

## RIVER ROAD BIKE LANES

### Zorn Avenue to Indian Hills Trail

#### TREE PRESERVATION STUDY – DRAFT

January 12, 2012

The River Road project is to add on-street bike lanes between Zorn Avenue and Indian Hills Trail. At the Alignment Selection meeting on December 29, 2011, the project team determined that a study for preserving as many trees in “Good” condition as possible was necessary before selecting the final alignment. The purpose of this report is to provide a study of the tree impacts for the three Alternatives:

1. Widening to the Left (north)
2. Widening to the Right (south)
3. Symmetric Widening

The ultimate typical section adds 2-4 ft. bike lanes to River Road’s existing travel lanes of 11 feet. The alternatives that widen either entirely left or right will shift the crown to the center; all alignments include an overlay of the existing road.

#### Initial Tree Preservation Assessment

Davey Resource Group’s Jenny Gulick’s initial opinion for the project was as follows:

*After a review of all the trees with diameters greater than 10 inches, it was determined that the alternative selection should primarily be determined by factors and conditions other than existing trees. Nearly 75% of the trees are in Fair or Poor condition, meaning if no construction work were to occur, their service lives are limited to 10 years or less. Over 30% are in Poor or Dead condition, and should be removed for public safety reasons regardless of any construction project activities. White ash trees comprise over 20% of the trees in the project area, and with Emerald Ash Borer(EAB) confirmed in Jefferson County, they unfortunately can be considered expendable.*

*There are trees in Good condition that are providing valuable canopy cover and environmental benefits to River Road and the City as a whole, such as the London planes, black walnuts and newly planted trees. Trees under 6-inches in diameter can be physically relocated and other trees can be protected by implementing tree protection measures during the construction process.*

#### Comparison Matrix

Appendix A (River Road Trees Impact Study) shows a comparison of each alternative broken out by segment in regard to the trees condition:

- Good Trees – **G**
- Fair, Poor, Poor/Dead – **F,P, P/D**

- White Ash

There are 59 “Good” trees in the project corridor. The alternatives impact the “Good” trees as follows:

1. Widening to the Left (north) - 17
2. Widening to the Right (south) - 5
3. Symmetric Widening – 9

Even though widening to the right impacts the fewest “Good” trees, there are too many impacts to existing utilities to make this the recommended alternative.

Road widening to the left impacts the most “Good” trees. Of the 17 impacted, 10 are impacted between Turners Club Entrance (Sta. 114+41) and Wagner Beach Road (Sta. 124+36). Switching the proposed alignment to use symmetric widening in this section would only impact 3 “Good” trees; however, the waterline would have to be relocated on the south (right) side of the road. Therefore, shifting to the Symmetric Widening alternative is not recommended. There is no difference between the symmetric widening and widening to the north (left) just past Wagners Beach Road (Sta. 125+60) to Thurman-Hutchins Park Entrance #2 (Sta. 141+11). Both impact 3 good trees.

#### White Ash Trees

There are 63 White Ash trees in the project corridor. The alternatives impact the trees as follows:

1. Widening to the Left (north) - 41
2. Widening to the Right (south) - 12
3. Symmetric Widening – 37

The presence of EAB in Jefferson County has damaged these trees; therefore, they are not considered good and are expendable.

#### Recommendation

The alternative of widening to the north (left) is recommended because it avoids relocation of the water line even though it impacts the most “Good” trees. Of the 59 “Good” trees in the project corridor 42 (over 70%) are preserved.

#### Miscellaneous Tree Notes

- Trees to be removed to grade and stumps/roots grinded below proposed subgrade to avoid disturbance of utilities or damage to existing roadbed
- The study area contains habitat for the Indiana Bat. Due to the location of the project in the vicinity of a known maternity colony, coordination with the USFWS will be required prior to tree clearing, which will be accomplished following final design, and tree clearing will not be allowed between June 1 and July 31.

