

**VILLAGE OF YELLOW SPRINGS  
PLANNING COMMISSION**

The Village of Yellow Springs Planning Commission will meet in regular session on Monday, March 12, 2018 at 7PM in Village Council Chambers on the second floor of the Bryan Community Center, 100 Dayton Street, Yellow Springs, Ohio 45387

**CALL TO ORDER**

**ROLL CALL**

**REVIEW OF AGENDA**

**REVIEW OF MINUTES**

Minutes of February 26, 2018

**VOTE FOR VICE CHAIR**

**VOTE FOR CHAIR**

**COMMUNICATIONS**

**COUNCIL REPORT**

**CITIZEN COMMENTS**

**PUBLIC HEARINGS:**

**Conditional Use Application** – Andrew and Elizabeth Holyoke, owners of 107 Cliff Street in the R-C, High Density Residential District, are seeking approval for an accessory dwelling unit.  
Parcel ID # F19000100110024800

**OLD BUSINESS**

**Comprehensive Land Use Plan (CLUP)**

- 1) Updating of the CLUP

**NEW BUSINESS**

**AGENDA PLANNING**

**ADJOURNMENT**

**Planning Commission  
Regular Meeting Minutes**

**Council Chambers 7:00pm**

**Monday, February 12, 2018**

**CALL TO ORDER**

The meeting was called to order at 7:00 P.M.

**ROLL CALL**

Planning Commission members present were Vice-Chair, Rose Pelzl, serving as Chair, Council Representative Marianne MacQueen, Frank Doden, Susan Stiles and Ted Donnell. Also present were Denise Swinger, Zoning Administrator, and, observing, AJ Williams, Alternate.

**REVIEW OF AGENDA**

There were no changes made.

**REVIEW OF MINUTES**

Minutes of February 12, 2018 were reviewed. MacQueen MOVED to APPROVE THE MINUTES AS AMENDED. Doden SECONDED and the MOTION PASSED 4-0 on a voice vote, with Stiles abstaining.

**COMMUNICATIONS**

Swinger noted a letter from nearby residents Bruce Bratmiller and Carol Cottom expressing approval for the application.

**PUBLIC HEARINGS:**

**Conditional Use Application** - B-2, General Business District 61535 Xenia Avenue 6 Property Owner: Antonio Avalos. Brian Rainey of the Calypso Grill has submitted an application for a restaurant serving alcohol. Parcel ID # F19000100060009900.

Swinger explained the request as follows:

Brian Rainey, owner of the Sunrise Café, has made an application to the zoning office to open a new restaurant serving alcohol called the Calypso Grill and Smokehouse, a conditional use requirement in the B-2, General Business District.

The owner of the property, Antonio Avalos, closed his Mexican restaurant Dona Margarota's last year. He leased the building to Mr. Rainey for use as a restaurant serving alcohol. In a review of the 1535 Xenia Avenue zoning file, Swinger stated, it was determined that Mr. Avalos received zoning approval for a restaurant in June 2014. It is requirement of the zoning code to hold a conditional use hearing for Mr. Rainey's Calypso Grill because the permit issued previously was for a restaurant only, not for a restaurant serving alcohol.

Mr. Avalos was required by the Ohio Department of Liquor Control to seek approval from the voters living in the south voting district of Yellow Springs if he wanted to serve alcohol at this location, which he received in May 2014. The gap in time likely led to some degree of confusion regarding the need to then apply to the Village for a conditional use, following the approval of the voters.

Mr. Rainey intends to operate his restaurant from 11:00 AM to 9:00 PM, six days a week. The restaurant will be closed on Tuesdays.

PC discussed the advantage to the community in holding a conditional use hearing with changes in ownership of a business.

Donnell commented that if the use is conditional, a hearing should occur with each change in ownership.

Brian Rainey noted that Avalos's liquor permit is being transferred over with the lease agreement as a part of their deal.

Rainey stated that if for any reason the restaurant were to go out of business, the liquor license will revert to Avalos.

Swinger noted that Rainey has the required number of parking spaces, and has made no changes to the building.

MacQueen noted that another individual owns the frontage.

Donnell commented that there is an access easement across the front of all of the properties along that strip.

Rainey commented that if there is demand, he may want to return to request later hours for the weekend.

Donnell suggested that Rainey make any such request at this hearing.

Rainey stated that his liquor license permits operation until 2am. He stated that he is considering offering delivery of food, beer and wine up until 2am on Friday and Saturday. Rainey stated that the dining room would close at 9pm, with delivery only until 2am.

Rainey commented that he had considered use of the drive-through window as a pick up window.

Swinger responded that this would need to be publicized as another hearing, should Rainey wish to follow up.

Rainey responded to a question from Donnell, stating that he would like to provide outdoor dining at some point.

Swinger noted the hours requested by Rainey as: 11am-9pm Wednesday, Thursday, Sunday and Monday, and 11am-2am Friday and Saturday.

Pelzl OPENED THE PUBLIC HEARING. There being no comment from those present, Pelzl CLOSED THE PUBLIC HEARING.

Pelzl CALLED A MOTION.

Donnell MOVED TO APPROVE THE CONDITIONAL USE REQUEST WITH THE CONDITIONS THAT THE CHANGE OF HOURS (as noted above) IS HEREBY APPROVED, THAT THERE WILL BE NO OPENING OF THE DRIVE THROUGH OR WORK BEGUN ON AN OUTDOOR DINING AREA WITHOUT RECEIVING FURTHER APPROVAL, AND THAT THE REQUISITE HEALTH AND BUILDING DEPARTMENT APPROVALS ARE RECEIVED. Stiles SECONDED and the MOTION PASSED 5-0 ON A ROLL CALL VOTE.

**NEW BUSINESS**

Assignment of Planning Commission member as representative to Active Transportation Committee.

Donnell volunteered for this position.

**AGENDA PLANNING**

Planning Commission's March 12 meeting will entail one conditional use request. Further work will be done on the Comprehensive Land Use Plan.

Doden noted that he would be happy to assist in managing the overall approach.

**ADJOURNMENT**

At 7:26pm, Donnell MOVED and Stiles SECONDED a MOTION TO ADJOURN. The MOTION PASSED 5-0 ON A VOICE VOTE.

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Rose Pelzl, Acting Chair

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Attest: Judy Kintner, Clerk

*Please note: These minutes are not verbatim. A DVD copy of the meeting is available at the Yellow Springs Library during regular Library hours, and in the Clerk of Council's office between 9 and 3 Monday through Friday.*



**TO:** Planning Commission

**FROM:** Denise Swinger, Zoning Administrator

**MEETING DATE:** March 12, 2018

**CONDITIONAL USE REQUEST:** Accessory Dwelling Unit

**ADDRESS:** 107 Cliff Street

**PARCEL ID** #F19000100110024800

An application for a conditional use hearing has been submitted by Andy Holyoke for an accessory structure (garage) with an accessory dwelling unit on the second floor (Exhibit 1).

**NOTIFICATION OF PUBLIC HEARING** ó A public hearing notification was provided in accordance with the Village's zoning regulations including publication in the Yellow Springs News, a mailed notice to abutting and adjacent neighbors of the property, and the posting of a sign on the property about the public hearing.

#### **PLANNING COMMISSION DUTIES**

**Section 1262** gives the Planning Commission the power to hear and decide applications for conditional use permits to allow proper integration into the community.

The Planning Commission may approve, modify, or deny any application. If the Commission approves the permit, it may impose time limitations and/or require that one or more things are done before the request is initiated.

#### **1248.03 SPATIAL REQUIREMENTS**

(a) All lots and buildings shall meet the minimum area and width requirements of **Table 1248.03**. New lots shall not be created, except in conformance with these requirements.

<i>Table 1248.03 Lot and Width Requirements: Residential Districts</i>		
<b>Zoning District</b>	<b>Minimum Lot Area (Sq. Ft.)<sup>1</sup></b>	<b>Minimum Lot Width (Ft.)</b>
<b>R-C, High-Density Residential</b>	<b>4,800</b>	<b>40</b>

Table 1248.03a Dimensional Requirements: Residential Districts						
Zoning District	Maximum Building Height (Ft./stories)	Minimum Yard Setbacks (Ft.)				Max. Lot Coverage (%)
		Front	Side		Rear	
			Total	Least		
R-C	35/3	20	10	5	15	50

## **STAFF FINDINGS**

Mr. and Mrs. Holyoke want to construct a garage/second floor accessory dwelling unit with a post and beam structure with straw bale infill, a building method they've used successfully in other locations around Yellow Springs.

### **Lot and Width Requirements:**

*The property meets the minimum lot area requirements of 4,800 sq. ft. with a 0.172 acre or 7,492 sq. ft. lot.*

*The property meets the minimum lot width of 40 feet, with two front lot lines, one measuring 54.80 feet abutting Railroad Street and the other measuring 144.21 feet abutting Cliff Street.*

The maximum lot coverage for this property of all structures is 50% or 3,746 sq. ft.

*The property contains the principal dwelling at 1,242 sq. ft. With the proposed garage/ accessory dwelling unit at 560 sq. ft., the total square feet of all structures will be 1,802 sq. ft., representing 48.1 percent of the allowable lot coverage.*

### **Dimensional and Conditional Use Requirements - Accessory Buildings and Structures**

**Chapter 1260.02 (a) (2)** states: In no case, however, shall the front yard setback for a garage, whether attached or detached, be less than 20 feet in order to provide adequate vehicle parking space in front of the garage without blocking a sidewalk or otherwise impeding pedestrian movement.

*The front yard setback measurement to the garage totals 20'6". The property line to the proposed structure setback is 10'3" but there is an additional 10'3" of right-of-way for parking (Exhibit 2).*

**Chapter 1260.04 (a) (3)** - Accessory buildings and structures may be erected in a rear yard if set back at least ten feet from the rear and five feet from the side property lines.

*The accessory structure meets the rear yard setback requirement with measurement of 10 feet and a side yard setback measurement of 5'6".*

**Chapter 1260.04 (a) (5)** - The height of an accessory structure shall not exceed 18 feet when a hip or gable roof is used, 15 feet when a mansard or gambrel roof is used and 12 feet when a flat or shed roof is used, except when a dwelling unit is included in the structure, in which case the height shall not exceed 24 feet.

*The accessory structure's building height is 21 feet 7 inches, and meets the 24 feet maximum height for an accessory dwelling unit (Exhibit 3).*

**Chapter 1260.04 (a) (6)** - Accessory structures shall not exceed 66% of the principal building floor area or 800 square feet, whichever is less.

*The accessory structure and accessory dwelling unit measures 560 square feet and meets the size requirement of the zoning code.*

**REQUIREMENTS:**

**Chapter 1262.03 General Standards** highlights the requirements for Conditional Uses which include:

- (a) The proposed use will be consistent with the intent and purposes of this zoning code and the vision, goals and recommendations of the **Yellow Springs Comprehensive Plan and Vision: Yellow Springs and Miami Township**.  
*The ADU increases the housing stock through infill development, a goal of the Comprehensive Plan and Vision documents.*
- (b) The proposed use will comply with all applicable requirements of this code, except as specifically altered in the approved conditional use.  
*The proposed use complies with the requirements of the zoning code.*
- (c) The proposed use will be compatible with the character of the general vicinity.  
*The proposed use is compatible as it is located in a residential district, and there are other ADU's nearby.*
- (d) The area and proposed use will be adequately served by essential public facilities and services, as applicable, such as highways, streets, police, and fire protection, drainage structures, refuse disposal, water and sewers, and schools. The applicant or landowner will be required to install public utilities, streets or other public infrastructure as required by the Village, state or other agencies to applicable specifications. Dedication of said public infrastructure may be required.  
*The proposed use will be adequately served by all essential public facilities.*
- (e) The proposed use will not involve uses, activities, processes, materials, equipment and conditions of operations, including, but not limited to, hours of operation, that will be detrimental to any persons, property, or the general welfare by reason of excessive production of traffic, noise, smoke, fumes, glare, odor or other characteristic not comparable to the uses permitted in the zoning district.  
*It will not involve uses that will be detrimental to the general welfare of persons and property nearby as it will serve as a dwelling unit in a residential district.*
- (f) The proposed use will not impede the normal and orderly development and improvement of the surrounding property for uses permitted in the district.  
*The proposed use should not impede development as all surrounding residential properties are built out.*

- (g) The proposed use will not block sight lines from the right of way to existing signs or windows on the front or side of a building.  
*This garage/ADU will not impede sight lines from the right of way (Exhibit 4).*

#### **1262.04 CONDITIONS OF APPROVAL**

Reasonable conditions may be imposed on the approval of a conditional land use in order to achieve the following:

- (a) Ensure public services and facilities affected by the proposed use or activity will be capable of accommodating increased service and facility loads necessitated by the proposed use.
- (b) Ensure that the use is compatible with adjacent conforming land uses and activities.
- (c) Protect natural resources; the health, safety, and welfare; and the social and economic well-being of those who will use the land use or activity under consideration; residents, business owners and landowners immediately adjacent to the proposed use or activity; and the community as a whole.
- (d) Relate to the valid exercise of the police power and purposes which are affected by the proposed use or activity.
- (e) Meet the purpose of the zoning code, be in compliance with the standards established in the code for the land use or activity under consideration, and be in compliance with the zoning district standards.

Additionally, **Chapter 1262.08 (e) (1)** highlights further conditions that must be met for the application to receive approval. They are:

- (1) Accessory Dwelling Units.
  - A. An accessory dwelling unit may be located within a principal single-family detached dwelling or a detached accessory building on the same lot as a principal dwelling.  
*The ADU will be located on the second floor of a new construction accessory structure, which is on the same lot as the primary dwelling.*
  - B. The accessory dwelling unit shall share all public utilities (water/sewer/electric) with the principal dwelling unit. Accessory dwelling units will not be separately metered.  
*The ADU will not be separately metered.*
  - C. A minimum of one off-street parking space shall be provided on the lot for the accessory dwelling unit in addition to the off-street parking spaces required for the principal dwelling unit.  
*This property does not currently have a garage or a driveway and Mr. and Mrs. Holyoke have always parked their vehicles in the 10'3" right-of-way.  
Construction of this garage/ADU will enable one or two cars to park off-street.*
  - D. The accessory dwelling unit shall be limited in size to a maximum of 66% of the total living area of the principal dwelling or 800 square feet of the total living area of the principal dwelling or 800 square feet, whichever is less.

*Sixty-six percent of the principal dwelling measurement of 1,242 sq. ft. exceeds the 800 sq. ft. maximum. With the ADU's size of 560 sq. ft., it meets the requirement of the zoning code.*

- E. The accessory dwelling shall contain a living area, one bath and a kitchenette (including a refrigerator, microwave oven, stove and sink) and may contain not more than one bedroom.  
*The ADU will contain a living area, full kitchen, one bathroom and one bedroom.*
- F. No more than two adults shall occupy the accessory dwelling unit.  
*Mr. Holyoke has indicated no more than two adults shall occupy the ADU.*
- G. No new access points or driveways shall be created or installed for access to the accessory dwelling unit.  
*There is currently no access point to this property and the driveway created will be new and will be located on the Cliff Street side of the property.*

### **RECOMMENDATION**

Although a site plan review is not required for the building of a single or two family dwelling unit or accessory structure, it is required for a conditional use. In reviewing the Level B requirements, the property owners are aware that the ADU will not be separately metered and must tie in to their existing primary structure's facilities for water, sewer and electric.

The Planning Commission may want to address the storm water runoff to ensure it will not have any effect on the abutting property. **Chapter 1268.06 (d) (2)** states, *“Storm water detention and drainage systems shall be designed so that the removal of surface waters will not adversely affect neighboring properties or public storm water drainage systems.”*

Staff has no objections to this application and recommends the Planning Commission **APPROVE** the conditional use for a garage/accessory dwelling unit.

If you have any questions, please feel free to call me at 767-1702 or email [dswinger@vil.yellowsprings.oh.us](mailto:dswinger@vil.yellowsprings.oh.us).

Respectfully submitted,

Denise Swinger  
Zoning Administrator





**Village of Yellow Springs**  
 100 Dayton Street, 45387  
 PHONE: (937) 767-1702  
 FAX: (937) 767-3720  
**Planning Commission**  
**Application**

Case #: PC18-03

TYPE OF REQUEST: (Check one)

☐ DEVELOPMENT PLAN ☐ TEXT AMENDMENT

☒ CONDITIONAL USE ☐ MAP AMENDMENT

☐ OTHER (Please Specify): \_\_\_\_\_

- Property Address and/or Parcel ID: 107 Cliff St.
- Property Owner: Andrew + Elizabeth Holyoke  
 Address: 107 Cliff St Phone: 937 532 3050
- Description of request: We wish to build an accessory structure. It will be a garage with an apartment above the garage. It will be in our usual, proven method: a post and beam structure with strawbale infill. The footprint will be 28 feet by 20 feet. It will front on Cliff St to the west of our existing house.  
A. It will be on the same lot as the principal dwelling  
B. It will get its utilities from the principal dwelling; no separate meters  
C. It will have off-street parking  
D. It will be 560 sq. ft., which is less than 66% of the sq. footage of principle dwelling  
E. It will have a living area, a bath, a full kitchen and one bedroom  
F. No more than two adults will occupy it.  
G. This garage will have the only driveway on the property

The owner of this property and undersigned do hereby certify that the information and statements given on this application, drawings, and specifications are to the best of their knowledge, true and correct.

Signature of Applicant: Andrew Holyoke Title: owner  
 Address: 107 Cliff St Date: Feb 21, 2018  
 E-mail: agholyoke@gmail.com

DO NOT WRITE BELOW THIS LINE [OFFICE USE]

Zoning Classification: B-1

Fee: \$ 100.00 - paid in full

Hearing Date: March 12, 2018

Request Denied or Approved: \_\_\_\_\_

Village Representative: \_\_\_\_\_

Title: \_\_\_\_\_

Amend

2

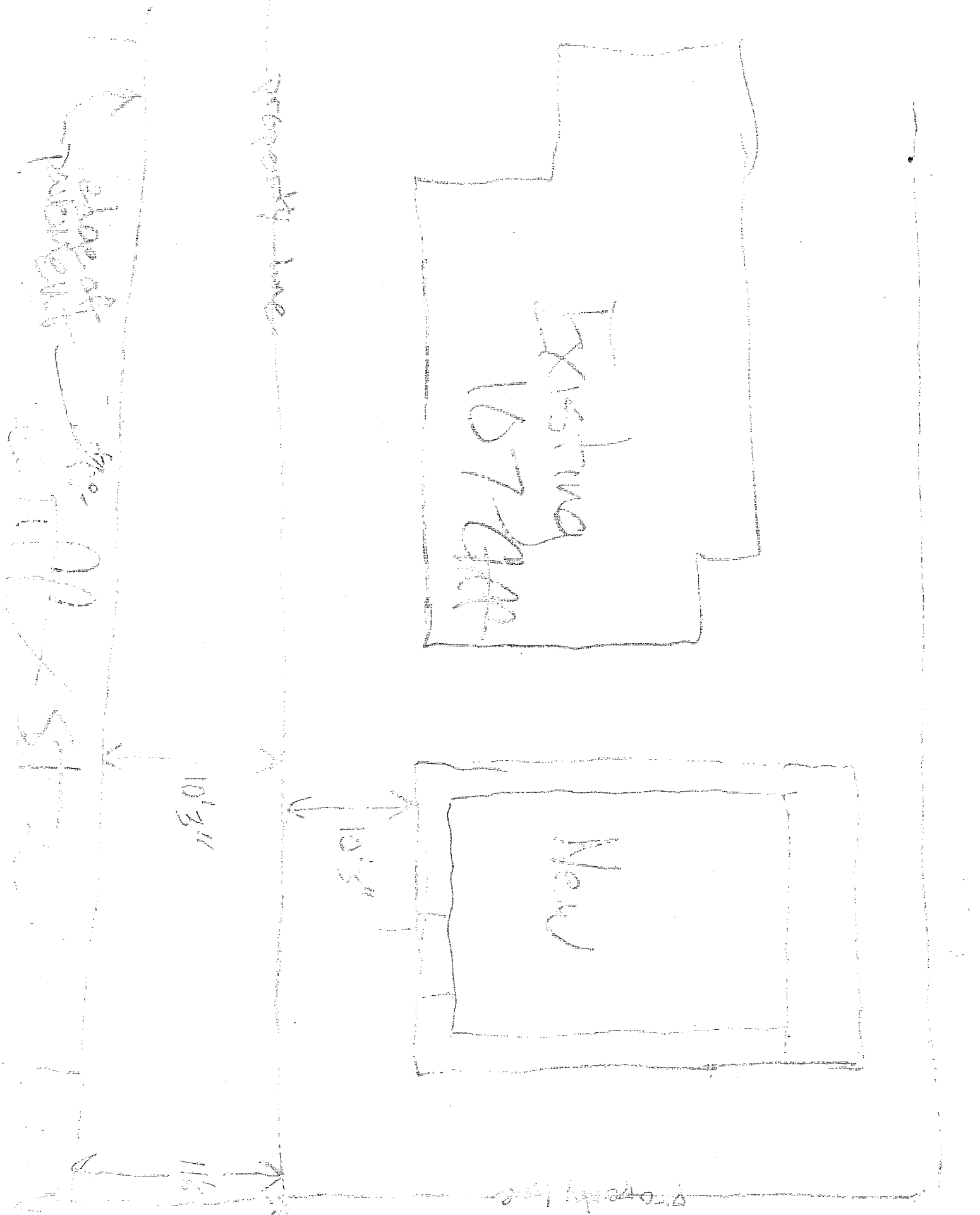


EXHIBIT 3

CLIFF STREET

EXHIBIT 3

RAILROAD ST

GENERAL NOTES:

- 01 ALL WORK TO BE DONE IN ACCORDANCE WITH RESIDENTIAL CODE OF OHIO 2013 & APPROPRIATE LOCAL JURISDICTION
- 02 DISCREPANCIES IN THE DRAWINGS SHOULD BE BROUGHT TO THE ATTENTION OF DESIGNER - GREEN GENERATION BUILDING CO. - FOR CLARIFICATION
- 03 DIMENSIONS ARE TO THE FACE OF STUD, POUR, OR I.C.F. UNLESS INDICATED OTHERWISE
- 04 TYPICAL EXTERIOR WALL ARE 4X6 POST @ 80" O.C. W/ STRAW BALE INFILL W/ EARTHEN PLASTER
- 05 TYPICAL INTERIOR WALLS ARE 2X4 @ 16" O.C.
- 06 INTERIOR PLUMBING WALLS ARE 2X6 @ 16" O.C.
- 07 DOORS CLOSE TO WALLS HAVE R.O. SET TO 3" (TWO 2X4S) FROM ADJACENT WALL TYPICAL
- 08 SEE PLUMBING PLAN FOR SUB SLAB DETAILS

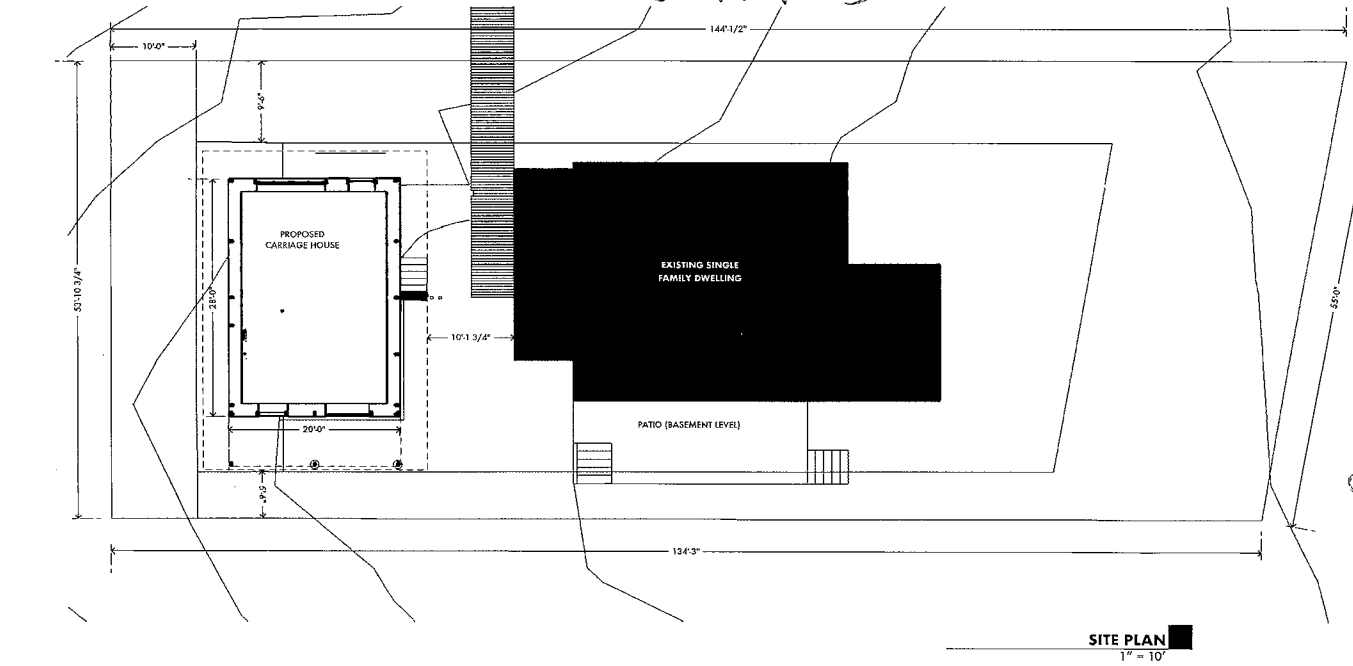


PROJECT #2018.0103  
SDV0.5  
02.21.2018  
DRAWN BY: AM  
CHECKED BY: HH  
www.greenohio.com

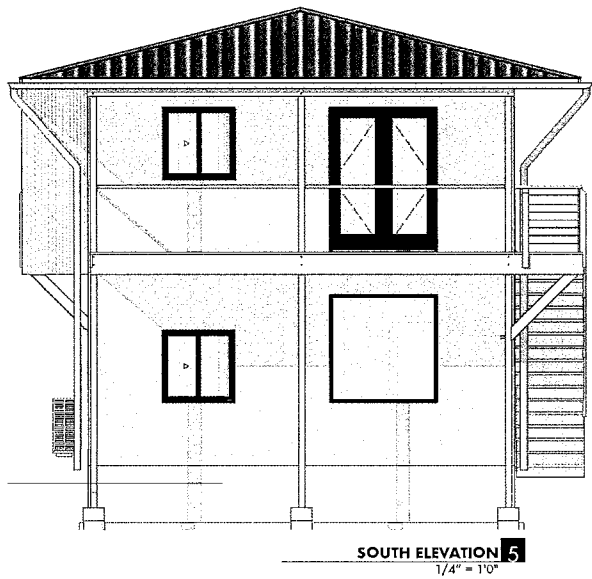
HOLYOKE CARRIAGE HOUSE

PROJECT ADDRESS: YELLOW SPRINGS, OHIO

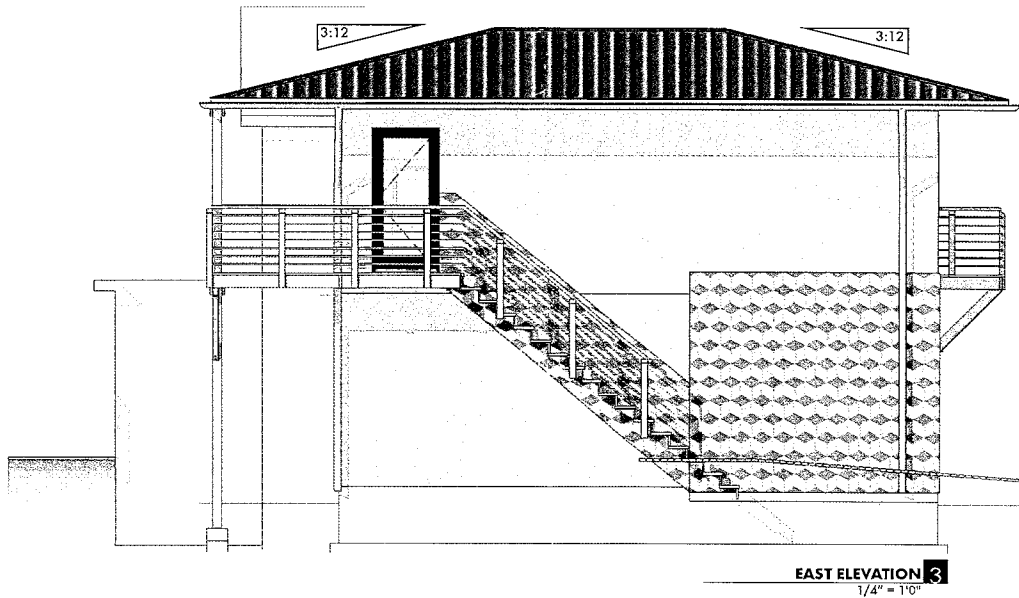
A100  
FLOOR PLANS  
& SCHEDULES  
2  
A100



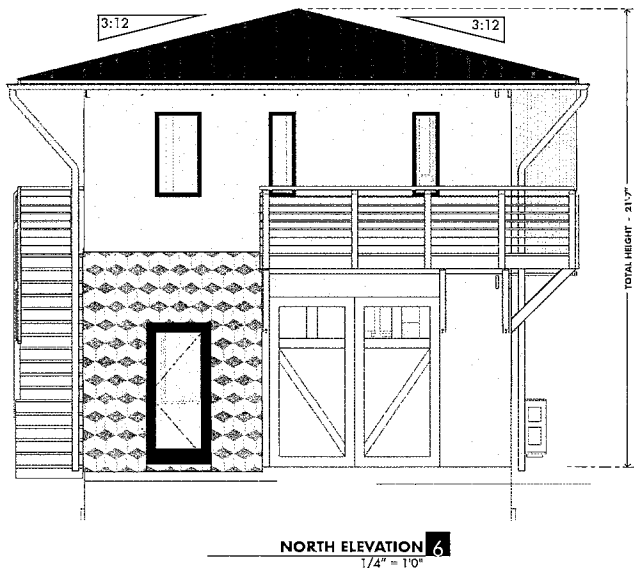
SITE PLAN  
1" = 10'



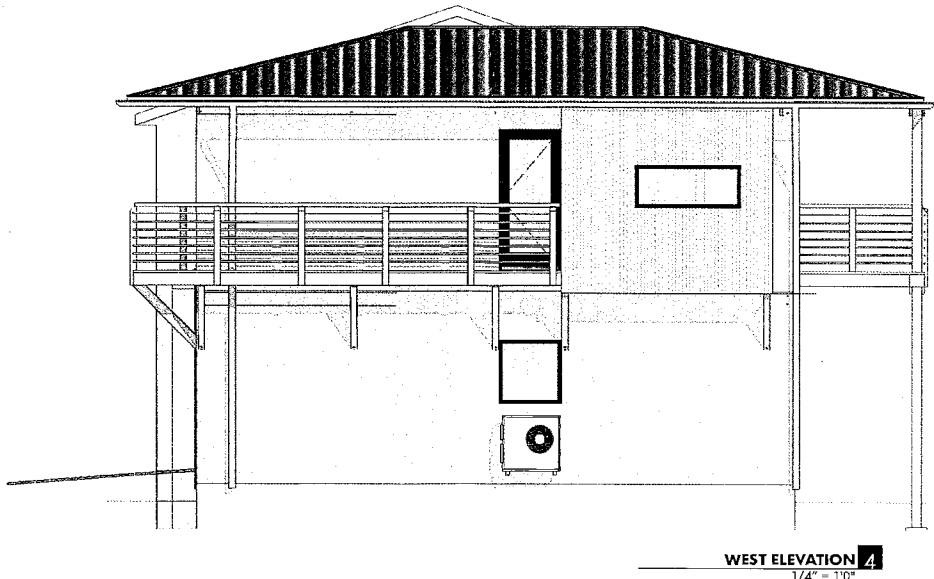
SOUTH ELEVATION 5  
1/4" = 1'-0"



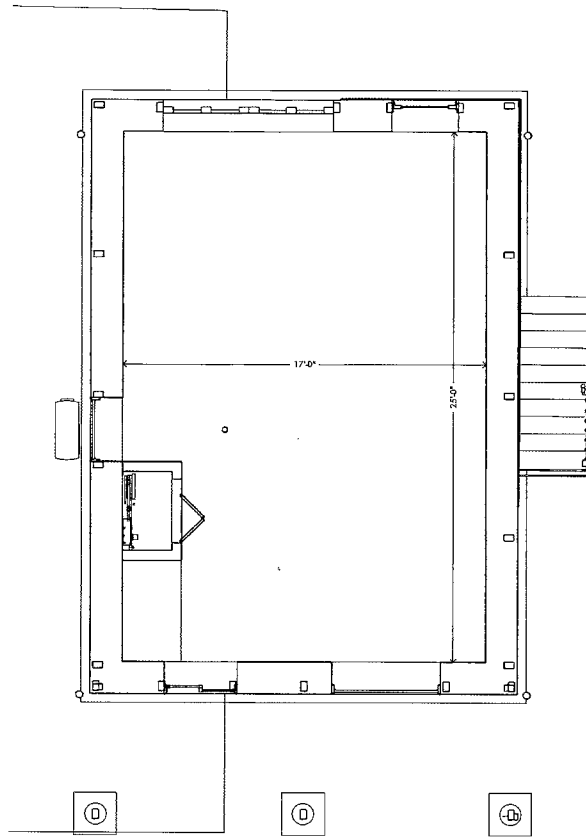
EAST ELEVATION 3  
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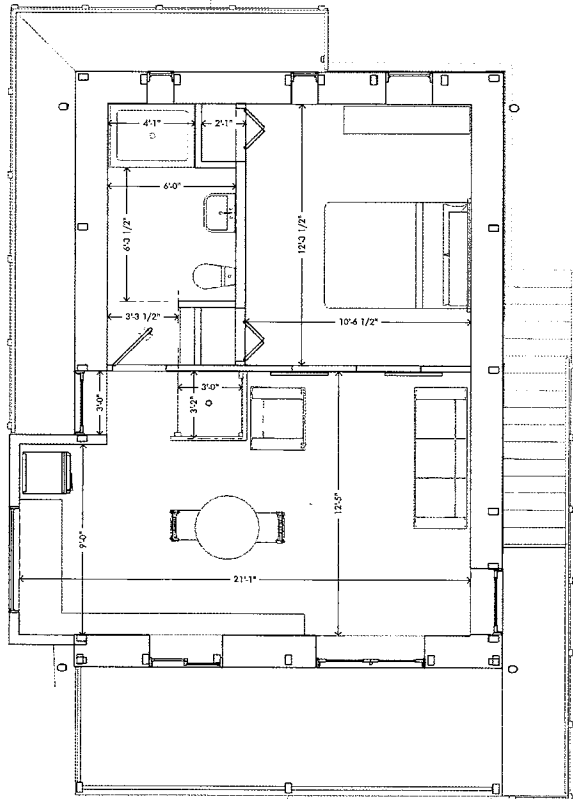
NORTH ELEVATION 6  
1/4" = 1'-0"



WEST ELEVATION 4  
1/4" = 1'-0"



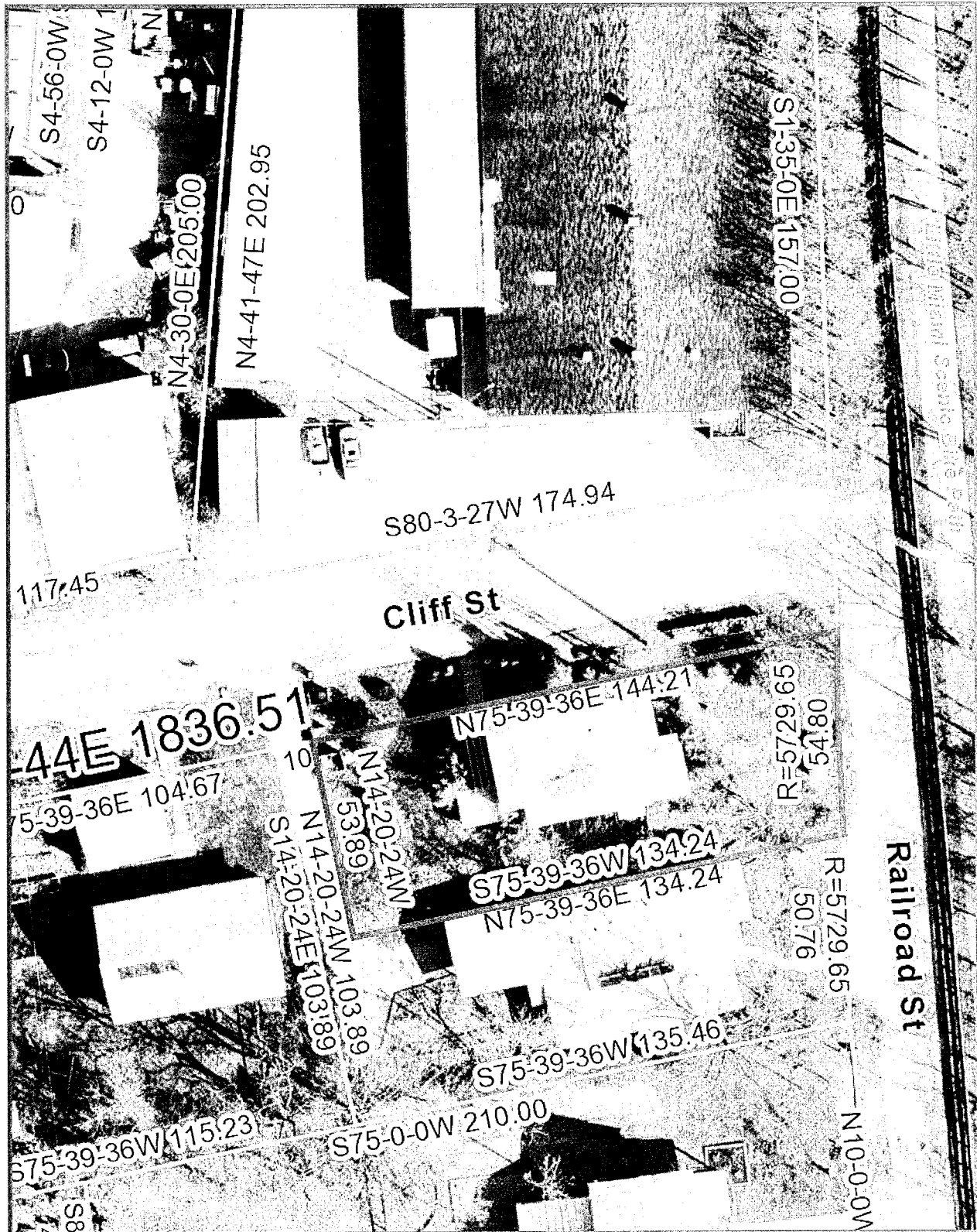
LOWER FLOOR PLAN 1  
1/4" = 1'-0"



UPPER FLOOR PLAN 2  
1/4" = 1'-0"

# Customized Property Map

EXHIBIT 4



## Greene County Legend

1 inch = 40 feet



Interstate Highway



Schools

71  
51

Parcel Number  
Lot Number



US Highway



Parks

Parcel Boundary



State Route



Buildings

Corporation Lines



Local Roads



Hydrography

940

Topography



0 20 40 Feet

This map was prepared as the tax map for Greene County as prepared by the Greene County Engineer in accordance with Section 5713.09 of the Ohio Revised Code. Greene County assumes no legal responsibility for the information contained on this map. Users noting errors or omissions are encouraged to contact the Greene County GIS Department.



