



SUBJECT: PER – CSX – Carrollton Railroad Company
Prime Farmland Request

Sept. 13, 2011

TO: Jo Ann Burroughs
Manager Network Services
CSX
500 Waters Street – J200
Jacksonville, FL 32202

Ms. Burroughs,

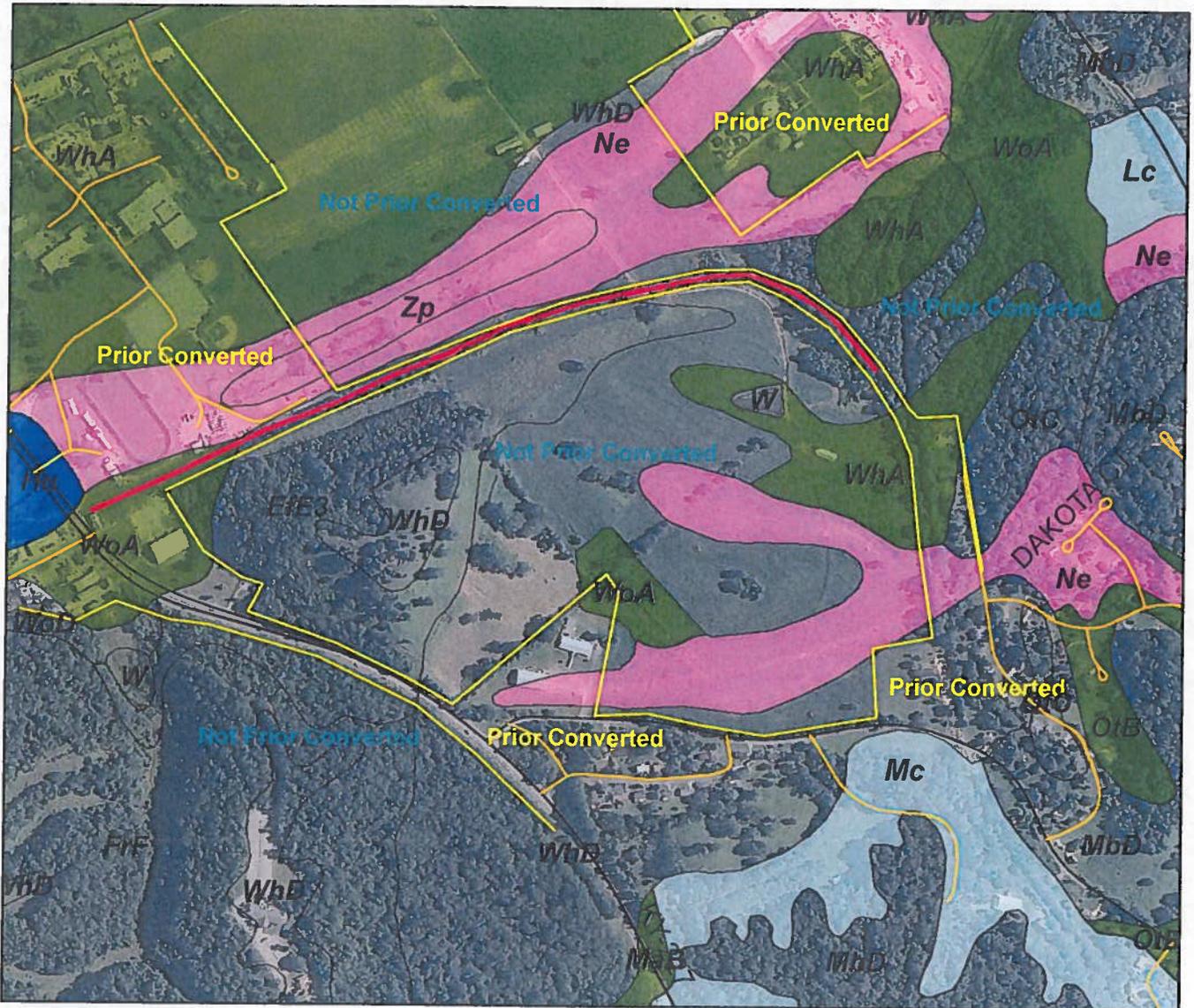
This is in response to your inquiry concerning the presence of prime agricultural land contiguous to the CSXT's Railroad Milepost OCR 6.72 to Railroad Milepost OCR 7.51 in Carrollton, KY.

