

APPLICATION FORM

ZONING MAP AMENDMENT
BOONE COUNTY PLANNING COMMISSION

(See Boone County Zoning Regulations)

SECTION A (To be completed by applicant)

- 1. Name of Project TANGLEWOOD SUBDIVISION
- 2. Location of Project 3400 BURLINGTON PIKE
- 3. Total Acreage of Site 50.78 AC
- 4. Current Zoning of Site A-2
- 5. Proposed Zoning (Classification being requested) RS OPEN SPACE
- 6. Proposed Uses (please specify each use) SINGLE-FAMILY DETACHED RESIDENCES

- 7. Names of Applicant(s) ONE ELEVEN ENG. & SUR. PLLC
- Phone Number 859 363-9025 Fax No. 859 363-9125

- 8. Address of Applicant(s) 5294 MADISON PIKE
- INDEPENDENCE KY 41051
- City State Zip

- 9. Name of Property Owner(s) ROSLYN WACHS TRUSTEE
- Phone Number _____ Fax No. _____

- 10. Address of Property Owner(s) RR 3 128~~th~~ 116
- MONTICELLO KY 42633
- City State Zip

- 11. Proposed Building Intensities (please specify) SINGLE-FAMILY DETACHED @ 2.95 UNITS PER ACRE

- 12. Are there any existing buildings on the site? NO
- How many? _____

- 13. Deed Book 830 Page No. 230 Group No. _____

- 14. Are you also applying for:
 - Conditional Use Permit
 - Dimensional Variance

- 15. Have you submitted a Concept Development Plan? YES

- 16. Have you had a pre-application meeting with BCPC Staff? YES

- 17. Please check the following organizations/agencies which you have discussed the proposed development within the last several months:

- Boone County Water District
- Florence Public Services Dept.
- Duke Energy
- Sanitation District #1
- Cincinnati Bell
- Owen Electric Cooperative, Inc.
- Boone County Public Works Department
- Kentucky Transportation Cabinet
- Cincinnati/N. KY International Airport (KY Airport Zoning Commission for height restrictions near the airport)

EXHIBIT

“A”

STAFF REPORT

Request of One Eleven Engineering & Surveying, PLLC (applicant) for Roslyn Wachs, Trustee (owner) for a Zoning Map Amendment from Agricultural Estate (A-2) to Rural Suburban (RS), and a Variance for side yard setbacks, for a 50.78 acre tract located on the north side of Burlington Pike, between the properties at 3300 and 3446 Burlington Pike and across from the Burlington Pike/Saddle Ridge Drive intersection, Boone County, Kentucky. The request is for a zone change to allow an open space style subdivision for single family residences, and a Variance to allow the side yard setbacks to be reduced to 5 feet minimum and 10 feet minimum total for both side yards combined.

September 20, 2006

REQUEST

The Applicant's submitted Concept Development Plan proposes 150 detached single family home lots. The Rural Suburban (RS) Open Space Subdivision requires a 5,000 square foot minimum lot size with 50' of road frontage. The minimum front yard setback is 10 feet (however the Applicant is proposing a minimum front yard setback of 25 feet) and the minimum rear yard setback is 25 feet. The Applicant is also requesting a variance of the side yard setbacks 5 foot minimum 10 foot total. The required side yard setback is 5 foot minimum 20 foot total. The proposed density of the subdivision is 3.3 dwelling units per acre. The Rural Suburban (RS) Open Space zone permits up to three (3) dwelling units per acre with a minimum green space area of 20% (or 10.16 of the 50.78 acres). The Concept Development Plan indicates that 15.03 acres (or 29.6%) will be retained as green space area.

The proposed entrance is shown across from Saddle Ridge Drive and utilizes the "Existing 100' Overhead Electric Easement." The proposed 100' boulevard is proposed to have no individual driveway access and all streets within the proposed development are showing sidewalks on both sides. No sidewalk is proposed for the KY 18 frontage.

Storm water detention is proposed in four areas within the proposed "Open Space", two (2) near Hidden Creek to the north and two (2) near KY 18 to the south. No street connections are proposed with this Concept Development Plan. The potential connection to the adjoining Hidden Creek II Subdivision is no longer an option as the cul-de-sac (Hammer Court) has been developed.

The northern portion of the subject property drains into an intermittent blue-line stream (as indicated on the USGS maps) that runs between the subject property and the Hidden Creek II Subdivision. The southern portion of the subject property drains into Allen's Fork Creek which is a blue-line stream (as indicated on the USGS maps) located along the south side of Burlington Pike (KY 18).

SITE HISTORY

This property was the subject of a similar Zoning Map Amendment request last year. That request was for a Zoning Map Amendment from Agricultural Estate (A-2) to Suburban Residential One (SR-1). More specifically, the Public Hearing was held on December 21, 2005, and the concept development plan viewed at the Public Hearing consisted of 153 detached single family home lots (8,000 square foot minimum lot size with 65' of frontage and setbacks of 30' front, 30' rear and 5' minimum - 15' total on the sides) and 17 patio home lots (8,000 square foot minimum lot size with 60' of frontage and setbacks of 25' front, 20' rear and 0' minimum - 10' total on the sides) for a total of 170 dwelling units on the 50.78 acre tract. The proposed density of the subdivision is 3.3 dwelling units per acre. The Suburban Residential One (SR-1) zone permits up to four (4) dwelling units per acre. The Applicant revised the Concept Development Plan at the Zone Change Committee reducing the total number of lots from 170 to 153 (from 3.3 to 3.0 dwelling units per acre). The Zone Change Committee recommended approval with conditions to the full Planning Commission by a vote of 3 to 1. The Planning Commission denied the project by a vote of 7 to 4 forwarding that recommendation to the Boone County Fiscal Court.

Due to the size, shape and topography of the Wachs property, the 2005 Concept Development Plan and the 2006 Concept Development Plan have some basic similarities, however the reduction in the total number of lots from 170 (or 153) to 150 and now proposing an Open Space style development are essentially the major changes to the development.

Attached to this Staff Report are copies labeled "2005 Concept Development Plan" and "2006 Concept Development Plan" for comparison.

ADJACENT LAND USES AND ZONING

- North: Single-Family Residences in the Hidden Creek and Hidden Creek II Subdivisions zoned Suburban Residential One (SR-1)
- South: The Saddle Ridge Subdivision and property owned by Poston (18.9 acres) zoned Agricultural Estate (A-2)
- East: Property owned by Green (5.22 acres) and Archambault (42.45 acres) zoned Rural Suburban Estate (RSE)
- West: Single-Family Residences in the Hidden Creek Subdivision zoned (SR-1)

RELATIONSHIP TO COMPREHENSIVE PLAN

The 2005 Boone County Comprehensive Plan's Future Land Use Map designates the site for "Suburban Residential" (SR) uses. This designation is described as "single family housing of up to four units per acre. This classification does not preclude low density or estate residential developed as a formal subdivision." It is critical to note that the Future Land Use Map is a 25 year projection, and is not intended to commit all areas to development immediately. In some areas, phasing may be used to make sure development is supported by infrastructure, and in others development may be delayed until planned infrastructure is provided.

The Land Use Element text makes the following statements that relate to the overall area (Burlington Area, page 150):

"Burlington Proper will continue to experience growth-related pressures. The influence of residential subdivisions in the surrounding areas, and the associated traffic, will necessitate improved traffic controls and management, particularly at KY 18 and KY 338."

"To provide an appropriate entrance to the potential large western Boone County tourism area, KY 18 west of Burlington should maintain a rural appearance through unique subdivision design. As this area develops and anticipated school facilities are built, improvements to KY 18 will be needed, such as shoulders, reconstructed curves, improved sight distances, and sufficient intersection improvements in Burlington at KY 18 and KY 338. Suburban Residential Land Uses depicted on the 2030 Future Land Use Map in this area should not be developed until these conditions on KY 18 are improved, and adequate school capacity can be provided in the area. The next Comprehensive Plan update can be used as a tool to evaluate the progress made regarding infrastructure provision."

"New residential subdivision development in the KY 18 corridor west of Burlington and east of Woolper Road should be designed carefully to respect the rural character. As the Future Land Use Map indicates, the planned Suburban Residential land uses west of Burlington change abruptly in the corridor to Rural Density, Rural Lands, and Developmentally Sensitive further west. Future Suburban Residential development in this area needs to provide sections of lower residential density adjacent to these border areas. A true density step-down is needed beyond the frontage and setback transitional recommendations described in the Development Guidelines section of this Element. Subdivision entrance areas and frontages along KY 18 should also be sensitively designed to retain the rural character of the area."

The Future Land Use Development Guidelines contain the following statements:

- A. Developments in Boone County should begin with an assessment of the existing site features to determine positive and useful attributes, as well as features which should or can be preserved. Development design should incorporate the use of these attributes for the benefit of the development and the County as a whole, rather than leveling an entire site to meet a pre-conceived project design. Development plans should identify such areas, and delineate disturb limits to protect those areas that have been defined ("Utilization of Existing Vegetation and Topography," pg. 140).
- B. As described in the Goals and Objectives, different development densities can occur in Boone County as long as the development is designed in a proper manner and the infrastructure exists or is planned to support the development.

In these conditions, proposed residential developments that have smaller lot sizes than surrounding land uses are recommended to utilize the following design mechanisms to address the impacts on existing development.

The proposed development should consider in its design a band of larger lots and setbacks along the affected perimeter of the site adjacent to existing development to provide an adequate transition.

The proposed development should consider a band of development along the existing main roadway in which the houses face the main road to appear rural, and where the lots in this band are larger than those in the balance of the proposed development. Building setbacks and lot frontages should imitate existing setbacks along the road.

Highly visible portions of the proposed development site should consider green space. The style of green space, including tree types, fencing or other similar features should imitate the existing road corridor views. Grandiose subdivision entryways may not be appropriate depending on existing conditions in the corridor.

These recommendations are site specific and should be evaluated on a case-by-case basis. In fact, there may be other design mechanisms not identified here that may work in some instances ("Development Layout, Lot Sizes, and Setbacks," pp. 140 and 141).

- C. Developments in Boone County must recognize the potential impacts upon adjoining land uses and incorporate a transition of land uses, building setbacks, and/or landscaping to minimize these impacts. Potential impacts include visual, noise or vibrations, odors, dust, smoke, and light. Buffering to mitigate these impacts should be an integral part of the design of proposed projects; existing site features should be used in meeting this guideline. Developments should provide buffering along public roadways, to soften the visual impact. Appropriate wooded areas and stream valleys should remain as greenbelts and open space within developments and between developments. Developments proposed adjacent to planned or established greenbelts should provide pedestrian access where appropriate . . .

Typically, buffering is required and provided between unlike land uses, however, as the development of Boone County fills in previously rural areas, different lot sizes and designs of residential development sometimes impact each other. Where an appropriate gradation of lot size and setbacks cannot be designed into a proposed residential subdivision development of a significantly higher density than existing adjacent residential uses, deliberate vegetation buffering may need to be incorporated into the design to help protect low density residential areas. Buffer areas should use and supplement existing site features where possible ("Buffering," pg. 141).

- D. Developments in Boone County must include landscaping to accompany the proposed project. This landscaping should be designed to improve the public view of a development, and should be incorporated into parking lots and other vehicle circulation areas, as well as within open spaces and around structures. Landscaping is intended to minimize the visual impacts of the development from adjoining properties and roadways.

Developments along major roadways in Boone County must include landscaping between the development and the right-of-way in order to promote the aesthetic appearance from the roads and to facilitate the compatibility of differing land uses ("Landscaping," pg. 141).

- E. Developments in Boone County must recognize the potential impacts of associated traffic on adjoining properties and transportation systems. The need exists to protect the capacity of the existing roadway network, and to plan improvements to accommodate new development and travel patterns. Access management provisions include the coordination of curb cuts, adequate corner clearance and site distance for access points, adequate space between access points, shared access points and parking facilities, provisions for access connections to adjoining properties, and dedication of public right-of-way. In subdividing property, arterials or collectors should not be used for direct access to lots, rather a system of local streets should feed into the collector and arterial system ("Access Management," pp. 141 and 142).

- F. Developments in Boone County must be designed, where appropriate, to improve the County's transportation network system of roadways, and functional classifications must be used in the planning for and designing of new developments. Collector roadways should be extended and developed to provide for the safe movement of traffic through and between subdivisions. Development along existing arterials and collector roadways should not have direct driveway access, but be served by a local street. Appropriate road connections should be constructed to provide alternate routes for traffic to and through specific projects and to enhance the capacity of existing streets.

Appropriate pedestrian networks should be incorporated into the design of developments which will generate or experience significant pedestrian use. These networks should not only provide internal paths, but should provide connections to adjoining uses where appropriate ("Transportation and Pedestrian Network," pg. 142).

The Housing Element provides the following comments that relate to this proposal.

- A. Although single-family homes are by far the most numerous, they continue to decrease in their percentage of total Boone County housing. Most new construction of single-family housing will take place on the outer rings of growth ("Housing Types," pg. 75).
- B. Housing development density has become an issue of concern to many existing residents in established, large lot subdivisions in suburban Boone County. Many of these areas developed during the 1960's to the 1980's when land prices were relatively low, few utilities were present, the surrounding land was agricultural, and urban/suburban development had not yet extended out to these areas. Many of these older subdivisions contain two-acre lots or larger. By contrast, most new subdivisions in Boone County are developing at around three units per acre, and sponsor sewer construction if sanitary sewer is not currently available to the site. The issue arises when these new higher density subdivisions are proposed near established low density areas, and centers mainly around development impacts on infrastructure and the residential character of the area ("Housing Densities," pg. 76).
- C. As noted previously, there is a desire of the population to live in rural areas that are convenient to the centers of commercial activity. This suggests a continuation of the outward movement of housing construction from the general Florence area. This movement is accelerated directionally by major thoroughfares such as KY 18, KY 237, US 42 and interstate interchanges. Residential development should occur near established urban or suburban areas, as opposed to leapfrogging to isolated areas, such as the western portion of the county. This will be an increasingly important issue as public water service is planned and implemented for the western parts of Boone County. For residential development to occur in these outlying areas, adequate and proper infrastructure must be provided, and impact on the natural environment must be minimized.

If public water and sanitary sewer infrastructure is implemented in currently rural areas, there would be demand for suburban subdivision densities. Just because one form of public infrastructure has been improved, however, does not mean the area is ready for suburban development. Other forms of infrastructure must be provided as necessary. It is also possible that some areas of the county are not suitable for suburban or urban density, or may be suitable later in the twenty-five year planning horizon. Development phasing is an option to enable the timing of new development to correlate with the provision of adequate infrastructure. In addition, new subdivision development should include design considerations, and gradation of lot sizes, or both, to lessen the impact on the character of the area. "Bands" of residential lot sizes may be a model to consider in order to ensure compatibility. This is particularly true in areas of agricultural zoning, and could include larger lots or green space along the main road(s), larger lots or a buffer along adjacent low density residential uses, strategic open space, and detailed attention to the orientation of housing units.

In general, residential development has occurred at a lower density than planned in the Future Land Use Plan over the last two comprehensive plan updates in Boone County. The development has predominantly been in a limited variety of product, typified by mid-range value single-family subdivisions at approximately three units per acre. The demand for this product appears to remain strong throughout the 25 year Comprehensive Plan planning horizon with some attached housing designed into larger planned developments. Increased density does not necessarily negatively impact the quality of a community or nearby home values. Although neotraditional, true mixing of unit types, connection to green space, and similar concepts of neighborhood design have just begun to be considered by the development industry in Boone County, much work needs to be done in the design realm to implement these ideas correctly, and make them more common. These newer concepts are needed to enable the development industry and local government to address density concerns and strengthen the sense of community, as well as meet the housing demands of a changing population ("Conclusion," pg. 80).

The adopted Goals and Objectives include the following pertinent statements.

- A. Development issues shall be viewed in terms of promoting overall quality of life. Mixing of residential and other land uses shall be encouraged, within appropriately planned and designed neighborhood developments ("Overall," Objective 2).
- B. Proper design principles shall be applied in development ("Overall," Objective 3).
- C. Future growth shall be accompanied by adequate infrastructure and services. Existing infrastructure and services shall be monitored, maintained and improved as needed ("Overall," Objective 4).
- D. New development or redevelopment within Boone County is designed, constructed and operated in such a way that the quality of the existing physical environment and social environment are enhanced. Development within Boone County preserves and promotes a better quality of life ("Environment," Goal).
- E. New development or redevelopment shall attempt to design sites utilizing existing topography and vegetation, and encourage preservation of the existing character of the land. New development shall be designed in harmony with the physical environment in such a way that each site's existing physical assets are used. Residential development design in particular should minimize grading work as opposed to clearing the entire site. Existing trees and pasture land shall be evaluated during the design and construction process as a visual and economic benefit to the community ("Environment," Physical Objective 2).
- F. Existing vegetation shall be considered as both an important site characteristic and a community resource ("Environment," Social Objective 4).

- G. A broad range of housing opportunities shall be provided which meet the needs and desires for all household types ("Housing," Objective 1).
- H. Housing supply in Boone County shall be balanced against present and planned commercial, industrial, and education needs. Primary and secondary education capacity shall be evaluated during housing development review ("Housing," Objective 4).
- I. In order to offer the citizens of Boone County maximum choice in living environment, residential development shall be judged primarily on the impact on infrastructure, buffering, and development design with only secondary consideration given to the type of dwelling units ("Housing," Objective 5).
- J. The interior street system of new residential developments shall insure continuity with adjacent built or planned neighboring areas. Residential developments shall be encouraged to provide interconnections between sections of their developments and with adjacent developments to promote safe and easy transportation access and a sense of neighborhood interaction. Based on certified traffic analysis, collector and sub-collector streets shall be evaluated to determine design without individual lot or driveway access. Lot and home buyers shall have access to approved plans regarding future connections. The interior street system shall also coordinate with and continue the evolving multi-modal transportation system (pedestrian and bicycle facilities, mass transit stops) ("Housing," Objective 8).
- K. Residential developments shall be encouraged to plan and build in a manner which is compatible not only with the general housing density and design planned for the area but also with the existing conditions of the site, including the suitability of adjoining lands for appropriate access, and significant site features ("Housing," Objective 13).
- L. Where existing infrastructure, services and the public school system are not adequate, developments shall be phased to coordinate with the provision of these items ("Housing," Objective 14).
- M. New infrastructure systems shall be built to definite planned and balanced capacities and for definite urban and rural forms ("Public Services and Facilities," Objective 2).
- N. Priorities for growth within any individual infrastructure system shall be based on the predicted needs of specific areas as prescribed by the future land use projections of this plan. No infrastructure system shall commit the county to excessive growth by the system's expansion ("Public Services and Facilities," Objective 3).
- O. New connector streets shall be developed where needed and feasible thus lessening the total dependence on arterial, collector, and local streets. Existing connector streets shall be improved where needed ("Transportation," 2nd Goal, Objective 2).

- P. Proper vehicular and pedestrian access to adjoining property shall be provided and/or retained when a property develops or redevelops ("Transportation," 2nd Goal, Objective 3).

STAFF CONCERNS

1. Staff is concerned that no street connections are proposed. A connection is needed into the adjoining Archambault property (42.45 acres), and possibly the Greene property (5.22 acres) both adjoining to the east. Staff feels that these connections are necessary to avoid "pocket" developments. The Archambault property has the potential to connect from Idlewild Road (through Boone County Public Works and Fairgrounds) on the north to KY 18 (across from Morgans Crossing) to the south. This could provide a portion of a connection from North Bend Road (KY 237) to East Bend Road (KY 338) around Burlington. Section 305, subsection "N" (Street Connections to Adjoining Tracts) of the Boone County Subdivision Regulations states that "dead end streets of a temporary nature and street connections with adjoining undeveloped tracts shall be required by the Commission. Reasons for this include the layout of the subdivision, the staging of the development, the opportunity for reasonable access alternatives to adjoining tracts, the necessity of providing through connections between collector or arterial streets, to distribute traffic patterns by providing alternative routes, and to provide convenient and efficient access for emergency vehicles, street maintenance, school buses, postal delivery, and other essential services."

2. Staff compared the intensities of the proposed subdivision with Saddle Ridge, Hunters Ridge, Morgans Crossing, Hidden Creek and Hidden Creek II.

Subdivision	Acreage	Buildable Lots	Dwellings Per Acre
TANGLEWOOD (PROPOSED)	50.87	150	2.95
SADDLE RIDGE	68.6	25	0.36
HIDDEN CREEK	45.5	92	2.02
HIDDEN CREEK II	83.05	207	2.49
MORGANS CROSSING	46.25	130	2.8
HUNTERS RIDGE	289.7	700	2.42

3. The Applicant is proposing an Open Space style development, but has not provided any type of tree preservation plan. Staff is concerned about the number of trees that will have to be cleared for this proposed project. The 2005 Boone County Comprehensive Plan describes that "existing vegetation shall be considered as both an important site characteristic and a community resource." Efforts were made in the Hidden Creek development to retain wooded areas, particularly near the entrance on KY 18.
4. Staff would like the Applicant to address the issues from the 2005 request regarding the four (4) retention ponds (especially the two located nearest KY 18), their design and potential impacts on the adjoining properties and infrastructure.
5. Staff has attached comments from Gretchen Bartley, Environmental Inspector III with the KY Division of Water, with regard to the potential impacts on the intermittent blue line stream as well as the blue line stream. Permits may be required from some or all of the following: the Water Resources Branch to work in or near the stream, the Water Quality Branch if they are disturbing 200 feet or more of the stream, and potentially the Army Corps of Engineers. Her December 13, 2005 letter has been attached per her request.
6. Staff received a letter from the Burlington Fire Protection District requesting that the "fire hydrant spacing be reduced from one (1) hydrant every 500 feet to one (1) hydrant every 350 feet."
7. Staff received a letter from Bryan Blavatt, Superintendent of Schools, in regard to housing plans in Boone County. Mr. Blavatt's letter is attached to the Staff Report. Staff would like to focus on the "phasing" aspect of the letter.
8. The Kentucky Transportation Cabinet has indicated that Staff use their November 14, 2005 letter. It states that a right turn lane will be required to accommodate movements into the site. Their comments are preliminary and still require a formal Encroachment Permit review.
9. Correspondence received from the Boone County Sheriffs Department indicates that there appears to be little or no "street calming" proposed for the development.
10. Staff recommends that the Planning Commission and Boone County Fiscal Court analyze the timing of the project and the 2005 Boone County Comprehensive Plan. The Comprehensive Plan uses a 25-year planning horizon for future land use recommendations. This plan is a tool designed to enable Boone County and the Planning Commission to manage the location and timing of the various types of development, to assure adequate and fiscally responsible provision of infrastructure and public services in order to assure that adjoining land uses are compatible and to assure that negative impacts to the environment are minimized. Specifically, the text states "As this area develops and anticipated school facilities are built, improvements to KY 18 will be

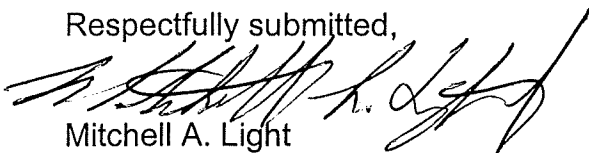
needed, such as shoulders, reconstructed curves, improved sight distances, and sufficient intersection improvements in Burlington at KY 18 and KY 338. Suburban Residential Land Uses depicted on the 2030 Future Land Use Map in this area should not be developed until these conditions on KY 18 are improved, and adequate school capacity can be provided in the area. The next Comprehensive Plan update can be used as a tool to evaluate the progress made regarding infrastructure provision."

11. Staff would like to point out that the KY 18 improvements outlined in the 2005 Boone County Comprehensive Plan have been recommended in the 2006 Boone County Transportation Plan. No funding is available for these improvements, and KY 18 will be in competition with many other planned road improvements in Boone County in the future. The applicant has not supplied Staff with a new/revised traffic impact study for this project. At the pre-application meeting, the applicant had offered a hypothetical design for a 5-lane KY 18, but has not submitted it at this time. A traffic impact study was submitted at the December 21, 2005 Public Hearing. The applicant needs to evaluate the potential impacts of the proposed development on the KY 18/KY 338 intersection similar to the analysis performed for Hunter's Ridge in 2003-04.
12. Staff recommends that the Planning Commission and Fiscal Court should consider the following issues if the Zoning Map Amendment application is approved:
 - A. Subdivision layout (i.e. house orientation and homes not facing KY 18, location of driveways, subdivision regulation standards, sidewalks along KY 18, etc.);
 - B. Subdivision phasing (timing of plan approvals);
 - C. Dedication of additional right-of-way along KY 18 for future improvements (i.e. turn lanes).

CONCLUSION

This request needs to be evaluated by the Boone County Planning Commission and the Boone County Fiscal Court in terms of the three criteria necessary for approving a Zoning Map Amendment as stated in Article 3 "Amendment" of the Boone County Zoning Regulations and the potential impacts on the existing and planned uses in the area. The requested Variances need to be reviewed by the Planning Commission in light of the criteria in Section 251 "Application and Standards for Variances" of the zoning regulations. The Future Land Use Map will not need to be amended if this request is approved.

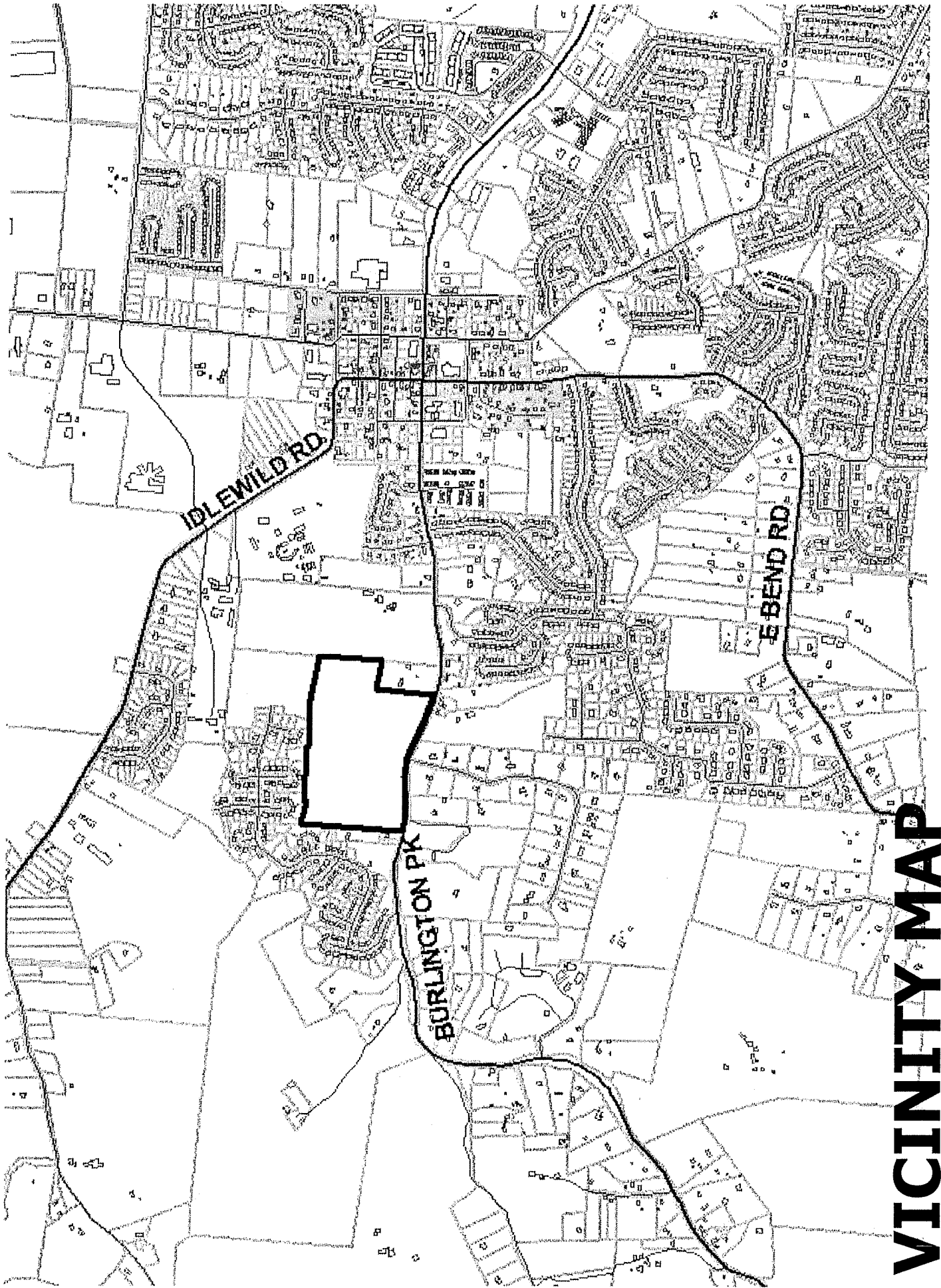
Respectfully submitted,



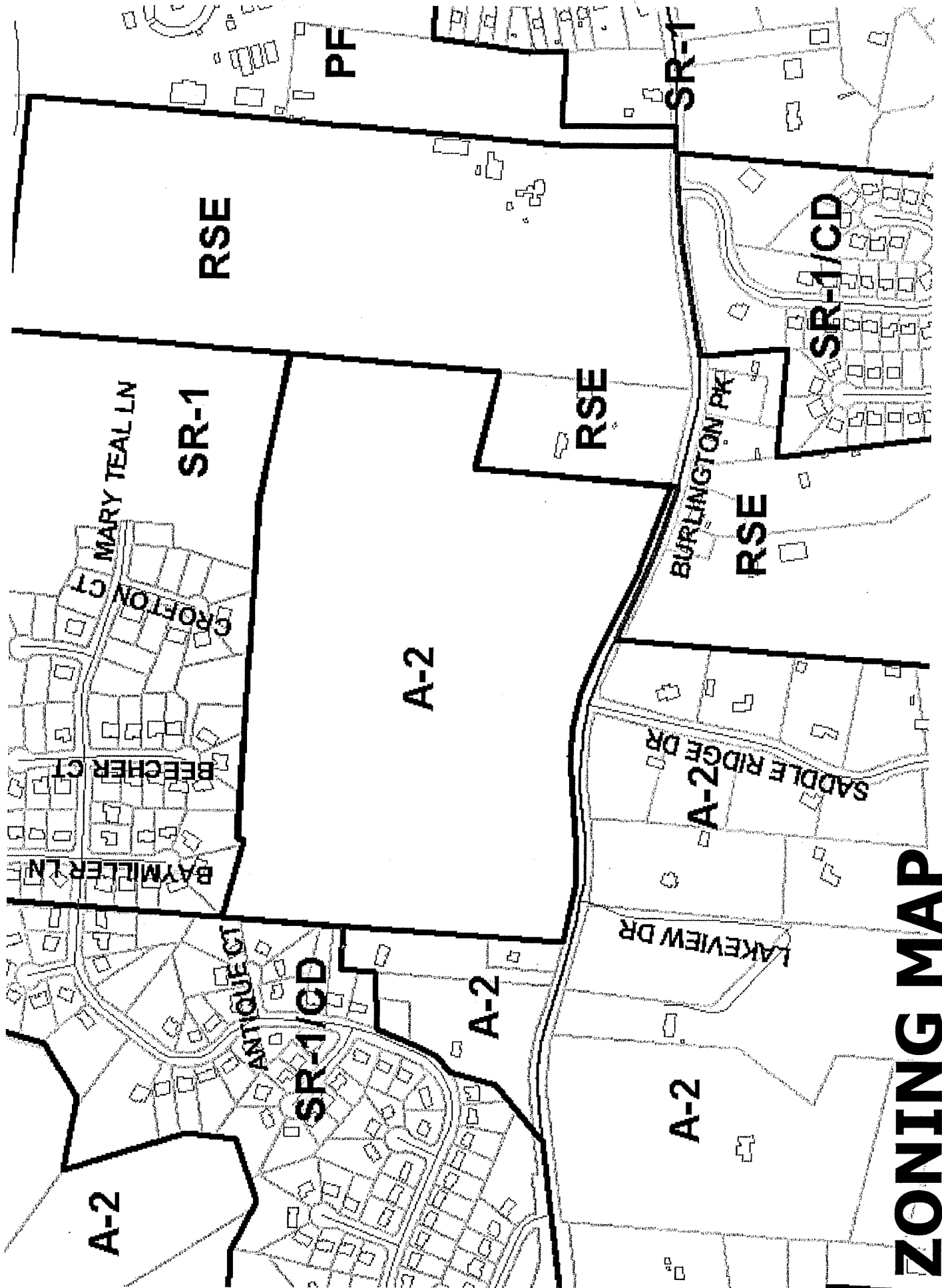
Mitchell A. Light
Asst. Zoning Administrator/Enforcement Officer

attachments:

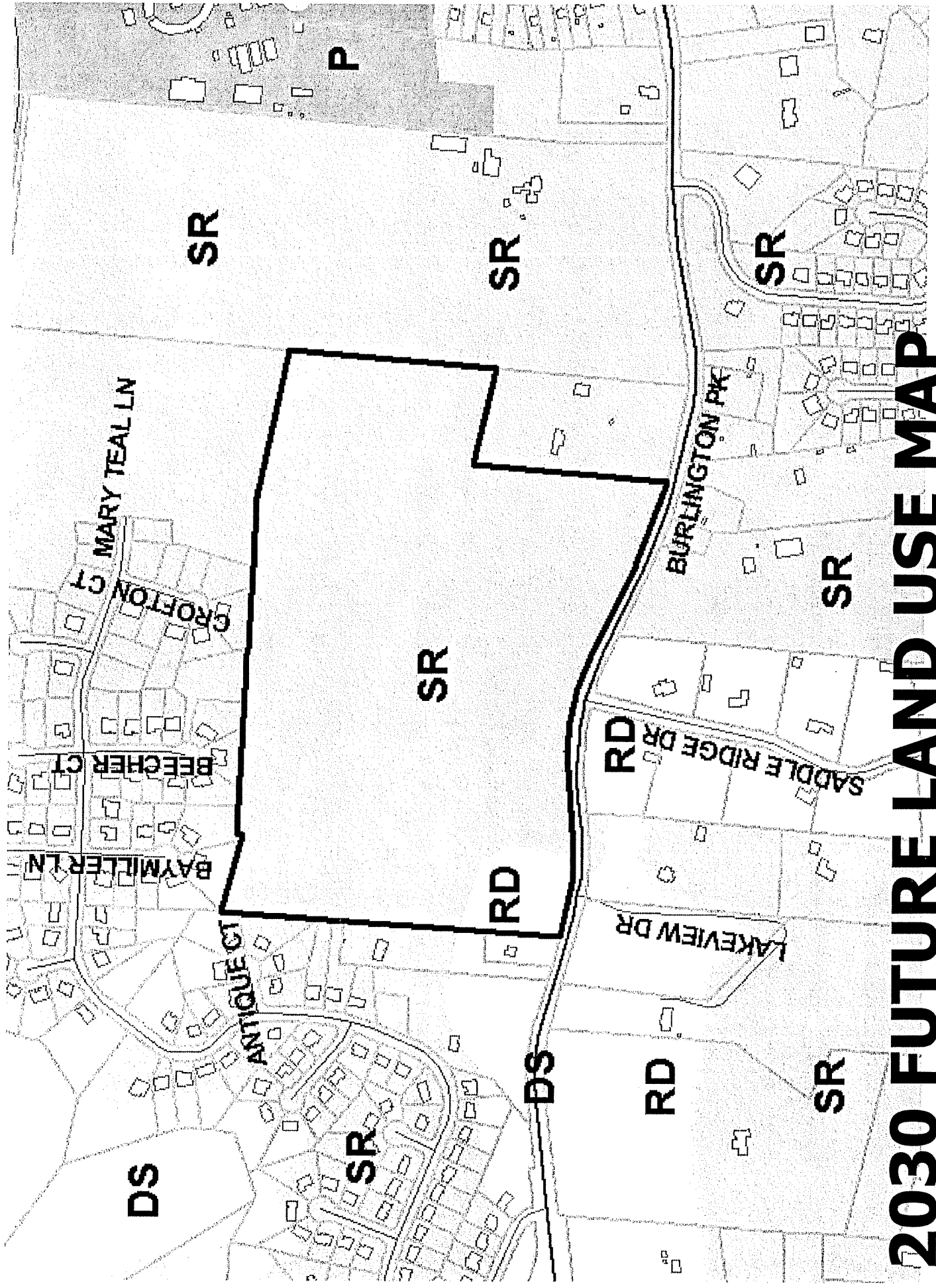
- Vicinity Map
- Zoning Map
- 2030 Future Land Use Map
- Existing Topography
- 2004 Aerial Photography
- 2005 Concept Development Plan
- 2006 Concept Development Plan
- Letter from Boone County Schools
- Letter from Burlington Fire Protection District
- E-mail from Boone County Sheriff's Office
- Letter from KY Transportation Cabinet
- Letter from Gretchen Bartley, KY Division of Water
- Section 251 "Application and Standards for Variances" of Boone County Zoning Regulations
- Application



