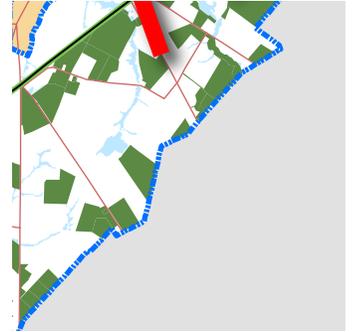
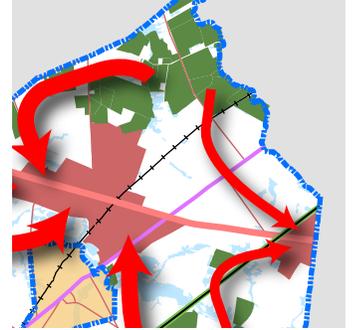


REAL ESTATE MARKET ANALYSIS



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URBAN PARTNERS

COMMUNITY & ECONOMIC DEVELOPMENT / HOUSING / POLICY RESEARCH

829 Spruce Street, Suite 204
Philadelphia, PA 19107
215 829-1901
215 829-1908 (fax)
urbanpartners@verizon.net

Letter of Transmittal

To: Department of Community Affairs, Office of Smart Growth
From: Urban Partners
Re: Transfer of Development Rights Real Estate Market Analysis
Date: December 8, 2006

We have prepared the real estate market analysis to support the Transfer of Development Rights Element of the Woolwich Township Comprehensive Plan. This market analysis is intended to establish and document land values in the Sending and Receiving Areas, to estimate the land value component of the proposed development in the Receiving Areas under the proposed zoning, and to determine the economic relationship of development rights in the Sending Area to development rights in the Receiving Area for various use categories.

Land prices in the Woolwich sending area are currently in the range of \$65,000 to \$80,000 per developable lot. After the TDR program is implemented, the residual value of the land for farming purposes is estimated to be \$6,000 per acre. The average valuation for a development credit in the Sending Area is estimated at \$55,000. However, this is an average since pricing will vary within a range based on the location of the parcel, the yield of developable lots per acre, the value of the residual parcel as farmland, and other factors.

Land prices in the Woolwich Route 322 Receiving Area currently range between \$45,000 and \$225,000 per acre. After the TDR program is implemented, land values are estimated to range between \$20,000 and \$55,000 depending on the type of unit that is allowable on the lot. For example, land values for single-family detached homes are estimated at \$55,000, twin units at \$40,000, townhomes at \$26,000, and multi-family flats at \$20,000. Land prices in the Woolwich Auburn Road Receiving Area currently range between \$100,000 and \$110,000 per acre. After the TDR program is implemented, land values are estimated to range between \$26,000 and \$65,000 depending on the type of unit that is allowable on the lot. For example, land values for single-family detached homes are estimated between \$55,000 and \$65,000, twin units at \$40,000, and townhomes at \$26,000.

This analysis and estimation is based on current market conditions and may not reflect futures values, which can be affected by different market conditions.

Sincerely,

Jim Hartling, Partner
Urban Partners

REAL ESTATE MARKET ANALYSIS

EXECUTIVE SUMMARY

Woolwich Township is a growing community which currently faces strong residential development pressures. The 1990 census reported 498 housing units in Woolwich, a number which doubled by the 2000 census to 1,026. Housing construction since 2000 has added another 2,004 units in Woolwich, bringing the total estimated number of housing units in 2006 to 3,030 with an estimated population of 7,560. Much of this residential building has occurred in the Weatherby development. The Township's population and housing units are expected to increase dramatically with a full residential buildout forecasted by 2029 of 31,000 new residents and 9,600 additional housing units.

To better manage this growth, Woolwich is incorporating a Transfer of Development Rights (TDR) element into its Comprehensive Plan. The TDR Program establishes a Sending Area of 3,817 acres, an undeveloped area of farmlands and open space. The Township wishes this area to remain in these uses and desires development rights of the Sending Area to be transferred to two Receiving Areas. Under the proposed zoning, the Township will allow intensive development within these two receiving areas of 743 acres (Route 322 Receiving Area # 1) and 125 acres (Auburn Road Receiving Area # 2).

This real estate market analysis is intended to establish and document land values in the Sending and Receiving Areas, to estimate the land value component of the proposed development in the Receiving Areas under the proposed zoning, and to determine the economic relationship of development rights in the Sending Area to development rights in the Receiving Area for various use categories.

