

**The Financial Future of the Guida Farmland
Conservation Area**

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In 1991 the City of Middletown purchased the Guida Farm Conservation Area for \$ 1.4 million. The Guida Farm Conservation Area is located in southwestern Middletown off of Round Hill Road and consists of approximately 100 acres. This property was purchased by the City of Middletown for a number of reasons concerning the preservation of open space. This purchase and preservation enables the City to:

- Create additional recreational opportunities.
- Preserve environmental features.
- Protect the existing wildlife habitat.
- Protect proposed open space systems.
- Maintain undeveloped areas to preserve Middletown's rural character.
- Encourage the public to take advantage of natural recreational opportunities.

All of these factors add to the importance of preserving open space. But through research it is apparent that the City of Middletown will also gain financially through this purchase. Initially it appears that the City is gaining valuable open space by spending \$1.4 million, but long-term savings is also obtained. This report will explain why and how the City of Middletown will save money in the long run by spending \$1.4 million on open space land.

Cost of Residential Development

The way this open space purchase will save money in the long-term is by preventing new residential development. Many city residents and developers encourage new development in order to create new sources of income. And it is true that residential, commercial, and industrial development are all very important components in the City's overall grand list. But preserved land areas, particularly in and around residential zones, are also an important part of the equation. Admittedly, residential development will provide a new source of income for the City. However, with the use of past research done by the American Farmland Trust as well as the Planning and

Zoning Department, it becomes obvious that strictly residential development will present a financial liability to the City. In the Guida farmland situation if the area was not purchased by the City it would have remained vacant under Guida supervision or would have been purchased and subdivided for housing. This is because the property is zoned residential. There are minimal wetlands on the property, and many areas can be considered ideal for residential development. The following data demonstrates the unfavorable revenue to expenditure ratio that occurs with residential development. The expenditures and revenues that are found in the ratios below are the amounts of money spent on and collected from each sector of the City of Middletown.

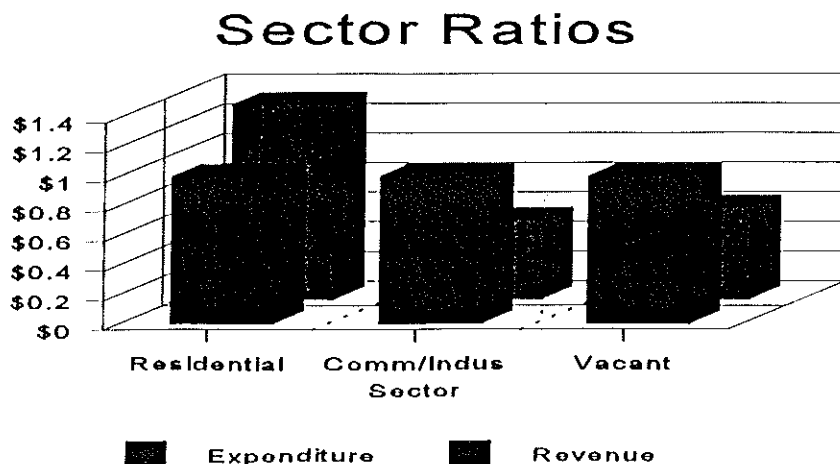
Data and Graph

Residential = $\frac{\text{Expenditure } \$68,521,000}{\text{Revenue } \$51,813,000} = \$1.32$

Comm/Industrial = $\frac{\text{Expenditure } \$18,145,500}{\text{Revenue } \$33,361,000} = \$0.54$

Vacant = $\frac{\text{Expenditure } \$383,000}{\text{Revenue } \$620,000} = \$0.62$

(Statistics are provided by the Middletown Planning and Zoning Department)



Middletown's revenues and expenditures were tabulated and ratios were developed that reveal for every \$1.00 collected from residential, \$1.32 must be spent. It is apparent by these figures that residential has a much less favorable ratio than that of commercial/industrial and vacant land. Because the Guida farmland is located in strictly residential zones and lacks the necessary infrastructure it would not have been possible to develop in a commercial or industrial way. When the City of Middletown purchased this land it prevented this ratio from taking place. The following long term scenario will further financially demonstrate and justify why the City is gaining by spending \$1.4 million on this property.

