



## BURGESS & NIPLE

Mr. Chris E. Bauserman, PE, PS  
Delaware County Engineer  
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Delaware, OH 43015

December 14, 2004

**Burgess & Niple, Inc.**

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Dear Mr. Bauserman:

Burgess & Niple, Inc. is pleased to submit this report on the process used to select the Preferred Corridor on the Sawmill Parkway Extension project.

The conclusions reported in this document represent another positive step in Delaware County's history of planning for the future. We believe the diverse backgrounds of the participants provided strong credibility for the consensus reached in this process. Each of the participants should be commended for their dedicated service to the present and future residents of Delaware County.

Please contact us with any questions you may have regarding this report.

Sincerely,

Jeffrey L. Griffin, PE  
Project Manager

JLG:sdb  
Enclosure  
copy: File

Report on the Preferred  
Corridor Selection Process  
to the  
Delaware County Engineer

**Sawmill Parkway Extension  
Delaware County, Ohio**

**December 2004**

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### **LIST OF EXHIBITS**

<b>Exhibit No.</b>	<b>Description</b>
1	Study Area
2	Study Corridors
3	Criteria Weighting Form
4	Corridors & Corridor Segments
5	Evaluation of Alternatives Form
6	Summary of Corridor Evaluation
7	Preferred Corridor

There are a variety of planning methods used to assess possible locations for future roadways. The Workshop Process described in this report has proven to be successful because it is an effective management technique that creates an environment promoting innovative thinking. This process brings together a small group with a variety of special talents to focus their creative energies on a specific problem. It achieves this by being conducted in a short space of time following a specific agenda. The Workshop for the Sawmill Parkway Extension was conducted in two sessions. Key maps and other reference material were on display during both sessions of the Workshop.

### **WORKSHOP ACTIVITIES - SESSION 1**

Participants in Session 1 of the Workshop were selected for the diversity of background, the organizations they represent, and their history of involvement in the project to date. The workshop began with introductory remarks followed by brief background presentations regarding various aspects of the project. The Study Area shown on Exhibit 1 is bounded by Home Road on the south, Section Line Road on the west, Airport Road and US 42 on the north, and Liberty Road on the east.

#### **Location**

Session 1 of the Sawmill Parkway Extension Workshop was held in the offices of Burgess & Niple, Inc, at 5085 Reed Road in Columbus on November 1, 2004.

#### **Participants**

Participants in the workshop were selected by the Delaware County Engineer. Membership on the Workshop Team was based on the expertise each person could bring to the process and/or the interest of the organization they represented. The following is a list of participants:

### **SAWMILL PARKWAY EXTENSION WORKSHOP**

#### **SESSION 1**

#### **CRITERIA SELECTION & WEIGHTING**

#### **Participants**

<b><u>Name</u></b>	<b><u>Organization</u></b>
Rita Brumley	Resident
John Bernans	Liberty Township
Ken Cox	Concord Township
Valerie Croasmun	ODOT District 6
Tony Daragona	Resident
Andy Kerr	Olentangy School District
Phil Laurien	Delaware County Regional Planning Commission
Jim Moore	City of Delaware
Scott Sanders	Delaware County Regional Planning Commission
Chris Bauserman	Delaware County Engineer
Scott Pike	Delaware County Engineer's Office

### **Support Team**

<b><u>Name</u></b>	<b><u>Organization</u></b>
Jeffrey Griffin	Burgess & Niple - Project Manager
James Garrison	Burgess & Niple - Principal
Rick Fitch	Burgess & Niple - Environmental Specialist
Steve Thielen	Burgess & Niple - Traffic Engineer
Jack Alston	Burgess & Niple - Facilitator
Tim Miller	Cochran Group, Inc. - Public Relations

### **Agenda**

As indicated earlier, the Workshop Process achieves its success in part because it is conducted in a short space of time following a specific agenda. This format focuses participants on specific problems as they are addressed. Following is the agenda for Session 1 of the Workshop.

## **SAWMILL PARKWAY EXTENSION WORKSHOP AGENDA**

### **SESSION 1 CRITERIA SELECTION & WEIGHTING November 1, 2004**

#### **INTRODUCTION**

#### **BACKGROUND PRESENTATIONS**

Chris Bauserman  
Jeff Griffin  
Rick Fitch

#### **CRITERIA DEVELOPMENT**

Suggested Criteria  
Modified Criteria

#### **CRITERIA RANKING & WEIGHTING**

Matrix Process

#### **CLOSING COMMENTS**

## **Introduction**

This session began with an introduction of participants and general comments about the agenda and process.