Attached is a soils map on NRCS 2010 aerial photography showing the prime farmland along the section of railroad indicated on your map. Also, attached for information are the descriptions of the soil mapping units involved and the soils legends of the prime and other important farmlands that occur in the areas surrounding the railroad line. Outlined and labeled in yellow on the soils map are those areas that would be considered as prior converted farmland and labeled with blue, those areas that are not prior converted.

If you need additional information or assistance please contact Paul Vech, District Conservationist for Carroll County at 502-484-2719 or myself at the above address and number.

Steve Jacobs
Resource Soil Scientist, NRCS
Maysville, Ky.

cc:
Paul Vech, DC, NRCS, Owenton, KY



NRCS 2010 Aerial Photography

Scale 1:10,000

Colored areas are considered prime farmland where not prior converted to urban or other non-farm uses.

Non-colored areas are not prime farmland where not prior converted.

See attachments for additional information on soils and farmland classification.

Map Unit Legend

Carroll, Gallatin, and Owen Counties, Kentucky (KY612)	
Map Unit Symbol	Map Unit Name
EfE3	Eden flaggy silty clay, 20 to 30 percent slopes, severely eroded
FrF	Fairmount-Rock outcrop complex, 30 to 60 percent slopes
Hu	Huntington silt loam
Lc	Lawrence silt loam
MaB	Markland silt loam, 2 to 6 percent slopes
MbD	Markland soils, 12 to 35 percent slopes
Mc	McGary silt loam
Ne	Newark silt loam
OtB	Otwell silt loam, 2 to 6 percent slopes
OtC	Otwell silt loam, 6 to 12 percent slopes
W	Water
WhA	Wheeling silt loam, 0 to 2 percent slopes
WhD	Wheeling silt loam, 12 to 20 percent slopes
WoA	Woolper silty clay loam, 0 to 2 percent slopes
WoD	Woolper silty clay loam, 12 to 20 percent slopes
Zp	Zipp silty clay loam
Totals for Area of Interest	

Map Unit Description (Brief, Generated)

Carroll, Gallatin, and Owen Counties, Kentucky

[Minor map unit components are excluded from this report]

Map unit: EfE3 - Eden flaggy silty clay, 20 to 30 percent slopes, severely eroded

Component: Eden (75%)

The Eden component makes up 75 percent of the map unit. Slopes are 20 to 30 percent. This component is on hills on uplands. The parent material consists of clayey residuum weathered from calcareous shale and/or limestone. Depth to a root restrictive layer, bedrock, paralithic, is 20 to 40 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches is very low. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 6e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 7 percent.

Map unit: FrF - Fairmount-Rock outcrop complex, 30 to 60 percent slopes

Component: Fairmount (60%)

The Fairmount component makes up 60 percent of the map unit. Slopes are 30 to 60 percent. This component is on hills on uplands. The parent material consists of clayey residuum weathered from limestone. Depth to a root restrictive layer, bedrock, lithic, is 10 to 20 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches is very low. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 5 percent. Nonirrigated land capability classification is 7e. This soil does not meet hydric criteria.

Component: Rock outcrop (30%)

Generated brief soil descriptions are created for major soil components. The Rock outcrop is a miscellaneous area.

Map unit: Hu - Huntington silt loam

Component: Huntington (85%)

The Huntington component makes up 85 percent of the map unit. Slopes are 0 to 4 percent. This component is on flood plains on valleys. The parent material consists of mixed fine-silty alluvium. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is high. Shrink-swell potential is low. This soil is frequently flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 4 percent. Nonirrigated land capability classification is 2w. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 1 percent.