Scenario of Residential Development

Under this scenario the property would hypothetically not be purchased by the City of Middletown. If in 1991 the property was not purchased it has been estimated that it would have taken developers around six years to purchase and develop the area. During those six years the City of Middletown would have been collecting \$22,000 per year (provided by the Middletown Tax Assessment Office) on the property through taxes without spending anything on community services. That is a total of \$132,000 that the city would have gained over those six years. After those estimated six years the Guida farmland would have been fully developed.

In order to determine how many residential lots could have been developed on the Guida farmland a build out formula was utilized (see attached Appendix). The Guida farmland consists of approximately 4,100,000 sq ft. The build out formula proves that when the property is developed approximately 60 new houses would be produced. Each of those households would pay property taxes to the City. In Middletown, households in the R-45 and R-60 zones pay on

average \$3,000 per year (provided by the Middletown Tax Assessment Office). At this point, with 60 new households each paying \$3,000 per year in taxes the city would collect \$180,000 per year in taxes from this subdivision. (60 homes x \$3,000 = \$180,000)

But with these added residents comes added expenses for the City. As mentioned before, for every \$1.00 recieved in taxes the city must spend \$1.32 on residential community services. There are a wide range of community services that are provided for all sectors of the City. These services consist of General Government, Public Safety, Public Works, Water/Sewer, and others. But residential zones require some services that are very expensive for the City. These services consist of Arts and Culture, Parks and Recreation, Human Resources, and Education. Education is the most costly of these services, costing the City close to \$40 million per year. These four services are the cause of the \$1.00 to \$1.32 revenue to expense ratio.

There are some factors due to the location and style of development that would have taken place that could have made this ratio larger in the Guida farmland area. These factors are related to road safety and maintenance adding to the roles of the Public Safety and Works Departments. When developers subdivide areas like the Guida farmland they are required to construct wide sub collector and cul-de-sac roads with excessive drainage and sidewalks. Developers are required to do this due to City Subdivision Regulations. Once the subdivision is completed and sold to private owners the roads and sidewalks become the responsibility of the City. The excessive road size and drainage puts unnecessary pressure and expense on the City for maintenance. And at a location such as the Guida farmland area, so far from the mainstream of the City, it would be more of an expense than normal.

Using the \$1.00 to \$1.32 ratio and the \$180,000 coming in to the City from taxes on the

subdivision annually the City will be responsible for \$237,600 in expenditures each year.

$$\frac{\text{Expenditures}}{\$180,00} = \frac{\$1.32}{\$1.00}$$

$$\text{Expenditures} = \$237,600$$

Therefore, each year the subdivision would be costing the city \$57,600.