# **APPENDIX A**

## **River Road Trees Impact Study**

# RIVER ROAD TREES IMPACT STUDY

## SECTIONS:

TOTAL # OF TREES			# OF TREES IMPACTED			# OF TREES SAVED		
G	F,P, P/D	WHITE ASH	G	F,P, P/D	WHITE ASH	G	F,P, P/D	WHITE ASH

**Zorn Ave. to Mockingbird Road**  
**STA.100+00 TO STA.109+35**

Widening Left  
 Widening Right  
 Symmetric Widening

3	3	0	1	1	0	2	2	0
3	3	0	0	2	0	3	1	0
3	3	0	1	3	0	2	0	0

**Mockingbird Road to Turners Club Entrance**  
**STA.109+35 TO STA.114+41**

Widening Left  
 Widening Right  
 Symmetric Widening

1	11	1	1	8	1	0	3	0
1	11	1	0	2	0	1	9	1
1	11	1	1	1	0	0	10	1

**Turners Club Entrance to Waldoah Beach Road**  
**STA.114+41 TO STA.120+57**

Widening Left  
 Widening Right  
 Symmetric Widening

7	6	0	6	3	0	1	3	0
WOODED AREA			WOODED AREA			WOODED AREA		
7	6	0	2	1	0	5	5	0

# RIVER ROAD TREES IMPACT STUDY

## SECTIONS:

TOTAL # OF TREES			# OF TREES IMPACTED			# OF TREES SAVED		
G	F,P, P/D	WHITE ASH	G	F,P, P/D	WHITE ASH	G	F,P, P/D	WHITE ASH

**Waldoah Beach Road to Wagner Beach Road**  
**STA.120+57 TO STA.124+36**

Widening Left  
 Widening Right  
 Symmetric Widening

5	1	0	4	1	0	1	0	0
WOODED AREA			WOODED AREA			WOODED AREA		
5	1	0	1	0	0	4	1	0

**Wagner Beach Road to T.H. Park Entr. #1**  
**STA.124+36 TO STA.126+34**

Widening Left  
 Widening Right  
 Symmetric Widening

6	3	5	0	1	2	6	2	3
6	3	5	2	1	3	4	2	2
6	3	5	1	1	3	5	2	2

**T.H. Park Entr. #1 to Cox Park Entr. #1**  
**STA.126+34 TO STA.132+56**

Widening Left  
 Widening Right  
 Symmetric Widening

9	23	8	3	3	5	6	20	3
9	23	8	0	14	0	9	9	8
9	23	8	2	7	5	7	16	3

**Cox Park Entr. #1 to T.H. Park Entr. #2**  
**STA.132+56 TO STA.147+11**

Widening Left  
 Widening Right  
 Symmetric Widening

14	60	17	2	5	9	12	55	8
14	60	17	2	20	1	12	40	16
14	60	17	1	15	7	13	45	10

# RIVER ROAD TREES IMPACT STUDY

## SECTIONS:

### T.H. Park Entr. #2 to Cox Park Entr. #2 STA.147+11 TO STA.151+33

Widening Left  
Widening Right  
Symmetric Widening

TOTAL # OF TREES			# OF TREES IMPACTED			# OF TREES SAVED		
G	F,P, P/D	WHITE ASH	G	F,P, P/D	WHITE ASH	G	F,P, P/D	WHITE ASH

2	32	7	0	0	7	2	32	0
2	32	7	0	19	0	2	13	7
2	32	7	0	11	7	2	21	0

### Cox Park Entr. #2 to Golf Centers STA.151+33 TO STA.159+44

Widening Left  
Widening Right  
Symmetric Widening

1	39	13	0	4	12	1	35	1
1	39	13	0	17	1	1	22	12
1	39	13	0	6	8	1	33	5

### Golf Centers to Indian Hills Trail STA.159+44 TO STA.165+63

Widening Left  
Widening Right  
Symmetric Widening

11	19	12	0	2	5	11	17	7
11	19	12	1	12	7	10	7	5
11	19	12	0	12	7	11	7	5

Widening Left  
Widening Right  
Symmetric Widening

319  
319  
319

SUMMARY								
TOTAL # OF TREES			# OF TREES IMPACTED			# OF TREES SAVED		
G	F,P, P/D	WHITE ASH	G	F,P, P/D	WHITE ASH	G	F,P, P/D	WHITE ASH
59	197	63	17	28	41	42	169	22
59	197	63	5	87	12	54	110	51
59	197	63	9	57	37	50	140	26

G - Good condition trees , F- Fair condition trees , P - Poor condition trees , D - Dead trees , WA - White Ash trees(EAB confirmed)