# VILLAGE OF YELLOW SPRINGS

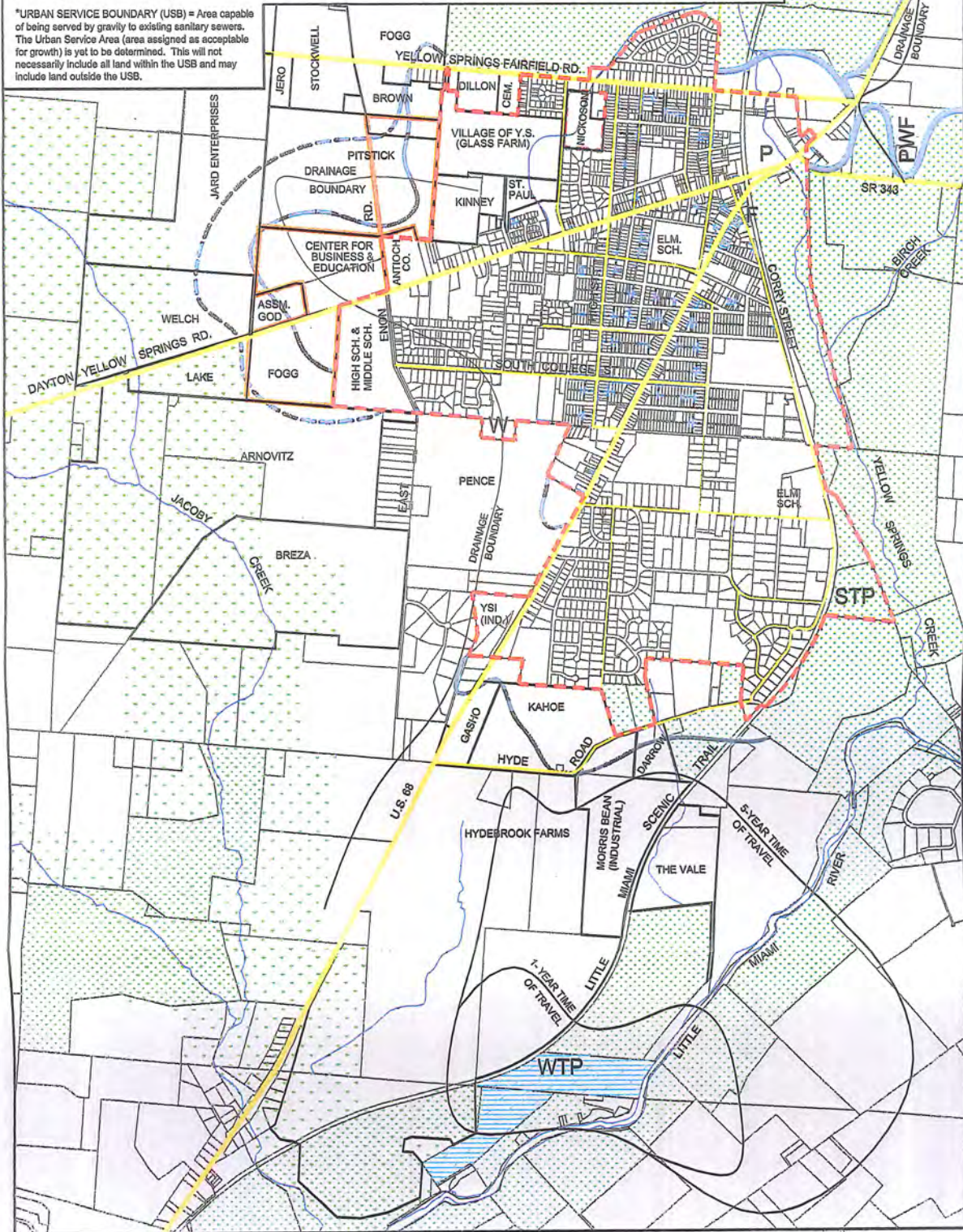
## URBAN SERVICE BOUNDARY\*

JANUARY 13, 2005 Phil Hawkey, AICP, VILLAGE PLANNER

- EXISTING VILLAGE LIMITS
- THOROUGHFARE PLAN
- COOPERATIVE ECONOMIC DEVELOPMENT AREA
- APPROX. LIMITS OF SERVICE TO EXISTING SEWERS BY GRAVITY (CONSERVATION AREAS EXCLUDED)
- APPROX. LIMIT WHEN 15" DAYTON ST. SEWER IS EXTENDED TO EAST ENON ROAD

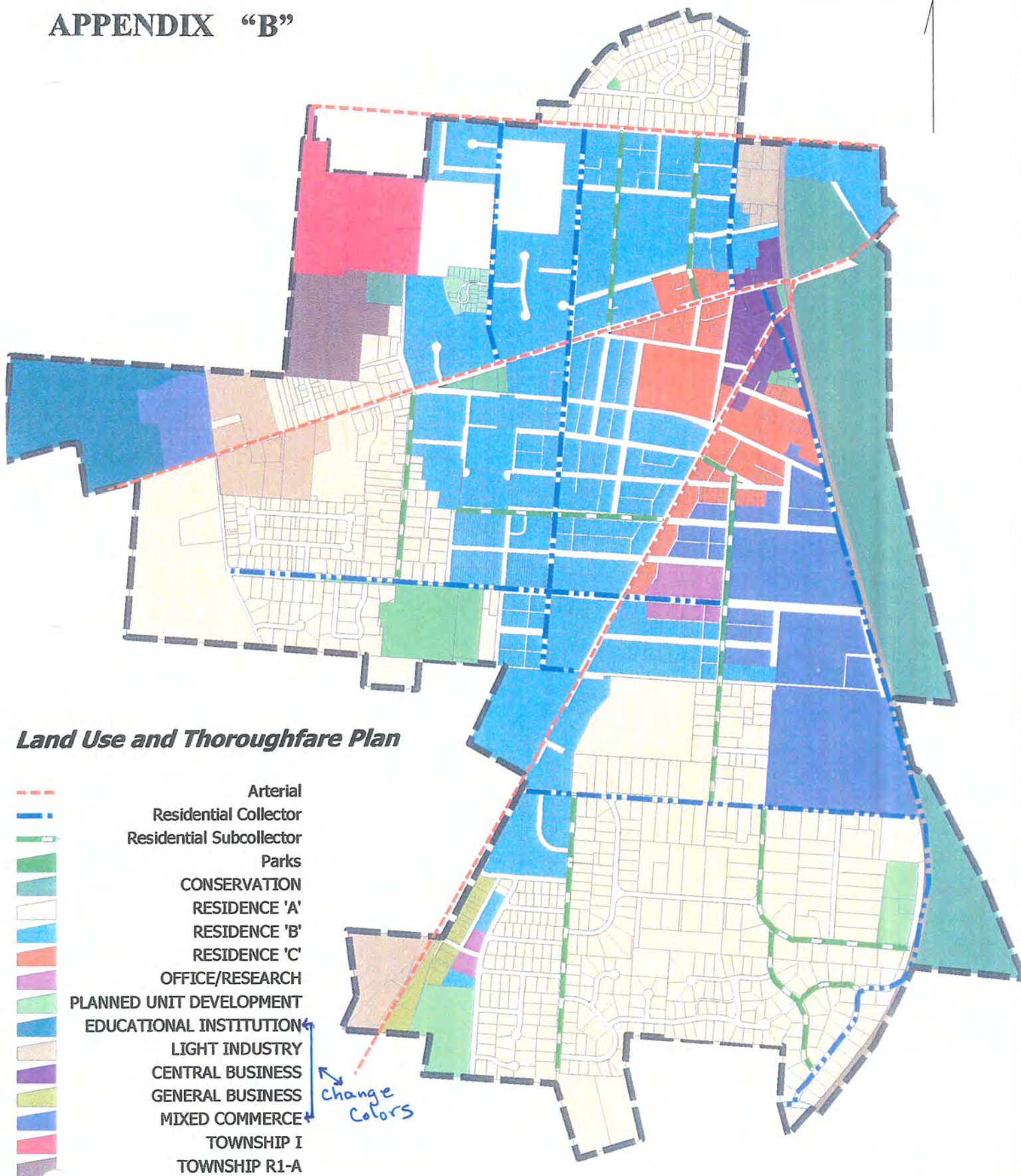
- F E.M.S. & FIRE
- P POLICE, BRYAN CENTER
- STP SEWAGE TREATMENT PLANT
- PWF PUBLIC WORKS FACILITY
- W WATER STAND PIPES
- WTP WATER TREATMENT & WELL FIELD
- EXISTING CONSERVATION AREAS
- JACOBY GREENBELT
- VILLAGE WELL FIELD

\*URBAN SERVICE BOUNDARY (USB) = Area capable of being served by gravity to existing sanitary sewers. The Urban Service Area (area assigned as acceptable for growth) is yet to be determined. This will not necessarily include all land within the USB and may include land outside the USB.





# APPENDIX "B"



VILLAGE OF YELLOW SPRINGS  
100 DAYTON ST.  
YELLOW SPRINGS OH, 45387

Map Design: Kai Qualben  
Scale: 1:14000  
Printed: December, 2007

## Appendix C

### Educational Institutions

- **Antioch University**
  - **Headquarter administrative offices for University System**
- **Antioch College**
  - **The undergraduate, residential liberal arts and sciences college of the Antioch University System**
- **Antioch University McGregor**
  - **The non-residential graduate and adult degree completion programs of Antioch University**
- **The Antioch School**
  - **An independent K-6 elementary school (originally established as the "lab" school of the Antioch College Teacher's Education Program)**
- **Yellow Springs Exempted Village School District (YSEVSD), including:**
  - **Mills Lawn Elementary School (K-6)**
  - **McKinney Middle School (7&8, shares campus with High School)**
  - **Yellow Springs High School (9-12)**
- **Yellow Springs Community Children' Center**
  - **An independent child care and pre-school facility accredited by the National Association for the Education of Young Children (NAEYC)**
- **Greene County Educational Services Center**
  - **Offers County-wide services such as:**
    - **Alternative programs**
    - **Home education**
    - **Gifted programs**
    - **Curriculum development and assessment**
    - **Professional Development**
    - **Mental Health Services**
    - **Therapy Services**
    - **Special needs classrooms**
    - **Parent programs**
    - **Alcohol and Drug-Free Services**
    - **Retired Teacher's Association**
- **The Miami Valley Educational Computer Association (MVECA)**
  - **Provides computer services to 24 school districts in Clark, Clinton, Greene, Highland, Fayette and Madison Counties**

- **Proximity to other educational institutions including, but not limited to:**
  - **Greene County Career Center**
  - **Wright State University**
  - **Central State University**
  - **Wilberforce University**
  - **Wittenberg University**
  - **Clark State Community College**
  - **Sinclair Community College**
  - **University of Dayton**
  - **Air Force Institute of Technology**
  - **United Theological Seminary**
- **Local entities that teach, among other things**
  - **Yoga**
  - **Dance**
  - **Pottery**
  - **Art**
  - **Music**
  - *Martial Arts*



#2

correct me

Appendix "D"

Part

# 1

Scan

# VILLAGE OF YELLOW SPRINGS PARKS & RECREATION DEPARTMENT MASTER PLAN

## History and Background

Historically, planning for the Village's park and recreational needs has been included as a component of the Village's comprehensive plan. Prior to the mid-1960s, the Village government owned very few parklands and ran virtually no programs for recreational activities. A Recreation Advisory Board was established by Village Council in 1958. Its stated purpose was to help prepare plans and programs for parks/recreation and advise Council on ways to respond to the community needs. Around 1974, the Board was re-named the Community Activities Board. The Board's charge was to define the recreations, cultural and leisure time needs of Village residents and provide policy guidance to the Village Council to address those needs. The Board was in existence until 1990, when it was disbanded by action of Village Council. The sentiment at that time was that the Parks and Recreation Department was operating and maintaining the Village's recreational resources sufficiently and, with no programs to oversee, the Board was not needed.

For about the last twenty years, the Village's position and support regarding parks and recreation has focused, almost exclusively, on providing physical facilities only. Prior to that time, programs were a major function of the department. At a point in the late 1970's, the Council decided that the Department needed to reduce its operation and, consequently, its budget. Following that downsizing, the Village government focused on maintaining and operating the existing parks system and providing some minimal support to volunteer efforts at programming. The Department has continued some annual traditions such as the Kings Island trip and a few organized skating parties for the community. During 1997, a volunteer group gathered to organize recreational events for local youth. This group sponsored a few events with the assistance of the Village's Parks and Recreation Department. The future of this interest and effort is unknown at this time.

## Past Planning Efforts

Throughout the years, various parks have received differing degrees of attention based on their role in the larger community picture. A significant investment has been given to Gaunt Park with an emphasis on creating active recreational facilities. The same is true of the John Bryan Community Center which has evolved from near abandonment to the present government offices/recreational hub. Conversely, the neighborhood parks which were established within residential areas as a means of providing play areas for the surrounding neighbors, have come to serve a more passive, open space role in the community. These areas have few, if any, park amenities and basically provide an open space within residentially-developed lots.

The 1966 Comprehensive Plan for the Village indicated that Gaunt Park was the only public park in the Village. At that time, what is now known as Ellis Pond/Park was still considered the former well field but was available for recreational needs. Also at that time, the Mills Lawn School property, the Glen Helen and the John Bryan State Park were seen as adequately serving community residents for recreational purposes. The 1966 Plan identified a need for neighborhood parks that would serve the active and passive recreational needs of local areas/neighborhoods.

The 1977 Village Plan recognized the addition of various neighborhood parks to the Village's inventory and noted that, in most areas of the Village, parkland is less than one-half mile away. The absence of a neighborhood park south of Allen Street was also noted. To support and encourage this continued enhancement provided by neighborhood parks, the Plan suggested the reservation of land for parks in conjunction with residential development.

The 1984 Village Plan Revision identified two poorly located mini-parks: the lot on the southeastern corner of Allen Street and Xenia Avenue and another at Whitehall and Northwood Drives. It highlighted Gaunt Park and the Bryan Community Center as facilities that are well situated and utilized by many community members. The bike path system developed throughout town was recognized in this document as another recreational asset to the community.

The 1996 Comprehensive Land Use Plan lists the following specific goals for the Village's Parks and Recreational system: 1) collect information regarding the recreational needs of the community and evaluate the present park system to determine if needs are being met; 2) continue to improve active recreational facilities as deemed appropriate, and 3) recognize and promote the Bryan Community Center as a cultural center.

The 1996 Plan also indicates that neighborhood parks should be evaluated to determine appropriate uses. Options for restructuring the use of these areas should be explored and changes made where deemed necessary. This document will attempt to do that.

#### **National Standards and Trends for Parks**

For the last thirty years, the National Recreation and Park Association (NRPA) has been responsible for establishing recommended guidelines and standards for parks and associated recreational uses. Traditionally, the standard of ten acres of park and open space per 1,000 population within an urbanized area plus an equal area in parkways, large parks, forests and the like either within or adjacent to the urban area has been used. This national guideline can provide some measurement of what is reasonable and adequate with respect to the delivery of a service and/or facility. Today, this and other standards are seen as a beginning point where a specific community can determine appropriate modifications to the standard based on the community's interests, desires and commitments towards parks and recreational areas.

The national agencies and organizations that have been involved in the parks and recreation field have gone through significant evolution over the last few decades. Changes with regard to environmental concerns, consumer demands for programs and facilities and the general growing interest in physical fitness have resulted in an alteration of the focus by these agents. One particularly significant national event that effects local plans for parks and recreational needs was the enactment of the 1992 Americans With Disabilities Act (ADA), which mandates equal access to all users of public (and private) facilities. This legislation requires that park areas and facilities shall provide reasonable accessibility and usable by all populations. This Act has resulted in significant changes in the procedures used to plan, design and utilize public parks and recreational areas. The US Architectural and Transportation Barriers Compliance Board of the Recreation Access Advisory Committee, a National agent, has generated design standards to address accessibility issues for recreational areas and activities. In the broadest sense, the ADA requires that: 1) all newly constructed buildings and facilities must be accessible, 2) renovations or alterations to existing facilities must incorporate accessibility elements, and 3) barriers to accessibility in existing facilities must be removed when "readily achievable." These standards have been recognized and have been used by the Village in the design and construction of improvements in the last few years.

There are national trends within the larger society which will influence local efforts to address recreational needs. Many have come to recognize the important role of our parks and recreational facilities in the larger community. These facilities add to the cultural fabric and quality of life for Village residents. Specific national trends that are seen as significant and, therefore, incorporated into recommendations outlined in this plan include:

1. the aging of the society
2. the increased importance of park and recreational amenities by community members
3. ongoing and changing environmental interest/concerns

4. a general increase in stake-holder involvement (i.e. local adopt-a-park programs/volunteerism, stewardship, etc.)

5. changing trends in recreational activities and the required support facilities

It is also important to look at the Village's parks and recreation system and how it weaves in with similar facilities that serve the larger region. It is particularly important, here in the Village, to recognize the larger regional recreational interests and actions and how they influence our local parks system. The presence of the Glen Helen Ecological Institute, the Little Miami Scenic Trail, John Bryan State Park and Clifton Gorge, within our immediate surrounds sets the stage for local involvement and influence in area-wide recreational activities.

There are many components to be addressed in a comprehensive plan for parks. A vast amount of information ranging from national trends and standards to the specific interests and concerns of community members should be acknowledged and incorporated into the planning effort. The assessment and evaluation of those elements are guided by an overall purpose and tone which should be established early on in the creation of a plan. To this end the general purpose of this plan is:

1. to evaluate the present and future need for recreational facilities here in the Village;
2. to identify options in meeting the anticipated needs;
3. to evaluate the projected costs of meeting the needs;
4. to provide a guidance tool for those involved in making decisions about future park needs.

The recreational facilities within a community represent an essential infrastructure element and, therefore, should be subject to the standard procedure used to determine a minimum Level of Service (LOS) which meets the demand. Once the LOS is established, the effectiveness of the existing recreational system can be evaluated. The use of a national guideline to serve as an expression of reasonableness in the delivery of such service is an accepted practice in the planning field. This LOS is an expression of the essential ingredients needed to provide the level of services deemed acceptable by the various vested parties. The LOS should be practicable and achievable and should provide adequate access to facilities for all citizens.

An established LOS serves as: 1) an expression of minimum acceptable facilities for citizens; 2) a guideline to determine land requirements for parks and recreational areas and facilities; and 3) a basis for relating recreational needs to land development opportunities which results in an effective and desirable community-wide system of parks and open spaces.

The approach adopted in this plan is to assess the existing system and residents' needs and incorporate that information into a framework for the creation of a parks system that safely and adequately addresses those needs. This approach must be accompanied by a commitment to continually assess the leisure needs and interests of the community through ongoing survey and inquiry. A specific LOS is not presented within the context of this document at this time. It is felt that a standard can be established once a comprehensive needs assessment has been completed. At present, the focus is to develop and enhance the existing facilities based on perceived need.

This plan should be incorporated into the Village's comprehensive land use planning efforts and capital improvements plan, either by reference or as an appendix/attachment element. An annual review of this document should be completed by the Parks & Recreation Department staff, with input from vested parties.

The plan's focus is to establish and operate from a perspective that combines the unique resources of the community and the desires and needs of the citizenry into a successful balance. The general basis for most of suggestions presented here is the day-to-day observations of the facilities and how the community is using them. In order to fulfill the purpose of the plan, as stated above, a more formalized and consistent



method of surveying and collecting input from facility users should be instituted. Typically, this feedback is relatively easy to collect from users of facilities such as the swimming pool and the community center. Simply survey those users as they visit the site. Other areas, such as neighborhood parks and open spaces, are more difficult to get feedback about with regard to use and importance. As was done a few years ago, the assumed users (i.e., neighbors of the park areas), should be surveyed for feedback on use and suggested enhancements.

### **The Village Park System: Present and Future**

The Village's park facilities have been categorized using established National standards for such facilities. These are described in detail below and are depicted in the site plans in Attachment "A".

#### **Community Parks**

In general, the purpose of a community park is to meet community-based needs, as well as to preserve unique landscapes and open spaces. These areas typically allow for group activities and offer recreational opportunities not available, or desirable due to related impacts, at the neighborhood level. Both active and passive activities should be accommodated at these facilities. Active recreational facilities in these parks are intended to be used in an informal and unstructured manner with some reserved and programmed use to a compatible level.

The site of a community park should be serviced by collector or arterial streets and be easily accessible from throughout its service area by way of interconnecting trails for vehicles and pedestrians.

Amenities for community parks should include, at a minimum, designated parking areas and public restroom facilities.

In the existing Yellow Springs Parks inventory, Gaunt Park, Ellis Park and the John Bryan Community Center fall within the category of community park. Each of these has a unique role in and contribution to the larger community.

#### *Wheeling S. Gaunt Memorial Park*

Gaunt Park was the first Village-owned land used for recreational activities. According to historical records, the Village took ownership of this land around 1894 after the death of Mr. Gaunt. In 1939, the Village Council authorized the "Community Youth Council" to work on the development of a plan for the "Wheeling Gaunt Land" to be developed for the community's recreational needs. Later that year, the Council dedicated the land for recreational purposes and established the required "Flour Fund" which was included in a bequest of Gaunt that the Village distribute flour to the widows in the Village. The specific stipulation was that rent revenues from the use of the land go toward the purchase of the flour. In 1956, with the opening of the Village swimming pool, the surrounding 17-acre tract of land, originally gifted to the Village became a vital community park. The park was subsequently dedicated to Gaunt's namesake.

Gaunt Park is located in the southwest quadrant of the Village. Based on its historical use, this park serves the largest population of all the Village's parks. The facilities here serve the broadest community in that patrons from well-outside the Village come to the park for the active recreational activities it offers. It houses a swimming pool, one baseball and one softball field, and two soccer fields. A large hillside has historically been used for winter sledding. The park has traditionally been the site for the annual July 4th fireworks display. About three acres of the property, added to the original land in 1958, is separated by fencing from the larger park and houses the Village's two water storage towers.

Historically, demands related to physical improvements within the park have mostly been associated with the swimming pool. From its original construction, the pool has been a product of complete support, including financial, from community members. Several significant improvements have been made to the pool and other facilities in the park in the last few years. In 1995, improvements to the poolhouse were

completed. A new diving board and new lifeguard stands were installed at the pool in 1997. During 1996 and 1997, permanent lighting was added to each existing ballfield. Some field improvement work, new backstops and fencing, was also completed. Playground equipment has recently been constructed in the front northwest area of the park.

The future for Gaunt Park is, basically, a continuation of its role as the focal point for the active recreational needs of the community and, to a manageable sense, the larger region. The location meets the standard criteria for a community park and no immediate expansion is recommended at this time. From a longer range (10-15 years) view, any expansion plans should consider the incorporation of the adjacent land to the south of the existing ballfields and east of the water tower area park. Presently, this land is outside the Village corporation limits and is being actively farmed.

Anticipated additions for the next five years should include: 1) a permanent concession area to replace the present one. This would be an expansion of the existing stand. A structure that would be plumbed and have permanent electricity is recommended. If possible, restrooms should be included. 2) improvements to the designated parking area to include proper striping and curbing and a possible redesign with some minor expansion to provide for more parking. The scope and details of any expansion of the parking area will be developed with the assistance of an engineer. 3) a renovation of the swimming pool which would expand the "poolside" area and expand the pool itself to include a "zero-depth" transition area where patrons who have physical limitations and/or who are very small can be accommodated. Additional pool amenities such as fountains and playpools should also be considered. It is presumed that any expansion would occur in the concreted area presently surrounding the pool. This addition would, most likely, be relatively costly and will not be implemented until significant input from pool patrons, staff, and design professionals is obtained. Also, based on the anticipated cost, any improvements will most likely be completed in phases over several years.

The estimated cost of each of these items in order of preferred priority is as follows:

1. Permanent Concession Facility	\$30,000
2. Parking Lot Improvement	\$25,000
3. Pool Renovation	\$80,000-\$100,000

#### *Ellis Park*

This park originally operated as the Village Water Works and well field. The approximate 17-acre parcel was dedicated as a park in 1955 in recognition of Charles Herbert Ellis, a former Superintendent of Public Utilities for the Village. The focal point of this park is the 3-acre pond which came into existence when, around 1948, metal sheet pilings were driven into the ground across the existing Yellow Springs Creek. About seven years later, the pond was dredged for increased depth, the banks widened and a concrete spillway was constructed to replace the pilings. The pond has been periodically stocked with fish. Ice-skating on the pond has been allowed in the past. There is a picnic shelter near the pond which was donated by the local Girl Scouts.

In 1976, improvements were made to the dam to fix existing leaks. Minor repairs have been completed on the dam since that time. Currently, it is in dire need of redesign and replacement.

Minor improvements and enhancements have been made at the park throughout the last twenty years. A restroom facility was constructed and playground equipment, which has subsequently been removed, were two such amenities. The Yellow Springs Tree Committee has been developing various tree groves throughout the park. During the last few years, they have been working to establish an arboretum in the southwest quadrant of the park. The arboretum is dedicated to Lloyd Kennedy and the many years he gave to the Tree Committee and the community at large. Other additions during the last few years include new picnic tables at the shelter house and also scattered throughout the park. Some existing benches that surround the pond will be replaced with new benches.

Ellis Park is considered a community park that it is used, predominantly, by community residents and a limited number of patrons outside the immediate area. The park caters to passive recreational activities, although a playground was present in the past. The pond will continue to be the focal point with amenities that compliment it to be considered. It is recommended that a walking path that would meander around the pond and also take in the tree groves and the arboretum be designed and constructed. It is also suggested that, if the opportunity should arise, the Village should pursue acquiring an access path that would link the park with the bikepath to the west. With the scheduled extension of the bikepath to the north, a paved spur from the bikepath to the park would provide an important link between the two facilities. At present, it appears that the spur should connect to the park at the south end. This runs parallel to an existing tractor path on the Whitehall Farm side of Polecat Road. A separate bike path should then be located along the southeastern edge of the park to connect with the parking lot. Also, if this connection is developed, some minor expansion of the parking area should be considered. The existing lot is gravel now and is recommended to remain. Any new parking area should also be graveled or be constructed with the porous pavement products now available.

The park has two rather immediate needs: improvements to the pond and permanent restroom facilities.

Future enhancements planned for Ellis Park include:

1) the addition of another shelter to be located where the original pump house was located, along the northwest edge of the existing parking area. This shelter will be dedicated to Charles Mundy, a long-time Village employee who helped create and construct the amenities presently at the Park. 2) the placement of several park benches along the perimeter of the pond. Some will replace existing benches and others will be new additions. If the supply allows, consideration should be given to creating a sitting area around the large evergreen trees at the northeast corner of the park. The new benches have been purchased through a 1997 ODNR Grant. 3) the addition of picnic tables to the existing shelter houses. These items have also been purchased in 1997. 4) a multi-year staged effort to dredge the pond and create areas of depth. This will involve a process whereby the perimeter of the pond, beginning at the existing edge and moving inward about six feet, will be dug out as the first step. Over time, expected to be about one year, some silt will move from the center of the pond into this increased-depth perimeter. Once again, the perimeter will be dredged (step 2). This process will be done an estimated three to four cycles. The result will be an overall dredging of the silt and debris at the bottom of the pond. An area near the dam will also be dug out to create an increased-depth area, and 5) the construction of permanent restroom facilities. The location will, most likely, be where the present "substandard" facility is now, and 6) the development of walking paths throughout the park that would link the various tree groves, the arboretum, picnic shelters and restrooms together. The path should be paved, with several outlooks/fishing "docks" along the pond, with a width of no more than five feet. A foot-bridge across the ditch will need to be included in the area that leads to the arboretum.

A final potential enhancement to be incorporated into the Park is non-consumptive wildlife recreational activities. These typically include bird-watching, insect study, plant life study, wildlife feeding and photography. These activities are supported through guided paths (the suggested walkway) that move through environments that are attractive to the birds and insects and vegetation being observed. There can be pausing areas along the way where one can sit and observe the surrounding environment. These paths can also include information signs and exhibits that describe the wildlife and/or vegetation present. This concept seems to compliment the existing tree groves and the planned walking path system. Further design details and associated costs would need to be explored.

The estimated cost of each of these items in order of preferred priority is as follows:

1. New Shelter	\$20,000
2. Pond Dredging	\$70,000
3. Restroom	\$15,000
4. Walking Path/pond docks/ditch bridge	\$18,000



#### *John Bryan Community Center*

The Community Center is located on 13 acres of land which was donated to the Village in 1923 upon the death of John Bryan. Mr. Bryan's request regarding use of the property was that it be used for educational and/or recreational purposes. The existing building was built in 1929, with the stone amphitheater and an dam being constructed on the site during the 1930 as a WPA project. The building served as the district high school until 1963. It later housed grades 6-8. In 1971, it began operating as a community center with many programmed activities occurring there. A significant remodeling of the building, to better serve the various scheduled activities, was completed in 1976, with funding assistance from the Federal Housing and Urban Development Program. After many years of use strictly for recreational and community activities, the Community Center was renovated and reopened in 1993. It presently houses the Village government offices and community meeting/conference space and recreational facilities. Behind the community center and adjacent to the parking area is a paved complex that houses two tennis courts and two outdoor basketball courts. Directly adjacent to the east of that, is a toddler playground, and the pottery shop.

The property has significant physical features, the most important being the Yellow Springs Creek and its valley. The entire property is located in the floodplain of the Creek. There are also several mature hardwood trees throughout the property that are important assets to the overall setting of the Center.

The portion of this property located between the creek and Cemetery Street has been used for overflow parking. It is recommended that this area continue to be used in this manner. As has been the case in the recent past, organized events associated with the bikepath and downtown events, will be encouraged to utilize this parking area.

The Bryan Center presently serves the recreational, cultural and social needs of the local community and, oftentimes, the larger regional community. The community center itself is the focal point of these activities which fall into a general category of "leisure activities" such as arts classes, dance and martial arts instruction, as well as volleyball and basketball in the gymnasium. The 1993 renovation has created a facility that is seen as meeting those needs well into the future with anticipated improvements being those associated with the ongoing operation and maintenance of the facility.

In general, future improvements are recommended for the area outside the community center. These include the design and construction of a walking path that would link the areas at the front and back of the building. This would lead users through the picnic areas to the playground/tennis court/skatepark area and also link with the adjacent bikepath. If constructed, consideration should be given to the construction of a bridge over the creek to connect the Cemetery Street area to the Center.

Another improvement to consider is the redevelopment of the amphitheater area. Several attempts at this have been made in the past with no success. If it is determined that the community sees this as a worthwhile enhancement to the area, attention should be targeted toward the effort.

The significant physical features present on the property, specifically the creek and the "woods" could be conducive to the creation of non-consumptive wildlife recreational activities. Paths through this area which would allow bird-watching, photography and environment study should be considered. This would be similar to the facilities described for Ellis Park. Again, specific design details and associated costs would need to be pursued.

Future plans for the Bryan Center include: 1) the addition of a skatepark facility just north of the existing tennis courts pending further details on design, construction costs and ongoing maintenance obligations. At a minimum, this facility should serve as wide a range of users as possible and be relatively self-sufficient in terms of personnel demands/requirements. 2) the completion of a landscaping plan that will highlight the building and soften to asphalt parking area, as per Yellow Springs Tree Committee recommendation, February, 1995. 3) continue vegetation clearing along Xenia Avenue/Dayton Street line of property and of area between the parking lot and the adjacent bike path, 4) install a crosswalk



across Dayton Street to Hilda Rahn Park which will link up to a walkway through that park area to the proposed Yellow Springs Station facility, and 5) develop the proposed walking path

The estimated cost of each of these items in order of preferred priority is as follows

1. Vegetation Clearing	\$3,000
2. Skatepark	\$65,000
3. Landscape Grounds	\$15,000
4. Walking Path	\$10,000

#### *Little Miami Scenic Trail*

The Village owns a three-mile stretch of the Little Miami Scenic Trail from Yellow Springs-Fairfield Pike to Jacoby Road. The Trail is an 80-mile paved multi-purpose path stretching from Milford to Buck Creek State Park near Springfield. The present northern terminus of the path is a bridge across Yellow Springs-Fairfield Road. Construction on the remaining section is scheduled to begin in 1999. This path has been a long time in the making. The city of Xenia, the Ohio Department of Natural Resources and the Village pursued acquisition of the railroad right-of-way between 1973 and 1983. In 1986, the project received funding from the Federal Highway Administration to construct an alternative means of transportation. Actual construction of the path began in July of 1990. The trail opened in October of 1991. For a few years, the Village paid the Greene County Parks and Recreation Department to maintain the path. Beginning last year, the County is providing that service at their cost.

Recommended improvements to the path should be closely coordinated with Greene County. There is an interest by those jurisdictions who have bikepath(s) in their areas to provide some uniform identification to the bikepath system. Amenities such as park benches, picnic tables and waste containers should be of a uniform design throughout the bikepath system. The Village will continue participation in those discussions and incorporate amenities as determined through this larger scope.

In 1997, a group of interested community citizens introduced an idea for a park area to commemorate women, to be located between Corry Street and the Bikepath, just south of the Antioch Theater. This would be a long, relatively narrow park with a walking path through it. Along this path would be sitting areas and finished landscape areas with information about particular women and their contribution to the community. The path would connect on each end to the Bikepath. To date, the Village Council has approved the use of the described area for such a park, contingent on an agreement to a final design for the site. Progress toward this end is anticipated to occur in 1998.

#### *Neighborhood Parks*

The Village has several neighborhood parks and/or open spaces at various locations throughout town. Some of these were the result of a previous requirement for the dedication of such land as housing developments occurred. Others have been donated to or purchased by the Village.

Neighborhood parks are considered the basic unit of a park system which serve the recreational needs of a neighborhood and often times as the social focal point. A neighborhood park should be developed for both active and passive activities, as specifically desired by those living in the neighborhood. It is important that the neighborhood park serve a variety of populations with regard to age and activity level.

A neighborhood park should be centrally located within a typical 1/4 to 1/2 mile service area. Access should be available through low-volume residential streets and paths/sidewalks/trails for pedestrians. Ease of access and walking distance are critical in the successful use of a neighborhood park. Recognizing that one of the main motivations for visiting a neighborhood park is to have a positive outdoor experience, the site should have some innate aesthetic qualities. Amenities such as mature trees, finished landscaping and the enhancement of any topographic features should be incorporated into the overall design.

In a planning sense, given the importance of location, neighborhood parks should be selected while a proposed subdivision is being platted and then the designated land acquired as part of the development process.

Neighborhood input and participation in the development or improvement of these areas is essential. It is important to seek a balance between active and passive park uses, as the surrounding neighborhood desires. Active uses are intended to occur on an informal and unstructured level. Programmed activities are not intended to be accommodated at these park areas. The creation of an appealing atmosphere is also critical to the success of the park. Safety must be addressed in all design aspects.

Many of the recommendations for improvements to these parks include playground equipment. At this point in the planning stage, the area to be occupied by that activity is identified. The actual elements of the play area can involve the typical structured play equipment such as play structures and swing sets but could also include amenities such as a play fort or "treehouse" and climbing rocks. The specific desires and physical limitations will aid in determining further specifics.

#### *Hilda Rahn Park*

The park known as Rahn Park was donated to the Village in 1904 by the Grinnell family. It encompasses about 3/10 of an acre at the north end of the Village where Dayton Street intersects with Xenia Avenue. In 1976, it was officially dedicated to Hilda Rahn, who served as Clerk of Council for (years).

Historically this park has served as a space that softens the entrance into the downtown area with an emphasis on the creation of an aesthetically-pleasing space. A local group, the Friendly Gardeners, have taken great responsibility and pride in creating attractive flower beds in the park. The Yellow Springs Tree Committee has also planted several flowering trees in the park. From Spring to Fall of each year, the small space provides a distinctly soothing space within the surrounding downtown. In the last few years, a few picnic tables have been added to the park.

In 1996, the Village developed plans to construct permanent public restrooms in the park to address concerns from downtown businesses regarding the lack of such facilities in the area. With its proximity to the bikepath, a restroom facility in Rahn Park seemed appropriate. Soon after that proposal, a group of community members began pursuing the idea of recreating the train station that was once a focal point of the Village. During the last year, plans for such a facility have solidified, along with the necessary funding. This facility will house public restrooms, office space for the Yellow Springs Chamber of Commerce and some public exhibit/information space. A site plan that incorporates the Yellow Springs Station into the park has been developed by a local architect and landscape architect. That plan is incorporated into this document, by reference, as the plan for Hilda Rahn Park.

Construction of the Yellow Springs Station is planned for the Spring of 1998 with completion soon thereafter. By the end of 1998, the Station will be in full operation. Remaining site improvements, as depicted on the plan, will be completed by Spring of 1999.

Anticipated costs of these recommended improvements are as follows:

- |                                     |           |
|-------------------------------------|-----------|
| 1. Construction of Train Station    | \$185,000 |
| 2. Landscaping/ Site enhancement(s) | \$15,000  |

#### *Bill Duncan Park*

Located at the point where Limestone and Dayton Streets intersect, this park serves as a significant focal point at one entrance into the Village. Traditionally this park has functioned as an open space with some minor passive recreational facilities such as benches and picnic tables present.

In total, the park encompassed about one and one-half acres. Other than the Parks Department crew, the Yellow Springs Tree Committee has been the predominant steward of this park, planting trees on a

routine basis. In the early 1990's, a sidewalk was constructed along the eastern side of the park, running between Limestone Street and Dayton Street.

Recently, the Village received a request from a nearby neighbor for the installation of playground equipment in Duncan Park. The Kingsfield development, located on King Street just north of Dayton Street, houses many families with children who would benefit from this addition. The present layout of the park could accommodate a playground, with further design details and requirements still needing to be worked out.

The western quarter of the park presently supports several trees of substantial size and relatively low canopies. This area is difficult to mow without risking damage to the low-lying tree branches. Additional smaller, younger trees have also been planted in this area. It is being suggested that the area be mulched and finished off, possibly in a planted area with flowers and other ground covers, to enhance its visual role as it relates to the surrounding areas, and to eliminate need for mowing.

Additional picnic tables and benches should be added to the park, as depicted on the site plan in Attachment "A." If the playground area is developed, a drinking fountain should be included adjacent to the playground.

This is one of the Village's parks that is probably just fine as it is. The recommendations for improvements and additions to this park are suggested to enhance the existing park and to incorporate additional amenities that would increase the use of the park.

Future plans for improvements to the park include: 1) the addition of a playground area and associated drinking fountain; 2) the redesign of the western quarter of the park to be mulched, flower beds be added and groundcover be established; and 3) additional picnic tables and park benches be added to various areas of the park.

Anticipated costs of these recommended improvements are as follows:

1. Playground Area	\$10,000 - \$12,000
2. Mulched/finished Area	\$5,000
3. Tables & Benches	\$4,000

#### *68/Allen St. Park*

The Village purchased this tract of land in 1963 from the estate of Paul H. Dawson. This park originally contained just over one acre. Sometime in the 1970s, about one-quarter acre was sold to adjacent property owners.

About seven years ago, a stormwater catchbasin was installed in the park. The surrounding area was graded to allow for the collection and temporary detention of stormwater from the Shawnee Drive. The collected water continues to move off the site, through a storm sewer, to the south. Any plans, modifications or improvements to the park must incorporate the presence of this infrastructure.

Although this land is considered "park," it mostly serves an "open space" role. There are presently no amenities to support any recreational use of the land. There are trees planted there by the Yellow Springs Tree Committee.