$$\$237,600 - \$180,000 = \$57,600$$

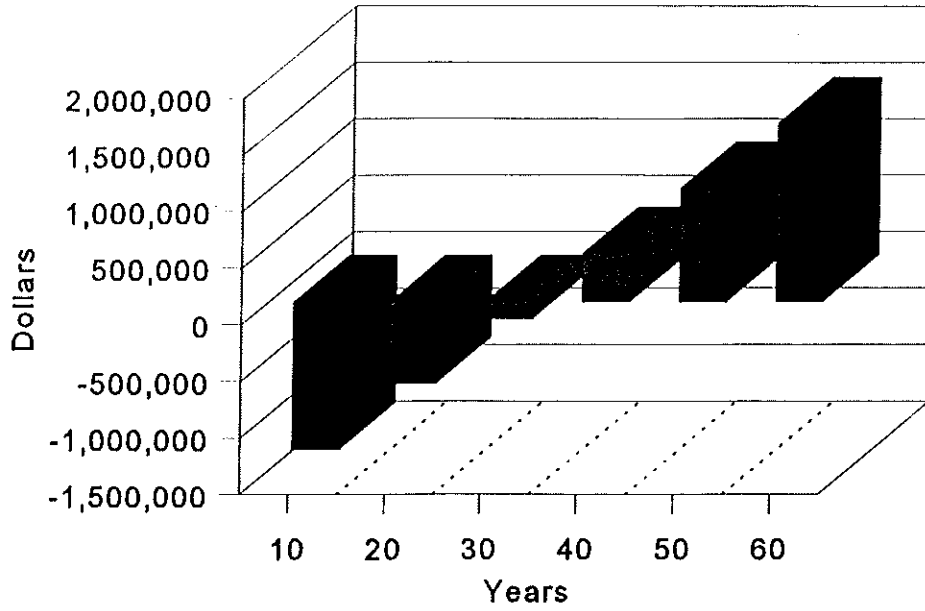
Long-run Financial Gains

In the long-run these costs will add up and will eventually offset the purchase of the property and the six years of lost tax revenue. The deficit from the purchase before the hypothetical development is \$1,532,000. That figure is the cost of the Guida area plus the six years of lost revenue before development. ($\$1,400,000 + \$132,000 = \$1,532,000$) Every year after development the City will be spending \$57,600 annually. Initially this investment will not appear worthwhile in a financial aspect, but with time it will begin to pay dividends. The following graphs demonstrate the financial future of the Guida farmland area.

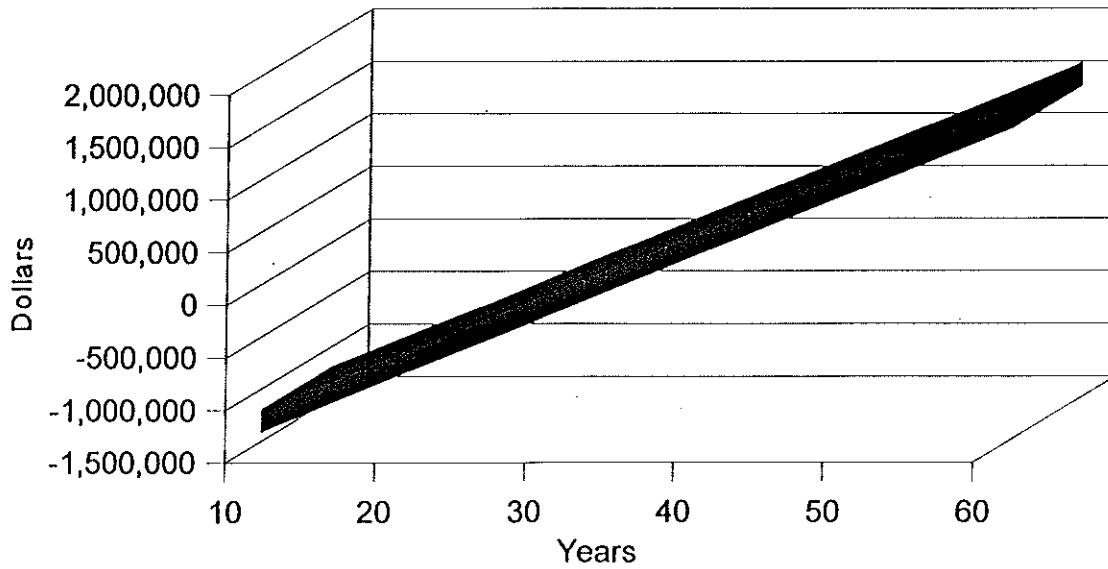
Graphs and Data

10 Years = \$-1,301,600
 20 Years = \$-725,600
 30 Years = \$-149,600
 40 Years = \$426,400
 50 Years = \$1,002,400
 60 Years = \$1,578,400

Financial Future



Financial Future



These graphs demonstrate that in the long-term the City of Middletown will profit from this investment. In under thirty-three years the City of Middletown will have paid for the Guida farmland and within sixty years **\$1.58 million** will be saved by preventing residential. Open space is valuable for its natural benefits mentioned earlier, but this report concludes that there are, in the long run, financial dividends as well.

Financial Conclusion

The wisdom of investing **\$1.4 million** in 1991 to gain cost savings after thirty-three years can certainly be questioned. However, the long-term alternatives must be considered as well as the intentions of the purchase. This property was bought for open space conservation and these long-run cost saving results are only after thoughts. Also, there are only two other alternatives that could have taken place.

One of the alternatives, residential development, has already been discussed in great length. This scenario would cost the City approximately **\$57,600** per year, after the six years of development, and **\$3.11 million** after sixty years. The other alternative is the Guidas holding the property and continuing to pay taxes on the forest and farmland. This would yield approximately **\$22,000** (tax figure is due to Chapter 490 a State tax reducing measure for farmland) each year in taxes and **\$1.32 million** after sixty years. Each of these alternatives are not as financially beneficial as the City's purchase. By spending **\$1.4 million** in 1991 the City will break even in thirty-three years and save **\$1.58 million** within sixty years from 1991.

