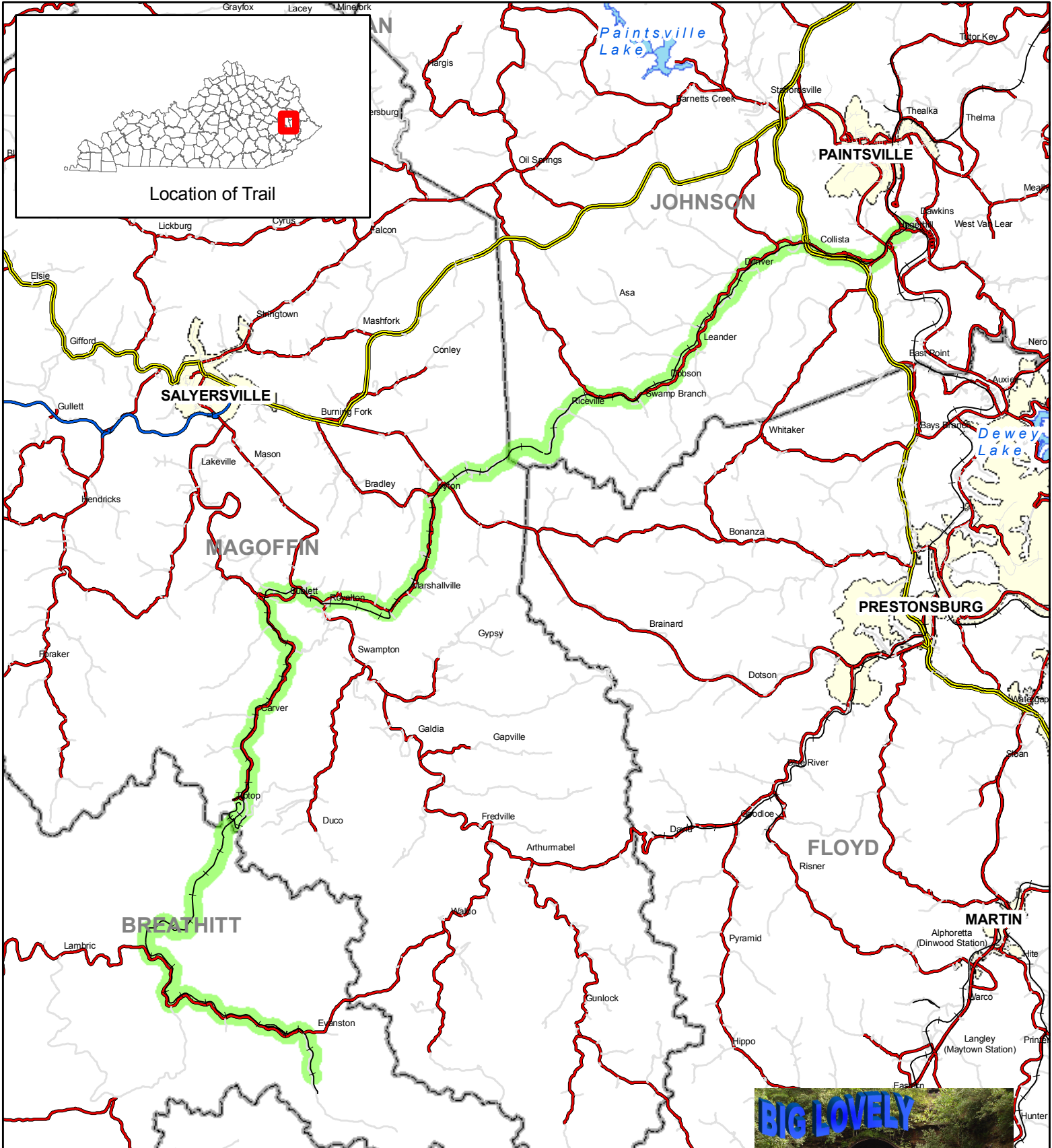
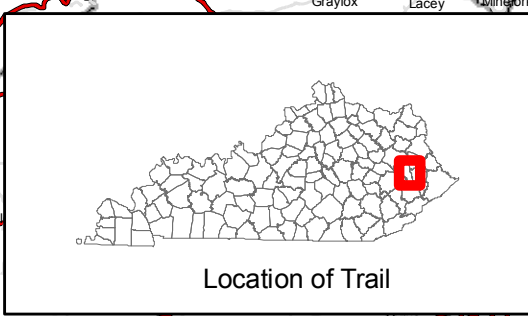
### 2.2 HISTORY

One would assume that coal was the impetus to create the Dawkins rail line. This was not entirely the case for at the turn of the century the cash crop for Eastern Kentucky was timber not coal. The railroad derived its name from the Dawkins Lumber Company. The Dawkins Lumber Company incorporated the Big Sandy & Kentucky River Railroad (BS&KR) in 1912 to build thirty one miles of line through three watersheds into Breathitt County. The corporate officers of the BS&KR were W. H. Dawkins, vice president; T. N. Fannin of Ashland, and L. N. Davis treasurer.

The BS&KR railroad office was at Riceville from 1913 to 1920. In 1920 as the tracks were extended to Carver, the railroad office was moved to Royalton. The BS&KR never reached Breathitt County. The stock market crash of 1929 terminated the Company. The C&O railroad acquired the entire stock of the BS&KR on September 22, 1930.

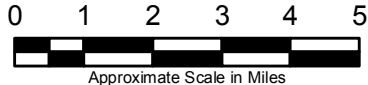
The C&O did not construct the tunnel at Carver (or Tiptop) until 1949. Tracks were finally extended from Carver to Evanston in Breathitt County after construction of this tunnel.

The C&O acquired the B&O and the Western Maryland in 1960. The C&O operated these Companies independently until 1972. In 1972 the C&O merged these entities and formed the Chessie system. In 1982 Chessie merged with Seaboard and became CSX. In 2002 CSX sold the Dawkins Line to R. J. Corman. R.J. Corman filed to abandon the thirty six miles of the Dawkins line the week of November 6, 2004.



**Legend**

BIG LOVELY MTN TRAIL	STATE HIGHWAY	LAKE
RAILROAD	PARKWAY	CITY BOUNDARY
CITY STREET	US HIGHWAY	COUNTY BOUNDARY
COUNTY ROAD		PPL_No_Urban



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 CHARLESTON, WV CHAPMANVILLE, WV  
 BIG ROCK, VA

**General Location Map**  
**Big Lovely Mountain Trail**

### 2.2.1 HISTORIC STRUCTURES/FEATURES

Our team did not identify any historic railroad buildings of significance remaining. Bridge structures will be addressed in 3.3.3.3. Further, we noted few old mountain homes. Most structures along the right of way are single-family frame dwellings of relatively recent construction.

There are several small cemeteries in close proximity to the right of way. These cemeteries may be of interest to local historians. The Rueben Patrick grave located 1 ½ miles west of Ivyton is of sufficient interest to merit a historic marker.

### 2.2.2 ISSUES OF HISTORIC NOTE

The team was advised of the following items of historic interest:

1. Van Lear/Butcher Hollow is the birth place of Loretta Lynn
2. Jennys Creek is named for Jenny Wiley, the pioneer woman kidnapped by Indians who became the namesake of the Jenny Wiley State Park
3. There is a monument near Tip Top commemorating the history of the Tip Top mines.

### 2.3 UNIQUE PHYSICAL FEATURES

The topography of the Dawkins line is typical of the Kanawha Section of the Appalachian Plateaus physiographic province. The Kanawha section of the province is a highly dissected plateau characterized by narrow, crooked valleys and narrow, irregular steep-sided ridges. Although major streams have floodplains of moderate width, most streams are confined to a very narrow valley floor. Topographic relief in the study area is about five hundred (500) feet, ranging from a low elevation of 602 Ft MSL at the junction with the CSX mainline at West Van Lear to a high elevation of 1072 Ft MSL at the Tip Top or Carver tunnel.

The Dawkins line traverses three major watersheds: Jennys Creek of the Tug Fork, the Licking River, and the headwaters of Quicksand Creek of the Kentucky River. Where the right of way parallels Jennys Creek (Hager Hill to Riceville) and Gun Creek (Ivyton to Sublett) the terrain consists of a relatively wide (for eastern Kentucky) floodplain. Agriculture has essentially stopped in eastern Kentucky. The floodplain is largely in well kept hayland / pasture (See Photo 2-1). From Riceville to Ivyton (the Narrows) and from Sublett to Evanston the right of way is largely a side hill cut in the narrow valley walls. Both sides of the alignment are heavily wooded and the rider feels spatially enclosed (Photo 2-2).

There is a 662 foot tunnel at Ivyton (Mile 14.9) and a 1,555 foot tunnel at Carver (Mile 25.7). These tunnels are probably the greatest physical features of interest for the alignment (Photos 2-3 and 2-4). There are thirty-five (35) bridges on the right way varying from short, single span structures to major multi-span structures over 200 feet in length. Some of the larger structures are quite dramatic to cross (Photo 2-5).

Photo 2-1

Typical View  
Gun Creek Floodplain



Photo 2-2

Trail near Evanston.

Note heavy woodland on both sides of trail.

Trees in foreground illustrate maintenance issues to be encountered.

Photo 2-3

Gun Creek Tunnel



Photo 2-4

Carver Tunnel



Photo 2-5

Bridge at mile point 13

Narrows Branch of  
Jennys Creek



## 2.4 POPULATION CENTERS

The counties immediately surrounding the railroad alignment include: Breathitt, Floyd, Johnson, and Magoffin. According to the Kentucky State Data Center in Louisville, Kentucky the 2005 populations of these counties are estimated to be:

Breathitt	15,957
Floyd	42,218
Johnson	24,001
<u>Magoffin</u>	<u>13,472</u>
Total	95,648

The urban population centers along the railroad alignment have largely died. Riceville in Johnson County, which was once the railroad office, can no longer be identified as a community. Ivyton is little more than a collection of single family dwellings and has no business center. Royalton still has the feel of a small town, but it is a shadow of its former self – having once been the largest population center in Magoffin County. For all practical intents and purposes, the community of Evanston in Breathitt County no longer exists.

The principal population centers in immediate proximity to the railroad are Paintsville (pop. 4,141) the county seat of Johnson County, and Salyersville (pop. 1,604) the county seat of Magoffin County. Paintsville anchors the east end of the trail. The center of Paintsville is only five to ten minutes from the West Van Lear end of the trail. Salyersville is only five miles from Royalton, Kentucky. Royalton is approximately the center of the trail.

Jackson (pop. 2,413), the county seat of Breathitt County, is only about 40 miles from the far west end of the alignment (Evanston). However, the drive time from Jackson to Evanston exceeds an hour due to the winding secondary roads. Prestonsburg (pop. 3,706), the county seat of Floyd County has the advantage of modern highway access to the proposed trail system. One can reach the West Van Lear end of the Dawkins line from Prestonsburg via US 23 in a little over twenty minutes. Royalton can be accessed from Prestonsburg via the Mountain Parkway in about a half hour.

Lexington, Kentucky (pop. 268,080) and the Ashland / Huntington area (Ashland, Kentucky pop. 21,510, Huntington, WV pop 49,891) would be the largest population centers within a 100 mile radius of the trail. Lexington is about 90 minutes from Royalton via the Mountain Parkway and Ashland is about 90 minutes from Paintsville/West Van Lear via US 23.

## 2.5 BUSINESSES

Research of related trails indicates that most trail users will be interested in day trips. Consequently, users will be more interested in existing fuel and food establishments than in over night accommodations. Our team has compiled an index of the major fuel, food, and lodging establishments in Jackson, Salyersville, Paintsville, and Prestonsburg. This index is provided in Appendix I.

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## SECTION 3 – CONCEPTUAL TRAIL PLAN

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### 3.1 LEGAL AUTHORITY / MANAGEMENT

It is our understanding that the fiscal courts of Johnson, Magoffin, and Breathitt County intend to form a tri-county Big Lovely Mountain Trail Authority. The Big Lovely Mountain Trail Authority will operate as a quasi-governmental agency. It will be governed by a board of directors. The Authority will purchase the Dawkins line right of way and finance a project to develop the right of way into a non-motorized recreational trail to make a positive contribution to public health by encouraging exercise, to promote the establishment of micro enterprises that support the trails, and to stimulate the local economy by fostering tourism.

The Authority will have the responsibility for the operation and maintenance of the Big Lovely Mountain Trail. At this time, it is unclear as to the mechanism the Authority will employ for the O&M function. Options available to the Authority include: contracting with local vendors, organizing a group of volunteers, and/or contracting with the respective fiscal courts for O&M by county forces. Contracting with local vendors or governmental agencies is expensive. However, these entities have the equipment, labor force, and materials to provide prompt solutions. This offers the Authority a clear chain of responsibility and a greater degree of control over one of the greater liability related management functions. If the Authority opts for management by volunteers, the O&M costs will be lower but the Authority will still need a mechanism to equip these volunteers with materials and equipment.

### 3.2 DESIGNATED TRAIL USES

The Big Lovely Mountain Trail is envisioned as a non-motorized trail. It will be a multi-use facility for hikers, bicyclists, and equestrians. It is not generally desirable to mix equestrians and bicyclists on the same-shared use path. Horses are easily startled and may act unpredictably if they feel threatened by a bicyclist. A separate path for equestrians is not envisioned. However, signage will be employed to encourage equestrians to ride the shoulder and avoid the “improved” portion of the trail.