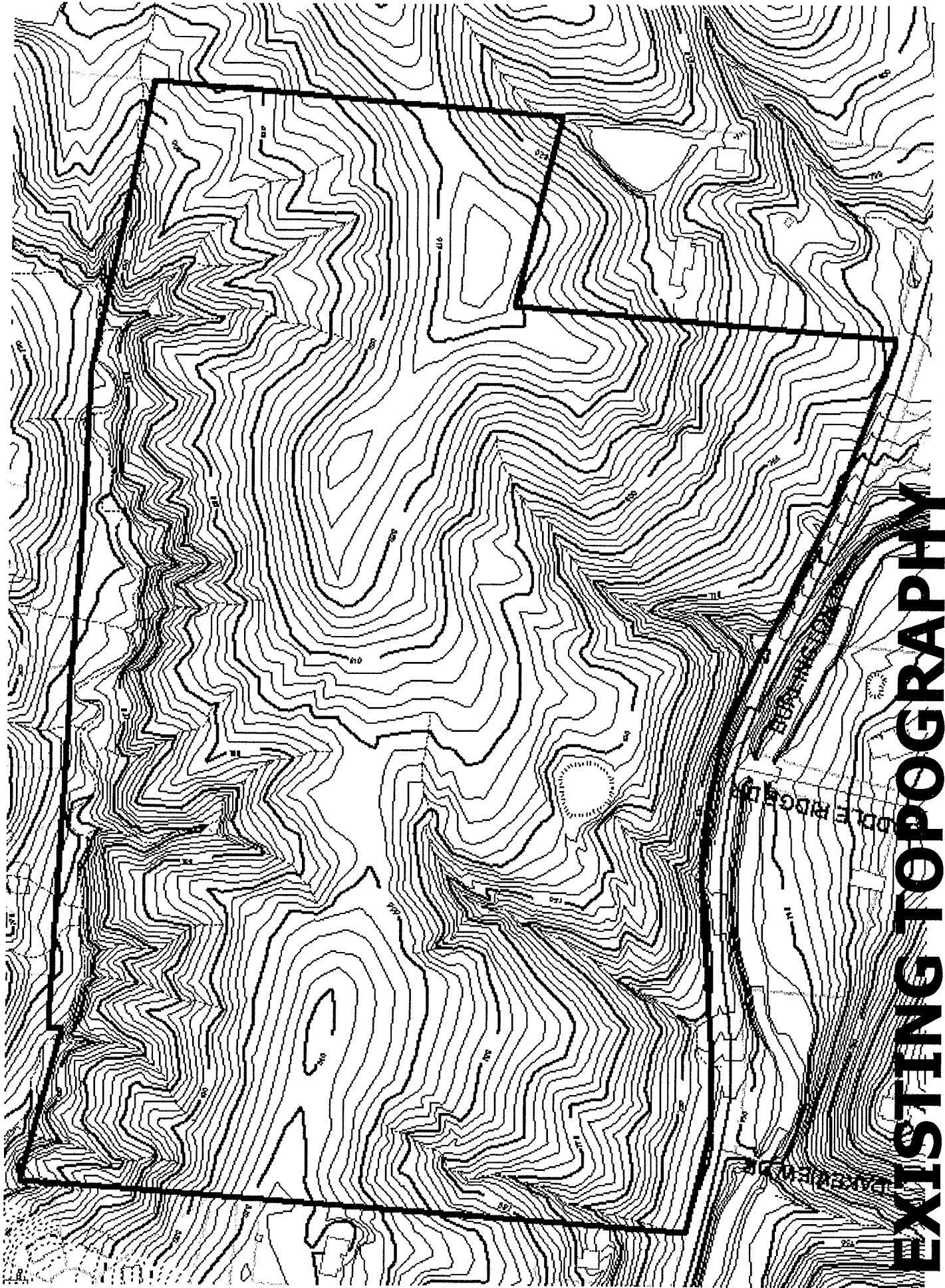
VICINITY MAP



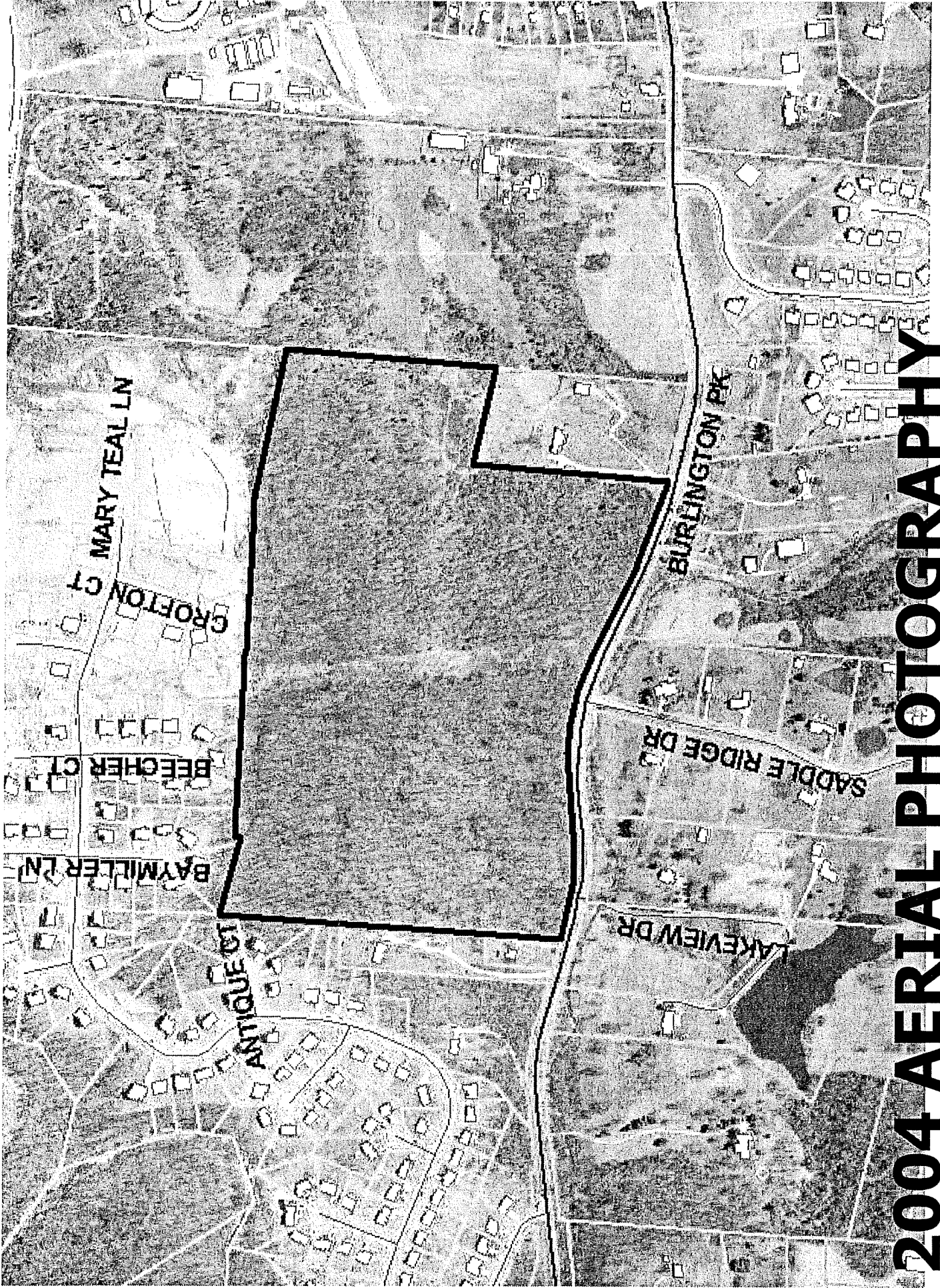
ZONING MAP



2030 FUTURE LAND USE MAP



EXISTING TOPOGRAPHY

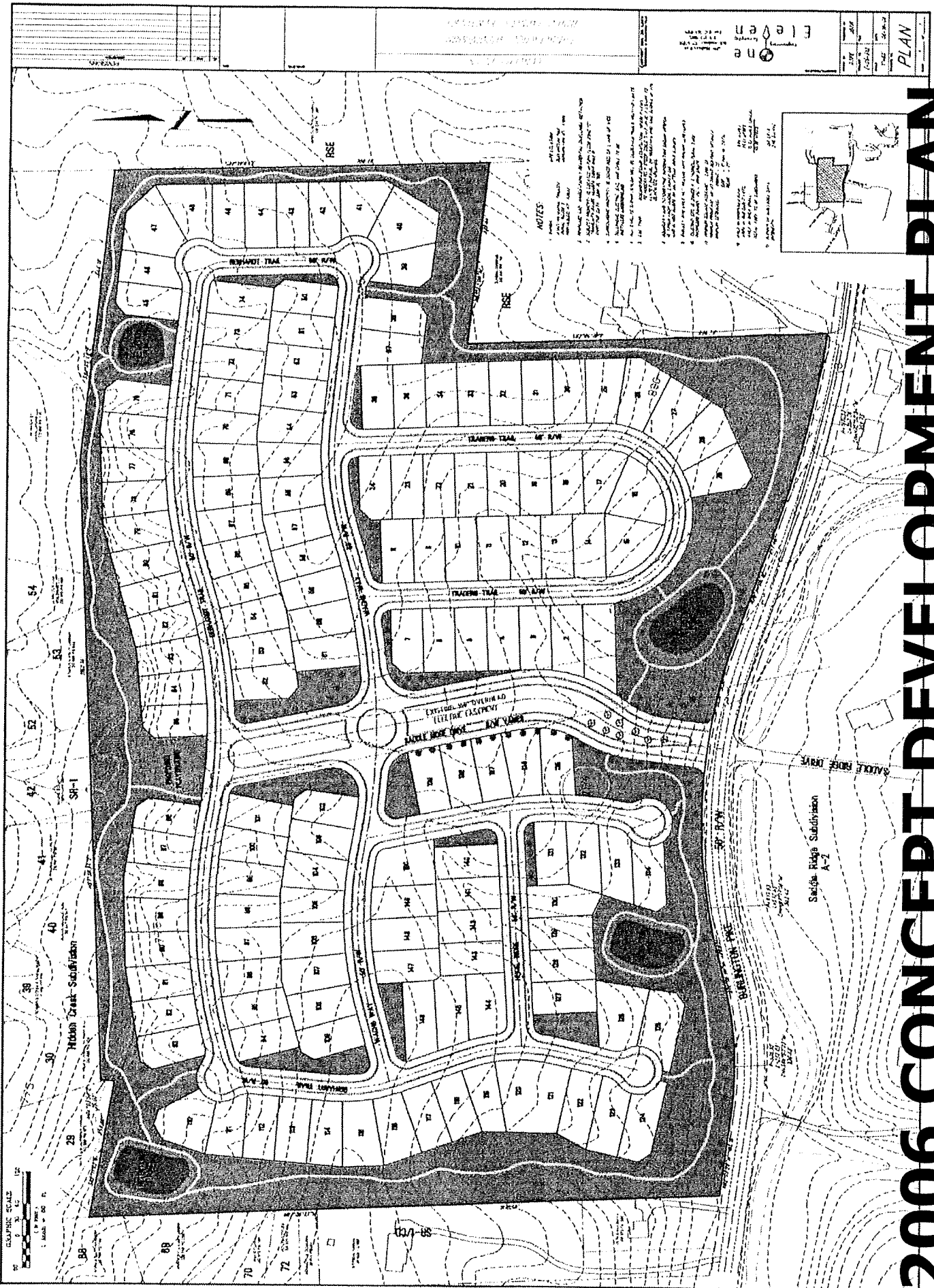


2004 AERIAL PHOTOGRAPHY



A-2

Saddle Ridge Subdivision
2005 CONCEPT DEVELOPMENT PLAN



2006 CONCEPT DEVELOPMENT PLAN

BRYAN A. BLAVATT
Superintendent of Schools

8330 U.S. 42
Florence, KY 41042
Phone: (859) 283-1003
Fax: (859) 282-2376

BOONE COUNTY SCHOOLS

www.boone.k12.ky.us

September 15, 2006

Mr. Kevin Costello, Executive Director
Boone County Planning Commission
2995 Washington Street
Burlington, KY 41005

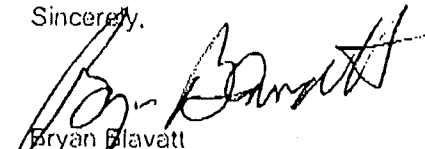
Dear Mr. Costello:

I would like to express my sincere appreciation to your office and the Planning Commission staff for all of the assistance that you have provided to Boone County Schools. We are extremely proud of the high level of collaboration that has exists between your office and the school district, and we look forward to the continuance of this relationship for many years.

As you are aware, Boone County Schools recognizes and supports continued growth across Boone County, and while I do not believe that the school district needs to communicate with the Planning Commission on every housing or zoning plan that is proposed, there are some concerns related to the development of large housing/community projects that obviate comment and could be addressed in the Comprehensive Plan. First, the development of large subdivisions places an increased strain on the infrastructure of the school district. We believe that the Planning Commission needs to communicate to developers the necessity to phase development resulting in the slow build out of projects. This delineation from immediate massive development would allow the school district to phase in increased costs incurred from the development of large subdivisions. Also, this would allow for a more natural growth pattern across the county. We recommend that the Planning Commission incorporate into conditions relative to zoning change that developers provide land for use by Boone County Schools. This would provide for the necessary infrastructure to accommodate the immanent student growth resulting from subdivision development. Second, the approval of individual development that begins as small tracts but later aggregated into larger development leaves the school district uninformed and ill prepared to take necessary action in regards to growth. We are recommending that the Planning Commission apply the same criteria for these plans as we have recommended for larger developmental projects.

Again, let me thank you and the Planning Commission for the support that you provide to Boone County Schools. With your help, new multi-tract zone changes will be structured so that the school district can respond proactively. If you have any questions, please feel free to contact me.

Sincerely,



Bryan Blavatt
Superintendent of Schools

Cc: Kevin Wall, Director of Zoning Services
Dave Geohegan, Director of Planning Services



Burlington Fire Protection District

6050 Firehouse Drive

P.O. Box 479

Burlington, Kentucky 41005-0479

Phone: (859) 586-6161

Fax: (859) 586-6178

David E. Biddle, Fire Chief

Website: www.burlingtonkyfire.org

TO: Mitchell A. Light
Assistant Zoning Administrator/Enforcement Officer

FROM: Shaun D. Klaserner
Assistant Chief

DATE: Tuesday, August 22, 2006

RE: Requested Zone Change for "Tanglewood Subdivision" between 3300 and 3446 Burlington Pike, Boone County, Kentucky

After a careful review of the above referenced project I have just a few comments. I do not see this project affecting the service delivery of the District in any way. Based on information provided from national standards organizations the District can expect for every 15 houses built, approximately 1 call for service per year is generated. This subdivision is proposed at 150 lots, so that means the District can expect an additional 10 calls per year. The District responded to 2,114 incidents in 2005, 10 additional calls will not adversely affect us.

With the proposed plan being an open space style subdivision and the requested variance to allow the side yard setbacks to be reduced to 5 feet minimum and 10 feet minimum total for both side yards combined we are requesting that as a part of the zone change the fire hydrant spacing be reduced from one (1) hydrant every 500 feet to one (1) hydrant every 350 feet. Fires in cluster subdivisions have become a national problem. Because most cluster development homes have vinyl siding on them, which accelerates the spread of fire from one dwelling to another. We feel that by spacing the hydrants every 350 feet this will help us combat this problem. This request is nothing new for the District; we asked for this with the Bradford Trace subdivision and received the requested spacing.

Thank you in advance and if you should have any further questions, please feel free to give me call.

Yours in Service

Shaun D. Klaserner
Assistant Chief

Mitch Light

From: Rob Reuthe
Sent: Monday, August 28, 2006 8:39 AM
To: Mitch Light
Subject: Tanglewood Subdivision

Mr. Light,

I do notice one issue that stands out to me. Other than the entrance to the subdivision, there is little or no "street calming" in place. I foresee speeding issues in this subdivision due to the fact that the street appears to be fairly straight. This will be a problem for us in the future. Other than that issue and the additional calls for service I see nothing that would affect the service provided by the Sheriff's Office.

Robert E. Reuthe

Lt. Colonel, Field Operations
Sheriff's Office, Boone County Kentucky
Office: 859-334-2171
Mobile: 859-393-9860
Fax: 859-334-2234

Mitch Light

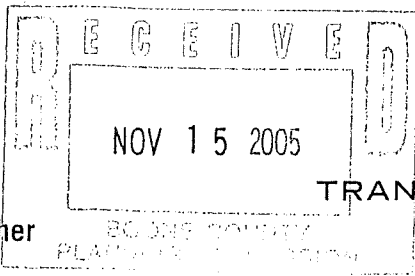
From: Thompson, Ed (KYTC-D06) [Ed.Thompson@ky.gov]
Sent: Friday, September 08, 2006 8:43 AM
To: Mitch Light
Cc: Hans, Robert (KYTC-D06)
Subject: Tanglewood Sub. KY 18 - Boone Co.

Mitchell:

We received a review request dated Aug 21, 2006 regarding the "Requested Zone Change for Tanglewood Subdivision" on KY 18 in Boone Co.

I wrote letter regarding this similar review of same site that was sent on November 14, 2005. There seems to be no change from that similar plan, so our response will be the same.

Edmond Thompson
Dist. 6 - Permit Supervisor
859-341-2700



TRANSPORTATION CABINET

Ernie Fletcher
Governor

Frankfort, Kentucky 40622
www.kentucky.gov

Bill Nighbert
Acting Secretary

Jim Adams
Deputy Secretary

Marc Williams
Commissioner of Highways

[Redacted]
Commissioner of
Administrative Services

Paul Steely
Commissioner of Aviation

Roy Mundy
Commissioner of
Vehicle Regulation

Mr. Mitchell Light
Assistant Zoning Administrator
Boone County Planning Commission
2995 Washington Street
Burlington, KY 41005

Subject: Zone Change – Tanglewood Subdivision
KY 18 – Burlington Pike
Boone County

November 14, 2005

Dear Mr. Light:

This letter is in response to your letter dated November 8, 2005, regarding a proposed subdivision located on KY 18 in Burlington, Kentucky.

The Department has reviewed the proposed development plans for this site. The plan would meet our standards and specifications for an entrance within a 35 MPH speed zone on KY 18 at the location indicated. The Department will require a right turn lane to accommodate movements into the site.

This is subject to the formal encroachment permitting application that is required to be forwarded to the Department for final review.

This office would like to thank you for this opportunity to comment on these proposed developments in Boone County. If any additional information is desired, or if you have any questions, please feel free to contact me at (859) 341-2700, Ext. 307.

Sincerely,

Edmond C. Thompson
Permit Supervisor

ECT/csm

Cc: Thomas J. Schomaker, CDE

To: Mitchell Light
Assistance Zoning Administrator/Enforcement Officer
Boone Co. Planning and Zoning

From: Gretchen M. Bartley
Environmental Inspector III
Kentucky Division of Water
Florence Regional Office

Date: December 13, 2005

Subject: Requested Comments for "Tanglewood Subdivision" at 3400 Burlington
Pike, Boone Co., Kentucky

In response to our phone conversation of this morning, I have looked over the map that roughly outlines the concept plan submitted by the Tanglewood Subdivision facility from the standpoint of Division of Water regulations that will apply to the specific location.

Review of the "Concept Plan Map" and comparison of that map with the USGS topographic and Geologic Maps, as well as the site plan map for the adjacent Hidden Creek Subdivision has concluded that there are several issues that the facility will need to address with Kentucky Division of Water as well as US Army Corps of Engineers. These items must be addressed, and the appropriate permits/certifications must be issued before any type of construction activities can begin on that tract of property.

First of all, the development will involve a surface disturbance of more than one acre(s), and will therefore be required to apply for a KPDES General Stormwater Permit for Construction Activities through Kentucky Division of Water's KPDES Branch. The Notice of Intent that serves as the permit application must be submitted to the Kentucky Division of Water's KPDES Branch at least 48 hours prior to commencement of construction activities. Additionally, the facility is required to have developed a Best Management Practice Plan for Erosion and Sediment Control prior to filing the Notice of Intent Form.

Secondly, although the base map used for the "Concept Plan" on which the streets, and lot lines have been superimposed, is a shaded so that the contour lines and topography is a bit difficult to read, however comparison of the overall tract of land to the site plan map for the adjacent Hidden Creek Subdivision, and the USGS Topographic Map combined with some field knowledge of the area, strongly indicates that the northern portion of the subdivision in question will involve impact to an intermittent blue-line stream. Although the "Concept Plan" appears to locate the two east - west trending streets parallel to the stream and on the edges of a ridgetop, the location and density of the lots, and location of the northernmost street appear to be such that installation of drainage for the lots and street may require some in-stream work or possible stream alteration.

State and federal water quality regulations require that the appropriate permits/certifications must be issued for any work involving more than 200 linear feet of in-stream work. Any stream with a well defined bed and bank qualifies as a stream for which the permit/certification must be obtained, and the 200 foot requirement is cumulative for all in-stream work located within the same development. Given the dissected topography of the site, and the number of headwater streams indicated by the topographic map, it would therefore be strongly advised that the developer or their agent contact both the US Army Corps of Engineers as well as Kentucky Division of Water's Water Quality Section before going any further in their construction plans.

In addition to being possibly being required to obtain the Permit/Certification required by Sections 401 and 404 of the Clean Water Act, it is also likely that the facility will be required to perform some type of mitigation to off-set any impact and alterations to the unnamed tributary to Allen Fork of Woolper Creek. This mitigation, when required, is part of the permit condition of the US Army Corps of Engineers Permit and the DOW Water Quality Certification, and would be addressed specific to the plans submitted by the Tanglewood facility to USACOE and KyDOW. The design work and approval process can take a considerable amount of time and expenditure. It is advisable that this be done in the planning phase, because commencement of in-stream construction activities prior to obtaining the required permit from the Corps of Engineers usually results in the issuance of a stop work order that is not lifted until the permit and associated mitigation work has been completed.

The "Concept Plan" Map does not appear to involve any actual stream crossing, although there are several headward drainage features that appear to be planned for filling in order to construct the roadways. Generally, it is advisable for the developer to submit a letter along with a general layout of the stream crossing(s) to Division of Water's Water Resources Branch for any stream crossings that may be planned for the site. That branch of the Agency can further instruct the facility as to whether they need an actual permit for a stream crossing, or if the type of activity proposed is covered under an exemption. It is almost certain that a Stream Construction Permit will be required should the development need to install a stream crossing over the blueline stream (the unnamed tributary of Allen Fork of Woolper Creek) that flows near the northern border of the property.

At the very least the facility will be required to obtain a KPDES Stormwater Permit for Construction Activities. The associated Best Management Practice Plan (BMP) will need to specifically address pollution prevention and protection of the adjacent streams from sediment generated by erosion of soil from the construction site. The slope of the land and high density of the lots proposed for building are a concern: These conditions will make the implementation and maintenance of the erosion/sediment control more challenging.

While the site suitability as related to the topography, geology and soils does not come directly under the regulatory prevue of Division of Water' Stormwater Regulations. Site selection (including site suitability) and planning are the two most important tools in developing the Best Management Practice Plan. The "Concept Plan" indicates high density housing situated on a steep slope area where glacial drift lays unconformably on top of bedrock of the Fairmont Formation. This bedrock unit consists of thinly bedded limestone bedrock interbedded with fissile shales. There are several roadways thatwill be constructed as part of the development, and they appear to be partially excavated into the hillsides and will be connected to each other and Route 18 by a primary access road that will be constructed into a very steep hillside. Given the geology and topography of the area it would seem strongly advisable for the developers to have thoroughly researched the geotechnology of the site and reflect that information, including the potential problems into the design work for the site.

As with all construction sites, our office is willing to meet with the developers to discuss more site specific requirements so as to assist them in achieving and maintaining compliance with DOW Regulations.

Should you have any questions about this comment or need further clarification, please feel free to contact our office at (859) 525-4923.

SECTION 250

Dimensional Variance

The Board of Adjustment and Zoning Appeals shall have the power to hear and decide on applications for variances. Variance is defined as a departure from dimensional terms of the zoning regulation pertaining to the height, width, or location of structures, and the size of yards and open spaces where such departure meets the requirements of K.R.S. 100.241 to 100.247.

Variances are appropriate by reason of exceptional narrowness, shallowness or unusual shape of a site on the effective date of these regulations or amendment thereof or by reason of exceptional topographic conditions, or some other extraordinary situation or condition of that site, the literal enforcement of the above dimensional terms of the zoning regulations would deprive the applicant of reasonable capacity to make use of the land in a manner equivalent to the use permitted other landowners in the same zone. The dimensional terms pertaining to height, width and location involve such items as structures, parking space stalls, driveway aisles, and landscaped buffers and signs (excepting the number of signs). Lot frontages, the size of yards and open spaces refer to minimum yard dimensions such as building setbacks. The Board shall not possess the power to grant a variance to permit a use of land, building or structure, which is not permitted by the zoning regulation in the zone in question, or to alter the density requirements in the zone in question. Density is defined as the number of units or square footage of a building per net acre of land developer. A variance runs with the land and is transferable to any future owner of the land, but it cannot be transferred by the applicant to a different site.

All adjoining property owners shall be notified of the public hearing at least two weeks in advance. The applicant shall be responsible for supplying the names and addresses of all adjoining property owners and shall pay costs of notification. Records maintained by the property valuation administrator may be relied upon conclusively to determine the identity and address of property owners. A sign, that announces the fact that a Board of Adjustment and Zoning Appeals hearing has been scheduled, shall be posted on the subject property at least 7 days prior to the public hearing.

SECTION 251

Application and Standards for Variances

A variance from the terms of this order shall not be granted by the Board of Adjustment and Zoning Appeals unless and until a written and signed application for a Variance is submitted to the Zoning Administrator and the Board of Adjustment and Zoning Appeals, along with any additional information the Board may find appropriate.

1. Before any variance is granted, the Board must find that the granting of the variance will not adversely affect the public health, safety or welfare, will not alter the essential character of the general vicinity, will not cause a hazard or a nuisance to the public, and will not allow an unreasonable circumvention of the requirements of the zoning regulations. In making these findings, the board shall consider whether:
 - a. The requested variance arises from special circumstances which do not generally apply to land in the general vicinity, or in the same zone;
 - b. The strict application of the provisions of the regulations would deprive the applicant of the reasonable use of the land or would create an unnecessary hardship on the applicant;
 - c. The circumstances are the result of actions of the applicant taken subsequent to the adoption of the zoning regulations from which relief is sought.

2. The Board shall deny any request for a variance arising from circumstances that are the result of willful violations of the zoning regulation by the applicant subsequent to the adoption of the zoning regulation from which relief is sought.

SECTION 252

Supplementary Conditions and Safeguards

In granting any appeal or variance, the Board of Adjustment and Zoning Appeals may prescribe appropriate conditions and safeguards in conformity with this order. Violation of such conditions and safeguards, when made a part of the terms under which the appeal or variance is granted, shall be deemed a violation of this order and punishable under Section 430 of this ordinance.

SECTION 253

Notice of Hearing

Notice of the time, place and purpose of a hearing of a notice of appeal or application for variance shall be published in a newspaper of general circulation at least seven (7) days, but not more than twenty-one (21) days before the date of the hearing.

Also, all adjoining property owners involved in an appeal and a variance request shall be notified in writing of the public hearing at least two weeks in advance. The applicant shall be responsible for supplying the names and addresses of all adjoining property owners and shall pay costs of notification. Records maintained by the property valuation administrator may be relied upon conclusively to determine the identity and address of property owners. In addition, a written notice of the appeal shall be made to the applicant or appellant and the Zoning Administrator and a sign, that announces the fact that a Board of Adjustment and Zoning Appeals hearing has been scheduled, shall be posted on the subject property at least 7 days prior to the public hearing if a specific site is being reviewed and subject to an appeal.

SECTION 254

Action by Board of Adjustment and Zoning Appeals

The Board of Adjustment and Zoning Appeals shall hear and decide upon the notice of appeal or application for variance within sixty (60) days of filing. The Board of Adjustment and Zoning Appeals shall either approve, approve with supplementary conditions as specified in Section 245, or disapprove the request for appeal or variance. The Board shall further make a finding that the reasons set forth in an application justify the granting of the variance that will make possible a reasonable use of the land, building, or structure. If the request is disapproved, the board shall state the reasons for disapproval in writing. Appeals from Board decisions shall be to the appropriate court of jurisdiction as provided by law.

SECTION 260

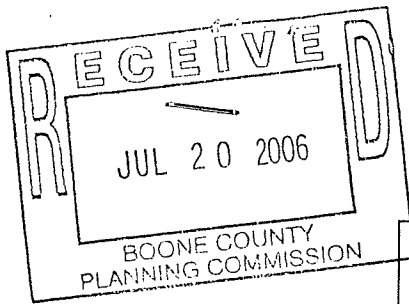
Conditional Use Permits

Conditional uses shall conform to the procedures and requirements of Sections 261-267, inclusive of this order and the requirements of K.R.S. 100.237.

SECTION 261

Contents of Application for Conditional Use Permit

An Application for Conditional Use Permit along with whatever additional information the Board may find appropriate, shall be filed with the chairperson of the Board of Adjustment and Zoning



APPLICATION FORM

ZONING MAP AMENDMENT
BOONE COUNTY PLANNING COMMISSION

(See Boone County
Zoning Regulations)

SECTION A (To be completed by applicant)

1. Name of Project TANGLEWOOD SUBDIVISION
2. Location of Project 3400 BURLINGTON PIKE
3. Total Acreage of Site 50.78 AC
4. Current Zoning of Site A-2
5. Proposed Zoning (Classification being requested) RS OPEN SPACE
6. Proposed Uses (please specify each use) SINGLE-FAMILY DETACHED RESIDENCES

7. Names of Applicant(s) ONE ELEVEN ENG. & SUR. PLLC
Phone Number 859 363-9025 Fax No. 859 363-9125
8. Address of Applicant(s) 5294 MADISON PIKE
INDEPENDENCE KY 41051
City State Zip
9. Name of Property Owner(s) ROSLYN WACHS TRUSTEE
Phone Number _____ Fax No. _____
10. Address of Property Owner(s) RR 3 128~~th~~ 116
MONTICELLO KY 42633
City State Zip
11. Proposed Building Intensities (please specify) SINGLE-FAMILY
DETACHED @ 2.95 UNITS PER ACRE
12. Are there any existing buildings on the site? NO
How many? _____
13. Deed Book 830 Page No. 230 Group No. _____
14. Are you also applying for:
_____ Conditional Use Permit
YES Dimensional Variance
15. Have you submitted a Concept Development Plan? YES
16. Have you had a pre-application meeting with BCPC Staff? YES
17. Please check the following organizations/agencies which you have discussed the proposed development within the last several months:

- _____ Boone County Water District
- _____ Florence Public Services Dept.
- _____ Duke Energy
- Sanitation District #1
- _____ Cincinnati Bell
- _____ Owen Electric Cooperative, Inc.
- Boone County Public Works Department
- Kentucky Transportation Cabinet
- _____ Cincinnati/N. KY International Airport (KY Airport Zoning Commission for height restrictions near the airport)

**ZONING MAP AMENDMENT
APPLICATION
PAGE 2**

- _____ Boone County Building Department
- _____ Northern Kentucky Health District
- _____ USDA NRCS/Boone County Conservation District
- _____ KY Division of Water
- _____ Local School District
- _____ Local Fire District
- _____ Other: _____

18. Project Jurisdiction/Location
- Unincorporated Boone County _____ Walton
 Florence _____ Union

19. Applicant's Signature Dan T. Egan

Property Owner's Signature Pauline Welch

SECTION B (To be completed by BCPC Staff)

1. Date Received 7-20-06
2. Review Fee \$2030.36 R# 50815 ~~\$350.00 R# 50826~~
3. Check what has been submitted:
 - Application
 - Fee
 - _____ Legal Description
 - Concept Development Plan
 - Address of Adjoining Property Owners
 - 5 Number of copies of plan received**
4. Is application complete? _____ Yes _____ No
5. Staff Reviewer MITCH LIGHT
6. Committee Chairman _____
7. Scheduled Public Hearing Date _____
8. Boone County Planning Commission Action:
 - _____ Approval
 - _____ Approval with Conditions
 - _____ Denial
9. Other: _____

**** Five (5) Copies Are Required**

Boone County Planning Commission
Boone County Administration Building
2950 Washington Street, Room 317
P.O. Box 958
Burlington, Kentucky 41005
(859) 334-2196 - Phone
(859) 334-2264 - Fax
plancom@boonecountky.org - E-mail
www.boonecountky.org - Web Page

NOTE: An application consists of all fees paid in full, submitted drawings and a completed application form.

**BOONE COUNTY PLANNING COMMISSION
BOONE COUNTY ADMINISTRATION BUILDING
FIRST FLOOR FISCAL COURTROOM**

September 20, 2006
7:30 P.M.

PUBLIC HEARINGS

Commission Members Present: Mrs. Arnett, Mr. Breetz, Mr. Bungler, Mr. Caddell – Chairman, Mr. Carmichael, Mrs. Kegley, Mr. McMillian, Mr. Poe, Mr. Reynolds, Mr. Rolfsen, and Mrs. Wilson – Secretary/Treasurer.

Staff Members Present: Mr. Kevin Costello, AICP, Executive Director; Ms. Jan Hancock, Secretary; Mr. Mitch Light, Assistant Zoning Administrator/ZEO; and Mr. Todd Morgan, AICP, Senior Planner.

Legal Counsel Present: Mr. Dale Wilson

Mr. Arnold Caddell, Chairman, called the meeting to order at 7:32 PM and introduced the first item on the Agenda:

Applicant: One Eleven Engineering & Surveying, PLLC for Roslyn Wachs, Trustee (owner)

Request: Zoning Map Amendment

The request of One Eleven Engineering & Surveying, PLLC (applicant) for Roslyn Wachs, Trustee (owner) for a Zoning Map Amendment from Agricultural Estate (A-2) to Rural Suburban (RS), and a Variance for side yard setbacks, for a 50.78 acre tract located on the north side of Burlington Pike, between the properties at 3300 and 3446 Burlington Pike and across from the Burlington Pike/Saddle Ridge Drive intersection, Boone County, Kentucky. The request is for a zone change to allow an open space style subdivision for single-family residences, and a Variance to allow the side yard setbacks to be reduced to 5 feet minimum and 10 feet minimum total for both side yards combined.

Staff Member Mitch Light presented the Staff Report which included a Power Point presentation (see Staff Report). He noted two corrections to Page 1 of the Staff Report. In paragraph 2, the proposed density of the subdivision is 2.95

dwelling units per acre (not 3.3) and in Paragraph 4 the cul-de-sac (Hammer Court) has NOT been developed.

Following an explanation of the Public Hearing process, the Chairman asked for the applicant's presentation.

Mr. David Wallace, attorney for the applicant, introduced Mr. Darren Eyre and Mr. Jim Bertram with One Eleven Engineering. He submitted the Traffic Study done in December 2005 (see Exhibit 1). They believe the traffic information is the same today. The Traffic Study is based on more lots in the subdivision than are proposed at this time. The proposed project is 50.78 acres and a total of 150 lots, which is a density of 2.95 acres. There is open space around the edge of the property and within the property that is approximately 15.03 acres, or 29.6% of the total project. There is a potential playground area in the open space. There are walking trails throughout the open space. He noted the main boulevard coming into the project. He indicated the three lots that could potentially have houses with their backs to KY 18 and stated that because of the topography, they do not believe the houses would be visible from KY 18. He stated that the open space will be owned and controlled by the Homeowners' Association and there will be assessments to take care of it. He reviewed the requirements of KRS 100 to approve a map amendment. He stated that it is clear that the proposal is in accord with the Comprehensive Plan. The Future Land Use Map designates this area as Suburban Residential, which is up to four units per acre and this proposal is for 2.95 units per acre. He stated that to the north and west of the site are approved subdivisions and, closer to Burlington, Morgan's Crossing and Noll Creek Subdivision have been approved. The proposed open space design will help to maintain the rural character of the property and the area. He stated that there is only one entrance into the subdivision. There will not be an elaborate entrance sign, in conformance with the Future Land Use Development Guidelines. They will make every attempt to maintain the existing vegetation and trees within the open space areas, which are located throughout the subdivision. In accordance with the Comprehensive Plan, they will maintain as much of the natural trees and vegetation in the highly visible spaces on KY 18 as possible. The plan has adequate buffering along the adjoining property boundaries. He indicated the detention pond. He stated that the Staff Report references the Comprehensive Plan providing a 25-year outlook for land use and that the infrastructure needs to be developed before any development can happen. He stated that zoning map is a five-year outlook. He indicated the adjacent properties zoned SR-1 and areas zoned SR-1 areas closer to Burlington. He stated that the proposed zoning is in more accordance with the current zoning map. He stated that, considering the Future Land Use Map and the current zoning map, which includes properties that adjoin to the north and to the south, and other developments further to the west (Hunter's Ridge), it is apparent that along KY the Planning Commission and Fiscal Court have recognized that there is adequate infrastructure for this type of development. He stated that the Comprehensive Plan speaks to staging and the stepping down of densities in the area west of

Burlington, which is what is happening. He stated that densities should be higher closer to Burlington and step down going west. He noted that Morgan's Crossing is at a density of 2.8, the next subdivision is at 2.9, then Hidden Creek and then further out to lower densities. He stated that the provisions of the Comprehensive Plan in the Staff Report apply more towards areas further west of Burlington where the roads are worse and there are Developmentally Sensitive areas. He stated that their plan has taken into account that the Transportation Plan, which is a 12-year plan, anticipates the widening of KY 18. They left enough room in the open space area to accommodate the proposed expansion of KY 18. The Transportation Plan indicates KY 18 to be a four- or five-lane road. They have taken into consideration that the majority of the road would be on this side of KY 18. If the expansion happens, the road could be straightened and more of the road would then be on the side close to Saddle Ridge, and the creek may be relocated.

Mr. Wallace responded to the Staff Concerns. **Staff Concern 1** He stated that the developers have no problem with making connections to the adjacent properties. No connection was shown on the Concept Development Plan to the Archambault property because the Archambaults are strongly opposed to it. The developer has no problem with the connection into Hidden Creek but, when it was approved by Fiscal Court, no connection was required and it will have to be negotiated before it can happen. He stated that they have no problem with the connection to the adjacent property. **Staff Concern 3** They intend to preserve as many trees and natural vegetation, which is part of the open space plan and one of the benefits of this type of development. **Staff Concern 4** He stated that if there is an issue with the retention ponds, if they can be moved or some of them eliminated and still provide adequate detention for the property, they can address that. **Staff Concern 6** He stated that moving the fire hydrants to every 350 feet is not a problem. **Staff Concern 7** He stated that it is the intention of the applicant to limit the number of approved zoning permits to thirty per year for a minimum of five years and, depending on the market, possibly longer. **Staff Concern 8** The right-turn lane is not shown on the plan, but they agree with it, their Traffic Study recommends it, and they have no problem putting the turn lane in. **Staff Concern 9** He stated that they intend to have stop signs throughout the subdivision and a roundabout in the center that will slow down the traffic somewhat. He stated that he has addressed **Staff Concerns 10 and 11**. He and the developers are available to answer any questions. This concluded the applicant's presentation.

The Chairman asked if there was anyone else present who wished to speak in favor of the request. There being no response, he asked if there was anyone present who wished to speak in opposition.

Mr. Charles Bray, 3300 Burlington Pike (just east of the proposed development), stated that he was amazed to be here again after going through this in March. That request was denied due to the density and lack of infrastructure and now, instead of SR-1, they are trying to change to RS. He stated that nothing has

changed from the facts of the denial in March. The infrastructure is not in place. The road improvements and schools are not appropriated. He stated that they have added some green space, shrunk the houses and put them on top of each other. They have only reduced the development by three houses from 153 to 150. He hopes the Commissioners will review the minutes from the previous meeting and from Fiscal Court. He stated that in 25 years, or maybe ten years, the Comprehensive Plan may support this development, but it does not now. In regard to the surrounding densities, he stated that he has a little over five acres and the people across the street have two-, four- or five-acre lots. He would not be happy with a development at the proposed density.

Mr. Bruce Belknapp, who lives across the street on the corner of Saddle Ridge and KY 18, stated that there are deer, fox, turkey, woodland creatures and wildlife. He did not hear a proposal about what they would do with those creatures. He questioned how they would straighten out the blue line stream. Where they would put it? Through his bedroom? He stated that there have been no comments about the rain and runoff. A lot of water comes through Allen's Fork Creek. There is a lot of water runoff and the water crests just over the Saddle Ridge bridge if it is not maintained properly. There are torrential rapids when there is a lot of rain. He stated that there should be an EPA report that shows that the wildlife will have a place to go. He would like the environment looked at extremely hard.

Ms. Heather Martz, 4050 Shady Hollow Lane, stated that she spoke to Matt Arlinghaus, the engineer for KY 18, and he said that no one has called him and no one has petitioned the state in regard to how this development will affect the road and what changes can be made. She stated that driving through there at certain times of the day is not only frustrating, it is a safety issue. There is one way in and one way out and there will be 1,500 more cars coming through there everyday. She has seen the correspondence that there would be thirteen acres in Hunter's Ridge for the new school, but she was just told by Dave Geohegan that Arlinghaus has decided that he does not want to allocated thirteen acres on that property and wants to put the school on the Hogan property on five acres, which is not enough for a school. She questioned who has control over where the school will be located. There needs to be more concrete information before anything else is approved.

Chairman Caddell stated that the Planning Commission has on file an e-mail from Ed Thompson, District 6 Permit Supervisor, in regard to the Tanglewood Subdivision. He quoted that "We received a request dated August 21 regarding the requested Zone Change for Tanglewood Subdivision on KY 18 in Boone County. I wrote a letter regarding a similar review of the same site that was sent on November 14, 2005 and there seems to be no change from the similar plan, so our response would be the same". The letter is available to the public at the Planning Commission office.

Ms. Carol Woods stated that her concerns are in regard to the retention ponds and green areas. She stated that a pond has to go down into a cavity in the ground, or there has to be a wall. She heard that there is a minimum height of twenty feet for the dams. She stated that taking all that space to make a hole in the ground, the green area will be defunct. She does not know that she would like a concrete wall aesthetically. She does not see a change in the conditions that prompted the Planning Commission and Fiscal Court to recommend the previous denial. Ms. Woods read and submitted her additional comments (see Exhibit 2).

Mr. Costello explained that the terms "green space" and "open space" are often used interchangeably. Open space is defined in the Zoning Code as a land area designated for recreation, resource protection and buffering. Open space is not defined as existing or future road rights-of-way, streets, driveways, parking areas, or buildings.

Mr. Chuck Reed, 6261 Saddle Ridge, stated that they were here in December 2005 to discuss the proposed zone change for the same property and that request was denied for many reasons. He stated that there still have been no improvements at the intersection of KY 18 and East Bend Road. Development west of Burlington has progressed and the area has become even more dangerous than it was last year. Traffic has increased and will continue to increase as more units that are already approved are completed. He stated that the Planning Commission's and Fiscal Court's recommendation stated that "no new development in this area should occur until that intersection is approved". He stated that during that zone change request, there were concerns with the egress to and from Saddle Ridge Drive. He stated that the speed limit is posted at 35 MPH, but it is seldom adhered to and people cannot exit Saddle Ridge Drive and gain enough speed going up the hill to be safe. He sees many close calls each week. They practically have to dive into their street and drive like the Indianapolis 500 to get out of their street during the day. He stated that 12 school children on their street ride the school bus. The bus cannot achieve 35 MPH going up the hill or for a quarter of a mile from Saddle Ridge Drive. His children ride the bus and he fears for their lives everyday when they leave Saddle Ridge Drive. They have seen many accidents occur there. He stated that KY 338/KY 18 have not been improved and are not funded. KY 18 west of Burlington is not improved or funded as recommended in the Comprehensive Plan. He stated that the Traffic Study done by the applicant in 2005 was flawed. One of the sensors failed for 24 hours of its 48-hour period. He stated that the Traffic Study should be done for a seven-day period. He questioned how there could be an accurate reading on Tuesday for what will happen on Saturday. He stated that all of the properties the applicant compared this development to are less dense and were approved prior to the 2005 Comprehensive Plan. He stated that the original proposal was for 153 houses, and they have reduced that by a total of three houses. He stated that we should adhere to the 2005 Comprehensive Plan. He asked that the request be denied until proper improvements are in place.

Mr. Mike Cassedy, 5769 Vice Lane, stated that in Ed Thompson's letter to Mitch Light, Mr. Thompson is not addressing the problems on KY 18, he is just stating that they acknowledge that an entrance can be put in a 35 MPH zoned area. He is not saying that KY 18 is appropriate in its present condition for this development. Mr. Cassedy stated that what is being presented now is basically the same except that there is only one ingress/egress into the development in this proposal. He stated that KY 18 is a landlocked highway. If there are problems on KY 18, anyone beyond this development has two options (1) go down through Woolper Road over to Allen's Fork Road to the interstate, and (2) go down through Belleview bottoms and back up East Bend Road. There is no other means of access to Burlington from western Boone County on KY 18. He has a civil engineering background and has conferred with Professional Engineer Don Renker. He stated that KY 18 is not engineered properly for the traffic that exists on it today. There is inverted banking -- when turning left, the road should bank to the left, but it banks to the right. He stated that there is a gravel industry in Belleview bottoms. He noted the lots per subdivision on Page 9 of the Staff Report. He stated that without this proposed subdivision, 1,150 new units are being built in western Boone County and based on the national average, that is an additional two thousand cars per day that will be using KY 18. There would be 300 additional cars from this development. He stated that with 1.3 students per household, there will be over two thousand additional students in the area and another 150 homes will add another two hundred students. Over two thousand new students would require more than one additional school. There is a rumor that the school facility specified for Hunter's Ridge has been changed. He stated that per the Comprehensive Plan there is supposed to be a school site near the Hogan's farm, but he was under the impression that it was in lieu of the one at Hunter's Ridge. He stated that over 700 homes are going in at Hunter's Ridge, which is 1,200 to 1,400 additional students. He stated that Bryan Blavatt has seen the light and the letter he submitted regarding this development is almost a rubber stamp letter. He stated that at the time Hunter's Ridge was proposed and approved, Bryan Blavatt's initial submittal said that he could not condone that development. He then submitted a second letter to the Planning Commission saying that he could condone it because the Arlinghaus development had promised him that they would provide a future school site.