It is recommended that this land continue to serve predominantly as an open area and not considered available for active recreational uses. Portions of this park appear to be good locations for the planting of ornamental grasses and prairie-type vegetation, mostly in the south east quadrant as depicted on the Site Plan in Attachment "A". Further details to determine the feasibility of such design should be pursued. If such an area can be developed, amenities such as sitting benches and maybe a picnic table should be incorporated into that area.

Anticipated costs of these recommended improvements are as follows:

1. Development of "planted area" to contain items such as ornamental grasses, prairie-type plantings, groundcovers, etc. \$5,000
2. Benches/Picnic Table(s) \$3,000

One footnote regarding this park: it needs a name. There is no identification that this is "parkland" which is owned and maintained by the Village. The surrounding neighborhood as well as the entire community should be surveyed to determine an appropriate name for this park.

#### *Fair Acres Park*

This park, which contains about three-tenths of an acre, was dedicated to the Village as part of the Fair Acres subdivision development. During the time of the dedication, the Village was requiring a percentage of the total land being developed to be dedicated for parkland or a fee paid to the Village in lieu of that dedication.

Historically, this park has been used by the surrounding neighbors for predominantly informal and unstructured activities. Youngsters would play ball there and neighbors would collect for a picnic. The park has no park amenities on the site and presently functions mostly as an open space within the neighborhood.

A 1996 neighborhood survey of Fair Acres subdivision (Gardendale, Whitehall, Northwood Drives) was completed in an effort to guide future needs for the neighborhood park. The general feeling of survey respondents was that the park area provided a welcome open space and was considered an asset to the neighborhood. There was some interest in adding park benches and picnic tables to the park to allow better use by interested neighbors. Respondents were not supportive of eliminating the park.

It is recommended that amenities to support the passive recreational use of the park be added. This should include picnic tables and park benches. If feasible, as determined by the physical allowance of the land and the genuine interest by the neighborly, a small playground area could also be developed.

The estimated cost of the recommended improvements is as follows:

1. Tables & Benches \$4,000
2. Playground Equipment \$6,000

#### *Beatty-Hughes Park*

This park was added to the Village's inventory in 1968 and was a homesite of William and Ethel Beatty. It is located on Corry Street just south of the downtown area. There are several mature trees in the park which are important assets to the overall park setting. The park encompasses about one-quarter acre of land.

This park serves and compliments the downtown area and the nearby bike trail. In the past, a playground area was included in the park. Presently there are a few benches and a drinking fountain. The fountain was donated by the Leo Hughes family, upon his passing in 1995.

Another relatively new addition to the park is located at the northwest corner and is dedicated to the memory of Deborah Sirkin, a long-time resident. The corner has been designed for plantings and finished landscape which include a park bench. A detailed plan for this area is included in Attachment "B"

It is recommended that this park continue its role as a "resting place" within the downtown area. Additional picnic tables and benches should be considered. There appears to be a small area that could support some playground equipment. That area has been designated on the site plan (Attachment "A").



The specific equipment selected will determine how many pieces might be placed within that designated space.

Anticipated costs of these recommended improvements are as follows:

- |                         |         |
|-------------------------|---------|
| 1 Picnic tables/benches | \$3,000 |
| 2 Playground equipment  | \$4,000 |

#### Other Park/Open Spaces in the Village

There are several other, non-Village-owned lands in the Village that should be acknowledged as part of an inventory of such spaces. These are places that are typically available to the public and house many social and cultural events. Most community members think of them as parks in their use of them. These areas include the "Golf Course" on the Antioch campus, the Mills Lawn School property, and the Yellow Springs High School/Middle School campus. The Yellow Springs School properties support some organized recreational activities and also are viewed as "parklands" by the Yellow Springs Tree Committee for tree-plantings. Specifically, the High School campus contains a football field and track and soccer fields. The Mills Lawn School property has two tennis courts, playground equipment and an informal baseball field. The "Golf Course" is an open tract of land containing over 20-acres with few significant physical features and no man-made improvements.

#### Future Needs

Past planning efforts have highlighted the perceived need for neighborhood parkland in the area south of Allen Street and also questioned the role and/or need for existing park/open space. With the Antioch "Golf Course" no longer owned by the Village, residents living in the area south of North College Street and east of Xenia Avenue are not served by a neighborhood park. The bikepath provides an appropriate link to the Beatty-Hughes Park and the Bryan Center but there is no specific park facilities for that area.

This area contains, roughly 250 residences. At an average of 2.2 persons per unit (1990 Census), the area contains approximately 550 people. Applying the National standard of 10 acres of parkland for every 1,000 people, this "neighborhood" should have about 5.5 acres of parkland available for use.

There is no obvious site to propose for the subject neighborhood park. Two possible options are: 1) approach Antioch University about a possible purchase of a tract of land from the "golf course" somewhere along Allen Street, and 2) research the possibility of developing the open space associated with the Greene Metropolitan Housing Authority development along Corry Street. Both of these options would require further research and validation from other vested parties. Another option could involve the dedication of land for park use if and when the remaining undeveloped areas in the very southern reaches of the Village are considered for subdivision. This would not address the needs of those in the northern portion of the target area.

It is suggested that the residents living south of North College Street between Corry Street and Xenia Avenue be surveyed to determine their interest in and perception of future parkland in that general area. Upon completion of that survey, additional options and considerations can be pursued.

With regard to unmet recreational needs, the Village's facilities for soccer are considered insufficient by most that are involved in using the facilities. The demand for more fields is very strong and it appears that the interest in the sport is solid. The two fields at Gaunt Park need attention and contribute a small piece into the large organized program. Those using the fields are also using the fields at the Yellow Springs High School. It is suggested that additional land be secured for a relatively large-scale (4 to 6 fields) facility be considered. A parcel of five to seven acres of land would be quite adequate for the suggested development. If a new tract is developed, additional amenities such as outdoor volleyball court(s), horseshoe pitching pits and general picnic areas should be considered.

In the past few years, concerns regarding the Village's youth and options available to them to occupy their free time were expressed. These concerns were connected with various events as they occurred over time - the presence of young people downtown, incidents occurring at the Youth Center, etc. Early in 1997, a group formed to attempt to address these concerns. The Youth Center Coordinating Committee was formed. The structure of the Committee was formalized to consist of four youth representatives, three adult volunteers and a Parks & Recreation staff representative. After some discussion, the Committee developed a Mission Statement: The Committee consists of adults and youth who coordinate, plan and implement programs and activities through the Youth Center to involve a maximum percentage of the community's youth. Duties were further defined to include: monthly meeting, solicit volunteers to help with projects/activities, serve as vehicle to foster youth leadership, and be available to hear topics of concern at Youth Center.

In April of 1997, the Committee and the Village Mediation Program held a Teen Training, which was held for five days for a total of eight hours. The purpose of the training was to help create a more satisfying experience for teens who used the Teen Center. This purpose was addressed by teaching those in attendance skills to more effectively resolve conflicts and solve problems and convey ways to treat people and property with respect. The sessions addressed issues such as teambuilding, resolving conflicts, managing anger, and ideas about improving the Youth Center environment.

As a result of this group's efforts, several activities were held in the Fall of 1997 for the community's youth. These included a Family Halloween Party, a hayride and story-telling at Ellis Park and a dance at the Bryan Center. There was also a partnership established with Antioch College's Bonner Scholar Program, whereby the Antioch students in the program would create and oversee activities for interested youth. One such program was held at the Youth Center over several weeks and involved drum-making.

In general, this effort was beneficial but was only an initial step in the ongoing need and concern to involve the youth of our community in positive, recreational and cultural activities. The interest and willingness of members of the community will determine the future direction of this recent effort.

#### **Financial History and Future Needs**

The Yellow Springs Department of Parks and Recreation is funded by Village income tax revenues. Currently, the Department is managed by the Parks and Recreation Director who oversees one full-time Maintenance Worker. Additional staff are part-time building monitors for the Bryan Center, and summer staff for the swimming pool and parks maintenance crew.

In 1972, when the Department was at its operational peak with both facilities and programs, the Village Council adopted an ordinance that restructured the Village's building permit fee to include an additional sum which went into a Park Fund and did the same in 1977 with regard to fees collecting for zoning permits involving residences. The revenue collected was to be used to acquire land for parks and other facilities. Also in 1972, the Council adopted a regulation that required any land of twenty acres or more, that was being subdivided, to include a dedication of 5% of the total acreage for parkland. In 1986, the Village Council repealed both requirements, stating that the needs for parkland had been adequately met for the foreseeable future and that this cost was seen as going against the goal of moderate, controlled housing growth.

For several years after 1986, the Parks and Recreation Department utilized the limited revenues from the local income tax to simply maintain the existing facilities with limited improvements. Annual budget information from 1994 to 1997 is further detailed in Attachment "C". Since 1995, a significant amount of revenue has been secured from grant sources of the State of Ohio. These moneys have contributed towards the purchase of the ballfield lights at Gaunt Park, the new toddler playground at the Bryan Center, the planned Yellow Springs Station along the bikepath and amenities such as picnic tables, park benches and trash containers. Two of the major funding sources for these improvements are predicted to become much less accessible with limited funds available. The Greene County GRJP Grant Program and

Community Public Improvement Fund appear to be solid and reliable sources for funds for future ventures.

Based on the apparent trend of income tax revenues remaining level to declining and the inherent assumption that operational costs are on the rise, the staff is committed to continue pursuing other, outside funding sources for the recommended improvements. It seems reasonable to expect that there will never be a perpetual outside source for funding and it is recommended that the Village study all prospects for revenue. This should certainly include consideration of increased user fees for use of the facilities, additional fees on other, related permits as was done in the past, and additional millage voted in on taxes.

Another option to help offset rising costs is to explore the development of a volunteer program to help facilitate the delivery of desired services to the community. Many communities in the Miami Valley Region and nationwide operate successful volunteer programs. Volunteer groups can assist with park beautification by tending flower beds and landscaped areas and also assist with ongoing programs focused on youth or particular recreational interests. Programs coordinating "Adopt-a-Park" activities have been very successful elsewhere. The first step at pursuing this option should be to survey the community and determine if there is a potential volunteer pool to participate in such a program.

Based on the information provided in this plan, the next two years are relatively secure with regard to anticipated revenues and expenses. It's after that, with the proposed pool renovation and pond dredging, that expenses reach a difficult level.

The following annual expenditures result from the plan, as outlined in the previous pages:

#### 1998

Hilda Rahn Park Train Station	\$185,000 <sup>1</sup>
Gaunt Park Permanent Concession Facility	\$30,000 <sup>2</sup>
Ellis Pond Picnic Shelter	\$8,000 <sup>3</sup>
Bryan Center vegetation clearing	\$3,000
Bryan Center skatepark	\$35,000 <sup>4</sup>
Duncan Park playground area	\$6,000-\$8,000
<b>TOTAL</b>	<b>\$267,000 - \$269,000<sup>5</sup></b>

1. Various grant sources @ \$104,300 (\$36,250 pending) & local (non-govt.) fund-raising
2. Pending GRIP Grant approval - \$9,000 Village cost
3. Some materials have been purchased
4. Phase 1, pending GRIP Grant approval - \$6,500 Village cost
5. Includes \$151,180 in anticipated grant & local non-govt. moneys

#### 1999

Bryan Center skate park	\$35,000 <sup>1</sup>
Beatty-Hughes Park picnic tables/benches	\$3,000
Beatty-Hughes Park playground equipment	\$4,000
Duncan Park mulched/finished area	\$5,000
Duncan Park tables & benches	\$4,000
Ellis Park Pond Dredging	\$70,000
Bryan Center landscape grounds	\$15,000
Xenia Ave./Allen St. Park planted area	\$5,000
 Xenia Ave./Allen St. park benches/ table(s)	 \$3,000

Xenia Ave./Allen St. park benches/ table(s)	\$3,000
TOTAL	\$146,000

*1. Phase 2, with grant assistance*

2000	\$15,000
Ellis Park Restroom	\$5,000
Bryan Center walking path	\$25,000
Gaunt Park parking lot improvements	\$40,000-\$50,000 <sup>1</sup>
Gaunt Park pool renovation	\$4,000
Fair Acres Park tables & benches	\$6,000
Fair Acres Park playground equip	
TOTAL	\$95,000-\$105,000

*1. Phase 1 upon completion of overall improvement plan*

2001	\$40,000-\$50,000 <sup>1</sup>
Gaunt Park pool renovation	\$5,000
Bryan Center walking path	\$18,000
Ellis Park walking path	
TOTAL	\$63,000-\$73,000

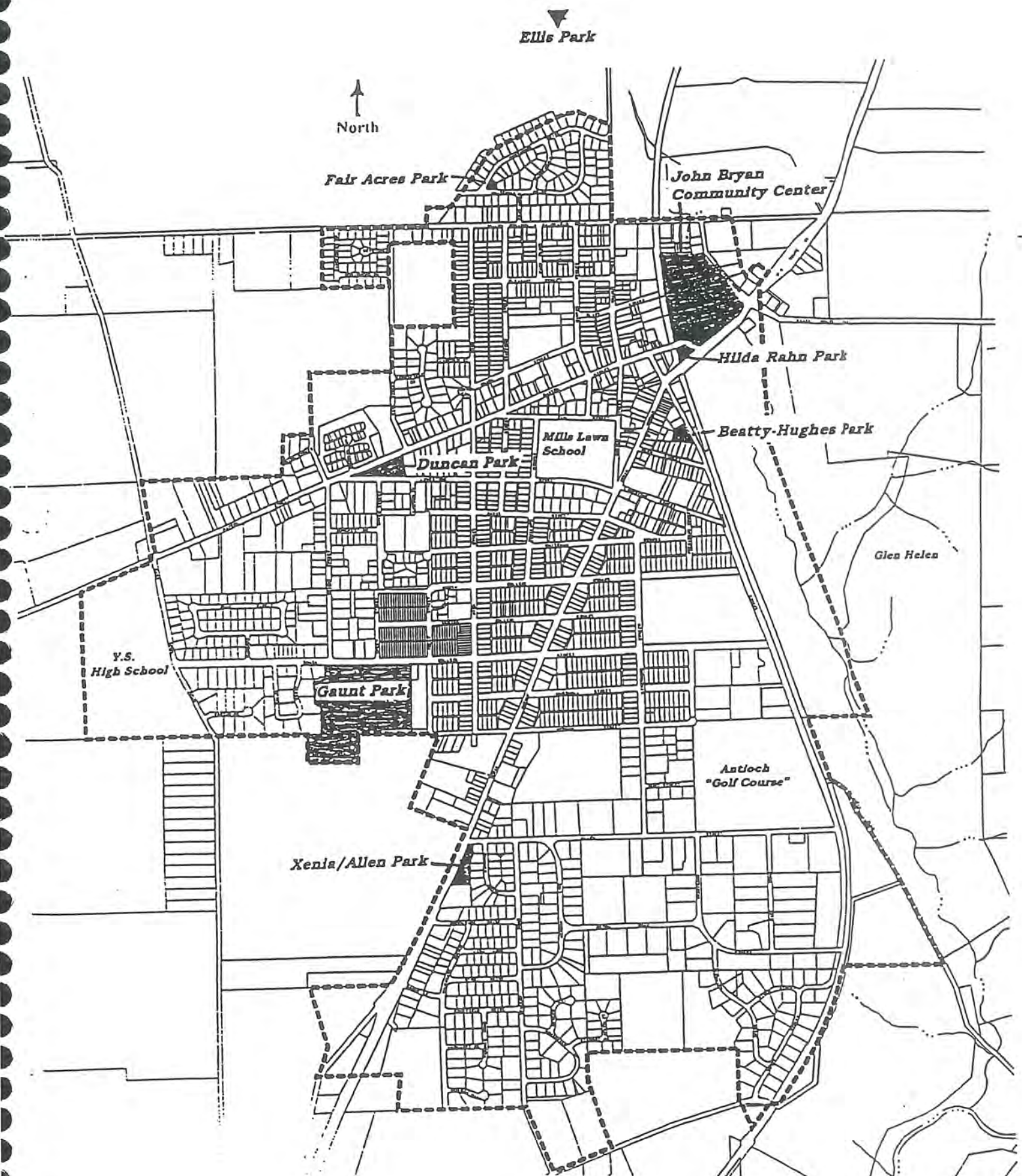
*1. Phase 2*

2002 and Beyond	\$70,000-\$100,000
Soccer Field development	\$50,000-\$90,000
Gaunt Park expansion	\$30,000-\$60,000
New Neighborhood Park	
TOTAL	\$150,000-\$250,000



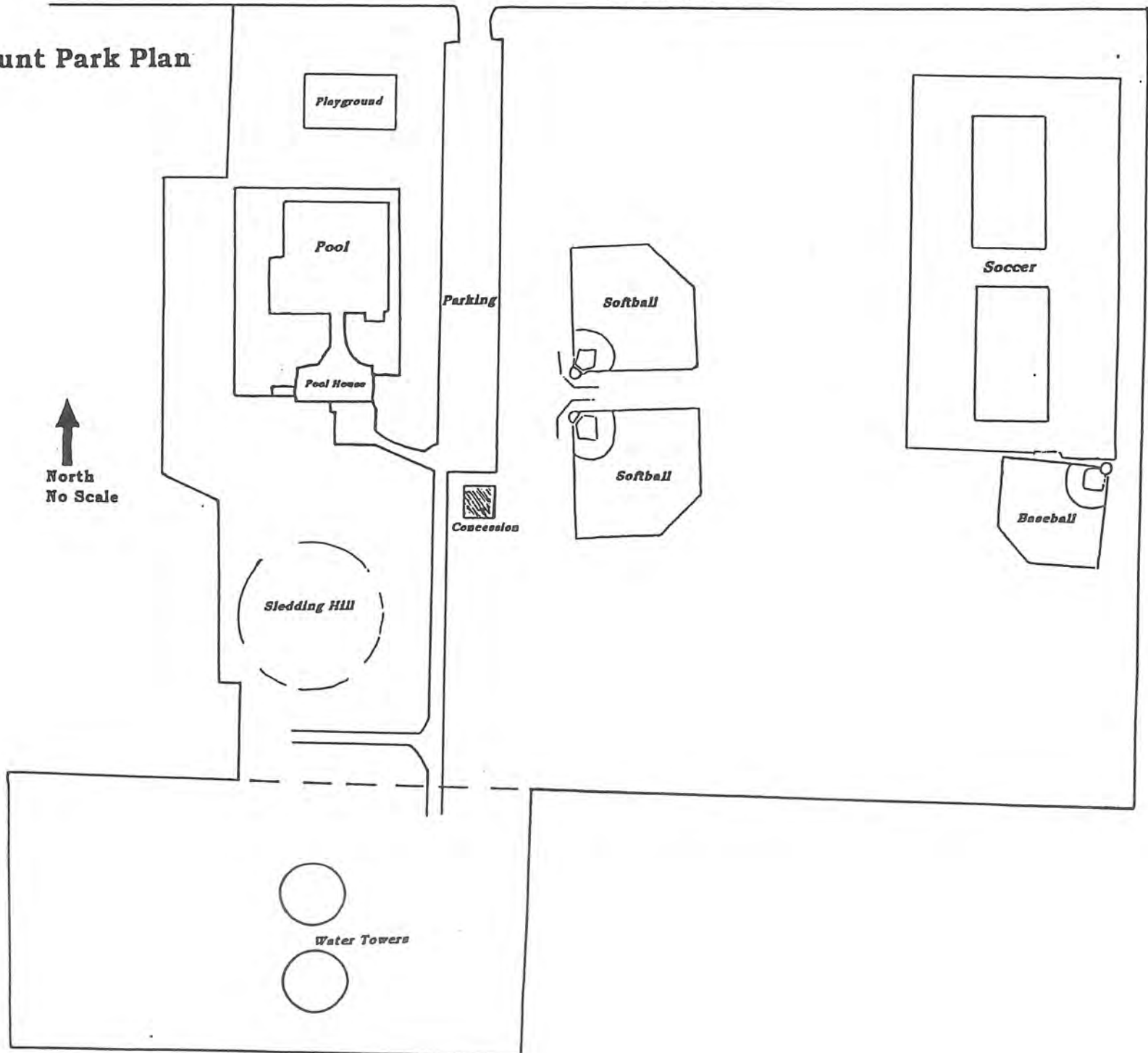
## ATTACHMENT "A"

1998  
Village Parks  
Locational Map

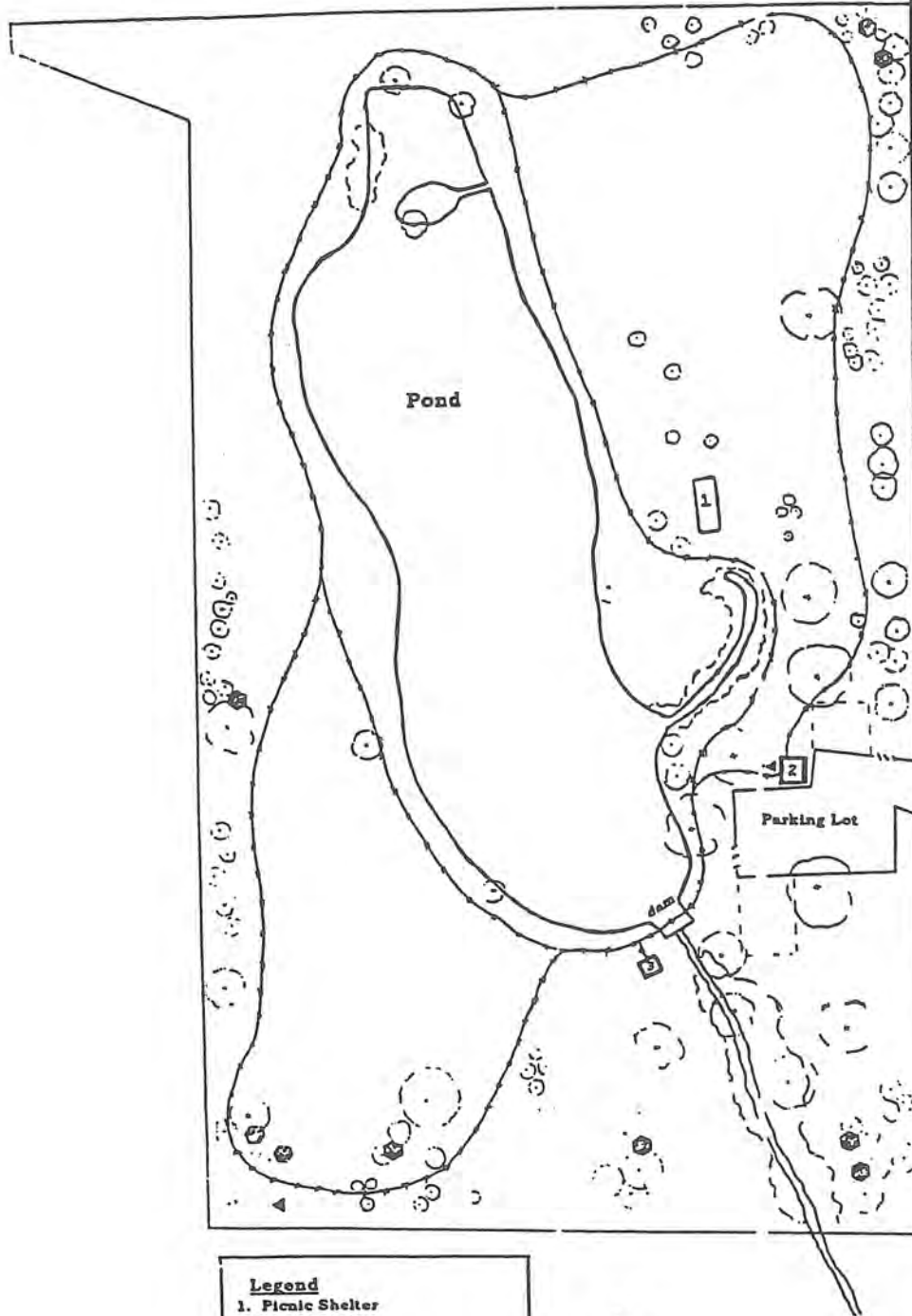


# Gaunt Park Plan

↑  
North  
No Scale



# Ellis Park Plan



## Legend

- 1. Picnic Shelter
- 2. Picnic Shelter
- 3. restroom

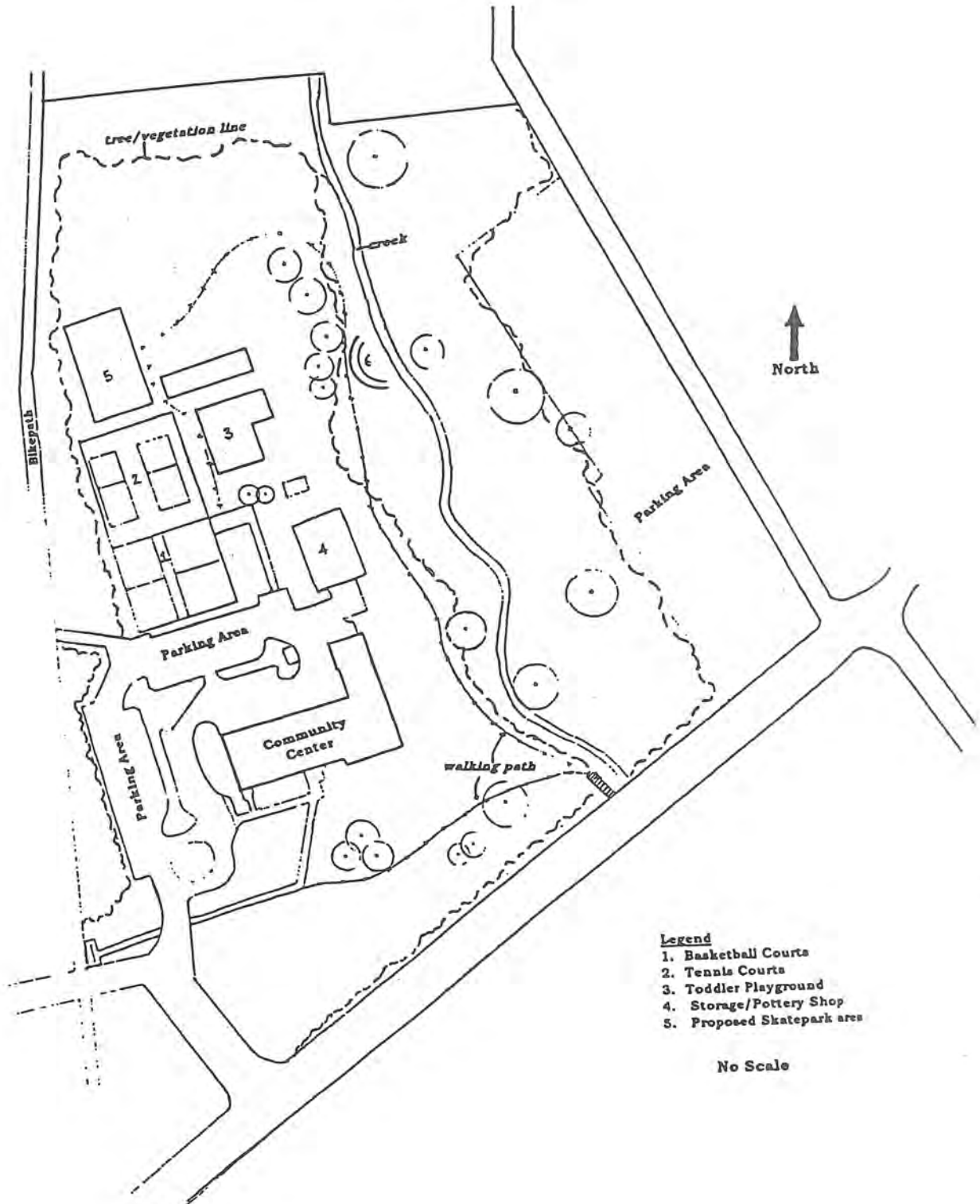
— walking path  
▲ drinking fountain/water  
■ benches/tables

**NO SCALE**





# John Bryan Community Center Plan



Rahn Park Plan  
shown on

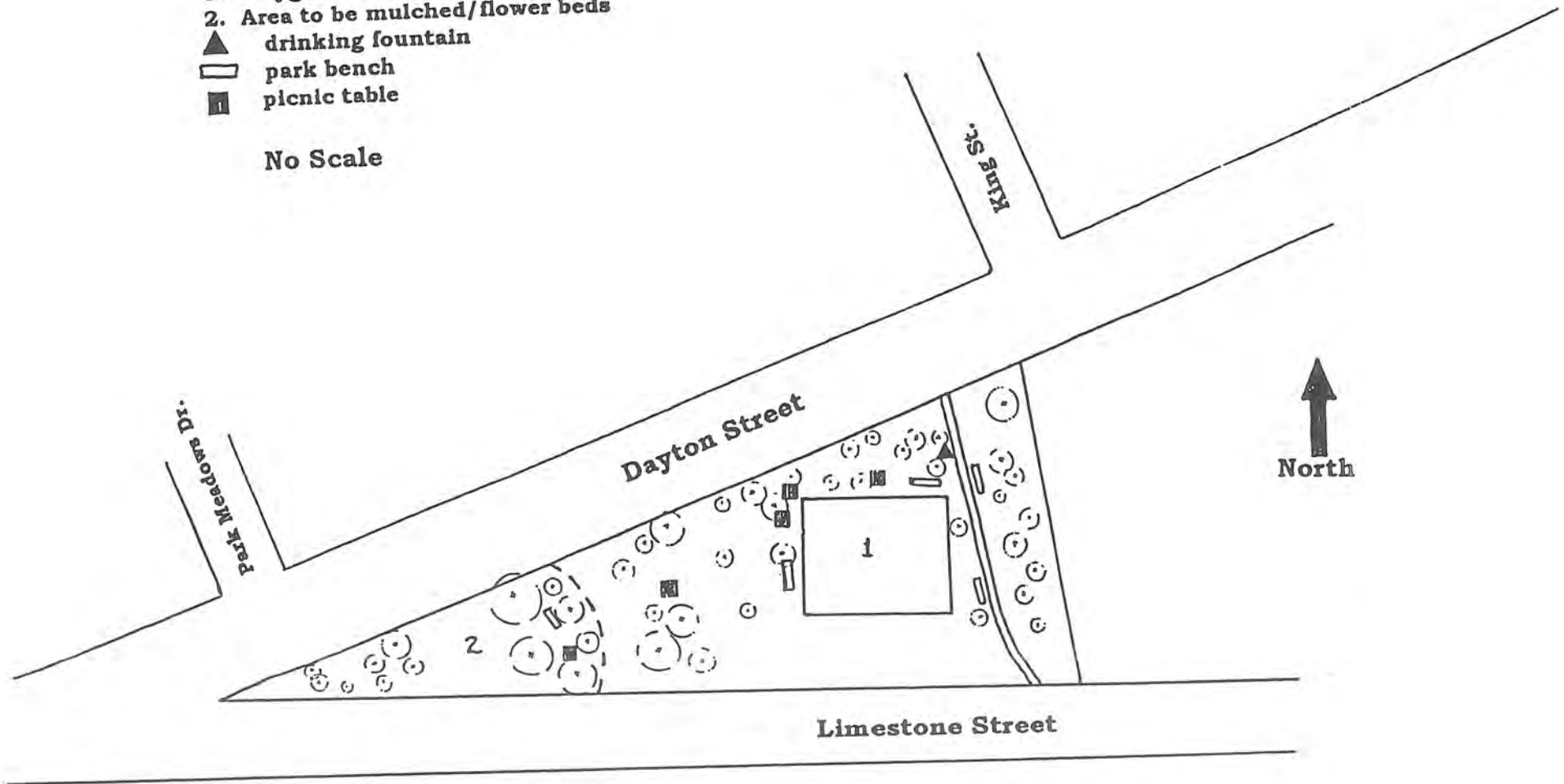
Train Station Site Plan, Attachment "B"

## Duncan Park Plan

### Legend

- 1. Playground
- 2. Area to be mulched/flower beds
- ▲ drinking fountain
- ▭ park bench
- picnic table