DEVELOPMENT POTENTIAL

As described in the Development Transfer Element of the Plan, zoning in both receiving areas will be changed to accommodate the Township's anticipated residential pressures detailed above and the Township's desire to preserve the Sending Area. If the TDR Program were not implemented, the total potential buildout of the Sending Area is estimated at 1,283 single-family units, which are likely to be absorbed by 2020. Based on this total buildout, there are 1,283 development credits available from the Sending Area's 3,817 acres to be used in the Receiving Areas. The following details the development potential for the Receiving Areas under these new zoning regulations:

Route 322 Receiving Area # 1:

Based on absorption analysis and assuming current development patterns continue, there appears to be sufficient demand to absorb the following development during the 2012 to 2029 period:

- 3,217 units of single-family, twins, townhome, and multi-family building units
- 1.1 - 2.1 million SF of retail and 500,000 - 1.5 million SF of office/flex space

Auburn Road Receiving Area # 2:

Based on recent development patterns and adjacency of the Auburn Road Receiving Area #2 to the Weatherby development, there appears to be sufficient demand to absorb the following development during the 2012 to 2029 period:

- 502 single-family and townhome units
- 60,000 to 70,000 SF of convenience retail

LAND VALUES

For the purposes of estimating land values, we assume that infrastructure costs for roadways, utilities, and site preparation will be equivalent to costs elsewhere in Woolwich. Also, we assume that the costs of providing affordable housing under COAH requirements will be identical to those under current conditions and that these costs have already been incorporated into land pricing.

Sending Area

Land prices in the sending area are currently in the range of \$65,000 to \$80,000 per developable lot. After the transfer of development rights, the residual value of the land for farming purposes is estimated to be \$6,000 per acre. The average valuation for a development credit in the Sending Area is estimated at \$55,000. However, this is an average since pricing will vary within a range based on the location of the parcel, the yield of developable lots per acre, the value of the residual parcel as farmland, and other factors.

Route 322 Receiving Area # 1

Based on recent sales transactions, land values range between \$45,000 and \$225,000 per acre depending on extent to which the parcel includes Route 322 frontage. For the uses proposed under the TDR program, land values are estimated for the following:

- Single-Family Detached units (9,500 SF average lot): \$50,000-\$60,000 per developable lot (\$55,000 used for analysis purposes)
- Twin units (5,000 SF average lot): \$35,000 to \$45,000 per developable lot (\$40,000 used for analysis purposes)
- Townhomes (2,500 SF average lot): \$20,000 to \$30,000 per developable lot (\$26,000 used for analysis purposes)
- Multi-family flats (1,200 to 1,800 SF): \$13,000 to \$24,000 per developable lot (\$20,000 used for analysis purposes)
- Retail, Office, and Flex Development: \$10 to \$35 per built SF (\$55,000 used for analysis purposes)

Auburn Road Receiving Area # 2

Under current zoning, land prices are in the range of \$100,000 and \$110,000 per acre. After the TDR program is implemented, land values are estimated for the following:

- Single-Family Detached units (12,000 SF average lot): \$55,000 to \$65,000 per developable lot
- Twin units (5,000 SF average lot): \$35,000 to \$45,000 per developable lot (\$40,000 used for analysis purposes)
- Townhomes (2,500 SF average lot): \$20,000 to \$30,000 per developable lot (\$26,000 used for analysis purposes)

Total required development credits are 2,717 for Receiving Area #1. The proposed post-TDR zoning will provide the same one credit per 1.5 acres throughout the Receiving Area. This allocation of 'by-right' residential development capacity will apply only where the parcel is participating in the Transfer of Development Rights. Based on this "by-right" allocation, 137 of the proposed 2,717 housing units can be developed on the basis of development rights associated with Receiving Area land. This leaves a shortfall of 2,580 development credits which must be purchased from the Sending Area or provided through "bonus" credits. In Receiving Area #2, the increment of development for which development rights would need to be transferred is 262 units. Development credits will need to be secured for all these units since these 262 units are in addition to a modified 'by right' development program in this Receiving Area.