### 3.3 CONCEPTUAL PLAN

The conceptual plan is illustrated on Exhibit 2-2 and described in the following paragraphs. Any discussion of the trail must necessarily begin with a discussion of access. We propose three major trail access points (trail heads), one for each county. We recommend a trailhead in the vicinity of Hager Hill (Johnson County), one in the vicinity of Royalton (Magoffin County), and one in the vicinity of Evanston (Breathitt County). The trailheads will be spaced roughly equi-distant, about seventeen miles apart.

Design guides for trail systems refer to the four S’s of trail development – scenery, surfaces, structures, and safety. We felt it would be appropriate to organize the discussion of the conceptual trail plan in this context.



### 3.3.1. SCENERY / ATTRACTIONS

#### 3.3.1.1 Natural Features

There are no locations that lend themselves to over looks. As discussed in Section 2.3, the right of way provides a good mix of landscapes, varying from the floodplain of Jennys Creek and Gun Creek to the forests of Narrows Branch and the head of Quicksand Creek.

The right of way includes a twenty-acre parcel of land in Narrows Branch of Jennys Creek, which is heavily wooded (Mile 10.5). We recommend that this special right of way holding be developed as a self guided nature trail. A hiker's footpath could be easily cleared. A numbering system could guide the hikers to some of the key hardwood species of the eastern deciduous forest and identify the common woodland plants unique to Eastern Kentucky.

There is a wetland left of the trail in the vicinity of Mile point 32.5 (about two acres in extent). This wetland will not be disturbed by the trail development. However, it could be developed as a self guided nature trail. Care would need to be taken in placement of the hiking path to avoid disruption of the wetland community. Some clearing of brush on the right of way would improve the view from the trail.

#### 3.3.1.2 Historic Features

Railroad enthusiasts may wish to visit the trail simply to experience the past lore of a lost railway. Unfortunately, virtually all of the historic structures that once dotted the alignment no longer exist. The two tunnels and thirty-five bridges are all that remain for the railroad enthusiast.

The tunnels at Ivyton (Gun Creek) and at Carver (Tip Top) will be popular attractions. On a hot summer's day they are a wonderful location to cool off and break for lunch. They also present some unique safety issues.

A few of the bridges on the right of way are quite dramatic, spanning narrow, deep gorges and offering a unique view of the landscape. These structures will be discussed in more detail in Section 3.3.3.3.

There were numerous rail sidings for coal load outs along the Dawkins line (See Volume II of II). All have been removed and virtually all traces of them eliminated. One coal tipple is still permitted on the alignment and was in operation as of the preparation of this report. The coal tipple at Evanston, Kentucky (Mile point 33.5) is operated by Appalachian Fuels under lease to Consol (a lessee of Western Pocahontas). In our opinion, this tipple should be viewed as a "nuisance attraction" rather than as a positive trail attribute. This facility will undoubtedly be a source of curiosity to trail users. Unfortunately, a coal tipple is extremely dangerous and presents serious issues with regard to safety, liability, and 'good neighbors'. In one telephone interview with Appalachian Fuels we were advised that the coal company would endeavor to block the trail to prevent users from trespassing on the tipple site (Personal Communication – Don Cooke, Appalachian Fuels, Phone 606-739-2100).

#### 3.3.1.3 Attractions

Potential users of the trail will also consider related local attractions in planning a trip to the trail. Map 2-2 endeavors to highlight some of these attractions for the future trail users. Local attractions include:

Jenny Wiley State Park (and theater)

Dewey Lake (and its campgrounds)

Paintsville Lake State Park (and its campgrounds)

Mountain Arts Center (Prestonsburg – Kentucky)

Thunder Ridge Raceway (Prestonsburg – Kentucky)

Stone Crest Golf Course (Prestonsburg – Kentucky)

East Kentucky Science Center and Planetarium (Prestonsburg – Kentucky)

Ranier Racing Museum (Prestonsburg – Kentucky)

Middle Creek National Battlefield (Prestonsburg – Kentucky)

U.S. 23 Country Music Highway Museum (Paintsville – Kentucky)

Mountain Homeplace/In the Pines Amphitheater (Paintsville – Kentucky)

Jenny Wiley Grave (River – Kentucky)

Forest and Maxine Preston Memorial Pedestrian Bridge (River – Kentucky)

Loretta Lynn Birthplace (Van Lear – Kentucky)

Coal Miners Museum (Van Lear – Kentucky)

Natural Bridge State Park (Slade – Kentucky)

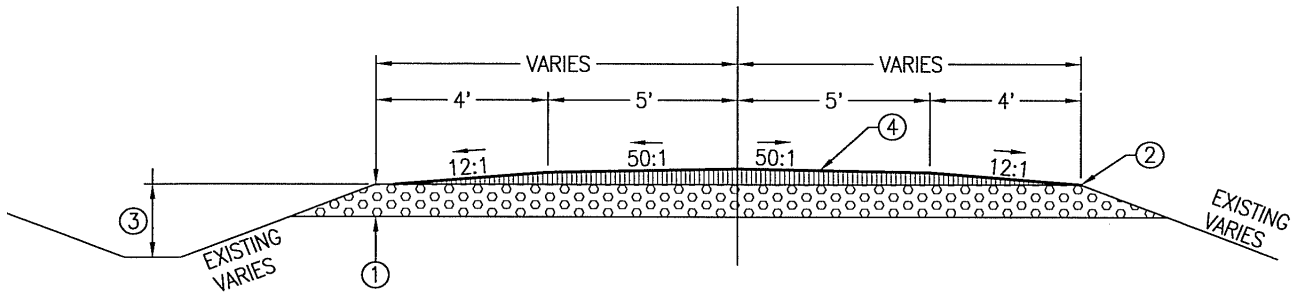
Pioneer Village (Salyersville – Kentucky)

### 3.3.2. SURFACES

If the Big Lovely Trail develops in a manner similar to the Virginia Creeper Trail, the majority of trail users will be bicyclists (Bowker, 2004). The smoothness of the trail surface directly impacts the comfort, safety, and speed of bicyclists. The pavement should be smooth and of a relatively uniform width. Cracks, joints, and drop offs at pavement edges can trap a bicycle wheel and cause loss of control. Bumps, ruts, and potholes can also lead to loss of control. As the surface quality degrades, the bicyclist must reduce his speed. A loss of speed results in less stability for the rider.

A high quality bituminous concrete surface was considered for the trail. This surface was rejected because of its high expense. Other factors considered in this decision included:

1. It impacts the scenery or trail aesthetic. It does not blend with the surroundings as readily as a stone surface.
2. It may encourage excessive speed.
3. Portions of the trail would be extremely difficult to access with paving equipment.



- ① QUANTITY OF BALLAST REMAINING – UNKNOWN
- ② BLADE EXISTING BALLAST SMOOTH & COMPACT WITH SMOOTH DRUM VIBRATORY COMPACTOR.
- ③ GRADE/EXCAVATE DITCH TO PROVIDE MINIMUM DEPTH OF 18". ARMOR DITCH IN EROSION AREAS.
- ④ PLACE 4" DGA, GRADE TO A UNIFORM SLOPE, AND COMPACT WITH SMOOTH DRUM VIBRATORY COMPACTOR. ADDITIONAL DEPTH OF STONE REQUIRED AT ROAD CROSSINGS TO PROVIDE SMOOTH TRANSITION.

FIGURE 3-1  
PROPOSED TYPICAL SECTION  
BIG LOVELY TRAIL  
 N.T.S.

A compacted dense graded aggregate surface is proposed. Properly rolled, and maintained, this surface should approach a bituminous pavement in ride quality. It will be substantially cheaper than a bituminous surface. Rider surveys on similar facilities indicate rider acceptance of compacted crushed stone surfaces.

Figure 3-1 provides a typical section of the proposed trail surface. We propose a ten (10) foot traveled way with four (4) foot shoulders. In most locations the existing trail is of sufficient width to accommodate this surface.

We also propose that decking for the trestle bridges be laid on a 45-degree angle to the ties. This will minimize the potential for bicycle wheels to be trapped by the gap between the hard wood decking (See Section 3.3.3.3).

### 3.3.3. STRUCTURES

We have organized this section into five main sections: (1) culverts, (2) barriers, (3) bridges, (4) tunnels and (5) trailhead/rest stop facilities.

#### 3.3.3.1 Culverts

Culverts are an un-noticed component of the trail. They are absolutely vital to the safe transmission and disposal of surface water runoff. Detailed inspection of all existing culverts on the Dawkins line was beyond the scope of this project. There are over 311 culverts on the alignment ranging in size from simple 12" culverts 20' in length to 120" diameter multi-plate pipes over 200' in length. We would recommend that the Trail Authority implement some type of culvert evaluation program as a 'due diligence' measure before taking possession of the right of way.

#### 3.3.3.2 Barriers

Citizens have expressed a great deal of concern with regard to the potential for All Terrain Vehicles (ATVs) to access the trail and degrade the trail experience for non-motorized users. We propose that removable post bollards be installed at all bridges and key locations along the trail. These barriers will significantly limit the potential for ATVs to disrupt the trail. Figure 3-2 provides a preliminary detail for the post bollards.

Fences are a barrier of last resort. We anticipate that privacy fencing will be necessary to hide the unsightly metal scrap yard at Ivyton. Fences may be necessary in a few instances to isolate residence yards from the trail. These situations may manifest themselves after the first phase of the facility is in service.

Guardrails along steep out slopes are not proposed. If guardrails were installed along every steep out slope on the trail, it would be cost prohibitive to open the trail for public use. Guardrails would also impair the aesthetic experience, separating the users from the neighboring woodlands.

#### 3.3.3.3 Bridges

Table III-1 in Appendix III lists the bridges of the Dawkins right of way. There are thirty-five (35) bridges on the right of way. With one exception (Mile 13.5) all of these bridges span a stream or watercourse. The bridge at Mile 13.5 is an overpass of the Mountain Parkway. The bridges over watercourses range from a 12' single span trestle (Mile 0.3 - Photo 3-1) to a nineteen span structure over the Licking River at Sublett 302 feet in length (Mile 19.7 - Photo 3-2). Most of the bridges are in good shape. We found two structures (Mile 5.4 at highway 825 and Mile 17.1 just outside

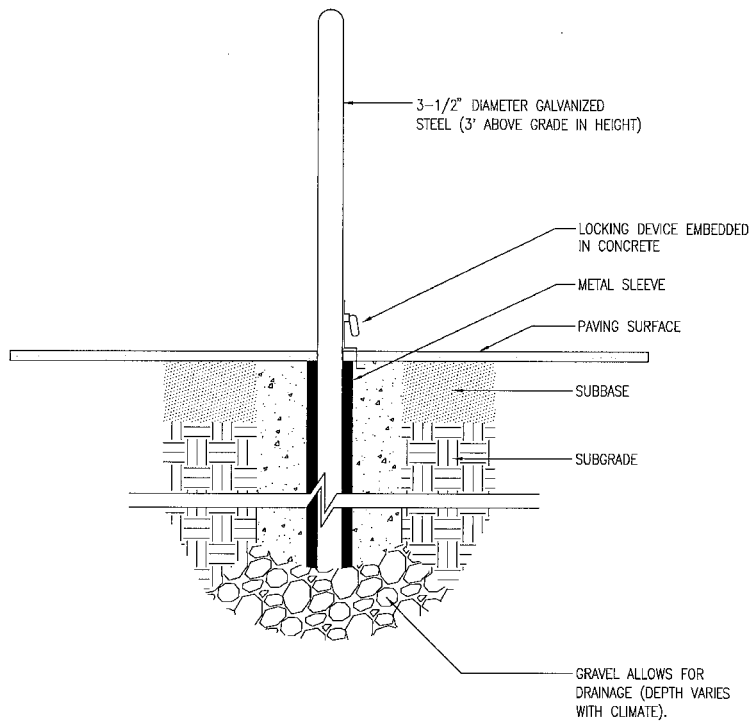


Figure 3-2 Post Bollards to Restrict ATVs and Other Motorized Vehicles

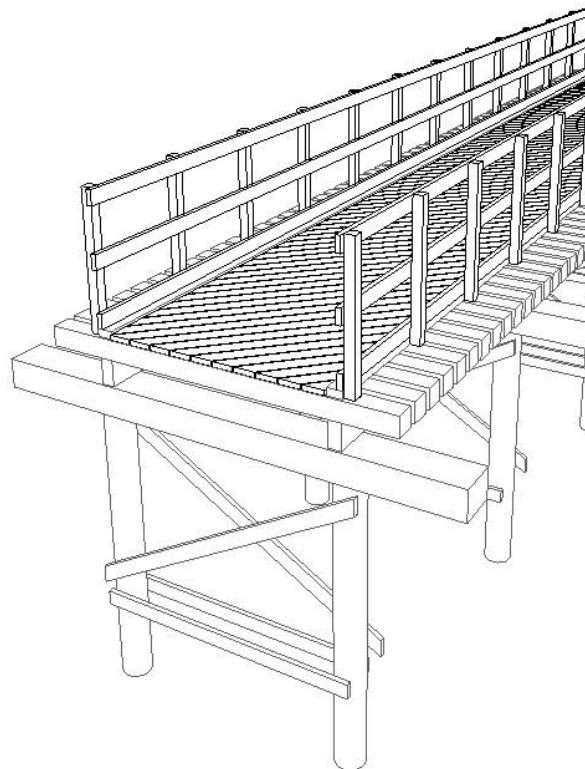


Figure 3-3 Decking and Handrail for Timber Bridges

Photo 3-1

Bridge at mile point 0.35

Typical short, single span trestle



Photo 3-2

Bridge at Sublett

Mile point 19.7



Photo 3-3

Bridge damaged by fire

Mile point 5.4

Note rail warped by heat  
of fire



Photo 3-4

Bridge damaged by fire

Mile point 17.1 outside Royalton, KY



Royalton) which have been severely damaged by fire and will require extensive repair (See Photos 3-3 and 3-4). The bridge at Sublett (Mile 19.7) has minor fire damage that should only require minor attention.