Mr. Costello stated that the Preliminary Plat approved for Hunter's Ridge shows a school. Unless another application comes in or there is a different proposal from the school district and Mr. Arlinghaus, the staff will follow up on the condition that says a site has to be designated for a school.

Mr. Cassedy stated that there have been a lot of applications for high development on KY 237 and the finding of the Planning Commission and the Fiscal Court is that until there are improvements to KY 237, there cannot be any further development on KY 237 -- and that condition would also be appropriate for KY 18. The state has not appropriated any funds and there is nothing that says there will be major improvements to KY 18. The schools are near or over capacity. He

stated that developers allotting land for a school does not build the school. We have to come up with the money to build the schools. We are already behind and will continue to be behind as long as we have high-density development. He stated that if the proposed development was one or two houses per acre, it would be similar to Saddle Ridge. Putting in high-density development does not do us any good. He stated that just because the Comprehensive Plan says we could do it and the zoning seems appropriate, that does not mean that we have to do it. He stated that the Arlinghaus development has taxed the roads, schools and sewer system. The water has to go somewhere and they may end up with water going into the street. Water and sewage come out of the sewer lid across from the pump station on KY 18. He stated that lower density development would allow the schools, roads and sewers to catch up.

Mr. Beau Archambault was present on behalf of his parents, Sue and Arch Archambault who live at 3218 Burlington Pike. He read and submitted a letter from his parents and a separate letter from his father Arch Archambault (see Exhibit 3).

Mr. Light read and submitted a letter received from Robert and Susan Meyer, 6242 Saddle Ridge Drive (see Exhibit 4).

The Chairman asked if there was anyone else present who wished to speak in regard to this request. There being no response, the Chairman asked if there were any comments or questions from the Commissioners.

Mr. Carmichael noted the comments made that there were 153 homes in the previous application, but the previous plat was for 170 lots. Mr. Costello responded that the previous application was for 170 lots, but the number of lots was reduced to 153 through the Committee process.

Mrs. Kegley stated that for the previous application, the connection through the cul-de-sac (Hammer Court) was important and she wants to emphasize it again. She noted the comments that people cannot get out of KY 18 and, therefore, the connection becomes all the more important. She stated that it would take some negotiations, but it is time to see if something can be done.

Mr. Poe stated that comments have been made this evening about the density, the road connections and KY 18. He would like the Committee to consider that those items have not been addressed since the denial of the first request.

Mr. Rolfsen asked if the two detention ponds can be eliminated if KY 18 is widened. Mr. Jim Bertram responded that they will provide information to the Committee showing that they have provided for a four-lane divided highway through there and can push the ponds back so that the dam will not be affected by the road widening. He stated that they also addressed the issue of preserving trees and open space throughout the development. They took what happened last time


and made changes. They feel that they have addressed a lot of the concerns and are willing to work with the Planning Commission. He stated that they had no objection to the connection last time or this time.

Mr. Reynolds stated that there was concern about the elevation and typography in relation to the ponds. Mr. Bertram responded that the ponds will be placed in the natural ravine. Mr. Reynolds asked if there will be any excavation. Mr. Bertram responded that there will only be excavation to build the dam. Mr. Reynolds questioned the height of the dam. Mr. Bertram will provide that information to the Committee.

Mr. Wallace stated that the applicant had no further comments.

There being no further discussion, the Chairman stated that the Committee Meeting for this item will be on October 4, 2006 at 5:00 PM in this room. This item will be on the Agenda for the Business Meeting on October 18, 2006 at 7:00 PM. The Chairman closed this Public Hearing at 8:47 PM and called for a short recess.

APPROVED:



Arnold Caddell, Chairman

Attest:



Jan Hancock, Recording Secretary

Exhibits –

- 1. Traffic Impact Study, Tanglewood Subdivision, December 2005 submitted by David Wallace**
- 2. Comments submitted by Carol Woods**
- 3. Letters from Sue and Arch Archambault and from Arch Archambault**
- 4. Letter from Robert and Susan Meyer**
- 5. Pictures of the site, the adjacent properties, and KY 18**

PREPARED FOR:

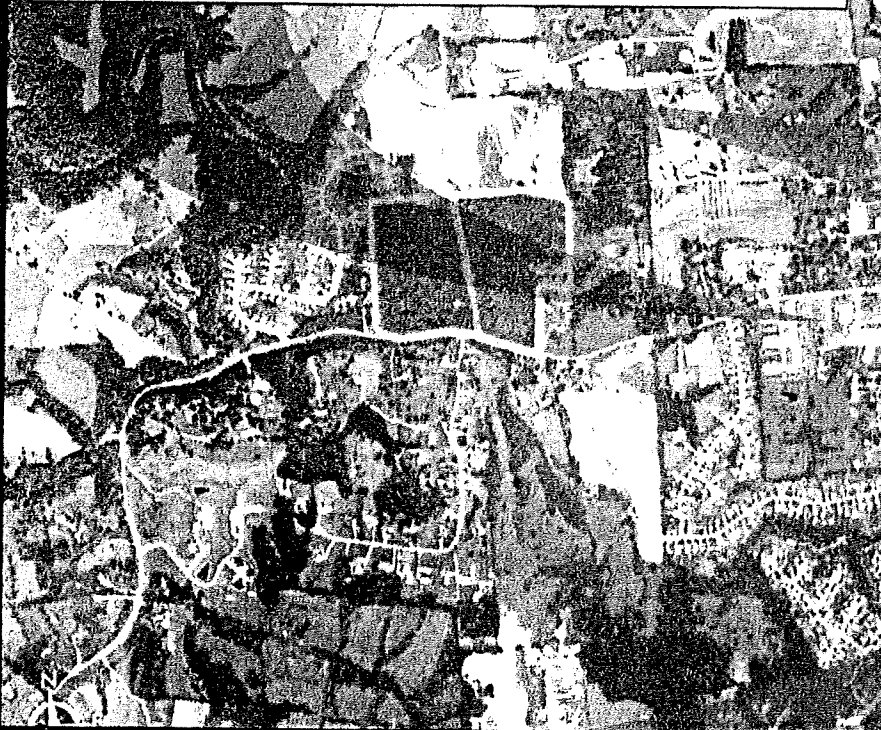
TEC Engineering, Inc.

ONE ELEVEN DEVELOPERS
5294 MADISON PIKE
INDEPENDENCE, KY 41051

ENGINEERS
PLANNERS
SURVEYORS

DECEMBER 2005
TEC PN - 05117-002

TRAFFIC IMPACT STUDY
TANGLEWOOD SUBDIVISION
RESIDENTIAL
DEVELOPMENT
BOONE COUNTY, KY



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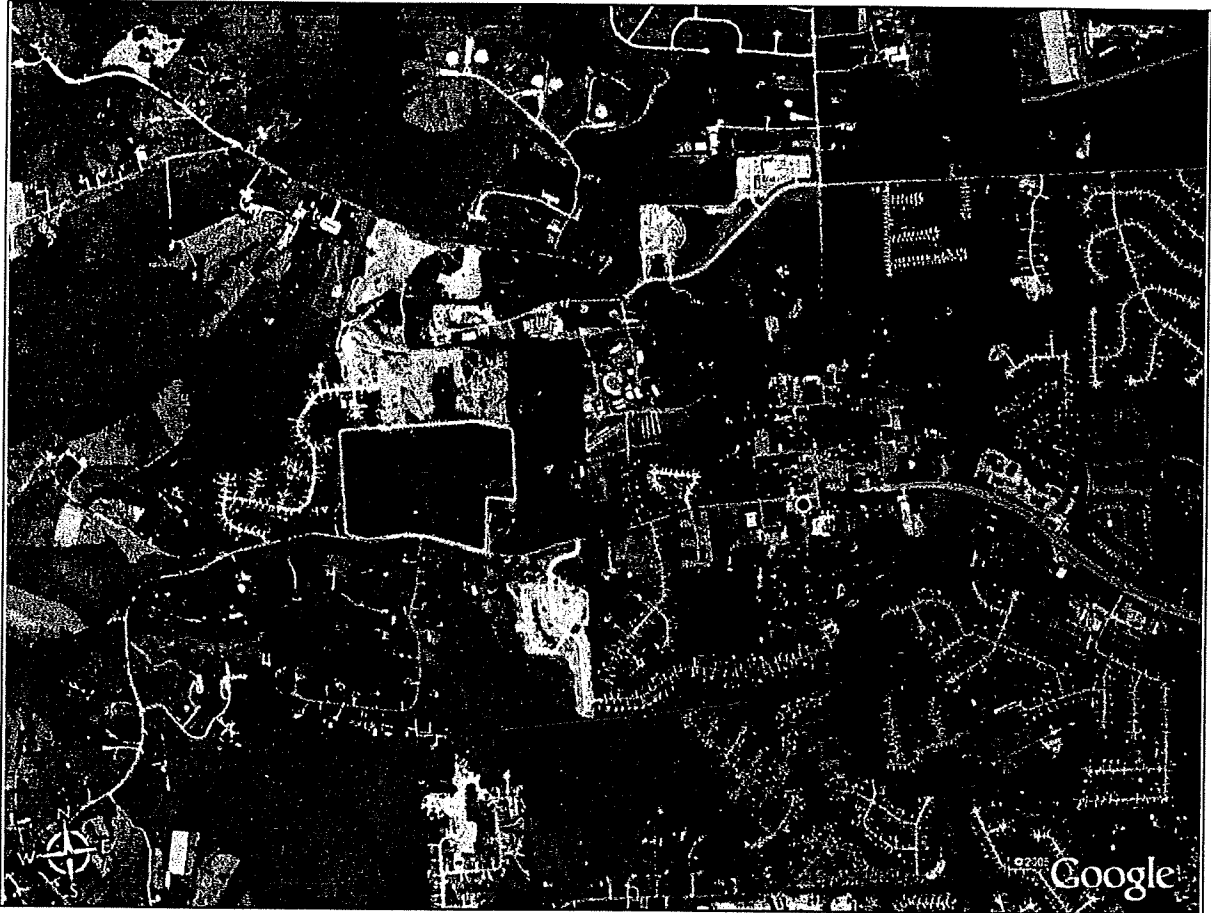
• WWW.TECENG.COM •

TRAFFIC IMPACT STUDY

Tanglewood Subdivision
Boone County, Kentucky

Prepared for:

One Eleven Developers
5294 Madison Pike
Independence, KY 41051



Prepared By:

TEC Engineering, Inc.

CINCINNATI - DAYTON - MASON

DECEMBER, 2005

TABLE OF CONTENTS

TITLE PAGE.....	I
TABLE OF CONTENTS	II
1. EXECUTIVE SUMMARY	1
2. INTRODUCTION	3
3. EXISTING CONDITIONS.....	4
4. PROPOSED SITE DEVELOPMENT	7
5. TRAFFIC PROJECTIONS	7
5. TRAFFIC PROJECTIONS	8
6. SIGNAL WARRANT ANALYSIS.....	15
7. CAPACITY ANALYSIS	16
8. SIGHT DISTANCE ANALYSIS.....	18
9. CONCLUSIONS AND RECOMMENDATIONS.....	19
10. FIRM QUALIFICATIONS	21

Appendix A: Traffic Counts

Appendix B: ITE Trip Generation Land Use Sheets

Appendix C: Signal Warrant Analysis Worksheets

Appendix D: Capacity Analysis Worksheets

1. EXECUTIVE SUMMARY

INTRODUCTION

TEC Engineering, Inc. was retained by One Eleven Developers to conduct a Traffic Impact Study for a proposed residential development in Boone County, KY. The objective of this report is to determine the roadway improvements necessary to accommodate the traffic generated by the proposed development.

EXISTING CONDITIONS

The proposed site for the Tanglewood Subdivision is located on the north side of Burlington Pike (KY 18) opposite the existing Saddle Ridge Drive. The proposed site is located within Boone County, KY. Currently, the proposed site is an undeveloped property.

Mechanical 24-hour traffic count data was collected for Burlington Pike in the vicinity of the proposed development. Manual turning movement counts were collected at the intersection of Burlington Pike (KY 18) and Saddle Ridge Drive during both the AM and PM peak hours.

TRAFFIC PROJECTIONS

The proposed development is a residential development, consisting of approximately 173 single family units.

The *Institute of Transportation Engineers (ITE) Trip Generation Handbook* is the most widely accepted publication for projecting traffic volumes; specifically related to how the site is used. The trips generated by the proposed development site were projected using the following ITE Land Use Type classifications:

Single-Family Detached Housing will represent the proposed land use of the development (ITE Code 210). The traffic was generated based on number of units.

TOTAL GENERATED TRIPS

Traffic Generated by Tanglewood Development						
Land Use Type	ITE Code	Unit of Measure (units)	Peak Hour			
			AM		PM	
			Enter	Exit	Enter	Exit
Single-Family Detached Housing	210	173	33	98	111	65
Total Trips			33	98	111	65
			131		176	

The basis for the directional distribution of the proposed development site was determined based upon an overview of the area and the location of the proposed site in relation to the surrounding communities, and areas traveled to for working, shopping, etc. For this site, the following directional distribution percentages were assumed:

90% to/from the East
10% to/from the West

SIGNAL WARRANT ANALYSIS

The *Manual on Uniform Traffic Control Devices (MUTCD)* provides eight (8) individual warrants, one or more of which must be satisfied to warrant installation of a traffic signal. This warrant analysis applied the existing traffic volumes, and the estimated hourly Build volumes to all applicable warrants. A traffic signal is not warranted at this location based upon the results of the traffic signal warrant analysis.

STORAGE LANE ANALYSIS

The capacity analysis results and the existing traffic conditions were examined to determine the need for storage lanes at the intersection of Burlington Pike (KY 18) and Saddle Ridge Drive/proposed access. A westbound right turn storage lane and a southbound left turn storage lane have been recommended to minimize the impact of the volume of traffic traveling to and from the east from the proposed development. These movements are projected to be the major movements from the proposed development.

CAPACITY ANALYSIS

The software program, *Synchro*, was used to analyze capacity at the intersections. Throughout all traffic volume conditions the overall intersection level of service remains an "A". The full results of the capacity analysis can be found in Section-7 of this report.

SIGHT DISTANCE ANALYSIS

The requirements of the Boone County Transportation Management Regulations for sight distance were examined at the proposed access location. The results of the sight distance analysis determined that the available sight distance at the proposed access exceeds the requirements as set in the Boone County Transportation Management Regulations.

RECOMMENDATIONS

- The development access should line up with the existing Saddle Ridge Drive to create a four leg intersection.
- To minimize any impacts associated with the major projected movements of traffic associated with the proposed development, a westbound right turn storage lane and a southbound left turn storage lane are recommended.
- Existing advance warning signage on Burlington Pike (KY 18) shall be replaced to conform to the proposed conditions.

IMPROVEMENT SUMMARY TABLE

Location	Recommended Improvement	Responsibility
Burlington Pike (KY 18) & Saddle Ridge Drive/Proposed Access	Westbound Right Turn Lane	Developer
	Southbound Left Turn Lane	Developer
	Revised Approach Signing	Developer

2. INTRODUCTION

TEC Engineering, Inc. was retained by One Eleven Developers to conduct a Traffic Impact Study for a proposed residential development in Boone County, KY. The objective of this report is to determine the roadway improvements necessary to accommodate the traffic generated by the proposed development.

The following sources were referenced:

- *Institute of Transportation Engineers (ITE) Trip Generation Manual, Seventh Edition*
- *AASHTO, Geometric Design of Highways and Streets, 2004*
- *Manual of Uniform Traffic Control Devices, MUTCD*
- *Boone County, KY – Traffic Management Regulations – Article 32*

The following steps were taken to complete this traffic impact study:

TRAFFIC COUNTS

Mechanical 24-hour traffic count data was collected for Burlington Pike (KY 18) in the vicinity of the proposed development. Manual turning movement counts were collected at the intersection of Burlington Pike (KY 18) and Saddle Ridge Drive during both the AM and PM peak hours. Traffic volume data sheets have been provided in *Appendix A*.

FIELD OBSERVATION

Field observations were performed to check the existing physical conditions of the roadway surrounding the proposed site development, including pavement markings and other roadway features. General pictures of the area were taken and included throughout this study.

GENERATED TRAFFIC

Trip Generation was completed using the proposed land use types to estimate the number of trips that will be generated due to the new development. Once these trips were generated, the directional distribution of the proposed development site was determined based upon an overview of the area and the location of the proposed site in relation to the surrounding communities, and areas traveled to for working, shopping, etc. The generated traffic was used to develop full build year traffic for analysis. ITE Trip Generation Land Use Worksheets are provided in *Appendix B*.

ANALYSIS & RECOMMENDATIONS

All of the aforementioned steps provided the information used to analyze the proposed site development. Signal warrant analysis, storage lane analysis, sight distance analysis, and capacity analysis were all used to develop the conclusions and recommendations pertinent to the impact of traffic in the vicinity of the proposed development. Signal Warrant Analysis Worksheets are located in *Appendix C*, and Capacity Analysis Worksheets are located in *Appendix D*.

This report summarizes the findings of the traffic impact study conducted by TEC Engineering, Inc. for One Eleven Developers.

3. EXISTING CONDITIONS

A. GENERAL LAYOUT

The proposed site for the Tanglewood Subdivision is located on the north side of Burlington Pike (KY 18) opposite the existing Saddle Ridge Drive. The proposed site is located within Boone County, KY. Currently, the proposed site is an undeveloped property.

Burlington Pike (KY 18) facilitates the flow of traffic in and around this area. The majority of traffic flows to and from the east to the City of Burlington, KY, and access to I-75/71 and I-275.

The proposed site will have direct access onto Burlington Pike (KY 18) opposite Saddle Ridge Road. This access location will add the fourth leg to an existing intersection.

Burlington Pike is a two lane roadway providing access to existing residential and agricultural properties west of the City of Burlington. Saddle Ridge Drive is an existing two-lane residential no outlet street providing access to several residential properties. The existing speed limits within the project area are: Burlington Pike (KY 18) (35 mph), and Saddle Ridge Drive (25 mph). The speed limits on the access drive were assumed to be 25 mph for the purposes of this study. Existing pavement markings are in good condition. The existing pavement conditions in the area are in fair to good condition.

Other significant features surrounding the project area include the existing creek located on the south side of Burlington Pike (KY 18).

A location map for this area is shown on the following page as *Figure 1*.

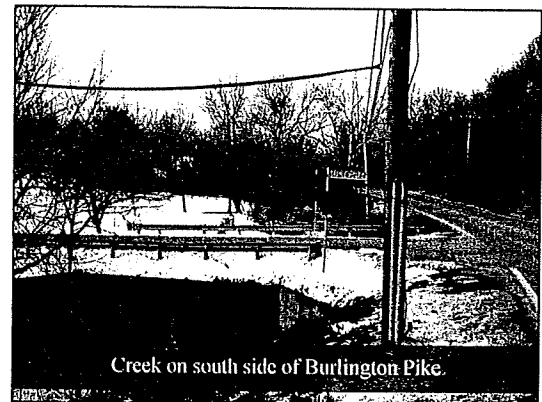
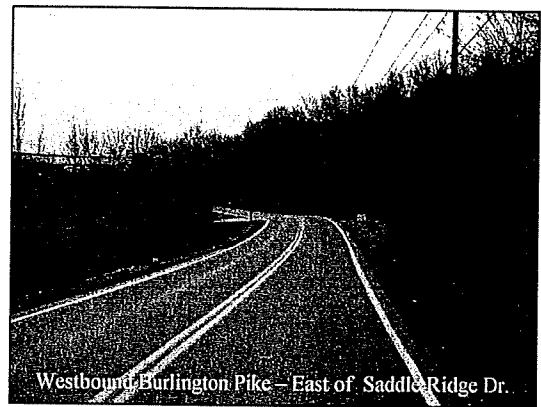
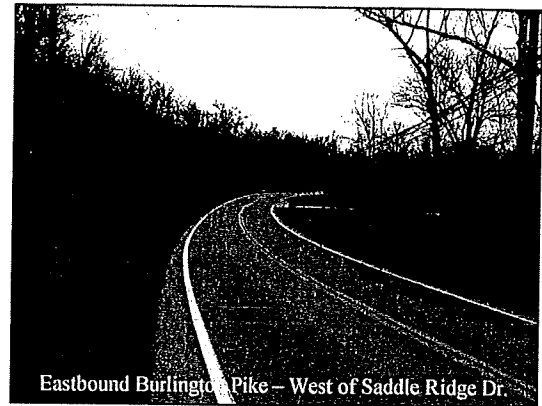


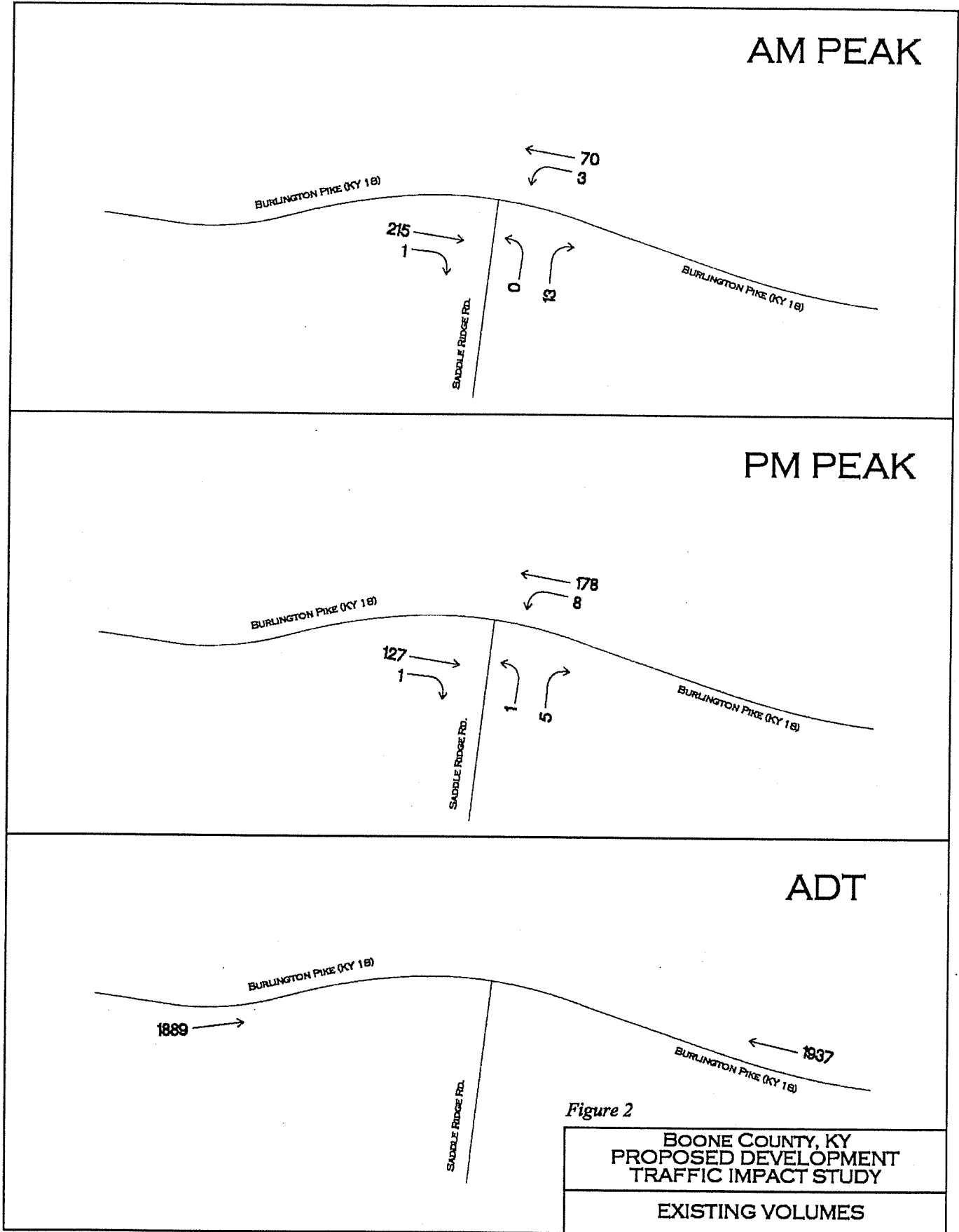
FIGURE 1: LOCATION MAP



B. EXISTING TRAFFIC CONDITIONS

Mechanical 24-hour traffic count data was collected for Burlington Pike in the vicinity of the proposed development. Manual turning movement counts were collected at the intersection of Burlington Pike (KY 18) and Saddle Ridge Drive during both the AM and PM peak hours.

The mechanical traffic count data collected along with the general location of the counts has been included in *Figure 2*. The existing collected peak hour turning movement count data has also been included in *Figure 2*. Traffic volume data sheets have been provided in *Appendix A*.

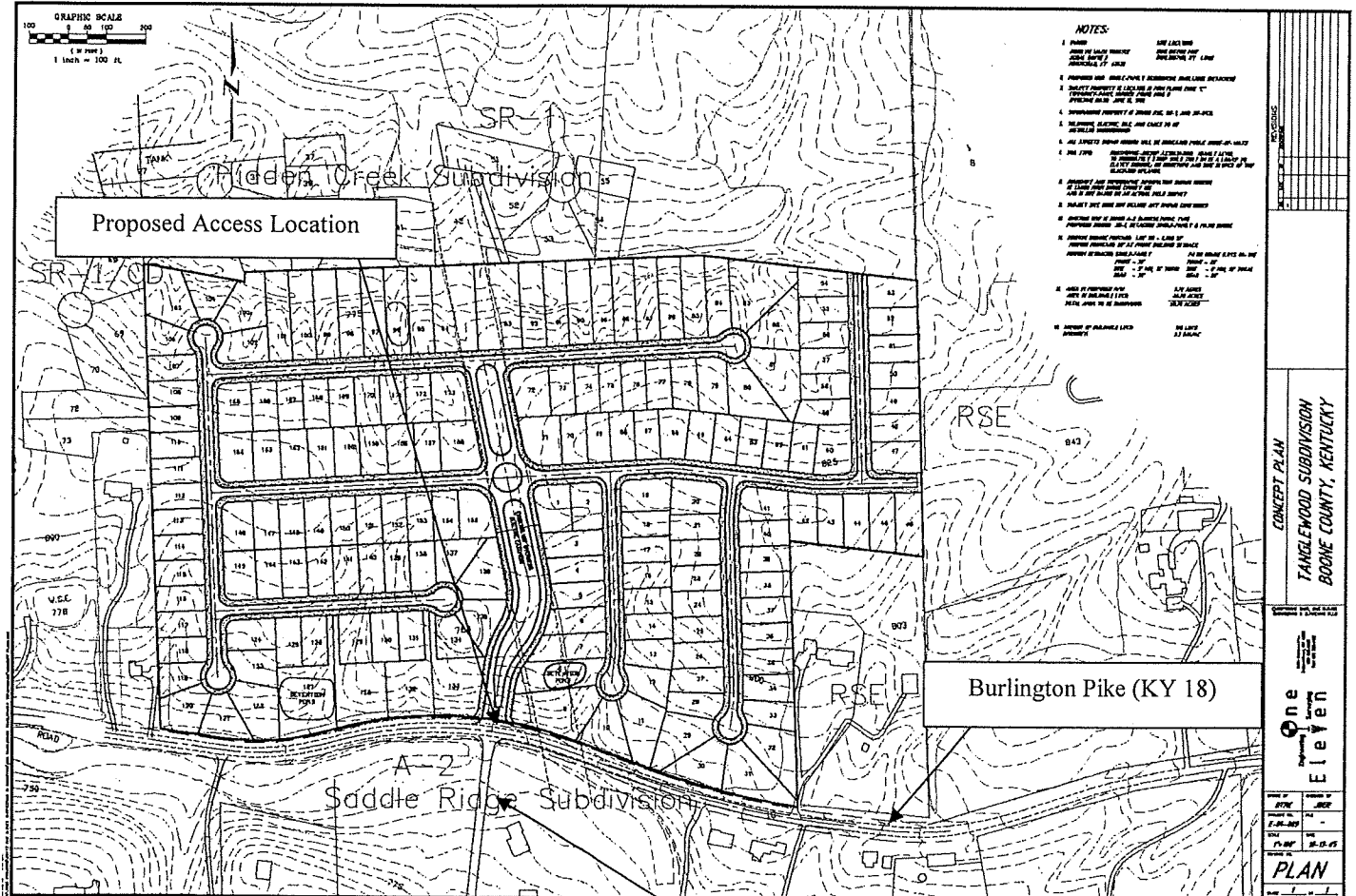


4. PROPOSED SITE DEVELOPMENT

The site is located on the north side of Burlington Pike (KY 18) opposite Saddle Ridge Drive, west of the City of Burlington. The proposed development will have direct connection to Burlington Pike opposite Saddle Ridge Drive creating a four leg intersection.

The proposed site plan is shown below in *Figure 3* to provide a general picture of the configuration of the development.

FIGURE 3: PROPOSED SITE PLAN



Saddle Ridge Drive

5. TRAFFIC PROJECTIONS

A. TRIP GENERATION

The proposed development is a residential development, consisting of approximately 173 single family units.

The *Institute of Transportation Engineers (ITE) Trip Generation Handbook* is the most widely accepted publication for projecting traffic volumes; specifically related to how the site is used. The trips generated by the proposed development site were projected using the following ITE Land Use Type classifications:

Single-Family Detached Housing was used to represent the proposed land use of the development (ITE Code 210). The traffic was generated based on number of units.

Table 1 on the following page shows the total projected trips to be generated by the site during the average weekday. The ITE trip generation worksheets have been included in *Appendix B*.

TABLE 1: TOTAL GENERATED TRIPS

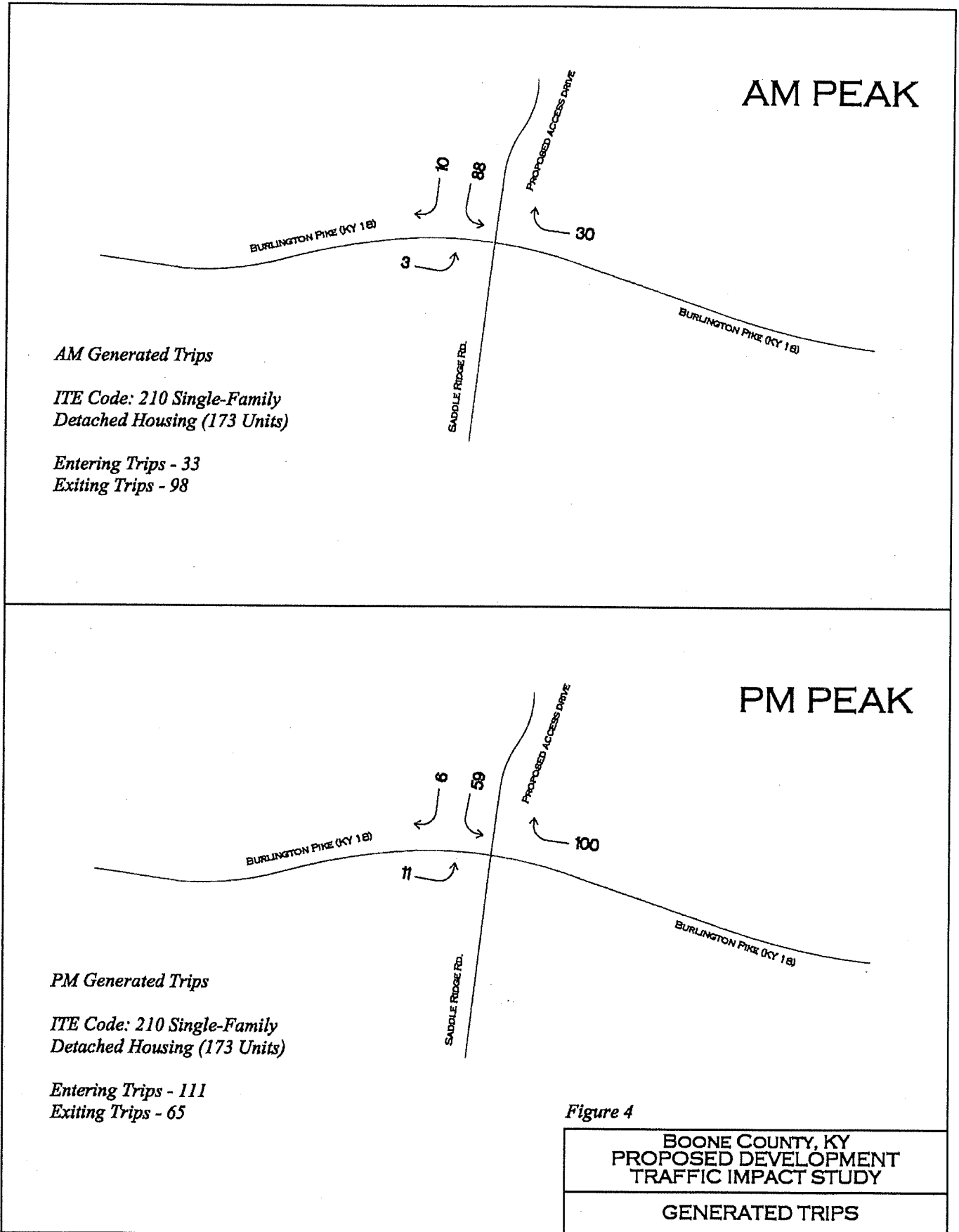
Traffic Generated by Tanglewood Development								
Land Use Type	ITE Code	Unit of Measure (units)	Peak Hour				Weekday ADT	
			AM		PM		Enter	Exit
			Enter	Exit	Enter	Exit		
Single-Family Detached Housing	210	173	33	98	111	65	861	861
Total Trips			33	98	111	65	861	861
			131		176		1722	

B. TRIP DISTRIBUTION

The basis for the directional distribution of the proposed development site was determined based upon an overview of the area, an examination of existing travel patterns, and the location of the proposed site in relation to the surrounding communities, and areas traveled to for working, shopping, etc. For this site, the following directional distribution percentages were assumed:

90% to/from the East
10% to/from the West

The distribution percentages were used in conjunction with the trips generated by the site. *Figure 4 (on the following page)* is a schematic showing the proposed entering and exiting generated volumes for the AM and PM peaks.



C. SCENARIO EVALUATION

The development is anticipated to be built-out and occupied by year 2011. Future background traffic volumes were determined by using a straight-line growth rate of 3.8% per year. This growth rate was established based on historical ADT volumes in the area provided by KYTC Planning. A comparison of traffic count data from the years 1996 and 2005 was used to develop the 3.8% growth rate.

To determine any improvements necessary to accommodate the traffic generated by the proposed development, the following scenarios were compared and analyzed:

- *Existing Traffic*
- *2011 Full Build Year - No Build*
- *2011 Full Build Year - Build*
- *2021 Design Year - No Build*
- *2021 Design Year - Build*

2005 - Existing Traffic

The existing traffic volumes in the area surrounding the site were used to demonstrate the existing area traffic conditions. *Figure 2* shows the existing traffic counts.

2011 - Full Build Year - No Build

The Full Build year traffic volumes, under the scenario that the development is not built, were projected using the existing traffic counts and a straight-line growth rate of 3.8% for six years. *Figure 5* is a schematic showing the Full Build Year - No Build peak volumes.

2011 - Full Build Year - Build

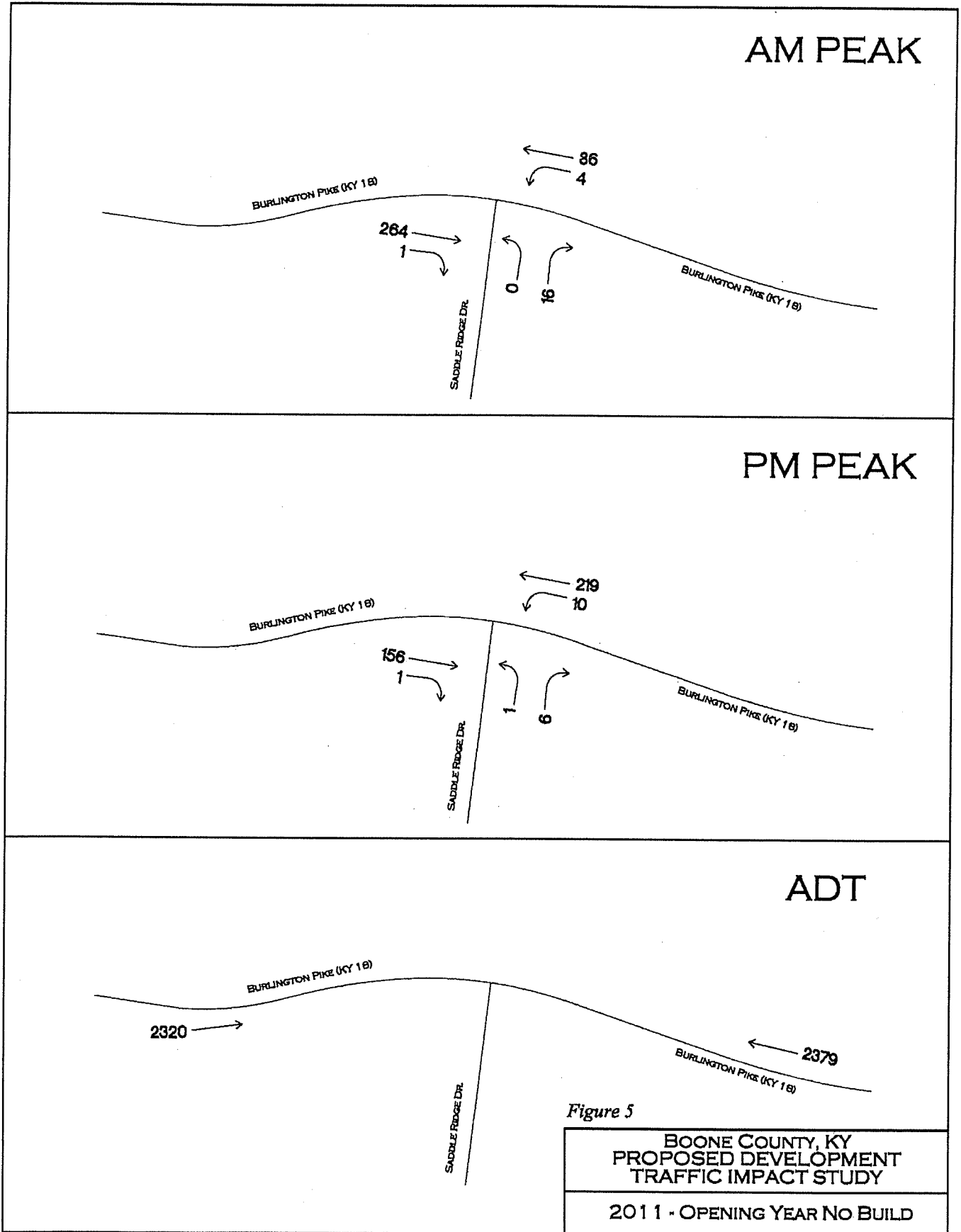
Traffic volumes were projected under the scenario that the development is built. These volumes were projected using the existing traffic volumes, a straight-line growth rate of 3.8% for six years, and the generated trips from the proposed development. *Figure 6* is a schematic showing the Full Build Year - Build peak volumes.

2021 - Design Year - No Build

The Full Build year traffic volumes, under the scenario that the development is not built, were projected using the existing traffic counts and a straight-line growth rate of 3.8% for sixteen years. *Figure 7* is a schematic showing the Full Build Year - No Build peak volumes.

2021 - Design Year - Build

Traffic volumes were projected under the scenario that the development is built. These volumes were projected using the existing traffic volumes, a straight-line growth rate of 3.8% for sixteen years, and the generated trips from the proposed development. *Figure 8* is a schematic showing the Full Build Year - Build peak volumes.