## **Background Presentations**

County Engineer Chris Bauserman provided some background information for the Sawmill Parkway Extension project from the county's perspective. Jeff Griffin, Burgess & Niple's project manager, related the progress and activity of the project including those of the Advisory Council, Stakeholder Group, and public meetings since the project started in January 2004. Rick Fitch, Burgess & Niple's transportation environmental specialist, briefly reviewed basic information about the study area including environmental characteristics. Exhibit 2, Study Corridors, shows that Corridors A, B, and C are located in Liberty Township except for the extreme western ends. All four corridors have the same location between Home and Hyatts Roads and the extreme western end where they join south Section Line Road. Corridor D is located almost entirely within Concord Township except for portions in the western end located in the City of Delaware. Corridors A and C occupy the same route between US 42 and Section Line Road.

## **Criteria Development**

The Criteria Phase was an extremely important part of the workshop process. In this activity, participants considered a number of previously submitted factors that might be used to judge the location and effectiveness of an alignment for the extension of Sawmill Parkway. The benefit of creating criteria at this point in the workshop process was that they were created without any bias toward specific alternative route locations. In so doing, the criteria stand alone as valid considerations against which elements can be judged for their value. The criteria listed below was developed by consensus of the workshop participants and is not presented in any order of preference or importance:

- **Maximize Compatibility With Comprehensive Plans**
- **Minimize Impact On Existing Homes And Businesses**
- **Minimize Environmental Impacts**
- **Avoid Structures Representing Major Capital Investments**
- **Minimize Public Cost**
- **Recognize Public Input From Surveys**

## Criteria Ranking & Weighting

Following completion of the list, the Criteria Weighting form shown on Exhibit 3 was used to compare each criterion against each of the other criterion to determine a weighted importance. The criteria were listed in the top part of the form. Next, using an importance factor ranging from 1 (slight or no preference) to 4 (major preference), **Maximize Compatibility with Comprehensive Plans** (Criterion A) was compared to **Minimize Impact on Existing Homes and Businesses** (Criterion B). As shown in the box in the upper left corner of the Scoring Matrix, the consensus of the workshop participants was that **Minimizing Impact on Existing Homes and Businesses** was favored over **Maximizing Compatibility With Comprehensive Plans** with a score of 3 (medium preference). The process continued with similar comparisons. The letter appearing in each box shows the preferred criterion while the number refers to the importance score attributed by the workshop participants.

At the conclusion of this comparison process, the raw score for each criterion was totaled by adding the number of appearances of each criterion in the matrix. For example, C (**Minimize Environmental Impacts**) appears five times. The symbol C-2 represents two Cs in the totaling process. Finally, the Weight for each criterion was developed by apportioning the raw scores within the range of 1 to 10 points. For example, **Avoid Structures Representing Major Capital Investments** had the highest raw score and received a weight of 10, whereas **Public Input From Surveys** had the lowest raw score and received a weighted value of 1.

The ranking of **Public Input From Surveys** warrants explanation. As explained previously, this criterion was selected by the participants prior to the ranking and weighting process. However, each of the other criterion were judged to be more important when the one-on-one comparisons were made. When the other criterion are considered, public input is inherent in each one – often times in a far greater magnitude than the 85 people who responded at the September 29, 2004 Open House for this project. For example, the process of preparing Comprehensive Plans in the City, County, Concord and Liberty Townships has involved dozens (perhaps hundreds) of meetings of elected officials, staff of public agencies, and the general public over many months time. In summary, the public's input to the planning of an extension of Sawmill Parkway has been considered for years and certainly has not been lost in the overall process.

At the conclusion of Session 1 of the Workshop, Burgess & Niple forwarded the results to Delaware County Engineer, Chris Bauserman for use by a Technical Committee in Session 2 of the Workshop. The following is a description of the process used to evaluate the alternative corridors in Session 2.

## WORKSHOP ACTIVITIES - SESSION 2

Participants in the Session 2 of the Workshop were selected for their technical expertise in route location of transportation facilities and a variety of associated experience.