Map unit: Lc - Lawrence silt loam

Component: Lawrence (90%)

The Lawrence component makes up 90 percent of the map unit. Slopes are 0 to 4 percent. This component is on stream terraces on river valleys. The parent material consists of thin fine-silty noncalcareous loess over loamy alluvium and/or clayey residuum weathered from limestone. Depth to a root restrictive layer, fragipan, is 18 to 32 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches is moderate. Shrink-swell potential is low. This soil is rarely flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during January, February, March, April, December. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 3w. This soil does not meet hydric criteria.

Map Unit Description (Brief, Generated)

Carroll, Gallatin, and Owen Counties, Kentucky

Map unit: MaB - Markland silt loam, 2 to 6 percent slopes

Component: Markland (85%)

The Markland component makes up 85 percent of the map unit. Slopes are 2 to 6 percent. This component is on stream terraces on river valleys. The parent material consists of thin fine-silty noncalcareous loess over clayey, calcareous lacustrine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches is moderate. Shrink-swell potential is high. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 54 inches during January, February, March, April, December. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 3e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 23 percent.

Map unit: MbD - Markland soils, 12 to 35 percent slopes

Component: Markland (85%)

The Markland component makes up 85 percent of the map unit. Slopes are 12 to 35 percent. This component is on stream terraces on river valleys. The parent material consists of thin fine-silty noncalcareous loess over clayey, calcareous lacustrine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches is moderate. Shrink-swell potential is high. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 54 inches during January, February, March, April, December. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 6e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 23 percent.

Map unit: Mc - McGary silt loam

Component: McGary (90%)

The McGary component makes up 90 percent of the map unit. Slopes are 0 to 2 percent. This component is on stream terraces on valleys. The parent material consists of clayey, calcareous lacustrine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches is moderate. Shrink-swell potential is high. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during January, February, March, April. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 3w. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 3 percent.

Map unit: Ne - Newark silt loam

Component: Newark (90%)

The Newark component makes up 90 percent of the map unit. Slopes are 0 to 2 percent. This component is on flood plains on valleys. The parent material consists of mixed fine-silty alluvium. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is very high. Shrink-swell potential is low. This soil is frequently flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during January, February, March, April, May, December. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 3w. This soil does not meet hydric criteria.

Map unit: OtB - Otwell silt loam, 2 to 6 percent slopes

Component: Otwell (90%)

The Otwell component makes up 90 percent of the map unit. Slopes are 2 to 6 percent. This component is on stream terraces on river valleys. The parent material consists of mixed fine-silty alluvium. Depth to a root restrictive layer, fragipan, is 18 to 26 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is low. Available water to a depth of 60 inches is moderate. Shrink-swell potential is moderate. This soil is rarely flooded. It is not ponded. A seasonal zone of water saturation is at 18 inches during January, February, March, April. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 2e. This soil does not meet hydric criteria.

Map Unit Description (Brief, Generated)

Carroll, Gallatin, and Owen Counties, Kentucky

Map unit: OtC - Otwell silt loam, 6 to 12 percent slopes

Component: Otwell (85%)

The Otwell component makes up 85 percent of the map unit. Slopes are 6 to 12 percent. This component is on stream terraces on river valleys. The parent material consists of mixed fine-silty alluvium. Depth to a root restrictive layer, fragipan, is 18 to 26 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is low. Available water to a depth of 60 inches is moderate. Shrink-swell potential is moderate. This soil is rarely flooded. It is not ponded. A seasonal zone of water saturation is at 18 inches during January, February, March, April. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 3e. This soil does not meet hydric criteria.

Map unit: W - Water

Component: Water (100%)

Generated brief soil descriptions are created for major soil components. The Water is a miscellaneous area.

Map unit: WhA - Wheeling silt loam, 0 to 2 percent slopes

Component: Wheeling (85%)

The Wheeling component makes up 85 percent of the map unit. Slopes are 0 to 2 percent. This component is on stream terraces on river valleys. The parent material consists of mixed fine-loamy alluvium. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 1. This soil does not meet hydric criteria.