The railroad trestle bridges were never intended for pedestrians or bicyclists. Figure 3-3 provides a concept sketch for decking the bridges and installing handrail. The ties of the trestle bridges must be decked to provide a smooth surface for bicyclists. Rough sawn oak 2 x 6s should be installed on a 45-degree angle to the ties. Handrails should be at least 54 inches high and should have at least three longitudinal rails. The handrail system should be rated for a lateral load of 50 pounds per foot of rail height.

#### 3.3.3.4 Tunnels

There are two tunnels on the Dawkins line: the Gun Creek tunnel (662 feet in length) and the Carver tunnel (1,555' in length). We recommend that each tunnel receive a soundness inspection as a part of the 'due diligence' inspection prior to purchase. We propose that both tunnels be lighted for the users. The tunnels represent excellent locations for barricades to restrict ATV use of the trail.

#### 3.3.3.5 Facilities

Figure 3-4 is a concept sketch for one of the three county trailheads. We propose a linear trailhead that can be fit to the narrow right of way available. A shelter closely resembling an old depot roughly 26' feet wide and 46' long would be constructed. This shelter would include restrooms, an information center, picnic tables, and vending. Parking for a least twenty-passenger vehicles and ten horse trailers would be provided. The facility would be manned at least 8 hours per day, seven days per week through the peak months. These centers would offer a focal point for trail operations. Riders could obtain day use passes, trail maps, and amenities. Users could park their vehicles knowing they would be relatively secure at a well-maintained, well-lighted trail facility. Operations personnel would use the trail heads as a location to determine the condition of the trail (riders will report maintenance issues), enforce use of trail passes, and to dispatch either emergency rescue personnel or maintenance personnel.

Less elaborate structures would be provided at the two intermediate trail stops. These structures will provide trail users with restrooms and picnic shelters. These facilities will have power but are too remote to have access to public water/sewer. Wells and septic systems will be needed. The intermediate stops are envisioned as un-manned facilities.

#### 3.3.4. SAFETY

Trail users must feel safe. They must feel that their vehicles will not be molested while they are on the trail. They must feel that actual use of the trail is not hazardous to them. Lastly, they must feel that in the event of an accident, that prompt rescue is possible.

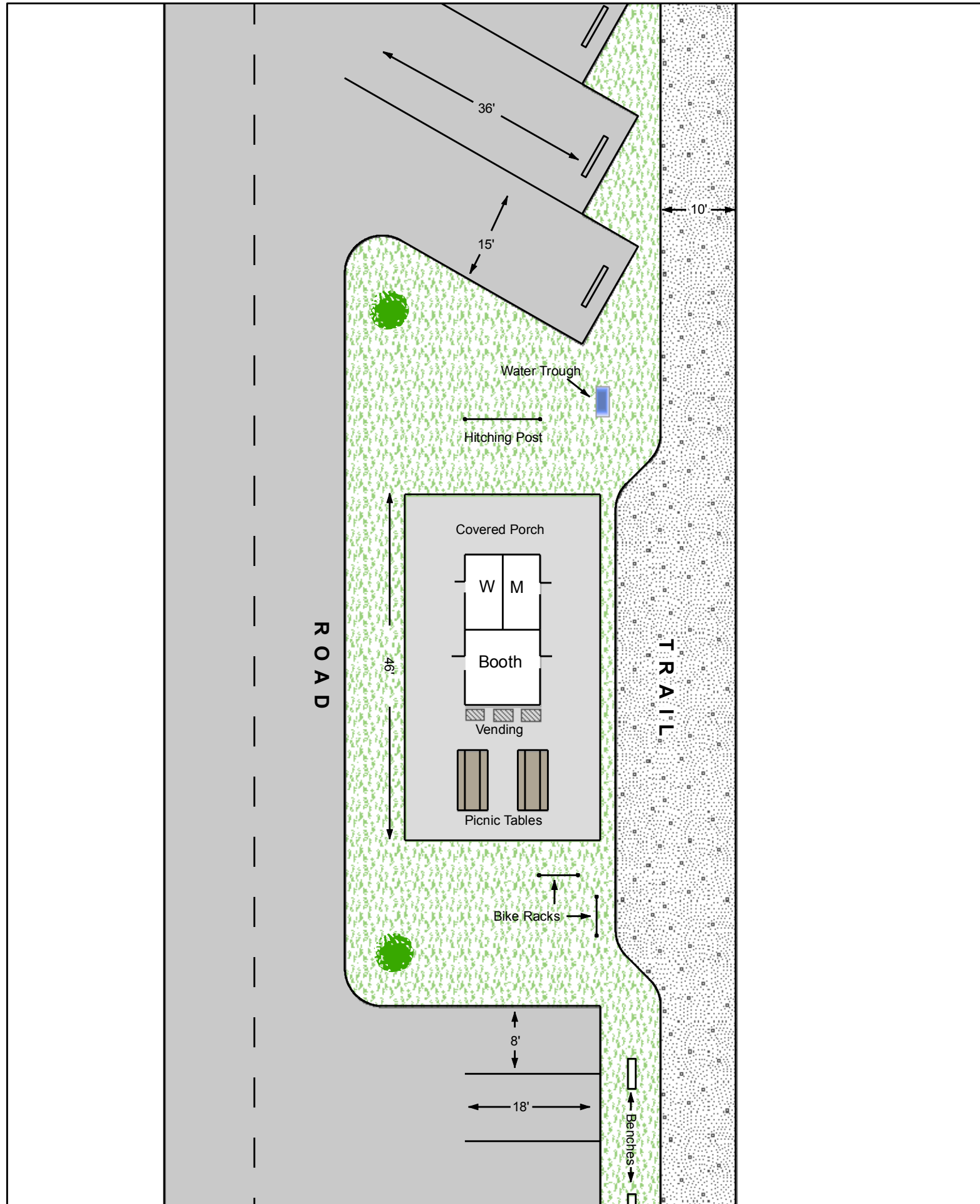
The greatest concern with safety on the trail is 'at grade' intersections with public highways. Table III-2 in Appendix III provides a tabulation of the crossings on the Dawkins line. Both the trail and the public highways must be signed to alert users of intersections. Figure 3-5 provides a recommended signing plan for a typical road/trail intersection.

One of the worst 'at grade' intersections is KY 1888 at Ivyton. Here the trail intersects a local arterial in a 'blind' curve. The intersection at Route 7 in Royalton is also notable for its limited sight distance.

Signs should be placed along the trail to warn users to control their speed. Excessive speed on down grades may become a concern. Signs should also be provided to warn users of risks -- for example a "dismount horses before crossing bridge" sign at each trestle.

The trail operations and maintenance plan must be sufficient to preclude the development of unsafe conditions on the trail. Examples of common problems that could become a major contributor to accidents would include leaf falls that render trestle bridges slick, downed trees from wind events that surprise users where sight distance is restricted, and rutting of the trail by heavy storms.

There must be a plan to rescue injured users in the event of a major accident. It must be noted that the trail is relatively remote, and inaccessible, on the west end of the trail from the Carver tunnel to Evanston and in the middle of the trail (Narrows Branch of Jennys Creek) from the Magoffin/Johnson county line to Riceville. A well-operated trail would have a means to ascertain when users did not return from an outing and a plan for the dispatch of rescue personnel.



1 inch equals 16 feet

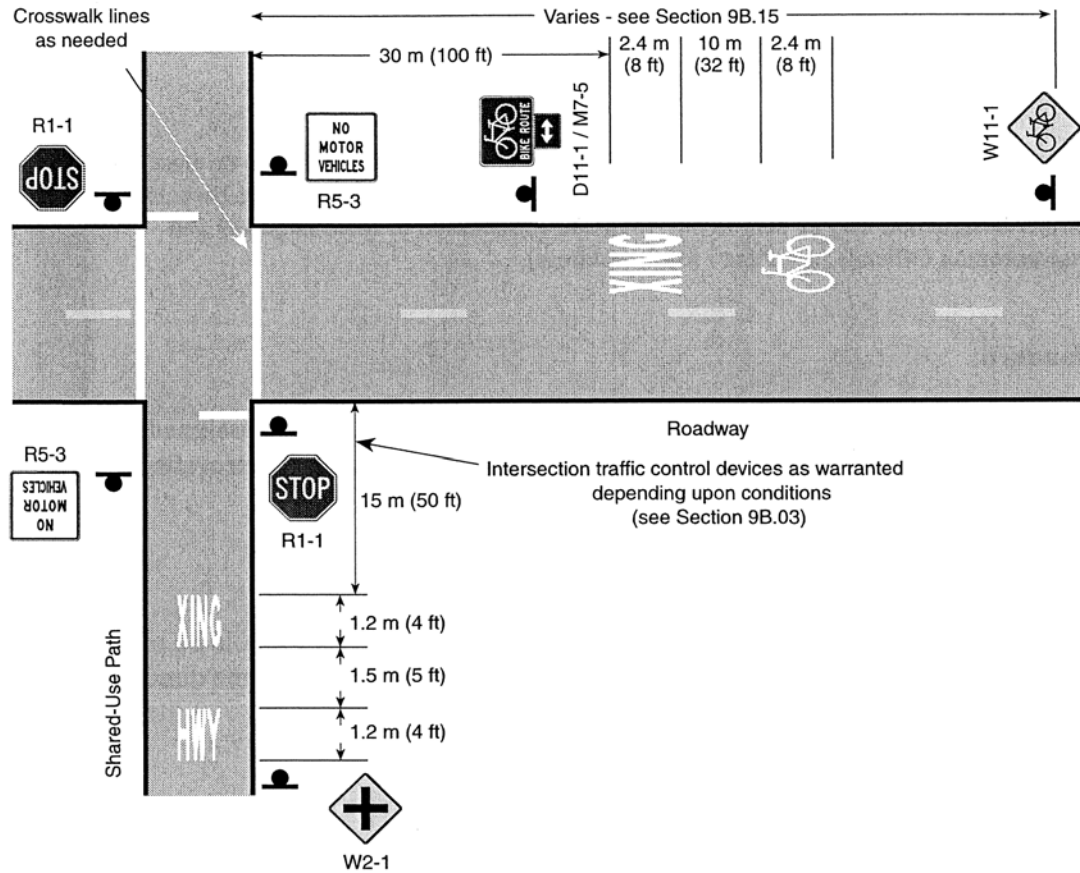


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 CHARLESTON, WV CHAPMANVILLE, WV  
 BIG ROCK, VA

**FIGURE 3-4**  
**Trail Head Concept**

Figure 3-5

Signing Required for Trail/Highway Intersection



Source (Figure 9B-3 of Manual for Uniform Traffic Control Devices)

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## SECTION 4 – COST ANALYSIS

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### 4.1 CAPITAL COST

The engineer's opinion of probable project cost is presented in Table 4-1. Unit costs in this table assume that the entire construction project is bid at the same time to properly bonded and insured contractors paying State/Federal prevailing wages. If the construction is phased over several years (which is likely), unit costs will increase due to inflation and economies of scale considerations, and the aggregate total cost of the entire endeavor will increase. The contingency of fifteen percent applied to the estimated construction cost is appropriate for a preliminary feasibility study.

The capital costs for trailheads included in Table 4-1 are documented in Appendix II. No capital costs are included for purchase of equipment. It is assumed that all O&M equipment is contracted, rented, or leased.

### 4.2 OPERATIONS COST

The engineer's opinion of probable operations cost is presented in Table 4-2. The operations cost analysis assumes that the trail is only operated for 9 months out of the year. Each of the three trailheads is manned by a single operator. Only the trail manager (Royalton office) would be a 12 months per year employee. A heavy equipment trail maintenance team is assumed to provide 24 hours of trail maintenance and materials once a month during the operating season. A bridge maintenance crew is assumed to spend at least four (4) hours per bridge, per season removing flood debris. The trailheads and interim rest stops will have annual cleaning, utilities costs, and repair costs. A contingency of 15% is applied to account for miscellaneous expenditures such as replacement signs, light bulbs, fuel, etc.

As for Table 4-1, some of the costs in Table 4-2 are documented in supporting tables provided in Appendix II. The operations analysis assumes that much of the actual maintenance work is contracted to small, local contractors. Operations costs could be reduced if existing County personnel were utilized or if a group of maintenance volunteers were organized.