This report and its figures indicate that the City of Middletown's purchase of the Guida Farmland aided the City, in the long run, by more than preserving open space and its natural characteristics. Long run financial savings is obtained as well.

Appendix

Build Out Formula

A = Total Land Area = 4,100,000 sq ft

B = Total Environmentally Sensitive Land Area = 750,000 sq ft

C = The amount of Environmentally Sensitive Land Area that could be part of standard building lots and open space. = $16\% \times 4,100,000 \text{ sq ft} = 656,000 \text{ sq ft}$

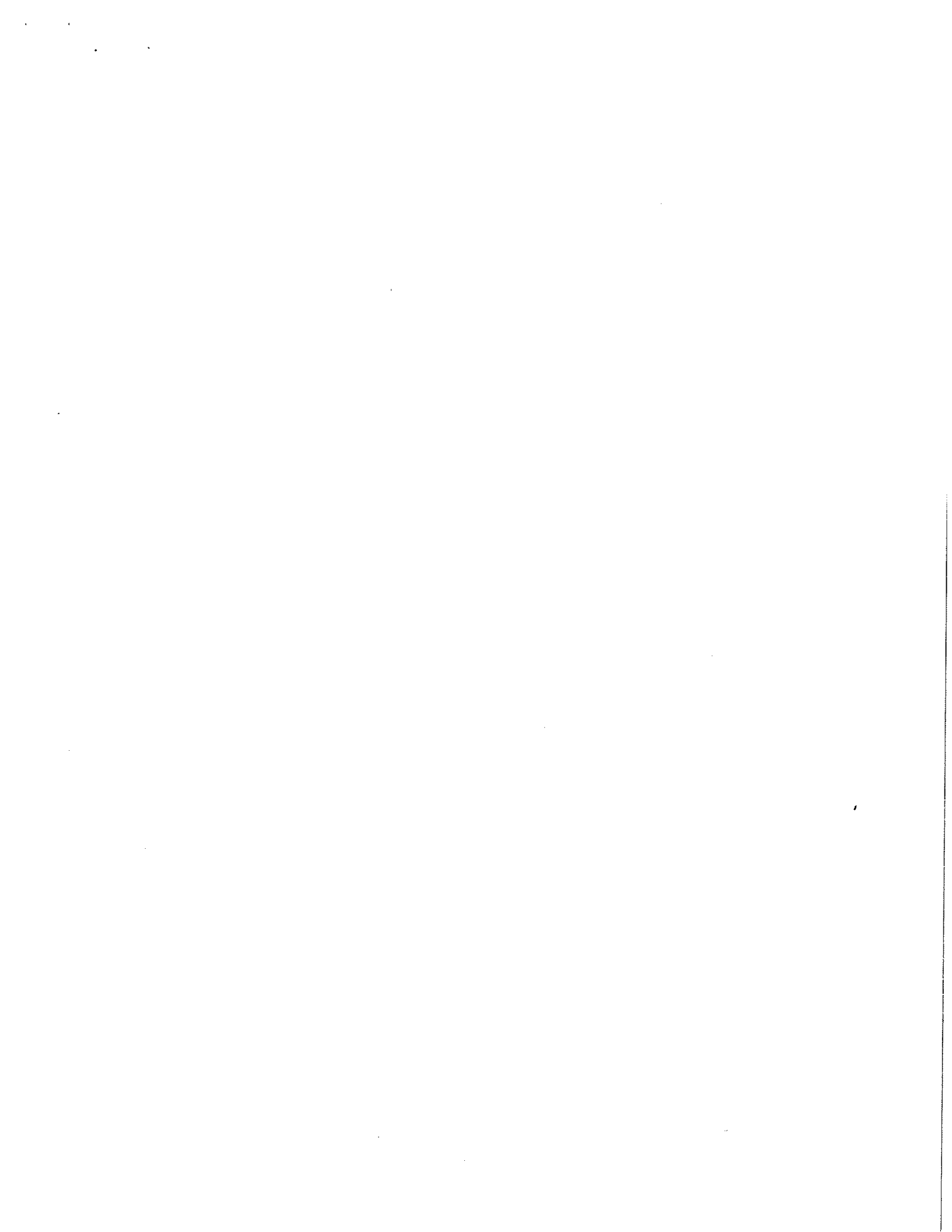
D = Excess Environmentally Sensitive Land Area =
 $750,000 \text{ sq ft} - 656,000 \text{ sq ft} = 94,000 \text{ sq ft}$