Map unit: WhD - Wheeling silt loam, 12 to 20 percent slopes

Component: Wheeling (80%)

The Wheeling component makes up 80 percent of the map unit. Slopes are 12 to 20 percent. This component is on stream terraces on river valleys. The parent material consists of mixed fine-loamy alluvium. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 4e. This soil does not meet hydric criteria.

Map unit: WoA - Woolper silty clay loam, 0 to 2 percent slopes

Component: Woolper (85%)

The Woolper component makes up 85 percent of the map unit. Slopes are 0 to 2 percent. This component is on flood plains on valleys. The parent material consists of clayey colluvium derived from limestone and/or mixed alluvium. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches is high. Shrink-swell potential is moderate. This soil is rarely flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 5 percent. Nonirrigated land capability classification is 1. This soil does not meet hydric criteria.

Map Unit Description (Brief, Generated)

Carroll, Gallatin, and Owen Counties, Kentucky

Map unit: WoD - Woolper silty clay loam, 12 to 20 percent slopes

Component: Woolper (85%)

The Woolper component makes up 85 percent of the map unit. Slopes are 12 to 20 percent. This component is on hills on uplands. The parent material consists of clayey colluvium derived from limestone and/or mixed alluvium. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches is high. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 5 percent. Nonirrigated land capability classification is 4e. This soil does not meet hydric criteria.

Map unit: Zp - Zipp silty clay loam

Component: Zipp (90%)

The Zipp component makes up 90 percent of the map unit. Slopes are 0 to 2 percent. This component is on stream terraces on river valleys. The parent material consists of mixed clayey alluvium. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches is moderate. Shrink-swell potential is high. This soil is frequently flooded. It is not ponded. A seasonal zone of water saturation is at 0 inches during January, February, March, April, May, December. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 4w. This soil meets hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 8 percent.

Prime and other Important Farmlands

Carroll, Gallatin, and Owen Counties, Kentucky

Map symbol	Map unit name	Farmland classification
MaB	Markland silt loam, 2 to 6 percent slopes	All areas are prime farmland
OtB	Otwell silt loam, 2 to 6 percent slopes	All areas are prime farmland
WhA	Wheeling silt loam, 0 to 2 percent slopes	All areas are prime farmland
WoA	Woolper silty clay loam, 0 to 2 percent slopes	All areas are prime farmland
OtC	Otwell silt loam, 6 to 12 percent slopes	Farmland of statewide importance
Lc	Lawrence silt loam	Prime farmland if drained
Mc	McGary silt loam	Prime farmland if drained
Ne	Newark silt loam	Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
Zp	Zipp silty clay loam	Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
Hu	Huntington silt loam	Prime farmland if protected from flooding or not frequently flooded during the growing season

Farmland Classification

Farmland Classification— Summary by Map Unit — Carroll, Gallatin, and Owen Counties, Kentucky (KY612)				
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
EfE3	Eden flaggy silty clay, 20 to 30 percent slopes, severely eroded	Not prime farmland		
FrF	Fairmount-Rock outcrop complex, 30 to 60 percent slopes	Not prime farmland		
Hu	Huntington silt loam	Prime farmland if protected from flooding or not frequently flooded during the growing season		
Lc	Lawrence silt loam	Prime farmland if drained		
MaB	Markland silt loam, 2 to 6 percent slopes	All areas are prime farmland		
MbD	Markland soils, 12 to 35 percent slopes	Not prime farmland		
Mc	McGary silt loam	Prime farmland if drained		
Ne	Newark silt loam	Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season		
OtB	Otwell silt loam, 2 to 6 percent slopes	All areas are prime farmland		
OtC	Otwell silt loam, 6 to 12 percent slopes	Farmland of statewide importance		
W	Water	Not prime farmland		
WhA	Wheeling silt loam, 0 to 2 percent slopes	All areas are prime farmland		
WhD	Wheeling silt loam, 12 to 20 percent slopes	Not prime farmland		
WoA	Woolper silty clay loam, 0 to 2 percent slopes	All areas are prime farmland		
WoD	Woolper silty clay loam, 12 to 20 percent slopes	Not prime farmland		
Zp	Zipp silty clay loam	Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season		
Totals for Area of Interest				