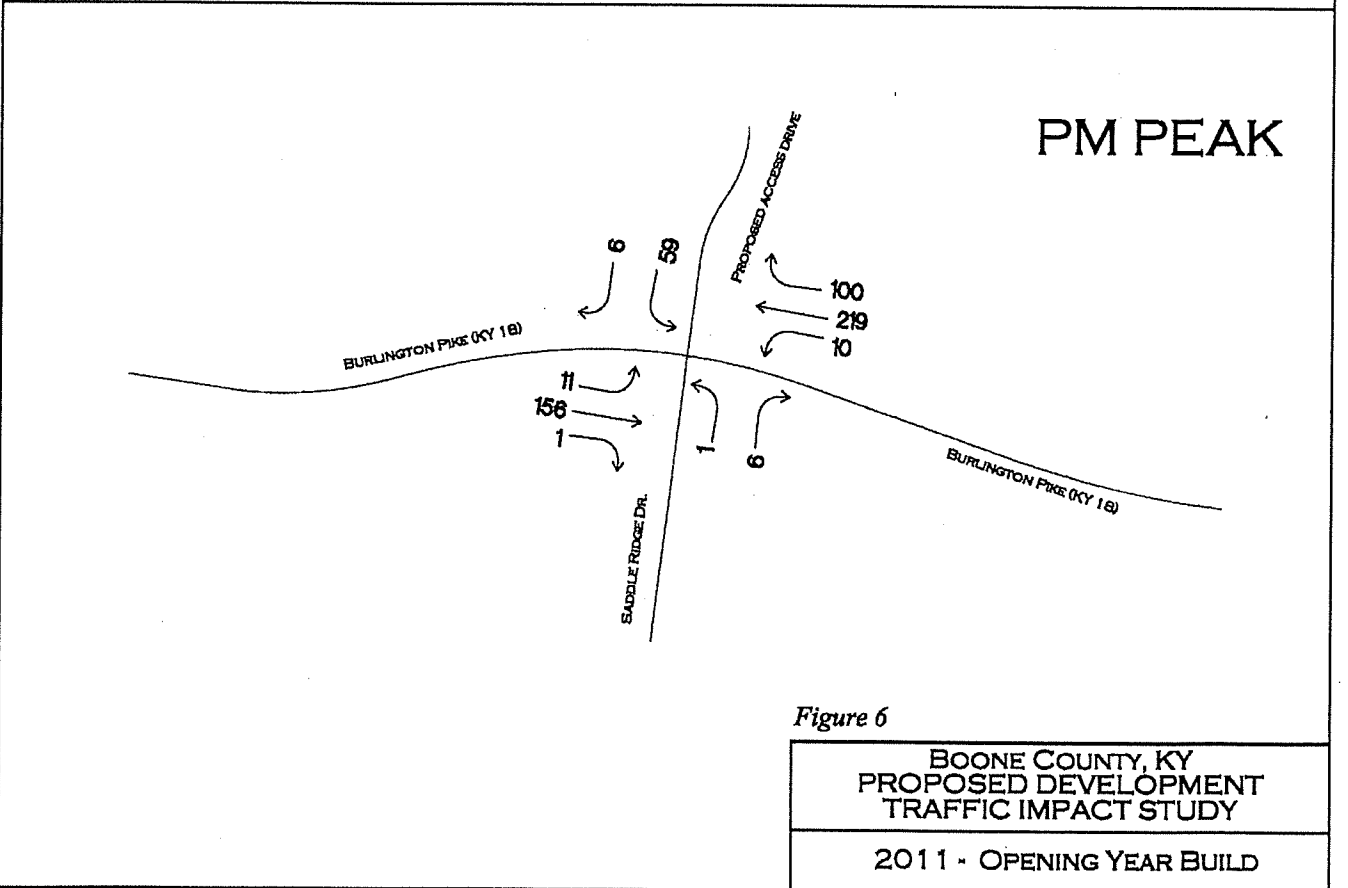
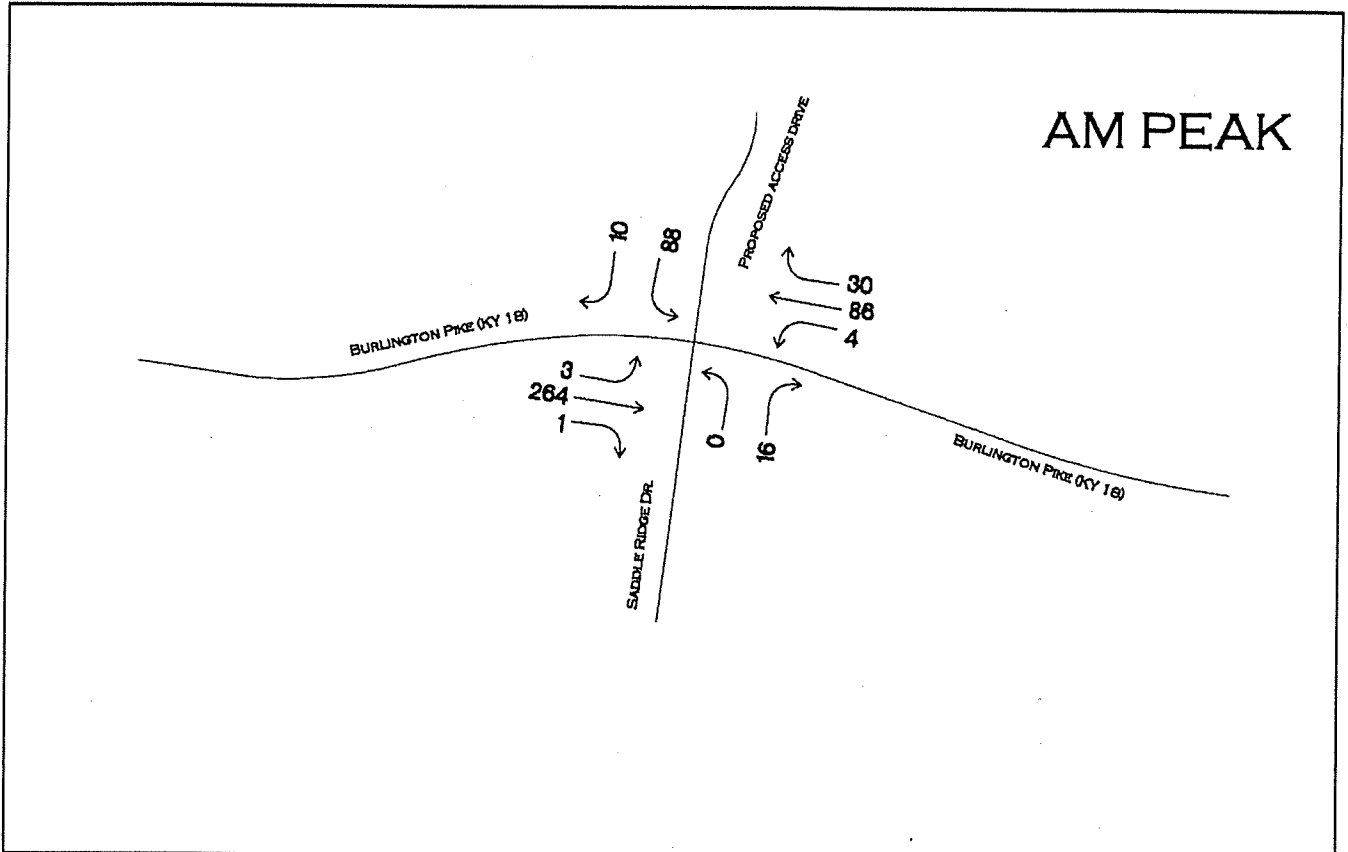
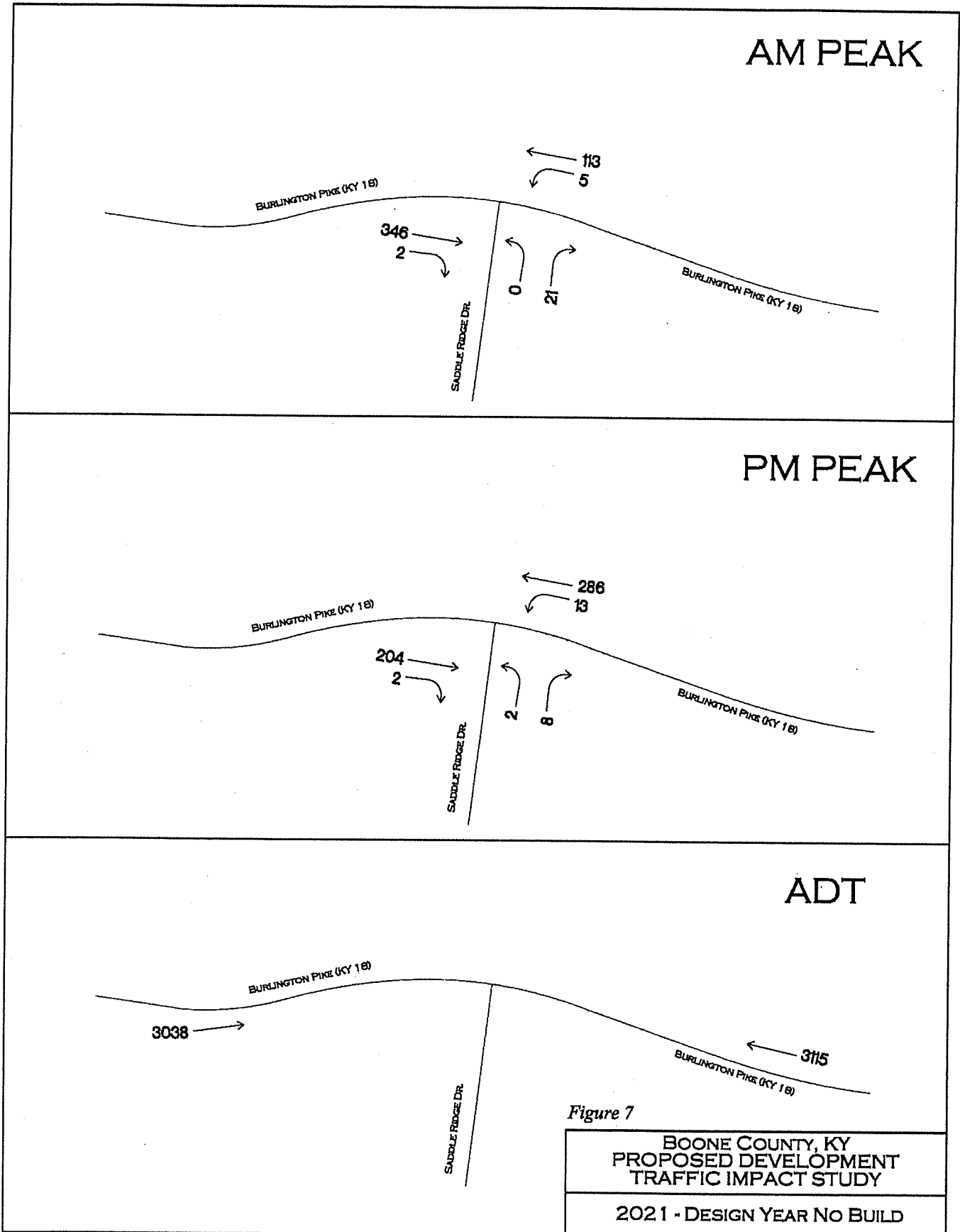


Figure 6

BOONE COUNTY, KY
PROPOSED DEVELOPMENT
TRAFFIC IMPACT STUDY

2011 - OPENING YEAR BUILD



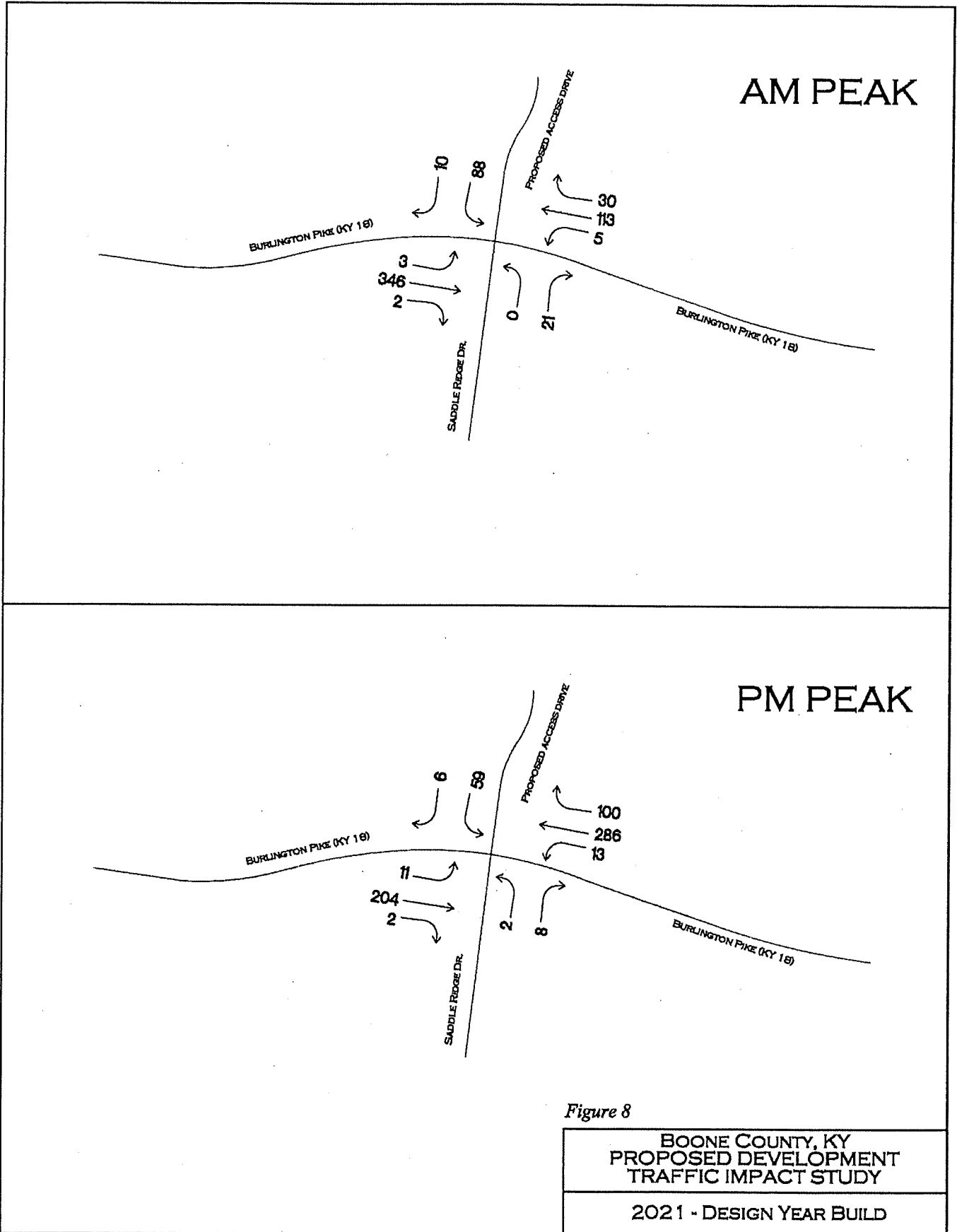


Figure 8

BOONE COUNTY, KY
PROPOSED DEVELOPMENT
TRAFFIC IMPACT STUDY

2021 - DESIGN YEAR BUILD

6. SIGNAL WARRANT ANALYSIS

The *Manual on Uniform Traffic Control Devices (MUTCD)* provides eight (8) individual warrants, one or more of which must be satisfied to warrant installation of a traffic signal. This warrant analysis applied the projected baseline traffic volumes, and the estimated hourly Build volumes to all applicable warrants. Since the generated volumes were only available in ADT and peak hours, the following method was used to estimate the hourly variations in traffic for the proposed development.

The generated hourly build volumes for the residential trips were estimated using the weekday ADT and peak hour generated trips in conjunction with historical entering and exiting residential roadway percentages collected by TEC for various residential roadways. TEC compiled traffic counts from various residential locations. This data was compared and averaged to create a listing of the hourly variations (percentages) of entering and exiting residential traffic for a 24 hour period. This listing was applied to the generated entering and exiting ADT and peak hour volumes to estimate the hourly traffic anticipated for the proposed development.

The generated hourly traffic volumes were combined with the projected background volumes to provide the build volumes used in the analysis.

A traffic signal warrant analysis was conducted at the intersection of Burlington Pike (KY 18) and Saddle Ridge Drive/proposed access using the estimated traffic volumes.

The traffic signal warrant analysis data sheets are provided in *Appendix C*, and the results have been summarized in *Table 2* below:

TABLE 2: SIGNAL WARRANT ANALYSIS SUMMARY

Traffic Signal Warrant Analysis Results		
Tanglewood Development		
Intersection	Year Analyzed	Warranted?
		Yes or No
Burlington Pike (KY 18) & Saddle Ridge Drive/proposed access	2011 Full Build	No

Since a traffic signal warrant analysis only examines the traffic volumes from the higher volume minor street, northbound traffic volumes were omitted from the analysis.

7. CAPACITY ANALYSIS

A capacity analysis was conducted for the AM & PM peak hours at the intersection of Burlington Pike (KY 18) and Saddle Ridge Drive/proposed access.

The software program, *Synchro*, was used to analyze capacity at the intersections. *Synchro* uses the methods prescribed in the Highway Capacity Manual to determine the Level-of-Service (LOS). LOS is defined in terms of delay and is a measure of driver discomfort and intersection performance with respect to vehicular capacity and quality of service provided to road users. Delay refers to total average stopped delay experienced by motorists at the referenced intersection. The level of service is classified into six different levels, ranging from A to F. *Table 3* shows the definitions of each level:

TABLE 3: LOS – UNSIGNALIZED INTERSECTION

Level of Service	Delay
A	<10 seconds per vehicle
B	10-15 seconds per vehicle
C	15-25 seconds per vehicle
D	25-35 seconds per vehicle
E	35-50 seconds per vehicle
F	>50 seconds per vehicle

A summary of the capacity analysis has been included in *Table 4*. The capacity analysis worksheets have been included in *Appendix D*.

TABLE 4: INTERSECTION CAPACITY ANALYSIS SUMMARY

Burlington Pike at Proposed Access Drive						
Scenario	Peak Period	Approach LOS (Delay)				Intersection LOS/Delay (s)
		Burlington Pike (KY 18)	Burlington Pike (KY 18)	Saddle Ridge Drive	Proposed Access	
		EB	WB	NB	SB	
EXISTING	AM	A (0.0s)	A (0.3s)	A (9.6s)	-	A (0.5s)
	PM	A (0.0s)	A (0.4s)	A (9.3s)	-	A (0.4s)
2011 Full Build NO BUILD	AM	A (0.0s)	A (0.4s)	A (9.9s)	-	A (0.5s)
	PM	A (0.0s)	A (0.4s)	A (9.5s)	-	A (0.4s)
2011 Full Build BUILD	AM	A (0.1s)	A (0.3s)	A (9.9s)	B (12.8s)	A (2.9s)
	PM	A (0.6s)	A (0.3s)	A (9.6s)	B (12.9s)	A (1.9s)
2021 Design Year NO BUILD	AM	A (0.0s)	A (0.4s)	B (10.6s)	-	A (0.5s)
	PM	A (0.0s)	A (0.4s)	B (10.1s)	-	A (0.4s)
2021 Design Year BUILD	AM	A (0.1s)	A (0.3s)	B (10.6s)	B (14.9s)	A (2.8s)
	PM	A (0.4s)	A (0.3s)	B (10.4s)	C (15.0s)	A (1.9s)

TEC is aware that additional development may occur on undeveloped properties adjacent to the proposed site. This additional development may be connected to the proposed site and therefore additional traffic volumes could potentially use the proposed access to Burlington Pike (KY 18).

To account for this, TEC examined the intersection of Burlington Pike and the proposed access to determine the traffic volumes (and related number of units) entering the exiting the proposed access that would lead to failure of an approach or movement at the intersection. The result of this analysis is summarized on the following page.

TABLE 5: ANALYZED MAXIMUM UNITS UNTIL APPROACH FAILURE

Scenario	Period	EB	WB	NB	SB	Overall
2021 Build 700 Units	AM	A (0.4s)	A (0.2s)	B (10.6s)	F (50.2s)	C (17.9s)
	PM	A (1.9s)	A (0.2s)	B (10.7s)	D (30.2s)	A (6.3s)

Based upon this analysis, it was determined that the southbound approach will fail during the AM peak hour with generated traffic volumes from approximately 700 single family units. The proposed development consists of 173 units and therefore the intersection could handle generated traffic from approximately 527 additional units before failure.

8. SIGHT DISTANCE ANALYSIS

An intersection sight distance (ISD) analysis was completed at the intersection of Burlington Pike (KY 18) and Saddle Ridge Drive/proposed access. The sight distance analysis was conducted for the proposed southbound approach to the intersection.

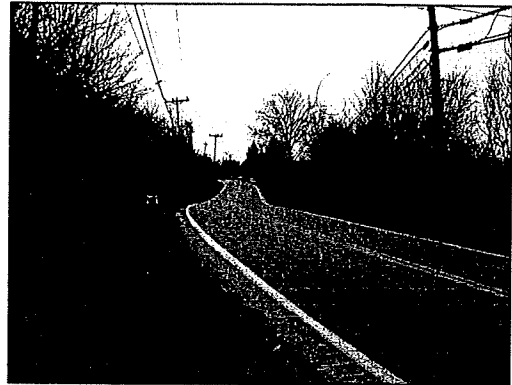
Using the existing speed limit of 35 mph on Burlington Pike (KY 18), the minimum required intersection sight distance from the *Boone County Transportation Management Regulations* is 475 feet for vehicles completing a left turn from the proposed access, and 430 feet for vehicles completing a right turn from the proposed access. The ISD analysis of this location resulted in the following measured sight distances:

Southbound proposed access

- Looking west – 550'
- Looking east – 645'

Based upon the results of the sight distance analysis the proposed access point meets the intersection sight distance requirements.

The existing intersection ahead warning signs should be replaced by the cross-road ahead warning signs upon construction of the proposed access.



Looking east from proposed access location



Looking west from proposed access location

9. CONCLUSIONS AND RECOMMENDATIONS

BURLINGTON PIKE (KY 18) AND SADDLE RIDGE DRIVE/PROPOSED ACCESS

This access is shown to be only access point for the development. **The development access should line up with the existing Saddle Ridge Drive** on the south side of Burlington Pike, as shown on the proposed site plan. This will create a standard four-leg intersection.

The intersection sight distance has been evaluated for the proposed access location. The existing sight distance is limited slightly to the west due the existing vertical alignment of the roadway. The existing "hump" in the roadway does block a portion of advancing vehicles, but field observations indicate that 550' of sight distance is available to the west and 645' is available to the east. The minimum intersection sight distance requirement from the Boone County Transportation Management Regulations for a 35 mph roadway is 475' for vehicles making a left turn, and 430' for vehicles making a right turn. **The available intersection sight distance exceeds the minimum intersection sight distance requirements** for the proposed access location.

Based upon the full build traffic of the proposed development, **a traffic signal is not warranted at this location.** Therefore an unsignalized intersection capacity analysis was conducted at this location. Throughout all traffic conditions (existing, full build year, and design year) **the overall intersection LOS remains an "A"** for both the AM and PM peak hours. Based upon our analysis, the 2011 build unsignalized LOS for the southbound stop-controlled approach to the intersection would be a "B" for the AM conditions and a "B" for the PM conditions. The analysis of the 2021 design year build conditions reveal that the southbound approach to the intersection will be a "B" for the AM conditions and a "C" for the PM conditions.

Based upon the large projected westbound right and southbound left turning volumes, TEC recommends that storage lanes be constructed at this intersection. **TEC recommends that a westbound right turn storage lane be provided** to remove the large projected right turn volumes from the existing through volumes. **A southbound left turn storage lane is also recommended** to provide separation of the left and right turning vehicles out of the development.

The existing advance intersection warning signs on Burlington Pike (KY 18) should be replaced to indicate a four leg intersection.

TEC is aware of the possibility that **additional development may occur on adjacent properties** to the north and east of the proposed development. The proposed connectivity of the adjacent properties to the proposed development could lead to additional traffic using the proposed development to gain access to Burlington Pike (KY 18). TEC examined the capacity of the intersection of Burlington Pike (KY 18) and Saddle Ridge Drive/proposed access to determine the total number of units and related traffic volumes that the intersection can handle prior to failure. Based upon this analysis, it was determined that **the southbound approach will fail during the AM peak hour with generated traffic volumes from approximately 700 single family units.** The proposed development consists of 173 units and therefore the **intersection can handle generated traffic from approximately 527 additional units** before failure.

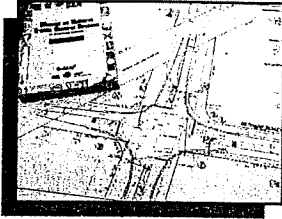
An improvement summary table has been included on the following page.

TABLE 6: IMPROVEMENT SUMMARY TABLE

Location	Recommended Improvement	Responsibility
Burlington Pike (KY 18) & Saddle Ridge Drive/Proposed Access	Westbound Right Turn Lane	Developer
	Southbound Left Turn Lane	Developer
	Revised Approach Signing	Developer

10. FIRM QUALIFICATIONS

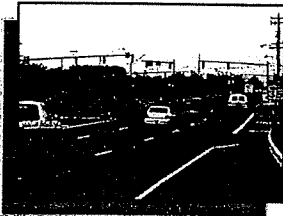
GENERAL QUALIFICATIONS



Since 1992, TEC Engineering has been instrumental in improving the safety and efficiency of Ohio and Kentucky's transportation systems. Our staff is widely experienced in a variety of transportation engineering fields, including:

TRANSPORTATION PLANNING

- Land Use and Thoroughfare Planning
- Traffic Impact Studies
- Access Management



TRAFFIC ENGINEERING

- Design
- Traffic Signal Design
- Traffic Signal Timing
- Closed Loop System Design

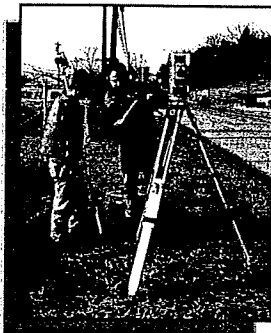


ANALYSIS

- Highway & Corridor Safety Studies
- Traffic Signal System Analysis
- Traffic Data Collections & Analysis

OPERATION

- Signal System Operation & Surveillance
- Traffic Management & Control
- Video Monitoring
- Special Events Traffic Management



HIGHWAY / ROADWAY DESIGN

- Roadway Geometric Design
- Roadway & Drainage Improvements
- Pavement Marking & Signing Design
- Maintenance of Traffic Plans
- Site Plans

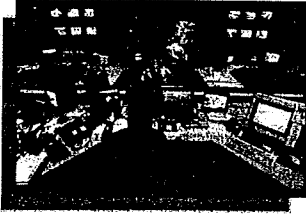
SURVEYING

- Topographic Surveying
- Boundary Surveying
- ALTA/ACSM Surveys
- Construction Stake-Out

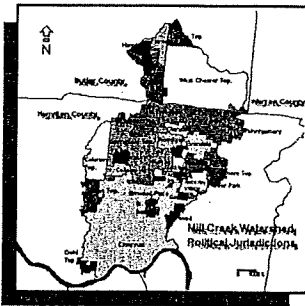


CONVENTIONAL & DECORATIVE ROADWAY LIGHTING

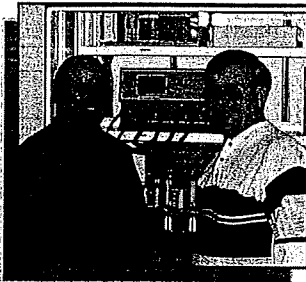
- High Mast Lighting
- Bridge Navigational Lighting
- Tunnel Lighting
- Exterior Aesthetic Lighting Design
- Industrial Campus Lighting



INTELLIGENT TRANSPORTATION SYSTEMS
ReACTS (Remote Accident Capture and Alert System)
ATMS (Advanced Traffic Management Systems)
ATIS (Automated Traveler Information Systems)
Freeway Surveillance & Control
Realtime Adaptive Traffic Control Systems
Early Deployment Studies
Video Monitoring



COMMUNITY PLANNING
Comprehensive Planning
Code Updates and Development
Community Surveys and Meetings
Brownfields
Streetscaping
Environmental Justice
Downtown Revitalization



INSPECTION SERVICES
Operation and Safety Inspection
Signal Construction Inspection
Plan Review Value Engineering
Sign Inventory

CLIENT INFORMATION

TEC has established relationships with and successfully performed projects for State, County, City, and other local government agencies, as well as private clients such as Architects and Developers. Following is a brief sampling of TEC's client base:



OHIO

Ohio Department of Transportation

OKI (Ohio Kentucky Indiana Regional Council of Governments)

Allen County (ODOT District 1)

City of Lima

American Township

Clark County (ODOT District 7)

City of Springfield

Springfield Township

Montgomery County (ODOT District 7)

City of Kettering

City of Riverside

City of Centerville

City of Miamisburg

Washington Township

Miami County (ODOT District 7)

Butler County (ODOT District 8)

City of Hamilton

City of Fairfield

Fairfield Township

Hamilton County (ODOT District 8)

City of Cincinnati

City of Norwood

City of Forest Park

Anderson Township

Green Township

Sycamore Township

Clermont County (ODOT District 8)

Union Township



KENTUCKY

Kentucky Transportation Cabinet

Kenton County

Boone County

City of Newport

PROJECT INFORMATION



TEC's project experience is quite diverse – from studies, to design, to grant funding applications for our clients. As a leading transportation engineering firm since 1992, we couldn't possibly begin to list all of our project experience. Following are examples of TEC's recent, significant project experience:

TRAFFIC SIGNALS

City of Cincinnati, Ohio: Streetscape Project, Central Avenue – Third Street to Seventh Street: Decorative traffic signal designs

City of Hamilton, Ohio: Streetscape Project: Design of decorative traffic signals

City of Fairfield, Ohio: Decorative Traffic Signals & Roadway Lighting

City of Mason, Ohio:

S.R. 741 / Bethany Road Intersection Improvement and Traffic Signal Design

Brant Connector / Kings Island Drive Traffic Signal Design

Traffic Signal Systems for Tylersville Road, Mason-Montgomery Road, and US 42

City of Beavercreek, Ohio: Indian Ripple Traffic Signal & Oxmoore Road / Grange Hall Road / Kemp Road Traffic Signal Designs

City of Mt. Healthy, Ohio: Closed Loop Traffic Signal Systems

City of New Philadelphia, Ohio: Closed Loop Traffic Signal System

City of Riverside, Ohio: Woodman/Harshman Traffic Signals

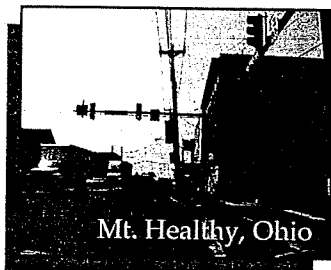
City of St. Bernard, Ohio: Closed Loop Traffic Signal System

City of Jackson, Ohio: Closed Loop Traffic Signal System

Clark County, Ohio: Moorefield Road Signal Project

Montgomery County, Ohio: North Dixie Drive - Phase IIIA Lighting and Signal Design

Miami County, Ohio: County Road 25A & Evanston Road Signalization



SAFETY STUDIES / CORRIDOR STUDIES

OKI; Kenton County, Kentucky: Dixie Highway Corridor Traffic and Transportation Optimization Study (2004-2005)

City of Riverside, Ohio: Burkhardt & Valley Streets Grant Application

City of Miamisburg, Ohio: Byers Road/SR 725 Intersection Study (2004)

City of Centerville, Ohio: Spring Valley/South Main Street Intersection Safety Study (2004)

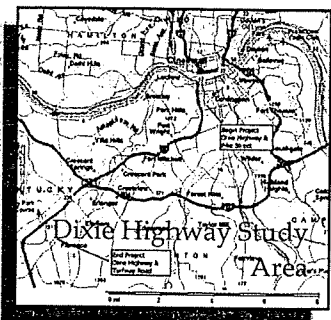
City of Lima, Ohio: Cable Road Safety Study (GHSO) (2003)

City of Springdale, Ohio: Route 4 Corridor 402 Safety Study (2003)

City of Mt. Healthy, Ohio: U.S. Route 127/Hamilton Ave. Corridor Safety Study (1999)

Village of Yellow Springs, Ohio: US Route 68 Corridor Safety Study (2003)

Symmes Township, Ohio: Loveland-Madeira Road Corridor Safety Study (1998)



TRAFFIC IMPACT STUDIES

Independence, Kentucky: Independence Village, Commercial and Residential Traffic Impact Study (2005)

Sycamore Township, Ohio: Kenwood Towne Place, Retail and Office Traffic Impact Study (2005)

City of Mason, Ohio: Mason High School, Recreation Center & Municipal Building Corridor Impact Study

Washington Township, Ohio: Kroger's Retail Dev /Office/Residential Traffic Impact Study (2004)

Kenton, Ohio: Wal-mart Retail Development (2004)

City of Findlay, Ohio: Trenton Avenue-US 224 (2004)

Englewood, Ohio: Wal-mart Retail Development (2003)

Washington Township, Ohio: Walgreens/Chick-fil-A Development (2003)

Hamilton Township, Ohio: Villages of Classicway Residential/Retail Development (2003)

Springfield Township, Ohio: Compton Road (2003)

Springboro, Ohio: Wal-mart/Kohl's Retail Development (2002)

Lancaster, Ohio: Home Depot Retail Development (2002)

Middletown, Ohio: Town Meadows Residential Townhomes (2002)

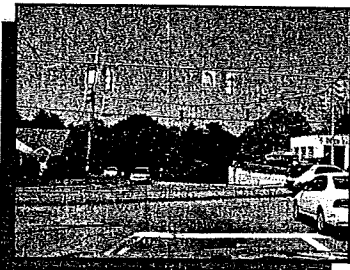
City of Norwood, Ohio: Walgreen's Retail Store; Rookwood Commons Commercial Development (2001)

Green Township, Ohio: Harrison Ave./Dry Fork Road (2003); Kleeman Greene Residential Development (2000); Autumn Oak Ridge Residential Development (2000/2005)

Clermont County, Ohio: Eagle Creek Residential Subdivision (2000)



Fields Ertel/Snider Road
Realignment



Banning/Hanley/Blue Rock
Road Widening Project

ROADWAY DESIGN

Hamilton County, Ohio: Harrison @ Wesselman/Johnson Road Redesign

Butler County, Ohio: Dry Run Drainage Improvement

City of Norwood, Ohio: Montgomery Rd./Carthage Ave. Realignment

City of Mason, Ohio: S.R. 741 / Bethany Road Redesign

City of Mason, Ohio: Fields Ertel/Snider Road Realignment

City of Mason, Ohio: Mason-Montgomery Road Widening Project

City of Mason, Ohio: Tylersville Road Widening Project

City of Mason, Ohio: Tylersville/Snider Road Alignment

City of Mason, Ohio: Western Row Road/U.S. 42 Improvements

Colerain Township, Ohio: Banning/Hanley/Blue Rock Road Widening Project

(Winner of ASHE 2003 Donald C. Schramm Transportation Improvement Award)

Green Township, Ohio: Rybolt Road Realignment

SURVEYS

Pfeiffer Road / Montgomery Road Topographic Survey

Mason-Montgomery Road Boundary & Topographic Survey

Valley Ridge Subdivision Boundary & Topographic Survey

Branch Hill Connector Topographic Survey

For more information about any of our projects or capabilities, contact Jennifer Kunz at (513) 771-8828 or jenniferk@teceng.com.

APPENDIX A
COUNTS

TEC Engineering, Inc.
 161 Northland Blvd, Suite A
 Cincinnati, OH 45246
 PH: (513) 771-8828 FAX: (513) 771-0707

KY 18_EB
 @ West of Saddle Ridge

Start Time	06-Dec-05 Tue	Channel 1		Hour Totals	
		Morning	Afternoon	Morning	Afternoon
12:00		2	23		
12:15		3	31		
12:30		1	19		
12:45		0	27	6	100
01:00		0	23		
01:15		2	30		
01:30		0	24		
01:45		1	35	3	112
02:00		1	24		
02:15		1	36		
02:30		1	20		
02:45		1	26	4	106
03:00		1	40		
03:15		2	29		
03:30		1	28		
03:45		2	26	6	123
04:00		3	48		
04:15		2	29		
04:30		4	30		
04:45		4	22	13	129
05:00		8	24		
05:15		8	34		
05:30		14	39		
05:45		21	20	51	117
06:00		26	31		
06:15		24	21		
06:30		26	21		
06:45		58	21	134	94
07:00		56	10		
07:15		50	21		
07:30		58	14		
07:45		40	11	204	56
08:00		35	13		
08:15		50	10		
08:30		25	6		
08:45		41	6	151	35
09:00		34	17		
09:15		28	17		
09:30		32	10		
09:45		37	2	131	46
10:00		25	11		
10:15		29	3		
10:30		24	6		
10:45		25	6	103	26
11:00		22	4		
11:15		39	9		
11:30		40	2		
11:45		21	2	122	17
Total		928	961		
Percent		49.1%	50.9%		
Grand Total		928	961		
Percent		49.1%	50.9%		

ADT Not Calculated

TEC Engineering, Inc.
 161 Northland Blvd, Suite A
 Cincinnati, OH 45246
 PH: (513) 771-8828 FAX: (513) 771-0707

KY 18_WB
 @ East of Saddle Ridge

Start Time	06-Dec-05 Tue	Channel 1		Hour Totals	
		Morning	Afternoon	Morning	Afternoon
12:00		6	26		
12:15		5	17		
12:30		4	26		
12:45		2	34	17	103
01:00		3	30		
01:15		2	25		
01:30		0	33		
01:45		2	25	7	113
02:00		0	35		
02:15		2	19		
02:30		0	32		
02:45		1	45	3	131
03:00		1	45		
03:15		2	33		
03:30		2	43		
03:45		1	36	6	157
04:00		0	43		
04:15		2	51		
04:30		2	47		
04:45		1	53	5	194
05:00		1	58		
05:15		1	41		
05:30		2	57		
05:45		4	45	8	201
06:00		1	49		
06:15		6	47		
06:30		6	36		
06:45		5	42	18	174
07:00		14	28		
07:15		19	14		
07:30		16	33		
07:45		22	22	71	97
08:00		30	28		
08:15		24	33		
08:30		20	20		
08:45		15	25	89	106
09:00		22	22		
09:15		14	16		
09:30		20	22		
09:45		16	12	72	72
10:00		23	19		
10:15		20	18		
10:30		27	13		
10:45		29	12	99	62
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11:15		15	15		
11:30		25	5		
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Total		484	1446		
Percent		25.1%	74.9%		
Grand Total		484	1446		
Percent		25.1%	74.9%		

ADT Not Calculated

TEC Engineering Inc.
161 Northland Blvd. Suite A
Cincinnati, OH 45246

PH: (513) 771-8828 FAX: (513) 771-0707

File Name : KY 18 & Saddle Ridge_AM
Site Code : 12070511
Start Date : 12/7/2005
Page No : 1

Start Time	KY 18 Westbound						Saddle Ridge Rd. Northbound						KY 18 Eastbound					
	App. Total		Thru		Peds		App. Total		Thru		Peds		App. Total		Thru		Peds	
	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
07:00 AM	2	0	0	0	0	0	8	0	0	0	0	0	0	63	1	0	0	0
07:15 AM	0	0	19	0	0	0	1	0	0	0	0	0	0	51	0	0	0	0
07:30 AM	0	1	18	0	0	0	1	0	0	0	0	0	0	39	0	0	0	0
07:45 AM	0	0	24	0	0	0	3	0	0	0	0	0	0	62	0	0	0	0
Total	3	70	70	0	0	0	13	0	0	0	0	0	0	215	1	0	0	0
08:00 AM	0	0	17	0	0	0	3	0	0	0	0	0	0	43	0	0	0	0
08:15 AM	0	0	27	0	0	0	4	0	0	0	0	0	0	27	1	0	0	0
08:30 AM	0	0	21	0	0	0	2	0	0	0	0	0	0	50	0	0	0	0
08:45 AM	0	1	22	0	0	0	1	0	0	0	0	0	0	40	0	0	0	0
Total	1	87	87	0	0	0	10	0	0	0	0	0	0	160	1	0	0	0
Grand Total	0	4	157	0	0	0	23	0	0	0	0	0	0	375	2	0	0	0
Approch %	0.0	2.5	97.5	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	99.5	0.5	0.0	0.0	0.0
Total %	0.0	0.7	28.0	0.0	0.0	0.0	4.1	0.0	0.0	0.0	0.0	0.0	0.0	66.8	0.4	0.0	0.0	0.0
App. Total	0	0	11	0	0	0	8	0	0	0	0	0	0	8	0	0	0	0
Thru	0	0	19	0	0	0	1	0	0	0	0	0	0	51	0	0	0	0
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
App. Total	0	0	19	0	0	0	1	0	0	0	0	0	0	39	0	0	0	0
Thru	0	0	24	0	0	0	3	0	0	0	0	0	0	62	0	0	0	0
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
App. Total	0	3	73	0	0	0	13	0	0	0	0	0	0	13	0	0	0	0
Thru	0	0	17	0	0	0	3	0	0	0	0	0	0	43	0	0	0	0
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	27	1	0	0	0
App. Total	0	0	27	0	0	0	4	0	0	0	0	0	0	28	0	0	0	0
Thru	0	0	21	0	0	0	2	0	0	0	0	0	0	50	0	0	0	0
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	40	0	0	0	0
App. Total	0	1	23	0	0	0	1	0	0	0	0	0	0	40	0	0	0	0
Thru	0	1	87	0	0	0	10	0	0	0	0	0	0	160	1	0	0	0
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
App. Total	0	0	17	0	0	0	3	0	0	0	0	0	0	3	0	0	0	0
Thru	0	0	27	0	0	0	4	0	0	0	0	0	0	27	1	0	0	0
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
App. Total	0	0	21	0	0	0	2	0	0	0	0	0	0	50	0	0	0	0
Thru	0	0	22	0	0	0	1	0	0	0	0	0	0	40	0	0	0	0
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
App. Total	0	1	88	0	0	0	10	0	0	0	0	0	0	10	0	0	0	0
Thru	0	1	157	0	0	0	23	0	0	0	0	0	0	375	2	0	0	0
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
App. Total	0.0	2.5	97.5	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	99.5	0.5	0.0	0.0	0.0
Thru	0.0	0.7	28.0	0.0	0.0	0.0	4.1	0.0	0.0	0.0	0.0	0.0	0.0	66.8	0.4	0.0	0.0	0.0