E = The area of the property that would be used for Roads and Open Space =
 $23.5\% \times 4,100,000 \text{ sq ft} = 963,500 \text{ sq ft}$

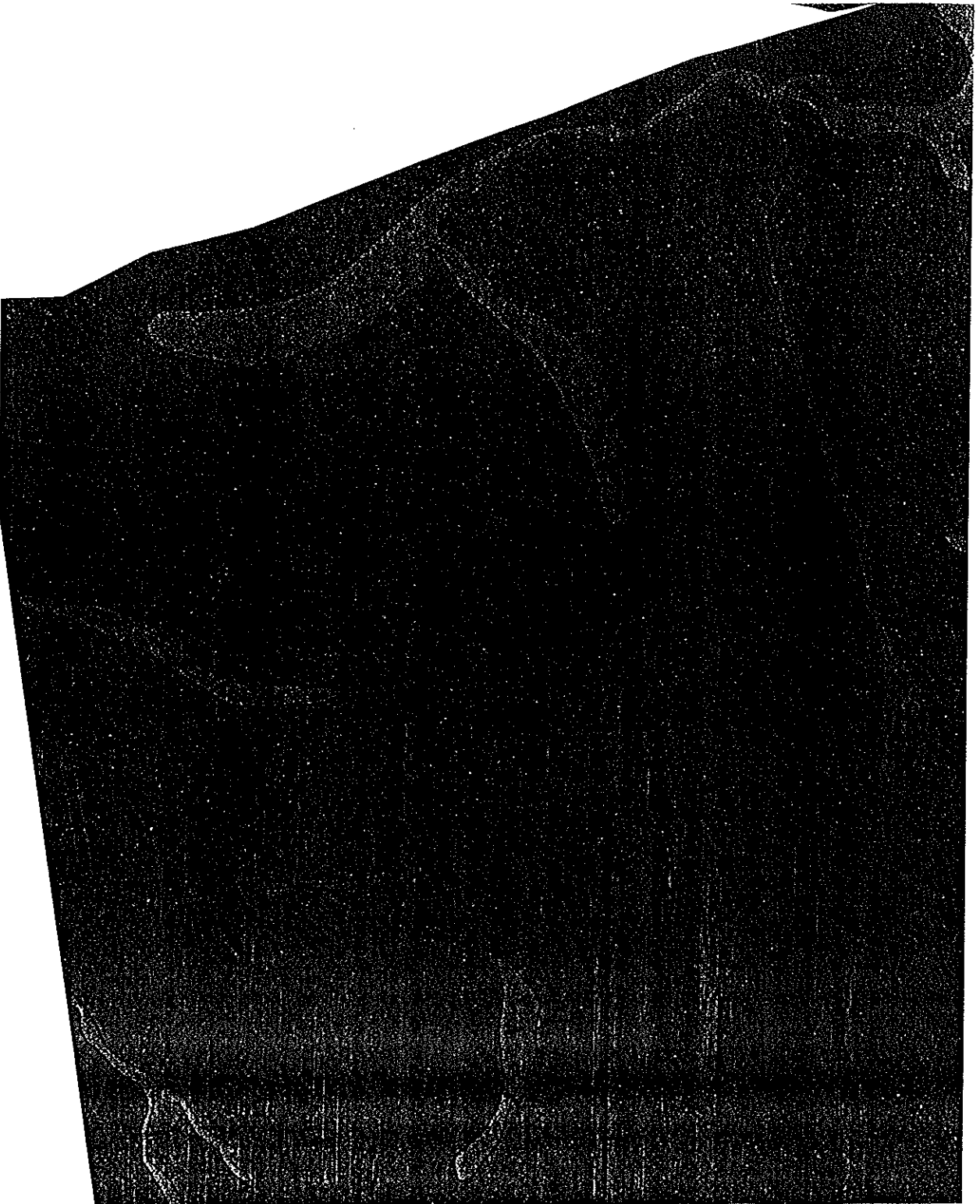
F = Excess Environmentally Sensitive land plus Open Space and Roads = "D" + "E" =
 $94,000 \text{ sq ft} + 963,500 \text{ sq ft} = 1,057,500 \text{ sq ft}$