### 4.3 POTENTIAL USE

The greatest variable in an assessment of the trail viability is the USER. How many locals will use the trail? How many bicycling and equestrian enthusiasts will be motivated to drive some distance to take advantage of the Big Lovely Mountain Trail recreation opportunity?

There are a few forensic studies of developed trail projects that have documented trail use demographics. However, the authors have not located a good model which would predict trail use for a "yet to be developed" trail.

The Maryland Greenways Commission funded an analysis of the Northern Central Rail Trail (PKF Consulting, 1994). The use of this suburban trail near Baltimore was documented to increase from 10,000 visitors per year in 1984 to 450,000 visitors per year in 1993 (a growth rate of 53 percent per year). The New Hampshire Department of Transportation commissioned a study of use rates for three trails (Alta Planning, 2003): the Burlington Waterfront Bikeway (VT), the Minuteman Bikeway (MA), and the Norwottuck Rail Trail (MA). The study derived an average trail trip generation rate of one trip per 33 people living within two miles of the project. Whether data from Northeastern trails can be extrapolated to rural Kentucky is debatable. The Little Miami Scenic Trail (Cincinnati, Ohio) is one of the oldest rail trail projects in the U.S. (Ohio Kentucky Indiana Regional Council of

Governments, 1999). The Loveland to Corwin section of this trail was estimated to have a use of 150,000 to 175,000 persons annually fifteen years after the trail was opened.

There is a population of roughly 95,000 in the four counties nearest the Big Lovely Trail. The two nearest state parks: Jenny Wiley and Breaks Interstate Park attract 1,000,000 and 329,907 visitors annually (Personal Communication). If the trail is properly promoted, and efforts are made to “capture” a portion of the state park visitors, the Big Lovely Trail should be able to attract between 25,000 to 50,000 visitors per year within five years of becoming fully functional.

#### 4.4 USER FEE SYSTEM

We recommend that the Trail Authority consider a user fee system for the trail. We recommend a “permit” system that provides for day use, weekly use, or seasonal use. The “permit” gives the authority a ready means to:

1. Evaluate use by counting permits issued,
2. Control liability by requiring purchasers of permits to acknowledge the operating rules for the facility and sign a liability release,
3. Involve local business enterprises in the trail by having them derive some revenue from permit sales to prospective users, and
4. Derive some revenue to underwrite a quality operations and maintenance program which is necessary to keep the users returning to the trail.

The USDA Forest Service has already instituted a trail user fee system for selected National Forests (USDA). An example for the Wayne National Forest may be found on the web at [http://www.fs.fed.us/r9/wayne/recreation\\_sites/trail\\_permits/trail\\_permit.html](http://www.fs.fed.us/r9/wayne/recreation_sites/trail_permits/trail_permit.html). The State of Wisconsin requires a state trail pass for biking, skating, horseback riding and skiing on designated trails (WDNR). The annual pass is \$15 and the daily use pass is \$4. The State of Kansas has instituted a trail use permit requirement for the Sand Hills State Park and Prairie Spirit Trail (KDWP). The annual pass is \$12.15 and the day use pass is \$3.50. The State of South Dakota has established fees for the George S. Mickleson Trail (\$2 day use, \$10 season pass). The State of Idaho has implemented a fee structure for the Hiawatha Trail (\$8 day use, \$25 season pass). Idaho states that the purpose of its fee structure is the pay Trail Marshals to ensure trail safety and cleanliness (<http://wallace-id.com/skilookout/tprices.html>.)

Table 4-3 derives an annual cost of capital and operations for the Big Lovely Mountain Trail. This derivation assumes that one third of the project’s capital cost is borrowed for twenty years at five percent interest. This is a reasonable assumption. State and Federal governments are encouraging trail projects through grant programs. This table also predicts a “break even” fee per user trip. This analysis suggests that it takes 100,000 trips per season to get a realistic break even per trip use fee for the stated assumption. Since anticipated use will be lower, the Authority should consider a volunteer trail operation and maintenance program as a means of reducing trail operations costs or should explore funding options to significantly reduce the loan dollars used to capitalize the project.

Table 4-1

ENGINEER'S OPINION OF PROBABLE PROJECT COST BIG LOVELY MOUNTAIN TRAIL					
ITEM NO.	ITEM	QUANTITY	UNIT	UNIT PRICE	AMOUNT
<b>1 GENERAL CONDITIONS</b>					
1a	Mobilization/Bonds/Insurance	1	LS	\$ 36,000.00	\$ 36,000.00
1b	Seeding	1	LS	\$ 25,000.00	\$ 25,000.00
1c	Landscape Allowance	1	LS	\$ 10,000.00	\$ 10,000.00
<b>SUBTOTAL</b>					<b>\$ 71,000.00</b>
<b>2 SIGNAGE &amp; SAFETY</b>					
2a	Paint Stripe public road crossings	84	Each	\$ 100.00	\$ 8,400.00
2b	Sign - Caution! Crossing Big Lovely Trail	84	Each	\$ 100.00	\$ 8,400.00
2c	Sign - Caution! Public Road Crossing	84	Each	\$ 100.00	\$ 8,400.00
2d	Sign - Caution! Bridge - Dismount & Walk	84	Each	\$ 100.00	\$ 8,400.00
2e	Restore Mile Markers	1	LS	\$ 3,400.00	\$ 3,400.00
<b>SUBTOTAL</b>					<b>\$ 37,000.00</b>
<b>3 TRAIL</b>					
3a	Grade / Shape / Compact Trailbed	178,722	LF	\$ 0.25	\$ 44,680.50
3b	4" Compacted DGA over 10" Trailbed	47,957	Ton	\$ 18.00	\$ 863,227.26
	w/0.08 shoulders 4 feet wide	19,183	Ton	\$ 18.00	\$ 345,290.90
3c	Regrade ditch lines	44,681	LF	\$ 1.00	\$ 44,680.50
3d	Feather DGA for Xing transitions	338	Ton	\$ 18.00	\$ 6,085.80
<b>SUBTOTAL</b>					<b>\$ 1,303,964.96</b>
<b>4 BRIDGES &amp; TRESTLES</b>					
4a	Deck 35 bridges w/rough 2x6 oak (8' 0" wide)	3,174	LF	\$ 15.00	\$ 47,610.00
4b	Handrail for 35 bridges	6,348	LF	\$ 20.00	\$ 126,960.00
4c	Repair/reconstruct bridge MP ??	1	LS	\$ 7,500.00	\$ 7,500.00
4d	Repair/reconstruct bridge MP ??	1	LS	\$ 7,500.00	\$ 7,500.00
4e	Post bollards to restrict ATV access	70	Each	\$ 150.00	\$ 10,500.00
<b>SUBTOTAL</b>					<b>\$ 189,570.00</b>
<b>5 AMENITIES</b>					
5a	Remote restroom / picnic shelter	2	Each	\$ 50,000.00	\$ 100,000.00
	Building & fixtures - \$25,000				
	Power - \$4,000				
	Septic - \$6,000				
	Well water system - \$15,000				
5b	Light system - Carver tunnel - 1555 ft	1	LS	\$ 15,000.00	\$ 15,000.00
5c	Light system - Gun Creek tunnel - 662 ft	1	LS	\$ 10,000.00	\$ 10,000.00
5d	Fence - Ivyton Scrap Yard	900	LF	\$ 15.00	\$ 13,500.00
5e	Fence - General	1,000	LF	\$ 10.00	\$ 10,000.00
5f	Nature Walk (clearing & signing)	1	LS	\$ 1,000.00	\$ 1,000.00
<b>SUBTOTAL</b>					<b>\$ 149,500.00</b>
<b>6 TRAIL HEADS</b>					
6a	Hager Hill Trail Head See Table II-1 App II	1	LS	\$ 71,092.00	\$ 71,092.00
6b	Royalton Trail Head See Table II-2 App II	1	LS	\$ 61,092.00	\$ 61,092.00
6c	Evanston Trail Head See Table II-3 App II	1	LS	\$ 61,092.00	\$ 61,092.00
<b>SUBTOTAL</b>					<b>\$ 193,276.00</b>
<b>SUB TOTAL CONSTRUCTION</b>					<b>\$ 1,944,310.96</b>
<b>NON-CONSTRUCTION</b>					
	Construction contingencies @ 15%				\$ 291,646.64
	Purchase of Railroad R/W from R.J. Co man				\$ 500,000.00
	Basic Engineering (Design/Bid/Admin)	85% of 7.65%			\$ 126,428.82
	Resident Inspection	4.60%			\$ 89,438.30
	Legal				\$ 25,000.00
	Environmental by ADD				\$ 25,000.00
	Grants Admin by ADD				\$ 50,000.00
<b>SUB TOTAL NON CONSTRUCTION</b>					<b>\$ 1,107,513.77</b>

PROBABLE PROJECT COST \$ 3,051,824.73

CAPITAL COST PER MILE  $\frac{\$3,051,824.73}{34} = \$ 89,760.00$

34

Table 4-2

ENGINEER'S OPINION OF PROBABLE OPERATIONS COST BIG LOVELY MOUNTAIN TRAIL					
ITEM NO.	ITEM	QUANTITY	UNIT	UNIT PRICE	AMOUNT
<b>1 LABOR</b>					
1a	Full Time General Manager		YR		See Royalton Trail Head
1b	Seasonal Trail Head Managers		YR		See Hager & Evanston
<b>SUBTOTAL</b>					\$ -
<b>2 SIGNAGE &amp; SAFETY MAINTENANCE</b>					
2a	Ride trail once per month & confirm warning and caution signs are still in place				inc in cost of Gen Man.
<b>SUBTOTAL</b>					\$ -
<b>3 TRAIL MAINTENANCE TEAM - CONTRACT IT OR USE COUNTY FORCES - MONTHLY OPS COST</b>					
3a	Skid Steer w operator	24	Hrs	\$ 55.00	\$ 1,320.00
3b	Backhoe w operator	24	Hrs	\$ 55.00	\$ 1,320.00
3c	Smooth Drum Vibratory Compactor w operator	24	Hrs	\$ 60.00	\$ 1,440.00
3d	Kubota RTV 9000 w 2 laborers chain saw & spray	24	Hrs	\$ 50.00	\$ 1,200.00
(this crew also checks bridge handrails, nails down loose plans, & checks for bridge abutment washouts)					
3e	Maintenance Stone	300	Ton	\$ 18.00	\$ 5,400.00
<b>SUBTOTAL PER MONTH</b>					<b>\$ 10,680.00</b>
<b>ANNUAL COST ASSUMING</b>					<b>\$ 96,120.00</b>
<b>4 ANNUAL BRIDGE &amp; TRESTLE MAINTENANCE</b>					
4a	Gradall for annual bridge opening cleanout	140	Hrs	\$ 100.00	\$ 14,000.00
4 Hrs per bridge by 35 bridges					
<b>SUBTOTAL</b>					<b>\$ 14,000.00</b>
<b>5 AMENITIES</b>					
5a	Rest stop / picnic shelter (cleaning & annual repairs)	2	Each	\$ 2,500.00	\$ 5,000.00
5b	Light system - Carver tunnel - 1555 ft (24/7)	1	LS	\$ 1,000.00	\$ 1,000.00
5c	Light system - Gun Creek tunnel - 662 ft (24/7)	1	LS	\$ 800.00	\$ 800.00
<b>SUBTOTAL</b>					<b>\$ 6,800.00</b>
<b>6 TRAIL HEADS</b>					
6a	Hager Hill Trail Head See Table II-4 App II	1	LS	\$ 34,024.00	\$ 34,024.00
6b	Royalton Trail Head See Table II-5 App II	1	LS	\$ 56,944.00	\$ 56,944.00
6c	Evanston Trail Head See Table II-6 App II	1	LS	\$ 34,024.00	\$ 34,024.00
<b>SUBTOTAL</b>					<b>\$ 124,992.00</b>
<b>SUB TOTAL OPERATIONS &amp; MAINTENANCE</b>					<b>\$ 241,912.00</b>
Operations contingencies @ 15%					\$ 36,286.80

PROBABLE OPERATIONS & MAINTENANCE COST \$ 278,198.80



Table 4-3

DERIVATION OF BREAK EVEN USER FEE BIG LOVELY MULTI-USE TRAIL					
ITEM NO.	ITEM	QUANTITY	UNIT	UNIT PRICE	AMOUNT
<b>1</b>	<b>BASIC DATA</b>				
	Interest Rate	5.00%			
	Planning Period / Term	20	Yrs		
	Capital Cost				\$ 3,051,824.73
	Less anticipated State & Federal Grants				\$ 2,044,722.57
	Capital Financed				\$ 1,007,102.16
	Annual cost of Capital				\$80,812.48
	Operations & Maintenance Cost				\$ 278,198.80
	<b>Annual cost Capital &amp; Operations</b>				<b>\$359,011.28</b>
<b>2</b>	<b>USE FEE AS FUNCTION OF NUMBER OF PERSON TR</b>				
	Users per 9 month season	25,000			\$ 14.36
	Users per operating calendar day	93			
	Users per 9 month season	50,000			\$ 7.18
	Users per operating calendar day	185			
	Users per 9 month season	100,000			\$ 3.59
	Users per operating calendar day	370			