### Location

Session 2 of the Sawmill Parkway Extension Workshop was held in the offices of Burgess & Niple, Inc, at 5085 Reed Road in Columbus on November 5, 2004.

## **Participants**

Participants in the workshop were selected by the Delaware County Engineer with input from Burgess & Niple. Membership on the Technical Committee was based on the expertise each person could bring to the process. The following is a list of participants:

**SAWMILL PARKWAY EXTENSION WORKSHOP  
SESSION 2  
EVALUATION OF ALTERNATIVE CORRIDORS  
Technical Committee**

<b><u>Name</u></b>	<b><u>Organization</u></b>
Chris Bauserman	Delaware County Engineer
Scott Pike	Delaware County Engineer
Jeffrey Griffin	Burgess & Niple - Project Manager
James Garrison	Burgess & Niple – Principal
Rick Fitch	Burgess & Niple - Environmental Specialist
Scott Ryan-Hart	Burgess & Niple
Kris Popovich	Burgess & Niple
Tim Miller	Cochran Group - Public Relations

## **Agenda**

As indicated earlier, the Workshop Process achieves its success in part because it is conducted in a short space of time following a specific agenda. This format focuses participants on specific problems as they are addressed. Following is the agenda for Session 2 of the Workshop.

**SAWMILL PARKWAY EXTENSION WORKSHOP  
SESSION 2  
EVALUATION OF ALTERNATIVE CORRIDORS  
November 5, 2004**

### **INTRODUCTION**

### **BACKGROUND PRESENTATIONS**

Jeff Griffin

### **EVALUATION PROCESS**

Review of Criteria  
Review of Suggested Alternative Corridors  
Segmenting Suggested Alternative Corridors

### **EVALUATION**

Evaluation Process



## **Suggested Alternatives Corridors**

The identification of Suggested Alternative Corridors was a key element. These corridors (1,000 feet in width) had been proposed by the Advisory Council and Stakeholder Group prior to the September 29, 2004 Open House and served as a starting point for the analysis (see Exhibit 2, Study Corridors). As the analysis began, it became evident that because the route of Corridor B crossed Corridors C and D, it offered possibilities for additional corridors through combinations of various segments of the other corridors. The evaluation process was conducted on the four original routes and nine combinations of segments identified on Exhibit 4, Corridors and Corridor Segments. In all, 13 potential corridor routes were evaluated.

## **Evaluation of Alternatives**

The final aspect of the overall evaluation process is reported on Exhibit 5, Evaluation of Alternatives. The criteria from Session 1 were inserted across the top of the form with appropriate identification. The weighted scores were also transferred from the Criteria Weighting Matrix shown on Exhibit 3. In order to clarify the meaning of the criteria prior to the evaluation process, each criterion was further defined as indicated below:

- **Maximize Compatibility With Comprehensive Plans**  
Comprehensive Plans for the City of Delaware and Liberty Township had the most influence on the location of the alternative corridors. Both plans show similar locations for Corridor A. It is noted that the Comprehensive Plans reflected the general location of this corridor.
- **Minimize Impact On Existing Homes And Businesses**  
The number of homes and businesses in each corridor was considered based upon their range from 20 to 42. The lowest number received the highest score in the rating process.
- **Minimize Environmental Impacts**  
Consideration for the environment was given a high priority in the original location of the corridors. Burgess & Niple's transportation environmental specialist presented a detailed analysis of environmental factors including wetlands, stream/drainage, wood lots, wood lots associated with the Grove Sandwort, farmland, and historic features or structures present in each alternative corridor. From this analysis, participants were able to classify the impact of each corridor on the environment.
- **Avoid Structures Representing Major Capital Investments**  
Here too, location of the original corridors placed heavy emphasis on avoidance of structures representing major capital investments such as electrical substations, towers for major power lines and other public facilities, such as schools. As such, equal values were recorded for this criterion in each corridor.
- **Minimize Public Cost**  
Public cost was rated on length of the roadway, estimated right of way acquisition cost, and drainage design considerations required in each corridor.
- **Recognize Public Input From Surveys**

This criterion was based upon public input received since the September 29, 2004 Open House and general comments received by public officials regarding preference.