No Scale



Allen Street



N

No Scale

U. S. 68

CB

*proposed planting area*

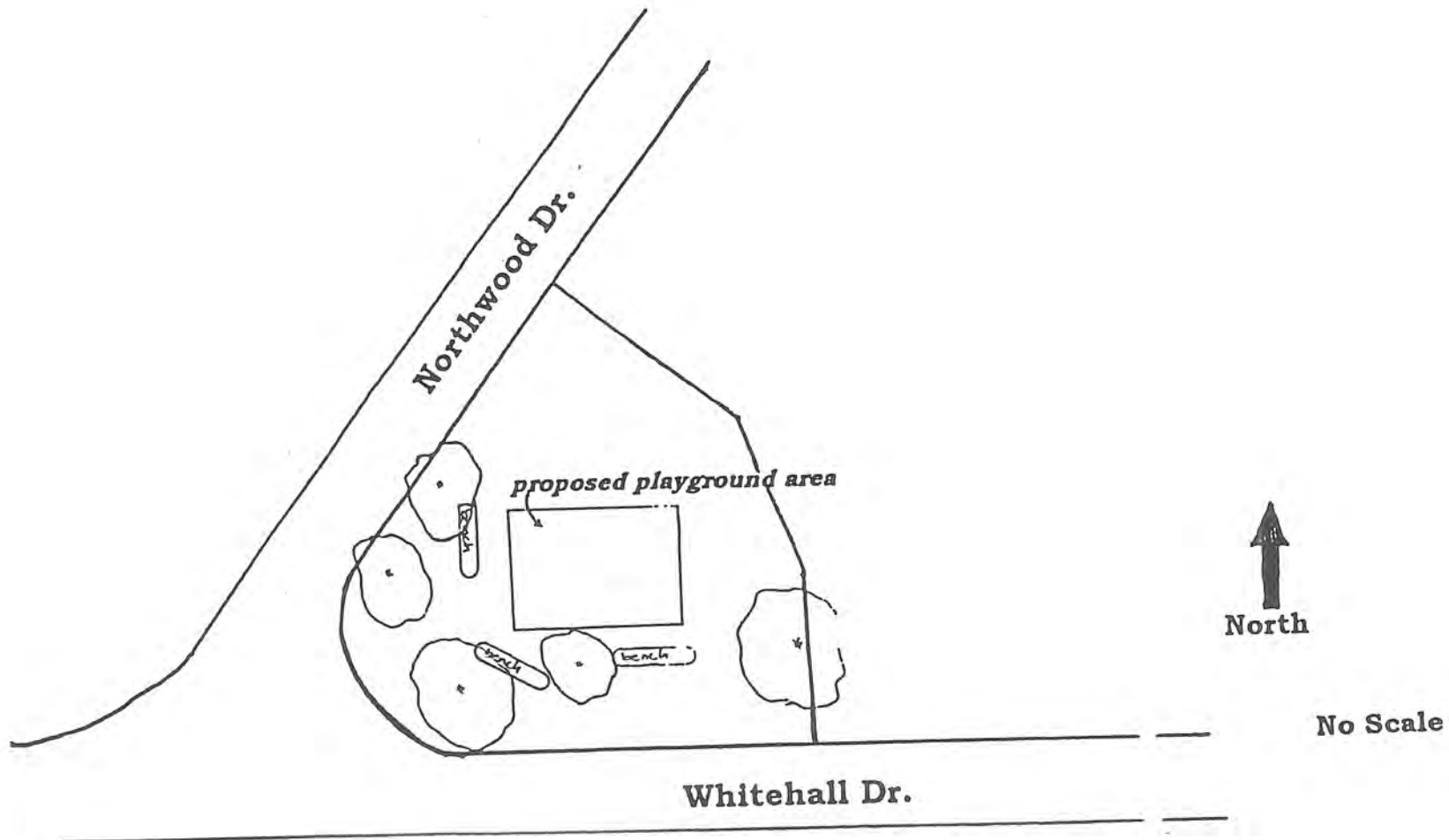
*bench*

*bench*

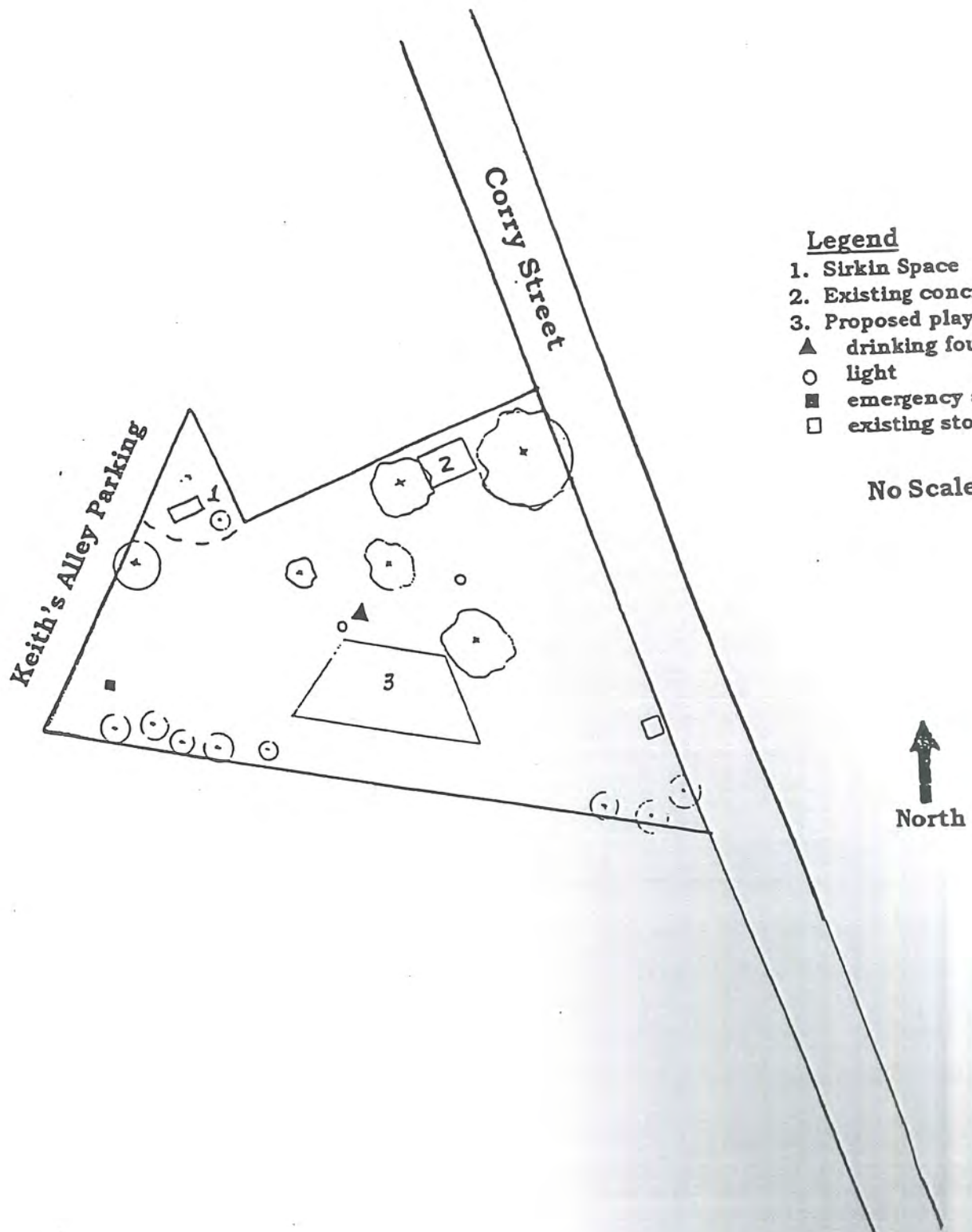
*bench*



## Fair Acres Park Plan

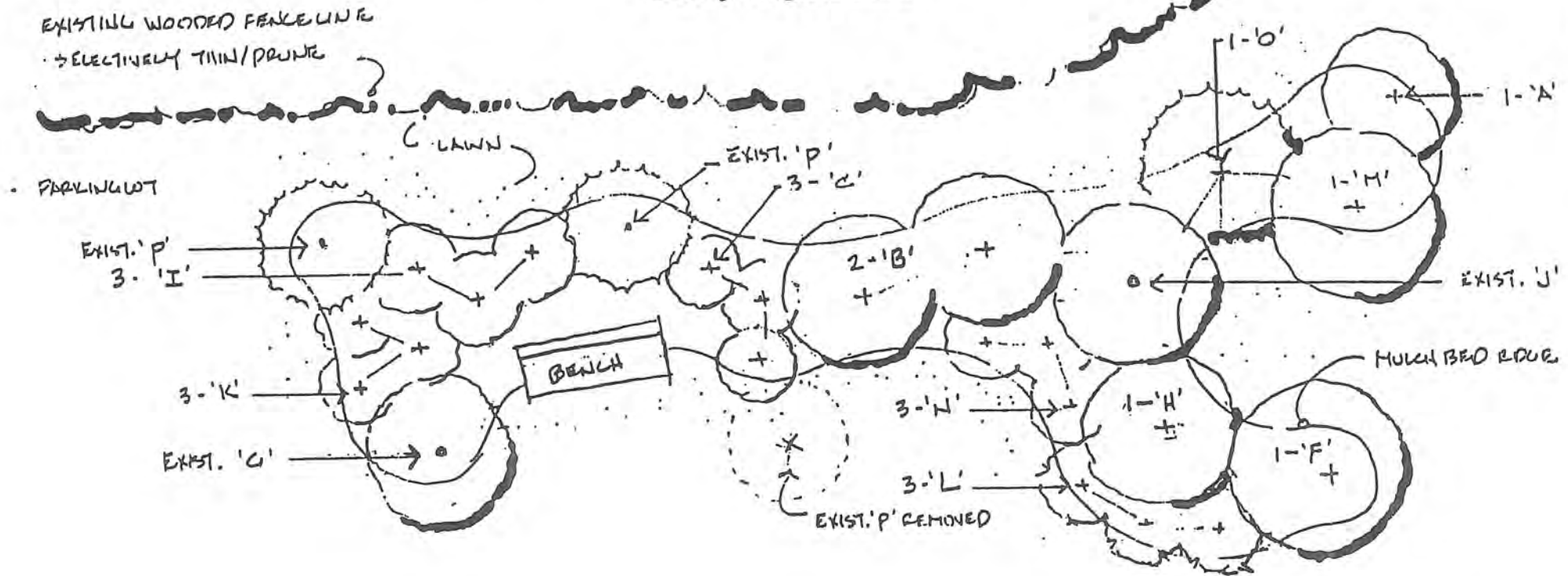


# Beatty-Hughes Park Plan



## ATTACHMENT "B"

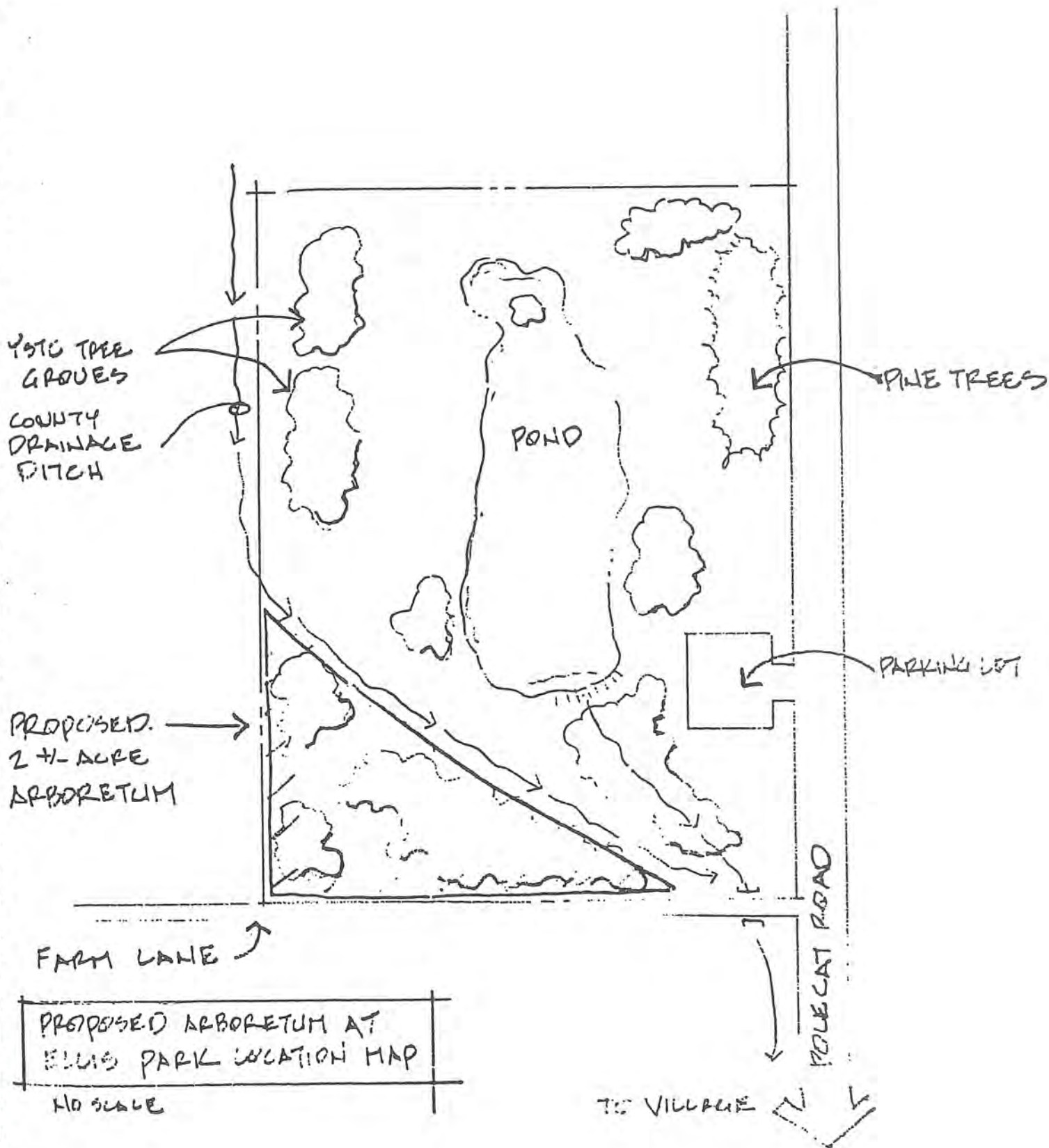
Sirkin Pl<sup>d</sup> Area  
Beatty-Hughes Park



KEY PLANT	HT/SPD	FLOWER COLOR	WHEN	1-D & 1-E LOCATED ON SITE
A Vernal Witch Hazel	8'	Yellow	March	<p>1-D &amp; 1-E LOCATED ON SITE</p> <p>→</p> <p>←</p>
B Red Bud Tree	12'	Lavender Pink	Early April	
C Flowering Almond	4'	Pink	April	
D Indian Magic Crabapple	15'	Red	Late April	
E Selkirk Crabapple	15'+	Rose Pink	Late April	
F White Dogwood	20'	White	Late April/May	
G Kousa Dogwood	16'	White	Mid-May	
H 'Betty' Magnolia	10'	Reddish-Purple	May	
I Variegated Redtwig Dogwood	8'	White /Red stems	May	
J Sweet Bay Magnolia	10'	White	Late May/June	
K Oakleaf Hydrangea	4'	White	Late June/July	
L Hedge Rose	6'	Pink/Red	June-Sept.	
M Ivory Silk Tree Lilac	20'	White	Early July	
N Blue Mist Spirea	4'	Blue tinged	August	
O Japanese White Pine		evergreen		
P Arborvitae		evergreen		

1/8" = 1' +/- 3/14/96



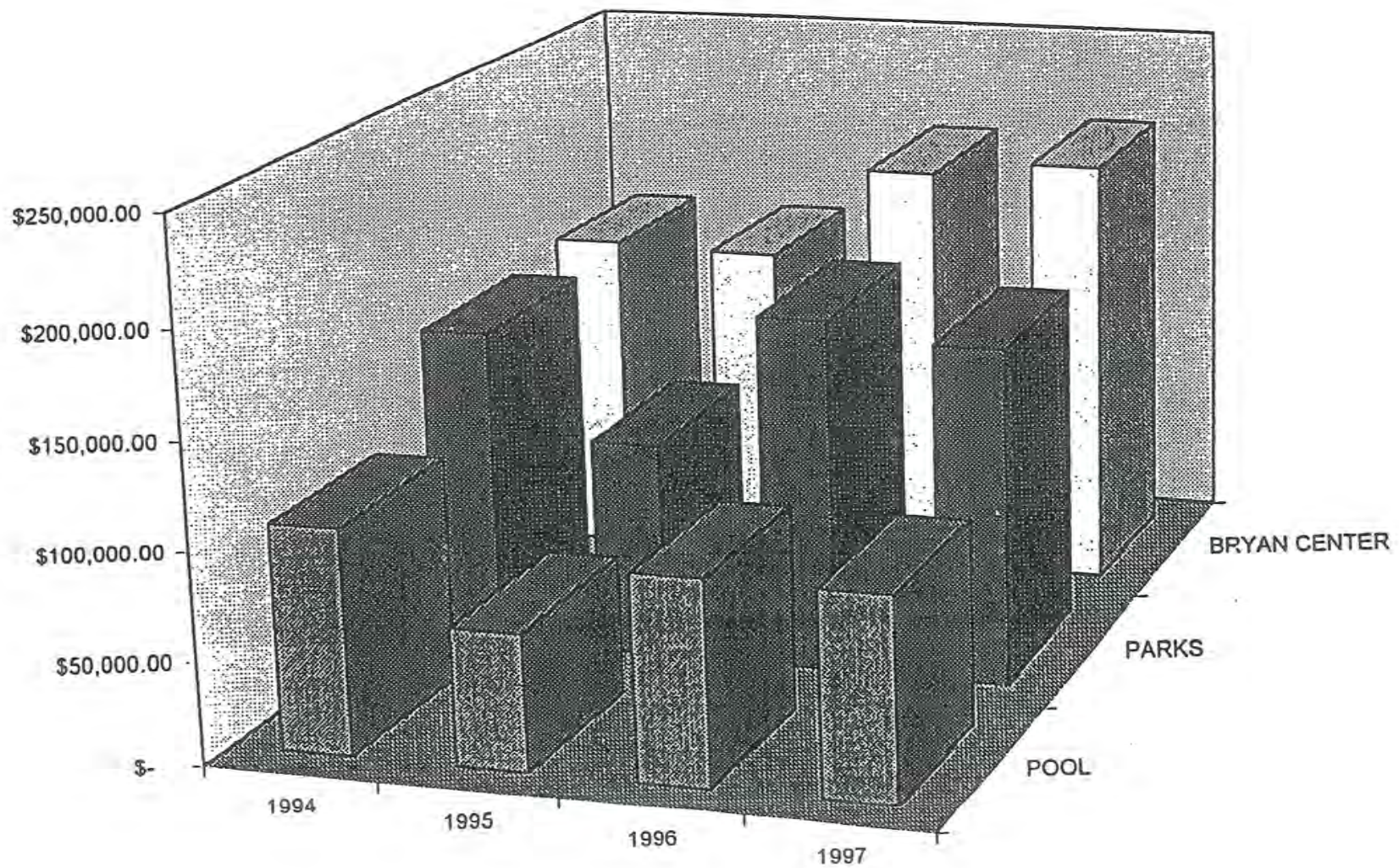


PROPOSED ARBORETUM AT  
ELLIS PARK LOCATION MAP

NO SCALE

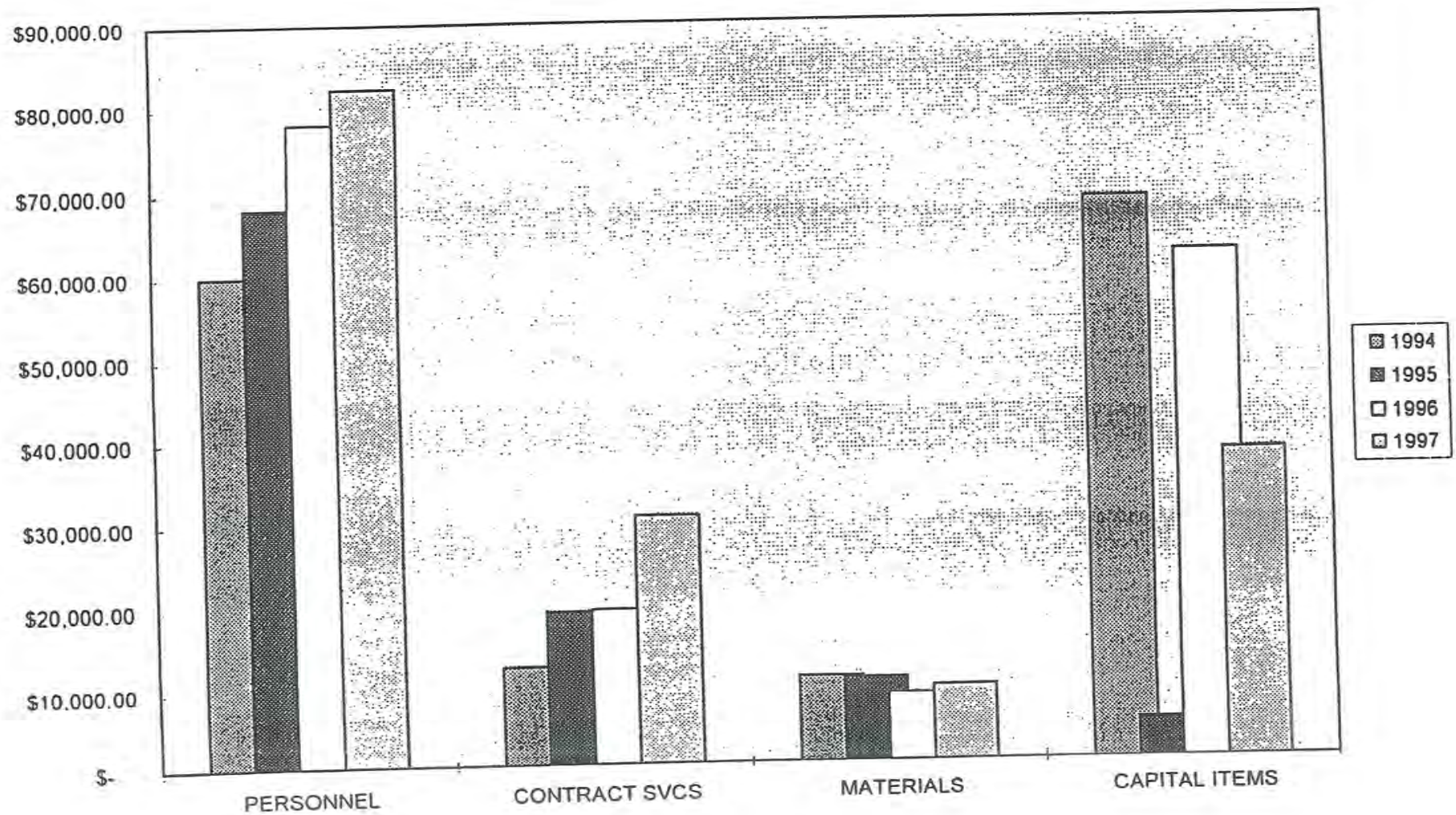
## ATTACHMENT "C"

Revenue Distribution 1994-1997  
Parks & Recreation Department

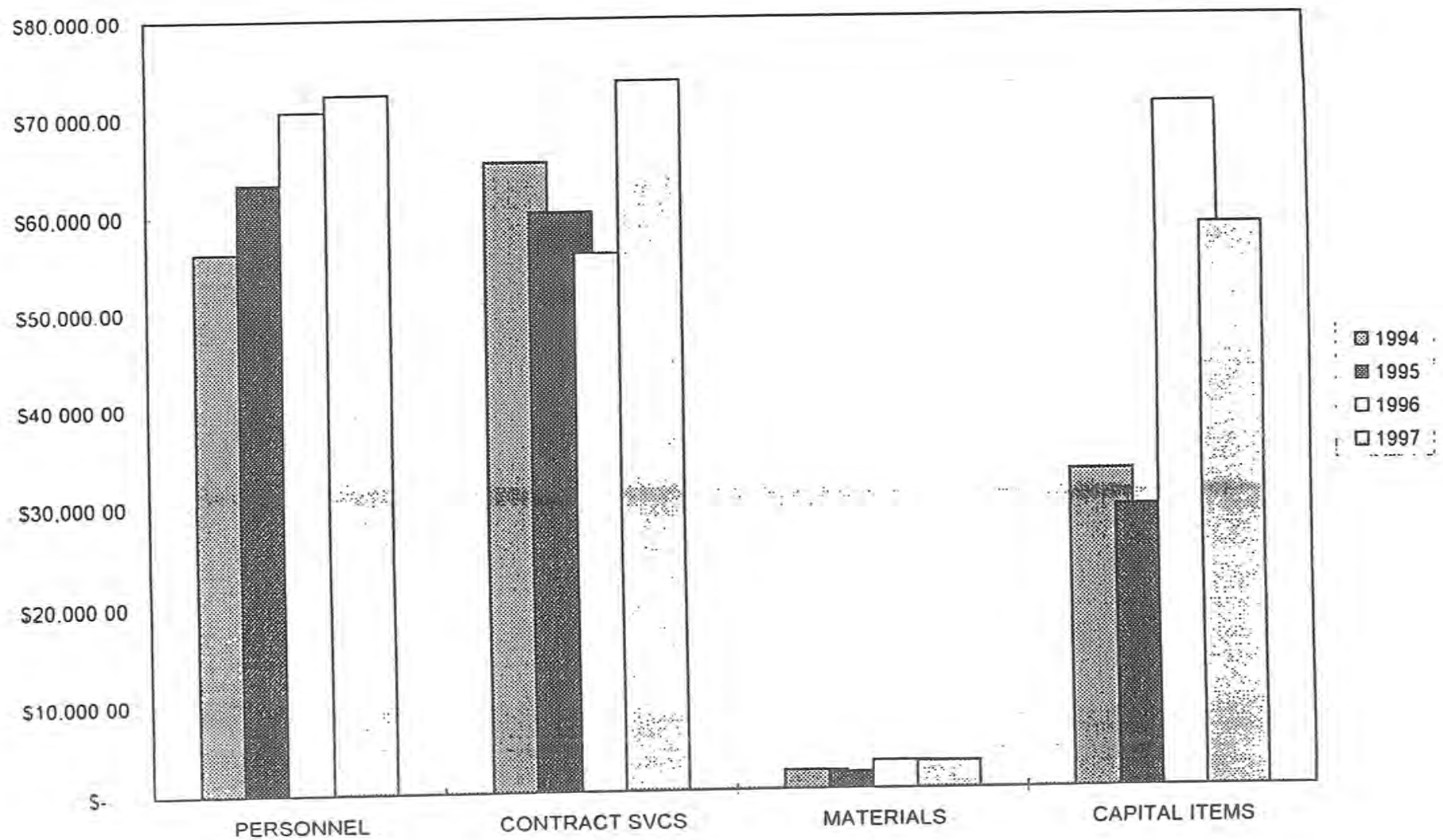




Cost Distribution 1994-1997  
Parks

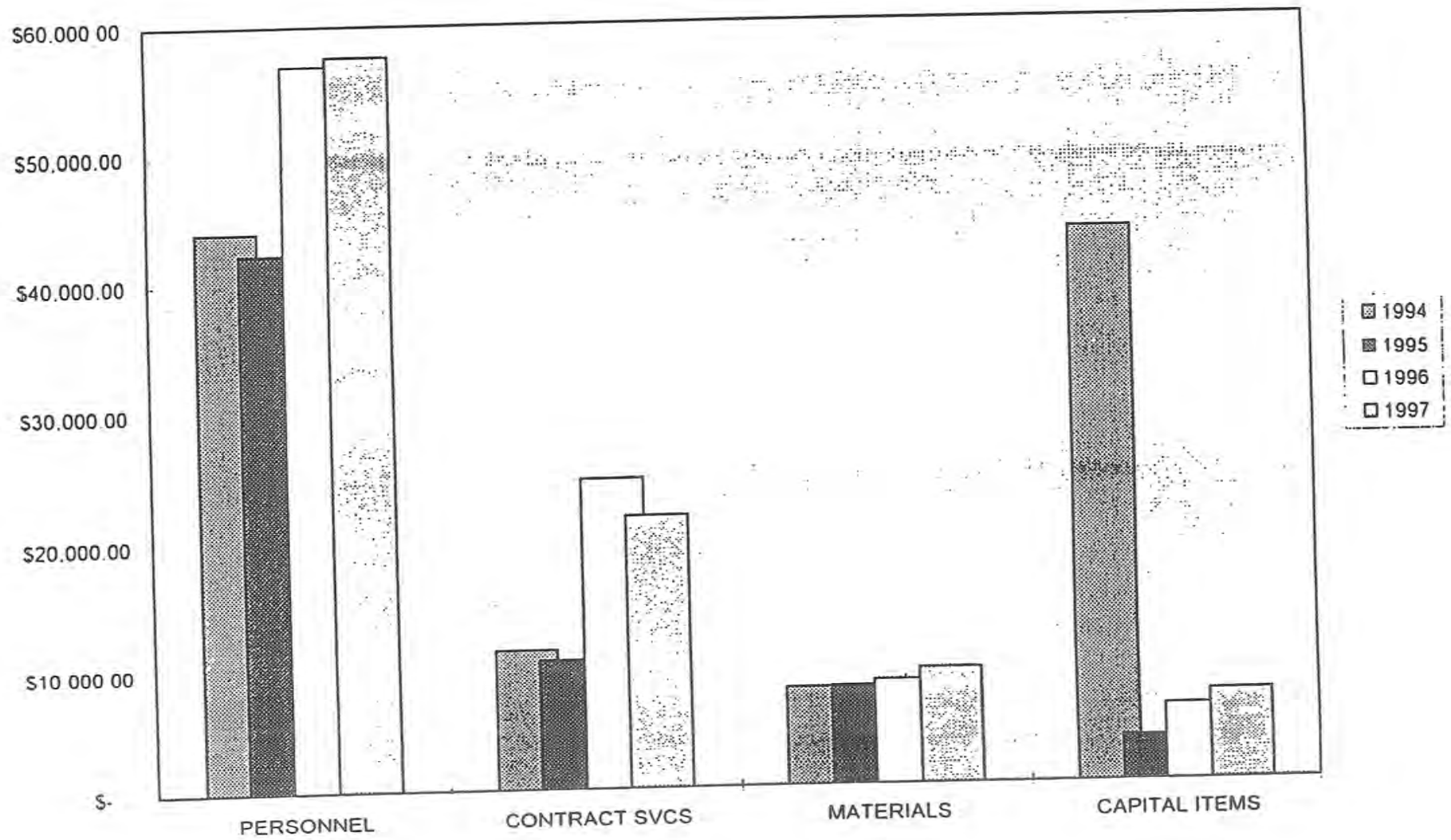


Cost Distribution 1994-1997  
Bryan Center





Cost Distribution 1994-1997  
Pool

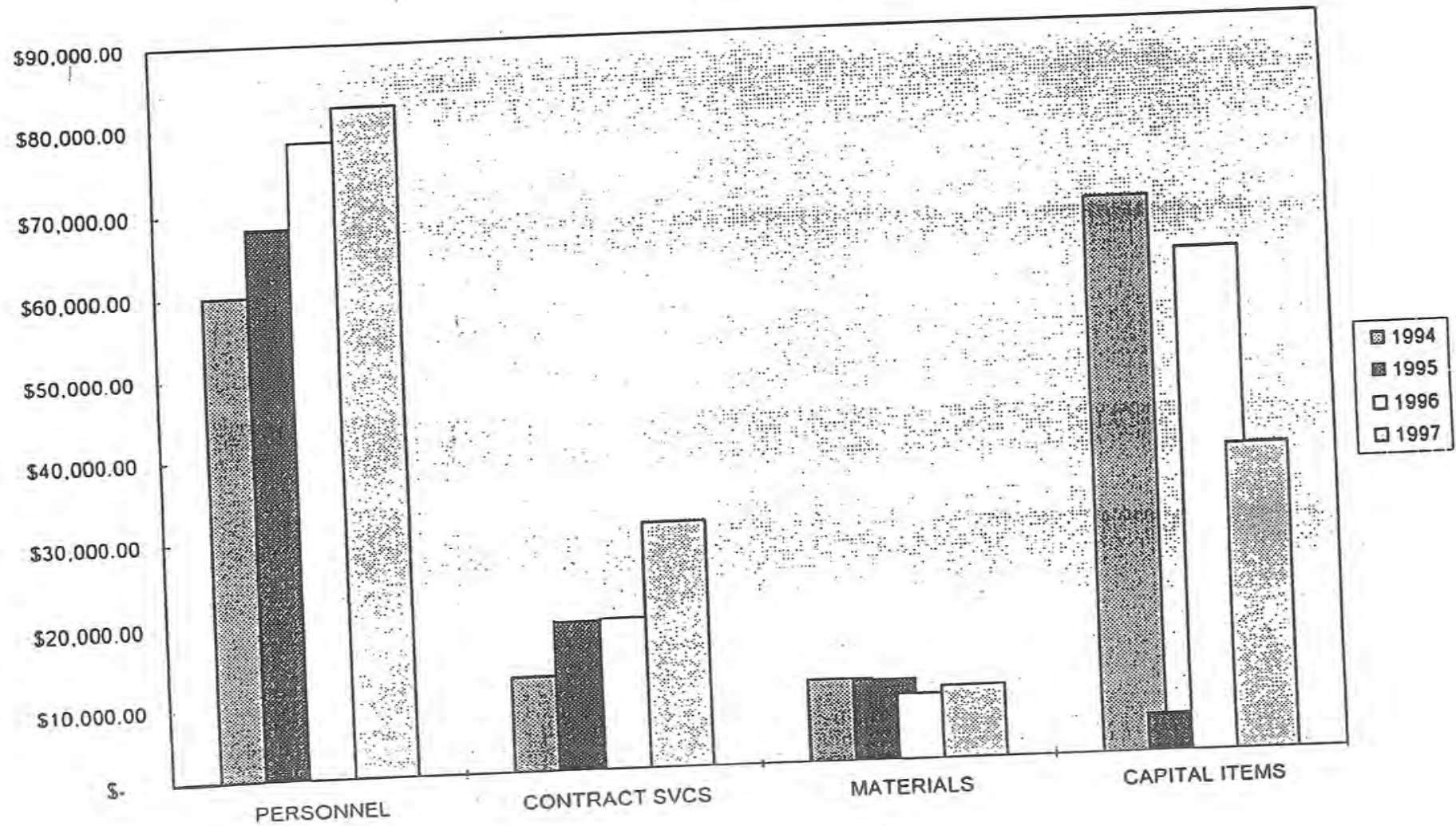


**PARKS & RECREATION DEPARTMENT  
GRANT REVENUES 1996-1998**

	Grant Amount	Local Match	Total
1996 NatureWorks	\$ 36,760.00	\$ 12,255.00	\$ 49,015.00
1996 GRIP Grant	\$ 19,400.00	\$ 6,500.00	\$ 25,900.00
1996 ODNR Buy Recycled	\$ 24,720.00	\$ 7,620.00	\$ 74,915.00
<b>1996 TOTAL</b>	<b>\$ 80,880.00</b>	<b>\$ 26,375.00</b>	<b>\$ 107,255.00</b>
1997 NatureWorks	\$ 29,250.00	\$ 7,320.00	\$ 36,570.00
1997 ODNR Buy Recycled	\$ 12,000.00	\$ 3,000.00	\$ 15,000.00
1997 GRIP Grant	\$ 9,000.00	\$ 3,000.00	\$ 51,570.00
1997 Ntl Trails Rec Fund	\$ 49,900.00	\$ 10,000.00	\$ 59,900.00
<b>1997 TOTAL</b>	<b>\$ 100,150.00</b>	<b>\$ 23,320.00</b>	<b>\$ 123,470.00</b>
1998 GRIP Request*	\$ 50,630.00	\$ 16,750.00	\$ 67,380.00
1998 Greene Co CPI Request*	\$ 36,250.00		\$ 36,250.00
<b>1998 TOTAL</b>	<b>\$ 86,880.00</b>	<b>\$ 16,750.00</b>	<b>\$ 103,630.00</b>
 <b>1996-1998 TOTAL</b>	 <b>\$ 267,910.00</b>	 <b>\$ 66,445.00</b>	 <b>\$ 334,355.00</b>

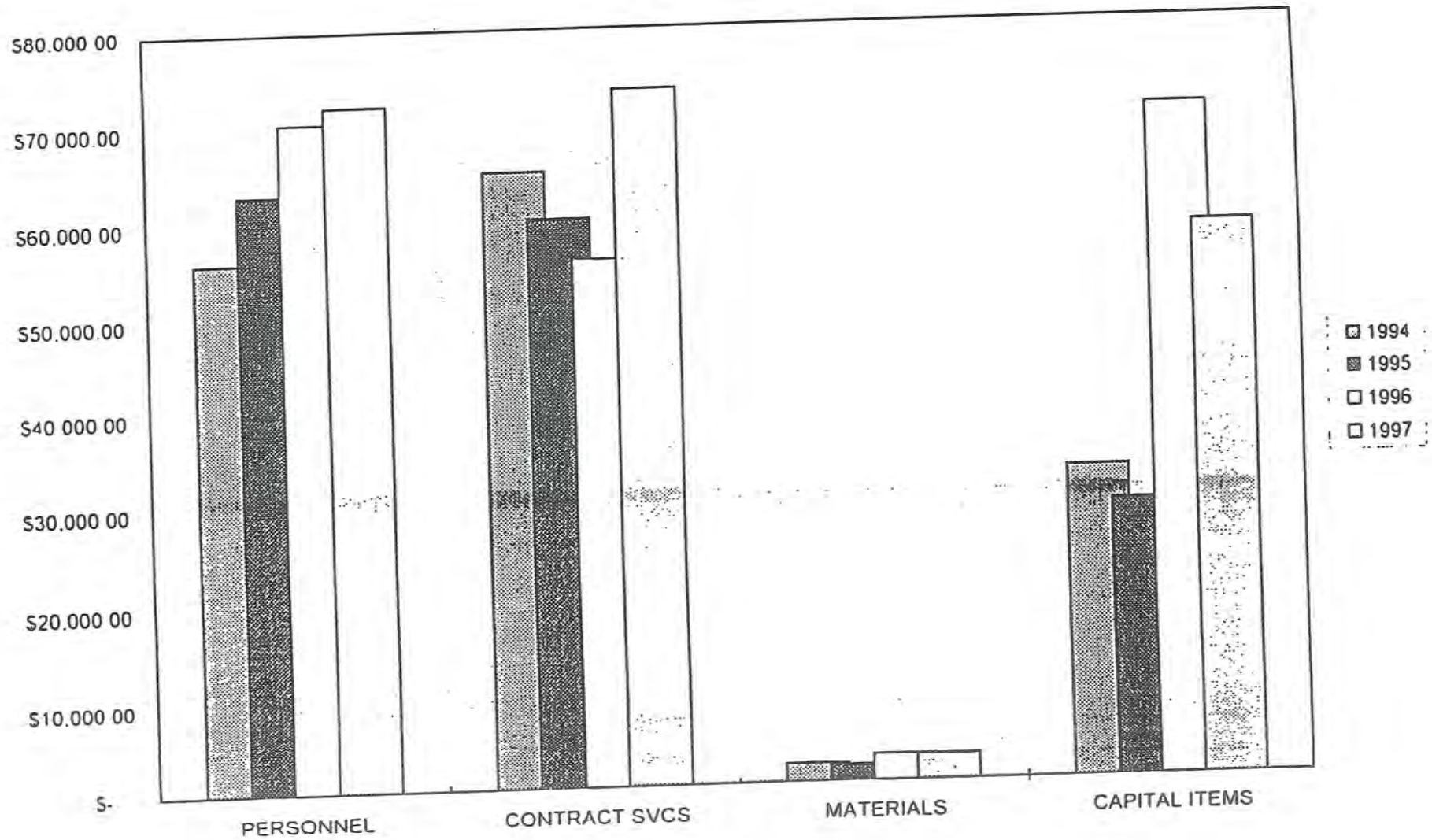
\*Approval pending

Cost Distribution 1994-1997  
Parks

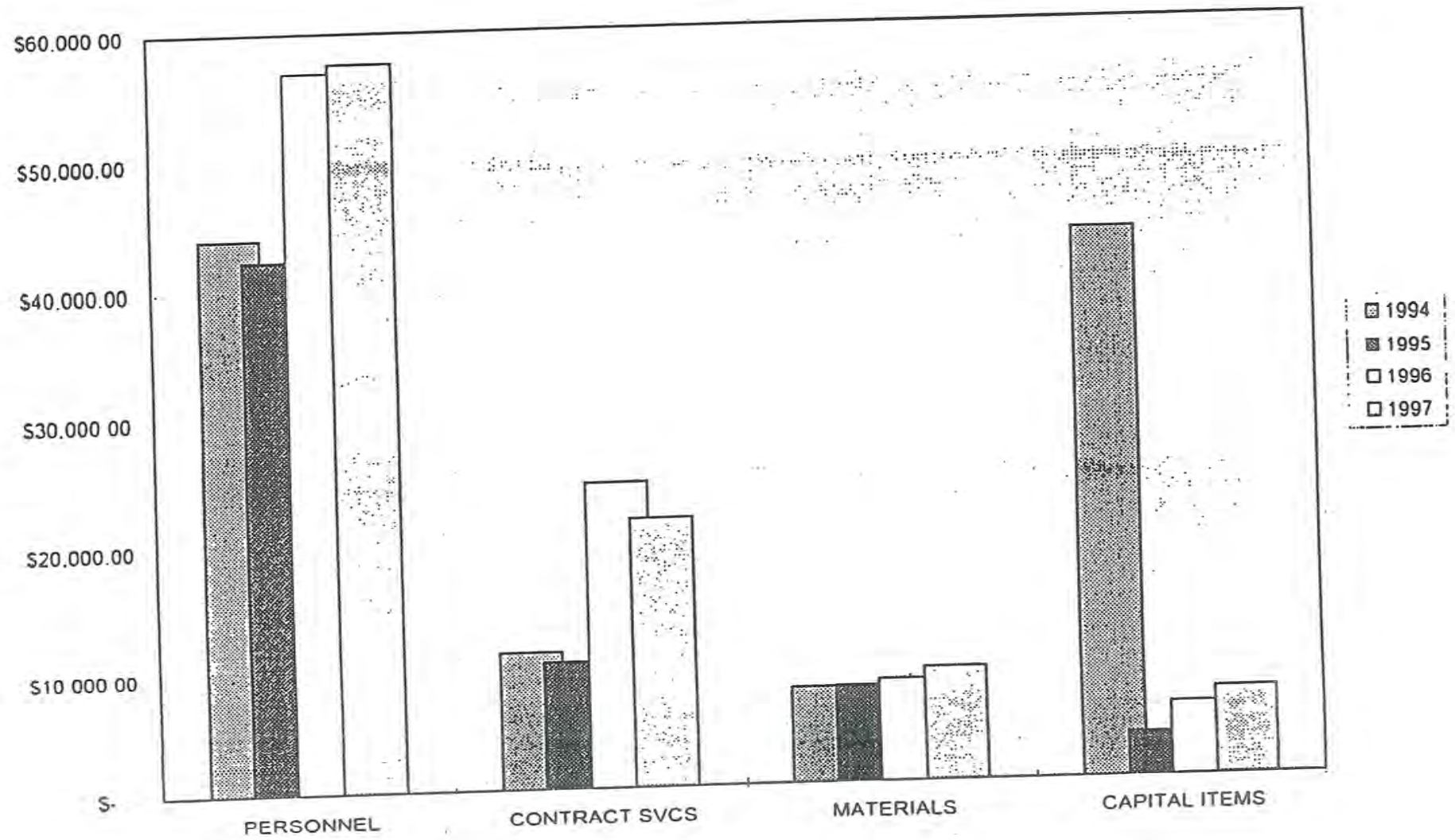




Cost Distribution 1994-1997  
Bryan Center



Cost Distribution 1994-1997  
Pool





# **PARKS & RECREATION DEPARTMENT GRANT REVENUES 1996-1998**

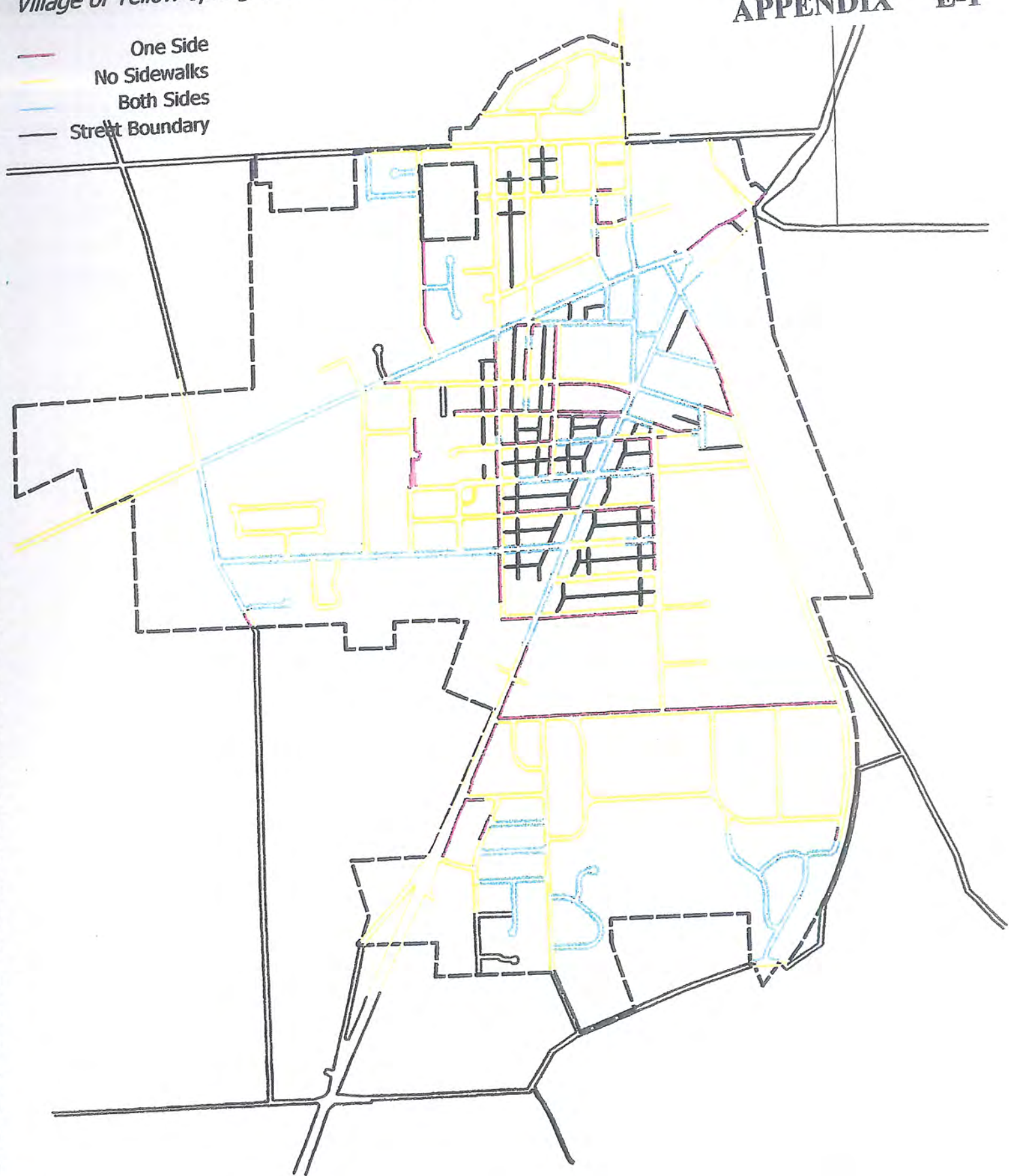
	Grant Amount	Local Match	Total
1996 NatureWorks	\$ 36,760.00	\$ 12,255.00	\$ 49,015.00
1996 GRIP Grant	\$ 19,400.00	\$ 6,500.00	\$ 25,900.00
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1998 TOTAL	\$ 86,880.00	\$ 16,750.00	\$ 103,630.00
1996-1998 TOTAL	\$ 267,910.00	\$ 66,445.00	\$ 334,355.00