TABLE 6-1

PHASING PLAN BIG LOVELY MOUNTAIN TRAIL				
ITEM NO.	ITEM	CONSTRUCT. COSTS	NON CONST. COSTS	AMOUNT
<b>PHASE I - RIGHT OF WAY ACQUISITION</b>				<b>\$ 520,000.00</b>
	Purchase of Railroad R/W from R.J. Coman		\$ 500,000.00	
	Legal		\$ 20,000.00	
<b>PHASE II - TRAIL SURFACE, BRIDGES &amp; TRESTLES</b>				<b>\$ 2,154,495.72</b>
	General Conditions	\$ 58,220.00		\$ -
	Signage & Safety	\$ 66,100.00		\$ -
	Trail	\$ 1,303,602.71		\$ -
	Bridges & Trestles	\$ 189,570.00		\$ -
	Tunnel Light Systems	\$ 25,000.00		
	<b>Sub-Total Construction</b>	<b>\$ 1,642,492.71</b>		
	Construction Contingencies @ 15%		\$ 246,373.91	
	Basic Engineering (Design/Bid/Admin)	85% of 8.13%	\$ 113,504.46	
	Resident Inspection	5%	\$ 82,124.64	
	Legal		\$ 2,500.00	
	Environmental & Grants Admin by ADD		\$ 67,500.00	
	<b>Sub-Total Non-Construction</b>		<b>\$ 512,003.00</b>	
	<b>SUBTOTAL</b>			<b>\$ -</b>
<b>PHASE III - TRAIL HEADS &amp; INTERMEDIATE REST STOPS</b>				<b>\$ 455,027.54</b>
	General Conditions	\$ 12,780.00		\$ -
	Amenities	\$ 124,500.00		\$ -
	Trail heads	\$ 193,276.00		\$ -
	<b>Sub-Total Construction</b>	<b>\$ 330,556.00</b>		
	Construction Contingencies @ 15%		\$ 49,583.40	
	Basic Engineering (Design/Bid/Admin)	11.08%	\$ 36,625.60	
	Resident Inspection	8.55%	\$ 28,262.54	
	Legal		\$ 2,500.00	
	Environmental & Grants Admin by ADD		\$ 7,500.00	
	<b>Sub-Total Non-Construction</b>		<b>\$ 124,471.54</b>	

PROBABLE PROJECT COST \$ 3,129,523.26

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## SECTION 5 – BENEFITS ANALYSIS

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### 5.1 MONETARY BENEFITS TO COMMUNITY

Appendix I details local food, fuel, lodging and equine support facilities that might benefit from the Big Lovely Trail. Map 2-2 (pocket) illustrates key clusters of these establishments.

Several authors have endeavored to document the economic impact of trail projects (Bowker, 2004; PKF, 1994; GKIRC, 1999). In general, the principal direct economic impacts of trail projects are expenditures for food and fuel. Lodging is a much smaller component of a trail's economic activity. Trails stimulate some purchases of durable goods (bikes, saddles, etc.). However, durable goods purchases tend to occur well beyond the trail community both because the durable goods establishments do not exist locally and because touring users tend to make durable purchases in their home communities.

In addition to stimulating existing businesses, trails may also foster the development of support businesses. Mr. Don Fields operates the only bicycle shop in the region (Pro Fitness Health and Wellness). Mr. Fields has expressed an interest in opening another shop near the trail once the Big Lovely Trail is placed in operation (personal communication). Bike rental/shuttle services may develop as use of the Big Lovely Trail grows. Likely locations for shuttle services are Royalton and Hager Hill. Since the Big Lovely Trail is envisioned as a multi-use trail, there is a possibility that some equine related services may develop (such as stabling or horse boarding). Equine enthusiasts also tend to be recreational vehicle users. A private developer might pursue an RV park.

There is some debate as to the impact of rail trails projects on property values. In urban areas, where green space is in limited supply, property values have increased significantly in proximity to trails. This effect is less pronounced for rural trails.

### 5.2 NON MONETARY BENEFITS TO COMMUNITY

Over eighty percent of trail users report that health benefits are a reason for using a trail (Bowker, 2004). Although it can be argued that this is a direct economic benefit (lowering community health care costs), it can also be argued that improved public health is a non-monetary benefit in the positive form of increased quality of life for the community. Trails offer an opportunity for relaxation that is equally difficult to quantify.

Trails increase community pride and, in increasing pride, foster property improvements along the right of way. Trails provide a learning experience for the community's youth, introducing them to the natural resources and history of their community.

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## SECTION 6 – IMPLEMENTATION

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### 6.1 PHASING PLAN

Acquisition and construction of the trail must be phased to coincide with the availability of funds. The following phasing plan is proposed:

Phase	Description
I	Acquire Dawkins line right of way
II	Construct Trail Surface, Deck Bridges, & Install Signage
III	Construct Trail Heads & Intermediate Rest Stops

Table 6-1 estimates the costs of each phase.

It is our understanding that political (and rail banking) concerns dictate that Phase I must be completed expeditiously. Phase II places the trail in operation without amenities. It is our understanding that users want the trail as soon as practical. Phase III would need to follow Phase II in short order. The trail will not succeed without the security provided by well-operated support facilities.

TABLE 6-1

PHASING PLAN BIG LOVELY MOUNTAIN TRAIL				
ITEM NO.	ITEM	CONSTRUCT. COSTS	NON CONST. COSTS	AMOUNT
<b>PHASE I - RIGHT OF WAY ACQUISITION</b>				<b>\$ 520,000.00</b>
	Purchase of Railroad R/W from R.J. Coman		\$ 500,000.00	
	Legal		\$ 20,000.00	
<b>PHASE II - TRAIL SURFACE, BRIDGES &amp; TRESTLES</b>				<b>\$ 2,154,495.72</b>
	General Conditions	\$ 58,220.00		\$ -
	Signage & Safety	\$ 66,100.00		\$ -
	Trail	\$ 1,303,602.71		\$ -
	Bridges & Trestles	\$ 189,570.00		\$ -
	Tunnel Light Systems	\$ 25,000.00		
	<b>Sub-Total Construction</b>	<b>\$ 1,642,492.71</b>		
	Construction Contingencies @ 15%		\$ 246,373.91	
	Basic Engineering (Design/Bid/Admin)	85% of 8.13%	\$ 113,504.46	
	Resident Inspection	5%	\$ 82,124.64	
	Legal		\$ 2,500.00	
	Environmental & Grants Admin by ADD		\$ 67,500.00	
	<b>Sub-Total Non-Construction</b>		<b>\$ 512,003.00</b>	
	<b>SUBTOTAL</b>			<b>\$ -</b>
<b>PHASE III - TRAIL HEADS &amp; INTERMEDIATE REST STOPS</b>				<b>\$ 455,027.54</b>
	General Conditions	\$ 12,780.00		\$ -
	Amenities	\$ 124,500.00		\$ -
	Trail heads	\$ 193,276.00		\$ -
	<b>Sub-Total Construction</b>	<b>\$ 330,556.00</b>		
	Construction Contingencies @ 15%		\$ 49,583.40	
	Basic Engineering (Design/Bid/Admin)	11.08%	\$ 36,625.60	
	Resident Inspection	8.55%	\$ 28,262.54	
	Legal		\$ 2,500.00	
	Environmental & Grants Admin by ADD		\$ 7,500.00	
	<b>Sub-Total Non-Construction</b>		<b>\$ 124,471.54</b>	

PROBABLE PROJECT COST \$ 3,129,523.26

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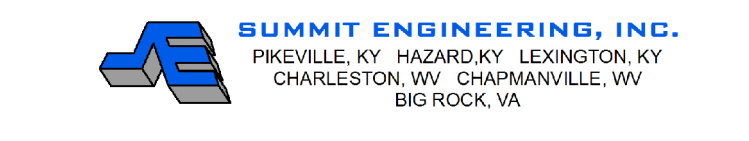
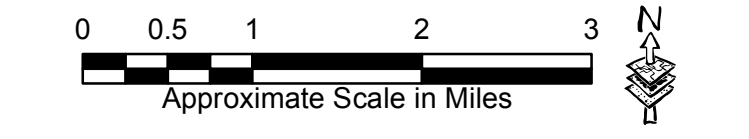
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# Big Lovely Mountain Recreational Trail

## Development Concept and Points of Interest



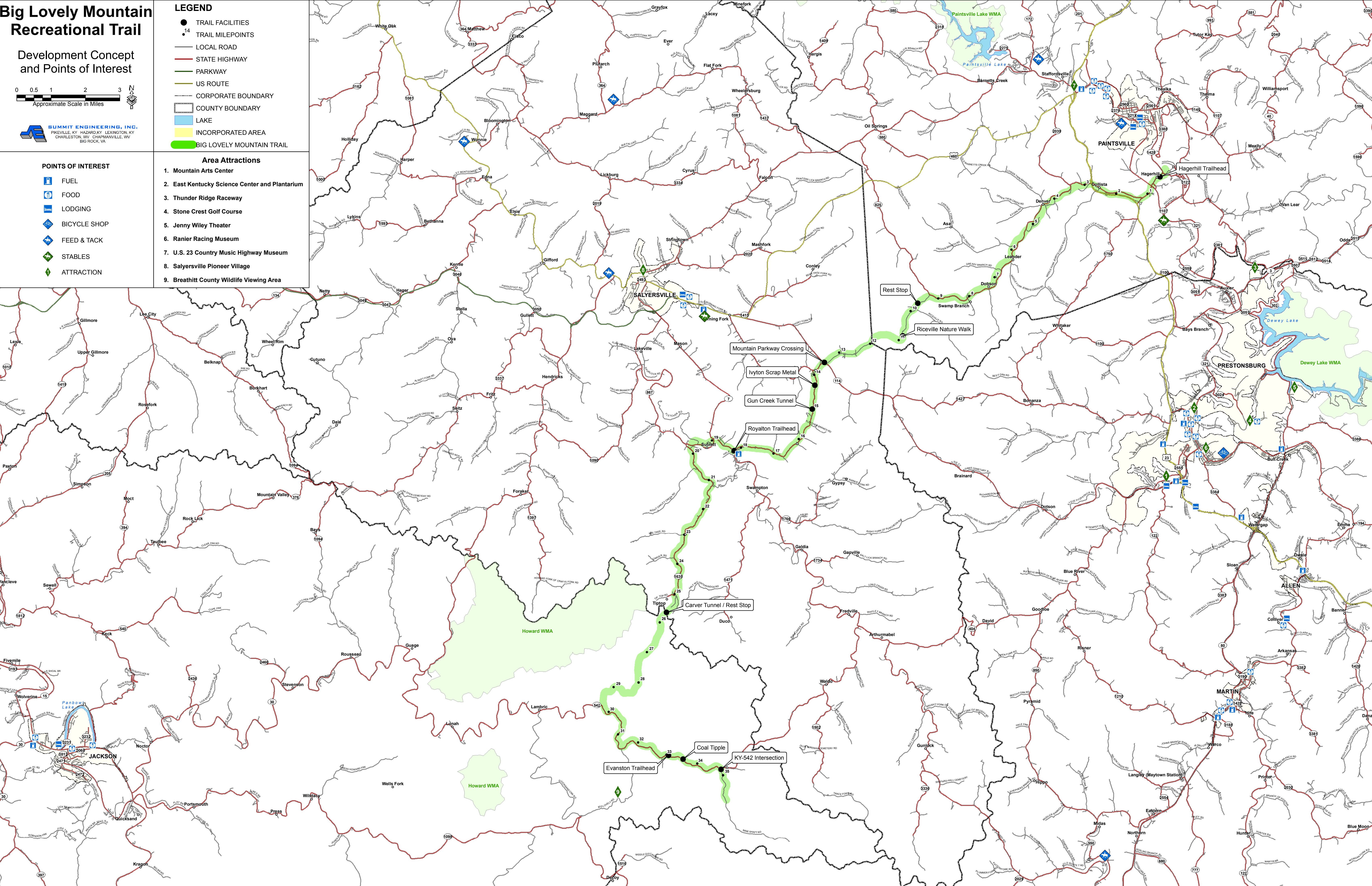
**LEGEND**

- TRAIL FACILITIES
- 14 TRAIL MILEPOINTS
- LOCAL ROAD
- STATE HIGHWAY
- PARKWAY
- US ROUTE
- CORPORATE BOUNDARY
- COUNTY BOUNDARY
- LAKE
- INCORPORATED AREA
- BIG LOVELY MOUNTAIN TRAIL

**POINTS OF INTEREST**

- FUEL
- FOOD
- LODGING
- BICYCLE SHOP
- FEED & TACK
- STABLES
- ATTRACTION

- Area Attractions**
1. Mountain Arts Center
  2. East Kentucky Science Center and Plantarium
  3. Thunder Ridge Raceway
  4. Stone Crest Golf Course
  5. Jenny Wiley Theater
  6. Ranier Racing Museum
  7. U.S. 23 Country Music Highway Museum
  8. Salyersville Pioneer Village
  9. Breathitt County Wildlife Viewing Area



# APPENDIX I

## REGIONAL ESTABLISHMENTS

FUEL

FOOD

LODGING

BICYCLE SHOPS

EQUINE STABLING & TACK



Appendix I  
Fuel Establishments

**Prestonsburg Area:**

Action Petroleum Co.