Start Time	KY 18 Westbound						Saddle Ridge Rd. Northbound						KY 18 Eastbound					
	App. Total		Thru		Peds		App. Total		Thru		Peds		App. Total		Thru		Peds	
	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right
Peak Hour From 07:00 AM to 08:45 AM - Peak 1 of 1	3	70	0	0	0	0	13	0	0	0	0	0	0	215	1	0	0	0
Intersection 07:00 AM	4.1	95.9	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	99.5	0.5	0.0	0.0	0.0
Volume	0	0	0	0	0	0	3	0	0	0	0	0	0	62	0	0	0	0
Percent	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Factor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
High Int. 6:45:00 AM	0	24	0	0	0	0	8	0	0	0	0	0	0	63	1	0	0	0
Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Factor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
App. Total	0	0	73	0	0	0	13	0	0	0	0	0	0	13	0	0	0	0
Thru	0	0	19	0	0	0	1	0	0	0	0	0	0	51	0	0	0	0
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
App. Total	0	0	19	0	0	0	1	0	0	0	0	0	0	39	0	0	0	0
Thru	0	0	24	0	0	0	3	0	0	0	0	0	0	62	0	0	0	0
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
App. Total	0	3	73	0	0	0	13	0	0	0	0	0	0	13	0	0	0	0
Thru	0	0	17	0	0	0	3	0	0	0	0	0	0	43	0	0	0	0
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	27	1	0	0	0
App. Total	0	0	27	0	0	0	4	0	0	0	0	0	0	28	0	0	0	0
Thru	0	0	21	0	0	0	2	0	0	0	0	0	0	50	0	0	0	0
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	40	0	0	0	0
App. Total	0	1	23	0	0	0	1	0	0	0	0	0	0	40	0	0	0	0
Thru	0	1	87	0	0	0	10	0	0	0	0	0	0	160	1	0	0	0
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
App. Total	0	0	17	0	0	0	3	0	0	0	0	0	0	3	0	0	0	0
Thru	0	0	27	0	0	0	4	0	0	0	0	0	0	27	1	0	0	0
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
App. Total	0	0	21	0	0	0	2	0	0	0	0	0	0	50	0	0	0	0
Thru	0	0	22	0	0	0	1	0	0	0	0	0	0	40	0	0	0	0
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
App. Total	0	1	88	0	0	0	10	0	0	0	0	0	0	10	0	0	0	0
Thru	0	4	157	0	0	0	23	0	0	0	0	0	0	375	2	0	0	0
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
App. Total	0.0	2.5	97.5	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	99.5	0.5	0.0	0.0	0.0
Thru	0.0	0.7	28.0	0.0	0.0	0.0	4.1	0.0	0.0	0.0	0.0	0.0	0.0	66.8	0.4	0.0	0.0	0.0

TEC Engineering Inc.
 161 Northland Blvd. Suite A
 Cincinnati, OH 45246
 PH: (513) 771-8828 FAX: (513) 771-0707

File Name : KY 18 & Saddle Ridge_PM
 Site Code : 12060522
 Start Date : 12/6/2005
 Page No : 1

Groups Printed- All Vehicles

Start Time	KY 18 Westbound						Saddle Ridge Rd. Northbound						KY 18 Eastbound						
	Left	Thru	Right	Peds	App. Total	App. Total	Left	Thru	Right	Peds	App. Total	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total	
	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0
04:00 PM	5	43	0	0	48	3	1	0	2	0	3	0	0	40	0	0	0	40	91
04:15 PM	0	45	0	0	45	0	0	0	0	0	0	0	0	36	0	0	0	36	81
04:30 PM	2	49	0	0	51	1	0	1	0	1	2	0	0	31	1	0	0	32	84
04:45 PM	1	41	0	0	42	2	0	2	0	2	4	0	0	20	0	0	0	20	64
Total	8	178	0	0	186	6	1	0	5	0	6	0	0	127	1	0	0	128	320
05:00 PM	1	61	0	0	62	2	0	2	0	2	4	0	0	18	0	0	0	18	82
05:15 PM	4	39	0	0	43	2	0	2	0	2	4	0	0	35	0	0	0	35	80
05:30 PM	3	50	0	0	53	1	0	1	0	1	2	0	0	34	0	0	0	34	88
05:45 PM	1	49	0	0	50	1	0	1	0	1	2	0	0	27	0	0	0	27	78
Total	9	199	0	0	208	6	0	6	0	6	12	0	0	114	0	0	0	114	328
Grand Total	17	377	0	0	394	12	1	0	11	0	12	0	0	241	1	0	0	242	648
Approch %	4.3	95.7	0.0	0.0	60.8	1.9	8.3	0.0	91.7	0.0	1.9	0.0	0.0	99.6	0.4	0.0	0.0	37.3	
Total %	2.6	58.2	0.0	0.0	60.8	1.9	0.2	0.0	1.7	0.0	1.9	0.0	0.0	37.2	0.2	0.0	0.0	37.3	

Start Time	KY 18 Westbound						Saddle Ridge Rd. Northbound						KY 18 Eastbound						
	Left	Thru	Right	Peds	App. Total	App. Total	Left	Thru	Right	Peds	App. Total	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total	
	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0
Peak Hour From 04:00 PM to 05:45 PM - Peak 1 of 1	9	199	0	0	208	6	0	0	6	0	6	0	0	114	0	0	0	114	328
Intersection Volume	4.3	95.7	0.0	0.0	53	1	0.0	0.0	100.0	0.0	1	0.0	0.0	100.0	0.0	0.0	0.0	34	88
05:30 Volume	3	50	0	0	53	1	0	0	1	0	1	0	0	34	0	0	0	34	88
Peak Factor	05:00 PM				05:00 PM		05:00 PM				05:15 PM							0.932	
High Int. Volume	1	61	0	0	62	2	0	0	2	0	2	0	0	35	0	0	0	35	88
Peak Factor	0.839				0.839	0.750	0	0	0	0	0.750	0	0	0.814				0.814	

APPENDIX B
TRIP GENERATION



Single-Family Detached Housing (210)

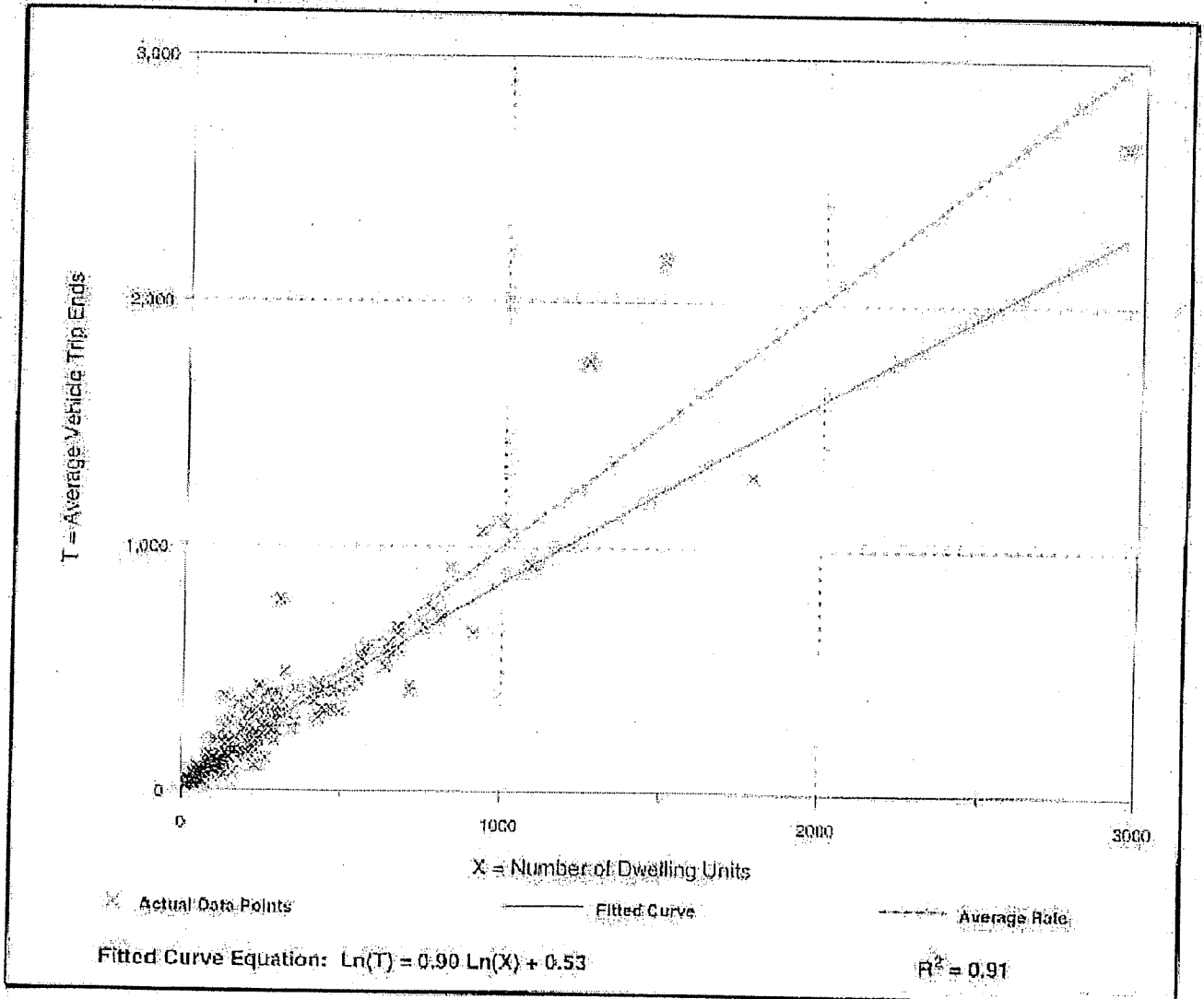
Average Vehicle Trip Ends vs: Dwelling Units
 On a: Weekday,
 Peak Hour of Adjacent Street Traffic,
 One Hour Between 4 and 6 p.m.

Number of Studies: 302
 Avg. Number of Dwelling Units: 214
 Directional Distribution: 63% entering, 37% exiting

Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
1.01	0.42 - 2.98	1.05

Data Plot and Equation



Single-Family Detached Housing (210)

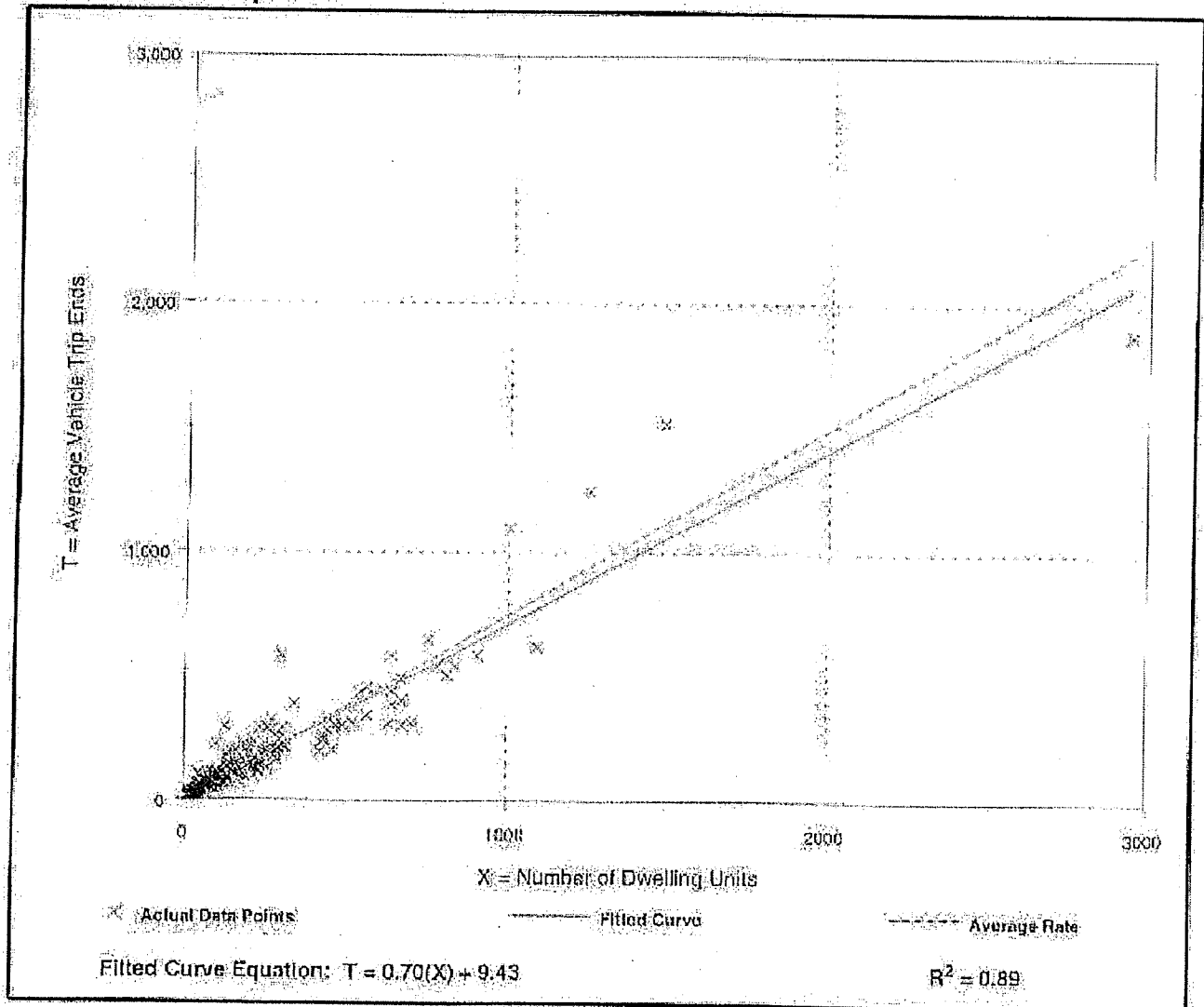
Average Vehicle Trip Ends vs: Dwelling Units
 On a: Weekday,
 Peak Hour of Adjacent Street Traffic,
 One Hour Between 7 and 9 a.m.

Number of Studies: 274
 Avg. Number of Dwelling Units: 201
 Directional Distribution: 25% entering, 75% exiting

Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.75	0.33 - 2.27	0.90

Data Plot and Equation



Single-Family Detached Housing (210)

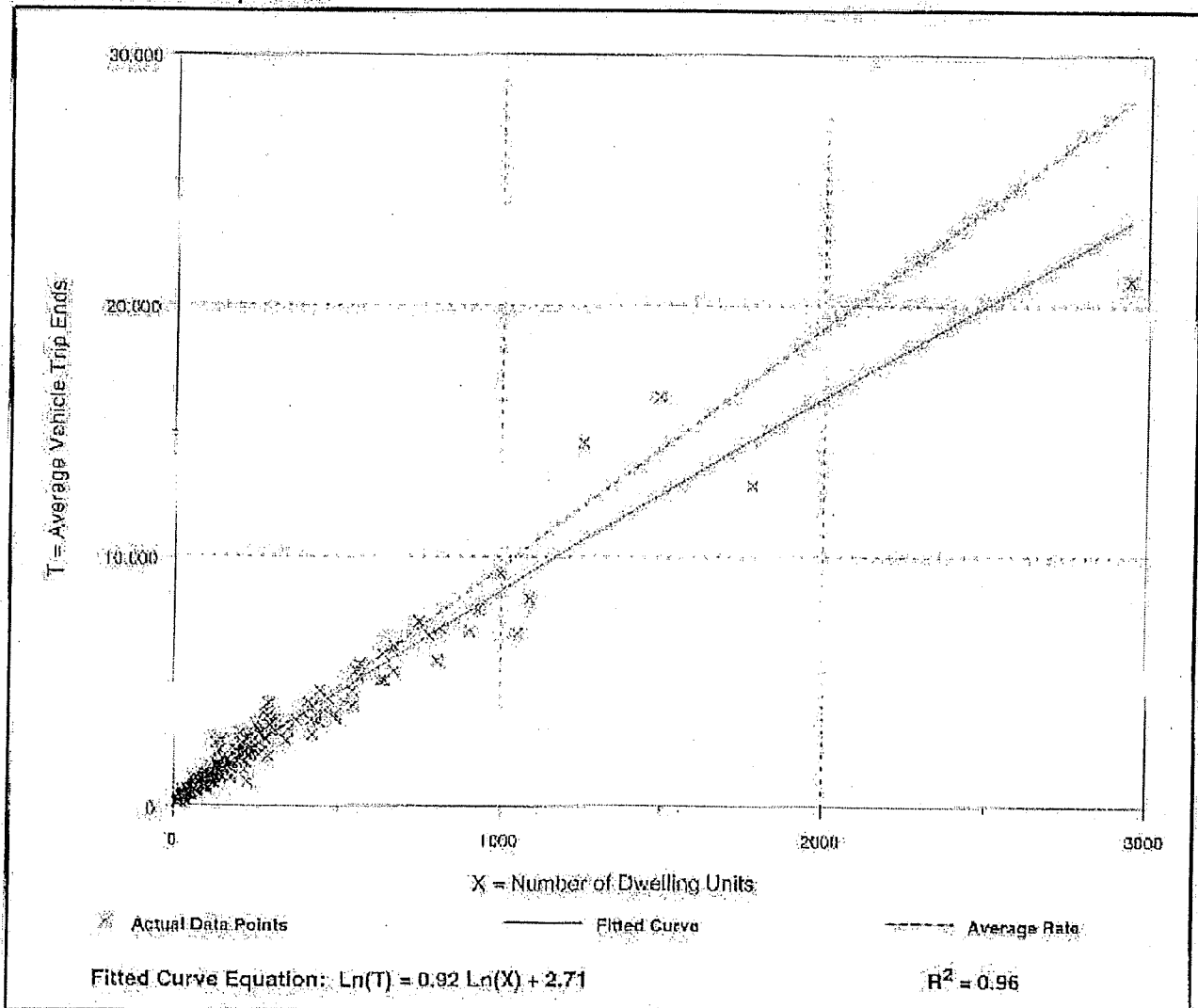
Average Vehicle Trip Ends vs: Dwelling Units
On a: Weekday

Number of Studies: 350
Avg. Number of Dwelling Units: 197
Directional Distribution: 50% entering, 50% exiting

Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
9.57	4.31 - 21.85	3.69

Data Plot and Equation



Land Use: 210

Single-Family Detached Housing

Description

Single-family detached housing includes all single-family detached homes on individual lots. A typical site surveyed is a suburban subdivision.

Additional Data

The number of vehicles and residents have a high correlation with average weekday vehicle trip ends. The use of these variables is limited, however, because the numbers of vehicles and residents was often difficult to obtain or predict. The number of dwelling units is generally used as the independent variable of choice because it is usually readily available, easy to project and has a high correlation with average weekday vehicle trip ends.

This land use included data from a wide variety of units with different sizes, price ranges, locations and ages. Consequently, there was a wide variation in trips generated within this category. As expected, dwelling units that were larger in size, more expensive, or farther away from the central business district (CBD) had a higher rate of trip generation per unit than those smaller in size, less expensive, or closer to the CBD. Other factors, such as geographic location and type of adjacent and nearby development, may also have had an effect on the site trip generation.

Single-family detached units had the highest trip generation rate per dwelling unit of all residential uses, because they were the largest units in size and had more residents and more vehicles per unit than other residential land uses; they were generally located farther away from shopping centers, employment areas and other trip attractors than other residential land uses; and they generally had fewer alternate modes of transportation available, because they were typically not as concentrated as other residential land uses.

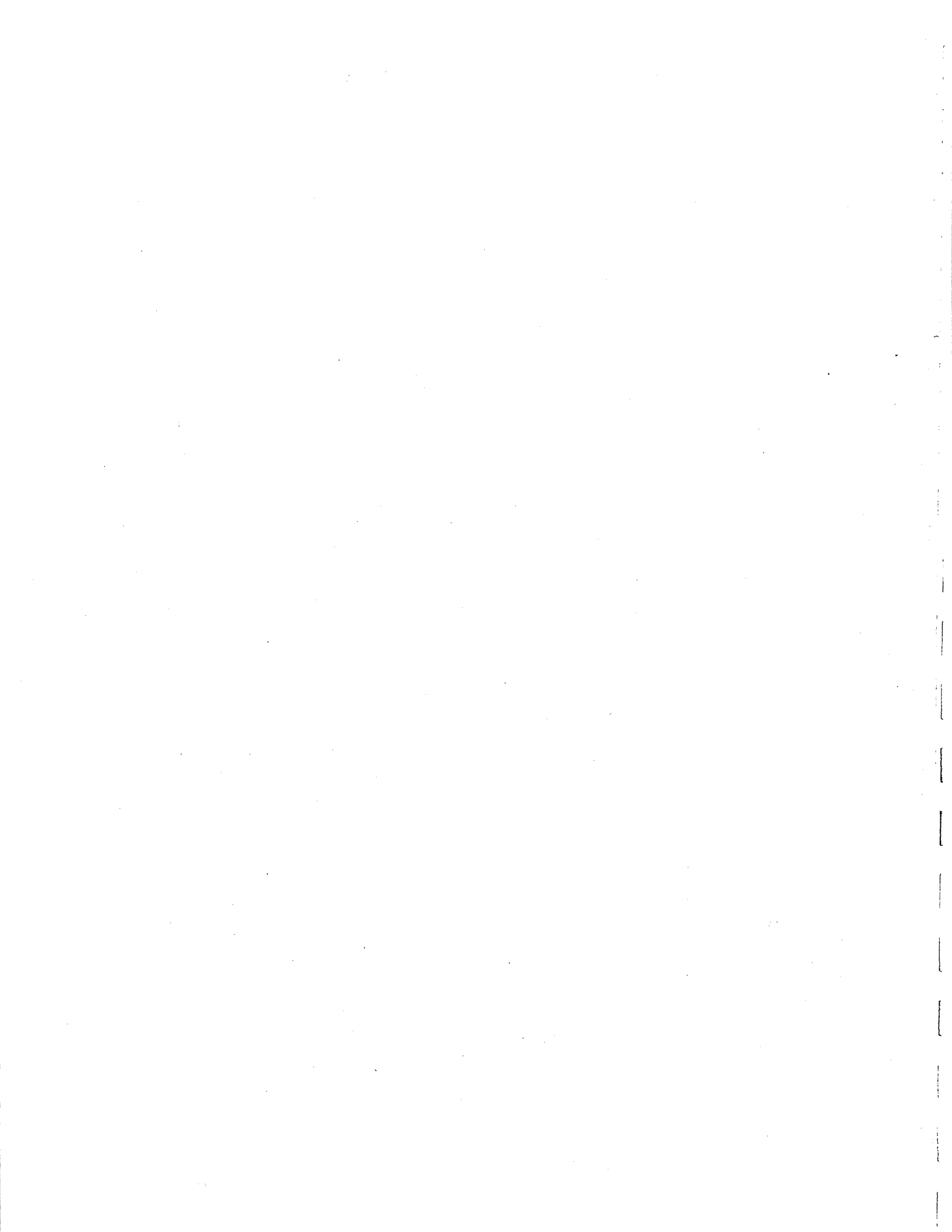
The peak hour of the generator typically coincided with the peak hour of the adjacent street traffic.

The sites were surveyed from the late 1960s to the 2000s throughout the United States and Canada.

Source Numbers

1, 4, 5, 6, 7, 8, 11, 12, 13, 14, 16, 19, 20, 21, 26, 34, 35, 36, 38, 40, 71, 72, 84, 91, 98, 100, 105, 108, 110, 114, 117, 119, 157, 167, 177, 187, 192, 207, 211, 246, 275, 283, 293, 300, 319, 320, 357, 384, 435, 550, 552, 579.

APPENDIX C
WARRANT ANALYSIS
WORKSHEETS



Intersection Signal Warrant Analysis

TEC Engineering, Inc.
161 Northland Blvd.
Cincinnati, Ohio 45246
(513) 771-8828

City/Twp. Boone County,
Location: Burlington Pike & proposed access
Comments: Project Build volumes

Job Number: 05117-002
Count Date: projected
Page number: 1 of 3

Start Time	EB Burlington Pike (major street) HOURLY VOLUME	WB Burlington Pike (major street) HOURLY VOLUME	SB Proposed Access (minor street) HOURLY VOLUME	(minor street) HOURLY VOLUME	Intsect Total
12:00 AM	8	23	4	0	35
1:00 AM	4	10	2	0	16
2:00 AM	5	5	3	0	12
3:00 AM	7	8	1	0	16
4:00 AM	16	7	4	0	27
5:00 AM	63	11	12	0	86
6:00 AM	166	33	54	0	253
7:00 AM	254	123	98	0	475
8:00 AM	190	149	77	0	416
9:00 AM	165	124	45	0	334
10:00 AM	129	148	41	0	318
11:00 AM	154	149	48	0	351
12:00 PM	128	177	46	0	351
1:00 PM	142	183	42	0	367
2:00 PM	135	205	40	0	380
3:00 PM	158	254	50	0	462
4:00 PM	166	303	55	0	524
5:00 PM	155	347	63	0	565
6:00 PM	123	285	65	0	473
7:00 PM	76	181	45	0	302
8:00 PM	48	179	33	0	261
9:00 PM	60	118	24	0	202
10:00 PM	33	87	12	0	133
11:00 PM	22	52	5	0	79

Intersection Data

No. of moving traffic lanes/app. on major st. 1
 No. of moving traffic lanes/app. on minor st. 1
 Number of Intersection approaches: 4
 85th percentile major-street speed (mph): 50
 Rural or Urban area? (R or U) u

Intersection Signal Warrant Analysis

TEC Engineering, Inc.
161 Northland Blvd.
Cincinnati, Ohio 45246
(513) 771-8828

City/Twp. Boone County,
Location: Burlington Pike & proposed access
Comments: Project Build volumes

Job Number: 05117-002
Court Date: projected
Page number: 1 of 3

MUTCD WARRANT ANALYSIS

Warrant 1	
A. Eight-Hour Vehicular Volume	
Major street volume requirement:	350
Minor street volume requirement:	105
Warrant hours required:	8
Warrant hours met:	0
Warrant 1A met?	NO
B. Interruption of Continuous Traffic	
Major street volume requirement:	525
Minor street volume requirement:	53
Warrant hours required:	8
Warrant hours met:	0
Warrant 1B met?	NO
Combinations of Warrants	
Warrant hours required:	8
Warrant hours met:	0
Combination Warrant met?	NO
Warrant 1 met?	NO

Warrant 2 - Four Hour Volumes	
(SEE FOUR HOUR VOLUME WARRANT CURVE)	
Warrant hours required:	4
Warrant hours met:	0
Warrant 2 met?	NO

Warrant 3	
A. Peak Hour Delay	
Total one minor street stopped time delay, warr, veh-hr	4
Total one minor street stopped time delay, veh-hr	0
Peak hour minor street approach warrant, vph	100
Peak hour minor street approach volume, vph	98
Total peak hour intersection vol. warrant, vph	800
Total peak hour intersection volume, vph	475
Warrant 3A met?	NO
B. Peak Hour Volumes	
(SEE PEAK HOUR VOLUME WARRANT CURVE)	
Warrant hours required:	1
Warrant hours met:	0
Warrant 3B met?	NO
Warrant 3 met?	NO

Delay Calculations	
Average stopped delay, s:	0
Average stopped delay, veh-hr:	0
Number of approach vehicles in hour, veh:	98
Total stopped time delay, veh-hr:	0
<i>*See attached capacity analysis</i>	

Warrant 4 - Pedestrian Volumes	
No. of Peak hour pedestrian crossing	0
No. of hours with 100+ pedestrian crossings	0
Warrant 4 met?	NO

Warrant 5 - School Crossing	
Is this signal near or part of a school crossing? (Y/N)	N
Warrant 5 met?	NO

Warrant 6 - Coordinated Signal System	
Is this signal to be used to control progressive movement throughout a system? (Y/N)	N
Warrant 6 met?	NO

Warrant 7 - Crash Experience	
A. Adequate trial of alternatives	
Adequate trial of alternatives with enforcement has failed to reduce crash frequency:	N
B. Crash Experience	
No. of intersection accidents within a one-year period susceptible to correction by a traffic signal:	0
C. 80% Volumes	
Warrant hours required:	8
Warrant hours met:	2
Combination Warrant met?	NO
Warrant 7 met?	NO

Warrant 8 - Roadway Network	
Is this signal to be used to control progressive movement throughout a system? (Y/N)	N
Warrant 8 met?	NO

Intersection Signal Warrant Analysis

TEC Engineering, Inc.
161 Northland Blvd.
Cincinnati, Ohio 45246
(513) 771-8828

City/Twp. Boone County,
Location: Burlington Pike & proposed access
Comments: Project Build volumes

Job Number: 05117-002
Count Date: projected
Page number: 1 of 3

Warrant 1A

maj warrnt	st vol.	(1) min warrnt	(2) min st vol.	hrs met
350	31	105	4	0
350	14	105	2	0
350	10	105	3	0
350	15	105	1	0
350	23	105	4	0
350	74	105	12	0
350	199	105	54	0
350	377	105	98	0
350	339	105	77	0
350	289	105	45	0
350	277	105	41	0
350	303	105	48	0
350	305	105	46	0
350	325	105	42	0
350	340	105	40	0
350	411	105	50	0
350	469	105	55	0
350	502	105	63	0
350	408	105	65	0
350	256	105	45	0
350	228	105	33	0
350	178	105	24	0
350	120	105	12	0
350	74	105	5	0
Warrant hours met				0

Warrant 1B

maj warrnt	st vol.	(1) min warrnt	(2) min st vol.	hrs met
525	31	53	4	0
525	14	53	2	0
525	10	53	3	0
525	15	53	1	0
525	23	53	4	0
525	74	53	12	0
525	199	53	54	0
525	377	53	98	0
525	339	53	77	0
525	289	53	45	0
525	277	53	41	0
525	303	53	48	0
525	305	53	46	0
525	325	53	42	0
525	340	53	40	0
525	411	53	50	0
525	469	53	55	0
525	502	53	63	0
525	408	53	65	0
525	256	53	45	0
525	228	53	33	0
525	178	53	24	0
525	120	53	12	0
525	74	53	5	0
Warrant hours met				0

Combination of Warrants

(1) maj warrnt	(2) maj st vol.	(1) min warrnt	(2) min st vol.	80% wrrt1	80% wrrt2	hrs. met
280	420	84	42	31	4	0
280	420	84	42	14	2	0
280	420	84	42	10	3	0
280	420	84	42	15	1	0
280	420	84	42	23	4	0
280	420	84	42	74	12	0
280	420	84	42	199	54	0
280	420	84	42	377	98	1
280	420	84	42	339	77	0
280	420	84	42	289	45	0
280	420	84	42	277	41	0
280	420	84	42	303	48	0
280	420	84	42	305	46	0
280	420	84	42	325	42	0
280	420	84	42	340	40	0
280	420	84	42	411	50	0
280	420	84	42	469	55	1
280	420	84	42	502	63	1
280	420	84	42	408	65	0
280	420	84	42	256	45	0
280	420	84	42	228	33	0
280	420	84	42	178	24	0
280	420	84	42	120	12	0
280	420	84	42	74	5	0
Warrant hours met						1 2 0

Warrant 3A

major st.	minor st.	hrs.
35	4	0
16	2	0
12	3	0
16	1	0
27	4	0
86	12	0
253	54	0
475	98	475
416	77	0
334	45	0
318	41	0
351	48	0
351	46	0
367	42	0
380	40	0
462	50	0
524	55	0
565	63	0
473	65	0
302	45	0
261	33	0
202	24	0
133	12	0
79	5	0
Pk Hr	98	475

Crash Analysis Part C Warrants

(1) maj warrnt	(2) maj st vol.	(1) min warrnt	(2) min st vol.	80% wrrt1	80% wrrt2	hrs.
280	420	84	42	31	4	0
280	420	84	42	14	2	0
280	420	84	42	10	3	0
280	420	84	42	15	1	0
280	420	84	42	23	4	0
280	420	84	42	74	12	0
280	420	84	42	199	54	0
280	420	84	42	377	98	1
280	420	84	42	339	77	0
280	420	84	42	289	45	0
280	420	84	42	277	41	0
280	420	84	42	303	48	0
280	420	84	42	305	46	0
280	420	84	42	325	42	0
280	420	84	42	340	40	0
280	420	84	42	411	50	0
280	420	84	42	469	55	1
280	420	84	42	502	63	1
280	420	84	42	408	65	0
280	420	84	42	256	45	0
280	420	84	42	228	33	0
280	420	84	42	178	24	0
280	420	84	42	120	12	0
280	420	84	42	74	5	0
Warrant hours met						1 2

Warrant 2 Graph

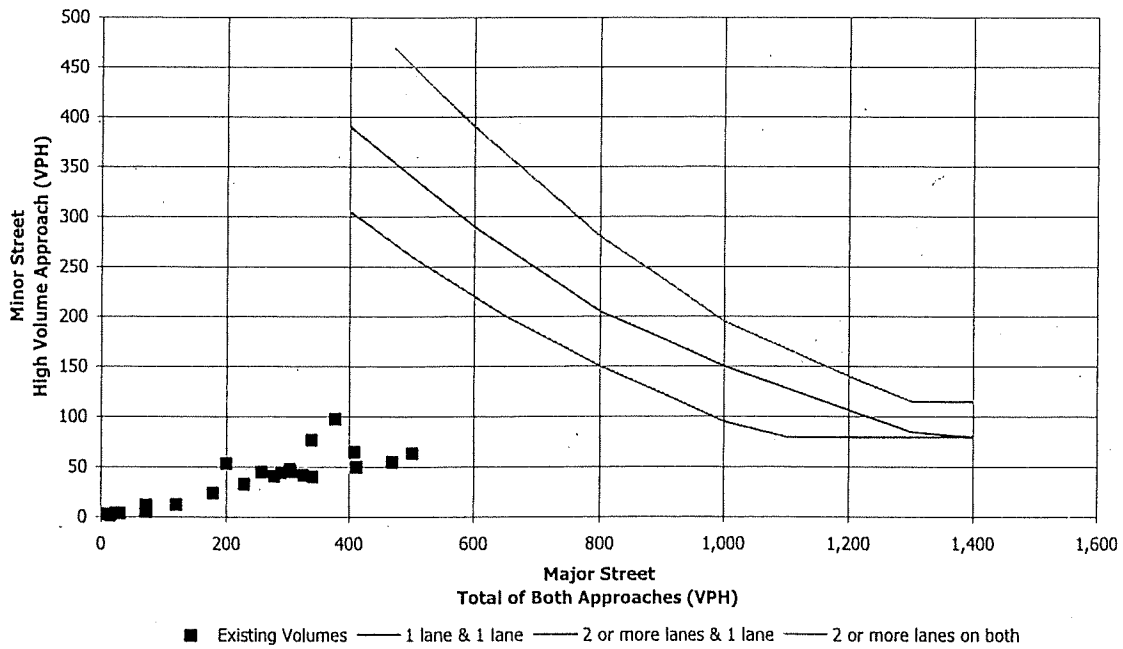
FIGURE A: NORMAL CONDITIONS

The Four Hour Volume Warrant is satisfied when each of any four hours of an average day plotted on a chart for the major street (both directions) and the higher volume of one direction of the minor street all fall above the curve.

The charts below are for the major street and the minor street.

This figure can not be used if the 85th percentile speed of the major street exceeds 40 mph or when the intersection lies within the built-up area of an isolated community having a population less than 10,000.

**Four Hour volume warrant - Major and Minor Streets
for Urban Locations**



Is Four Hour Volume Warrant met? NO

Warrant 2 Graph

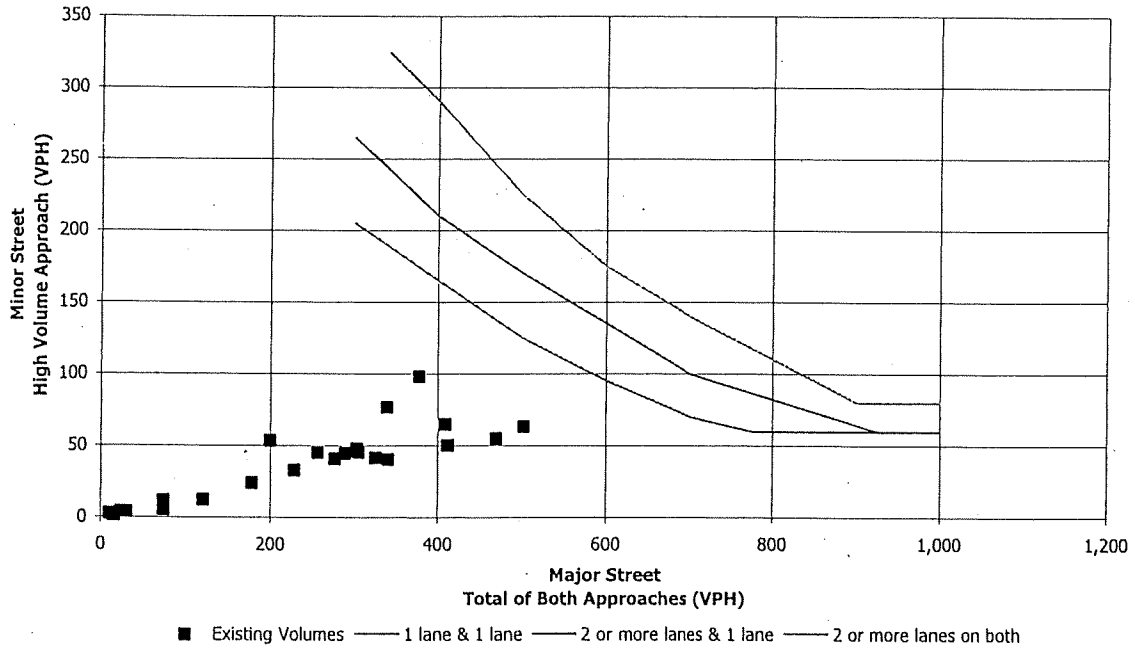
FIGURE B: MAJOR STREET APPROACH SPEED > 40 MPH OR POPULATION < 10,000 FOR A BUILT-UP AREA WITHIN AN ISOLATED COMMUNITY

The Four Hour Volume Warrant is satisfied when each of any four hours of an average day plotted on a chart for the major street (both directions) and the higher volume of one direction of the minor street all fall above the curve.

The charts below are for the major street and the minor street.

This figure must be used if the 85th percentile speed of the major street exceeds 40 mph or when the intersection lies within the built-up area of an isolated community having a population less than 10,000.

**Four Hour volume warrant - Major and Minor Streets
for Rural Locations**



Is Four Hour Volume Warrant met? NO

Warrant 3B Graph

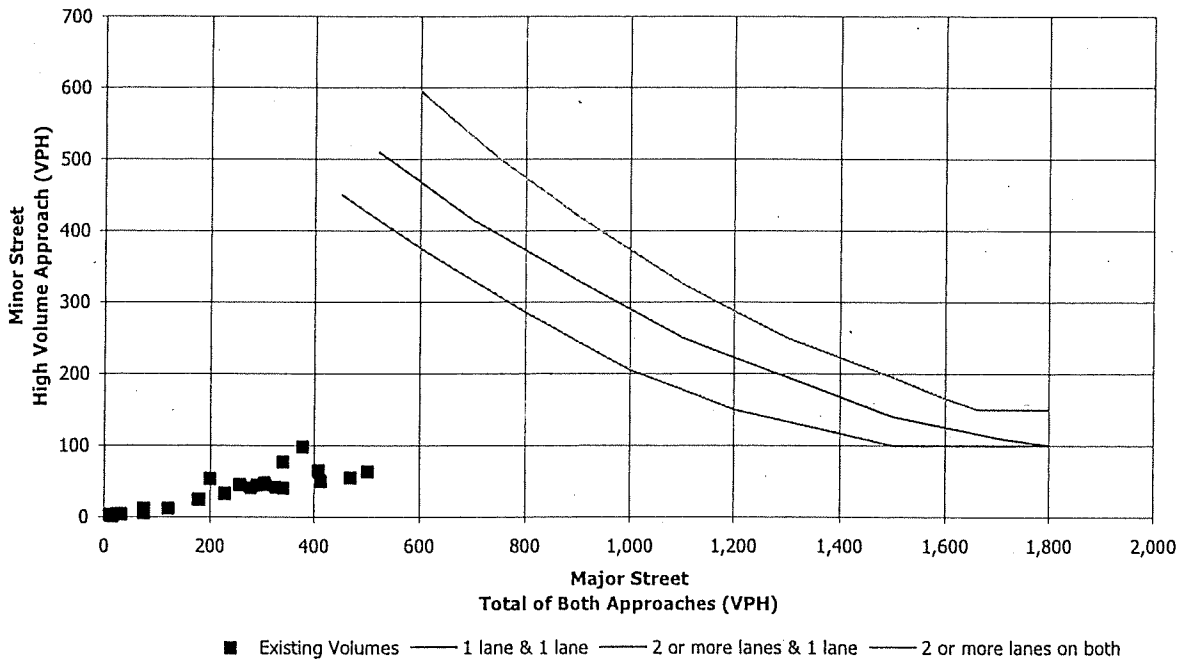
FIGURE A: NORMAL CONDITIONS

The peak hour volume warrant is also intended for application when traffic conditions are such that for one hour of the day minor street traffic suffers undue traffic delay in entering or crossing the main street.

The peak hour volume warrant is satisfied when the plotted point representing vehicles per hour on the higher volume minor street for one hour falls above the curve.

This figure can not be used if the 85th percentile speed of the major street exceeds 40 mph or when the intersection lies within a built-up area of an isolated community having a population less than 10,000.