\*Approval pending

*Village of Yellow Spring Sidewalk Survey*

N  
APPENDIX "E-1"

- One Side
- No Sidewalks
- Both Sides
- Street Boundary





# YELLOW SPRINGS BIKEWAYS

APPENDIX "E-2"



- GATEWAY
- TRAILHEAD
- IMPROVED INTERSECTION
- PRIMARY BIKEWAY
- SECONDARY BIKEWAY
- FUTURE BIKEWAY



# APPENDIX "F"

**MAP KEY**  
**WATER MAIN SIZES:**  
 16 INCH  
 12 INCH  
 10 INCH  
 8 INCH  
 6 INCH  
 4 INCH  
 2 INCH

**PROJECT #3 NEW 8" ON KING ST.**  
 FIRE FLOW AT VS. FAIRFIELD & KING:  
 250 GPM BEFORE  
 620 GPM AFTER

**PROJECT #1 (COMPLETED)**  
 NEW 8" ON S. WALNUT  
 & SHORT ST.  
 FIRE FLOW:  
 770 GPM BEFORE  
 1,300 GPM AFTER

**PROJECT #2 NEW 10" ON**  
 CORY STREET FROM ALLEN  
 TO LUNESTONE & FROM DAYTON  
 ST. TO KENNA AV.  
 FIRE FLOW AT KENNA AV. & CORY:  
 180 GPM BEFORE PROJECT 1  
 1,220 GPM BEFORE PROJECT 2  
 1,980 GPM AFTER PROJECT 2  
 2,480 GPM AFTER, WITH BOTH PUMPS ON

**PROJECT #4 NEW 8" ON**  
 LUNESTONE, DAVIS & KENNA  
 FROM SOUTH COLLEGE TO  
 LUNESTONE STREET  
 FIRE FLOW AT NORTH COLLEGE & LUNESTONE:  
 500 GPM BEFORE  
 1,720 GPM AFTER  
 2,320 GPM AFTER (WITH PROJECT #3)

**PROJECT #5 NEW 10"**  
 ON HERMAN STREET  
 FROM KENNA AV. TO  
 WATER TOWNS

EXISTING BOTTLE NECK  
 ONE 6" & TWO 4" LINES  
 CONNECT TREATMENT PLANT  
 TO TOWNS

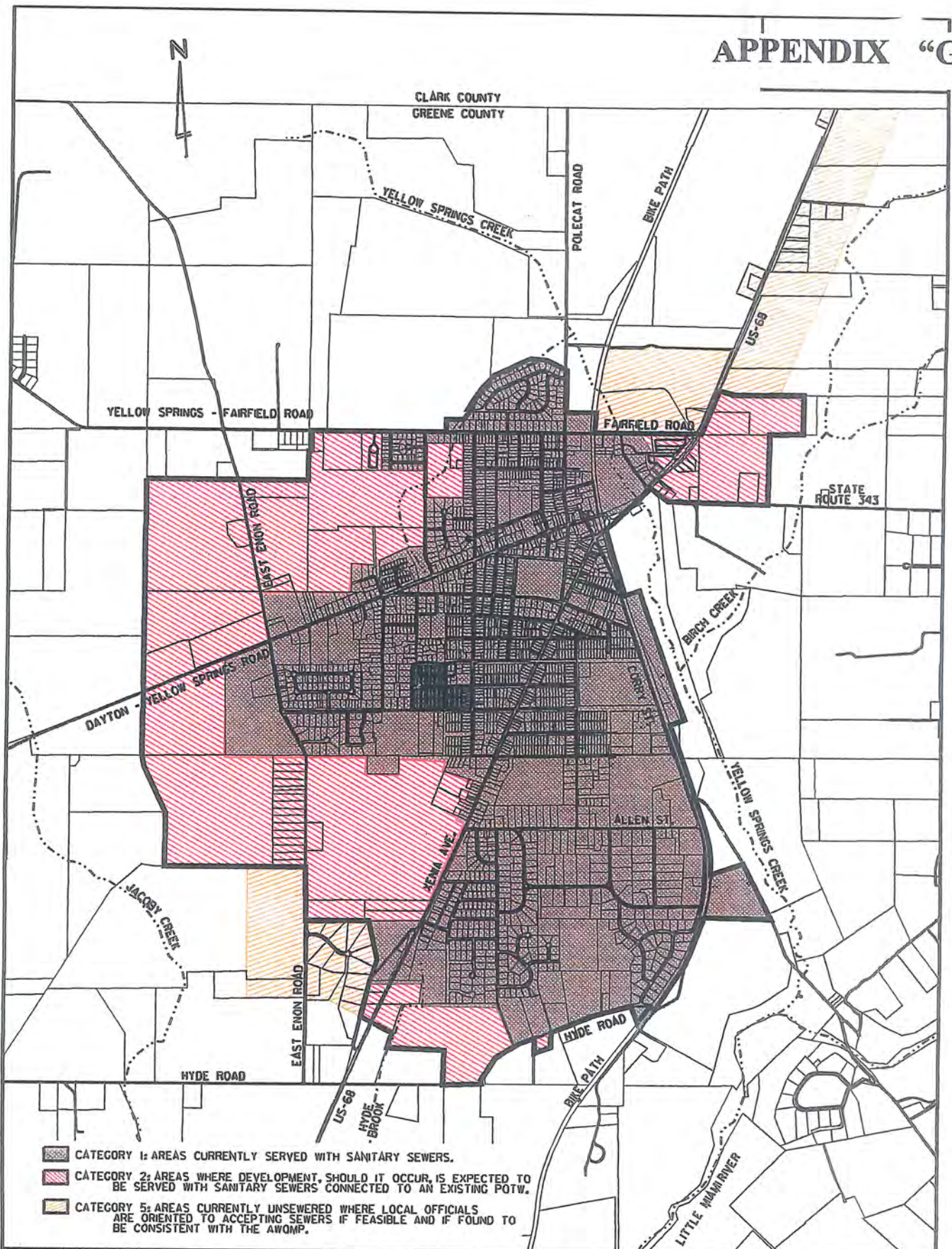
EXISTING FIRE FLOW AT BRANNUM LANE:  
 BOTH PUMPS OFF = 435 GPM  
 ONE PUMP ON = 1,100 GPM  
 TWO PUMPS ON = 1,635 GPM

PROJECTED FLOWS AT BRANNUM LANE:  
 ALL PUMPS OFF  
 PROJECT 1 ONLY = 585 GPM  
 PROJECT 2 ONLY = 775 GPM  
 PROJECTS 3 & 4 = 680 GPM  
 PROJECTS 2, 3 & 4 = 1,184 GPM

**WATER SYSTEM PROJECTS**  
 (Results of 2005 Water Distribution Study)



# APPENDIX "G"



## 2006 URBAN SERVICE AREA MAP

See Appendix L: 2006 Sanitary Sewer System Study for Background Information



Village of Yellow Springs  
100 Dayton Street  
Yellow Springs, Ohio 45387

Job No. EN-23253

Date: JANUARY 2007

COMPREHENSIVE PLAN



LJB Inc. • 3100 Research Blvd.  
P.O. Box 20246 • Dayton, OH 45420-0246  
(937) 259-5000 tel • (937) 259-5100 fax  
ljbinc.com



ANNEXATION POLICY & PROCEDURES,  
VILLAGE OF YELLOW SPRINGS, OHIO  
2006

The Village of Yellow Springs, Ohio is committed to maintaining its small, rural village character while at the same time allowing for economic growth from within the Yellow Springs/Miami Township community. Further, the Village is committed to making consistent, fair, and well-informed decisions regarding land use proposals, including annexation requests, to help ensure the public health, safety and welfare. For these reasons, the following policy and procedures will be used by all Village planning and decision-making authorities in considering and making decisions regarding the issues of annexation of land into the Village.

POLICY

1. Only areas that are contiguous with the Corporate Limits of the Village may be considered for annexation.
2. Village representatives will not actively solicit annexation of land into the Village merely for the purpose of expanding the Village limits.
3. Annexation decisions will be consistent with the objectives of the most recent Village Plan, except where the Plan is inconsistent with Figure 1 (attached), in which case the information presented in Figure 1 will supersede the Village Plan. In particular, annexation beyond the limits of the "Suggested Limits of Urban Expansion" shown on Figure 1 should not be allowed unless there is overwhelming reason shown for such annexation (i.e. a development proposal would involve properties within the boundary and just adjacent to the boundary of the Village, a development would in part accomplish watershed protection, or Figure 1 is determined by Council to be outdated in a material respect and not appropriate with respect to a particular proposal).
4. No annexation request will be granted without prior agreement by the petitioner that all Village utilities will be extended within a reasonable period of time into the territory to be annexed unless Council determines that there is a valid reason to waive this requirement.
5. Annexation studies should be conducted for all proposed annexations. These studies should evaluate the net benefit or harm to the public over the short and long term, taking into consideration the following issues:
  - Economic benefits to the public
  - Costs to the public
  - Tax revenues

- Other benefits to the community
- Public infrastructure
- Land use plan compatibility/owner's use intentions
- Population projections
- Consistency with the objectives of the Village Plan, the attached Figure 1, and other relevant planning documents
- Timing of developments
- Environmental impacts

The annexation study should be conducted by the Village Planner pursuant to an annexation request and shall be completed prior to the date when Village Council must pass legislation to accept or reject the annexation following the approval of the annexation by the Board of County Commissioners of Greene County. The level of detail of such study should be commensurate with the size and intended use of the land, the overall contribution or impact to the community and the complexity of the issues to be addressed when considering the annexation. The cost for such study may be recovered from the petitioner, if warranted and if agreed upon by the petitioner.

6. The Village should resist proposals for annexation where the result would be an isolated development. Two aspects in particular should inform annexation policy in this regard. First, additional density should be accompanied by integration into the Village street network, so that vehicular traffic can be dispersed and pedestrian circulation throughout the Village is encouraged. Second, new development should be accompanied by provision of public open space, either as neighborhood parks or as additions to the Greenbelt. It is recommended that a condition of annexation be the ability to contribute meaningfully to the public open space system, with a target of ten percent of the land area of the annexation as either internal or external open space. In cases where a land donation is not appropriate, a monetary donation equal to the value of the land donation required, shall be provided to the Village's greenspace acquisition fund for future use.

7. Preannexation agreements specifying the terms of the annexation decision (including negotiated infrastructure improvements or other public benefits, for example) should be developed when appropriate.

8. Nothing in this policy shall be deemed to supercede, waive, amend or otherwise alter the requirements of the Ohio Revised Code relating to annexations.

**Electric Systems Task Force  
Phase 1 Report  
15 October, 2007**

**Findings and recommendations of the Phase 1 Report of the Electric Systems Task Force**

The Electric Systems Task Force (ESTF) was commissioned by the Village Council of Yellow Springs to provide information regarding the condition of its electric system, and to assist the Village Council to understand and address issues of electric power usage in the Village. The driving force for the creation of the ESTF was concern over issues of delivering power quality and capacity to meet current and future village needs and the potential need for a new substation. The tasking of the ESTF was split into two phases: Phase 1 provides information regarding the condition of the electric system and an exploration of options regarding the needs of the system. Phase 2 is to provide information and recommendations about electric power conservation in the Village. This report is on Phase 1.

The ESTF gathered information from public documents, information supplied by the Village Manager, and by face-to-face meetings with representatives from AMP-Ohio, which schedules and coordinates the delivery of electric power to the Village, and discussions with large power users.

**Village Distribution System**

The ESTF has determined that the condition of the Village-owned distribution system is generally good and well maintained. Some customers at the end of a distribution circuit experience low line voltage during periods of high energy demands on the Village distribution system and, according to Michelle Palmer of AMP-Ohio, this problem can be fixed by installing a 3<sup>rd</sup> set of voltage regulators on the two existing Village 3 phase distribution circuits at a cost of approximately \$120,000. Installation of a 3<sup>rd</sup> distribution circuit is recommended in the near future to further improve the quantity and quality of power at a cost of approximately \$210,000. The additional 3<sup>rd</sup> circuit will increase the total village distribution system capacity to approximately 14 MW from its current limitation of approximately 9.4MW (on the two existing circuits) and should eliminate the need for the Village to "shed load" as is required now whenever the two existing circuits are overloaded and exceed their individual limitations of approximately 4.7 MW each. A model of the existing Village electric system is being developed by AMP-Ohio as requested by the Village Manager at the recommendation of the ESTF. The model will enable analysis of power distribution within the Village and improvements of power quality and capacity. It will also, with inputs from the ESTF, simulate growth scenarios and their effect on the electric system.

**Demand & Capacity**

Historic data show that the existing Village electric system has a margin of approximately 25% in capacity (comparing 2006 usage to 1999 usage). As for distribution from DP&L to the Village, Amp Ohio estimated that DP&L would likely operate their system at a demand of up to approximately 40% over 2006 peak usage before upgrading. Also, peak demand has consistently trended downward since 1999, and a survey of large industrial users indicates further reductions in demand. Finally, modest conservation efforts can reduce peak usage in the Village by at least 10%, again adding margin to capacity. More detailed analysis of conservation measures is the task of Phase 2.

It is concluded that there is a significant margin for peak demand.



### Substation

The purpose of the electric substation would be to accept increased power transmission capacity from DP&L and distribute it within the Village. When this was first raised as an option by the Blaeser Engineering Study in 1990, it was proposed as a cost-saving measure that would have paid for itself in a 7 year period. The cost of this project has increased seven fold. The modest savings in transmission and distribution costs paid to DP&L of \$90,000 per year would not offset the \$280,850 cost per year to finance its construction. This analysis negates financial considerations as a factor for construction of a substation. From the demand analysis discussed above, it is clear that there is ample time to react to year-on-year changes in demand, including long lead-time installations such as a substation if or when one is ultimately needed.

In conclusion, the ESTF has determined that the electric substation is not needed now, and that the decision to delay building it can be safely made, even taking into account the long lead time to bring it online. This finding is supported by AMP-Ohio.

### Recommendations

The ESTF does believe that the Village distribution system needs to be upgraded. Here are three recommended options to achieve this:

Option 1) Based on results from the "Electrical System Modeling" by AMP Ohio, it may be possible to better balance the existing Village distribution system.

Option 2) If Option 1 is not sufficient to meet current needs, 1 or 2 voltage regulators may be added to the existing 3-phase distribution circuits at an estimated cost of \$60,000 each.

Option 3) If additional quality and capacity are needed, a 3<sup>rd</sup> 3-phase distribution circuit can be added at an estimated cost of \$210,000. The 3<sup>rd</sup> distribution circuit will increase the total capacity to distribute power within the Village to approximately 14 MW.

If demand exceeds 13.7 MW, it will exceed the existing capacity of the power transmission lines to the Village distribution system, and will necessitate an increase in power delivered by DP&L or the installation of a substation. Note that Options 1 and 2 will need to be executed first in order to distribute 13.7 MW or greater anyhow.

The options provided above comprise a series of improvements for consideration by the Village Council that can make the distribution of power within the Village more reliable and meet power demand for the Village.

#### *ESTF Members:*

Benji Maruyama (Chair)  
Pat Murphy  
Carol Gasho  
Reggie Stratton  
Roy Eastman  
David Heckler  
Richard Zopf  
Steven Conn

#### *Village Council Liaisons to ESTF:*

Karen Wintrow  
Judith Hempfling

Technical Report to the council  
Final Version – October 8

**Introduction:**

The purpose of this report is to respond to the Village Council charter for the Energy Task Force Phase 1. The Phase 1 tasks set by council are as follows:

The Task Force will provide information regarding the condition of our electric system and explore options regarding the needs of the system. It will identify the questions which need to be answered, identify the sources of expertise needed to assist them in their work and report their findings to Council and the community. An important component of the process is to invite public involvement in the discussion. The Task Force will issue a report with the following findings:

- A description of the current electrical system, its condition, reliability, safety and demand capability based on historic and present day data.
- A description of electrical capacity needs of residential, commercial and industrial users based upon historic, current and anticipated future needs.
- A description of available options to meet these needs.

Electrical Power Systems are complex and the terminology and numbers can be daunting. Simply stated, Dayton Power & Light transmits electricity from the “grid” to Yellow Springs and the Village distributes the electricity to Village customers. To distribute electricity, the Village owns and maintains a 3 phase distribution system that delivers 3 phase power to industrial and commercial customers and single phase power to small businesses and residential customers.

It is necessary to understand this in some detail in order to understand the recommendations of the task force. In a later section describing the details of the system, a table is provided rather than placing it in an appendix. The reader may refer to this table as he or she reads the text.

Throughout this document the abbreviation SRS is used to designate DP & L’s Snynn Road Substation and VMS is used to describe what can be called the village switching station or distribution station or metering system.

**Getting Power**

There are three terms that are necessary to understand electricity delivery systems – generation, transmission and distribution. Power first must be generated. Generation is mostly done by electrical power plants burning coal, oil and natural gas. In Ohio almost 90% of its electrical power is generated by coal fired plants. Other ways of generation include nuclear power plants and hydroelectric dams along with wind turbines. A small percentage of power (less than 2%) is generated by burning biomass, mostly wood. Less than 1% of the nation’s power is generated from photovoltaic (solar) and wind generation.

Transmission is the process of moving the generated power from the point of generation to various parts of the country or region. Transmission is differentiated from distribution, which is the process of taking transmitted power, normally at high voltages, “stepping it down”, and sending it to the end consumer, normally in a residence (single phase) or a commercial/industrial building (3-phase).



Power is generated throughout the country. The pylons of the national grid pass a few miles away from Yellow Springs. Dayton Power and Light (DP&L) has the equipment to take high voltage power from the national grid and convert it to the lower voltages used by distributors. All power consumed in Yellow Springs comes through power lines from the Snypp Road Substation (SRS), owned by DP&L. All the power purchased by the village is transmitted to Yellow Springs via the DP&L transmission lines.

Transmission lines from the SRS arrive in Yellow Springs at the Village's metering electrical substation (VMS) on Fairfield Pike Road. The power received from SRS is diverted into the two 3-phase circuits that carry power throughout the village. Each of the two 3-phase circuits runs (supported by power poles) to the various users within the village who use 3-phase power or single phase power.

### **Electricity Ownership – Participants**

Electricity is delivered to Yellow Springs residents via efforts of many different entities. Each entity has different responsibilities for the different components of power delivery. The Village owns and operates its own electric utility in the same manner that it owns and operates its water and sewer system. This is not the most common approach to providing electrical services in the U.S. The average person receives electricity through a commercial power company such as Dayton Power and Light (DPL). In such cases, DPL would own the lines, poles, etc. However, in the case of Yellow Springs, the poles, lines and transformers belong to the village. The village sets electric rates and collects payments. The Village employs utility staff and associated equipment, trucks, etc. While two bucket trucks are used mostly by the electric utility, other larger equipment and all employees work with more than one utility.

The electric utility that the village owns includes the metering station (VMS located on Fairfield Pike road). The metering station includes a wide range of power equipment resting on a foundation surrounded by a wire fence. The station includes transformers, current limiting devices, voltage regulators and monitoring equipment.

The power delivered to the various industries/businesses/homes of Village electric customers is not generated by the village. That power is generated at many different locations connected to the electric grid – some from coal plants, some from hydroelectric sites and some from waste products. AMP-Ohio schedules and coordinates the delivery of power delivered to the Village. Other means of generation also contribute. To be more precise, all power generated goes into a common pool and although the village might buy hydropower from one source, what actually is delivered could be from any generating plant as noted above.

Dayton Power and Light (DP&L) is the entity that delivers electricity to the village metering station (VMS). The village buys the actual power from the multiple sources previously mentioned and pays DP&L to transit it to the VMS.

The Village is a member of AMP-Ohio. AMP-Ohio is a non-profit cooperative, municipally-owned corporation (AMP-Ohio schedules and coordinates the delivery of power delivered to the Village. Yellow Springs purchases most of its power generation (not transmission) through AMP-Ohio. AMP-Ohio also provides a variety of other services to private electrical distributors, including legislative advocacy, electric generation facilities, conservation tools, technical consulting, etc.

## Reliability and Capacity

The formation of the task force was based initially on concerns about the age and reliability of the system in general as well as the reliability of the system at its highest loads. Surprisingly, there were no specific details found that could measure either abnormal events or the level of the severity of any events that did occur. One benefit of this analysis was in learning that AMP-Ohio does have access to some data on the YS system which they received by a telemetry system. AMP-Ohio said it would be possible to add some analysis capability using the data that is generated to get a better sense of the reliability in the future.

The conclusion that the system is reliable comes mostly from AMP-Ohio as well as the experience of two task force members, Dave Heckler, former Village Manager, and Richard Zopf, former consultant to the village. The task force did no analysis of its own with system data nor was any attempt made by task force members to review or measure the system. Michele Palmer of AMP-Ohio toured the distribution system and in her professional judgment it was deemed well maintained and reliable. AMP-Ohio has over 102 systems – her familiarity with many of these systems adds credence to her conclusion. She acknowledged that there was system degradation in terms of voltage levels on a few occasions throughout the year, typically at times of hot weather (high demand associated with air conditioning load). She also noted that tree trimming is needed in some areas.

Issues—Capacity versus Quality

The following table summarizes information that is used in the remained of this section (MW means megawatts, kV means kilovolts, V means volts, A means amps, kWh means kilowatt hours):

<b>Present Capacity Information</b>	
Rated capacity of DP&L's 3-phase Snypp Road Substation (SRS)	10 MW
Maximum peak capacity (short periods) provided by SRS	11 MW
Peak Transmission from SRS to Village Metering Station (VMS) 2006	9.1 MW
Peak Usage in 2006	9.1 MW
Transformer voltage change at SRS	69 kV to 12.47kV
Present power transmission voltage from SRS to VMS	12.47kV
Maximum Contracted quantity of power DPL must deliver to VMS	18.8 MW
Single Phase voltage range within Village	114V to 126V
Number of 3-phase Village distribution circuits	2
Number of voltage regulators on each Village 3 phase distribution circuit	1
Number of voltage regulators on DP&L's transmission circuit to VMS	1
Existing limit (MW) on each Village distribution circuit (Total 9.4 MW)	4.7 MW
Amperage of VMS Recloser that sets 4.7 amps per distribution circuit	219A
Year of historical peak usage	1999
Amount of 1999 historical peak usage	11.15 MW
Percent decline from high usage point (1999 to Sep 2006)	22%
Percent decline from high peak point (1999 to Sep 2006)	19%
Possible increased usage capacity	25% (11.15/9.1)
<b>Potential Capacity Information</b>	
Potential power transmission voltage from SRS to VMS with new substation	69kV
Number of voltage regulators that can be added to each existing circuit	1
Number of 3 phase distribution circuits that can be added to existing VMS	1
Cost estimate from AMP-Ohio to add 3rd (final) voltage regulator to 2 circuits	\$120,000
Cost estimate from AMP-Ohio to add 3rd circuit -	\$210,000
Amount of additional power provided by adding 3rd 3 phase distribution circuit (System capacity will increase from current 9.4 MW to 14.1 MW)	4.7MW
Space available at the existing switching station to add circuits	sufficient
Estimated cost of a new substation	\$3.5 million
Estimated time to design and build a new substation	3 years
<b>Statistics – large users</b>	
Antioch University (includes Antioch College and McGregor) usage	4,842,543 kWh
Antioch College future usage requirements	Unknown
Morris Bean usage (DP&L customer)	6,000,000 kWh
Antioch Company goal to reduce future usage	15-25%
YSI goal to reduce future usage	10-25%
Number of residential customers 2005	1850
Total residential electrical usage	14,692,114 kWh
Average residential energy usage	8,000 kWh

The issue of electric power to Village residents and businesses is actually two problems: Capacity and Quality. Quality of power here refers primarily to the distribution of power by the Village to customers within a specific voltage range. Capacity is the ability to deliver enough power during peak usage periods to meet demand. In our case it refers specifically to the capacity of DP&L to transmit power to the VMS from the SRS. For the Village these two issues are basically independent—that is increasing capacity does not improve quality to Village customers, and improving quality does not increase capacity delivered by DP&L. However, if DP&L were to provide greater capacity to VMS, the current village system does not have the capacity to deliver in excess of 9.4 MW.

#### **Capacity: Peak power delivery from DP&L to the Village of Yellow Springs**

##### ***The Capacity Situation Today***

Power is transmitted to the Village by DP&L, who owns and operates the equipment up to the Village switching station. DP&L transmits power to the village from the Snypp Road Substation (SRS) which includes a transformer that reduces the voltage of the electricity from 69 kV to 12.47kV, the voltage that is transmitted to Yellow Springs. The rated capacity of the SRS transformer is 10 MW although at times DP&L has used the transformer at the slightly higher rate of 11.1 MW). The limit of transmission capacity of the power lines from Snypp Road to the Yellow Springs switching station is 13.6 MW. DP&L current equipment can deliver 10 MW of peak power. This is sufficient to meet the 2006 Village power demands of 9.1 MW. This leaves a margin of growth of peak power of about 10%.

##### ***Delivering more power to the Village:***

The DP&L power transmission system as of today can deliver a maximum peak power of 10-11 MW. If the peak power demand of the Village exceeds the DP&L transmission capacity, then either new DP&L equipment must be installed or Village-owned equipment must be installed. The current DP&L Substation at Snypp Road (SMS) is limited to 11 MW peak power while the lines can carry 13.6 MW.

The current contract between the Village and DP&L stipulates that DP&L must be ready to deliver up to 18.8 MW of power to the village. DP&L might be required by this contract to upgrade their equipment to meet an increased peak power demand from the Village. One option is to increase the substation transmission capacity. Another option is to deliver power at 69kV to VMS and build a new substation there. This option may not be practical for DP&L but might be practical for the village. The substation and new transmission lines would cost the Village \$3.5 million.

A second scenario to increase peak power capacity above about 13 MW is to install another 12.47 kV transmission line to the Village. This would still require an upgrade of the DP&L transformer at SRS. It is unclear what this would cost the Village but appears to be covered within the existing contract with DP&L. Questions for DP&L on this issue to be discussed in Phase II include:

- Would the Village be required to pay for any of the upgrades?
- How long would the upgrade take?
- What would the peak power capacity of the upgraded system?

#### **Quality of Power and Brownouts**

Quality of power here refers to the delivery of power within a range of voltages. For residential users this is 114V to 126V. Excursions above, or more typically below this range can harm some



electrical equipment. The existing Village-owned distribution system sometimes delivers power below the 114V limitation.

A brown out is defined as the delivery of power at less than 114V. A brownout is a decrease in power quality, not an interruption in service. Full interruptions – often called blackouts - are caused by falling tree limbs, squirrels, lightning storms, etc. Brownouts come when the demand at some time of day is greater than the capacity of the distribution system.

While brown-outs (or system overloads not resulting in system shut-down) caused by a limitation on the capacity to deliver (regulate and distribute) power to the village have been reported by users, documentation has not been produced as the village does not have the ability to record these events. So the number or severity of the brownouts is not known. Also, it is not clear what the cause of the browns out were, i.e., the Village system or DP&L; however, currently available evidence point to limitations in the Village distribution system.

Voltage regulators can be installed to increase the lower voltage. Industry practice limits the number of voltage regulators to 3 per circuit. The Village has two 3 phase distribution circuits, (each of which has 1 voltage regulators). There is also a voltage regulator at SRS. Thus, one solution to the voltage drop problem is to install a third voltage regulator on each of the two 3 phase distribution circuits at a cost of \$120,000. (Estimate from AMP-Ohio's Michelle Palmer).

An alternate solution is to install a third 3 phase distribution circuit in the Village, with a more direct feed to those customers receiving poor quality power. AMP-Ohio's Michelle Palmer gave a rough estimate of \$210K as the cost to install a third distribution circuit. This would increase the approximately 9.4 MW limit to about 14 MW. Note that improving the Village distribution system does not increase the power delivered to the Village by DP&L.

The quality of power, i.e., the providing of electric power within specifications appears to be within the control of the Village. The addition of a third voltage and/or a third power distribution line will enhance quality. The upgrade to a substation (which receives 69 kV power) does not solve the problem of power quality. Similarly, upgrading the power quality with a regulator or another distribution line does not increase the peak power transmission capacity of DP&L to the Village. The placement of the voltage regulator and/or the third distribution line should be modeled as soon as possible.

## **Summary**

There is no immediate need for a new substation. Both capacity and quality can be improved at a much lower cost. Adding a third Voltage regulations to both of the 3 – phase distribution circuits will improve quality. Adding a third distribution circuit will increase both quality and capacity. It will also allow Yellow Springs to balance total load (MW) across three 3-phase distribution circuits (current load occasionally exceeds capacity of two existing 3-phase circuits)

Note that these possible improvements are congruent with the Blaser capital improvement report dated November, 1990. These possible improvements are a continuation of improvements previously outline in that report. Some of the improvements in the Blaser report have already been implemented.

**Future Work**

Phase II of the task force will address growth of Village residential population, growth in Village business, increase or decrease in per capita electric power as well as peak power demand and a strategy for energy conservation and efficiency. Power transmission and distribution equipment takes time (years) to install—if demand exceeds capacity upgrades may be slower than desired. Growing demand may exceed supply for housing and business (commercial and large industrial). Potential businesses interested in establishing a Village location might be deterred by the capacity limits of the electric system. Concern that not enough is being done to conserve (reduce consumption) and fight global warming must be addressed.

"I"

**VILLAGE OF YELLOW SPRINGS  
RESOLUTION #2007-16**

**A RESOLUTION AUTHORIZING THE CREATION OF AN ELECTRICAL SYSTEM TASK FORCE FOR THE VILLAGE OF YELLOW SPRINGS.**

**Whereas,** Council has concerns with the current condition and capabilities of the Village-owned electrical system; and

**Whereas,** along with anticipated residential and commercial growth, the need to consider options to address current and future concerns must begin now; and

**Whereas,** Council would also like to address concerns regarding the global environment and the need to reduce CO2 emissions and consumptions; and

**Whereas,** Council would create an Electrical System Task Force to address these concerns.

**NOW, THEREFORE, THE COUNCIL FOR THE VILLAGE OF YELLOW SPRINGS, OHIO HEREBY RESOLVES THAT:**

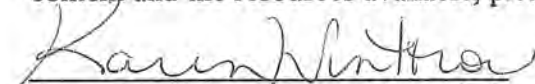
**Section 1.** The Electric System Task Force is an ad hoc committee of the Yellow Springs Village Council. Its first order of business shall be to choose a Chair Person whose responsibilities include presiding over the meetings, and reporting the findings of the Task Force. If the Chair is not able to fulfill their responsibilities, the Task Force shall choose an alternate to stand in for the Chair.

**Section 2.** The Electrical System Task Force shall begin its work within 30 days of Council approval of its makeup and charge. A report of findings to Village Council and the community will be made in two parts. A report on Phase 1 will be made 90 days from the start of the Task Force work, and a report on Phase 2 will be made in an additional 90 days.

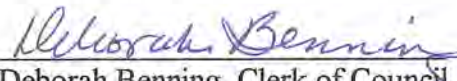
**Section 3.** The membership of this Task Force is as follows:

Benji Maruyama, Materials Engineer  
Steve Conn, Environmental Commission, Professor of History, OSU  
Roy Eastman, Owner Electroshield, former Village Council member  
Richard Zopf, Miami Township Planner  
Carol Gasho, Community Resources  
Pat Murphy, Community Solution  
David Heckler, Former Village Manager  
Paul Abendroth, Retired Systems Engineer with Electrical degree  
Reggie Stratton, Antioch Company  
Bob Brecha, PhD. Physics, UD. Resource person for energy conservation; not a task force member.

**Section 4.** For a more comprehensive outline of the duties of this Task Force, the reporting content and the resources available, please see the attached memo.

  
Karen Wintrow, Vice President of Council

Passed: June 4, 2007

Attest:   
Deborah Benning, Clerk of Council

**ROLL CALL**

Karen Wintrow \_\_Y\_\_      Bruce Rickenbach Absent      Judith Hempfling \_\_Y\_\_

Kathryn Chase \_\_NO\_\_      Kathryn Van der Heiden \_\_Y\_\_

**2008**

# **[ ELECTRICAL SYSTEMS TASK FORCE ESTF PHASE II FINAL REPORT ]**

Final report for Phase II of the Electrical Systems Task Force to the Village Council of Yellow Springs,  
Yellow Springs, Ohio.



**Electrical Systems Task Force**

**ESTF Phase II Final Report  
Dec. 2008**

**ESTF Members**

Benji Maruyama  
Reginald Stratton  
Pat Murphy  
John Struewing  
Roy Eastman  
Carol Gashow  
David Heckler  
Robert Brecha  
Richard Zopf  
Stephen Conn

**ESTF Phase II Final Report  
Dec. 2008**

**Table of Contents**

<b>Recommendations .....</b>	<b>4</b>
<b>Appendix A: Energy efficiency and alternative energy cost and benefit examples.....</b>	<b>5</b>
<b>Appendix B: Energy Efficiency and Conservation Program Summary for Village Council.....</b>	<b>11</b>
<b>Appendix C: Energy Resolution Authorizing the ESTF .....</b>	<b>21</b>
<b>Appendix D: Electrical Usage Data for the Village of Yellow Springs .....</b>	<b>23</b>

**ESTF Phase II Final Report  
Dec. 2008**

**Recommendations**

In concert with Village Council's current goal to "Develop a comprehensive policy that addresses global warming and seeks to reduce the carbon footprint of our community", the ESTF recommends that Council

**commit to and begin funding a long term (2025) phased-in project to minimize our reliance on coal, provide as much of our electricity from renewable sources as possible, reduce our average per meter consumption by 50% and create 100 new conservation, efficiency and/or renewable energy related jobs in the village.**

Methods to implement this include:

- Fund a study to size and cost an energy plan towards the above goals. (anticipated cost not to exceed \$75K.) This is in addition to the \$125K and possibly could be funded with KWH tax funds or economic development funds.
- Increase electric utility rates to generate an additional \$125K per year for a minimum of 5 years.
- Use these funds for conservation, education and renewable generation (in order of priority) working closely organizations like AMP-Ohio and Ameresco
- Allocate \$50k per year (from the \$125k or KWH tax) for 3 years to initiate conservation measures in Village-owned facilities (Bryan center, library, water and sewage treatment plants, etc.)
- Implement a plan to incentivize the creation of 100 new jobs through a "conservation, efficiency and intermediate technology" energy themed economic development program

Execution:

- Establish a new task force to assist the Council and Staff in developing and implementing the strategy. Involve new task force in all phases of the effort.
- Develop a request for information (RFI) from potential contractors who would be pre-qualified to execute the energy plan under contract.
- Develop a request for proposals (RFP) to execute the energy plan.
- Implement the plan over the funded 5 years.

Funding:

- \$75K from the general fund for a consultant to produce a detailed work and estimated cost plan.
- \$125K per year for 5 years in funds generated from Electric Utility rates to pay for conservation and alternative energy generation.

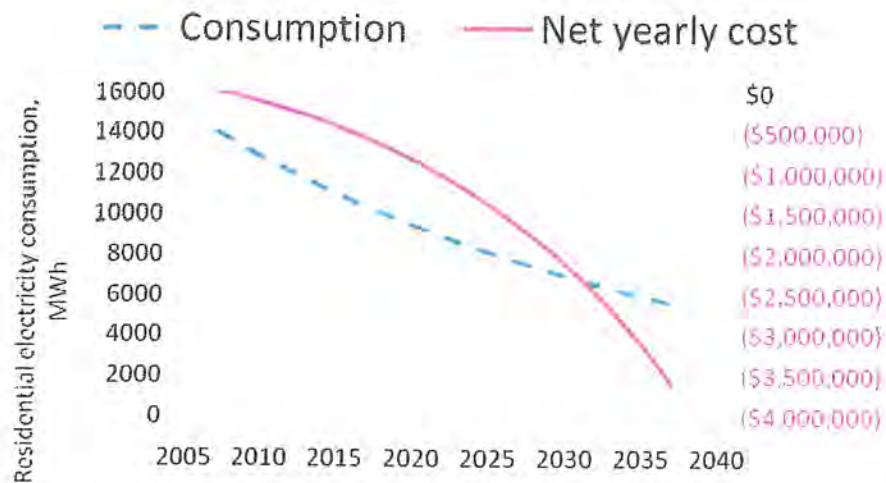
## APPENDIX A

### Analysis by Robert Brecha

#### ESTF – Energy efficiency and alternative energy cost and benefit examples

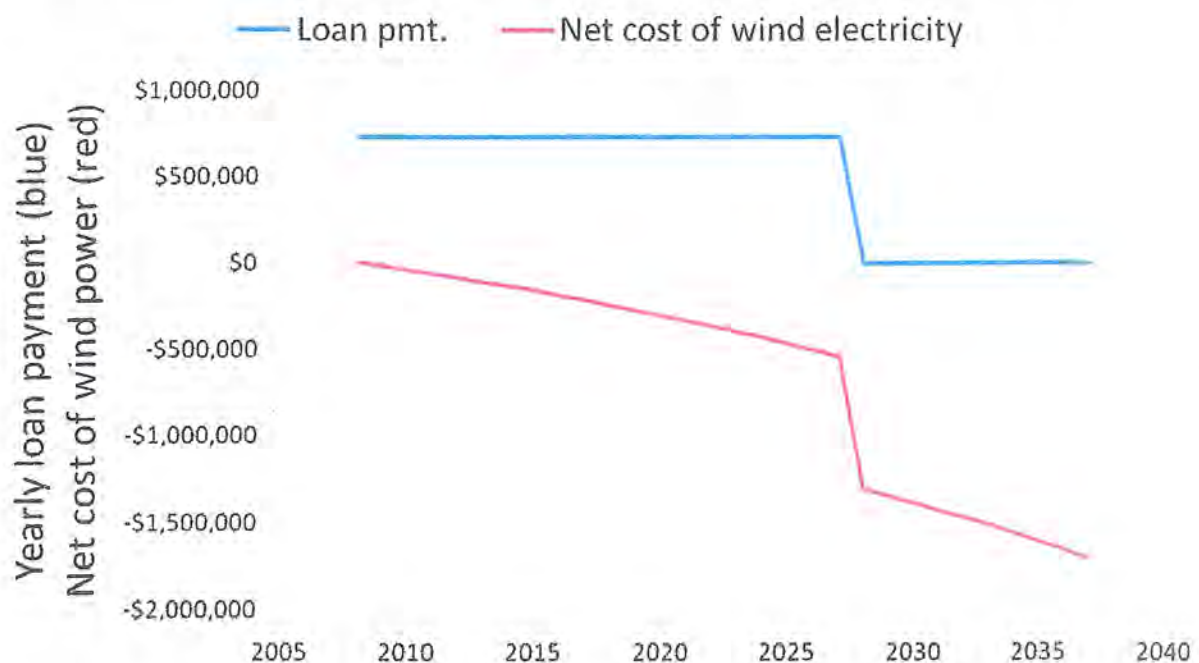
1. Consider the costs and benefits of implementing energy efficiency measures in the Village. In the following, I assume (following AMP-Ohio and others, and being conservative) that energy efficiency measures cost \$0.03/kWh saved. Total residential consumption in the Village is about 14,000 MWh across approximately 1700 households. If we further assume that electricity costs will rise at 5%/year, and that our goal is to realize energy-use reductions of 3%/year going forward, we find the following, for the first five years of a program. In the first year,  $0.03 \times 14,000 \text{ MWh} = 420 \text{ MWh}$  reduction. Since the investment needed to realize this savings is \$0.03/kWh, the total cost will be  $420,000 \text{ kWh} \times \$0.03/\text{kWh} = \$12,600$ . At our current electricity rate of about \$0.10/kWh, the total dollar savings for villagers by reducing consumption by an aggregate 420 MWh is  $420,000 \text{ kWh} \times \$0.10/\text{kWh} = \$42,000$ . We can continue these calculations into the future, assuming that electricity costs increase, per kWh, and efficiency investments continue as well. After five years, just for the sake of argument, we can assume that the cost per kWh for energy efficiency will increase to \$0.05/kWh, as we move to more and more difficult measures. Further increases to \$0.08/kWh and \$0.15/kWh occur after 10 years and 20 years, respectively. (These numbers are pure guesses, and might be high or low; the point is to roughly acknowledge the fact that as measures are implemented, somewhat larger investments will be necessary to take further steps.) Following this path until 2025, we find that total consumption will have decreased to about 8100 MWh, and villagers will be saving nearly \$1.5million per year compared to what electricity expenses would otherwise be. For an average family, the total savings will be on the order of \$7000 over that time period.