101 Baldwin Street  
606-886-2368

Kent Rose Citgo

1099 N. Lake Drive  
606-886-0616

Lakeview Mart Marathon

654 Lake Road  
606-886-9463

Prestonsburg Exxon Tiger Mart

3835 US Hwy. 23 North  
606-886-7007

Samon's Service Station

US Hwy. 23 East  
606-874-2181

Somerset Oil Inc.

1590 S. Lake Drive  
606-886-9413

Super America

654 N. Lake Drive  
606-886-1383

**Allen:**

Skeans Marathon

468 US Hwy. 23 North  
606-874-1226

**Martin Area:**

Halbert Brothers Garage

606-285-9111

Jacobs Citgo Svc. & U-Haul

12697 Main Street  
606-285-9300

**Martin Area:**

Speedway

12676 Main Street  
606-285-3963

Super America

606-285-9345

Gas Mart

6701 KY Route 550, Garrett  
606-358-3330

Tackett's BP

13810 KY Route 122, Hi Hat  
606-377-6441

Vance Quick Mart

16751 KY Route 122, Hi Hat  
606-377-9700

D & A Ashland

Hwy. 550, Hueysville  
606-358-4415

Yates Gulf

10209 KY Route 122, McDowell  
606-377-6925

**Ivel Area:**

Stratton's Citgo

6365 US Hwy. 23 South  
606-478-4009

Evans Ashland Station

7623 KY Route 979, Grethel  
606-587-2604

**Paintsville Area:**

Atlas Auto Care

193 North US Hwy. 23  
606-789-9101

Autobahn at Eastern

345 KY Route 550  
606-358-3417

Appendix I  
Fuel Establishments

**Paintsville Area:**

Fast Change Lube & Oil  
501 N. Mayo Trail #A  
606-788-9900

Highland Chevron  
US Hwy.321  
606-789-6273

Paintsville Chevron  
1074 3<sup>rd</sup> Street  
606-297-7401

Shell Auto & Truck Repair Svc.  
1428 Depot Street  
606-789-1554

Super America  
513 S. Mayo Trail  
606-789-7176

Ward's Service Station  
304 College Street  
606-789-9865

C & M Ashland Station  
2247 KY Route 40 West, Staffordsville  
606-297-4232

Exxon  
643 KY Route 40 West, Staffordsville  
606-297-7200

**Salyersville:**

Parkway Sunoco  
279 E. Mountain Parkway  
606-349-3334

Parkway Sunoco Corp.  
114 E. Mountain Parkway  
606-349-2235

Rose's Parkway Chevron, Inc.  
Hwy. 114 E. Mountain Parkway  
606-349-3911

**Salyersville:**

Speedway  
460 Maple Street  
606-349-4207

**Inez Area:**

Autoglass of America  
Blacklog Road  
606-298-0062

Exxon Tiger Mart  
Rt. 3 Old Middle Fork Road  
606-298-3193

Fast Change Lube & Oil  
Hwy. 40 West  
606-298-0764

Horn's BP  
Milo Road  
606-298-5947

Inez Sunoco  
Hwy. 40 West  
606-298-6781

Route 40 BP  
Hwy. 40 East  
606-298-6750

Super America  
Main Street & Route 40  
606-298-7720

Fletcher's Gas N Go  
2031 US Hwy. 23, Lowmansville  
606-297-7867

Fast Change Lube & Oil  
9 Hwy. 292 South, Warfield  
606-395-6010

Appendix I  
Fuel Establishments

**Hindman Area:**

Hindman Double Kwik

28 Hwy. 80 East  
606-785-0711

Mousie BP

9875 Hwy. 550 East, Mousie  
606-946-2704

VICARS BP Station

Melvin, KY  
606-452-2617

VICARS Gulf Svc.

22879 KY Route 122, Melvin  
606-452-2619

M & L Variety Market

12583 Hwy. 582, Kite  
606-447-2305

Perkins Service Station

10230 Hwy. 7 South, Kite  
606-447-2414

Richard Hall Ashland Station

11130 Hwy. 7 South, Kite  
606-447-2809

**Jackson Area:**

Jackson Citgo

215 Hwy. 15 North  
606-666-7717

Jackson Service Center

162 Town Hill Road  
606-666-5039

Shell Food Mart

445 Hwy. 15 North  
606-666-4375

Deaton Brothers Ashland

520 Hwy. 15 North  
606-666-4782

**Jackson Area:**

Jiffy Mart

800 Hwy. 15 South  
606-666-5986

Jackson Double Quick 2

20 North Point Avenue  
606-666-8976

Parkway Marathon

6856 KY Hwy. 15 North  
606-666-9286

Vic's Food Mart

9630 Hwy. 15 South, Haddix  
606-666-2091

First Class Travel Center

Hwy. 15, Campton  
606-668-3135

Campton Service Center

41 South KY 15, Campton  
606-668-7374

Shell Food Mart

30 South KY 15, Campton  
606-668-9500

Main Stop Fuel & Deli

111 Main Street, Campton  
606-668-7600

Porter Self Service

Route 35, Rogers  
606-668-6248

Corner Marathon & Food Mart

30 KY 715, Pine Ridge  
606-668-3332

Booneville BP

Hwy. 11 North, Booneville  
606-593-7263

M & M Service Center

Hwy. 11 North, Booneville  
606-593-6313

Appendix I  
Fuel Establishments

**Hazard Area:**

Grand Vue Auto Sales

1376 Combs Road  
606-436-1124

Daniel Boone Shell Food Court

1079 Morton Blvd.  
606-439-0740

Highwayman Chevron Food Mart

3145 North KY Hwy. 15  
606-436-1910

Double Kwik Markets

2377 North KY Hwy. 15  
606-436-4684

Barb's Mini Mart

5584 West KY Hwy. 80  
606-439-3069

Walkertown Service Center

2008 North Main Street  
606-439-1371

Hazard Shell Food Mart

108 East Main Street  
606-436-4600

Hayes Hazard Service

464 East Main Street  
606-436-5498

Lothair Shell

1825 East Main Street  
606-436-5364

Dale Noble Grocery

3108 KY Hwy. 28  
606-439-2438

Redi-Mart

7851 Jamestown Vig #100, Bulan  
606-251-3611

Appendix I  
Restaurant Establishments

**Prestonsburg Area:**

Country At Heart & Old Town Fudge Co.

128 South Front Avenue  
606-886-8957

Billy Ray's Restaurant

101 North Front Avenue  
606-886-1744

Papa John's Pizza

487 North Lake Drive  
606-886-2800

Giovanni's

1216 South Lake Drive  
606-886-8070

Taco Bell

649 North Lake Drive  
606-886-6001

Hardee's Restaurant

909 North Lake Drive  
606-886-1052

Dairy Queen

1059 North Lake Drive  
606-886-1931

4 Guys & a Grill

918 Clubhouse Drive  
606-889-0048

Subway

477 Village Drive  
606-889-9808

McDonald's Restaurant

6606-886-3442

Little Caesar's Pizza

429 Village Drive  
606-886-8215

Peking Chinese Buffet

606-886-6868

**Prestonsburg Area:**

Pizza Hut

US 23 Mays Branch Road  
606-886-1377

Reno's Roadhouse

30 Colonels Court  
606-886-0085

Wendy's Old Fashioned Hamburgers

1206 North Lake Drive  
606-886-1492

Dairy Cheer

1384 North Lake Drive  
606-886-8666

Hillbilly Pizza

5459 KY Route 321  
606-889-6464

El Azul Grande

134 Collins Circle  
606-886-8300

Jerry's Restaurant

1488 North Lake Drive  
606-886-6701

Long John Silver's

1530 North Lake Drive  
606-886-6701

Made from Scratch Dining & Catering,  
Inc.

1566 North Lake Drive  
606-886-9699

Hobert's Pizzeria

3240 South Lake Drive  
606-886-8118

Hot Rod's Pizza

60689 KY Route 1428  
606-874-0055

Appendix I  
Restaurant Establishments

**Martin Area:**

Giovanni's Pizza  
11564 Main Street  
606-285-0745

McDonald's Restaurant  
12575 Main Street  
606-285-0723

Long John Silver's  
12575 Main Street  
606-285-3522

Subway  
12676 Main Street  
606-285-3963

Seasons Inn Motel & Restaurant  
8550 KY Route 1428, Allen  
606-874-2770

Martha's Pizza & More  
43 Ivy Creek, Ivel  
606-478-2010

Sharon's Pizza  
4939 KY, David  
606-886-2248

Pizza Den  
49 Boyd Lane, Ivel  
606-478-9986

Dairy Queen  
Martin, KY  
606-285-9827

**Paintsville Area:**

Giovanni's Pizza  
261 Court Street  
606-789-8535

Wilma's Restaurant  
212 Court Street  
606-789-5972

**Paintsville Area:**

Carriage House Restaurant  
624 James Trimble Blvd.  
606-789-4242

Porky's Pizza  
419 Broadway Street  
606-789-8421

Tom's Pizza Shack  
521 3<sup>rd</sup> Street  
606-789-8187

Mandarin House  
507 South Mayo Trail  
606-789-5313

Pizza Hut  
221 North Mayo Trail  
606-789-5490

Fazoli's Restaurant  
337 North Mayo Trail  
606-789-6708

Burger King  
341 North Mayo Trail  
606-789-1061

Dairy Queen  
906 Broadway Street  
606-789-5400

KFC of Paintsville  
607 South Mayo Trail  
606-789-1166

Papa John's Pizza  
425 North Mayo Trail  
606-789-3200

Little Caesar's Pizza  
475 North Mayo Trail  
606-789-1060

East End Pizza  
1055 Broadway Street  
606-789-3420

Appendix I  
Restaurant Establishments

**Paintsville Area:**

Fiesta Place  
461 North Mayo Trail  
606-789-4444

Shoney's Restaurant  
510 North Mayo Trail  
606-789-9212

Hardee's of Paintsville  
545 North Mayo Trail  
606-789-2415

Bob Evans Farms Restaurant  
631 North Mayo Trail  
606-789-4334

Wendy's Old Fashioned Hamburgers  
US 23  
606-789-6829

McDonald's Restaurant  
RR 23  
606-789-6989

Arby's Roast Beef Restaurant  
606-789-1475

Long John Silver's  
606-789-7620

Subway  
606-789-5052

Kaleidoscoops Ice Cream  
606-789-4445

**Jackson Area:**

Main Street Diner  
1134 Main Street  
606-666-4160

The Feed Store of Jackson Restaurant  
1124 Main Street  
606-666-8662

**Jackson Area:**

Wendy's  
30 Hwy. 15 South  
606-666-8748

Variety Pizza House  
1189 Main Street  
606-666-5454

Hardee's Restaurant  
305 Hwy. 15 South  
606-666-8149

Shell Food Mart #2  
445 Hwy. 15 North  
606-666-7178

Long John Silver's  
440 Hwy. 15 South  
660-666-5802

Kentucky Fried Chicken  
745 Hwy. 15 North  
606-666-7381

Pizza Hut  
759 Hwy. 15 South  
606-666-4924

Little Caesar's Pizza  
842 Hwy. 15 North  
606-666-4916

New China  
1550 Hwy. 15 South  
606-666-8828

Pizzas R Us  
1550 Hwy. 15 South  
606-666-9888

McDonald's of Jackson  
Hwy. 15 & 30 North  
606-666-5788

Appendix I  
Restaurant Establishments

**Jackson Area:**

Old Country Inn  
Jetts Shopping Center  
606-666-7977

White Flash #2 & Tasty Twist  
Hwy. 15 North  
606-666-9171

Subway  
Hwy. 15 North  
606-666-7178

**Salyersville Area:**

Salyersville Shop Rite Deli  
433 Parkway Drive  
606-349-2227

Subway  
114 East Mountain Parkway  
606-349-8899

Salyersville Food Court  
300 East Mountain Parkway  
606-349-4809

Betty's Pizza & Grill  
350 Gamble Branch Road  
606-349-7856

Ron's Pizza  
5590 Flat Fork Road  
606-349-3314

A & K Wildcat Pizza  
RR 7  
606-349-2717

Speedway Deli  
460 Maple Street  
606-349-1331

Kozy Korner  
East Maple Street  
606-349-8601

**Salyersville Area:**

Tom's Pizza  
RR 114  
606-349-4131

Dairy Queen  
606-349-1616

Lee's Famous Recipe  
East Mountain Parkway  
606-349-3626

McDonald's Restaurant  
East Mountain Parkway  
606-349-1611



Appendix I  
Lodging Establishments

**Allen:**

Seasons Inn Motel and Restaurant

8550 Ky Route 1428  
Allen, KY 41601  
(606) 8742770

**Jackson:**

The Jackson Inn

Highway 15  
Jackson, KY 41339  
(606) 666-7551

Paul's Motel

1184 Main St  
Jackson, KY 41339  
(606) 666-2471

**Salyersville:**

Budget Inn Express

180 E Mountain Parkway  
Salyersville, KY 41465  
(606) 349-3577

Dixie Bed & Breakfast

304 Dixie Ave  
Salyersville, KY 41465  
(606) 349-7829

Ivy Point Motel

Highway 460 W  
Salyersville, KY 41465  
(606) 349-1750

**Paintsville:**

Days Inn

US 321 South  
Paintsville, KY 41240  
(606) 789-3551

**Paintsville:**

Budget Inn Express

US 321 South  
Paintsville, KY 41240  
(606) 789-5341

Ramada Inn and Convention Center

624 James Trimble Blvd  
Paintsville, KY 41240  
(606) 789-4242

**Prestonsburg:**

Best Western

1887 North US 23  
Prestonsburg, KY 41653  
(606) 886-0001

Comfort Suites

51 Hal Rogers Dr  
Prestonsburg, KY 41653  
(606) 886-2555

Jenny Wiley State Resort Park

39 Jenny Wiley Dr  
Prestonsburg, KY 41653  
(606) 889-1790

Microtel Inn

85 Hal Rogers Dr  
Prestonsburg, KY 41653  
(606) 889-0331

Super 8 Motel

80 Shoppers Path  
Prestonsburg, KY 41653  
(606) 886-3355

# Bicycle Shops & Organizations

## **Bicycle Shops**

- Pro Fitness Health & Wellness  
Don Fields  
1243 South Lake Drive  
Prestonsburg, KY 41653  
606-886-8604  
[www.multisports.net](http://www.multisports.net)
- Cave Run Bicycle Shop  
995 South Highway 801  
Morehead, KY 40351