**Peak Hour volume warrant - Major and Minor Streets
for Urban Locations**



Is Peak Hour Volume Warrant Met? NO

Warrant 3B Graph

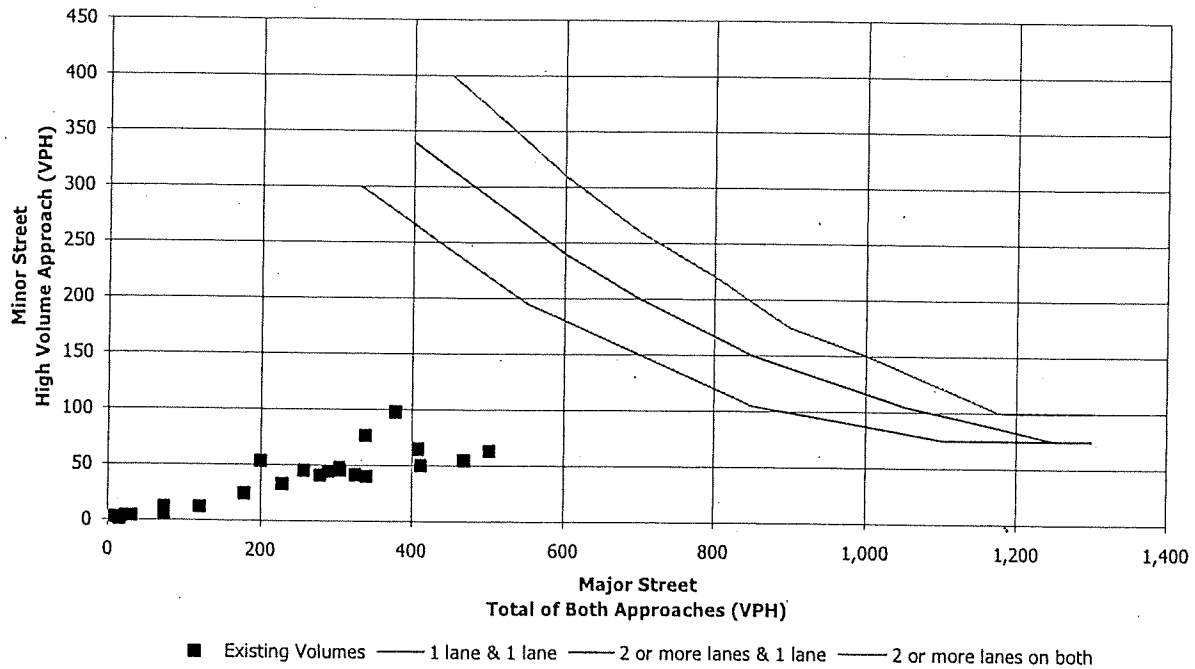
FIGURE B: MAJOR STREET APPROACH SPEED > 40 MPH OR POPULATION < 10,000 FOR A BUILT-UP AREA WITHIN AN ISOLATED COMMUNITY

The peak hour volume warrant is also intended for application when traffic conditions are such that for one hour of the day minor street traffic suffers undue traffic delay in entering or crossing the main street.

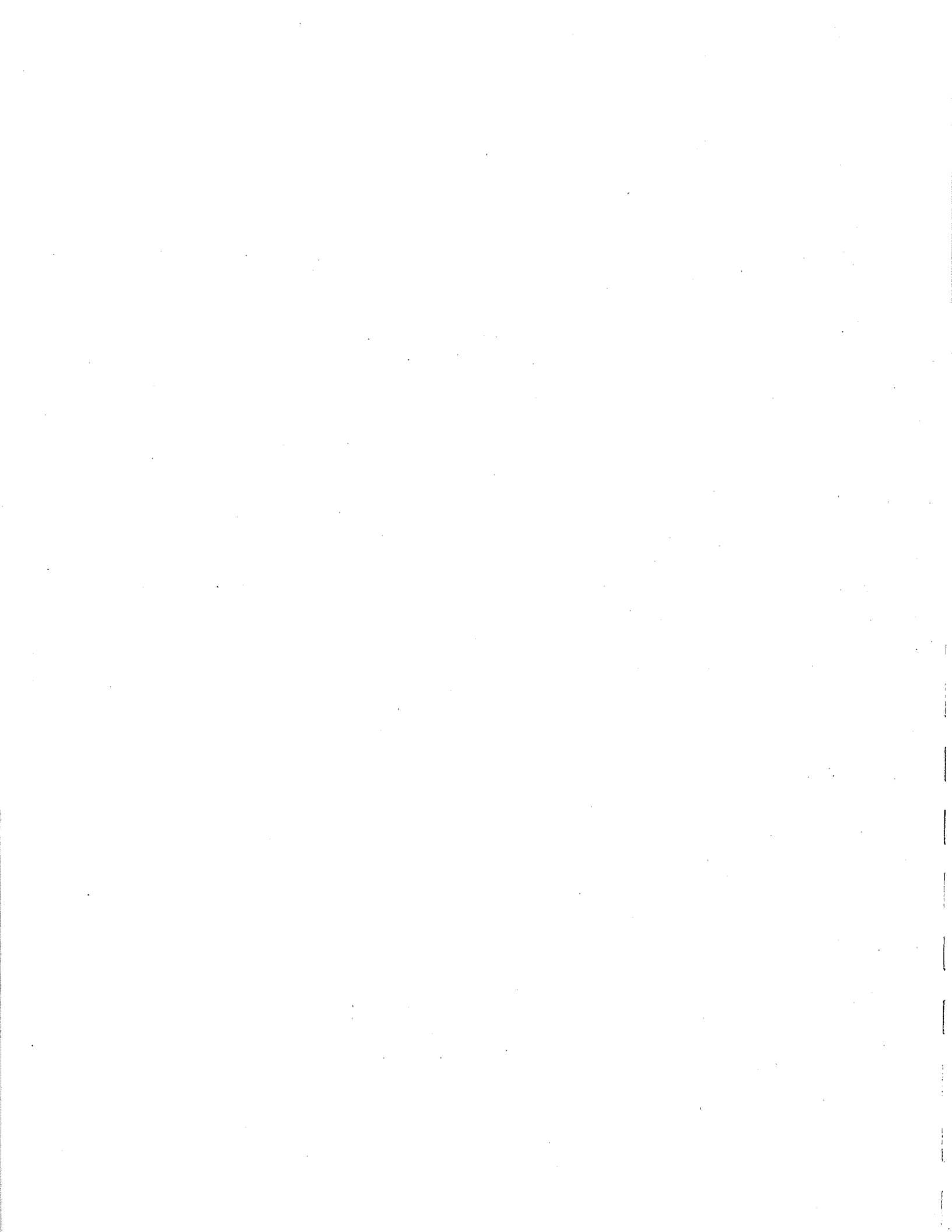
The peak hour volume warrant is satisfied when the plotted point representing vehicles per hour on the higher volume minor street for one hour falls above the curve.

This figure must be used if the 85th percentile speed of the major street exceeds 40 mph or when the intersection lies within a built-up area of an isolated community having a population less than 10,000.

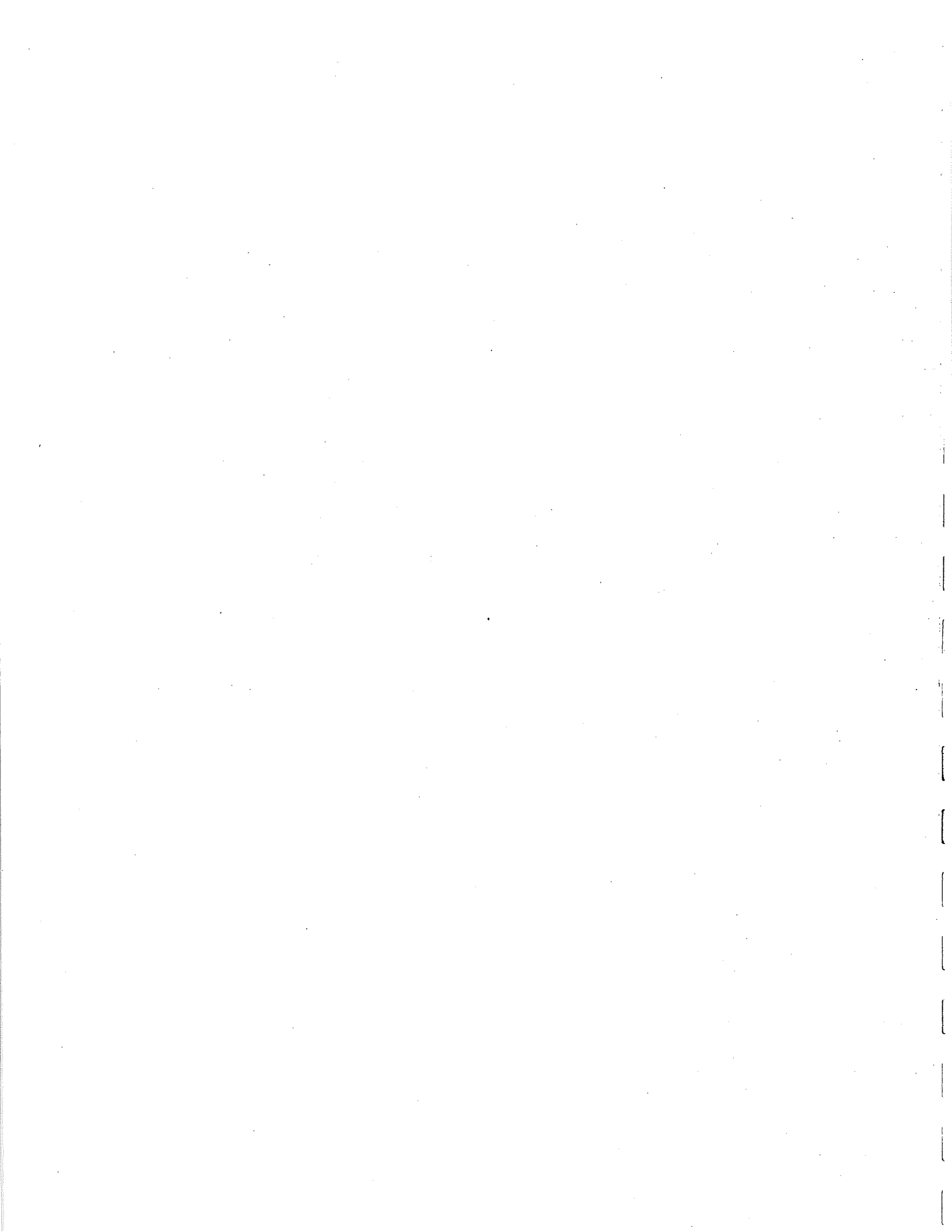
**Peak Hour volume warrant - Major and Minor Streets
for Non-Urban Locations**



Is Peak Hour Volume Warrant Met? NO

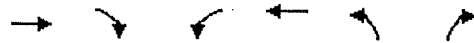


APPENDIX D
SYNCHRO ANALYSIS
WORKSHEETS



HCM Unsignalized Intersection Capacity Analysis
 3: Burlington Pike & Saddle Ridge Dr.

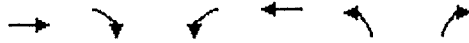
Existing Conditions
 AM Peak



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↩			↩	↩	↩
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	215	1	3	70	0	13
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	234	1	3	76	0	14
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None		
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			235		317	234
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			235		317	234
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	98
cM capacity (veh/h)			1333		675	805
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	235	79	14			
Volume Left	0	3	0			
Volume Right	1	0	14			
cSH	1700	1333	805			
Volume to Capacity	0.14	0.00	0.02			
Queue Length 95th (ft)	0	0	1			
Control Delay (s)	0.0	0.3	9.6			
Lane LOS		A	A			
Approach Delay (s)	0.0	0.3	9.6			
Approach LOS		A				
Intersection Summary						
Average Delay			0.5			
Intersection Capacity Utilization		21.4%		ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis
 3: Burlington Pike & Saddle Ridge Dr.

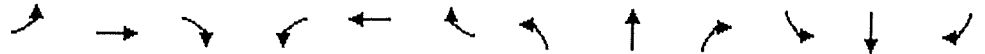
2011 No Build
 AM Peak



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↕		↕		↕	
Sign Control	Free		Free		Stop	
Grade	0%		0%		0%	
Volume (veh/h)	264	1	4	86	0	16
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	287	1	4	93	0	17
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			288		390	288
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			288		390	288
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	98
cM capacity (veh/h)			1274		612	752
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	288	98	17			
Volume Left	0	4	0			
Volume Right	1	0	17			
cSH	1700	1274	752			
Volume to Capacity	0.17	0.00	0.02			
Queue Length 95th (ft)	0	0	2			
Control Delay (s)	0.0	0.4	9.9			
Lane LOS		A	A			
Approach Delay (s)	0.0	0.4	9.9			
Approach LOS			A			
Intersection Summary						
Average Delay			0.5			
Intersection Capacity Utilization			24.0%	ICU Level of Service	A	
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis
 3: Burlington Pike & Proposed Access Drive

2011 Build
 AM Peak



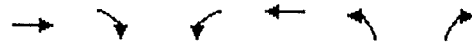
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕	↗		↕		↖	↕	
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	3	264	1	4	86	30	0	0	16	88	0	10
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	3	287	1	4	93	33	0	0	17	96	0	11
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type							None			None		
Median storage veh												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	126			288			407	429	288	414	397	93
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	126			288			407	429	288	414	397	93
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	98	82	100	99
cM capacity (veh/h)	1460			1274			546	516	752	534	538	964

Direction, Lane #	EB 1	WB 1	WB 2	NB 1	SB 1	SB 2
Volume Total	291	98	33	17	96	11
Volume Left	3	4	0	0	96	0
Volume Right	1	0	33	17	0	11
cSH	1460	1274	1700	752	534	964
Volume to Capacity	0.00	0.00	0.02	0.02	0.18	0.01
Queue Length 95th (ft)	0	0	0	2	16	1
Control Delay (s)	0.1	0.4	0.0	9.9	13.2	8.8
Lane LOS	A	A		A	B	A
Approach Delay (s)	0.1	0.3		9.9	12.8	
Approach LOS				A	B	

Intersection Summary		
Average Delay		2.9
Intersection Capacity Utilization	34.6%	ICU Level of Service A
Analysis Period (min)		15

HCM Unsignalized Intersection Capacity Analysis
 3: Burlington Pike & Saddle Ridge Dr.

2021 No Build
 AM Peak



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔		↔		↔	
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	346	2	5	113	0	21
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	376	2	5	123	0	23
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			378		511	377
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			378		511	377
iC, single (s)			4.1		6.4	6.2
iC, 2 stage (s)						
iF (s)			2.2		3.5	3.3
p0 queue free %			100		100	97
cM capacity (veh/h)			1180		520	669

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	378	128	23
Volume Left	0	5	0
Volume Right	2	0	23
cSH	1700	1180	669
Volume to Capacity	0.22	0.00	0.03
Queue Length 95th (ft)	0	0	3
Control Delay (s)	0.0	0.4	10.6
Lane LOS		A	B
Approach Delay (s)	0.0	0.4	10.6
Approach LOS			B

Intersection Summary			
Average Delay		0.5	
Intersection Capacity Utilization	28.3%	ICU Level of Service	A
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis
 3: Burlington Pike & Proposed Access Drive

2021 Build
 AM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↕	↗		↕		↖	↕	
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	3	346	2	5	113	30	0	0	21	88	0	10
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	3	376	2	5	123	33	0	0	23	96	0	11
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	155			378			528	550	377	540	518	123
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	155			378			528	550	377	540	518	123
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	97	78	100	99
cM capacity (veh/h)	1425			1180			453	440	669	435	458	928

Direction, Lane #	EB 1	WB 1	WB 2	NB 1	SB 1	SB 2
Volume Total	382	128	33	23	96	11
Volume Left	3	5	0	0	96	0
Volume Right	2	0	33	23	0	11
cSH	1425	1180	1700	669	435	928
Volume to Capacity	0.00	0.00	0.02	0.03	0.22	0.01
Queue Length 95th (ft)	0	0	0	3	21	1
Control Delay (s)	0.1	0.4	0.0	10.6	15.6	8.9
Lane LOS	A	A		B	C	A
Approach Delay (s)	0.1	0.3		10.6	14.9	
Approach LOS				B	B	

Intersection Summary		
Average Delay		2.8
Intersection Capacity Utilization	38.9%	ICU Level of Service
Analysis Period (min)		15
		A

HCM Unsignalized Intersection Capacity Analysis
 3: Burlington Pike & Proposed Access Drive

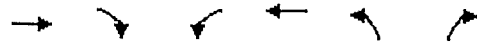
2021 Build - MAX UNITS
 AM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕	↗		↕		↖	↕	
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	12	346	2	5	113	113	0	0	21	338	0	37
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	13	376	2	5	123	123	0	0	23	367	0	40
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	246			378			577	660	377	560	538	123
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	246			378			577	660	377	560	538	123
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			100	100	97	12	100	96
cM capacity (veh/h)	1320			1180			405	378	669	419	443	928
Direction, Lane #	EB 1	WB 1	WB 2	NB 1	SB 1	SB 2						
Volume Total	391	128	123	23	367	40						
Volume Left	13	5	0	0	367	0						
Volume Right	2	0	123	23	0	40						
cSH	1320	1180	1700	669	419	928						
Volume to Capacity	0.01	0.00	0.07	0.03	0.88	0.04						
Queue Length 95th (ft)	1	0	0	3	223	3						
Control Delay (s)	0.4	0.4	0.0	10.6	50.2	9.1						
Lane LOS	A	A		B	F	A						
Approach Delay (s)	0.4	0.2		10.6	46.1							
Approach LOS				B	E							
Intersection Summary												
Average Delay				17.9								
Intersection Capacity Utilization			57.7%		ICU Level of Service					B		
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis
 3: Burlington Pike & Saddle Ridge Dr.

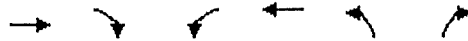
Existing Conditions
 PM Peak



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↖			↗		↘
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	127	1	8	178	1	5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	138	1	9	193	1	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			139		349	139
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			139		349	139
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		100	99
cM capacity (veh/h)			1444		644	910
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	139	202	7			
Volume Left	0	9	1			
Volume Right	1	0	5			
cSH	1700	1444	851			
Volume to Capacity	0.08	0.01	0.01			
Queue Length 95th (ft)	0	0	1			
Control Delay (s)	0.0	0.4	9.3			
Lane LOS		A	A			
Approach Delay (s)	0.0	0.4	9.3			
Approach LOS		A	A			
Intersection Summary						
Average Delay			0.4			
Intersection Capacity Utilization			25.9%	ICU Level of Service	A	
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis
 3: Burlington Pike & Saddle Ridge Dr.

2011 No Build
 PM Peak



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↗		↖		↘	
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	156	1	10	219	1	6
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	170	1	11	238	1	7
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			171		430	170
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			171		430	170
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		100	99
cM capacity (veh/h)			1407		578	874

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	171	249	8
Volume Left	0	11	1
Volume Right	1	0	7
cSH	1700	1407	814
Volume to Capacity	0.10	0.01	0.01
Queue Length 95th (ft)	0	1	1
Control Delay (s)	0.0	0.4	9.5
Lane LOS		A	A
Approach Delay (s)	0.0	0.4	9.5
Approach LOS		A	

Intersection Summary			
Average Delay		0.4	
Intersection Capacity Utilization	29.7%	ICU Level of Service	A
Analysis Period (min)	15		

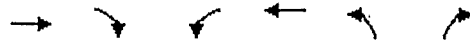
HCM Unsignalized Intersection Capacity Analysis
 3: Burlington Pike & Proposed Access Drive

2011 Build
 PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕	↗		↕		↖	↕	
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	11	156	1	10	219	100	1	0	6	59	0	6
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	12	170	1	11	238	109	1	0	7	64	0	7
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type							None			None		
Median storage veh												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	347			171			460	562	170	460	454	238
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	347			171			460	562	170	460	454	238
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			99			100	100	99	87	100	99
cM capacity (veh/h)	1212			1407			500	428	874	501	493	801
Direction, Lane #	EB 1	WB 1	WB 2	NB 1	SB 1	SB 2						
Volume Total	183	249	109	8	64	7						
Volume Left	12	11	0	1	64	0						
Volume Right	1	0	109	7	0	7						
cSH	1212	1407	1700	790	501	801						
Volume to Capacity	0.01	0.01	0.06	0.01	0.13	0.01						
Queue Length 95th (ft)	1	1	0	1	11	1						
Control Delay (s)	0.6	0.4	0.0	9.6	13.2	9.5						
Lane LOS	A	A		A	B	A						
Approach Delay (s)	0.6	0.3		9.6	12.9							
Approach LOS				A	B							
Intersection Summary												
Average Delay			1.9									
Intersection Capacity Utilization			33.9%		ICU Level of Service				A			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis
 3: Burlington Pike & Saddle Ridge Dr.

2021 No Build
 PM Peak



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔			↕	↔	
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	204	2	13	286	2	8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	222	2	14	311	2	9
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			224		562	223
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			224		562	223
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		100	99
cM capacity (veh/h)			1345		483	817

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	224	325	11
Volume Left	0	14	2
Volume Right	2	0	9
cSH	1700	1345	718
Volume to Capacity	0.13	0.01	0.02
Queue Length 95th (ft)	0	1	1
Control Delay (s)	0.0	0.4	10.1
Lane LOS		A	B
Approach Delay (s)	0.0	0.4	10.1
Approach LOS			B

Intersection Summary			
Average Delay		0.4	
Intersection Capacity Utilization	35.6%	ICU Level of Service	A
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis
3: Burlington Pike & Proposed Access Drive

2021 Build
PM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↕			↕			↕	
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	11	204	2	13	286	100	2	0	8	59	0	6
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	12	222	2	14	311	109	2	0	9	64	0	7
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type												
Median storage (veh)							None			None		
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	420			224			592	695	223	595	587	311
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	420			224			592	695	223	595	587	311
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			99			99	100	99	84	100	99
cM capacity (veh/h)	1140			1345			407	358	817	405	413	729

Direction, Lane #	EB 1	WB 1	WB 2	NB 1	SB 1	SB 2
Volume Total	236	325	109	11	64	7
Volume Left	12	14	0	2	64	0
Volume Right	2	0	109	9	0	7
cSH	1140	1345	1700	680	405	729
Volume to Capacity	0.01	0.01	0.06	0.02	0.16	0.01
Queue Length 95th (ft)	1	1	0	1	14	1
Control Delay (s)	0.5	0.4	0.0	10.4	15.5	10.0
Lane LOS	A	A		B	C	A
Approach Delay (s)	0.5	0.3		10.4	15.0	
Approach LOS				B	C	

Intersection Summary		
Average Delay		1.9
Intersection Capacity Utilization	36.4%	ICU Level of Service
Analysis Period (min)		15
		A

HCM Unsignalized Intersection Capacity Analysis
 3: Burlington Pike & Proposed Access Drive

2021 Build - MAX UNITS
 PM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕	↗		↕		↖	↕	
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	39	204	2	13	286	350	2	0	8	205	0	23
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	42	222	2	14	311	380	2	0	9	223	0	25
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type							None			None		
Median storage veh												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	691			224			672	1027	223	655	648	311
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	691			224			672	1027	223	655	648	311
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	95			99			99	100	99	38	100	97
cM capacity (veh/h)	904			1345			341	221	817	359	367	729
Direction, Lane #	EB 1	WB 1	WB 2	NB 1	SB 1	SB 2						
Volume Total	266	325	380	11	223	25						
Volume Left	42	14	0	2	223	0						
Volume Right	2	0	380	9	0	25						
cSH	904	1345	1700	639	359	729						
Volume to Capacity	0.05	0.01	0.22	0.02	0.62	0.03						
Queue Length 95th (ft)	4	1	0	1	100	3						
Control Delay (s)	1.9	0.4	0.0	10.7	30.2	10.1						
Lane LOS	A	A		B	D	B						
Approach Delay (s)	1.9	0.2		10.7	28.1							
Approach LOS				B	D							
Intersection Summary												
Average Delay			6.3									
Intersection Capacity Utilization		56.8%		ICU Level of Service					B			
Analysis Period (min)			15									

September 20, 2006

To: Boone County Planning Commission

From: Paul and Carol Woods, Saddle Ridge Residents

Subject: Request by One Eleven Developers to change Roslyn
Wachs property from A-2 to SR-1

Regarding the zone change request for the Wachs property on SR 18, we would like to enter the following concerns.

The conditions that prompted the request's being denied have not changed.

1. The sight distance problems for ingress and egress of Saddle Ridge are a constant problem with no planned remedy. Impaired vision causes people to pull out from Saddle Ridge onto SR 18 in an untimely fashion. This is dangerous for eastbound traffic. Oncoming gravel trucks find it difficult to slow down much less stop. To make the necessary quick right turn from Saddle Ridge onto SR 18, both lanes must be clear. It is impossible to make the sharp turn at the speed necessary without using part of the west bound lane.
2. We hope that all members of the Planning Commission make a test drive and negotiate the right hand turn. Please keep in mind the school buses must make turns in both directions.
3. As stated in previous public meetings and numerous letters, the impact of the Arlinghuse development

has not been realized nor evaluated. The Comprehensive Plan provides for yet further development west of Saddle Ridge.

Also, we have questions regarding the two proposed dams.

1. We understand these dams will be a minimum of 20 feet high. Will they be made of tapered earth, concrete or other? Will they be an eyesore?
2. How far off SR 18 will they be? Will they prohibit any hope of widening SR 18?
3. The ponds are shown as part of a green area. If they are filled with water, how will they collect and hold surface water during heavy rains?
4. If they overflow, how will the water affect the ditch on that side of the road? Will it overflow onto SR 18? Will it cause undermining of the road? How will the water affect the driveways of people who live west of these dams?
5. We are assuming pipes will be involved to handle the surface water? Who will maintain this system and keep the pipes free of debris?

Please keep in mind as you consider this development, no plans have been made to widen or straighten SR 18. Land owners have the right to sell their property. However, the people affected have a right to the preservation of life and limb.

Thank you,

Carol Woods
Paul Woods

September 11, 2006

This letter is being read by our son Beau Archambault as my husband and I are unable to attend.

As a concerned Boone county citizen, taxpayer, and adjoining property owner of approximately 43 acres of 40 years; we are apposed to the zone change from A2 to SR by One Eleven Engineering & Surveyancy PLLC, applicant for Roslyn Wacks, Trustee.

Our reasons for opposition are:

- 1) The negative impact on the community with that many homes.
- 2) The loss of the abundance of wild life from the 50 acres (Deer, Birds, Squirrels, etc.)
- 3) The loss of the plant nicknamed "Dog Bain", witch the Native American people use to make rope. The species on that property grows to a large size of 3 to 4 foot tall.
- 4) The loss of the sixty to seventy year old trees that densely populate the entire property. They will be cleared off the 50 acres causing more loss of green space for the county.
- 5) In clearing and grading, the mud and dirt would flow into the Blue Stream along RT18. It has no where else to go but to pollute and over flow the already over stressed stream system. On the back of the property the mud and dirt would potentially flow into our lake and pond.
- 6) Traffic on RT18 is heavy with cars, gravel trucks and school busses going in and out of town. "Saddle Ridge" which is right across from the property is dangerous to get in and out of with the curve on RT18 being right there. This subdivision would put additional burden on the safety of Boone county citizens already traveling RT18. You must also remember that the Arlinghouse subdivision farther down RT18 has not yet started and with the mass number of homes to be built there no one knows the true affect on RT18 that traffic will have. Until RT18 is expanded to a 4 lane highway this request (and ones like it for mass amount of homes) should be denied.
- 7) The submitted plan shows retention ponds right on RT18. How is RT18 going to be expanded to 4 lanes with the stream on the other side of the road? The construction of those ponds and the homes next to them makes widening RT18 impossible.
- 8) The plan of a walk path and green space around the subdivision along our property line creates a "safety hazard" to our horse farm (with nine horses). The path would expose our two acre lake, pond, barns, and house. The path would also make the Boone county fairgrounds visible and therefore accessible to wandering children or adults across our property. A safety hazard and a burden on our police department.
- 9) The plan show one way in and the same way out this is also a safety issue. How about the plan for a playground under the power lines? That is also a safety issue.
- 10) There is an issue of a cemetery being located on the property. Mr. Bitter who was born and raised on an adjoining property remembers there to be one. It needs to be looked into.

We are apposed to the zone change. It needs to remain A2 that is what the comprehensive plan says and it needs to conform to the rural setting and nature of RT18 west of town!

Sincerely
Sue and Arch Archambault

To whom it may concern,

Upon study of the new zone change request, I find nothing new as compared to the last zone change request that was overwhelmingly denied.

Looking at the county's comprehensive plan, items like traffic and water drainage are the same.

I hope that this request be denied until this property will conform to the Boone County Comprehensive Plan.

Thank you
I.A. Archambault

9-20-06

Boone Co. Planning Commission
Burlington Ky



BOONE COUNTY PLANNING COMMISSION
Date: 9/20/06 Public Hearing # / Exhibit # 4

SEP 20 2006

Dear Commissioners

We object to the proposed zone change for the 50.78 acre tract located on the north side of Burlington Pike across from Saddle Ridge Dr.

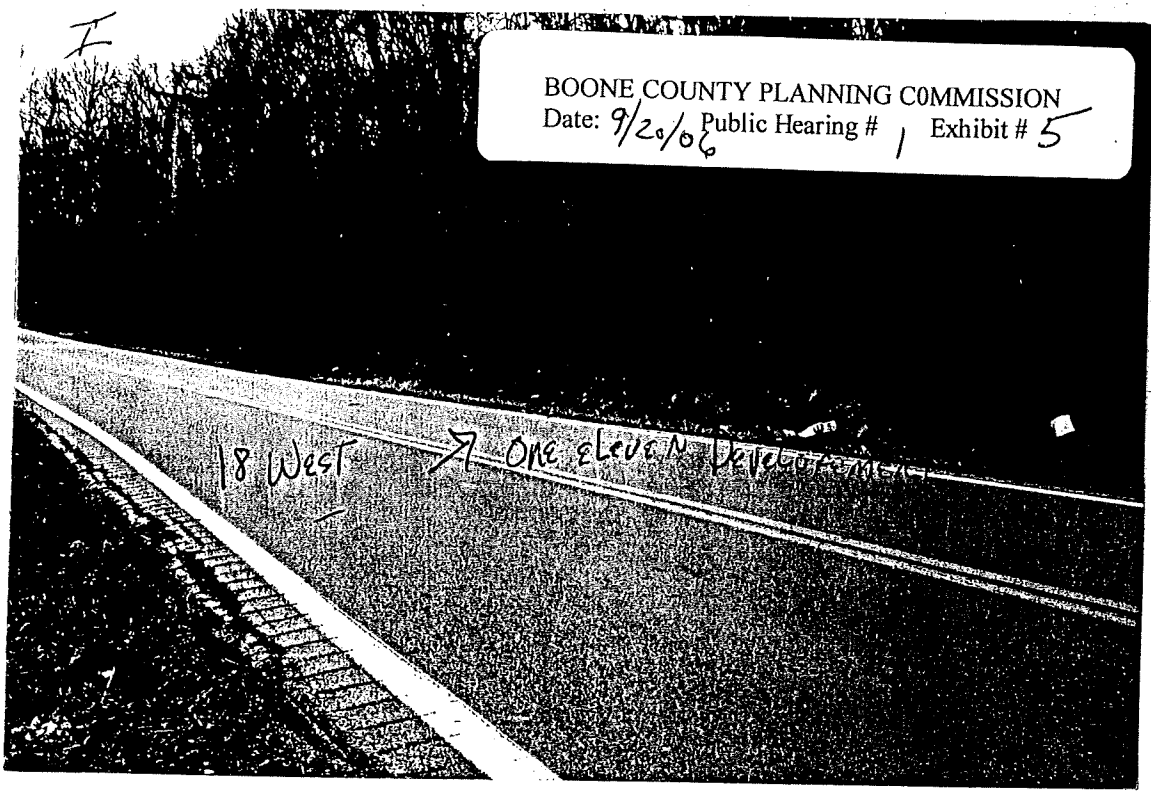
There are numerous lots in several subdivisions west of Burlington that are yet to be sold and built on. When these are started they will add to the traffic problems that presently exist.

Until a plan is made, approved and begun no further zone changes to increase the density of the area should be approved.

Sincerely

Robert E Meyer
Susan C. Meyer

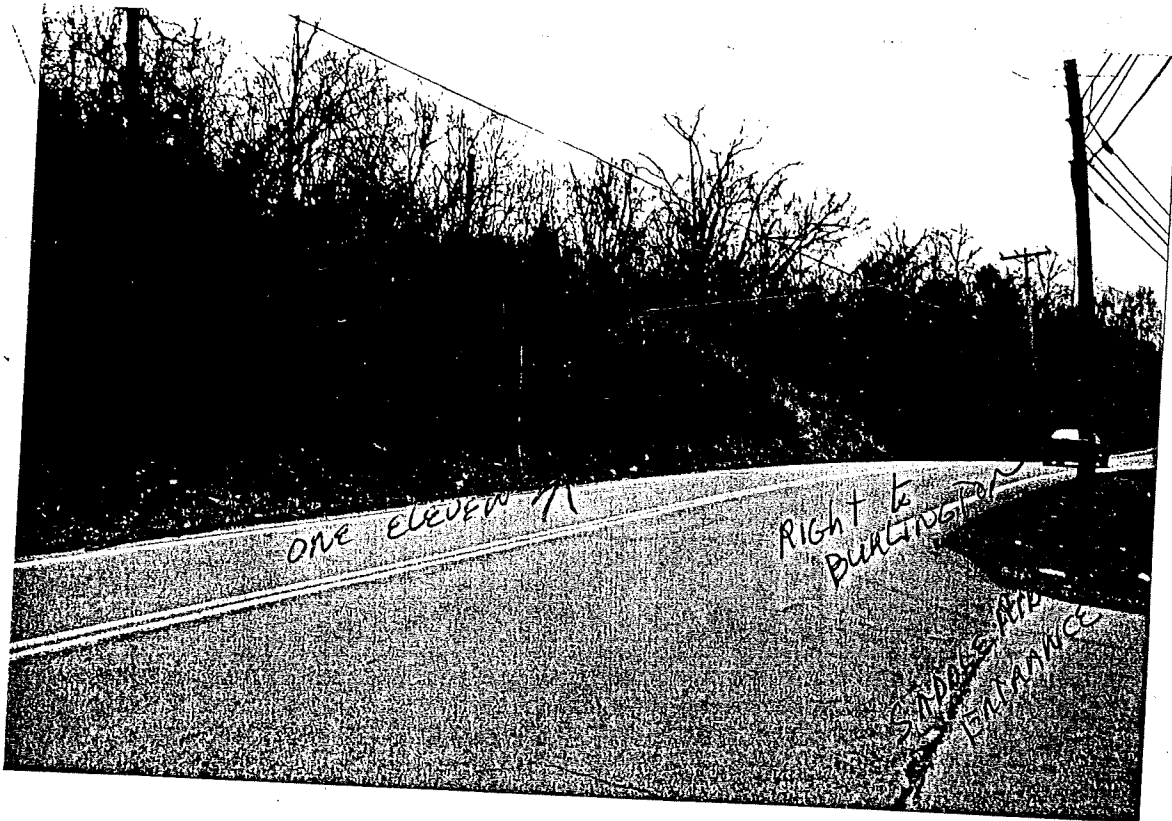
6242 Saddle Ridge Dr
Burlington, Ky 41005





ONE ELEVEN DEVELOPMENT

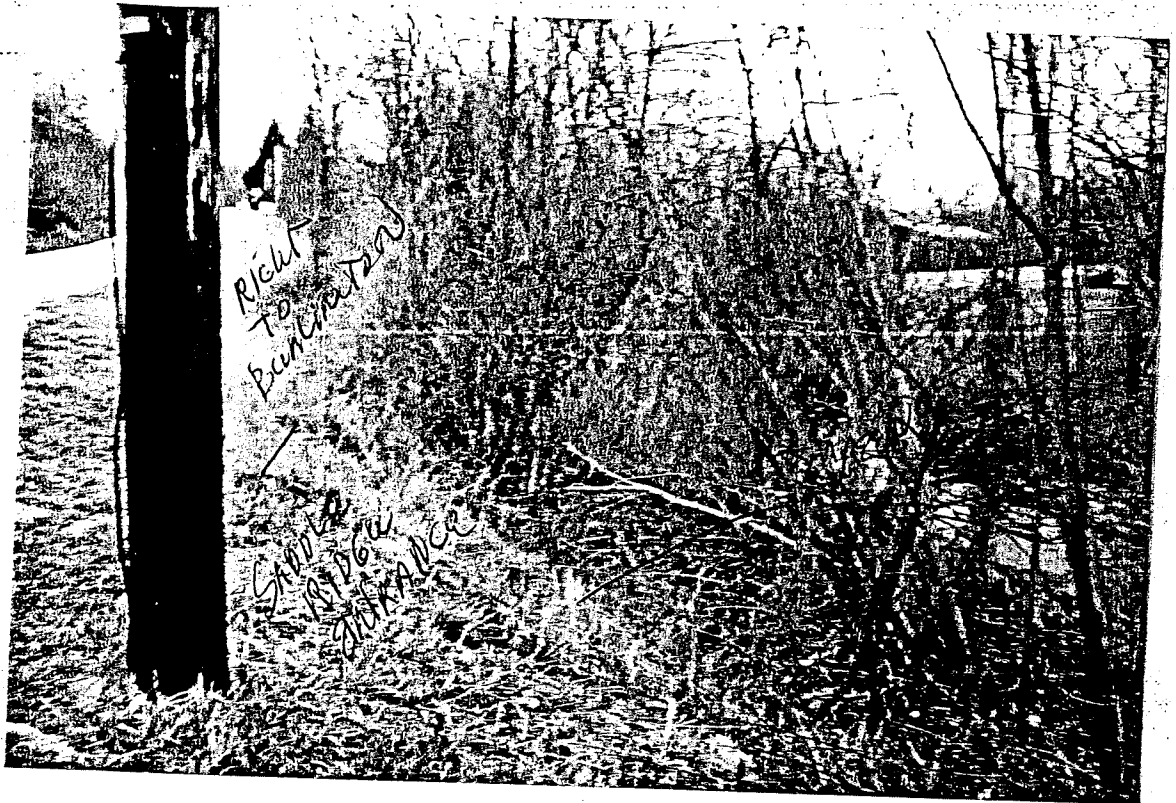
ACROSS FROM SADDLE RIDGE ENTRANCE



ONE ELEVEN

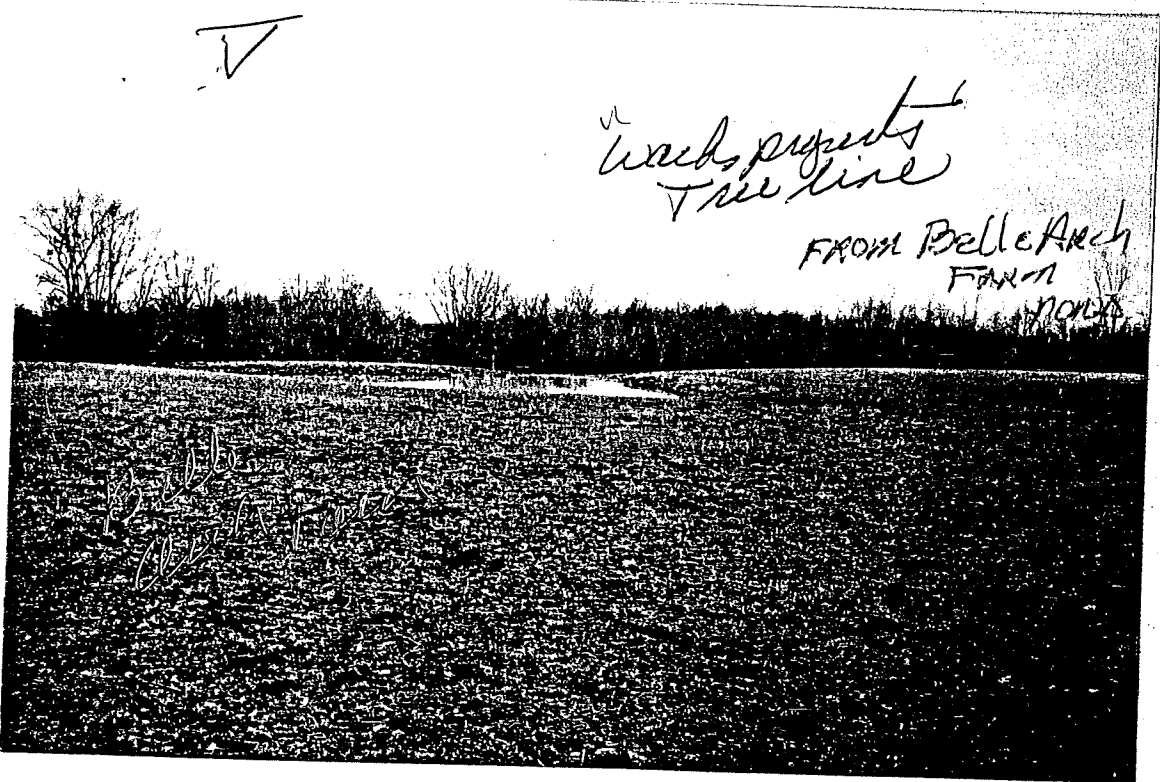
RIGHT to BUILDING

SADDLE RIDGE ENTRANCE



Right to Encroachment

Start in new direction

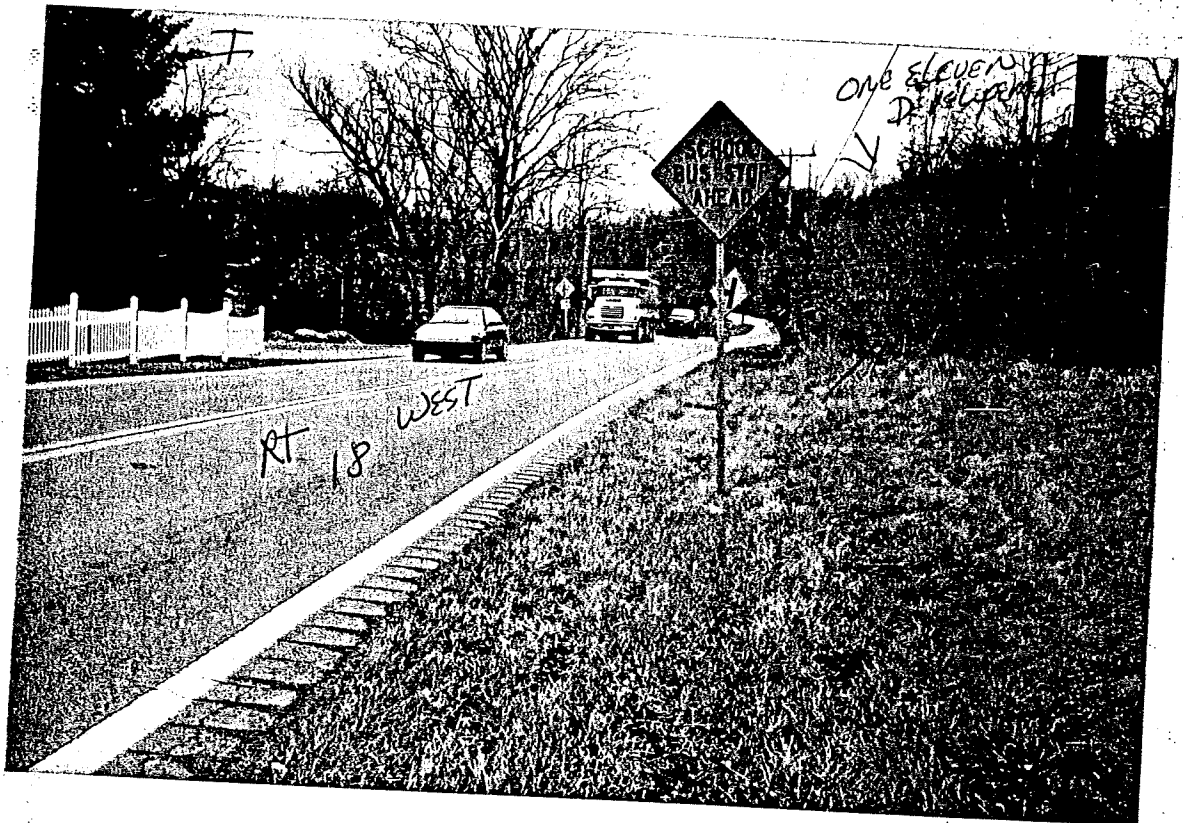


w/wards projects
Tree line

FROM Belle Arch
Farm
NOV 1978

11/28/78
[Signature]





**BOONE COUNTY PLANNING COMMISSION
BOONE COUNTY ADMINISTRATION BUILDING
FIRST FLOOR FISCAL COURTROOM
BUSINESS MEETING
November 15, 2006
7:00 P.M.**

Mr. Arnold Caddell, Chairman, called the meeting to order at 7:02 PM.