G = Land Available For Building Lots = "A" - "F" =
 $4,100,000 \text{ sq ft} - 1,057,500 \text{ sq ft} = 3,042,500 \text{ sq ft}$

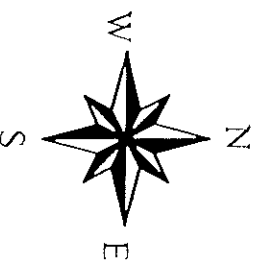
H = Maximum Number of Lots = "G" divided by the applicable minimum lot size =
 $(60,000 \text{ sq ft} + 45,000 \text{ sq ft})/2 = 52,500 \text{ sq ft}$
 $3,042,500 \text{ sq ft}/52,500 \sim 60 \text{ lots}$



Guida Farmland Conservation Area



- Roads
- Wetlands
- Streams&ponds
- Openspace
- Boundary



OPEN SPACE EVALUATION CRITERIA

1. Category A Forest Uses

Characteristics to consider

- * Has potential for use as a forest management demonstration area.
- * Has potential for valuable growth, separate contains uncommon forest species.
- * Presents multiple use opportunities
- * Presents opportunity for future expansion.
- * Presents public access value

2. Category B Park and Recreation Lands

Characteristics to consider

- * Land has swimming area or swimming potential
- * Potential exists for future expansion of swimming access or acquisition completes park or swimming area
- * Property contains landmarks, scenic, historic, or archaeological attributes of local, regional, or statewide significance
- * Potential as an urban "pocket park"
- * Accessible from or within walking distance of public transportation
- * Provides adequate access to fishing areas
- * Provides substantial protection of important fishing area
- * Acquisition would contribute to anadromous fish restoration, fisheries program or waterway protection
- * Property has potential for boat launch access in a recreational area
- * Property is large enough to provide for adequate parking
- * Presents potential for access by the disabled

3. Category C Wetlands

Characteristics to consider

- * Wetland has endangered, threatened or special concern species or habitat;
- * Has outstanding ecosystem productivity
- * Is a scientific or research area
- * Wetland performs valuable function (s) such as; flood control, nutrient retention and sediment trapping
- * Is in healthy condition or is somewhat degraded but shows significant potential for restoration
- * Is contiguous to permanent open water or high water quality stream
- * Is adjacent to State, Federally owned or committed wetland

4. Category D Wildlife Management Areas

Characteristics to consider

- * Contains populations or habitat of year round resident and/or migratory harvested or non-harvested wildlife species
- * Exhibits a diversity of habitat throughout the site
- * Is of sufficient size to allow productive management of the wildlife species' populations.
- * Has potential for educational or research activities associated with wildlife

5. Category E Trails and River Corridors

Characteristics to consider

- * Property provides a key segment of a trail network, or segment of historic right-of-way
- * Provides linkage between existing parks or open space
- * Provides exceptional scenic value such as ridge line or waterfalls
- * Provides adequate parking for users
- * Contributes to the preservation of a natural, undeveloped river corridor of high water quality
- * Provides access to a substantial undeveloped length of the river

6. Category F Geologic and Landform Features

Characteristics to consider in order to rank those features that are of geologic significance for science or public education, and natural land forms that are significant, distinctive, or representative of the CT landscape:

- *Degree to which property represents Regional, State or locally significant feature
- * Degree of quality of feature
- * Degree to which management of property is required
- * Contributes to other land protection objectives or adds to existing state land, etc.

7. Category G Inholdings and Land Adjacent to Publicly owned or other committed Open Space

Characteristics to consider

- * Borders City, State or other committed land
- * Is critical to long-term resource management
- * Has public access value

PRIORITY RATING SUMMARY SHEET

Parcel -----

Date Reviewed -----

Date Scored-----

Reviewer -----

Category	Score (Out of 10 points)	Comments
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1. Forest Lands	_____	
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2. Park and Recreational Lands	_____	
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3. Wetlands	_____	
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4. Wildlife Management Area	_____	
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5. Trails and River Corridors	_____	
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6. Geologic and Landform Features	_____	
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7. Inholdings	_____	
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TOTAL	-----	
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