## **Groups/Associations**

- Kentucky Mountain Bike Association  
[www.kymba.org](http://www.kymba.org)

## Appendix I Horse & Tack Shops

- Connelley Feed Store  
Jackson Road  
Salyersville, KY 41465  
606-349-2618
- Mountain Liquor Feed & Tack  
1635 US Route 460  
Salyersville, KY 41465  
606-349-5100
- R&R Stables  
55 E Mountain Pkwy  
Salyersville, KY 41465  
606-349-1119
- Lyon Feed & Tack  
1885 Coon Creek Rd.  
Salyersville, KY 41465  
606-349-3422
- J&H Feed And Tack, INC.  
480 KY Route 172  
Staffordsville, KY 41256  
606-297-3715
- McGahan Feed Co. INC  
219 Mill Branch Road  
Paintsville, KY 41240  
606-789-4078
- Hay Loft Tanning Salon  
2051 KY Route 40 W.  
Staffordsville, KY 41256  
606-297-1878
- Salt Lick Hay and Feed  
60 Jefferson Road  
Hueysville, KY 41640  
606-358-5588
- J&B Farming INC.  
180 Mattie Graham Rd.  
Campton, KY 41301  
606-668-6715
- Childers Bros. Farm Supply  
2189 Highway 80 E.  
Hindman, KY 41822  
606-785-3004
- Circle C Farm Feed & tack  
248 Church Road  
Harold, KY 41635  
606-478-9999
- Lyon Feed & Tack  
7589 Liberty Road  
West Liberty, KY 41472  
606-743-2140
- Brewer Earl Stables  
Campton, KY 41301  
606-668-3169
- Mckenzie Stables  
25 Patrick Hill Road  
Louisa, KY 41230  
606-673-1154
- Hidden Hills Stables & Tack  
Rt. 2 Box 58  
Booneville, KY 41314  
606-593-5393

## Appendix I Horse & Tack Shops

### Horse Stables

- Brewer Earl Stables  
Campton, KY 41301  
606-668-3169
- R&R Stables  
55 E Mountain Pkwy  
Salyersville, KY 41465  
606-349-1119
- Hidden Hills Stables Tack & Feed  
Rt. 2 BOX 58  
Booneville, KY 41314  
606-593-5393
- Linda's Classic Canines  
4633 Smithboro Rd  
Sassafras, KY 41759  
606-642-3600
- McKenzie Stables  
25 Patrick Hill Rd.  
Louisa, KY 41230  
606-673-1154
- Show Stoppers Grooming  
Eli Road  
Inez, KY 41224  
606-298-0796
- Tri County Animal Clinic  
11 Rhubens Br  
Louisa, KY 41230  
606-673-1144
- Elite Grooming  
142 Mayo Cir  
Pikeville, KY 41501  
606-433-9980
- Barnyard Grooming & Boarding  
2628 Ratliff Creek Rd.  
Pikeville, KY 41501  
606-432-0511
- Pampered Pets  
180 Town Mountain Rd.  
Pikeville, KY 41501  
606-432-8509
- Paradise Horse Farms-Madden  
Stables  
826 Bradley Hollow  
Olive Hill, KY 41164
- Rudy's Ranch & Horse Camp  
RR1 Box 418  
Salt Lick, KY 40371
- Virginia Stables  
678 Ky Route 1107  
Van Lear, KY 41265
- Blackburn Stables  
217 River Road  
Louisa, KY 41230
- Knott County Saddle Club  
Hindman, KY  
Roger Bolen, President  
606-785-3229

## APPENDIX II

### SUPPORTING COST DERIVATIONS

Table II-1

ENGINEER'S OPINION OF PROBABLE PROJECT COST BIG LOVELY MULTI-USE TRAIL HAGER HILL TRAIL HEAD					
ITEM NO.	ITEM	QUANTITY	UNIT	UNIT PRICE	AMOUNT
<b>1 RIGHT OF WAY</b>					
1a	Purchase 2 ac. Abandoned tipple & entrance	1	LS	\$ 10,000.00	\$ 10,000.00
SUBTOTAL					\$ 10,000.00
<b>2 GENERAL CONDITIONS</b>					
2a	Seeding	1	LS	\$ 1,000.00	\$ 1,000.00
2b	Landscape Allowance	1	LS	\$ 2,000.00	\$ 2,000.00
SUBTOTAL					\$ 3,000.00
<b>3 TRAIL HEAD</b>					
3a	Welcome Center, Restroom, Vending, Shelter (1040 SF total - 200 SF heated)	1	LS	\$ 45,000.00	\$ 45,000.00
3b	Connect to Public Water	1	Each	\$ 750.00	\$ 750.00
3c	Connect to Public Sewer	1	Each	\$ 1,000.00	\$ 1,000.00
3d	Connect to Power	1	Each	\$ 1,000.00	\$ 1,000.00
3e	Security Lighting (Pole Mounted - Photo cell light)	1	Each	\$ 1,500.00	\$ 1,500.00
3f	Gravel Parking Area				
	10 Truck & Trailer Bays at 45 feet (7800 SF)	200	Ton	\$ 18.00	\$ 3,600.00
	12 Automobile Bays at 9 feet (3672 SF)	94	Ton	\$ 18.00	\$ 1,692.00
3g	Amenities				
3g.1	Air compressor for bikes in lock box	1	Each	\$ 300.00	\$ 300.00
3g.2	Vending Machines (by vendor)				No Cost
3g.3	Richie Fountain w Backflow preventer for horses	1	Each	\$ 800.00	\$ 800.00
3g.4	Garbage cans	2	Each	\$ 50.00	\$ 100.00
3g.5	Bike Rack	2	Each	\$ 750.00	\$ 1,500.00
3g.6	Hitching Post	1	Each	\$ 250.00	\$ 250.00
3g.7	Picnic Table	2	Each	\$ 150.00	\$ 300.00
3g.8	Park Bench	2	Each	\$ 150.00	\$ 300.00
SUBTOTAL					\$ 58,092.00
TOTAL CONSTRUCTION					\$ 71,092.00

Table II-2

ENGINEER'S OPINION OF PROBABLE PROJECT COST BIG LOVELY MULTI-USE TRAIL ROYALTON					
ITEM NO.	ITEM	QUANTITY	UNIT	UNIT PRICE	AMOUNT
<b>1 RIGHT OF WAY</b>					
1a	On right of way – no purchase necessary				No Cost
	<b>SUBTOTAL</b>				<b>\$ -</b>
<b>2 GENERAL CONDITIONS</b>					
2a	Seeding	1	LS	\$ 1,000.00	\$ 1,000.00
2b	Landscape Allowance	1	LS	\$ 2,000.00	\$ 2,000.00
	<b>SUBTOTAL</b>				<b>\$ 3,000.00</b>
<b>3 TRAIL HEAD</b>					
3a	Welcome Center, Restroom, Vending, Shelter (1040 SF total - 200 SF heated)	1	LS	\$ 45,000.00	\$ 45,000.00
3b	Connect to Public Water	1	Each	\$ 750.00	\$ 750.00
3c	Connect to Public Sewer	1	Each	\$ 1,000.00	\$ 1,000.00
3d	Connect to Power	1	Each	\$ 1,000.00	\$ 1,000.00
3e	Security Lighting (Pole Mounted - Photo cell light)	1	Each	\$ 1,500.00	\$ 1,500.00
3f	Gravel Parking Area				
	10 Truck & Trailer Bays at 45 feet (7800 SF)	200	Ton	\$ 18.00	\$ 3,600.00
	12 Automobile Bays at 9 feet (3672 SF)	94	Ton	\$ 18.00	\$ 1,692.00
3g	Amenities				
3g.1	Air compressor for bikes in lock box	1	Each	\$ 300.00	\$ 300.00
3g.2	Vending Machines (by vendor)				No Cost
3g.3	Richie Fountain w Backflow preventer for horses	1	Each	\$ 800.00	\$ 800.00
3g.4	Garbage cans	2	Each	\$ 50.00	\$ 100.00
3g.5	Bike Rack	2	Each	\$ 750.00	\$ 1,500.00
3g.6	Hitching Post	1	Each	\$ 250.00	\$ 250.00
3g.7	Picnic Table	2	Each	\$ 150.00	\$ 300.00
3g.8	Park Bench	2	Each	\$ 150.00	\$ 300.00
	<b>SUBTOTAL</b>				<b>\$ 58,092.00</b>
	<b>TOTAL CONSTRUCTION</b>				<b>\$ 61,092.00</b>

Table II-3

ENGINEER'S OPINION OF PROBABLE PROJECT COST BIG LOVELY MULTI-USE TRAIL EVANSTON					
ITEM NO.	ITEM	QUANTITY	UNIT	UNIT PRICE	AMOUNT
<b>1 RIGHT OF WAY</b>					
1a	On right of way -- no purchase necessary				No Cost
<b>SUBTOTAL</b>					<b>\$ -</b>
<b>2 GENERAL CONDITIONS</b>					
2a	Seeding	1	LS	\$ 1,000.00	\$ 1,000.00
2b	Landscape Allowance	1	LS	\$ 2,000.00	\$ 2,000.00
<b>SUBTOTAL</b>					<b>\$ 3,000.00</b>
<b>3 TRAIL HEAD</b>					
3a	Welcome Center, Restroom, Vending, Shelter (1040 SF total - 200 SF heated)	1	LS	\$ 45,000.00	\$ 45,000.00
3b	Connect to Public Water	1	Each	\$ 750.00	\$ 750.00
3c	Connect to Public Sewer	1	Each	\$ 1,000.00	\$ 1,000.00
3d	Connect to Power	1	Each	\$ 1,000.00	\$ 1,000.00
3e	Security Lighting (Pole Mounted - Photo cell light)	1	Each	\$ 1,500.00	\$ 1,500.00
3f	Gravel Parking Area				
	10 Truck & Trailer Bays at 45 feet (7800 SF)	200	Ton	\$ 18.00	\$ 3,600.00
	12 Automobile Bays at 9 feet (3672 SF)	94	Ton	\$ 18.00	\$ 1,692.00
3g	Amenities				
3g.1	Air compressor for bikes in lock box	1	Each	\$ 300.00	\$ 300.00
3g.2	Vending Machines (by vendor)				No Cost
3g.3	Richie Fountain w Backflow preventer for horses	1	Each	\$ 800.00	\$ 800.00
3g.4	Garbage cans	2	Each	\$ 50.00	\$ 100.00
3g.5	Bike Rack	2	Each	\$ 750.00	\$ 1,500.00
3g.6	Hitching Post	1	Each	\$ 250.00	\$ 250.00
3g.7	Picnic Table	2	Each	\$ 150.00	\$ 300.00
3g.8	Park Bench	2	Each	\$ 150.00	\$ 300.00
<b>SUBTOTAL</b>					<b>\$ 58,092.00</b>
<b>TOTAL CONSTRUCTION</b>					<b>\$ 61,092.00</b>



Table II-4

ENGINEER'S OPINION OF PROBABLE OPERATIONS COST BIG LOVELY MULTI-USE TRAIL HAGER HILL TRAIL HEAD					
ITEM NO.	ITEM	QUANTITY	UNIT	UNIT PRICE	AMOUNT
<b>1 LABOR</b>					
1a	Manager (Security, Grounds Maintenance, Cleaning, Directions, Sales)	9	MO	\$ 3,200.00	\$ 28,800.00
SUBTOTAL					\$ 28,800.00
<b>2 TRAIL HEAD UTILITIES &amp; MAINTENANCE</b>					
2a	Annual Painting / Cleanup	1	LS	\$ 2,500.00	\$ 2,500.00
2b	Cost to Public Water	12	Mo	\$ 30.00	\$ 360.00
2c	Cost Public Sewer	12	Mo	\$ 30.00	\$ 360.00
2d	Cost Power	12	Mo	\$ 40.00	\$ 480.00
2e	Cost Security Light	12	Mo	\$ 20.00	\$ 240.00
2f	Cost Garbage Pick Up	12	Mo	\$ 7.00	\$ 84.00
2g	Cost Phone	12	Mo	\$ 25.00	\$ 300.00
2h	Parking Lot Maintenance Stone	50	Ton	\$ 18.00	\$ 900.00
SUBTOTAL					\$ 5,224.00
TOTAL CONSTRUCTION					\$ 34,024.00