COMMISSION MEMBERS PRESENT:

Mr. Randy Barlow
Mr. Greg Breetz
Mr. Arnold Caddell, Chairman
Mr. Jim Carmichael
Mrs. Janet Kegley
Mr. Don McMillian
Mr. Randy Poe
Mr. Charlie Reynolds
Mr. Charlie Rolfsen
Mr. Bob Schwenke

COMMISSION MEMBERS NOT PRESENT:

Mrs. Judy Arnett
Mr. Kim Bunger
Mr. Richard Knock, Temporary Presiding Officer
Mrs. Susan Poston, Vice Chairwoman
Mrs. Lisa Wilson, Secretary/Treasurer

LEGAL COUNSEL PRESENT:

Mr. Dale Wilson

STAFF MEMBERS PRESENT:

Mr. Kevin Costello, AICP, Executive Director
Ms. Jan Hancock, Secretary
Mr. Mitch Light, Assistant Zoning Administrator/ZEO
Mr. Kevin Wall, AICP, CDT – Director, Zoning Services

Approval of the Minutes:

Chairman Caddell stated that the Commissioners received copies of the Minutes of the November 1, 2006 Business Meeting. He asked if there were any comments or corrections. There being no changes to the Minutes, Mr. Breetz moved that they be approved as mailed. Mr. Reynolds seconded the motion and it carried unanimously.

ACTION ON PLAN REVIEWS:

1. **Zoning Map Amendment**

The request of One Eleven Engineering & Surveying, PLLC (applicant) for Roslyn Wachs, Trustee (owner) for a Zoning Map Amendment from Agricultural Estate (A-2) to Rural Suburban (RS), and a Variance for side yard setbacks, for a 50.78 acre tract located on the north side of Burlington Pike, between the properties at 3300 and 3446 Burlington Pike and across from the Burlington Pike/Saddle Ridge Drive intersection, Boone County, Kentucky. The request is for a zone change to allow an open space style subdivision for single-family residences, and a Variance to allow the side yard setbacks to be reduced to 5 feet minimum and 10 feet minimum total for both side yards combined.

Chairman Caddell stated that the vote taken at the Zone Change Committee resulted in a 2 – 2 tie. He read the Planning Commission's procedure to be followed when there is a tie vote from the Committee. He stated that Staff will read both the *Findings of Fact for Denial* and the *Findings of Fact for Approval with Conditions*. The first report read represents the vote of the Committee Chair.

Staff Member Mitch Light stated that the Committee Chair voted in favor of the recommendation for denial. He read the Findings of Fact for Denial of the request (see Findings of Fact for Denial). Mr. Light then read the Findings of Fact for Approval with five conditions (see Findings of Fact for Approval). The property owner and the applicant have signed the letter agreeing to the conditions. He noted a minor change in the wording of condition #5 (see signed Condition Letter). Committee members Mrs. Kegley and Mr. Reynolds voted in favor of approval with conditions, Committee Chairman Mr. Breetz and Committee Member Mrs. Arnett were opposed.

The Chairman asked if the applicant wished to make a summary statement in regard to items raised at the Public Hearing or discussed at the Committee Meeting before the Planning Commission takes action on this request.

Mr. David Wallace, attorney for the applicant, stated that throughout the process one of the big questions has been *what has changed?* He stated that when this request was first submitted for a more dense project without the open space it has now, the Committee voted 3 to 1 that it was in conformance with the Comprehensive Plan – and one of the reports read tonight says it is in conformance with the Comprehensive Plan. He stated that no evidence was submitted at the Public Hearing that the request is not in conformance with the Comprehensive Plan. In regard to what has changed, he stated that: (1) It has become an open space development that preserves the rural character of the project. (2) The existing vegetation along the property boundary lines is being preserved. (3) There is adequate space within the development for the widening of KY 18 to five lanes, and the widening is on the Boone County 12-Year Road Plan -- but not yet within the state plan. (3) There is water and sewer to the project. (4) The biggest complaint was KY 18 at the KY 18/Idlewild Road intersection and the biggest change is that Boone County Fiscal Court made a determination that the intersection will handle the 700-lot Arlinghaus project to the west. The Arlinghaus project is staged at 40 lots the first year and 75 lots per year thereafter – but the project has not started and is currently 115 lots behind, and by the end of the year there will be another 75 lots that have not developed. The developer of this project has agreed to limit development to 25 lots per year and this project will take five to six years to catch up with the Arlinghaus lots for which the infrastructure has been determined to be adequate. That is a major change since the last time this request was before the Planning Commission. (5) Density transition - from Burlington going out KY 18 there are other dense developments before you get to this location and more dense developments to the west. There is density transition when looking at the area as a whole and not just one piece of property. There is transition between the properties by preserving the open space and having it owned by the Homeowners' Association. They have agreed to preserve the green space and existing vegetation. They have reduced the number of lots to 147 and taken out the three lots that would have been visible from KY 18, which was a previous concern in preserving the rural character of the project. He stated that the request is in conformance with the Comprehensive Plan. The Traffic Study was the only evidence presented and shows Level of Service A. He asked for approval of the request.

The Chairman asked if there was anyone present who wished to make a summary statement on behalf of the opposition at this time. He reminded those present that new evidence cannot be introduced and only items discussed at the Public Hearing and the Committee meeting can be addressed. Comments are limited to a total of five minutes.

Ms. Carol Woods, 6251 Saddle Ridge, read and submitted her comments (see Exhibit 1). Ms. Susan Archambault, a property owner to the east, stated that she and her husband have lived on their 42.3-acre property for forty years. She stated that this 50-acre site is green space -- it is a dense woods with trees and an underbrush of berries. The property is at a high elevation on KY 18 and when the root system is disturbed, there will not be a tree standing on the property. They will

have to flatten the rolling hills. She stated that traveling down KY 18 for the next five years that it takes for development, there will be an eyesore – there will be no green space. She stated that the water runoff has nowhere to go but down to KY 18 and to the blueline stream. She stated that the Planning Commission has a responsibility to the existing residents and people on KY 18 for their safety and asked that the request be denied. If the request is approved, they ask for a six-foot chain link fence with three strands of barbed wire the entire length of their property. They have a business farm with horses, a pond and a two-acre lake that are visible, and the Boone County Fairgrounds are visible from the road. She asked that the Zone Change be denied.

At this time, Mr. Breetz moved to approve the Findings of Fact for Denial of the request. Mr. Rolfsen seconded the motion.

Mrs. Kegley, a member of the Committee, stated that she voted for approval of the request at the Committee meeting. She stated that the density is appropriate. There is a similar size subdivision behind this one that wraps around further west. The applicant has protected the neighboring properties with a buffer all the way around the property and on the Archambault side the buffer was increased to 40 feet. On the west side the buffer varies from 70 feet to 120 feet. The buffer area is to remain undisturbed and all of the trees within the buffer area are to remain. Three lots in the front of the property were eliminated that were closer to the road and people will see green space, then the access road, and then houses facing toward KY 18. The houses sit back as far as many of the homes on KY 18 that are on much larger lots zoned Agricultural. The development should look nice from KY 18 and it is protected on all sides. She stated that the schools asked for phasing, which has been done. The Traffic Study submitted by the applicant showed a Level of Service A, the highest level possible, once the additional lane is put in. She stated that the Committee did not have a lot of information about the intersection in Burlington. It is now a four-way stop and she questioned in Committee whether it had been looked at for a traffic signal since it is only a problem in the AM and PM peak hours. It should work fine as a flashing light until peak hours when it could change to a traffic signal which would allow the traffic to move more quickly and Fiscal Court would need to decide if such an improvement would make the grade or not. The other issue is in regard to the connection to the neighborhood in the back. The applicant is willing to make the connection, but she does not know that there is agreement with the developer to the rear. Fiscal Court would need to determine if that is going to take place.

There being no further discussion, the Chairman asked for a vote on the motion made by Mr. Breetz to deny the request. **The roll call vote found Mr. Barlow, Mr. Breetz, Mr. Poe, Mr. Rolfsen, and Chairman Caddell in favor. Mr. Carmichael, Mr. Kegley, Mr. McMillian, Mr. Reynolds, and Mr. Schwenke were opposed. There were 5 votes in favor and 5 votes opposed, resulting in a tie vote.**

Chairman Caddell stated since a vote on the motion to deny was a tie, a motion to approve would also result in a tie vote. **Mrs. Kegley moved to forward the request to Boone County Fiscal Court reflecting that the vote at the Planning Commission was a 5 to 5 tie vote. Mr. Reynolds seconded the motion and it carried unanimously.**

2. Zoning Map Amendment and Concept Development Plan

The request of Anne F. McBride, McBride Dale Clarion (applicant) for Michael A. Conner and Linda H. Conner (owners) for a Zoning Map Amendment from Suburban Residential Two (SR-2) to Commercial Two/Planned Development (C-2/PD) for approximately 15.3 acres of an approximate 24-acre site located on the southwest corner of the KY 20/KY 237 intersection, Boone County, Kentucky; and the request of Anne F. McBride, McBride Dale Clarion (applicant) for Michael A. Conner and Linda H. Conner (owners) for a Concept Development Plan in a Commercial Two/Planned Development (C-2/PD) zone for approximately 8.7 acres of an approximate 24-acre site located on the southwest corner of the KY 20/KY 237 intersection, Boone County, Kentucky. Both applications are to allow a retail/commercial development.

Chairman Caddell stated that Agenda Item #2 is recommended for deferral to the December 6, 2006 Business Meeting at 7:00 PM. Mr. McMillian so moved. Mr. Carmichael seconded the motion and it carried unanimously.

**3. Technical/Design Review - Huntington Bank
6985 Houston Road**

Staff Member Mitch Light presented the Design Review request for Huntington Bank at 6985 Houston Road. He reviewed his memorandum in regard to the square footages of the requested signs compared to the square footages of signs approved for adjacent outlots. The proposed signs are in line with the existing signage in the area. The requested signs meet the height, square footage, style and design requirements for signs located within the lawsuit settlement area. The requested monument sign is 23.91 square feet and a 24 square foot monument sign is permitted. They are allowed two elevations of signage up to 100 square feet each, for a total of 200 square feet. They are asking for less than 125 square feet of signage, but they are asking for signage on three elevations. Directional signs are allowed in the lawsuit settlement area at a maximum of 4 square feet. They are proposing 4 directional signs at 3.95 square feet each. The locations of the proposed signs are shown in the packet.

There being no discussion, **Mr. Schwenke moved to approve the request based on the Committee Report. Mr. Reynolds seconded the motion and it carried unanimously.**

November 15, 2006

To: Boone County Planning Commission

From: Paul and Carol Woods
6251 Saddle Ridge
Burlington, Kentucky

Subject: One Eleven Developers' Request for Zone Change
for the Wach's Property

This request is not in keeping with the Comprehensive Plan. The reasons for denial in February '06 still exist. The transition from one house on two acres to 2.89 houses per acre is an affront. Saddle Ridge residents interests should not be ignored on the basis of septic tanks.

The required major earth moving is threatening. Having two retention ponds without clearly defined location and function is foreboding. Storm water problems from stripped vegetation is inevitable. Cresting of storm water surges over the Saddle Ridge bridge will worsen.

The mock-up for widening SR 18, as presented by the applicant, indicates this development will seriously hamper any improvements and increase the cost.

The residents of Saddle Ridge, SR 18 and those who travel this road will be better served with development that leaves the hill in tact. The Transportation Department will then have the space necessary for proper terracing of land and handling of storm water.

A minimum of 1500 vehicles will ^{be} on the road as the Arlinghaus Subdivision develops. This mix of heavy traffic and speeding gravel trucks is lethal. The six year build out with no improvements on the horizon is a good news -- bad news scenario. The bad news is - you have terminal cancer. The good news is - it will take 6 years to get you.

Carol Woods
Paul Woods

EXHIBIT

“B”

One Eleven Developers, LLC. (applicant) for Roslyn Wachs, Trustee (owner)

FINDINGS OF FACT FOR APPROVAL

November 15, 2006

1. The Committee has concluded that the map amendment request is in agreement with the adopted Comprehensive Plan and its Future Land Use Map. Specifically, the Future Land Use Map designates the site for "Suburban Residential" uses. The Suburban Residential classification is described as "single family housing of up to four units per acre. This classification does not preclude low density or estate residential developed as a formal subdivision." The proposal is for a subdivision for detached, single family residences with an overall density of 2.89 units per acre, which is within the four units per acre residential uses that the Future Land Use Map would allow in the future. The Committee believes that the timing and infrastructure issues have been adequately addressed by the location of the development near the town of Burlington and the road improvements planned by the developer.
2. The Committee has concluded that the applicant has adequately demonstrated that the existing zoning classification of Agricultural Estate (A-2) is inappropriate for a parcel surrounded by existing and planned residential development, and that the proposed zoning classification of Rural Suburban (RS) proposed as an open space style subdivision for single family residences is appropriate given the adjacent land uses and densities.
3. The Committee has concluded that the requested Variance for side yard setbacks to allow the side yard setbacks to be reduced to 5 feet minimum and 10 feet minimum total for both side yards combined fulfill the criteria in Section 251 "Application and Standards for Variances" of the Boone County Zoning Regulations. This Variance does not allow a reduction in the minimum lot size (5,000 square feet), but merely allows the homes to be placed closer together due to the minimum side yard setbacks for an Open Space Residential Subdivision developed in an RS zoning district (5' min. - 20' total). The Committee does not believe that the Variance will have any negative effect on adjoining properties and by allowing the Variance, it creates more Open Space.
4. The Committee has concluded that the following conditions are necessary to achieve consistency with the specific goals, objectives, and policies of the 2005 Boone County Comprehensive Plan. The conditions listed below are necessary to mitigate any foreseeable community impacts that may be created by the development. The property owner has signed a letter demonstrating agreement with these conditions.

CONDITIONS

1. The property owner agrees to further revise the Concept Development Plan reviewed by the Committee at their October 18, 2006 meeting to reflect removing lots 25 & 26 and removing lot 134 so that cul-de-sac can be pulled further north away from KY 18. This reduces the total number of lots from 150 to 147 on the 50.78 acres for an overall intensity of 2.89 dwelling units per acre.
2. The property owner agrees that there will be no more than twenty-five (25) zoning permits issued per calendar year for the proposed development.
3. The property owner will provide two (2) alternatives at the Preliminary Plat and Improvement Plan review stages for the northeast quadrant of the property in the event a connection can be made to the Hidden Creek II Subdivision (Hammer Court).
4. The property owner agrees that there will be no direct vehicular access onto the main subdivision road from any of the adjoining lots.
5. The property owner agrees to keep the overall site grading to a minimum concentrating on the construction of the entrance road, streets and home sites, the construction of the ponds, utilities and walking paths so as to preserve as much of the existing vegetation and natural buffers. Disturbed limits will be clearly shown and noted on the Preliminary and Improvement Plans. The Green Space as outlined on the Concept Development Plan will not be disturbed except where intermittent work for the initial development of the subdivision is required as noted above.

**BOONE COUNTY PLANNING COMMISSION
BOONE COUNTY ADMINISTRATION BUILDING
FIRST FLOOR FISCAL COURTROOM**

September 20, 2006

7:30 P.M.

PUBLIC HEARINGS

Commission Members Present: Mrs. Arnett, Mr. Breetz, Mr. Bunger, Mr. Caddell – Chairman, Mr. Carmichael, Mrs. Kegley, Mr. McMillian, Mr. Poe, Mr. Reynolds, Mr. Rolfsen, and Mrs. Wilson – Secretary/Treasurer.

Staff Members Present: Mr. Kevin Costello, AICP, Executive Director; Ms. Jan Hancock, Secretary; Mr. Mitch Light, Assistant Zoning Administrator/ZEO; and Mr. Todd Morgan, AICP, Senior Planner.

Legal Counsel Present: Mr. Dale Wilson

Mr. Arnold Caddell, Chairman, called the meeting to order at 7:32 PM and introduced the first item on the Agenda:

Applicant: One Eleven Engineering & Surveying, PLLC for Roslyn Wachs, Trustee (owner)

Request: Zoning Map Amendment

The request of One Eleven Engineering & Surveying, PLLC (applicant) for Roslyn Wachs, Trustee (owner) for a Zoning Map Amendment from Agricultural Estate (A-2) to Rural Suburban (RS), and a Variance for side yard setbacks, for a 50.78 acre tract located on the north side of Burlington Pike, between the properties at 3300 and 3446 Burlington Pike and across from the Burlington Pike/Saddle Ridge Drive intersection, Boone County, Kentucky. The request is for a zone change to allow an open space style subdivision for single-family residences, and a Variance to allow the side yard setbacks to be reduced to 5 feet minimum and 10 feet minimum total for both side yards combined.

Staff Member Mitch Light presented the Staff Report which included a Power Point presentation (see Staff Report). He noted two corrections to Page 1 of the Staff Report. In paragraph 2, the proposed density of the subdivision is 2.95

dwelling units per acre (not 3.3) and in Paragraph 4 the cul-de-sac (Hammer Court) has NOT been developed.

Following an explanation of the Public Hearing process, the Chairman asked for the applicant's presentation.

Mr. David Wallace, attorney for the applicant, introduced Mr. Darren Eyre and Mr. Jim Bertram with One Eleven Engineering. He submitted the Traffic Study done in December 2005 (see Exhibit 1). They believe the traffic information is the same today. The Traffic Study is based on more lots in the subdivision than are proposed at this time. The proposed project is 50.78 acres and a total of 150 lots, which is a density of 2.95 acres. There is open space around the edge of the property and within the property that is approximately 15.03 acres, or 29.6% of the total project. There is a potential playground area in the open space. There are walking trails throughout the open space. He noted the main boulevard coming into the project. He indicated the three lots that could potentially have houses with their backs to KY 18 and stated that because of the topography, they do not believe the houses would be visible from KY 18. He stated that the open space will be owned and controlled by the Homeowners' Association and there will be assessments to take care of it. He reviewed the requirements of KRS 100 to approve a map amendment. He stated that it is clear that the proposal is in accord with the Comprehensive Plan. The Future Land Use Map designates this area as Suburban Residential, which is up to four units per acre and this proposal is for 2.95 units per acre. He stated that to the north and west of the site are approved subdivisions and, closer to Burlington, Morgan's Crossing and Noll Creek Subdivision have been approved. The proposed open space design will help to maintain the rural character of the property and the area. He stated that there is only one entrance into the subdivision. There will not be an elaborate entrance sign, in conformance with the Future Land Use Development Guidelines. They will make every attempt to maintain the existing vegetation and trees within the open space areas, which are located throughout the subdivision. In accordance with the Comprehensive Plan, they will maintain as much of the natural trees and vegetation in the highly visible spaces on KY 18 as possible. The plan has adequate buffering along the adjoining property boundaries. He indicated the detention pond. He stated that the Staff Report references the Comprehensive Plan providing a 25-year outlook for land use and that the infrastructure needs to be developed before any development can happen. He stated that zoning map is a five-year outlook. He indicated the adjacent properties zoned SR-1 and areas zoned SR-1 areas closer to Burlington. He stated that the proposed zoning is in more accordance with the current zoning map. He stated that, considering the Future Land Use Map and the current zoning map, which includes properties that adjoin to the north and to the south, and other developments further to the west (Hunter's Ridge), it is apparent that along KY the Planning Commission and Fiscal Court have recognized that there is adequate infrastructure for this type of development. He stated that the Comprehensive Plan speaks to staging and the stepping down of densities in the area west of

Burlington, which is what is happening. He stated that densities should be higher closer to Burlington and step down going west. He noted that Morgan's Crossing is at a density of 2.8, the next subdivision is at 2.9, then Hidden Creek and then further out to lower densities. He stated that the provisions of the Comprehensive Plan in the Staff Report apply more towards areas further west of Burlington where the roads are worse and there are Developmentally Sensitive areas. He stated that their plan has taken into account that the Transportation Plan, which is a 12-year plan, anticipates the widening of KY 18. They left enough room in the open space area to accommodate the proposed expansion of KY 18. The Transportation Plan indicates KY 18 to be a four- or five-lane road. They have taken into consideration that the majority of the road would be on this side of KY 18. If the expansion happens, the road could be straightened and more of the road would then be on the side close to Saddle Ridge, and the creek may be relocated.

Mr. Wallace responded to the Staff Concerns. **Staff Concern 1** He stated that the developers have no problem with making connections to the adjacent properties. No connection was shown on the Concept Development Plan to the Archambault property because the Archambaults are strongly opposed to it. The developer has no problem with the connection into Hidden Creek but, when it was approved by Fiscal Court, no connection was required and it will have to be negotiated before it can happen. He stated that they have no problem with the connection to the adjacent property. **Staff Concern 3** They intend to preserve as many trees and natural vegetation, which is part of the open space plan and one of the benefits of this type of development. **Staff Concern 4** He stated that if there is an issue with the retention ponds, if they can be moved or some of them eliminated and still provide adequate detention for the property, they can address that. **Staff Concern 6** He stated that moving the fire hydrants to every 350 feet is not a problem. **Staff Concern 7** He stated that it is the intention of the applicant to limit the number of approved zoning permits to thirty per year for a minimum of five years and, depending on the market, possibly longer. **Staff Concern 8** The right-turn lane is not shown on the plan, but they agree with it, their Traffic Study recommends it, and they have no problem putting the turn lane in. **Staff Concern 9** He stated that they intend to have stop signs throughout the subdivision and a roundabout in the center that will slow down the traffic somewhat. He stated that he has addressed **Staff Concerns 10 and 11**. He and the developers are available to answer any questions. This concluded the applicant's presentation.

The Chairman asked if there was anyone else present who wished to speak in favor of the request. There being no response, he asked if there was anyone present who wished to speak in opposition.

Mr. Charles Bray, 3300 Burlington Pike (just east of the proposed development), stated that he was amazed to be here again after going through this in March. That request was denied due to the density and lack of infrastructure and now, instead of SR-1, they are trying to change to RS. He stated that nothing has

changed from the facts of the denial in March. The infrastructure is not in place. The road improvements and schools are not appropriated. He stated that they have added some green space, shrunk the houses and put them on top of each other. They have only reduced the development by three houses from 153 to 150. He hopes the Commissioners will review the minutes from the previous meeting and from Fiscal Court. He stated that in 25 years, or maybe ten years, the Comprehensive Plan may support this development, but it does not now. In regard to the surrounding densities, he stated that he has a little over five acres and the people across the street have two-, four- or five-acre lots. He would not be happy with a development at the proposed density.

Mr. Bruce Belknapp, who lives across the street on the corner of Saddle Ridge and KY 18, stated that there are deer, fox, turkey, woodland creatures and wildlife. He did not hear a proposal about what they would do with those creatures. He questioned how they would straighten out the blue line stream. Where they would put it? Through his bedroom? He stated that there have been no comments about the rain and runoff. A lot of water comes through Allen's Fork Creek. There is a lot of water runoff and the water crests just over the Saddle Ridge bridge if it is not maintained properly. There are torrential rapids when there is a lot of rain. He stated that there should be an EPA report that shows that the wildlife will have a place to go. He would like the environment looked at extremely hard.

Ms. Heather Martz, 4050 Shady Hollow Lane, stated that she spoke to Matt Arlinghaus, the engineer for KY 18, and he said that no one has called him and no one has petitioned the state in regard to how this development will affect the road and what changes can be made. She stated that driving through there at certain times of the day is not only frustrating, it is a safety issue. There is one way in and one way out and there will be 1,500 more cars coming through there everyday. She has seen the correspondence that there would be thirteen acres in Hunter's Ridge for the new school, but she was just told by Dave Geohegan that Arlinghaus has decided that he does not want to allocated thirteen acres on that property and wants to put the school on the Hogan property on five acres, which is not enough for a school. She questioned who has control over where the school will be located. There needs to be more concrete information before anything else is approved.

Chairman Caddell stated that the Planning Commission has on file an e-mail from Ed Thompson, District 6 Permit Supervisor, in regard to the Tanglewood Subdivision. He quoted that "We received a request dated August 21 regarding the requested Zone Change for Tanglewood Subdivision on KY 18 in Boone County. I wrote a letter regarding a similar review of the same site that was sent on November 14, 2005 and there seems to be no change from the similar plan, so our response would be the same". The letter is available to the public at the Planning Commission office.

Ms. Carol Woods stated that her concerns are in regard to the retention ponds and green areas. She stated that a pond has to go down into a cavity in the ground, or there has to be a wall. She heard that there is a minimum height of twenty feet for the dams. She stated that taking all that space to make a hole in the ground, the green area will be defunct. She does not know that she would like a concrete wall aesthetically. She does not see a change in the conditions that prompted the Planning Commission and Fiscal Court to recommend the previous denial. Ms. Woods read and submitted her additional comments (see Exhibit 2).

Mr. Costello explained that the terms "green space" and "open space" are often used interchangeably. Open space is defined in the Zoning Code as a land area designated for recreation, resource protection and buffering. Open space is not defined as existing or future road rights-of-way, streets, driveways, parking areas, or buildings.

Mr. Chuck Reed, 6261 Saddle Ridge, stated that they were here in December 2005 to discuss the proposed zone change for the same property and that request was denied for many reasons. He stated that there still have been no improvements at the intersection of KY 18 and East Bend Road. Development west of Burlington has progressed and the area has become even more dangerous than it was last year. Traffic has increased and will continue to increase as more units that are already approved are completed. He stated that the Planning Commission's and Fiscal Court's recommendation stated that "no new development in this area should occur until that intersection is approved". He stated that during that zone change request, there were concerns with the egress to and from Saddle Ridge Drive. He stated that the speed limit is posted at 35 MPH, but it is seldom adhered to and people cannot exit Saddle Ridge Drive and gain enough speed going up the hill to be safe. He sees many close calls each week. They practically have to dive into their street and drive like the Indianapolis 500 to get out of their street during the day. He stated that 12 school children on their street ride the school bus. The bus cannot achieve 35 MPH going up the hill or for a quarter of a mile from Saddle Ridge Drive. His children ride the bus and he fears for their lives everyday when they leave Saddle Ridge Drive. They have seen many accidents occur there. He stated that KY 338/KY 18 have not been improved and are not funded. KY 18 west of Burlington is not improved or funded as recommended in the Comprehensive Plan. He stated that the Traffic Study done by the applicant in 2005 was flawed. One of the sensors failed for 24 hours of its 48-hour period. He stated that the Traffic Study should be done for a seven-day period. He questioned how there could be an accurate reading on Tuesday for what will happen on Saturday. He stated that all of the properties the applicant compared this development to are less dense and were approved prior to the 2005 Comprehensive Plan. He stated that the original proposal was for 153 houses, and they have reduced that by a total of three houses. He stated that we should adhere to the 2005 Comprehensive Plan. He asked that the request be denied until proper improvements are in place.

Mr. Mike Cassedy, 5769 Vice Lane, stated that in Ed Thompson's letter to Mitch Light, Mr. Thompson is not addressing the problems on KY 18, he is just stating that they acknowledge that an entrance can be put in a 35 MPH zoned area. He is not saying that KY 18 is appropriate in its present condition for this development. Mr. Cassedy stated that what is being presented now is basically the same except that there is only one ingress/egress into the development in this proposal. He stated that KY 18 is a landlocked highway. If there are problems on KY 18, anyone beyond this development has two options (1) go down through Woolper Road over to Allen's Fork Road to the interstate, and (2) go down through Belleview bottoms and back up East Bend Road. There is no other means of access to Burlington from western Boone County on KY 18. He has a civil engineering background and has conferred with Professional Engineer Don Renker. He stated that KY 18 is not engineered properly for the traffic that exists on it today. There is inverted banking -- when turning left, the road should bank to the left, but it banks to the right. He stated that there is a gravel industry in Belleview bottoms. He noted the lots per subdivision on Page 9 of the Staff Report. He stated that without this proposed subdivision, 1,150 new units are being built in western Boone County and based on the national average, that is an additional two thousand cars per day that will be using KY 18. There would be 300 additional cars from this development. He stated that with 1.3 students per household, there will be over two thousand additional students in the area and another 150 homes will add another two hundred students. Over two thousand new students would require more than one additional school. There is a rumor that the school facility specified for Hunter's Ridge has been changed. He stated that per the Comprehensive Plan there is supposed to be a school site near the Hogan's farm, but he was under the impression that it was in lieu of the one at Hunter's Ridge. He stated that over 700 homes are going in at Hunter's Ridge, which is 1,200 to 1,400 additional students. He stated that Bryan Blavatt has seen the light and the letter he submitted regarding this development is almost a rubber stamp letter. He stated that at the time Hunter's Ridge was proposed and approved, Bryan Blavatt's initial submittal said that he could not condone that development. He then submitted a second letter to the Planning Commission saying that he could condone it because the Arlinghaus development had promised him that they would provide a future school site.

Mr. Costello stated that the Preliminary Plat approved for Hunter's Ridge shows a school. Unless another application comes in or there is a different proposal from the school district and Mr. Arlinghaus, the staff will follow up on the condition that says a site has to be designated for a school.

Mr. Cassedy stated that there have been a lot of applications for high development on KY 237 and the finding of the Planning Commission and the Fiscal Court is that until there are improvements to KY 237, there cannot be any further development on KY 237 -- and that condition would also be appropriate for KY 18. The state has not appropriated any funds and there is nothing that says there will be major improvements to KY 18. The schools are near or over capacity. He

stated that developers allotting land for a school does not build the school. We have to come up with the money to build the schools. We are already behind and will continue to be behind as long as we have high-density development. He stated that if the proposed development was one or two houses per acre, it would be similar to Saddle Ridge. Putting in high-density development does not do us any good. He stated that just because the Comprehensive Plan says we could do it and the zoning seems appropriate, that does not mean that we have to do it. He stated that the Arlinghaus development has taxed the roads, schools and sewer system. The water has to go somewhere and they may end up with water going into the street. Water and sewage come out of the sewer lid across from the pump station on KY 18. He stated that lower density development would allow the schools, roads and sewers to catch up.

Mr. Beau Archambault was present on behalf of his parents, Sue and Arch Archambault who live at 3218 Burlington Pike. He read and submitted a letter from his parents and a separate letter from his father Arch Archambault (see Exhibit 3).

Mr. Light read and submitted a letter received from Robert and Susan Meyer, 6242 Saddle Ridge Drive (see Exhibit 4).

The Chairman asked if there was anyone else present who wished to speak in regard to this request. There being no response, the Chairman asked if there were any comments or questions from the Commissioners.

Mr. Carmichael noted the comments made that there were 153 homes in the previous application, but the previous plat was for 170 lots. Mr. Costello responded that the previous application was for 170 lots, but the number of lots was reduced to 153 through the Committee process.

Mrs. Kegley stated that for the previous application, the connection through the cul-de-sac (Hammer Court) was important and she wants to emphasize it again. She noted the comments that people cannot get out of KY 18 and, therefore, the connection becomes all the more important. She stated that it would take some negotiations, but it is time to see if something can be done.

Mr. Poe stated that comments have been made this evening about the density, the road connections and KY 18. He would like the Committee to consider that those items have not been addressed since the denial of the first request.

Mr. Rolfsen asked if the two detention ponds can be eliminated if KY 18 is widened. Mr. Jim Bertram responded that they will provide information to the Committee showing that they have provided for a four-lane divided highway through there and can push the ponds back so that the dam will not be affected by the road widening. He stated that they also addressed the issue of preserving trees and open space throughout the development. They took what happened last time

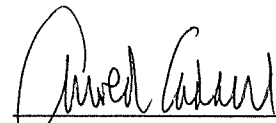
and made changes. They feel that they have addressed a lot of the concerns and are willing to work with the Planning Commission. He stated that they had no objection to the connection last time or this time.

Mr. Reynolds stated that there was concern about the elevation and typography in relation to the ponds. Mr. Bertram responded that the ponds will be placed in the natural ravine. Mr. Reynolds asked if there will be any excavation. Mr. Bertram responded that there will only be excavation to build the dam. Mr. Reynolds questioned the height of the dam. Mr. Bertram will provide that information to the Committee.

Mr. Wallace stated that the applicant had no further comments.

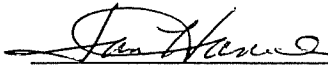
There being no further discussion, the Chairman stated that the Committee Meeting for this item will be on October 4, 2006 at 5:00 PM in this room. This item will be on the Agenda for the Business Meeting on October 18, 2006 at 7:00 PM. The Chairman closed this Public Hearing at 8:47 PM and called for a short recess.

APPROVED:



Arnold Caddell, Chairman

Attest:



Jan Hancock, Recording Secretary

Exhibits –

1. Traffic Impact Study, Tanglewood Subdivision, December 2005 submitted by David Wallace
2. Comments submitted by Carol Woods
3. Letters from Sue and Arch Archambault and from Arch Archambault
4. Letter from Robert and Susan Meyer
5. Pictures of the site, the adjacent properties, and KY 18

ZONE CHANGE/CONCEPT PLAN COMMITTEE VOTE

TO: Boone County Planning Commission

FROM: Greg Breetz, Chairman

DATE: October 18, 2006


RE: Request of **One Eleven Engineering & Surveying, PLLC (applicant)** for **Roslyn Wachs, Trustee (owner)** for a Zoning Map Amendment from Agricultural Estate (A-2) to Rural Suburban (RS), and a Variance for side yard setbacks, for a 50.78 acre tract located on the north side of Burlington Pike, between the properties at 3300 and 3446 Burlington Pike and across from the Burlington Pike/Saddle Ridge Drive intersection, Boone County, Kentucky. The request is for a zone change to allow an open space style subdivision for single family residences, and a Variance to allow the side yard setbacks to be reduced to 5 feet minimum and 10 feet minimum total for both side yards combined.

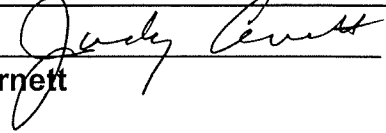
REMARKS:

We, the Committee Members were present at the Committee Meeting and voted on the above request or else were absent from voting. Further, based upon the vote, the Committee directs the Staff to draft the findings of fact and conditions if deemed necessary in order to complete the Committee Report.

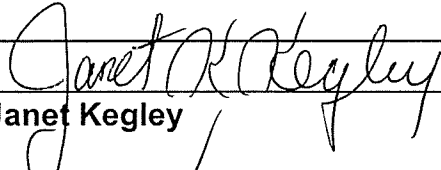
One Eleven Engineering/Wachs

October 18, 2006


Greg Breetz (Chairman)
 For Project ___ Absent ___
 Against Project ___
 Abstain ___ Deferred ___

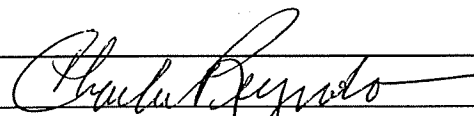

Judy Arnett
 For Project ___ Absent ___
 Against Project ___
 Abstain ___ Deferred ___

Kim Bunger
 For Project ___ Absent ___
 Against Project ___
 Abstain ___ Deferred ___


Janet Kegley
 For Project ___ Absent ___
 Against Project ___
 Abstain ___ Deferred ___

Susan Poston
 For Project ___ Absent ___
 Against Project ___
 Abstain ___ Deferred ___

Jim Carmichael (Alternate)
 For Project ___ Absent ___
 Against Project ___
 Abstain ___ Deferred ___


Charlie Reynolds (Alternate)
 For Project ___ Absent ___
 Against Project ___
 Abstain ___ Deferred ___

Bob Schwenke (Alternate)
 For Project ___ Absent ___
 Against Project ___
 Abstain ___ Deferred ___

Lisa Wilson (Alternate)
 For Project ___ Absent ___
 Against Project ___
 Abstain ___ Deferred ___

TOTAL: ___ DEFERRED 2 FOR PROJECT ___ ABSENT
2 AGAINST PROJECT ___ ABSTAIN

ZONE CHANGE/CONCEPT PLAN COMMITTEE VOTE

TO: Boone County Planning Commission

FROM: Greg Breetz, Chairman

DATE: October 4, 2006

RE: Request of **One Eleven Engineering & Surveying, PLLC (applicant)** for **Roslyn Wachs, Trustee (owner)** for a Zoning Map Amendment from Agricultural Estate (A-2) to Rural Suburban (RS), and a Variance for side yard setbacks, for a 50.78 acre tract located on the north side of Burlington Pike, between the properties at 3300 and 3446 Burlington Pike and across from the Burlington Pike/Saddle Ridge Drive intersection, Boone County, Kentucky. The request is for a zone change to allow an open space style subdivision for single family residences, and a Variance to allow the side yard setbacks to be reduced to 5 feet minimum and 10 feet minimum total for both side yards combined.

REMARKS:

We, the Committee Members were present at the Committee Meeting and voted on the above request or else were absent from voting. Further, based upon the vote, the Committee directs the Staff to draft the findings of fact and conditions if deemed necessary in order to complete the Committee Report.

One Eleven Engineering/Wachs

October 4, 2006

[Signature]

Greg Breetz, Chairman

For Project ____ Absent ____
 Against Project ____
 Abstain ____ Deferred

[Signature]

Judy Arnett

For Project ____ Absent ____
 Against Project ____
 Abstain ____ Deferred

Kim Bunger

For Project ____ Absent
 Against Project ____
 Abstain ____ Deferred ____

[Signature]

Janet Kegley

For Project ____ Absent ____
 Against Project ____
 Abstain Deferred

Susan Poston

For Project ____ Absent ____
 Against Project ____
 Abstain ____ Deferred ____

Jim Carmichael (Alternate)

For Project ____ Absent ____
 Against Project ____
 Abstain ____ Deferred ____

[Signature]

Charlie Reynolds (Alternate)

For Project ____ Absent ____
 Against Project ____
 Abstain ____ Deferred

Bob Schwenke (Alternate)

For Project ____ Absent ____
 Against Project ____
 Abstain ____ Deferred ____

Lisa Wilson (Alternate)

For Project ____ Absent ____
 Against Project ____
 Abstain ____ Deferred ____

TOTAL: 4 DEFERRED ____ FOR PROJECT ____ ABSENT
 ____ AGAINST PROJECT ____ ABSTAIN

One Eleven Developers, LLC. (applicant) for Roslyn Wachs, Trustee (owner)

FINDINGS OF FACT FOR DENIAL

November 15, 2006

1. The map amendment request may appear to be in agreement with the adopted Comprehensive Plan and its Future Land Use Map. However, the Comprehensive Plan is a 25 year projection and existing infrastructure can not support this development at this time. The Land Use Element is very clear regarding the 25 year planning horizon and that the Comprehensive Plan is required to be updated every five years. The intent is to manage the location and timing of the various types of development, to assure adequate and fiscally responsible provision of infrastructure and public services in order to assure that adjoining land uses are compatible, and to assure that negative impacts to the environment are minimized. Specifically, the text states "As this area develops and anticipated school facilities are built, improvements to KY 18 will be needed, such as shoulders, reconstructed curves, improved sight distances, and sufficient intersection improvements in Burlington at KY 18 and KY 338. Suburban Residential Land Uses depicted on the 2030 Future Land Use Map in this area should not be developed until these conditions on KY 18 are improved, and adequate school capacity can be provided in the area. The next Comprehensive Plan update can be used as a tool to evaluate the progress made regarding infrastructure provision." At this time, there is no commitment from the State to fund these road improvements on the six-year plan.
2. The Applicant has not demonstrated that the existing zoning classification of A-2 is inappropriate. The site could readily support development under the existing zoning of A-2, which is consistent with the adjoining development across KY 18, and would enable the existing woodlands and site features on the site to be utilized in a development. Development under the A-2 zoning district would respect the rural character of the corridor. Neither has the applicant demonstrated that the requested zoning of RS proposed as an open space style subdivision for single family residences is appropriate by addressing the need for a density transition in this area. Increasing some lot sizes and providing Open Space of questionable applicability do not constitute remedies for the density proposed. The site is not close enough to the central town area of Burlington to warrant a higher density adjacent to existing low density development.
3. The Applicant has not specifically demonstrated that the proposed zoning classification is in agreement with the 2005 Boone County Comprehensive Plan as stated at the September 20, 2006 Public Hearing. The Land Use Element on pages 150 & 151 clearly indicates that sections of Boone County, especially those served by one major roadway, are to be planned and developed hand in hand with necessary infrastructure. The KY 18 corridor, west of the town of Burlington is one such area where the Plan recommends careful development. This was examined in detail during the 2005 Boone County Comprehensive Plan update, particularly the Land Use Element. Since some development is already under construction to the

west which was approved under a different Comprehensive Plan, the impacts are yet to be known in light of the fact that there are no funded road improvements or school facilities for the corridor. The 2005 Boone County Comprehensive Plan update recognized findings and facts presented during the update process that the level of existing and approved development in this corridor exceeds the adequacy of the road and school infrastructure unless improvements are made to improve capacity on KY 18 or at schools serving the site.