DEVELOPMENT CREDIT BONUSES

To create additional financial incentives to developers to purchase these development credits, the TDR program proposes development credit bonuses—that is, additional units that can be built within the receiving areas when credits are bought in addition to the allowable number of units under the base zoning code. With the addition of bonus ratios, the cost of buying development credits for use in the Receiving Area is less than the cost of the land that is currently available for development in the sending area.

VIABILITY OF TDR PROGRAM

As previously stated, there are 1,283 credits that need to be transferred in order to preserve the Sending Area. The purchase of 1,357 development credits is required for full buildout of the two Receiving Areas. Based on current market conditions and absorption patterns, there is demand potential for 1,357 credits. This total potential demand exceeds the total estimated development credits desired to be transferred from the Sending Area of 1,283 credits.

The sufficient level of residential and retail demand, coupled with the proposed bonus credits, will provide adequate market to support needed sales of the desired 1,283 credits in the Sending Area. This demand will assure that all sending area credits can find buyers from the Receiving Area. Therefore, we conclude that the proposed TDR program is based upon sufficient market demand and provides sufficient economic incentive to development credit buyers to support the needed sales of the development credits in the Sending Area.

GENERAL INFORMATION

Purpose of the Market Analysis

This real estate market analysis has been prepared to support the Transfer of Development Rights (TDR) Element of the Comprehensive Plan for Woolwich Township, Gloucester County, New Jersey. The TDR Plan Element is intended to achieve several major objectives of the Comprehensive Plan, including: (1) the preservation of open space and farmland in areas of the Township currently undeveloped; (2) the encouragement of development in the Route 322 Corridor which already benefits from substantial roadway infrastructure; and (3) the creation of a compact mixed-use center along the Route 322 Corridor which includes a variety of residential types and pedestrian-oriented retail services.

To further these objectives, this TDR Plan Element establishes a Sending Area that includes 3,817 acres of current farmland and open space which the Township desires to remain in these farming and open space uses and from which the Township desires development rights to be transferred. The TDR Plan Element further establishes two Receiving Areas—one of 743 acres that contributes to the desired Center along the Route 322

Corridor and a second, smaller area of 125 acres that is immediately adjacent to the Weatherby Planned Residential Community, which is in mid-development. The Township intends on amending current zoning to provide opportunities for more intensive development within the Receiving Areas. Under this proposed zoning, the potential for more intensive development will be subject to developers purchasing development rights from property-owners in the Sending Area.

This real estate market analysis is intended to establish and document land values in the Sending and Receiving Areas, to estimate the land value component of the proposed development in the Receiving Areas under the proposed zoning, and to determine the economic relationship of development rights in the Sending Area to development rights in the Receiving Area for various use categories.

The analysis presented below estimates the relationship in value of (a) 1,283 Development Credits—the rights to construct 1,283 single-family detached houses in the Sending Area on one to two acre lots without sewer—with (b) the right to construct a range of types of residential units totaling up to 2,717 units in the Route 322 Receiving Zone #1 and up to 262 twins and townhomes in the Auburn Road Receiving Area #2.

Definition of Legal and Technical Terms

The following is a definition list of legal and technical terms used throughout this market analysis:

1. **Base Zoning:** the zoning in place as of one year prior to the municipal enactment of a transfer of development rights ordinance or the zoning in place less than one year prior to the municipal enactment of the transfer of development rights ordinance provided that the zoning was adopted by the municipality for purposes of achieving consistency with a master plan that has received initial or advanced plan endorsement from the State Planning Commission pursuant to N.J.A.C. 5:85-7.1 et seq.
2. **Bonus Density:** in a receiving zone either the amount by which development can exceed base zoning or the right to develop a use not permitted under the base zoning with the use of TDR credits.
3. **Development Right:** an interest in land, less than fee simple absolute title, which enables the owner to develop the land for any purpose allowed by ordinance.
4. **Environmentally Constrained Area:** an area in which development is precluded or significantly limited by existing environmental statutes or regulations.
5. **Market Value Restricted:** the value of a property based on its agricultural,

environmental or historical resource and its other remaining property rights, but does not allow the owner to develop the land for any other purpose except as expressly authorized by the transfer of development rights ordinance.