The key point in this exercise is that the dollar amount saved each year is significantly greater than the investment made to implement efficiency measures. This point is actually obvious, because the cost of each saved kWh (\$0.03 initially) is less than the cost of each purchased kWh (\$0.10 initially).





2. The second example is a bit more speculative, until we talk to energy providers, but will still serve to illustrate the potential advantage to investing in renewable energy generation capacity. If we were to pay for the installation of wind turbines with a total capacity of 4 MW (for example, four turbines with 1 MW power output rating), and the cost per kW of installed capacity were \$2500, the total capital cost would be \$10,000,000. Given a capacity factor of about 0.2 (capacity factor is essentially the fraction of time the turbine is actually producing at its nameplate capacity), we can calculate how many kWh of energy the turbines would produce. If we assume that we could get financing for 20 years at a rate of 4% for this project, there will be a monthly or yearly debt payment necessary. However, the electricity generated by the turbines is sold to homes in YS at the going rate of \$0.10/kWh, inflating at about 3%/year, as assumed in the previous example. This system would produce about 7000 MWh/year. (Remember that the example for efficiency considered only households; even so, this example might be a bit ambitious in that there is almost too much wind power.) Village residents would pay  $\$0.103/\text{kWh} \times 7,008,000\text{kWh} = \$720,000$  in the first year for power from the turbine. The debt payment would be, given the above conditions, \$727,000 in that first year, and for every year after. As time goes on, electricity gets more expensive, so the income from wind-generated electricity increases over time, whereas the debt payments remain constant. The result is that after the first year, there is net income from the wind project, as shown below.



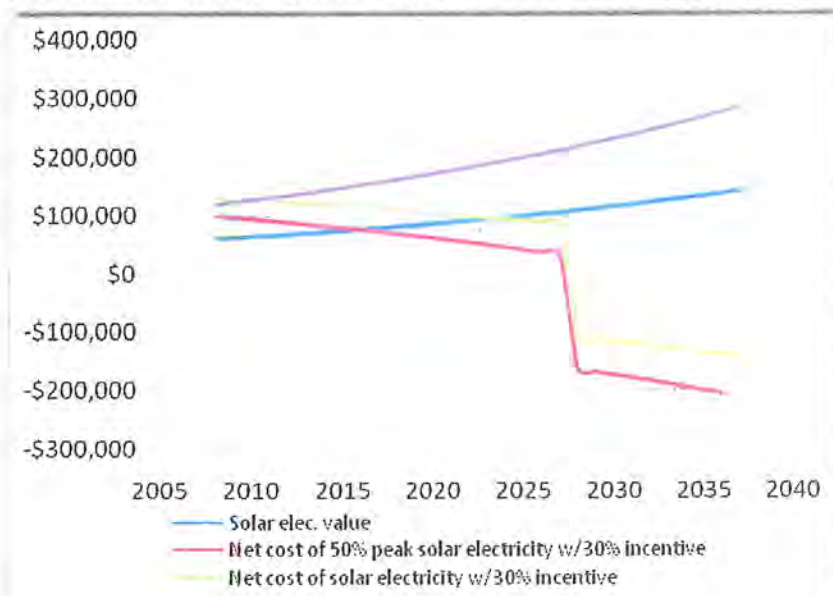
Photovoltaic energy (electricity directly from the sun) is, relatively speaking, an expensive source of electricity if quoted costs are taken merely at face value. Looking into photovoltaics a bit more carefully, some of the excess cost is reduced significantly, although it is still more expensive than even wind power. The main advantages of solar energy are that the “fuel” is free and the generation is local. Financially, solar energy is eligible for various tax credits. The cost to install and generate solar photovoltaic systems is often quoted as being on the order of \$0.30/kWh. However, there are at least four points to consider, all tending to reduce the relative cost disadvantage of solar photovoltaics. First, there are subsidies available; for example, a 30% cost reduction in the form of a tax rebate will reduce the overall cost of

generation by that same 30%, to ~\$0.21/kWh. Second, the cost of the solar input energy will not increase over time, meaning that as fossil-fuel generated electricity becomes more expensive, solar electricity will close the gap in price. Third, since solar electricity is generated locally, there is very little loss in transmission to the end-user. Overall, "line losses" account for about 7% of the electricity generated nationwide; this figure can climb to as high as 20% in summer peak-load periods. Thus, extra energy must be generated at peak-load times, not only to satisfy demand, but also because a greater percentage is being lost in transmission. The effect of this is to make locally-generated solar electricity less costly, relatively speaking. Fourth, electricity prices fluctuate over the year and during the day, as more expensive generating sources are brought on line to satisfy cyclic demand increases. Generation costs can vary by a factor of four or more, with the highest-cost electricity coming at just the time on hot summer afternoons when solar photovoltaic generation is at its maximum. Therefore, much of the electricity that is being replaced by photovoltaics is high-cost electricity, and not low- or average-cost electricity to which the price is often compared.

Given this preamble, here are a couple of options for solar photovoltaics.

### 3. Solar photovoltaic (version 1)

Buy a system, or large set of systems to be mounted on individual buildings, houses, parking lots, etc. Imagine a total capacity of 500kW, at an installed cost of \$7.50/kW peak capacity. If, as in the wind example, financing is available for 20 years at 4%, and furthermore, if there is a 30% tax credit available, then there will be debt service of approximately \$200,000/year. The generated electricity, assuming half to be at peak rates does cost more per year than the debt payment, at least for the period of the loan. However, over the last ten years or so of the expected lifetime of the panels, there is a net income to the Village electric system. It should be noted as well that the total amount generated annually by this rather large photovoltaic system is only slightly less than 600 MWh; on the other hand the extra cost involved is also only a relatively small amount of the income to the utility, and therefore represents only a very small rate increase which itself decreases over time. The figure below shows this information graphically (positive numbers are net dollar outflows, while negative numbers are net income).





#### 4. Solar photovoltaic (version 2)

A second possibility for pv generation is to engage in a power-purchase agreement. An Ohio company, Dovetail Solar, offers a plan in which they provide installation and service, and essentially a lease agreement for roofspace, with the option to fully purchase the system at the end of an eight-year initial period. They claim an expected system lifetime (56.4 kW is the standard size they offer) of 40 years. Such an agreement would have to be investigated in more detail, and it may be that other entities, perhaps even AMP-Ohio, would offer similar or more favorable agreements.

#### 5. Solar thermal

Using solar energy to heat water for domestic use is a viable option, and costs significantly less than photovoltaics. Solar thermal systems are also eligible for tax credits. Sample runs from a solar software package are shown below; without going into all details, a summary is as follows:

- Often, hot water heaters are set at temperatures that are too high, such as 140°F. If this is the case for an individual household, simply turning down the hot water heater to 120°F is enough to save ~\$50/year in energy costs. (See the comparison between the first two figures below, "Cost Aux Enrgy Without Solar"
- In the second figure, for the lower set-point temperature, the cost savings per year for using solar hot water, calculated for our location and average solar input, comes out to about \$180/year for an average household.
- In the third figure, and again for the lower set-point temperature of 120°F, but now with an electric hot-water heater, the savings work out to about \$420/year by having a solar hot water system.

SolarSim							
File Weather Data Active Solar Solar Wall PV Wind Help							
Location: DAYTON							
System: Hot Water							
Collector Area = 8 (m2) Slope = 45 (deg) Azimuth from South = 0 (deg) Gnd Refl = 0.2							
Num glaz = 1 Frits = 0.73 FrUL = 13.03 (kJ/hr m2 C)							
Mass H2O Storage = 400 (kg)							
Eff Hot Water Heater = 0.7 Cost Aux Energy = 12 (\$/GJ)							
Month	Avg It kJ/dy	Avg Qts kJ/dy	Avg Qfshw kJ/dy	Avg Ts C	Avg Qloadhw kJ/dy	Avg Qauxhw kJ/dy	Total SLR Qts/Qloadtot
1	82,369	29,230	28,602	39.7	45,875	17,273	0.62
2	99,159	34,989	33,457	46.4	46,775	13,318	0.72
3	115,000	40,941	35,769	51.6	45,603	9,833	0.78
4	143,952	47,823	40,736	65.3	43,633	2,896	0.93
5	143,952	47,373	38,496	66.9	41,202	2,705	0.93
6	145,199	49,117	38,244	72.5	39,055	811	0.98
7	144,244	47,582	36,305	73.6	36,588	283	0.99
8	155,685	49,799	35,787	76.4	35,973	176	1.00
9	141,193	45,143	35,426	71.1	36,750	1,324	0.96
10	138,675	44,643	34,810	68.6	37,759	2,949	0.92
11	78,708	27,579	27,208	44.7	40,863	13,655	0.67
12	63,422	21,413	22,723	35.3	43,346	20,617	0.52
Annual Avg	121,073	40,493	33,953	59.4	41,083	7,130	0.83
Avg Solar System Eff = Qts/It = 0.28							
Annual Savings							
Cost Aux Enrgy Without Solar = \$257/year							
Cost Aux Enrgy With Solar = \$45/year							
Savings from Solar = \$212/year							

Calculations assuming a gas hot-water heater with set-point of 140°F.

Location: DAYTON System: Hot Water Collector Area = 8 (m2) Slope = 45 (deg) Azimuth from South = 0 (deg) Grnd Refl = 0.2 Num glaz = 1 Frits = 0.73 FRIUL = 13.03 (kJ/hr m2 C) Mass H2O Storage = 400 (kg) Eff Hot Water Heater = 0.7 Cost Aux Energy = 12 (\$/GJ)							
Month	Avg It kJ/dy	Avg Qts kJ/dy	Avg Qfshw kJ/dy	Avg Ts C	Avg Qloadhw kJ/dy	Avg Qauxhw kJ/dy	Total SLR Qfs/Qloadtot
1	82,369	29,230	27,192	39.7	37,588	10,396	0.72
2	99,159	34,989	30,812	46.4	38,488	7,676	0.80
3	115,000	40,941	32,643	51.6	37,316	4,673	0.87
4	143,952	47,823	34,628	65.3	35,346	718	0.98
5	143,952	47,373	32,282	66.9	32,915	633	0.99
6	145,199	49,117	30,713	72.5	30,768	55	1.00
7	144,244	47,582	28,301	73.6	28,301	0	1.00
8	155,685	49,799	27,686	76.4	27,686	0	1.00
9	141,193	45,143	28,302	71.1	28,463	161	0.99
10	138,675	44,643	28,449	68.6	29,472	1,024	0.97
11	78,708	27,579	25,284	44.7	32,576	7,292	0.78
12	63,422	21,413	22,228	35.3	35,059	12,831	0.63
Annual Avg	121,073	40,493	29,021	59.4	32,797	3,775	0.88
Avg Solar System Eff = Qfs/It = 0.24							
Annual Savings Cost Aux Engy Without Solar = \$205/year Cost Aux Engy With Solar = \$24/year Savings from Solar = \$182/year							

Calculations assuming a gas hot-water heater with set-point of 120°F.

Location: DAYTON System: Hot Water Collector Area = 8 (m2) Slope = 45 (deg) Azimuth from South = 0 (deg) Grnd Refl = 0.2 Num glaz = 1 Frits = 0.73 FRIUL = 13.03 (kJ/hr m2 C) Mass H2O Storage = 400 (kg) Eff Hot Water Heater = 0.7 Cost Aux Energy = 28 (\$/GJ)							
Month	Avg It kJ/dy	Avg Qts kJ/dy	Avg Qfshw kJ/dy	Avg Ts C	Avg Qloadhw kJ/dy	Avg Qauxhw kJ/dy	Total SLR Qfs/Qloadtot
1	82,369	29,230	27,192	39.7	37,588	10,396	0.72
2	99,159	34,989	30,812	46.4	38,488	7,676	0.80
3	115,000	40,941	32,643	51.6	37,316	4,673	0.87
4	143,952	47,823	34,628	65.3	35,346	718	0.98
5	143,952	47,373	32,282	66.9	32,915	633	0.99
6	145,199	49,117	30,713	72.5	30,768	55	1.00
7	144,244	47,582	28,301	73.6	28,301	0	1.00
8	155,685	49,799	27,686	76.4	27,686	0	1.00
9	141,193	45,143	28,302	71.1	28,463	161	0.99
10	138,675	44,643	28,449	68.6	29,472	1,024	0.97
11	78,708	27,579	25,284	44.7	32,576	7,292	0.78
12	63,422	21,413	22,228	35.3	35,059	12,831	0.63
Annual Avg	121,073	40,493	29,021	59.4	32,797	3,775	0.88
Avg Solar System Eff = Qfs/It = 0.24							
Annual Savings Cost Aux Engy Without Solar = \$479/year Cost Aux Engy With Solar = \$55/year Savings from Solar = \$424/year							

Calculations assuming an electric hot-water heater with set-point of 120°F.



6. Job opportunities from energy efficiency and renewable energy generation.

There are many possibilities for meeting the additional Energy System Task Force goal of creating new job opportunities. Among these are:

- Energy efficiency – building (residential and commercial) energy inspections; energy efficiency retrofits to high and documentable standards; ultra-high efficiency (e.g. German passive house) construction.
- Wind – engineering design companies; turbine maintenance; manufacturing of components
- Solar pv – system design and planning; installation and maintenance
- Solar thermal – system design and planning; installation and maintenance; manufacturing of solar thermal panels

## APPENDIX B

### Analysis by Reginald Stratton

#### ESTF Energy Efficiency and Conservation Program Summary for Village Council

##### Program Goal and Objective

**a. Goal:**

Reduce carbon footprint to help deter impact Village has on global warming.

**b. Objective:**

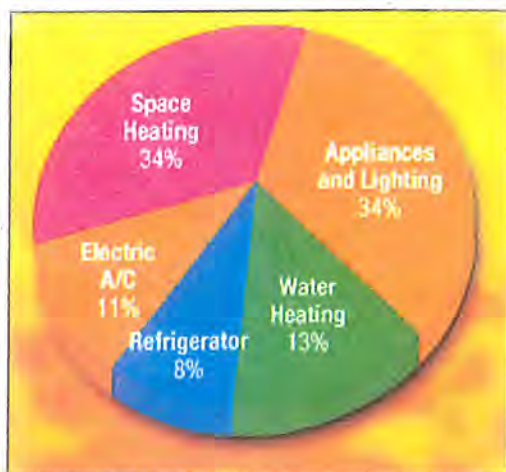
Reduce our average per meter consumption by 50% over the next 15 years through a comprehensive energy efficiency and conservation program.

The predicted effects of global warming for the environment and for human life are numerous and varied. The main effect is an increasing global average temperature. From this flows a variety of resulting effects such as rising sea levels, altered patterns of agriculture, increased extreme weather events, and an increased range of tropical diseases.

Energy efficiency and conservation is the quickest and most cost effective way that the village can reduce its contribution to global warming and its subsequent devastating effects.

In this report, we will provide an overview of programs our community could implement to reduce our energy use and lessen our contribution to global warming and help preserve the environment for generations to come.

Before embarking on a comprehensive EE & C program, it is important to understand how energy is consumed in residential and commercial buildings. As indicated from the U.S. Department of Energy chart below and the table demonstrating the end use of energy in residential and commercial buildings, the majority of energy is expended on heating and cooling buildings, lighting, water heating and refrigeration. Initiating programs that address these sectors of energy use can have the greatest impact.



Source: U.S. Department of Energy

**Table 3: U.S. Buildings Primary Energy and Expenditure End-Use Splits, 2004**

Energy consumed is shown in quads and % of totals

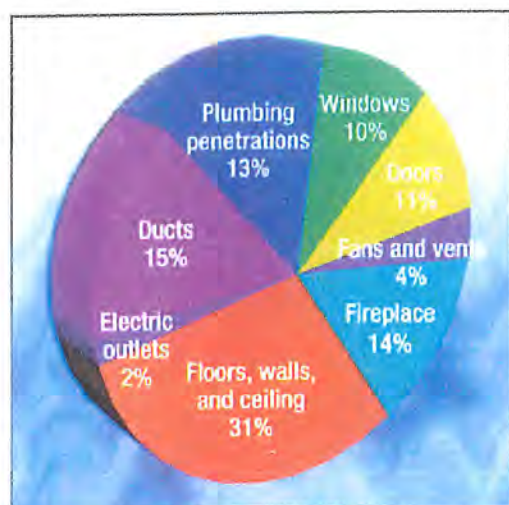
End Use	Residential		Commercial		All Buildings	
Space Heating	6.6	32%	2.3	13%	8.9	23%
Lighting	2.5	12%	4.3	25%	6.8	18%
Space Cooling	2.3	11%	1.9	11%	4.2	11%
Water Heating	2.7	13%	11	6%	3.7	10%
Refrigeration	1.7	8%	11	6%	2.8	7%
Electronics	11	5%	1.0	6%	2.0	5%
Cooking	1.0	5%	0.4	2%	1.3	3%
Wet Clean	1.0	5%			1.0	3%
Ventilation			1.0	6%	1.0	3%
Computers	0.2	1%	0.4	3%	0.7	2%
Other	0.9	4%	1.8	10%	2.6	7%
Adjusted to SEDS*	11	5%	2.2	13%	3.3	9%
<b>Total</b>	<b>21.1</b>	<b>100%</b>	<b>17.4</b>	<b>100%</b>	<b>38.5</b>	<b>100%</b>

\* State Energy Data System

It is also important to know how energy is wasted through poor weatherization or insulation of buildings, inefficient use of hot water or the use of inefficient appliances and lighting systems.

**Air Infiltration and Thermal Transfer:** The chart below breaks down how air infiltrates our homes and buildings producing heat loss in the winter and cooling loss in the summer. Air leaking through cracks and crevices in doors and window framing or holes in plumbing penetrations can cause considerable cooling and heating loss. Thermal loss occurs as well through poorly insulated walls, attics and floors. Solar gain through windows in the summer time creates an extra burden on air conditioning.

Creating weatherization programs to address these losses is an important element of any EE & C Program.



Source: U.S. Department of Energy

**Water Heating:**



Water heating is the third largest energy expense in your home. It typically accounts for about 13% of your utility bill (U.S. DOE). The chart below details how the typical home owner uses heated water. Programs that promote the use of low flow faucets and shower heads, water heater insulation jackets and more efficient electric water heaters can help lessen this impact.

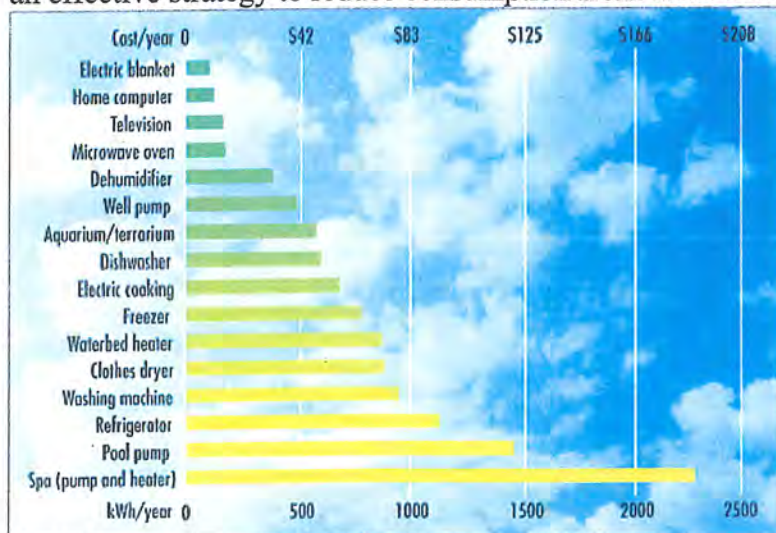
### Average Hot Water Use

Activity	Gallons per Use
Clothes washing	32
Showering	20
Bathing	20
Automatic dishwashing	12
Preparing food	5
Hand dishwashing	4

Source: U.S. Department of Energy

### Inefficient Appliances

Appliances account for about 20% of your household's energy consumption with refrigerators, clothes washers, and clothes dryers at the top of the consumption list (U.S. DOE). Encouraging the purchase of "Energy Star" rated appliances through incentive programs and new construction building codes can be an effective strategy to reduce consumption from these items.



(U.S. Department of Energy)

### Inefficient Lighting

Upgrading lighting systems from incandescent to fluorescent is one of the fastest ways to cut energy usage. An average household dedicates 12% of its energy budget to lighting while commercial buildings



dedicate up to 25%. Using new lighting technologies can reduce lighting energy use by 50% to 75% (U.S. DOE). Here is an example of energy savings realized by switching out twenty 60 watt incandescent bulbs with twenty 14 watt (60 watt equivalent) compact fluorescent bulbs in your home:

[print this page](#)

### Simple Energy Estimator

Calculate the energy savings you'll gain by relamping your lighting system.  
Also find out how long it will take to recoup your full investment for the new system.

Enter the following information and click "calculate."  
Your results will display below.

* Required	
* Number of fixtures:	20
* Average number of hours on per year:	2184
* Your electric cost per kilowatt hour: \$	0.10
* Watts per fixture used in current system:	60
* Watts per fixture used in proposed system:	14
Cost to upgrade each fixture*: \$	1.60
<a href="#">CALCULATE</a>	

### Results

Cost of Electricity		Energy Savings (with proposed system)	
Current system:	\$262.08 per year	Each fixture:	\$10.05 per year
Proposed system:	\$61.15 per year	Total:	\$200.93 per year

Using only your energy savings, you will get your full investment back in	2 months (0.16 yr.)
---	---------------------

Source: General Electric Lighting Estimator

Note: In addition to the cost savings of \$200.93 year you use 1373 less kWh per year.

### Program Initiatives (all would need cost/benefit analysis)

The following are descriptions of possible energy efficiency and conservation programs that could be adopted by the village to address many of the issues stated above. A comprehensive approach is needed

to obtain deep cuts in our consumption and delay large capital outlays for increased generation. Savings from energy efficiency and conservation efforts will also offset ever increasing costs of energy for residential, commercial and industrial customers:

#### **Education Program**

- An educational program should be the cornerstone of any conservation program. Utilizing the local newspaper and radio station (WYSO) to launch the various initiatives, incentives, give aways or rebates are effective ways to “get the word out” to the general public. Developing a newsletter or sending out informational inserts with utility bills could also be effective communication tools. Posting links to energy efficient ideas, products or programs on the village web site would also be good conduit for exchanging information. The website could also have links to Green Energy Ohio or the US Green Build Council where information on renewable energy and green building design can be found.
- Develop an energy education program in our school curriculums (similar to the “water project”) through partnerships with local organizations such as Community Solutions or the Environmental Coalition. There are also state funded programs that will provide teacher assistance and educational materials. Amp Ohio also provides teacher assistance for schools in its member communities.
- Host Village sponsored events, such as an “energy expo” or conference with local business involvement and vendors brought in to display energy efficient products and services.
- Provide information on Local, State and Federal incentive programs for energy efficiency, conservation and renewable energy and post on village website or village newsletter.
- Host talks on energy efficiency and conservation and invite speakers in with expert knowledge or experience in the field of conservation.
- Network with other businesses to share conservation efforts and provide tours of facilities.
- Encourage membership in the local chapters of the USGBC and Green Energy Ohio and publish information about events hosted by these organizations.

#### **Audit Program**

An audit program for residential and commercial/industrial customer is essential in helping the user to identify areas of high energy use, wasted energy or inefficient use of energy resources.

- Organize a group of volunteers group to do building scans with a thermal imaging camera to identify areas of poor insulation or air infiltration.
- Provide forms, tools and resources for homeowners to perform self audits.

- The Village could loan out an appliance meter, such as the “Watts Up” or “Kills-A-Watt” to residents to assist with self audits. The local library currently loans out one of these devices.
- Contract with a local vendor to perform audits at a discounted or subsidized rate. The contractor could offer a basic walk through audit or an audit involving thermal imaging and blower door tests.
- Commercial / Industrial customers can request a comprehensive audit through the village manager performed by an AMP-Ohio representative.

#### **Compact Fluorescent Bulb Program**

- A CFL program could be initiated by forming partnerships with local businesses support by village promotional/educational materials and rebates or other incentives. Downing’s Do-It-Best Hardware and Living Green store have expressed interest in supplying CFL’s for such a program. Other organizations that could champion this type of program could be the Environmental Coalition or Community Solutions. CFL’s could also be given out as part of a conservation kit.

#### **Programmable Thermostats**

- “Set-up” assistance from a local vendor, village staff, or local volunteers for programmable thermostats could be offered as part of a program to promote the purchase and installation of these devices in residential homes. AC Service is a possible local vendor who could stock this item and perform the installation and set up as a package deal. Programmable Thermostats range in price from \$29.00 to \$79.00 and are very user friendly.

#### **Appliance Program – Energy Star**

- An appliance exchange program to encourage residents to turn in their old refrigerators or other inefficient appliances with low income assistance provided by the village to promote the purchase of Energy Star rated appliances. Offering a “trade up” allowance to residents who are planning to buy a new appliance to encourage the purchase of a more efficient appliance could be an additional approach.

#### **Other Incentive Programs**

- Provide free materials in the form of a “Conservation Kit” that may include caulking, low flow showerheads, water heater blankets, power strips, window film and a CFL’s. Again, use a local vendor to stock these kits at a substantial discount and launch with promotional and educational materials.
- Provide credits on bill for energy efficiency/conservation implementation by commercial and residential customers or institute a usage penalty to those above a certain usage threshold.
- Low/No Interest Loans or incentives for Energy Efficiency Projects such as Energy Star appliance purchases or HVAC upgrades.

#### **Insulation/Weatherization Program**

There are a couple of existing weatherization programs available to Yellow Springs residents:

- **Greene County Program**  
Green County offers a low income assistance weatherization program. The village sent out flyers about this program; however, very few customers are taking advantage of it. Offering an application assistance program may help participation.
- **Vectren CAP Program**

A low income weatherization program is available to Yellow Springs residents who are Vectren customers. It is run by the Community Action Partnership (CAP). CAP will perform a home energy efficiency assessment and then install cost effective measures up to a certain value. The program is now budgeted at \$2 million a year and is scheduled to expand in size. It is probable that very few villages are aware of this program. Ellis Jacobs stated that CAP may be willing to coordinate weatherization activities in YS with any broader energy efficiency program that YS would set up. He frequently represents CAP in utility cases and would be glad to make introductions whenever appropriate.

#### **Load Management – Interruptible Circuits**

- AMP-Ohio offers a load management program to its member community. This program involves the installation of radio controlled switches on the utility customer's air conditioning units or electric water heaters to turn off the condensers, resulting in a load reduction. The fans continue to run during cycling. Typical programs cycle the units off for up to 15 minutes on the hour during times of high peak load events during the summer months. This can be an effective program to help the village alleviate the number or frequency of "brown outs" currently experienced in the summer due to exceeding peak load capacity on electric transmission lines. The Village can contract with AMP-Ohio for this service and customers could enroll in such a program voluntarily or the village could provide a rate incentive to encourage participation.

#### **Building Code "above code" requirements:**

- The village could consider an above code requirement for new construction involving heating, cooling, appliance and insulation standards. Incorporating "Energy Star" and USGBC "LEED" programs could have significant impacts.

### **Approaches to Comprehensive EEC Programs**

There are several approaches to defining and implementing a comprehensive EE & Conservation Program. The first is a completely community based program which uses resources within the community to develop and implement programs. The second approach is to utilize the services of AMP-Ohio who recently contracted with Vermont Energy Investment Corporation to develop an EE & C Program for its member community. A third approach is to hire consulting firm (such as VEIC) to design a program for the village. And finally, a fourth approach is to hire a design, build, and install performance contractor who will work mostly with the utility to identify efficiency opportunities within the village infrastructure and recommend upgrades with a guaranteed payback.

#### **Community Based**

- The village organizes a "grass roots" effort that utilizes volunteers, local business leaders and educators to help introduce energy saving products and habits to the community. Form a volunteer audit team, for example, to perform simple energy audits for residential customers. Utilize a local community action organization to promote and or distribute energy saving products or educational materials. Use local businesses to host and promote energy conservation events or product demonstrations. Assist the schools in implementing an energy education module in their curriculum.

#### **Energy Performance Contracting**



- The ESTF met with Ameresco, a private energy performance contracting firm. In general, the company focuses on efficiency improvements to municipality-owned properties, including municipal buildings, schools, water treatment facilities, traffic control and lighting systems, but are capable of delivering a comprehensive energy program involving energy education, renewable generation and grant assistance. Other competitors include **Optimera, The Synergy Company, Trane and Siemens.**

#### **Private Consulting**

- **The Vermont Energy Investment Corporation (VEIC)** is a non-profit consulting firm that can provide analytic, planning, management and technical support for a comprehensive EE & C program. The VEIC is currently working with AMP-Ohio to design a program that AMP-Ohio plans to roll out to member communities in June of 2008.
- **Environmental Defense Fund**  
Pat Murphy met with James Fine, an economist with Environmental Defense Fund in San Francisco. James said EDF might volunteer some resources to aid Task force in analysis.

Below are some other resources for the Village that requires further exploration:

- **Conservation Services Corporation**
- **WECC (Wisconsin Energy Conservation Corp)**
- **Ohio Home Performance Program**
- **International Conservation Services**

#### **Utility Based**

- **Amp Ohio** has contracted with **VEIC** to develop an EE program it will later roll out to member communities by early summer. An EE portfolio is being developed comprised of possible member programs. The next phase involves forming a “pilot” group comprised of AMP-Ohio member communities. A program “menu” will be established for each participant in this group and potential penetration rates and program costs and benefits will be evaluated. Our village was suggested as a possible participant in this study by the Amp-Ohio board of directors and members of the ESTF were invited to a teleconference with the Village manager, AMP-Ohio, and the VEIC to explore this opportunity.

#### **Case Studies**

##### **Osage, Iowa**

The center piece of the Osage, Iowa conservation program is education. Osage strategically launched each initiative with ads and articles in the local media. They also produced a bi-monthly newsletter mailed out to all utility customers that detailed energy efficient techniques and local energy achievements and used them to promote new initiatives or giveaways. The village also hosted talks and formed partnerships with the local schools to promote energy education and provided teacher assistance.

Auditing was also an important element in their conservation program. Village staff performed thermal scans of building roofs, walls and interiors and sent pictures of scans to residents to show how heat loss and thermal transfer was occurring in their buildings. The village also performed blower door tests for residents and free energy audits for local industrial and commercial accounts.

New construction standards were implemented specifying a minimum r-value for insulation of new buildings. Non-compliance to this new standard meant no gas or electric service until standards were met.

Osage incentive programs included free weatherization materials and low flow shower heads and faucet aerators along with CFL rebates to help residents conserve energy and encourage participation.

Osage also looked inward, initiating upgrades of their utility system to minimize line losses and detect faulty currents. Street lights were upgraded as well to more energy efficient lighting. A load management program was implemented to address peak loading during summer months through the installation of interruptible circuits on residential air conditioners and electric water heaters.

### **Ohio Energy Smart Communities**

In 2001, Governor Taft initiated the “Energy Smart Community Challenge”. This program recognized communities who made commitments to comprehensive energy efficiency programs and renewable energy strategies. A few of these communities are members of the Amp-Ohio network. These include Bowling Green, The City of Westerville and The City of Oberlin.

**Bowling Green’s** energy program is focused on developing a diverse, clean power portfolio. Approximately 20% of electricity used by local consumers is generated from sustainable resources. This portfolio includes solar, wind, landfill gas and hydro with plans to expand wind and hydro capacity. Two elementary schools have 1kw grid connected solar panels and a solar education program. The project was made possible by the Foundation for Environmental Education and a grant from the Ohio Department of Development Office of Energy Efficiency and with revenue from the City’s “Green Power” program. Additionally, the Ohio Energy Project (OEP) is providing in-kind contributions in the form of teacher training as a part of the Energy Smart School Program. A load management program is also deployed in Bowling Green and they are developing consumer programs on energy conservation and efficiency.

**The City of Westerville** has an on-line tool called “Energy Depot” where customers can perform a comprehensive on-line energy audit. An “Energy Calculator” is featured to help users determine the approximate energy consumption and costs for home appliances. The web-site has helpful “tips” to educate customers on conservation and energy efficiency. The Westerville School District has an energy education program that is funded in part by the Westerville

Electric Division and instructional materials and assistance is provided by the Ohio Energy Project. Like Bowling Green, Westerville also has solar panels installed at local elementary schools and solar education program.

**The City of Oberlin** partners with Oberlin College Students and local business to distribute Energy and Water Conservation kits to local residents. The local hardware stores provide the kits at a 50% discount (\$27.00) and the students install the packages for free. The conservation kits include a water heater blanket, CFL, low flow shower heads, two faucet aerators, toilet tank dams, leak detector tablets and an energy conservation booklet. Oberlin College has one of Ohio's largest solar installations (60kw) providing 53% of the Lewis Center building energy demands. The college has installed a comprehensive energy and water monitoring system in all its dormitories that will provide real-time feedback that allows students to better conserve resources. A competition between dormitories is held to see which dormitory can reduce its consumption the most.

**APPENDIX C**  
**Resolution Authorizing the ESTF**

**VILLAGE OF YELLOW SPRINGS**  
**RESOLUTION #2007-16**

**A RESOLUTION AUTHORIZING THE CREATION OF AN ELECTRICAL SYSTEM TASK FORCE FOR THE VILLAGE OF YELLOW SPRINGS.**

**Whereas**, Council has concerns with the current condition and capabilities of the Village-owned electrical system; and

**Whereas**, along with anticipated residential and commercial growth, the need to consider options to address current and future concerns must begin now; and

**Whereas**, Council would also like to address concerns regarding the global environment and the need to reduce CO2 emissions and consumptions; and

**Whereas**, Council would create an Electrical System Task Force to address these concerns.

**NOW, THEREFORE, THE COUNCIL FOR THE VILLAGE OF YELLOW SPRINGS, OHIO HEREBY RESOLVES THAT:**

**Section 1.** The Electric System Task Force is an ad hoc committee of the Yellow Springs Village Council. Its first order of business shall be to choose a Chair Person whose responsibilities include presiding over the meetings, and reporting the findings of the Task Force. If the Chair is not able to fulfill their responsibilities, the Task Force shall choose an alternate to stand in for the Chair.

**Section 2.** The Electrical System Task Force shall begin its work within 30 days of Council approval of its makeup and charge. A report of findings to Village Council and the community will be made in two parts. A report on Phase 1 will be made 90 days from the start of the Task Force work, and a report on Phase 2 will be made in an additional 90 days.

**Section 3.** The membership of this Task Force is as follows:

Benji Maruyama, Materials Engineer  
Steve Conn, Environmental Commission, Professor of History, OSU  
Roy Eastman, Owner Electroschild, former Village Council member  
Richard Zopf, Miami Township Planner  
Carol Gasho, Community Resources  
Pat Murphy, Community Solution  
David Heckler, Former Village Manager  
Paul Abendroth, Retired Systems Engineer with Electrical degree  
Reggie Stratton, Antioch Company  
Bob Brecha, PhD. Physics, UD. Resource person for energy conservation; not a task force member.

**Section 4.** For a more comprehensive outline of the duties of this Task Force, the reporting content and the resources available, please see the attached memo.

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Karen Wintrow, Vice President of Council

Passed: June 4, 2007

Attest: \_\_\_\_\_  
Deborah Benning, Clerk of Council

**ROLL CALL**

Karen Wintrow \_\_Y\_\_      Bruce Rickenbach Absent      Judith Hempfling \_\_Y\_\_

Kathryn Chase \_\_NO\_\_      Kathryn Van der Heiden \_\_Y\_\_

**APPENDIX D**  
**Electrical Usage Data for the Village of Yellow Springs**  
**Compiled by VYS Staff**

**Village Electric Usage, Top Five Consumers**

KWH USAGE, BY TOP FIVE CONSUMERS AS PURCHASED

		2001	2002	2003	2004	2005	2006
VYS	VYS Sewer Treatment	754,600	1,026,920	1,316,360	1,229,380	1,152,840	1,043,100
VYS	YELLOW SPRINGS EVSD	478,510	433,270	740,053	974,536	1,002,900	919,159
VYS	VYS Bryan Center	412,560	468,960	432,480	455,160	420,000	407,760
VYS	VYS Water Treatment	201,890	244,525	217,425	199,475	193,280	218,998
	VERNAY	8,696,760	7,118,160	3,977,160	2,797,920		
	ANTIOCH COLLEGE	4,591,113	4,934,730	4,605,845	5,880,643	4,842,543	4,528,794
	YELLOW SPRINGS INSTRUMENT	2,749,920	2,851,560	2,537,880	2,639,640	2,527,840	2,378,240
	ANTIOCH PUBLISHING	2,659,800	2,786,400	2,459,400	2,722,800	3,037,200	2,799,000
	FRIENDS CARE CENTER	1,026,720		1,168,203	1,226,943	1,152,944	1,090,004
	TOTAL TOP FIVE/Govt	21,571,873	19,864,525	17,454,806	18,126,497	14,329,547	13,385,055
	YEAR/YEAR CHANGE		-1,707,348	-2,409,719	671,691	-3,796,950	-944,492
			-8%	-12%	4%	-21%	-7%
	CHANGE 2001 TO 2006 FOR						-38%
	TOP FIVE CUSTOMERS						
	CHANGE 2003 TO 2006 FOR						
	TOP FIVE CUSTOMERS						-23%

Total VYS A Average VY Savings from Expected reduction in consumption  
kWH per ye: kW                      kW  
1,847,560    210.90868                      35                      17%

### Village Electric Usage by Class in KWH

	2001	2002	2003	2004	2005	2006
Residential	13155760	14165796	13468781	13802378	14692114	13566555
General Service	7937302	8528645	8455663	7454140	7382797	6786348
Large Power	20051740	18810080	15000500	15756880	14355920	13472100
Total	40,275,869	40,797,076	36,924,944	37,013,398	36,430,831	33,825,003
Change from Previous		1.3%	-9.5%	0.2%	-1.6%	-7.2%
Peak (Top Hour Interval)	9919	9951	8513	8201	9036	9057
Change from Previous		0.32%	-14.45%	-3.66%	10.18%	0.23%
Cumulative Cooling Degree Day Units	900	1272	687	771	1075	860
Year/Year Pct change		41%	-85%	11%	39%	-25%
Correlation total to CDD		0.491516979				
Correlation Resident to CDD		0.631411539				
Correlation General to CDD		0.208337168				
Correlation Large to CDD		0.381151903				
Correlation Peak to CDD 03-06		0.712423611				

Degree Days is a weather term used to help understand energy use over a period. A "degree day" is a unit of measure for recording how hot or how cold it has been over a 24-hour period. The number of degree days applied to any particular day of the week is determined by calculating the mean temperature for the day and then comparing the mean temperature to a base value of 65 degrees F. (The "mean" temperature is calculated by adding together the high for the day and the low for the day, and then dividing the result by 2.)