Table II-5

ENGINEER'S OPINION OF PROBABLE OPERATIONS COST BIG LOVELY MULTI-USE TRAIL ROYALTON TRAIL HEAD					
ITEM NO.	ITEM	QUANTITY	UNIT	UNIT PRICE	AMOUNT
<b>1 LABOR</b>					
1a	General Manager (Security, Scheduling of Maintenance, Grounds Maintenance, Bookkeeping, Grounds Maintenance, Directions, Sales)	12	MO	\$ 4,200.00	\$ 50,400.00
SUBTOTAL					\$ 50,400.00
<b>2 EQUIPMENT</b>					
2a	ATV for trail patrol / ambulance (expressed as monthly O&O cost)	12	MO	\$ 110.00	\$ 1,320.00
SUBTOTAL					\$ 1,320.00
<b>3 TRAIL HEAD UTILITIES &amp; MAINTENANCE</b>					
3a	Annual Painting / Cleanup	1	LS	\$ 2,500.00	\$ 2,500.00
3b	Cost to Public Water	12	Mo	\$ 30.00	\$ 360.00
3c	Cost Public Sewer	12	Mo	\$ 30.00	\$ 360.00
3d	Cost Power	12	Mo	\$ 40.00	\$ 480.00
3e	Cost Security Light	12	Mo	\$ 20.00	\$ 240.00
3f	Cost Garbage Pick Up	12	Mo	\$ 7.00	\$ 84.00
3g	Cost Phone	12	Mo	\$ 25.00	\$ 300.00
3h	Parking Lot Maintenance Stone	50	Ton	\$ 18.00	\$ 900.00
SUBTOTAL					\$ 5,224.00
TOTAL CONSTRUCTION					\$ 56,944.00

Table II-6

ENGINEER'S OPINION OF PROBABLE OPERATIONS COST BIG LOVELY MULTI-USE TRAIL EVANSTON TRAIL HEAD					
ITEM NO.	ITEM	QUANTITY	UNIT	UNIT PRICE	AMOUNT
<b>1 LABOR</b>					
1a	Manager (Security, Grounds Maintenance, Cleaning, Directions, Sales)	9	MO	\$ 3,200.00	\$ 28,800.00
<b>SUBTOTAL</b>					<b>\$ 28,800.00</b>
<b>2 TRAIL HEAD UTILITIES &amp; MAINTENANCE</b>					
2a	Annual Painting / Cleanup	1	LS	\$ 2,500.00	\$ 2,500.00
2b	Cost to Public Water	12	Mo	\$ 30.00	\$ 360.00
2c	Cost Public Sewer	12	Mo	\$ 30.00	\$ 360.00
2d	Cost Power	12	Mo	\$ 40.00	\$ 480.00
2e	Cost Security Light	12	Mo	\$ 20.00	\$ 240.00
2f	Cost Garbage Pick Up	12	Mo	\$ 7.00	\$ 84.00
2g	Cost Phone	12	Mo	\$ 25.00	\$ 300.00
2h	Parking Lot Maintenance Stone	50	Ton	\$ 18.00	\$ 900.00
<b>SUBTOTAL</b>					<b>\$ 5,224.00</b>
<b>TOTAL CONSTRUCTION</b>					<b>\$ 34,024.00</b>

APPENDIX III

BRIDGE & TRAIL CROSSING  
INVENTORY

Table III-1  
Bridges of the Dawkins Line

<b>CORMAN/DAWKINS LINE STRUCTURES</b>		
<b>Milepost</b>	<b>Description</b>	<b>Length</b>
0.3	1-span timber pile trestle	12'
0.5	1-span timber pile trestle	17'
0.6	1-span timber pile trestle	21'
2.8	7-span timber pile trestle	91'
2.9	10-span timber pile trestle	127'
3.3	8-span timber pile trestle	100'
3.4	3-span timber pile 1 steel trestle	108'
3.9	7-span timber pile trestle	85'
4	9-span timber pile trestle	111'
4.3	10-span timber pile trestle	114'
5.4	10-span timber pile trestle	119'
5.9	10-span timber pile trestle	123'
6.2	10-span timber pile trestle	123'
6.7	4-span timber pile trestle	60'
9.3	Timber pile trestle	?
9.6	6-span timber pile trestle	72'
9.8	8-span timber pile trestle	91'
10.7	1-span deck plate girder 4-span I-beam	27' 147'
11.3	2-span deck plate girder 2 span I-beam	140' 74'
12	8-span timber pile trestle	96'
13	4-span deck plate girder	249'
13.5	Timber pile trestle	?
14	1 span timber pile trestle	12'
14.9	Tunnel	662'
15.6	10-span timber pile trestle	120'
16.7	4-span timber pile trestle	49'
17.1	8-span timber pile trestle	110'
17.9	1-span timber pile trestle	15'
18.6	4-span timber pile trestle	32'
19.1	1-span timber pile trestle	20'
19.7	1-span deck plate girder 18-span timber pile trestle	72' 230'
21.6	5-span timber pile trestle	55'
23	2-span timber pile trestle	24'
24.3	3-span timber pile trestle	38'
25.7	Tunnel	1555'
29.7	1-span deck plate girder 7span timber pile trestle	100' 71'
34.8	1-span timber pile trestle	34'

Table III-2  
Road Crossings  
Dawkins Line

CROSSING NUMBER	STATUS	MILE POST	LOCATION	ROAD NAME	TYPE
227 636 R	Closed	MP 20	Paintsville		Private/Farm
227 637 X	Open	MP 21	Johnson Co.		Public
227 638 E	Open	MP 48	Paintsville	Private Road	Private/Residential
227 639 L	Open	MP 53	Paintsville	KY 1428	Public
227 640 F	Open	MP 60	Paintsville	Private Road	Private/Industrial
227 641 M	Closed	MP 61	Paintsville		Private/Industrial
227 642 U	Open	MP 75	Johnson Co.	US 23	Public
227 643 B	Open	MP 80	Paintsville		Private/Industrial
227 644 H	Open	MP 99	Paintsville	Private Road	Private/Residential
227 645 P	Open	MP 1.22	Paintsville		Public
227 646 W	Open	MP 1.46	Paintsville	Private Road	Private/Farm
227 647 K	Closed	MP 2.16	Paintsville		Private/Residential
227 648 K	Open	MP 2.32	Paintsville	Private Road	Private/Farm
227 649 S	Open	MP 2.56	Paintsville	Middle Fork Road	Public
227 650 L	Open	MP 2.61	Paintsville	Private Road	Private/Farm
155 943 N	Open	MP 2.70	Paintsville	US 23	Public
227 651 Y	Open	MP 2.89	Paintsville	Route 825	Public
227 652 A	Open	MP 3.03	Paintsville	Private Road	Private/Residential
227 653 G	Open	MP 3.45	Paintsville	Private Road	Private/Residential
227 654 N	Open	MP 3.76	Paintsville	Private Road	Private/Residential
227 655 V	Open	MP 4.15	Paintsville	Private Road	Private/Farm
227 656 C	Open	MP 4.24	Paintsville	Private Road	Private/Residential
227 657 J	Open	MP 4.32	Paintsville	Route 825	Public
227 658 R	Open	MP 4.35	Paintsville	Private Road	Public
155 944 V	Open	MP 4.80	Paintsville	Private Road	Private/Farm
227 659 X	Open	MP 5.26	Paintsville	Route 825	Public
227 560 S	Open	MP 5.35	Paintsville	KY 825	Public
227 661 Y	Closed	MP 5.57	Johnson Co.		Private/Farm
227 662 F	Open	MP 5.80	Paintsville	Private Road	Private/Farm
227 663 M	Open	MP 5.85	Paintsville	Asa Creek Road	Public
227 664 U	Open	MP 6.02	Paintsville	Private Road	Private/Industrial
227 665 B	Open	MP 6.25	Van Lear	Private Road	Private/Residential
227 667 P	Open	MP 6.35	Van Lear	Private Road	Private/Farm

Table III-2  
Road Crossings  
Dawkins Line

CROSSING NUMBER	STATUS	MILE POST	LOCATION	ROAD NAME	TYPE
227 668 W	Open	MP 6.69	Van Lear	Private Road	Private/Residential
227 669 D	Open	MP 6.73	Van Lear	Route 825	Public
227 670 X	Open	MP 6.93	Van Lear	Private Road	Private/Industrial
227 671 E	Open	MP 7.31	Van Lear	Private Road	Private/Residential
227 672 L	Closed	MP 7.65	Van Lear		Private/Farm
227 673 T	Open	MP 7.90	Van Lear	Private Road	Private/Farm
227 674 A	Open	MP 7.98	Van Lear	KY 825	Public
227 675 G	Open	MP 8.09	Van Lear	Private Road	Private/Farm
227 676 N	Closed	MP 8.16	Van Lear		Private/Industrial
227 677 V	Closed	MP 8.36	Van Lear		Private/Farm
227 678 C	Open	MP 8.98	Van Lear	Private Road	Private/Residential
227 679 J	Open	MP 9.27	Evanston	KY 1867	Public
227 680 D	Open	MP 9.69	Evanston		Public
227 681 K	Open	MP 9.82	Evanston	Private Road	Private/Residential
227 682 S	Closed	MP 10.27	Van Lear		Private/Farm
227 683 Y	Open	MP 12.35	Evanston	Gun Creek	Public
227 684 F	Open	MP 12.55	Evanston		Private/Residential
227 685 M	Open	MP 12.95	Evanston		Public
227 686 U	Open	MP 13.52	Evanston	Mt. Parkway	Public
227 687 B	Open	MP 13.73	Evanston	Private Road	Private/Residential
227 688 H	Open	MP 13.77	Evanston		Private/Residential
227 689 P	Open	MP 13.98	Evanston	Route 1888	Public
227 690 J	Open	MP 14.39	Evanston	Private Road	Private/Residential
227 691 R	Open	MP 15.17	Evanston	Private Road	Private/Farm
227 692 X	Open	MP 15.85	Evanston	Private Road	Private/Farm
227 693 E	Open	MP 16.12	Evanston	Route 867	Public
227 694 L	Open	MP 16.52	Evanston	Private Road	Private/Residential
227 695 T	Open	MP 16.68	Evanston	KY 867	Public
227 696 A	Closed	MP 16.79	Evanston	Private Road	Private/Industrial
227 697 G	Open	MP 16.90	Evanston	Private Road	Private/Residential
227 699 V	Open	MP 17.28		Private Road	Private/Farm
227 700 M	Open	MP 17.58	Evanston	Private Road	Private/Residential
227 701 U	Open	MP 17.90	Evanston	Private Road	Private/Residential
227 702 B	Open	MP 18.25		KY 7	Public
227 703 H	Closed	MP 18.39	Evanston		Private/Residential
227 704 P	Open	MP 18.75	Evanston	Private Road	Private/Farm
227 705 W	Open	MP 18.95	Evanston	KY 867	Public

Table III-2  
Road Crossings  
Dawkins Line

CROSSING NUMBER	STATUS	MILE POST	LOCATION	ROAD NAME	TYPE
227 706 D	Open	MP 19.10	Evanston	Private Road	Private/Residential
227 707 K	Open	MP 19.13	Evanston	Private Road	Private/Residential
227 708 S	Open	MP 19.43	Evanston	Private Road	Private/Residential
227 709 Y	Open	MP 19.44	Evanston	Route 867	Public
227 710 T	Open	MP 19.73			Public
227 711 A	Open	MP 19.78	Evanston	Private Road	Private/Residential
227 712 G	Open	MP 19.80	Evanston	KY 1635	Public
227 713 N	Open	MP 19.97	Evanston		Private/Farm
227 714 V	Open	MP 20.23	Evanston	Private Road	Private/Residential
227 715 C	Open	MP 20.34	Evanston	Private Road	Private/Residential
227 716 J	Open	MP 20.48	Evanston	Route 867	Public
227 717 R	Open	MP 20.89	Evanston	Private Road	Private/Residential
227 718 X	Open	MP 21.21	Evanston	Private Road	Private/Farm
227 719 E	Open	MP 21.64	Evanston	Private Road	Private/Farm
227 720 Y	Open	MP 21.89	Evanston	Private Road	Private/Farm
227 721 F	Open	MP 22.26	Evanston	Private Road	Private/Residential
227 722 M	Open	MP 22.31	Evanston	Private Road	Private/Industrial
227 723 U	Open	MP 22.98	Evanston	Route 867	Public
227 724 B	Open	MP 23.12	Evanston	Private Road	Private/Residential
227 725 H	Open	MP 23.78	Evanston	Route 867	Public
227 726 P	Open	MP 24.35	Evanston	KY 1635	Public
227 727 W	Closed	MP 24.54	Evanston	KY 1635	Public
227 728 D	Closed	MP 24.54	Evanston	KY 1635	Public
227 729 K	Closed	MP 24.91	Evanston		Private/Farm
227 730 E	Closed	MP 25.09	Evanston		Private/Residential
227 731 L	Open	MP 29.63	Evanston		Public
227 732 T	Open	MP 34.01	Evanston	Private Road	Private/Industrial
227 733 A	Open	MP 34.01	Evanston		Private
227 734 G	Closed	MP 34.04	Evanston		Private/Industrial
227 735 N	Closed	MP 35.26			Private/Residential





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