6. **Real Estate Market Analysis or Market Analysis:** the Report required pursuant to Subchapter 2 of N.J.A.C.5:86-1.1 et seq.
7. **Receiving Zone:** an area or areas designated in a master plan and zoning ordinance, adopted pursuant to N.J.S.A. 40:55D-1 et seq., within which development may be increased, and which is otherwise consistent with the provisions of N.J.S.A. 40:55D-145.
8. **Sending Zone:** an area or areas in a master plan and zoning ordinance, adopted pursuant to N.J.S.A. 40:55D-1 et seq., within which development may be restricted and which is otherwise consistent with the provisions of N.J.S.A. 40:55D-144.
9. **TDR Credit:** the development right can be utilized in a receiving zone to achieve the bonus density, the number of TDR credits is determined based on the transfer ratio and the number of development rights being transferred from the sending zone to the receiving zone.
10. **TDR Zoning:** zoning authorized in the receiving zone when TDR credits are utilized or in the sending zone once development credits have been relinquished.
11. **Transferable Development Right:** a unit of development permitted by the base zoning which can be transferred from a property in the sending zone.
12. **Transfer Ratio:** the number of transferable development rights that can be transferred from a sending zone property divided by the additional units of development that can be built on the receiving zone property through the use of TDR credits.
13. **Unit of Development:** an additional right to build on a particular piece of property as determined by zoning ordinance; which may include, but is not limited to acre, square foot, residential unit, floor, height etc.

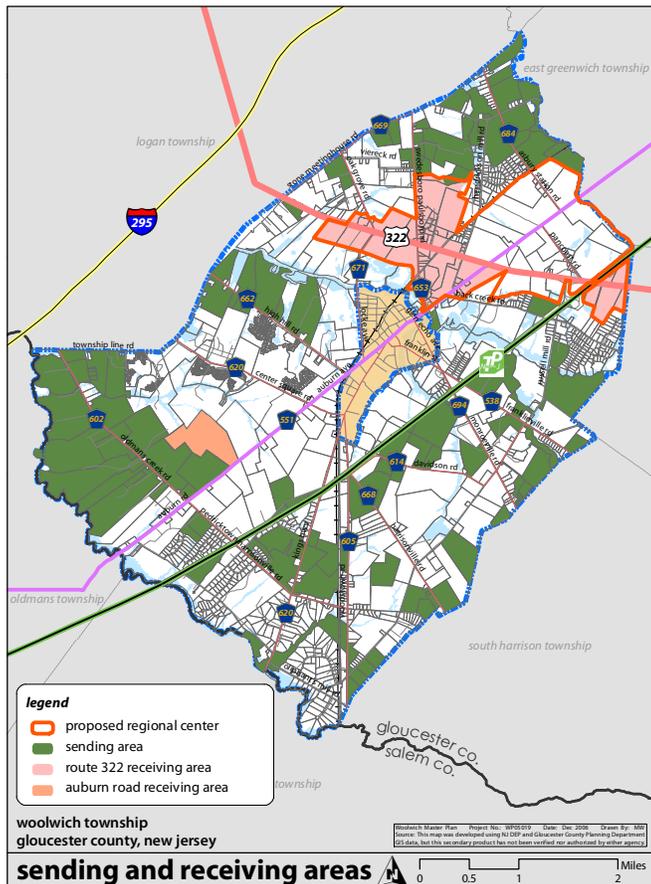
Assumptions and Limitations

The validity of the real estate market analysis incorporated in this report and the determination in this report of the viability of the Transfer of Development Rights program proposed for Woolwich Township are dependent on a number of assumptions concerning overall economic conditions and policies at the national, state, regional, county, and local level. Most critical among these assumptions are the following:

- that the overall growth of the national economy remain generally consistent with patterns of the past fifteen years.
- that interest rates remain within the ranges of rates seen in the past fifteen years. There has been some development slowdown recently as higher interest rates have slowed housing development. This real estate market analysis assumes that this adjustment will be short-term and that monetary conditions will support housing demand in the long-term;
- that the Philadelphia region will continue to maintain the moderate pace of economic growth that has prevailed during the past fifteen years;
- that New Jersey and Gloucester County tax and public services policies will remain consistent relative to other regional counties; and
- that Woolwich Township will remain a location of choice for new housing development until full buildout is achieved.