## Yellow Springs Planning: A List of Studies and Sources

1. Fiscal Impacts of a Proposed Commerce Park, Village of Yellow Springs, May 25, 2001  
Report prepared by Kalpana Pareek, Graduate Intern Wright State University Dayton, Ohio, for The Yellow springs Economic Development Committee. Dr. Robert Premus, Prof. Of Economics, Wright State University served as primary advisor on this report.
2. Economic Assessment Study, Yellow Springs Village, September 2002.  
Prepared for Community Resources by Annemette Jensen, under the direction of Jane Dockery, Center of Urban and Political Affairs, Wright State University, Dayton, Ohio.
3. Yellow Springs Cost of Living Report, November 2002.  
Study sponsored by The Yellow Springs Men's Group, Inc. with financial support from the Yellow Springs Community Foundation and The Antioch company Charitable Contributions Program, under the direction of the Center for Urban and Public Affairs, Wright State University, Dayton, Ohio and with assistance from volunteers from the community.
4. Yellow Springs External Perception Survey, August 2005.  
Compiled by David Jones, Center for Urban & Public Affairs, Wright State University, Dayton, Ohio with input from the Community Information Project, a coalition of Yellow Springs leaders.
5. Yellow Springs Transportation Service Needs and Priorities: Business Community Perception Survey, 2005.  
Compiled by Carol Hooker, Center for Urban & Public Affairs, Wright State University, Dayton, Ohio with assistance from Angelina Bressler, Katie Dempsey & Christina Arose.
6. Yellow Springs Hospitality Feasibility Study, 2005.  
Compiled by Carol Hooker, Center for Urban & Public Affairs, Wright State University, Dayton, Ohio with assistance from Angelina Bressler, Katie Dempsey & Christina Arose.
7. Water Distribution Study.
8. Sanitary System Study, 2006. LBJ Inc. for the Village of Yellow Springs.
9. Building a Five-Year Financial Plan for Village Government, 2004 by Village Council.
10. Mail and Telephone Survey Results, 2005 for Village Government to Draft the Five-Year Financial Plan.



## **VILLAGE OF YELLOW SPRINGS, OHIO**

### **VILLAGE COMPREHENSIVE LAND USE PLAN, 2010**

**Updated 10/29/2010**

## **1. INTRODUCTION**

### **1.1. General Purpose and Definitions**

One very important role of a Comprehensive Plan or as will be referred to as “Plan”, is as a statement of policy. In this capacity, this plan outlines the community's desires regarding issues such as atmosphere or community character, quality of life and growth. These desires should translate into statements of goals, which may be followed by some discussion or statements concerning implementation options. A plan's general purpose is to guide and direct land use and the local government's development decisions. The comprehensive land use approach is one that recognizes the community's responsibility to reaching consensus about how physical and social resources are valued, managed and used. The Plan in some way influences nearly all-essential community services. Formulation of a community's zoning ordinance is one important example where general goals and directions outlined in the Plan provide the basis for legislative action.

The Standard State Zoning Enabling Act of the 1920's created the federal mandate that zoning be created in accordance with a comprehensive plan. This legislation required the presence of certain standards in local planning and zoning. As communities became more involved in land use planning, they began to see the need for flexibility in the zoning ordinance (e.g., floating zones, planned unit development provisions, etc.). The limits on the use of this flexibility require reliance on the comprehensive plan to help determine potential locations and/or situations where those options should be considered.

In addition, because a comprehensive plan is recognized as a legal document that supports and guides a political jurisdiction's zoning ordinance, it can be crucial in defending a community against private interests seeking to overturn a zoning ordinance in court. As policy statements, the community's intentions outlined in the plan should be as clear and concise as possible to help reduce the potential of being interpreted as arbitrary and capricious with regard to zoning controls, subdivision regulations, capital budgeting, etc. Variations in tools such as the zoning ordinance are necessary to meet varying and changing conditions, but clear guidance is required, through the Plan, about when they are appropriate. Improvements and/or new extensions of infrastructure should be in accordance with overall growth expectations established in the Plan. Annual spending and resource allocations should be supported by the goals outlined in the plan. New community additions, such as a community center, parks, governmental facilities, etc. should also be directed by the plan. These are just a few of the many examples where the Plan is essential in determining appropriate action and in defending the zoning ordinances based on it.

The commonly accepted legal tools for plan implementation are twofold: zoning and subdivision regulations. These legal tools are drafted and published as separate documents. In addition to zoning and subdivision regulations, other tools such as an annexation policy, mutual land use agreements between political subdivisions and the code enforcement protocol can be very influential in achieving the Plan's goals.

The zoning ordinance is an essential tool of the Plan as it relates to private land development. The fundamental precept behind zoning is that it must recognize the need for and establish a regulatory balance between private property rights and interests and the interest and well being of the community. Land use activities are controlled through this ordinance based on affecting a regulatory balance when the individual and communal interests do not converge. The Plan is a statement of the community's goals as a whole while the tools for implementation, such as the zoning ordinance, state the specific controls all must adhere to in order to achieve the "public good". The zoning ordinance should be viewed as a key tool for implementing the vision statement of the Plan and not simply seen as a way to avoid problems.

Zoning is the manifestation of a municipality's police powers as they relate to the use of land. The concept of zoning is a relatively simple one, yet specific zoning techniques can be complex. The controls allowed by zoning must: 1) be in accordance with a comprehensive plan, 2) have substantial relation to the general public welfare, and 3) be neither arbitrary nor capricious. Zoning may regulate land use without regard to economic depreciation or appreciation, but it may not have the effect of appropriating all meaningful land value without due compensation. If zoning powers become too oppressive in the opinion of landholders, the courts can be called upon to decide the issues of "relation to public welfare", "appropriation without compensation", and "arbitrariness".

The land use tool that addresses the development of unplatted land is the subdivision regulation. Typically, subdivision regulations are based upon: 1) the need to protect the public interest in the creation and coordination of public improvements, and 2) the need to specify areas of developmental responsibility by the various participants. Subdivision regulations specify street widths, utility networks, the layout of lots, procedures for approvals and inspections, etc.

It is important to understand the distinction between zoning and subdivision regulations. If, Yellow Springs was to gain city status (a population of 5,000 or more) extra-territorial control over subdivision developments within a three-mile radius around the corporate boundary could be an additional regulatory responsibility. This would allow the Village to exercise more control over the quality of surrounding subdivisions, but not the size of the actual subdivision development. This added authority originated from the general feeling that, in time, it is quite likely that any subdivision located three-miles or less from a municipality will either be incorporated or, at a minimum, need the public services provided by the municipality and therefore, that municipality should have some say about how it is built and served. Zoning powers, on the other hand, remain restricted to the area within the corporation limit regardless of any change in the Village's status.

The broad-based purpose of this Plan is: 1) to describe options that will help secure a positive quality of life for residents; 2) to allow active participation and influence in changes that are inevitable; 3) to state explicitly the commonly held goals for the Village's future; and 4) to establish means of implementing those goals.

Through this Plan, the Village government shall recognize and enhance the Village's self-reliant nature by asserting that it has or can acquire the knowledge, skills, resources and vision to identify changing conditions; locate appropriate technical assistance when needed and initiate

actions in a manner that conserves the existing Village environment and distributes benefits equitably.

The policies and positions outlined in this Plan shall be reviewed by the Village Council and the Planning Commission on a regular basis and as significant changes within the Village's development pattern occur.

## **1.2. Historical Overview**

Soon after Ohio became a state in 1803, Lewis Davis built the first log cabin in the Yellow Springs area. He went on to establish a trading post and general store serving those who were visiting the nearby medicinal springs. In 1827, Elisha Mills purchased the land, added more buildings, and established a flourishing health resort. This was continued by the Neff family in 1842 ultimately created a popular and sophisticated spa, later (1869), a magnificent but ill-fated hotel. During that time, as many as 5,000 people were known to visit the springs on a given summer weekend. Judge William Mills, Elisha Mills' son, is recognized as the "founder" of the Village of Yellow Springs, which initially consisted of some 700 lots and 37 streets. The Mills plan for the Village has not been significantly altered in over 100 years. The planning of three 15-20 acre parks and other open spaces, such as gardens incorporated into this plan, shows that the value of open space was present from the Village's inception. By the mid 1850's, a flourmill, a grain elevator, two general stores, and a hotel were located at the intersection of Dayton and Corry Streets. Unfortunately a series of disastrous fires wiped out some of these buildings just before the turn of the century. These events caused a gradual relocation of the business district to its present location along Xenia Avenue.

The arrival of the Little Miami Railroad (1846) and the founding of Antioch, under the leadership of Horace Mann (1853)-both results of Mill's entrepreneurial skill-began a period of rapid growth in the Village. Antioch, the first college to give an equal education to both men and women, originally consist of a main building and two dormitories (North and South Halls.) The presidency of Arthur Morgan (1920's) would be a turning point in its development and influence.

The arrival and settlement of the Conway Colony during the Civil War era added significantly to the Village history; later, Yellow Springs would become one of the first towns to desegregate its schools. In 1929, the 900-acre parcel known as Glen Helen was donated to the college by Hugh Taylor Birch, friend of Arthur Morgan. This helped create a philosophy of appreciation for the natural environment and a strong advocacy for protecting surrounding open lands that has remained an important part of the Village.

In 1920 Yellow Springs was a quiet, conservative community with a population that for 50 years had fluctuated between 1,200 and 1,400 persons, consisting mostly of retired farmers. During that time, Antioch College had declined to a few dozen students and was on the verge of bankruptcy. The Village had no public water supply or sewer system and only two streets had superficial pavement.

The arrival of Arthur E. Morgan as president of Antioch College marked an important point in the life of the Village. Through his leadership and the conscious effort of residents, the college

was rebuilt and the community transformed itself from a sleepy town into a flourishing village. His vision of the small town brought faculty and entrepreneurial leadership to the community.

The late 1940s and 50s saw the influx of many new students at the college, the expansion of activity at the Wright Patterson Air Force Base, and general economic conditions improved. This generated pressure to expand the village housing stock. Such developments as West Wood and Fair Acres took place north of Yellow Springs-Fairfield Pike. By the end of the 1960s, the population of the village was edging toward 5,000. The point at which village would become a city.

There were deep and general feelings that the Village of Yellow Springs did not want to become a city. This had happened to neighboring communities. This could drastically alter the character of the village. This would overshadow the rural small town history of the community. The residents felt it was important to maintain the historic, small town values of our village.

### **1.3. Past Plan Overview**

Throughout its history, especially since the 1920's, many Village planning efforts have been formulated. Three principal themes have recurred throughout most of these plans: 1) a continuing awareness of the need for long-range planning; 2) a continuing emphasis on the desirability of maintaining open space; and 3) a desire to keep the community relatively small and relatively self-sufficient.

The Village's first official comprehensive land use plan was adopted in 1967. One goal introduced in the document, with an associated program, was the preservation of the Village as a semi-rural community near an urbanized metropolitan area. Although generally desirable, this statement may have been in response to a regional report of a Village population projection of twenty-percent increase before 1980. Following the dissemination of this information, the Village Council refused all overtures to annex nearby rural land, enacted new restrictive zoning and subdivision code regulations and made development more costly through measures such as requiring park/open space dedications as components of any approved subdivisions. The 1967 Village Comprehensive Plan also identified a greenbelt area just west of the Village to provide a visual and geographic separation between the community and surrounding developments.

The actual 1980 census figures indicated the Village had lost population. Even though new homes were being built, the average family size was dropping and Antioch College had experienced a decline in student population. The local school administration expressed concern over this trend and Village Council responded by taking steps to encourage some growth. A 1973 survey of nearly 400 Village residents, in preparation for a Plan update that was completed in 1977, indicated that some growth would be acceptable and that controlled growth was preferred. Based on the survey results, the 1977 Plan re-affirmed the pursuance of the greenbelt preservation approach but also included a directive to pursue some limited commercial expansion.

Ten years later the Village Council appointed a "Planned Growth Task Force" charged with identifying existing obstacles to residential development in the community and outlining ways to address them. In November of 1987, the Task Force identified appropriate potential locations for



residential and commercial development and also introduced the concept of green space corridors linking existing parklands.

Using a system of neighborhood forums, another polling of the community was performed in 1990 in connection with the Urban-Rural Interface Project funded through a US Forestry Service grant. The general consensus expressed in these forums, by a very large margin, identified valued assets of the Village including: 1) the willingness of individuals to tolerate and encourage diversity which creates the multi-faceted make-up of the community; 2) the independent school system; 3) the present size and character of the Village; 4) the commercial/social/cultural "hub" that exists downtown; 5) the surrounding open/green/agricultural spaces; and 6) efforts by the Village and Township governments to work cooperatively on land use and other related issues. Questions about how to support and protect these assets were also raised in the forums. Identification of valued assets was followed by a list of related concerns. These included: 1) how to identify and protect existing diversity; 2) how to determine and maintain an "ideal" size for the Village; 3) how to continue adequate financing for an independent school system; and 4) how to assist and encourage continuation and expansion of local businesses without threatening other community assets.

In 2009 and 2010, a Visioning Plan for the Village of Yellow Springs and Miami Township was developed. This Plan, titled *Vision Yellow Springs and Miami Township* was the result of an intensive year-long, citizen-based initiative which brought together a diverse group of citizens to create a holistic, collaborative vision and action plan to chart a course toward a common future that reflects the community's shared values. The *Vision* identifies goals for most aspects of quality of life in the village and township, from arts and culture to economic health to land stewardship, and also presents specific actions to realize a preferred future. Village Council passed Resolution 2010-33 on September 20, 2010, which formally adopted this planning document. Appendix K is a copy of *Vision Yellow Springs and Miami Township*.

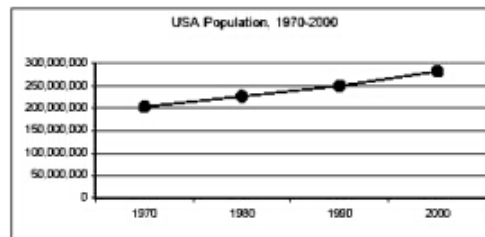
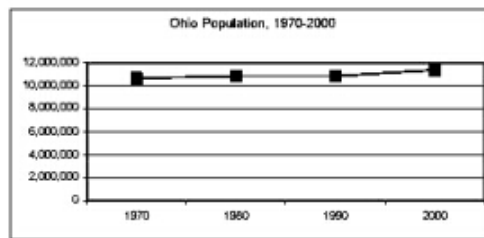
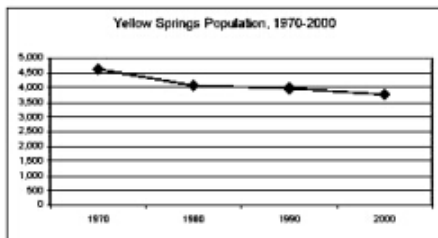
## 2. CURRENT CONDITIONS

### 2.1. 2000 Census Data

All the following statistics are taken from the Yellow Springs Cost of Living Report (YSCLR), November 2002, which was prepared by the Yellow Springs Men's Group. This report has been included as an appendix to The Comprehensive Plan.

#### 4. Population Change Comparison

### Population Change Comparison



	Yellow Springs	Ohio	USA
1970	4,624	10,652,017	203,211,926
1980	4,077	10,797,630	226,545,805
1990	3,973	10,847,115	248,709,873
2000	3,761	11,353,140	281,421,906

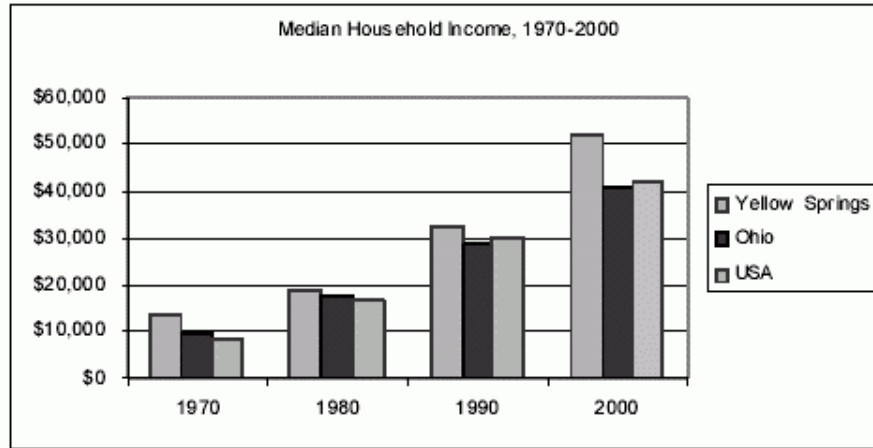
Source: US Census Bureau, 1970, 1980, 1990, 2000

Additional Population Information:

- > Population Percentage Change - Page 12 of YSCLR
- > Gender of Population Change - Page 18 of YSCLR
- > Table 6. Gender - Page 59 of YSCLR

## 5. Income Change Comparison

### Income Change Comparison



	Yellow Springs	Ohio	USA
1970	\$13,476	\$9,682	\$8,486
1980	\$18,485	\$17,754	\$16,841
1990	\$32,500	\$28,706	\$30,056
2000	\$51,984	\$40,956	\$41,994

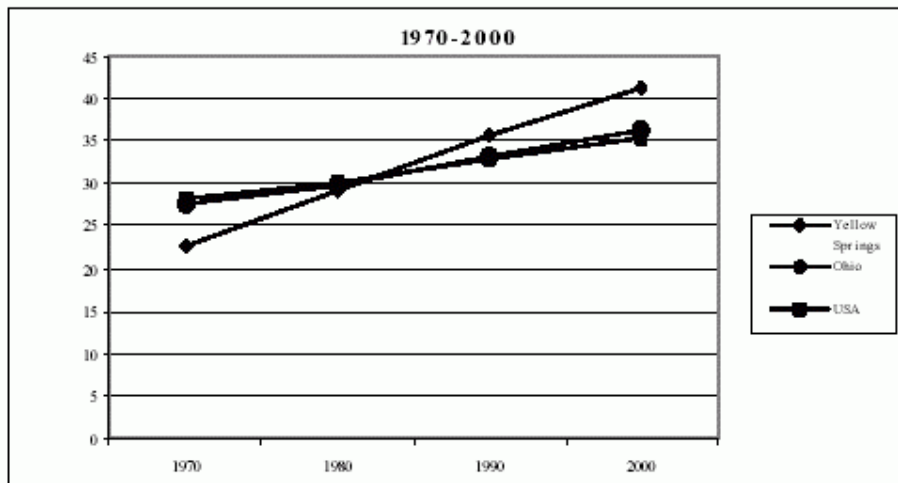
Source: US Census Bureau, 1970, 1980, 1990, 2000  
\*Income is not adjusted for inflation  
See Appendix, Table 2, for more detail

Additional Income Data:

- > Poverty Change Comparison - Page 15 of YSCLR
- > Table 2, Income - Page 55 YSCLR
- > Table 3, Poverty - Page 56 YSCLR

c. Median Age Change Comparison

## Median Age Change Comparison



Source: US Census Bureau, 1970, 1980, 1990, 2000  
See Appendix, Table 5, for more detail

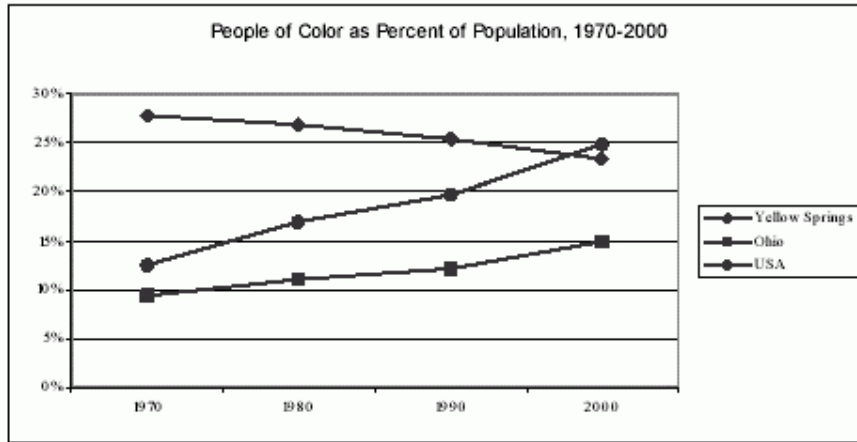
Additional Age Data:

> Table 5, Age - Page 58 of YSCLR



d. Racial Diversity of Change Comparison

## Racial Diversity Change Comparison



	1970	1980	1990	2000
Yellow Springs	27.8%	26.8%	25.4%	23.4%
Ohio	9.4%	11.1%	12.2%	15.0%
USA	12.5%	16.9%	19.7%	24.9%

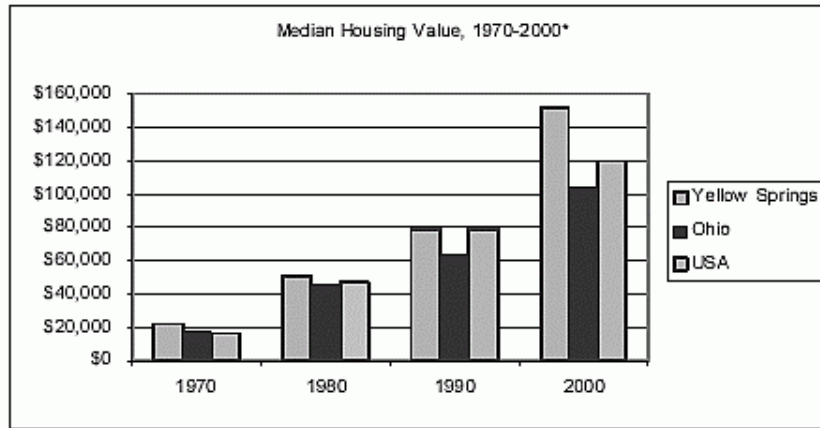
Source: US Census Bureau, 1970, 1980, 1990, 2000  
See Appendix, Table 7, for more detail

Additional Racial Diversity Data:

> Table 7. Racial Diversity - Page 60 of YSCLR

e. Housing Value Change Comparison

## Housing Value Change Comparison



	Yellow Springs	Ohio	USA
1970	\$21,400	\$17,600	\$17,000
1980	\$51,000	\$44,900	\$47,200
1990	\$78,800	\$63,500	\$79,100
2000	\$151,600	\$103,700	\$119,600

Source: US Census Bureau, 1970, 1980, 1990, 2000  
 \*Housing Value is not adjusted for inflation  
 See Appendix, Table 9, for more detail

Additional Housing Data:

- > Persons Per Household - Page 20 of YSCLR
- > Change in Households - Page 23 of YSCLR
- > Table 8. Household Size - Page 61 of YSCLR
- > Table 9. Housing Value - Page 62 of YSCLR
- > Table 10. Housing Costs Comparison - Page 63 of YSCLR

## **2.2. Physical Features**

Yellow Springs is situated on a plateau bounded on the east and west by deep valleys, which join on the south at the confluence of the Little Miami River and the Jacoby Creek near Goes Station. The area was overrun by at least one of the four continental glaciers, which moved southward from Canada during the Pleistocene Epoch. The typical geological setting for this area consists of flat-lying consolidated sedimentary rocks predominated by limestone and shale of Silurian and Ordovician age. The geologic section for this area includes alternating layers of marine shale, limestone and dolomites. These lie in the crest and flanks of a regional structure named the Cincinnati Arch. From this crest, the sedimentary rocks slope away to the east, north, and west. Yellow Springs is situated in an area that prior to glaciations encompassed the headwaters of a large tributary of the ancient Teays River now referred to as the Hamilton River. This tributary flowed to the southwest from land that is now Greene County through current Montgomery and Butler counties. The Yellow Springs area was drained prior to glaciation by the middle branch of the Hamilton River, which cut back into the upland in the direction of Yellow Springs and Clifton. Generally, the present Little Miami River coincides with the ancestral middle and southern branches of the Hamilton River. The Illinoian and Wisconsin Glaciations that followed resulted in deposits of glacial material from 1-90 feet thick throughout the area. The material consists of glacial till and outwash.

Topography in the area ranges from 830 feet to 1,060 feet above mean sea level. Predominant soils are Brookston, Celina, Fox and Miami, all with moderate to high capacity for holding water, good productivity and resistance to erosion. The predominant Miamian soils are often chosen for home sites since they are typically well drained, but they also have low permeability. The Brookston soils present in the area are generally not well suited for building houses because of the typical poor drainage and relatively high water table. When artificially drained, they can be productive for agricultural uses. The Fox soils present are well drained and have a moderate to high permeability. Celina soils consist of level or gently sloping, moderately well drained soils that are formed in loam glacial till. The flood plain of the Little Miami River is contained within a relatively narrow gorge in the immediate vicinity of the Village.

The Village is located within six miles of I-675 and eight miles from I-70. U.S. Route 68 is a major thoroughfare running through the community. So far, the impact of the regional interstate system on the growth and development of the Village has been relatively minor overall, but the Village is feeling influences from I-675 as more Bath Township land is developed. Much of the growth in nearby communities has been dictated by the interstate influence. Presently, the I-675/Dayton-Yellow Springs Road interchange is developing at a rate that creates some secondary effects on the Village. Dayton Street was closed to through truck traffic in 2000. This interchange area has developed into a significant employment and residential center, with several office developments and a substantial warehouse distribution center. Future development plans in that area includes additional commercial and residential uses. As this interchange area becomes recognized as an employment hub, people will begin to look for home sites nearby. The Village, being approximately six miles to the east, may be perceived as a viable option for housing newcomers to that area.

### **2.3. Land Use Distribution**

According to the records of the Greene County Auditor for 2002, 608 acres within the Village are coded for residential development. Additionally, 36 acres are coded for industrial activities and 59 acres are coded for retail uses. About 52 acres are identified as coded for agricultural activities.

The dominant residential use is single-family residences in the Village's 1.7 square mile area. Nearly 70% of the Village is occupied with various types of residences. The next highest use of land falls in the category of quasi-public, which includes Antioch College, churches and the local government facilities. Parks and open areas are the next largest land use. Although the physical space occupied by commercial uses is quite limited, the density and vitality of that space makes it significant. The central business district is the most versatile location in the Village with regard to multi-use development. Although retail uses dominate the downtown, residential, service, and public/nonprofit uses are also significant components there. Xenia Avenue downtown is one of the 63 "great American public places" cited by a panel of designers, authors and developers in the book, *The Pocket Guide to Great American Public Places*, which was published in 1995.

Within the general category of residential development, single-family concentrations occur in the south and north portions of the Village. Many homes in the central portion of the community house one family but this area is also the one most interspersed with duplexes and multi-family developments.

The area surrounding the Village is sparsely developed, mostly occupied by single-family residences and farms. Although significant residential development has occurred to the west of the Village, it has occurred in Bath Township, approximately three miles from the corporation line. South of Yellow Springs, in Xenia Township near the City of Xenia, residential development is also occurring rapidly.

About 1000 acres of predominately farmland that adjoins almost the entire northern boundary of the Village will not be developed. In 1999 the Village contributed to the purchase of an easement on this land that will perpetuate its use as a farm.

### **2.4. Infrastructure**

The Village Government is the supplier of water, sewer and electricity. Local control of utilities and the authority to decide on extensions allow the Village to actively affect growth issues.

Present public water production at the Village's well fields just south of the Village is about one-half the total capacity of the plant. Weather related demands seem to have more effect than any changes in use or population. The plant is designed to treat one million gallons of water per day, but current extraction is limited to about three quarters of that amount on an ongoing basis.

The Village has developed a wellhead protection program in line with OEPA regulations. The three components of this program address the location of the Village water supply, the threats to this water, and ways to mitigate the threats.



The Village's wastewater treatment plant, located on Grinnell Road just outside the Village, is designed to treat up to 1.2 million gallons of water per day. Currently, about 600,000 gallons of wastewater is treated daily. The discrepancy between water produced and water treated comes from ground water infiltration into the sanitary sewer system. By today's standards the plant can realistically treat 900,000 gallons per day. Treatment capacity can also be limited by the availability of sludge disposal.

The problem of infiltration of ground water and inflow of surface water into the sanitary sewer system is presently a major concern. Aged infrastructure causes additional water to reach the treatment facility through cracks and breaks in sewer pipes. Additional water comes through illegal connections to the system. Ongoing data collection regarding infrastructure deficiencies in conjunction with a financial cost-benefit determination will guide future action.

Improving water service to the south side of the Village by eliminating dead ends in the water supply lines and by increasing the size of existing water lines as required. The objective is to increase water pressure for customers and improve firefighting capabilities. The implementation of a long-range plan to increase the quality and capacity of the electrical distribution system continues.

The Village recognizes the importance of including a state-of-the-art telecommunications system as part of the necessary infrastructure. Efforts to incorporate elements such as fiber optics, high-speed data transmission systems and other technologies will be pursued by the Village as the technology continues to develop.

Mapping of referenced utilities is available in the Village Manager's Office.

Yellow Spring's pedestrian network is relatively complete in the central business area. However, elsewhere in Town's the system is non-direct, discontinuous, and in some areas non-existent. The key implication of not having an interconnected system of sidewalks and bikeways is that residents have limited choice in transportation modes and the increased dependency on automobile use perpetuates. A major issue for the Comprehensive Plan is to identify an integrated system of transportation solutions, including a network of pedestrian facilities and bicycle routes. These improvements need to be provided in coordination with the street system and the locations of existing and future transit routes as an integral part of the complete transportation system.

### **3. PROJECTIONS**

The Village obviously is expected to experience some of the same kinds of changes anticipated by other communities. Demographic changes relating to: 1) an overall growth in the elderly population; 2) an increase in single-parent families and dual-income families; 3) increases in wages earned; and 4) increases in the general cost of living are some of the realities predicted. These changes will require services that focus on the needs of the growing numbers of elderly and children as well as other special-needs populations. Other important elements, that are not as predictable and yet have great influence on the local economy, include the health of the local job market and the availability of State and Federal support services.

Regional trends that will most likely have some effect on the Village and should be incorporated into local planning efforts include: 1) a general trend toward larger housing units on smaller lots; 2) an increase in home-based businesses; 3) a changing definition of family; 4) an increase in house-sharing and other variations on household make-up; and 5) a general decrease in household size.

Prior to 1996, the Miami Valley Regional Planning Commission (MVRPC) has projected a population of 5,492 for Miami Township in the year 2015. Presently, about 77% of the Township population resides in the Village. Assuming the same distribution, the Village's population projection is 4,229 in 2015. This represents an increase of 6% from the 1990 population, which is a slightly higher growth rate than in the past.

Regional population projections show growth that ranges from nearly 16% for Greene County, 17% for Miami County and 6% for Montgomery County. According to Miami Valley Regional Planning Commission, growth rates by the year 2015 in Greene County will range from a high of 20% in Bellbrook/Sugarcreek Township to a low of 3% in Ross Township.

## **4.0 LAND USE PRINCIPLES AND OBJECTIVES**

### **Introduction**

Our community has consistently valued the surrounding rural environment and the small-town feel of our village that have endured since the Comprehensive Land Use Plan's first iteration, circa 1969. These have been incorporated into many community activities including all planning/land use documents. A number of long-standing issues, such as the role of tourism, have also played a familiar role in many land-use decisions. These values and issues have been discussed in previous Comprehensive Plans and are updated in this Plan.

For this 2009 update to the Comprehensive Plan, a set of nine principles have been developed to help guide future planning and land use decisions, including zoning decisions.

After the discussion of the community values, issues and the articulation of implementing principles, the major areas of land use planning are discussed and land use objectives identified.

### **Values and Issues**

In this section the community values and recurring issues underlying and guiding the community's land use planning and decision-making activities are discussed. With each value or issue, there are interdependencies and trade-offs that enter into land use decisions, and these are also discussed below.

#### **A. Open Space**

The community has consistently expressed that it values preservation of open space, natural topographic and vegetation features, and critical environmental areas. The community has consistently identified the importance of "guaranteed" open space-- land which is legally restricted with regard to development-- and has even used the tools available through Village Government and private organizations to act on that desire. In general, these actions have been perceived as positive and retain continued local support.

As important as preservation of open space is to the community, there are trade-offs that include reduction of land available for other uses, reduction in potential property tax revenues and increases in value of adjacent land, making it less affordable to some segments of the population and thereby potentially reducing diversity. Various groups in the community are at work to mitigate these concerns through subsidized housing and the exploration of development patterns that attempt to increase density.

#### **B. Economic Vitality**

Yellow Springs has largely been a relatively self-reliant community that has the knowledge, skills, resources and vision to identify changing economic conditions, locate needed technical assistance and initiate action in such a way that protects the Village character and distributes local economic benefits equitably.

The global, national and local economic pictures are constantly changing and the Village must continue to define and maintain its role in this changing world. An unbalanced reliance upon one element of the economy, tourism for instance, is risky and should be avoided. Public and private support for new ventures spanning many areas of the marketplace must be maintained and enhanced wherever and whenever possible.

The community believes in planned growth and must continue to look seriously at how education, business and industry contribute to ongoing economic health.

### **C. Healthy Downtown**

While one major role of the downtown is to serve the commercial needs of the community, we also recognize and seek to preserve its role as a vital place for social interaction. Presently, the downtown is a vibrant mixture of commercial, social and cultural activities. This environment is treasured by the community, and methods of supporting and encouraging that role should be pursued.

It is also crucial to recognize and preserve the downtown's character as an anchor for the community's heritage and history, and to ensure the ongoing stability of those components that make up that character, while also recognizing and protecting the rights of downtown business and property owners. Unique, locally-owned and operated businesses contribute to the identity of the downtown and should be recognized for that and encouraged. National franchises and businesses need to be made aware of this and encouraged to design their Yellow Springs locations in ways that allow them to blend into the existing fabric of the downtown and avoid changes that significantly alter the total ambiance.

### **D. Healthy Business Districts**

While the downtown area is unique and has special qualities that the community values, there is also a recognition that the limited size of the downtown area means that it cannot serve all the economic activity needs of the community. Therefore, the economic vitality of the community also requires that all the business districts remain healthy.

### **E. Local Control and Acceptable Level of Public Services**

The community has long exercised local control of public services such as utilities, police protection and a locally operated, independent school system. Historically there have been overt demonstrations of this commitment, including the use of local resources and revenue. Local control has enabled the Village to choose to provide higher quality services that are more expensive than less extensive services elsewhere.

Continuing to provide locally controlled services will require an on-going community commitment to maintaining a revenue base sufficient to keep these services affordable. Otherwise a higher cost of living results in challenges -- higher utility rates, for example -- which make it harder to maintain an economically diverse population.

### **F. Diversity**

The community continues to find that it is desirable to maintain a population that is economically, ethnically, politically, culturally, educationally, professionally diverse with the full range of age groups, and that is inclusive of those with disabilities. As in the past, Villagers recognize the value of being a part of a diverse community. The wide array of resources that result from such diversity is a treasured asset. Constructive efforts must be pursued to ensure that a wide variety of lifestyles are part of the community. These efforts will involve both public and private entities.

### **G. Staying Small**

Although the community has clearly expressed the desire to stay the same size numerous times in the past, it is important to recognize the need for movement, growth and change in order to meet new challenges over time. Rather than focusing on a fixed population size, we can agree that the current ambiance of Yellow Springs as small and rural, walkable and bikeable, should be preserved. This includes maintaining a healthy central business district, encouraging density where appropriate, and preserving green space within and around the Village. There can be room for flexibility in our vision of the Village's ideal size and shape. That vision should be based on a balanced view that considers economic, social, and environmental needs.

## **H. Tourism**

Yellow Springs has been a place for visitors since its beginnings, when tourists came to sample the water from the mineral spring. Obviously, more recent additions such as the *Little Miami Scenic Trail* have influenced the numbers of people who visit the Village, their ages and interests, and the types of activities they are likely to engage in while here. This Plan focuses on issues that may or may not be products of tourism, such as limited parking, the need for additional public facilities, and economic development.

The Village is a charming and interesting place that people want to visit and the unique attributes of Yellow Springs that attract visitors are a source of pride to citizens. The community is also home to specialty retailers, restaurants, artisans and artists of all types who clearly require and benefit from the increased traffic that could be considered tourist.

There seems to be a general perception that there are problems needing attention related to increased numbers of cars and people for temporary periods of time mainly in the downtown area, and these problems, especially the development of alternative parking areas other than downtown should be identified and dealt with, regardless of who or what may be responsible for their existence. The Village sponsored endeavor to enhance the Cemetery Street Parking area is an example.

## **I. Planned Growth**

Much of the essence of the existing Village depends on limited change in the surrounding Township. Not only should the Village monitor potential changes within its Urban Service Area, defined as such on the 2006 Urban Service Area Map (Appendix B to this document), but it should also seek to cooperate with Miami Township to address development and find ways to meet the needs of both Village and township residents with planned growth, without the type of uncontrolled growth commonly recognized as sprawl.

Even so, emerging regional land use plans being developed by the Regional Planning and Coordinating Commission of Greene County ([www.co.greene.oh.us](http://www.co.greene.oh.us)) and the Miami Valley Regional Planning Commission ([www.mvrpc.org](http://www.mvrpc.org)) must be acknowledged as possibly having an influence on our community's future land use planning efforts.

## **J. Historic Preservation**

Historic preservation has long been a concern of Village citizens and local government representatives. Whereas there has been no direct Village governmental participation in this area, the Yellow Springs Historical Society has been in existence for many years. During the early years of historical involvement, activities were limited to surveys and data collection. As a result, there is a limited recognition of historic sites and properties. According to the National Register of Historic Places website, there are four Yellow Springs structures listed:

- Antioch Main Building
- Antioch North Hall
- Antioch South Hall
- South School (909 S. High St.)

Additionally, the Yellow Springs Historic District, bounded generally by the bike trail, Yellow Springs-Fairfield Road, High Street and Herman Street, is listed on the National Register. A map showing the



exact location of this historic district is found in Appendix J. While not within the Village corporation limits, there are also three other nearby sites listed on the National Register: Grinnell Mill, Orators Mound, and Whitehall Farm.

Up to now, the salvage of important historic resources has relied on the goodwill and cooperation of landowners. This cooperation cannot be counted on to always be successful in the future. Due in part to the lack of regulation, a number of significant historic treasures have been lost. With the temporary closing of Antioch College and the resulting vacancy of its historic campus, and with the emphasis on infill as a strategy for growth in the Village, measures must be taken to insure the reliable conservation of historic resources. The community seems to be at the threshold of new historical conservation activity. The process of preserving our historic resources must begin with a plan of action.

1. Articulate an historical overview to establish the context for preservation activities.
2. Establish an updated inventory of historic sites.
3. Village Council should consider legislation to address the concerns of historic preservation practices.