4. The Committee has not identified any facts which would lead to a finding that there have been major changes of an economic, physical, or social nature not anticipated in the adopted comprehensive plan that substantially alter the area's character nor has the Applicant provided any such facts. Other Zoning Map Amendments in the area took place before the 2005 Boone County Comprehensive Plan update.
5. The Committee and the applicant have agreed to a number of conditions which should be applied to the development, should it be approved. These conditions are necessary to mitigate foreseeable impacts that may be created by the development. These conditions are outlined in the Findings of Fact for Approval which recommends conditional approval of this application. However, this application should be denied, regardless of the potential conditions, because none of the three statutory criteria of KRS 100.213 have been met. The applicant has worked with the Zone Change Committee during the zoning map amendment process in some respects to alter the proposed development design, however, the resulting Concept Development Plan still does not address issues of density and lot size adequately with adjoining subdivisions as described in the September 20, 2006 Staff Report, and road connections to adjacent development.
6. Although the applicant has proposed turning lane improvements to KY 18, these improvements serve to improve access to the development, but do little to address traffic safety concerns along KY 18. This proposed development would add another leg to an existing 3-way intersection where sight distance and reaction time have been a concern. The added decisions that have to be made by a motorist at this location can be expected to make the margin of error smaller. The applicant's traffic impact study has not sufficiently addressed the reaction time and similar issues associated with traffic speed, gravel truck numbers, gravel truck stopping distance, and the mixing of school bus turning movements with the significant truck traffic at this location.

BOONE COUNTY PLANNING COMMISSION
BOONE COUNTY ADMINISTRATION BUILDING
FIRST FLOOR FISCAL COURTROOM

September 20, 2006
7:30 P.M.

PUBLIC HEARINGS

Commission Members Present: Mrs. Arnett, Mr. Breetz, Mr. Bungler, Mr. Caddell – Chairman, Mr. Carmichael, Mrs. Kegley, Mr. McMillian, Mr. Poe, Mr. Reynolds, Mr. Rolfsen, and Mrs. Wilson – Secretary/Treasurer.

Staff Members Present: Mr. Kevin Costello, AICP, Executive Director; Ms. Jan Hancock, Secretary; Mr. Mitch Light, Assistant Zoning Administrator/ZEO; and Mr. Todd Morgan, AICP, Senior Planner.

Legal Counsel Present: Mr. Dale Wilson

Mr. Arnold Caddell, Chairman, called the meeting to order at 7:32 PM and introduced the first item on the Agenda:

Applicant: One Eleven Engineering & Surveying, PLLC for Roslyn Wachs, Trustee (owner)

Request: Zoning Map Amendment

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dwelling units per acre (not 3.3) and in Paragraph 4 the cul-de-sac (Hammer Court) has NOT been developed.

Following an explanation of the Public Hearing process, the Chairman asked for the applicant's presentation.

Mr. David Wallace, attorney for the applicant, introduced Mr. Darren Eyre and Mr. Jim Bertram with One Eleven Engineering. He submitted the Traffic Study done in December 2005 (see Exhibit 1). They believe the traffic information is the same today. The Traffic Study is based on more lots in the subdivision than are proposed at this time. The proposed project is 50.78 acres and a total of 150 lots, which is a density of 2.95 acres. There is open space around the edge of the property and within the property that is approximately 15.03 acres, or 29.6% of the total project. There is a potential playground area in the open space. There are walking trails throughout the open space. He noted the main boulevard coming into the project. He indicated the three lots that could potentially have houses with their backs to KY 18 and stated that because of the topography, they do not believe the houses would be visible from KY 18. He stated that the open space will be owned and controlled by the Homeowners' Association and there will be assessments to take care of it. He reviewed the requirements of KRS 100 to approve a map amendment. He stated that it is clear that the proposal is in accord with the Comprehensive Plan. The Future Land Use Map designates this area as Suburban Residential, which is up to four units per acre and this proposal is for 2.95 units per acre. He stated that to the north and west of the site are approved subdivisions and, closer to Burlington, Morgan's Crossing and Noll Creek Subdivision have been approved. The proposed open space design will help to maintain the rural character of the property and the area. He stated that there is only one entrance into the subdivision. There will not be an elaborate entrance sign, in conformance with the Future Land Use Development Guidelines. They will make every attempt to maintain the existing vegetation and trees within the open space areas, which are located throughout the subdivision. In accordance with the Comprehensive Plan, they will maintain as much of the natural trees and vegetation in the highly visible spaces on KY 18 as possible. The plan has adequate buffering along the adjoining property boundaries. He indicated the detention pond. He stated that the Staff Report references the Comprehensive Plan providing a 25-year outlook for land use and that the infrastructure needs to be developed before any development can happen. He stated that zoning map is a five-year outlook. He indicated the adjacent properties zoned SR-1 and areas zoned SR-1 areas closer to Burlington. He stated that the proposed zoning is in more accordance with the current zoning map. He stated that, considering the Future Land Use Map and the current zoning map, which includes properties that adjoin to the north and to the south, and other developments further to the west (Hunter's Ridge), it is apparent that along KY the Planning Commission and Fiscal Court have recognized that there is adequate infrastructure for this type of development. He stated that the Comprehensive Plan speaks to staging and the stepping down of densities in the area west of

Burlington, which is what is happening. He stated that densities should be higher closer to Burlington and step down going west. He noted that Morgan's Crossing is at a density of 2.8, the next subdivision is at 2.9, then Hidden Creek and then further out to lower densities. He stated that the provisions of the Comprehensive Plan in the Staff Report apply more towards areas further west of Burlington where the roads are worse and there are Developmentally Sensitive areas. He stated that their plan has taken into account that the Transportation Plan, which is a 12-year plan, anticipates the widening of KY 18. They left enough room in the open space area to accommodate the proposed expansion of KY 18. The Transportation Plan indicates KY 18 to be a four- or five-lane road. They have taken into consideration that the majority of the road would be on this side of KY 18. If the expansion happens, the road could be straightened and more of the road would then be on the side close to Saddle Ridge, and the creek may be relocated.

Mr. Wallace responded to the Staff Concerns. **Staff Concern 1** He stated that the developers have no problem with making connections to the adjacent properties. No connection was shown on the Concept Development Plan to the Archambault property because the Archambaults are strongly opposed to it. The developer has no problem with the connection into Hidden Creek but, when it was approved by Fiscal Court, no connection was required and it will have to be negotiated before it can happen. He stated that they have no problem with the connection to the adjacent property. **Staff Concern 3** They intend to preserve as many trees and natural vegetation, which is part of the open space plan and one of the benefits of this type of development. **Staff Concern 4** He stated that if there is an issue with the retention ponds, if they can be moved or some of them eliminated and still provide adequate detention for the property, they can address that. **Staff Concern 6** He stated that moving the fire hydrants to every 350 feet is not a problem. **Staff Concern 7** He stated that it is the intention of the applicant to limit the number of approved zoning permits to thirty per year for a minimum of five years and, depending on the market, possibly longer. **Staff Concern 8** The right-turn lane is not shown on the plan, but they agree with it, their Traffic Study recommends it, and they have no problem putting the turn lane in. **Staff Concern 9** He stated that they intend to have stop signs throughout the subdivision and a roundabout in the center that will slow down the traffic somewhat. He stated that he has addressed **Staff Concerns 10 and 11**. He and the developers are available to answer any questions. This concluded the applicant's presentation.

The Chairman asked if there was anyone else present who wished to speak in favor of the request. There being no response, he asked if there was anyone present who wished to speak in opposition.

Mr. Charles Bray, 3300 Burlington Pike (just east of the proposed development), stated that he was amazed to be here again after going through this in March. That request was denied due to the density and lack of infrastructure and now, instead of SR-1, they are trying to change to RS. He stated that nothing has

changed from the facts of the denial in March. The infrastructure is not in place. The road improvements and schools are not appropriated. He stated that they have added some green space, shrunk the houses and put them on top of each other. They have only reduced the development by three houses from 153 to 150. He hopes the Commissioners will review the minutes from the previous meeting and from Fiscal Court. He stated that in 25 years, or maybe ten years, the Comprehensive Plan may support this development, but it does not now. In regard to the surrounding densities, he stated that he has a little over five acres and the people across the street have two-, four- or five-acre lots. He would not be happy with a development at the proposed density.

Mr. Bruce Belknap, who lives across the street on the corner of Saddle Ridge and KY 18, stated that there are deer, fox, turkey, woodland creatures and wildlife. He did not hear a proposal about what they would do with those creatures. He questioned how they would straighten out the blue line stream. Where they would put it? Through his bedroom? He stated that there have been no comments about the rain and runoff. A lot of water comes through Allen's Fork Creek. There is a lot of water runoff and the water crests just over the Saddle Ridge bridge if it is not maintained properly. There are torrential rapids when there is a lot of rain. He stated that there should be an EPA report that shows that the wildlife will have a place to go. He would like the environment looked at extremely hard.

Ms. Heather Martz, 4050 Shady Hollow Lane, stated that she spoke to Matt Arlinghaus, the engineer for KY 18, and he said that no one has called him and no one has petitioned the state in regard to how this development will affect the road and what changes can be made. She stated that driving through there at certain times of the day is not only frustrating, it is a safety issue. There is one way in and one way out and there will be 1,500 more cars coming through there everyday. She has seen the correspondence that there would be thirteen acres in Hunter's Ridge for the new school, but she was just told by Dave Geohegan that Arlinghaus has decided that he does not want to allocated thirteen acres on that property and wants to put the school on the Hogan property on five acres, which is not enough for a school. She questioned who has control over where the school will be located. There needs to be more concrete information before anything else is approved.

Chairman Caddell stated that the Planning Commission has on file an e-mail from Ed Thompson, District 6 Permit Supervisor, in regard to the Tanglewood Subdivision. He quoted that "We received a request dated August 21 regarding the requested Zone Change for Tanglewood Subdivision on KY 18 in Boone County. I wrote a letter regarding a similar review of the same site that was sent on November 14, 2005 and there seems to be no change from the similar plan, so our response would be the same". The letter is available to the public at the Planning Commission office.

Ms. Carol Woods stated that her concerns are in regard to the retention ponds and green areas. She stated that a pond has to go down into a cavity in the ground, or there has to be a wall. She heard that there is a minimum height of twenty feet for the dams. She stated that taking all that space to make a hole in the ground, the green area will be defunct. She does not know that she would like a concrete wall aesthetically. She does not see a change in the conditions that prompted the Planning Commission and Fiscal Court to recommend the previous denial. Ms. Woods read and submitted her additional comments (see Exhibit 2).

Mr. Costello explained that the terms "green space" and "open space" are often used interchangeably. Open space is defined in the Zoning Code as a land area designated for recreation, resource protection and buffering. Open space is not defined as existing or future road rights-of-way, streets, driveways, parking areas, or buildings.

Mr. Chuck Reed, 6261 Saddle Ridge, stated that they were here in December 2005 to discuss the proposed zone change for the same property and that request was denied for many reasons. He stated that there still have been no improvements at the intersection of KY 18 and East Bend Road. Development west of Burlington has progressed and the area has become even more dangerous than it was last year. Traffic has increased and will continue to increase as more units that are already approved are completed. He stated that the Planning Commission's and Fiscal Court's recommendation stated that "no new development in this area should occur until that intersection is approved". He stated that during that zone change request, there were concerns with the egress to and from Saddle Ridge Drive. He stated that the speed limit is posted at 35 MPH, but it is seldom adhered to and people cannot exit Saddle Ridge Drive and gain enough speed going up the hill to be safe. He sees many close calls each week. They practically have to dive into their street and drive like the Indianapolis 500 to get out of their street during the day. He stated that 12 school children on their street ride the school bus. The bus cannot achieve 35 MPH going up the hill or for a quarter of a mile from Saddle Ridge Drive. His children ride the bus and he fears for their lives everyday when they leave Saddle Ridge Drive. They have seen many accidents occur there. He stated that KY 338/KY 18 have not been improved and are not funded. KY 18 west of Burlington is not improved or funded as recommended in the Comprehensive Plan. He stated that the Traffic Study done by the applicant in 2005 was flawed. One of the sensors failed for 24 hours of its 48-hour period. He stated that the Traffic Study should be done for a seven-day period. He questioned how there could be an accurate reading on Tuesday for what will happen on Saturday. He stated that all of the properties the applicant compared this development to are less dense and were approved prior to the 2005 Comprehensive Plan. He stated that the original proposal was for 153 houses, and they have reduced that by a total of three houses. He stated that we should adhere to the 2005 Comprehensive Plan. He asked that the request be denied until proper improvements are in place.

Mr. Mike Cassedy, 5769 Vice Lane, stated that in Ed Thompson's letter to Mitch Light, Mr. Thompson is not addressing the problems on KY 18, he is just stating that they acknowledge that an entrance can be put in a 35 MPH zoned area. He is not saying that KY 18 is appropriate in its present condition for this development. Mr. Cassedy stated that what is being presented now is basically the same except that there is only one ingress/egress into the development in this proposal. He stated that KY 18 is a landlocked highway. If there are problems on KY 18, anyone beyond this development has two options (1) go down through Woolper Road over to Allen's Fork Road to the interstate, and (2) go down through Belleview bottoms and back up East Bend Road. There is no other means of access to Burlington from western Boone County on KY 18. He has a civil engineering background and has conferred with Professional Engineer Don Renker. He stated that KY 18 is not engineered properly for the traffic that exists on it today. There is inverted banking -- when turning left, the road should bank to the left, but it banks to the right. He stated that there is a gravel industry in Belleview bottoms. He noted the lots per subdivision on Page 9 of the Staff Report. He stated that without this proposed subdivision, 1,150 new units are being built in western Boone County and based on the national average, that is an additional two thousand cars per day that will be using KY 18. There would be 300 additional cars from this development. He stated that with 1.3 students per household, there will be over two thousand additional students in the area and another 150 homes will add another two hundred students. Over two thousand new students would require more than one additional school. There is a rumor that the school facility specified for Hunter's Ridge has been changed. He stated that per the Comprehensive Plan there is supposed to be a school site near the Hogan's farm, but he was under the impression that it was in lieu of the one at Hunter's Ridge. He stated that over 700 homes are going in at Hunter's Ridge, which is 1,200 to 1,400 additional students. He stated that Bryan Blavatt has seen the light and the letter he submitted regarding this development is almost a rubber stamp letter. He stated that at the time Hunter's Ridge was proposed and approved, Bryan Blavatt's initial submittal said that he could not condone that development. He then submitted a second letter to the Planning Commission saying that he could condone it because the Arlinghaus development had promised him that they would provide a future school site.

Mr. Costello stated that the Preliminary Plat approved for Hunter's Ridge shows a school. Unless another application comes in or there is a different proposal from the school district and Mr. Arlinghaus, the staff will follow up on the condition that says a site has to be designated for a school.

Mr. Cassedy stated that there have been a lot of applications for high development on KY 237 and the finding of the Planning Commission and the Fiscal Court is that until there are improvements to KY 237, there cannot be any further development on KY 237 -- and that condition would also be appropriate for KY 18. The state has not appropriated any funds and there is nothing that says there will be major improvements to KY 18. The schools are near or over capacity. He

stated that developers allotting land for a school does not build the school. We have to come up with the money to build the schools. We are already behind and will continue to be behind as long as we have high-density development. He stated that if the proposed development was one or two houses per acre, it would be similar to Saddle Ridge. Putting in high-density development does not do us any good. He stated that just because the Comprehensive Plan says we could do it and the zoning seems appropriate, that does not mean that we have to do it. He stated that the Arlinghaus development has taxed the roads, schools and sewer system. The water has to go somewhere and they may end up with water going into the street. Water and sewage come out of the sewer lid across from the pump station on KY 18. He stated that lower density development would allow the schools, roads and sewers to catch up.

Mr. Beau Archambault was present on behalf of his parents, Sue and Arch Archambault who live at 3218 Burlington Pike. He read and submitted a letter from his parents and a separate letter from his father Arch Archambault (see Exhibit 3).

Mr. Light read and submitted a letter received from Robert and Susan Meyer, 6242 Saddle Ridge Drive (see Exhibit 4).

The Chairman asked if there was anyone else present who wished to speak in regard to this request. There being no response, the Chairman asked if there were any comments or questions from the Commissioners.

Mr. Carmichael noted the comments made that there were 153 homes in the previous application, but the previous plat was for 170 lots. Mr. Costello responded that the previous application was for 170 lots, but the number of lots was reduced to 153 through the Committee process.

Mrs. Kegley stated that for the previous application, the connection through the cul-de-sac (Hammer Court) was important and she wants to emphasize it again. She noted the comments that people cannot get out of KY 18 and, therefore, the connection becomes all the more important. She stated that it would take some negotiations, but it is time to see if something can be done.

Mr. Poe stated that comments have been made this evening about the density, the road connections and KY 18. He would like the Committee to consider that those items have not been addressed since the denial of the first request.

Mr. Rolfsen asked if the two detention ponds can be eliminated if KY 18 is widened. Mr. Jim Bertram responded that they will provide information to the Committee showing that they have provided for a four-lane divided highway through there and can push the ponds back so that the dam will not be affected by the road widening. He stated that they also addressed the issue of preserving trees and open space throughout the development. They took what happened last time

and made changes. They feel that they have addressed a lot of the concerns and are willing to work with the Planning Commission. He stated that they had no objection to the connection last time or this time.

Mr. Reynolds stated that there was concern about the elevation and typography in relation to the ponds. Mr. Bertram responded that the ponds will be placed in the natural ravine. Mr. Reynolds asked if there will be any excavation. Mr. Bertram responded that there will only be excavation to build the dam. Mr. Reynolds questioned the height of the dam. Mr. Bertram will provide that information to the Committee.

Mr. Wallace stated that the applicant had no further comments.

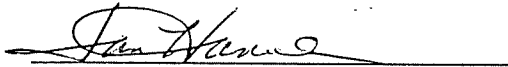
There being no further discussion, the Chairman stated that the Committee Meeting for this item will be on October 4, 2006 at 5:00 PM in this room. This item will be on the Agenda for the Business Meeting on October 18, 2006 at 7:00 PM. The Chairman closed this Public Hearing at 8:47 PM and called for a short recess.

APPROVED:



Arnold Caddell, Chairman

Attest:


Jan Hancock, Recording Secretary

Exhibits –

1. Traffic Impact Study, Tanglewood Subdivision, December 2005 submitted by David Wallace
2. Comments submitted by Carol Woods
3. Letters from Sue and Arch Archambault and from Arch Archambault
4. Letter from Robert and Susan Meyer
5. Pictures of the site, the adjacent properties, and KY 18

ZONE CHANGE/CONCEPT PLAN COMMITTEE VOTE

TO: Boone County Planning Commission

FROM: Greg Breetz, Chairman

DATE: October 18, 2006

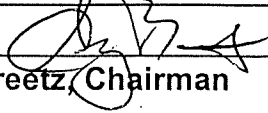
RE: Request of One Eleven Engineering & Surveying, PLLC (applicant) for Roslyn Wachs, Trustee (owner) for a Zoning Map Amendment from Agricultural Estate (A-2) to Rural Suburban (RS), and a Variance for side yard setbacks, for a 50.78 acre tract located on the north side of Burlington Pike, between the properties at 3300 and 3446 Burlington Pike and across from the Burlington Pike/Saddle Ridge Drive intersection, Boone County, Kentucky. The request is for a zone change to allow an open space style subdivision for single family residences, and a Variance to allow the side yard setbacks to be reduced to 5 feet minimum and 10 feet minimum total for both side yards combined.

REMARKS:

We, the Committee Members were present at the Committee Meeting and voted on the above request or else were absent from voting. Further, based upon the vote, the Committee directs the Staff to draft the findings of fact and conditions if deemed necessary in order to complete the Committee Report.

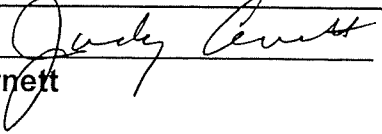
One Eleven Engineering/Wachs

October 18, 2006



Greg Breetz, Chairman

For Project _____ Absent _____
 Against Project _____
 Abstain _____ Deferred _____

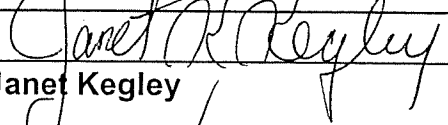


Judy Arnett

For Project _____ Absent _____
 Against Project _____
 Abstain _____ Deferred _____

Kim Bunger

For Project _____ Absent _____
 Against Project _____
 Abstain _____ Deferred _____



Janet Kegley

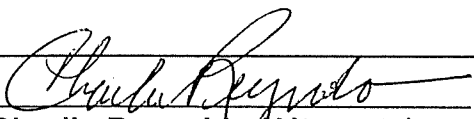
For Project _____ Absent _____
 Against Project _____
 Abstain _____ Deferred _____

Susan Poston

For Project _____ Absent _____
 Against Project _____
 Abstain _____ Deferred _____

Jim Carmichael (Alternate)

For Project _____ Absent _____
 Against Project _____
 Abstain _____ Deferred _____



Charlie Reynolds (Alternate)

For Project _____ Absent _____
 Against Project _____
 Abstain _____ Deferred _____

Bob Schwenke (Alternate)

For Project _____ Absent _____
 Against Project _____
 Abstain _____ Deferred _____

Lisa Wilson (Alternate)

For Project _____ Absent _____
 Against Project _____
 Abstain _____ Deferred _____

TOTAL: _____ DEFERRED 2 FOR PROJECT _____ ABSENT
2 AGAINST PROJECT _____ ABSTAIN

ZONE CHANGE/CONCEPT PLAN COMMITTEE VOTE

TO: Boone County Planning Commission

FROM: Greg Breetz, Chairman

DATE: October 4, 2006

RE: Request of **One Eleven Engineering & Surveying, PLLC (applicant)** for **Roslyn Wachs, Trustee (owner)** for a Zoning Map Amendment from Agricultural Estate (A-2) to Rural Suburban (RS), and a Variance for side yard setbacks, for a 50.78 acre tract located on the north side of Burlington Pike, between the properties at 3300 and 3446 Burlington Pike and across from the Burlington Pike/Saddle Ridge Drive intersection, Boone County, Kentucky. The request is for a zone change to allow an open space style subdivision for single family residences, and a Variance to allow the side yard setbacks to be reduced to 5 feet minimum and 10 feet minimum total for both side yards combined.

REMARKS:

We, the Committee Members were present at the Committee Meeting and voted on the above request or else were absent from voting. Further, based upon the vote, the Committee directs the Staff to draft the findings of fact and conditions if deemed necessary in order to complete the Committee Report.

One Eleven Engineering/Wachs

October 4, 2006

Greg Breetz

Greg Breetz, Chairman

For Project ____ Absent ____
 Against Project ____
 Abstain ____ Deferred

Judy Arnett

Judy Arnett

For Project ____ Absent ____
 Against Project ____
 Abstain ____ Deferred

Kim Bunger

For Project ____ Absent
 Against Project ____
 Abstain ____ Deferred ____

Janet Kegley

Janet Kegley

For Project ____ Absent ____
 Against Project ____
 Abstain Deferred

Susan Poston

For Project ____ Absent ____
 Against Project ____
 Abstain ____ Deferred ____

Jim Carmichael (Alternate)

For Project ____ Absent ____
 Against Project ____
 Abstain ____ Deferred ____

Charlie Reynolds

Charlie Reynolds (Alternate)

For Project ____ Absent ____
 Against Project ____
 Abstain ____ Deferred

Bob Schwenke (Alternate)

For Project ____ Absent ____
 Against Project ____
 Abstain ____ Deferred ____

Lisa Wilson (Alternate)

For Project ____ Absent ____
 Against Project ____
 Abstain ____ Deferred ____

TOTAL: 4 DEFERRED ____ FOR PROJECT ____ ABSENT
 ____ AGAINST PROJECT ____ ABSTAIN

SUPPORTING INFORMATION



BOONE COUNTY PLANNING COMMISSION

www.boonecountyky.org/pc
www.boonecountygis.com

Boone County Administration Building
2950 Washington Street, Room 317
P.O. Box 958
Burlington, KY 41005

Phone (859) 334-2196; Fax (859) 334-2264
plancom@boonecountyky.org

November 1, 2006

Mr. James J. Bertram, Jr.
One Eleven Developers, LLC.
5284 Madison Pike
Independence, KY 41051

RE: Request of One Eleven Engineering & Surveying, PLLC (applicant) for Roslyn Wachs, Trustee (owner) for a Zoning Map Amendment from Agricultural Estate (A-2) to Rural Suburban (RS), and a Variance for side yard setbacks, for a 50.78 acre tract located on the north side of Burlington Pike, between the properties at 3300 and 3446 Burlington Pike and across from the Burlington Pike/Saddle Ridge Drive intersection, Boone County, Kentucky. The request is for a zone change to allow an open space style subdivision for single family residences, and a Variance to allow the side yard setbacks to be reduced to 5 feet minimum and 10 feet minimum total for both side yards combined.

Dear Mr. Bertram:

The following represents the conditions of approval for the above referenced application as recommended by the Planning Commission's Zone Change Committee at their October 18, 2006 meeting. If you, as the applicant, agree with these conditions, please have the property owner sign in the space provided at the end of this letter, and return the original letter to the Planning Commission's office by Monday, October 30, 2006.

CONDITIONS

1. The property owner agrees to further revise the Concept Development Plan reviewed by the Committee at their October 18, 2006 meeting to reflect removing lots 25 & 26 and removing lot 134 so that cul-de-sac can be pulled further north away from KY 18. This reduces the total number of lots from 150 to 147 on the 50.78 acres for an overall intensity of 2.89 dwelling units per acre.
2. The property owner agrees that there will be no more than twenty-five (25) zoning permits issued per calendar year for the proposed development.
3. The property owner will provide two (2) alternatives at the Preliminary Plat and Improvement Plan review stages for the northeast quadrant of the property in the event a connection can be made to the Hidden Creek II Subdivision (Hammer Court).

Mr. James J. Bertram, Jr.
One Eleven Developers, LLC.
November 1, 2006
Page 2

- 4. The property owner agrees that there will be no direct vehicular access onto the main subdivision road from any of the adjoining lots.
- 5. The property owner agrees to keep the overall site grading to a minimum concentrating on the construction of the entrance road, streets and home sites, the construction of the ponds, utilities and walking paths so as to preserve as much of the existing vegetation and natural buffers. Disturbed limits will be clearly shown and noted on the Preliminary and Improvement Plans. The Green Space as outlined on the Concept Development Plan will not be disturbed except where Intermittent work for the initial development of the subdivision is required as noted above.

Sincerely,

Mitchell A. Light
Assistant Zoning Admin/Enforcement Officer

MAL/pr

AGREEMENT

I, Roslyn Wachs, do hereby agree to the recommended conditions of approval stated above for the Zoning Map Amendment from Agricultural Estate (A-2) to Rural Suburban (RS), and a Variance for side yard setbacks, for a 50.78 acre tract located on the north side of Burlington Pike, across from the Burlington Pike/Saddle Ridge Drive Intersection, to allow an open space style subdivision for single family residences, and a Variance to allow the side yard setbacks to be reduced to 5 feet minimum and 10 feet minimum total for both side yards combined.

<i>Roslyn Wachs</i>	<i>Nov. 1/06</i>
Roslyn Wachs, Trustee (owner)	Date
<i>Roslyn Wachs</i>	<i>Nov. 8, 06</i>
<i>Darren T. Eyre</i>	<i>11/13/06</i>
Darren T.R. Eyre (applicant)	Date

(A)

2/24

WARRANTY DEED

GROUP NO. 2024

KNOW ALL MEN BY THESE PRESENTS that Roslyn Wachs, a single woman, without consideration does convey to Roslyn Wachs, Trustee of the Roslyn Wachs Trust dated November 9, 2000, her heirs and assigns forever the Real Estate, in County Boone and Commonwealth of Kentucky described in more detail as follows:

Being a tract of an estimated 50.76 acres and described as follows:

Parcel No. 1:

Beginning at the corner of the Castleman and Ridd tract on the Burlington and Bellevue Pike; Thence in a northerly direction with the Riddell line to a corner post in the line fence enclosing said Wilkes' house; Thence with said fence in a westerly direction to the new post, being the corner of said enclosure; Thence in a southerly direction with said fence, passing a post at the end of the enclosure to a point near the center of said Pike, in a line of George Blythe; Thence in an easterly direction with Blythe's line to the beginning embracing the lot of land now enclosed about the said Wilkes' house.

Parcel No. 2:

Lying and being in Boone County, Kentucky, on the Burlington and Bellevue Pike, bounded on the east by lands of Joseph Clements and Charles Birkle (Tract No. I above described); On the south by the lands of said Birkle, D. M. Snyder, Leslie Goodridge, George, Blythe and Jerry Blythe, on the west by the lands of the heirs of the late Amos Hall; and on the north by lands of Hubert Gaines. Containing about 57 Acres.

Less the following Exceptions:

- 1) There is excepted from the foregoing boundary about one (1) acre of ground conveyed to J. W. Goodridge, by deed dated April 9, 1913, and recorded in Deed Book 54 Page 340 of the Boone County records at Burlington.
- 2) Also, there is excepted from the foregoing 5.24 acres more or less conveyed by Mary Wachs, a single person to William Bitter, et ux, by deed dated July 25, 1964 and recorded in Deed Book 163 page 316 of the Boone County Court Records at Burlington, Kentucky.

Being the same property conveyed to Frederick W. Wachs and Mary Wachs, his wife, jointly, with right of survivorship, by deed from W. T. Rudicill, et ux, dated September 22, 1947, and recorded in Deed Book 88 page 371 of the Boone County Court Records at Burlington, Kentucky.

Frederick W. Wachs died June 12, 1956. By virtue of the survivorship clause in the aforementioned deed, upon his death full legal title and sole power to convey said premises, vested in his wife, Mary Wachs. A specific Kentucky Inheritance Tax release for his estate is recorded in Miscellaneous Book 10 page 96 of said records.

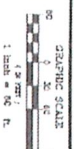
Status:	Exempt per KRS 142.050(8)(a)
Estimated Value:	\$700,000.00
Property Address:	Burlington Pike, Burlington, KY
Grantor and Grantee mailing address:	RR 3, 128 MG, Monticello, KY 42633

BOONE COUNTY

Amos Baldwin
PO Box 6129
Cin OH 45206

RETURN TO

REVISED FROM 10/4 COMMITTEE MEETING



NOTES

1. OWNER: [illegible]
2. [illegible]
3. [illegible]
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CONCEPT PLAN
 FAMILLEWOOD SUBDIVISION
 BOONE COUNTY, KENTUCKY

1111 Parkway, P.O. Box 1111
 Louisville, KY 40201
 Phone: (502) 452-1111
 Fax: (502) 452-1112
 Website: www.eleven.com

DATE	DESCRIPTION
10/4/04	REVISED FROM 10/4 COMMITTEE MEETING
10/1/04	CONCEPT PLAN
9/1/04	PRELIMINARY PLAN
8/1/04	PRELIMINARY PLAN
7/1/04	PRELIMINARY PLAN
6/1/04	PRELIMINARY PLAN
5/1/04	PRELIMINARY PLAN
4/1/04	PRELIMINARY PLAN
3/1/04	PRELIMINARY PLAN
2/1/04	PRELIMINARY PLAN
1/1/04	PRELIMINARY PLAN

Resolution Of The Boone County Fiscal Court

Resolution No. 07-15

A RESOLUTION OF THE BOONE COUNTY FISCAL COURT DENYING A REQUEST OF ONE ELEVEN ENGINEERING & SURVEYING, PLLC (APPLICANT) FOR ROSLYN WACHS, TRUSTEE (OWNER) FOR A ZONING MAP AMENDMENT ON A 50.78 ACRE SITE GENERALLY LOCATED ON THE NORTH SIDE OF BURLINGTON PIKE AND ACROSS FROM THE BURLINGTON PIKE/SADDLE RIDGE DRIVE INTERSECTION, BOONE COUNTY, KENTUCKY.

WHEREAS, the Boone County Planning Commission received a request for a Zoning Map Amendment to the Boone County Zoning Map and such Zoning Map Amendment being a zone change from Agricultural Estate (A-2) to Rural Suburban (RS) for a 50.78 acre site generally located on the north side of Burlington Pike and across from the Burlington Pike/Saddle Ridge Drive intersection, Boone County, Kentucky, which is more particularly described below; and

WHEREAS, the Boone County Planning Commission as the planning unit for the unincorporated areas of Boone County, Kentucky, was requested to and has conducted a Public Hearing serving as a due process trial-type hearing and made no recommendations for the Zoning Map Amendment.

NOW, THEREFORE, BE IT RESOLVED BY THE BOONE COUNTY FISCAL COURT:

SECTION I

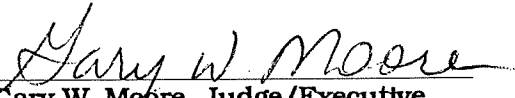
That the request for a Zoning Map Amendment for the real estate which is more particularly described above is hereby denied, said Zoning Map Amendment being a zone change from Agricultural Estate (A-2) to Rural Suburban (RS) for a 50.78 acre site generally located on the north side of Burlington Pike and across from the Burlington Pike/Saddle Ridge Drive intersection, Boone County, Kentucky.

SECTION II


That as a basis for denial for this Zoning Map Amendment request are the findings of fact of the Boone County Fiscal Court as set forth in its minutes and official records for this request shall be and are hereby incorporated by reference as fully set out in the Resolution and marked as "Exhibit A."

SECTION III

That this Resolution is hereby approved and adopted in Open Session of the Boone County Fiscal Court this 2nd day of January, 2007.


Gary W. Moore, Judge/Executive
Boone County Fiscal Court

Attest:


Louis Kelly
Fiscal Court Clerk

MINUTES
BOONE COUNTY FISCAL COURT
Boone County Administration Building
Fiscal Courtroom (1st Floor)
Burlington, Kentucky
Tuesday, January 2, 2007
5:30 P.M.

ITEM I.

CALL TO ORDER

Judge Gary W. Moore called to order the meeting of the Boone County Fiscal Court.

Present: Gary W. Moore, County Judge/Executive
Cathy H. Flaig, Commissioner, District 1
Charles E. Kenner, Commissioner, District 2
Terri Moore, Commissioner, District 3
J.R. Schrand, County Attorney
Jeff Smith, Assistant County Attorney

Staff: Lisa Buerkley, County Treasurer
Robin Curry, Assistant County Administrator
Major Ben Huff, Sheriff's Department
Melanie M. Morris, Executive Assistant
Jeffrey S. Earlywine, County Administrator/Deputy Judge/Executive
Louis Kelly, Fiscal Court Clerk
Greg Sketch, County Engineer

Commissioner Moore was not present at the beginning of the meeting but called to say that she was on her way and would be joining the Court later in the meeting.

ITEM II.

APPROVAL OF MINUTES

Commissioner Flaig moved, seconded by Commissioner Kenner, to approve the Minutes from the meeting of December 19, 2006. Judge Moore called for a vote on the motion, ALL PRESENT VOTING AYE (3-0).

ITEM III.

DELEGATIONS

Judge Moore presented an award to retiring Golf Course Superintendent Jerry Coldiron for 27 years of service.

ITEM IV.

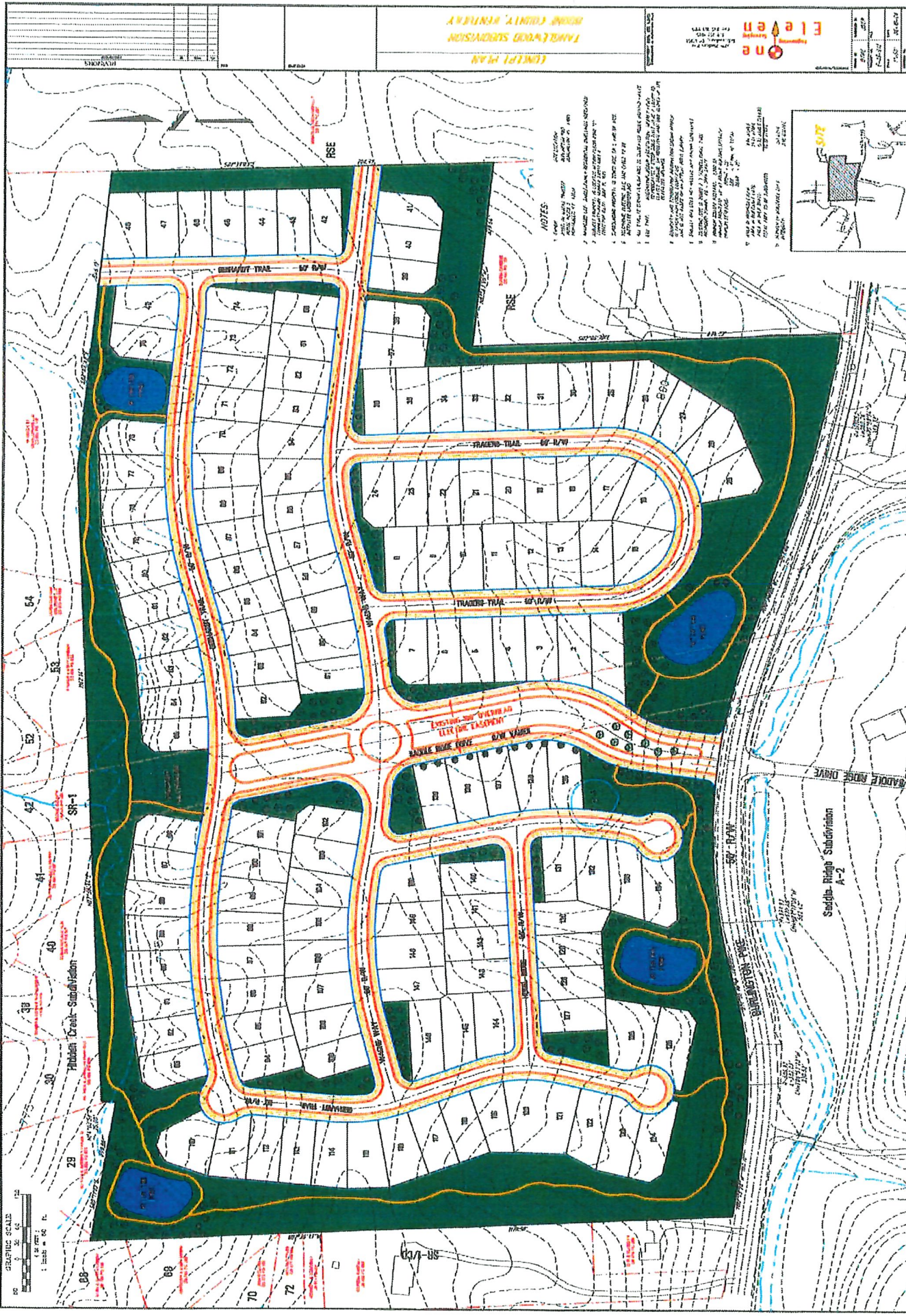
PERSONNEL MATTERS

Commissioner Kenner moved, seconded by Commissioner Flaig to approve Resolution 07-01, a Resolution of the Boone County Fiscal Court re-appointing Department Heads to their positions for the calendar year 2007. Judge Moore called for a vote on the motion, ALL PRESENT VOTING AYE (3-0). (Exhibit IV A)

ITEM V.

ORDINANCES

Second reading was given for An Ordinance of the Boone County Fiscal Court approving, with conditions, for a request of Bayer-Becker c/o Nicole Daily (applicant) for Joseph Bremke, William Vogt, Barbara Schubert, Paulette Harp, Bonita Biggs and Claudette Peters (owners) for a zoning map amendment, such zoning map amendment being a zone change from Agricultural Estate (A-2) to Industrial One (I-1) for a 7.3 acre site located at 1009 Petersburg Road, Boone County, Kentucky.



GRAPHIC SCALE
 1 inch = 50 ft.
 1:50

Plotted Credit Subdivision

Saddle Ridge Subdivision
 A-2

LANDLORD SUBDIVISION
 HONOLULU COUNTY, HAWAII

ELLEN ENGINEERING
 1111 KALANIANA'OHU BLVD., SUITE 200
 HONOLULU, HI 96813
 TEL: 808-955-1111
 FAX: 808-955-1112
 WWW.ELLENENGINEERING.COM

- NOTES
1. SEE SHEET 10/4 FOR GENERAL NOTES.
 2. ALL DISTANCES ARE IN FEET AND DECIMALS THEREOF.
 3. ALL CORNERS ARE TO BE BENCHMARKED TO THE HAWAIIAN SYSTEM OF MEASUREMENT.
 4. ALL DISTANCES ARE TO BE MEASURED ALONG THE CENTERLINE OF THE ROAD.
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REVISED FROM 10/4 COMMITTEE MEETING