Using the scale at the bottom of the Evaluation Form (4, 3, 2, or 1), the Committee ranked each potential alternative against each of the criterion and recorded a score in the top row of boxes opposite each alternative. This score represents a rating of how well each corridor satisfied each criterion. That score was then multiplied by the weighted value of the criterion to produce a value in the bottom row of boxes opposite each alternative. This bottom row of values opposite each alternative was then added together to produce the total score for each potential alternative. This process was completed for all the segment alternatives and resulted in the scores and ranking shown on Exhibit 5, Evaluation of Alternatives.

Exhibit 5 shows the range of evaluation from the high of 104 to the low of 57. At the conclusion of the evaluation process, Corridor B and “Hybrid Corridor 4” were tied with the highest evaluation score. Hybrid Corridor 4 is a combination of segments B-1, A-2 and A-C. The next highest ranking potential alignment was Hybrid Corridor 5, a combination of segments B-1, B-2, C-2 and A-C. Exhibit 6, Summary of Corridor Evaluation shows the three highest rated corridors. At the conclusion of Session 2 of the Workshop, it was determined the results of Sessions 1 and 2 should be presented to the Advisory Council for input and discussion.

## ADVISORY COUNCIL MEETING

### Location

This meeting was held in the Delaware County Engineer's Office at 50 Channing Street in Delaware, Ohio on November 10, 2004.

### Participants

Participants at the November 10, 2004 meeting of the Advisory Council were as follows:

<b>Name</b>	<b>Organization</b>
Robert Cape	Liberty Township
Bill Ferrigno	City of Delaware
Terry Lively	City of Delaware
Kris Jordan	Delaware County Commissioner
Phil Laurien	Delaware County Regional Planning Commission
Scott Sanders	Delaware County Regional Planning Commission
Chris Bauserman	Delaware County Engineer
Scott Pike	Delaware County Engineer's Office

<b>Support Team</b>	
<b>Name</b>	<b>Organization</b>
Jeffrey Griffin	Burgess & Niple – Project Manager
James Garrison	Burgess & Niple – Principal
Rick Fitch	Burgess & Niple – Environmental Specialist
Tim Miller	Cochran Group, Inc. – Public Relations
Chris Hermann	MSiDesign – Planning

### Agenda

The following is the agenda for the November 10, 2004 Advisory Council meeting:

#### DISCUSSION OF NOVEMBER 1 CRITERIA WEIGHTING WORKSHOP

Location  
Purpose  
Participants  
Results – Selected Criteria for Corridor Evaluation

## DISCUSSION OF NOVEMBER 5 CORRIDOR EVALUATION WORKSHOP

Location

Purpose

Participants

Evaluation of Corridors and Hybrid Corridors

Results – Corridor B and Hybrid Corridor 4 were tied for the highest rank with a total of 104 points each. Hybrid Corridor 5 was next with 101 points.

## INPUT AND DISCUSSION OF HIGHEST RANKED CORRIDORS

### PREFERRED CORRIDOR RECOMMENDATION FROM ADVISORY COUNCIL

#### **Advisory Council Comments**

Of the highest ranked corridors (Corridor B, Hybrid Corridor 4, and Hybrid Corridor 5), the Advisory Council voiced support for Hybrid Corridor 4, based on the following observations:

- Within Liberty Township, Hybrid Corridor 4 maximizes the available area west of the corridor for single family detached residences on lot sizes no less than 1 acre. It also minimizes available area east of the corridor where somewhat higher densities might be considered. These are consistent with the current zoning and the Comprehensive Plan for Liberty Township.
- Within the current and projected future corporate limits of the City of Delaware, Hybrid Corridor 4 maximizes the available area for development consistent with the City of Delaware Comprehensive Plan. It also places the potential intersection of the Sawmill Parkway Extension and U.S. Route 42 in a location more consistent with expansion plans for the Delaware Municipal Airport.
- Of the highest ranked corridors, Corridor B was viewed by the Advisory Council as having the least amount of consistency with the current Liberty Township and City of Delaware Comprehensive Plans.

#### **Advisory Council Recommendation**

The Advisory Council recommended Hybrid Corridor 4 be selected as the Preferred Corridor for the Sawmill Parkway Extension.

## **CONCLUSION**

Based on the results of Workshop Sessions 1 and 2 and input received from the Advisory Council, the Delaware County Engineer's Office selected Hybrid Corridor 4 as the Preferred Corridor for the Sawmill Parkway Extension. Please refer to Exhibit 7.