### **Land Use Principles**

The principles articulated below have been identified for the first time in the 2010 Comprehensive Plan for the purpose of guiding the community's land use planning and decision-making, including zoning decisions.

**Principle 1** - Make land use provisions and decisions that make possible the restoration, maintenance, and retention of a population, employment, and economic base that is capable of sustaining the community.

**Principle 2** - Make provisions for a range of housing opportunities, costs, and choices that provide safe, quality housing for current and potential residents of all income levels, paying particular attention to modest cost housing to ensure maintenance of income diversity in our town.

**Principle 3** - Support land use developments in which residents can live, walk, and bicycle to work, to learn, to shop, to worship, and to play.

**Principle 4** - Encourage collaborative land use development that honors both landowners' rights to a fair return on the value of their land, and the community's desire to determine how and where it wants to grow. The Comprehensive Plan should be the guideline used by policymakers when making decisions on land use and zoning matters.

**Principle 5** - Promote compatible mixed-use land use adjacencies that foster synergies (not disharmonies) among residential, commercial, retail, educational, and industrial uses.

**Principle 6** - Preserve open space, naturally occurring topographic features and vegetation, critical environmental areas, and historic buildings and land uses.

**Principle 7** - Promote a transportation infrastructure that supports safety, compatibility, and accessibility for pedestrian, bicycle, and motorized vehicles.

**Principle 8** - Direct new residential development, should it occur, to areas either already served by existing infrastructure – water, sanitary sewer, electric, and streets – and/or to yet undeveloped areas within current Village borders where compatible land use adjacencies already exist. New development

shall be encouraged within the Village through infill and greater density and it shall not be considered outside the Urban Service Area. The Village will work with the Township to balance controlled development with goals for preservation of the Jacoby Greenbelt.

**Principle 9 - Promote new retail, commercial, and industrial development in areas in the community where these land uses already exist (are already zoned for), and/or to yet undeveloped areas within current Village borders. New development shall be encouraged within the Village through infill and greater density and it shall not be considered outside the Urban Service Area. The Village will work with the Township to balance controlled development with goals for preservation of the Jacoby Greenbelt.**

## **4.1 HOUSING**

**Principle 1 - Make land use provisions and decisions that make possible the restoration, maintenance, and retention of a population, employment, and economic base that is capable of sustaining the community.**

**Principle 2 - Make provisions for a range of housing opportunities, costs, and choices that provide safe, quality housing for current and potential residents of all income levels, paying particular attention to modest cost housing to ensure maintenance of income diversity in our town.**

**Principle 3 - Support land use developments in which residents can live, walk, and bicycle - to work, to learn, to shop, to worship, and to play**

Opinions about the adequacy of housing in the Village and Miami Township vary, but there is a common concern about the Village's ability to respond to changes in housing needs. Current census figures continue to suggest a shrinking and aging population. Nevertheless, there is at least the perception of limited available housing that fulfills these Principles, and that therefore planned moderate growth in housing that facilitates the achievement of these Principles should be encouraged.

To test the validity of this perception there should be periodic assessments of:

- A. the existing mix of housing types, including rentals, and costs,
- B. the changing demands for housing types and costs,
- C. how these demands are or are not being met by the existing mix, and
- D. the household incomes/economic capacity necessary to afford the housing types in the mix.

These assessments should account, in so far as it is possible to do so, for

- A. emerging trends that would create rapid change,
- B. the rise in housing costs due in part to increased taxes, public service costs (including an independent local school system) as well as for increases in “construction” and “land” costs, and
- C. the competitive cost due to the desirability of living in Yellow Springs, especially when housing is tight.

Village Government bears considerable responsibility for ensuring safe housing. The community has also indicated support for Government involvement in ensuring that Village provides a wide variety of opportunities to obtain housing. At a minimum, land use planning and decisions should ensure that policies and laws foster, or at least do not inhibit, the achievement of these Principles.

## **4.2 COMMERCE**

**Principle 1 - Make land use provisions and decisions that make possible the restoration, maintenance, and retention of a population, employment, and economic base that is capable of sustaining the community.**

**Principle 5 - Promote compatible mixed-use land use adjacencies that foster synergies (not disharmonies) among residential, commercial, retail, and industrial uses.**

**Principle 9 - Promote new retail, commercial, and industrial development in areas in the community where these land uses already exist (are already zoned for), and/or to yet undeveloped areas within current Village borders. New development shall be encouraged within the Village through infill and greater density and it shall not be considered outside the Urban Service Area. The Village will work with the Township to balance controlled development with goals for preservation of the Jacoby Greenbelt.**

One factor that has distinguished Yellow Springs from other communities of comparable size has been the diversity of its commercial activities. The orientation of activities include retail, professional, medical, research, educational and industrial/manufacturing. The size of these businesses ranges from individuals to hundreds of employees. This diversity has provided a wide variety of job opportunities and growth potential, and has mitigated the economic impact of the rise and fall of any particular component of commerce. Another important byproduct of this diversity has been the contribution to the community of the variety and expertise of the individuals connected to these ventures. However, trends in recent years have significantly reduced some components of this diverse mix.

Based on past and present concerns expressed by community members, one goal for future commercial activity in the Village should focus on the development and utilization of an economic strategy that conserves resources and increases local productivity. This would include emphasizing human development (skills, knowledge, talents,) expanding local control of resources (water, land, etc.) increasing internal investment capacity (providing capital to underwrite growth that will stay in the Village).

Land use planning and zoning should provide opportunity for new and expanding commercial activity while protecting current land uses and the vitality of the downtown area. To accomplish this objective, the Land Use Plan/Thoroughfare Plan (Appendix B) establishes several custom commercial districts, each with its special character and purpose:

- A. The Central Business District (CBD), with its concentration of various uses in a relatively small area, is aimed at serving mostly pedestrian traffic, but with parking needs for both bicycles and motorized vehicles. There is very little currently vacant land in this district.
- B. A General Business District (US 68/Xenia Avenue from approximately Brookside Drive to the south corporate limits) with a primary focus on automobile related businesses and large land users. Examples of such businesses include vehicular services and dealerships, motels, drive-through food services, and industrial/manufacturing operations.
- C. A light industrial area north of the Central Business District where buildings related to past industrial/commercial activities are currently being put to new uses.
- D. The area at the intersection of Dayton Street and East Enon Road including the recently established Center for Business and Education.

Land use planning and land use decisions should support all the districts to:

- A. Preserve each as an anchor for its respective (but different) role in providing places for community interactions that are commercial, social, and cultural,
- B. Ensure their stability while recognizing the rights of business and property owners,

- C. Ensure that unique, locally owned and operated businesses continue to contribute to the community's identity,
- D. Encourage businesses coming into the community to design their locations and operations to blend into these interactions, stability, and permanence of the community's retail and commercial centers.

The Village's PUD process also allows commercial activity to be established in other areas as part of a coherent plan that has received the community's support.

In order to avoid retail development in strip centers throughout the Village, retail activity should be clustered, and not simply allowed to develop wherever space and prime street frontage allow. Such clustering should be limited to increasing around the two primary retail areas already existing -- the central business district and the area south of Brookside Drive along the east side of Xenia Avenue.

Although commercial districts other than the Central Business District are currently predicated primarily on vehicular access, land use planning, zoning and community policy should also require provisions for easy access by pedestrians and bicyclists.

The Village's commercial land use policies should support a diversity of successful commercial activities, encourage assistance to existing local commercial activities and local entrepreneurial efforts, and enable and encourage commercial activities to relocate here. These policies may use concessions on density, open space and other land use features to reward conservation of resources, and environmental, economic, and other sustainability features.

#### **4.3 INDUSTRY**

**Principle 1 - Make land use provisions and decisions that make possible the restoration, maintenance, and retention of a population, employment, and economic base that is capable of sustaining the community.**

**Principle 3 - Support land use developments in which residents can live, walk, and bicycle to work, to learn, to shop, to worship, and to play.**

**Principle 5 - Promote compatible mixed-use land use adjacencies that foster synergies (not disharmonies) among residential, commercial, retail, educational, and industrial uses.**

**Principle 9 - Promote new retail, commercial, and industrial development in areas in the community where these land uses already exist (are already zoned for), and/or to yet undeveloped areas within current Village borders. New development shall be encouraged within the Village through infill and greater density and it shall not be considered outside the Urban Service Area. The Village will work with the Township to balance controlled development with goals for preservation of the Jacoby Greenbelt.**

Industry has long been part of the community's economic fabric. In the past, many task forces and committees have been assigned to evaluate how to continue, resurrect and perpetuate this historically vibrant part of the community, whether stimulated by local entrepreneurial ingenuity or by incubation (as by Antioch College's science and engineering disciplines which created Morris Bean, Vernay and YSI). These committees generated the Economic Development Revolving Loan Fund (EDRLF), which is strategically used to foster commercial, industrial and retail businesses that create local jobs. They decided that State and Federal Economic Development grants should be sought to secure the community's economic sustainability. External funding can contribute to sustaining local enterprises – commercial,

retail and industrial -- that are contributors to the community's business economy, diversity and independence.

Industrial land use plans and decisions should support existing industries, enabling them to grow and remain in the community. These plans should also attract new industries to locate, expand and thrive in the community by encouraging state-of-the-art telecommunications and environmentally sustainable building design and manufacturing practices. Additionally, we recognize the need to keep local commercial, industrial, retail and health care activities in the community.

It is important to recognize Health and Wellness as an industry. The Village is fortunate to be home to some of the area's finest healthcare facilities and practitioners, including medical doctors, dentists, chiropractic and other holistic care providers. The Village also has an excellent long-term care nursing center, which includes assisted living and independent living units.

#### **4.4 EDUCATION**

**Principle 1 - Make land use provisions and decisions that make possible the restoration, maintenance, and retention of a population, employment, and economic base that is capable of sustaining the community.**

**Principle 3 - Support land use developments in which residents can live, walk, and bicycle to work, to learn, to shop, to worship, and to play.**

**Principle 5 - Promote compatible mixed-use land use adjacencies that foster synergies (not disharmonies) among residential, commercial, retail, educational, and industrial uses.**

A community forum dubbed the Village of Yellow Springs as the "Education Village" owing to our own local educational institutions, and those in close proximity to the community (Education Institutions-Appendix C) that have been part of the educational assets of our community and that have contributed to the social and economic development of the community and that have collectively been among the largest employers of local residents.

While the public school population has generally declined over the past twenty-five years, local school achievement remains on a high level and community support (through taxation and tuition) continues to be acceptable to taxpayers and to parents.

With the temporary closing of Antioch College on July 1, 2008, and the anticipated opening of the New Antioch College in the Fall of 2011, it is especially important that community land use planning continue to enable the community's local educational institutions to:

- 1) attract and retain students,
- 2) retain the open spaces their campuses and contiguous land uses represent,
- 3) maintain the relatively clear and safe intersections proximate to their facilities, and
- 4) maintain their roles in civic and recreational community activities.

Land use policies should enable safe access to schools by pedestrians, bicyclists, buses, and other vehicles (whether by parents or student drivers).

Locations of all the educational institutions have the advantages of significant open area and nearby green space, which is of great benefit to the schools and efficiently permit varied nearby activities. The principal traffic intersections near these locations are relatively clear. Thus, although traffic can be



heavy during some parts of the day, the safety record of the locations has been very good. In any future development, it is recommended that pressure to develop heavily at intersections in proximity to educational centers should be resisted in favor of the need to preserve this safety record. Side setbacks at principal intersections should conform to front setbacks.

The Community Children's Center location does not have the advantage of a large setback from Corry Street. In fact, the setback is rather small, making drop-off and pick-up of students less than ideal. The playground and access are also small and would appear to receive precipitation runoff from adjacent higher ground to the west.

All the educational institutions have remarkably high automobile use associated with their activities and perceived as a need by students and/or faculty. With the exception of the High School and the new Antioch Midwest facility, automobile parking near the schools during normal operations is at a premium.

All of the locations have modest infrastructure in spite of the relatively heavy utilization of the properties. Many of the structures and even principal buildings appear to need improved maintenance.

The Mills Lawn School plays important and generally appreciated roles in downtown recreational and civic events. In any future planning, the value of these roles should be taken into account.

#### **4.5 PARKS AND RECREATION**

**Principle 3 - Support land use developments in which residents can live, walk, and bicycle to work, to learn, to shop, to worship, and to play.**

**Principle 5 - Promote compatible mixed-use land use adjacencies that foster synergies (not disharmonies) among residential, commercial, retail, educational, and industrial uses.**

**Principle 6 - Preserve open space, naturally occurring topographic features and vegetation, critical environmental areas, and historic buildings and land uses.**

Both community-owned and nearby parks and recreational areas contribute to the desirability of the community as a place to live, work and learn.

A. Village owned parks and recreational areas include:

- Ellis Park
- Gaunt Park
- Bryan Center
- Duncan Park
- Beatty-Hughes Park
- Hilda Rahn Park (location of the Train Station – Chamber of Commerce)
- YS Toddler Park
- YS Skate Park
- YS Women's Park
- Portions of the Little Miami Bike Trail

B. Nearby recreational areas that are not owned by the Village include:

- Glen Helen
- John Bryan State Park
- Clifton Gorge
- Little Miami Scenic Trail (the bike path)

- Greene County Park system
- Mills Lawn School Playground and Tennis Courts
- Antioch College Tennis Courts
- Yellow Springs High School Track and Athletic Fields

Community land use planning should ensure the continued viability of the Village-owned park and recreation areas and make provisions in new developments for properly managed and maintained “neighborhood parks” in accordance with the Parks and Recreation Master Plan (Appendix D), which needs to be updated.

#### **4.6 TRANSPORTATION INFRASTRUCTURE AND THOROUGHFARE PLAN**

**Principle 3 - Support land use developments in which residents can live, walk, and bicycle to work, to learn, to shop, to worship, and to play.**

**Principle 7 - Make provisions for a transportation infrastructure that supports safety, compatibility, and accessibility for pedestrian, bicycle, and motorized vehicles**

A Land Use Plan/Thoroughfare Plan (see Appendix B) designates how the elements of the community’s transportation infrastructure – streets, sidewalks, and bike-ways – work together to fulfill these Principles. The Thoroughfare Plan should integrate the Village plan with the larger system of county, state, and federal roads, highways, interstates and bikeway systems.

##### **Local Street Network**

The majority of streets serve local traffic within the Village. Most existing streets and associated infrastructure are in a 50-foot right-of-way; although some have only a 40-foot right-of-way. Many streets have a pavement width of 20 feet or less and no walkways on one side of the street. The present design standards for new streets provide an option for an estate street which includes a 24-foot wide pavement on a 50-foot right-of-way. This design allows for an aboveground swale system in lieu of the standard underground storm sewer infrastructure. The original approval of this design was initiated not only for the appropriateness of the design but also as a way of lowering development costs. Several streets in the Village with this design, such as Orton Road are quite functional and have presented no serious problems. The estate street design, along with other alternatives, should be an option in future developments. Modifications to this basic design may include requirements for a sidewalk when anticipated traffic volume warrants separation of motorized traffic from pedestrians and non-motorized vehicles for safety.

An effective street network must recognize the different functions of various streets. A street hierarchy system separates routes that carry traffic to different destinations and serve different types of travel. A system that maintains the appropriate balance between movement and access is desirable. One obvious distinction in the hierarchy recognizes streets serving through traffic and those serving access to specific property. Specific access and movement criteria are the foundation for an ordered classification system with associated design standards. The street hierarchy is outlined below.

##### **(1) Residential Access Street**

The general purpose of this street is to carry traffic having destination or origin on the street itself and to provide frontage for service and access to private lots. These streets should be designed to carry the least amount of traffic at the lowest speed. The geometric design should be such that safety is promoted and one that contributes to an overall desirable residential neighborhood design. Typically, these streets are

short loops, cul-de-sacs, or courts. Residential subdivisions should be designed so that all or most housing units front on this type of street. Design standards include:

1. No section conveys an average daily traffic volume greater than 250 vehicles at a design speed of 25 mph.
2. In a minimum 40-foot right-of-way.
3. Two moving lanes with minimum width of 10 feet each.
4. Parking lane with width of 8 feet is optional.
5. Curbing is required with a parking lane, optional otherwise.
6. Sidewalks and tree lawns should also be viewed as necessary when they add an important component to the overall design but are not required in all cases.

## **(2) Residential Sub-collector**

The purpose of this street is to carry the traffic of adjoining residential access streets to destinations within the immediate neighborhood. The traffic would be limited to that from intersecting residential access streets along with the traffic generated on the street itself. This street does not interconnect adjoining neighborhoods and should not carry regional through traffic. Some properties can front on these streets when a development design does not allow them to front on the access street. Design standards include:

1. No section conveys an average daily traffic volume greater than 500 vehicles at a design speed of 25 mph.
2. Usually in a 40 to 60-foot right-of-way.
3. Two moving lanes with minimum width of 10 feet each.
4. One or two 8-foot wide parking lanes.
5. Curbing should be included and is required with a parking lane.
6. One or two 5-foot sidewalks
7. Tree lawns with minimum width of 4 feet on each side of street.

The variation in design elements for any particular case would depend on the expected intensity of the street use, not only by vehicles but pedestrians and bicycles, and how it would complement surrounding areas.

## **(3) Residential Collector**

The purpose of this street is to conduct and distribute traffic between lower-order streets and higher-order ones. These streets should carry the largest volume of residential traffic at higher speeds. To allow free traffic flow, on-street parking and direct access to homes should be prohibited. Residential collectors expected to carry considerable volume should be designed so that they are not used as short cuts between neighborhoods. Not all developments will require residential collectors but, as a general rule, developments over 150 dwellings will typically contain collectors. Design standards include:

1. Average daily traffic volume up to 3000 vehicles at a design speed of 35 mph.
2. Usually in a 40 to 60-foot right-of-way.
3. Two moving lanes with a width of 12 feet each.
4. On-street parking and drive-way access to residential properties should be limited.

5. Curbing is required.
6. One or two 5-foot sidewalks
7. Tree lawns with minimum width of 4 feet on each side of street.

#### **(4) Arterial**

The purpose of these streets is to convey traffic into and out of the community, and to and from major activity centers within the community such as commercial, industrial and retail areas. Design standards include:

1. Average daily traffic volume above 3000 vehicles at a design speed of 35 to 45 mph.
2. Usually in a 50 to 60-foot right-of-way.
3. Two moving lanes with a width of 12 feet each.
4. Two 8-foot parking lanes with curbing.
5. Two 5-foot sidewalks
6. Tree lawns with minimum width of 5 feet on each side of street.

#### **(5) Special Purpose Streets**

- (a) Alley: This is a service road providing secondary access to lots. It is considered the same functional level as a residential access street with different standards. The amount of activity on alleys should be minimized and their layout should discourage use as shortcuts. These should be designed to discourage through traffic and no parking should be permitted. The pavement must be a minimum of 12 feet wide and 15 is preferred.
- (b) Cul-de-Sac: This is a street with single access for ingress and egress with a circular turn-around at its terminus. These streets are valued in residential developments as they promote neighborhood identity and allow safer, quieter living conditions. Cul-de-sacs can have different design standards, depending on the uses they serve. Those serving residences can be narrower than those serving businesses.
- (c) Stub Street: This is a portion of a street (of whatever kind) either approved in its entirety (but not yet constructed) or planned as a future connector (of whatever kind) to subsequent, future development of adjacent land. Design standards would be the same as its expected completion street, with additional temporary design elements, e.g., temporary turn-around as deemed necessary.
- (d) Estate Street: This is really a street architecture more than a special purpose street as its architecture can be used throughout the hierarchy of other streets (even special purpose ones, with the exception of alleys).

The Land Use Map included in this Plan indicates the classification of existing streets and also indicates where new street connections are desirable.

Regardless of street type, consideration should always be given to making provisions for:

- A. Bike-ways – either as part of the roadway or as separate paths,
- B. Pedestrian sidewalks/walkways at least 5’ wide – with appropriate ramping for “walkers” and wheelchairs (and revise the Zoning Code to require this width), and
- C. Intra- and inter-neighborhood connectors such as dedicated paths between lots.

#### 4.7 GENERAL ENVIRONMENT

**Principle 3 - Support of land use developments in which residents can live, walk, and bicycle - to work, to learn, to shop, to worship, and to play**

**Principle 6 - Preserve open space, naturally occurring topographic features and vegetation, critical environmental areas, and historic buildings and land uses**

Some basic values have emerged and been strengthened through community dialog during the past several decades that define Yellow Springs' current and future image of itself. They all have some impact on the environment, and on the way citizens of the Village expect to relate to the environment. In general, Villagers agree that:

- (1) Being environmentally responsible-- working to improve and preserve the natural ecosystem's health-- is deemed higher priority than individual or collective economic gain.
- (2) The community values diversity and seeks to preserve the freedom and rights of individuals insofar as possible, so long as the freedom and rights of others and the long-term health of the Village environment, ambiance, and quality of life are not compromised.
- (3) The current ambiance of Yellow Springs-- small and rural-- should be preserved. A healthy central business district, the hub of the Village, is an integral part of the valued ambiance, as is green space both within and around the Village.
- (4) While recognizing that Yellow Springs has attributes worth preserving, stagnation is not a desirable goal and a healthy economy is also important. The community sees itself as connected to and influenced by surrounding communities and the world, and proactive in developing and using new ideas and appropriate technology for land use strategies and protecting the environment.
- (5) Conservation, be it applied to the natural environment as a whole or resources such as air, water and energy, is more than a concept in Yellow Springs. Village government should lead and support programs and practices that conserve energy and reduce, if not avoid, contaminating our air and water.

In terms of the community's goals vis-à-vis the environment in general, these basic values support the goal of protecting or improving our landscape, air and water.

#### **Open Space**

Open spaces, both internal to the community and surrounding the Village, are important to the residents of Yellow Springs.

Preservation of natural forest, meadowland, and agricultural open space beyond the Urban Service Area is a desirable goal. Yellow Springs pledges support for the continued preservation of Glen Helen on the east and the preservation of additional greenbelt to extend completely around the Village. Currently, the Country Common to the southeast and Whitehall Farms to the north have been preserved through conservation easements. The western portion, known as the Jacoby Greenbelt, is the largest piece that has not yet been preserved and is seen as a priority as development farther to the west continues to move towards Yellow Springs.

General strategies that may be used toward this greenbelt goal include acquiring and keeping land and/or development rights, acquiring land for resale once conservation easements are applied, and active cooperation with the Tecumseh Land Trust, other conservation groups, agricultural organizations, and neighboring planning commissions. Specific strategies will include, but not be limited to, mapping of the greenbelt areas, keeping records and tracking ownership and land use activity, establishing acquisition priorities, identifying development threats, and determining a financial plan that includes appropriate compensation (financial or otherwise) for greenbelt land owners other than the Village and maintaining an



ongoing dialog with Miami Township officials and land owners to share priorities and develop mutually-beneficial strategies.

Open spaces within the Village include the Village parks, the Yellow Springs school campuses, the “Golf Course” of Antioch College, the Glass Farm and the undeveloped private land in the northwest and southwest. There are also small areas of private land in various neighborhoods that while not available to the general public, do add to the open space ambiance of the Village. Increasing the public accessibility and interconnectedness of publicly owned open spaces within the village is a desirable goal, particularly via biking/walking paths to encourage healthier and safer living for everyone. Strategies for accomplishing this goal include purchases, conservation easements, easements for biking/walking paths, and exchanging increased density for open space designation in PUD developments.

### **Natural Resources: Air, Water, and Energy**

Recognizing that the Village of Yellow Springs has limited control over the quality of its air, environmental goals for protecting air quality should include utilizing data from the regional air-monitoring programs that track contaminant fluctuations. Encouraging the use of bicycles, enforcing laws against idling vehicles and open burning, and using low-emission fuels for Village energy expenditures are small but significant steps. Taking an active stand on practices, proposals, and developments upwind and downwind is justified within the larger goal of protecting the quality of life in Yellow Springs.

The Village is completely dependent on groundwater, and groundwater, like air, does not respect political boundaries. Recognizing this and the connection between surface water and groundwater, as well as the impact of storm water and agricultural runoff, lawn treatments, landfills, septic tanks, and non-containment of industrial and household wastes, should direct land use planning, legislation, enforcement, and the use of Village-owned land.

## **4.8 SPECIAL PLANNING AREAS**

**Principle 1 - Make land use provisions and decisions that make possible the restoration, maintenance, and retention of a population, employment, and economic base that is capable of sustaining the community.**

**Principle 2 - Make provisions for a range of housing opportunities, costs, and choices that provide safe, quality housing for current and potential residents of all income levels, paying particular attention to modest cost housing to ensure maintenance of income diversity in our town.**

**Principle 3 - Support land use developments in which residents can live, walk, and bicycle to work, to learn, to shop, to worship, and to play.**

**Principle 4 - Encourage collaborative land use development that honors both landowners’ rights to a fair return on the value of their land, and the community’s desire to determine how and where it wants to grow. Land use decisions should be made in a manner that make land use proposals predicable, fair, and cost-effective by a land use plan and zoning code that is consistent with this Comprehensive Land Use Plan.**

**Principle 5 - Promote compatible mixed-use land use adjacencies that foster synergies (not disharmonies) among residential, commercial, retail, educational, and industrial uses.**

**Principle 6 - Preserve open space, naturally occurring topographic features and vegetation, critical environmental areas, and historic buildings and land uses.**

**Principle 7 - Promote a transportation infrastructure that supports safety, compatibility, and accessibility for pedestrian, bicycle, and motorized vehicles.**

**Principle 8 - Direct new residential development, should it occur, to areas either already served by existing infrastructure – water, sanitary sewer, electric, and streets – and/or to yet undeveloped areas within current Village borders where compatible land use adjacencies already exist. New development shall be encouraged within the Village through infill and greater density and it shall not be considered outside the Urban Service Area. The Village will work with the Township to balance controlled development with goals for preservation of the Jacoby Greenbelt.**

**Principle 9 - Promote new retail, commercial, and industrial development in areas in the community where these land uses already exist (are already zoned for), and/or to yet undeveloped areas within current Village borders. New development shall be encouraged within the Village through infill and greater density and it shall not be considered outside the Urban Service Area. The Village will work with the Township to balance controlled development with goals for preservation of the Jacoby Greenbelt.**

Four Special Planning Areas are identified on the Land Use Plan/Thoroughfare Plan (Appendix B) as important components of the Village Plan because of their size, physical location, and potential for mixed-use development. These are (1) the central business district, (2) the Dayton-Yellow Springs and East Enon Roads area, (3) the King Street and Fairfield Pike area, and (4) the US Route 68 and Hyde Road area. All the identified areas require development proposals and approvals that:

- conform to zoning regulations,
- do not threaten air, water, and other environmental factors, and
- are compatible with adjacent land uses.

A performance-based approach should be considered in the review of any specific development proposals within these areas. The premise of this approach is that any type of land use is possible, as long as the impact of growth and development does not threaten natural, social and economic qualities that are deemed worthy of protection. This premise, however, should not be so restrictive as to preclude preservation of those things we wish to preserve. These natural, social and economic qualities should be explicitly defined beforehand. Compatibility with existing adjacent uses and infrastructure/service demand must also be addressed in using this approach.

### **Area 1: The Central Business District**

The Central Business District has physical, social and economic importance as the community's hub. There has been, and continues to be, clear and on-going support for measures that would enhance the downtown area as a community focal point. This means that the present variety of land uses, all complementary to the community with respect to services, retail, social and cultural offerings, and aesthetics, should be supported and protected. Planning should maintain and add to the elements that provide a human scale to the district – sitting benches, planters and ornamental trees, bike parking, and an eclectic mixture of building types and architectures worthy of preservation. New or renovated buildings should preserve the already established scale and harmony of height, bulk, and setbacks.

The district has fairly well defined entry points including:

- Three main entry points: US 68 at SR 343; US 68 at Limestone Street (James A McKee Way); and Dayton Street at Walnut Street
- Secondary entry points: Corry Street at Glen Street, Glen Street itself, Elm Street at Walnut, and Short Street.

All of these entry points deserve careful attention with respect to their street architecture – roadways, sidewalks, bikeways, and streetscapes, as well as the present and future land uses to insure that the Central Business District continues to have clearly identifiable entry points.

The Central Business District has two serious problems: its small size, and limited and inadequately identified parking.

The small size of the Central Business District, currently about 18 acres, limits the expansion of existing businesses and restricts the ability for new businesses to locate in the district. By comparison, land use data for other communities in the region indicates rule-of-thumb acreage of commercial land being about one acre per 100 residents, which would mean that about 39 acres should be provided to serve the present Village population. However, it is clear, both in the public opinion survey of 1973 and the 1990 neighborhood forums that citizens would discourage new commercial centers elsewhere in or near the Village that might be harmful to the retail base of the Central Business District. However, small, alternate commercial areas that do not rival the focal-point character of downtown are seen as realistic and accommodating the overall quality of Village life.

Although limited downtown parking has been the subject of many studies over the years, there is still no comprehensive plan to accommodate peak parking needs. On-street parking in the Central Business District is already maximized with respect to size and duration. Off-street parking - both private and public - also seems to be maximized, but is inadequately signed and identified. The Northern Gateway Project will provide relief through improvements to the Cemetery Street parking area.

Planning for the Central Business District should include desired development patterns and preferences regarding the direction of expansion. New or modified development in the district should reflect its legacy of relatively small lots, high density, a pedestrian orientation, and mixed uses-- for example, shops on the ground floor and offices, studios, light production or residences on the second floor. Buildings that have managed to endure as "historic treasures" should be specifically identified and protected.

## **Area 2: Dayton Street and East Enon Road**

Education and light industry already exist in this special planning area, which is surrounded by adjacent residential and agricultural areas. The northwest corner of the intersection, which comprises the Center for Business and Education, has recently been annexed into the Village. There are only two more properties to the west on Dayton Street that lie within the Urban Service Area and can be provided with gravity sewers should they be annexed. These three properties together will form the western entrance to Yellow Springs for the foreseeable future. Additional properties to the north on East Enon Road are also within the Urban Service Area and could be added to this special planning area in the future.

Development in this special planning area should:

1. Encourage education and light industry, but residential uses should not be precluded, including the possibility of mixed-use areas.
2. Discourage retail uses that would detract from the Central Business District.
3. Minimize access points and curb-cuts on Dayton Street and East Enon Road.
4. Recognize the aesthetic importance of this intersection as an entry point to the community and accordingly design for compatibility with existing structures, provide landscaping, screening and signage that enhance this gateway.
5. Protect Jacoby Creek and its watershed.

## **Area 3: King Street and Yellow Springs-Fairfield Road**

Development in this area is expected to be residential with various densities consistent with the existing subdivisions in the general area, which include Park Meadows (high density), Kingsfield (low density), The Stancliff Neighborhood (medium-high density) and Thistle Creek (medium-high density). The

eastern third of the Village-owned Glass Farm was recently designated a conservation area, which includes a recently constructed detention pond that reduces the frequency of downstream flooding.

Most of the undeveloped land in this planning area is west of the creek and consists of interior parcels such as the Kinney property and the western part of the Glass Farm. Access points for streets are limited to Wright Street extended, Kenneth Hamilton Way extended, one point on Fairfield Road and frontage on East Enon Road. Sanitary Sewer to serve the area must come from a new sewer in Wright Street beginning at Dayton Street. Proper storm water management will be important for this area. Although, the entire area drains to the Glass Farm detention pond, this pond was not intended for, or designed to accommodate, any new development.

Planning for this area should include a Thoroughfare Plan and preliminary routing and design for sanitary trunk sewer that starts on Wright Street at Dayton Street and extends to East Enon Road. Storm water management may work best if undertaken jointly by multiple landowners and this should be encouraged.

With existing commercial land uses on Yellow Springs-Fairfield Road just west of the Village limits, there could be consideration of compatible uses on part of the Glass Farm.

#### **Area 4: US 68 and Hyde Road (and the surrounding area)**

This area currently includes residential, industrial, commercial and agricultural land uses. Any new development must be compatible with this land use reality and cannot – by the zoning regulations already applied to this area – detract from the vitality of the Central Business District. Additionally, any development should not adversely affect down-stream watercourses – including Hyde Creek, Jacoby Creek and the Little Miami River.

As yet undeveloped areas to the east of this US 68 corridor should probably be encouraged to be developed residentially, although some transient uses could possibly be allowed as well (given the proximity of the Springs Motel). Wherever feasible, access to US 68 should be from existing streets rather than from new curb cuts. Sanitary sewer extensions should be carefully planned to allow access to the entire service area.

#### **4.9 ANNEXATION, UTILITY EXTENSION**

**Principle 1 - Make land use provisions and decisions that make possible the restoration, maintenance, and retention of a population, employment, and economic base that is capable of sustaining the community.**

The annexation of the Kinney property, the Village owned Glass Farm, and the Community Resources owned Center for Business and Education (CBE) – have added some 100+ acres to the community's land area. However, except for the CBE, no definite development plans have emerged for these annexed land areas. Other land adjacent to the Village boundaries may also be subject to annexation proposals in the future.

A policy outlining the Village Council's position regarding annexation was adopted in 1992 and amended in 2006 in response to changes in Ohio annexation law. The 2006 policy is included as Appendix K of this document.

When land that is annexed to the Village is developed, it must be provided with the necessary infrastructure of which the following components generally fall within the direct responsibility of the Village to own operate and maintain after installation by the developer:

1. Transportation including streets, sidewalks and bikeways.

2. Electrical Distribution
3. Water Distribution and Water Treatment Plant (WTP)
4. Sanitary Sewer Collection and Waste Water Treatment Plant (WWTP)
5. Storm Water Management

However, there may be instances where the Village is not directly responsible for components of the infrastructure such as operation and maintenance of private sanitary lift stations, storm water detention facilities, etc. For these infrastructure components, the Village should ensure that the development plans include the appropriate legal structures for continued operation and maintenance of facilities that remain in private ownership, and provide for Village intervention should the facilities not be properly operated and maintained.

### **Transportation**

Transportation infrastructure was covered extensively in Section 4.6. A particular issue related to the most recent annexations is the need to develop a plan for transportation infrastructure within the area bounded by Dayton Street, East Enon Road, Fairfield Road and King Street, which has few points of access to the interior parcels.

### **Electric Distribution**

Yellow Springs has owned, operated and maintained its own electric distribution system for many years. The system functions as an enterprise, and supports its own maintenance and capital improvements. The Village purchases power through its membership in American Municipal Power (AMP), a non-profit public power membership organization with 128 member jurisdictions in six states.

The electric distribution system was recently evaluated for reliability and future adequacy. The Electric System Task Force was commissioned by Village Council to provide information regarding the system condition. The Task Force was created due to concerns about the delivery of reliable power at sufficient capacity to meet existing and future needs, and to examine a proposal to construct a new sub-station.

The Task Force's Phase I report (October, 2007) indicated that the Village-owned system is in good condition and is well maintained. The report identified projects that will increase the capacity and quality of our electric distribution without the construction of a new sub-station given current needs and accommodating modest future growth. Electric capacity should be monitored to ensure that it is able to meet the demand as consistent, quality electric distribution is a strong component of business retention and expansion and economic development.

The Task Force's Phase II report recommends that the Village embark on an effort to reduce electric consumption through conservation, improved energy efficiency and increased use of renewable sources of power thereby reducing needed expansion of the electric system. They also recommended reducing our reliance on coal-fired generation in an effort to address the concerns of global warming and the changing energy industry. The report also recommended finding ways to create new energy related jobs in the Village by systematically investing in conservation efforts, community education and the development of renewable energy generation. Both of the Task Force's reports are attached to this Comprehensive Plan as Appendix I.



### **Water Distribution and Water Treatment Plant (WTP)**

The Village has developed a computer model of the water distribution system that can be used for water infrastructure planning when land within the Village is developed, or when land is being considered for annexation.

Results of the computer model indicate that water supply is plentiful for normal uses in most areas, but that fire flows may be limited in some scenarios due to a “bottleneck” between Allen Street and Herman Street. Fire flows for the south end of the Village must come primarily from the well field while fire flows for the area from Herman Street north must come primarily from the water towers at Gaunt Park.

Water distribution infrastructure is well positioned to serve the recently annexed land with large water mains between the water towers at Gaunt Park and Dayton Street at East Enon Road and east to King Street. While water volume is plentiful, pressure will be low for multi-story buildings and fire suppression systems, necessitating booster pumps for those uses.

The Water Treatment Plant is designed to treat 1.0 million gallons per day (GPD). Current water consumption is normally around 750,000 GPD. This 250,000 gallon “surplus” should be adequate to accommodate modest growth.

### **Sanitary Sewer Collection and Waste Water Treatment Plant (WWTP)**

The Village policy, adopted in 2004, is that the Village will not extend sanitary sewers outside the Village limits, and that future extensions of Village owned sewer infrastructure will only be through gravity sewers. This means that the Village will not extend sanitary service to areas that would be served by Village owned lift stations.

In 2006, the Village established an Urban Service Area based on the lands that could be served by gravity sewer as established in a 2006 Sanitary Sewer Study that is included as Appendix L. Outside the Urban Service Area the Village expects that sanitary wastewater will be treated with on-site or semi-public systems as delineated in the Facilities Planning Area documents adopted by Yellow Springs and approved by the Miami Valley Regional Planning Commission and the Ohio Environmental Protection Agency.

The recently sanitary sewer improvements in Dayton Street have facilitated the development of the Center for Business and Education. Careful planning is needed for providing sanitary sewer service throughout the already annexed land bounded by Dayton Street, East Enon Road, Fairfield Road and King Street. As described in the 2006 Sanitary Sewer Study, the primary means of serving this area and the remaining land in the northwest part of the Urban Service Area is via a trunk sewer that would begin at Dayton Street and Wright Street. This sewer must be planned and constructed with the entire service area in mind, not merely the next piece of land to be developed.

The Waste Water Treatment Plant is designed to treat 1.2 million GPD. Currently about 600,000 GPD is treated daily. This 600,000 gallon “surplus” should be adequate to accommodate modest growth.

### **Storm Water Management**

Village ordinances require that land being subdivided provide storm water detention in accordance with Greene County standards. When land is being developed under a PUD, the Greene County standards are not mandatory so the Village has considerable latitude to require those standards or to consider site specific alternatives for storm water management. However, the existing ordinances are silent on

requirements for storm water management as relates to development undertaken through site plan review only. This is a gap that should be addressed.

A high level of storm water management must be included in all development in the northwest area that drains to the Glass Farm Branch of Yellow Springs Creek. While the recently constructed detention pond on the Glass Farm is reducing the frequency of flooding downstream, this detention pond was not designed or intended to substitute for proper storm water management by new development throughout the watershed.

**VILLAGE OF YELLOW SPRINGS**  
**COMPREHENSIVE LAND USE PLAN**  
**APPENDICES - 2010**

<b>Appendix A</b>	<b>Urban Services Area Map</b>
<b>Appendix B</b>	<b>Land Use Plan/Thoroughfare Plan</b>
<b>Appendix C</b>	<b>Education Institutions</b>
<b>Appendix D</b>	<b>Parks &amp; Recreation Master Plan</b>
<b>Appendix E</b>	<b>Sidewalk Survey Map</b>
<b>Appendix F</b>	<b>Yellow Springs Bikeways Map</b>
<b>Appendix G</b>	<b>Sanitary Sewer Collection Map</b>
<b>Appendix H</b>	<b>Annexation Policy</b>
<b>Appendix I</b>	<b>Energy Systems Task Force Report/Phase I and II</b>
<b>Appendix J</b>	<b>Historic District Map</b>
<b>Appendix K</b>	<b>2010 Visioning Plan – <i>Vision Yellow Springs and Miami Township</i></b>