Identification of the Sending and Receiving Zones

The proposed Sending Area includes 112 parcels (see Map 1). About half these parcels are located east of the New Jersey Turnpike; one quarter in the far northern portion of the Township abutting Logan & East Greenwich Townships; and one-fifth in the far western portion of the Township along either side of Oldman's Creek Road. These 112 parcels range in size from 4 to 177 acres and include a total of 3,817.3 acres. The current uses in the Sending Area are farms, woodlands, wetlands, and open space. Table 1 identifies the parcels included in the Sending Area by tax map block & lot number, ownership, zoning, and size.



Map 1. The Sending Area includes 112 parcels.

The proposed Receiving Zone includes two separate Receiving Areas. The Route 322 Receiving Area #1 is located along the Route 322 Corridor (see Map 1). Route 322 traverses Woolwich Township for 3.5 miles from west to east through the northern portion of the Township. This portion of Route 322 is located between I-295, one mile to the west in Logan Township, and Exit 2 of the New Jersey Turnpike, which is located within and at the eastern end

of the Receiving Area. This Receiving Area #1 includes a total of 743 acres of land immediately adjacent to and both north and south of Route 322. The Receiving Area is divided into two portions—the major portion includes 84 parcels totaling 646.5 acres generally located near the intersections of Route 322 with Locke Avenue, Oak Grove Road, Swedesboro Paulsboro Road, and Hendrickson Mill Road; a smaller portion of 96.5 acres in 10 parcels is located immediately east of the Turnpike entrance.

The two portions of this Receiving Area are separated by a collection of parcels totaling 750 acres which has been the subject of a law suit and settlement. This settlement provides the owner of those parcels (Woolwich Adult LLC) with the right to construct "Kingsway Town Center," a mixed-use development with 925 units of age-restricted single-family housing, 104 affordable multi-family age-restricted housing units, and 2,700,000 SF of commercial space. This development will bridge the two portions of Receiving Area #1.

Woolwich Adult LLC has entered into highly-publicized agreements with Pulte Homes for the residential development and Wolfson Verrichia Group for the commercial development. The commercial development will include 1.1 million SF of office/flex and 1.6 million SF of retail. Retail plans include at least 1 million SF of large format stores—a home center, a supermarket, department stores, restaurants, and a movie theater—in "Woolwich Commons" and 500,000 SF of "lifestyle" village-like retail called Main Street at Woolwich. Preliminary plans for this lifestyle center include a pedestrian-oriented environment with parks and a clock tower, a restaurant row, convenience services (hair salons, dry cleaners, bank) as well as smaller shops.

The Auburn Road Receiving Area #2 is located along Auburn Road just south of the Weatherby planned development (see Map 1). Receiving Area #2 involves a single 125-acre parcel of land.

Table 2 identifies the parcels included in the two Receiving Areas by tax map block & lot number, ownership, zoning, and size.

Table 1
Sending Area Parcels--Part 1

Block Lot	Owner	Owner Address	City	Acres	Zoning
14	28 GAROZZA, CATHERINE MRS	140 MILL ROAD	WOOLWICH TWP, NJ 08085	13	R-1
14	29 GAROZZA, CATHERINE MRS	140 MILL ROAD	WOOLWICH TWP, NJ	5.32	R-1
14	30 DESANTIS, MARY ANN	156 MILL ROAD	WOOLWICH TWP, NJ 08085	16.75	R-1
31	301 SWEDESBO RO INC	2387 KINGS HIGHWAY	WOOLWICH TWP, NJ	50.05	R-1
31	4 SWEDESBO RO INC	2387 KINGS HIGHWAY	WOOLWICH TWP, NJ	61.71	R-1
31.01	12 SWEDESBO RO INC	2387 KINGS HIGHWAY	WOOLWICH TWP, NJ	14.81	R-1
38	4 DELUCA ENTERPRISES INC	975 EASTON RD STE 200	WARRINGTON, PA	66.38	R-1
38	5 SCHMIDT, FRANCESA & DONALD W	600 WOODSTOWN RD	WOOLWICH TWP, NJ	11.45	R-1
39	1 HAINES, CHARLES & MARGARET P	323 N MAIN ST	WOODSTOWN, NJ	10.05	R-1
39	2 SORBELLO, THOMAS & MARIE	216 PORCHES MILL ROAD	SWEDESBO RO, NJ	13.54	R-1
39	3 SORBELLO, THOMAS	216 PORCHES MILL ROAD	SWEDESBO RO, NJ	12.82	R-1
39	4 HAINES, CHARLES & MARGARET P	323 N MAIN ST	WOODSTOWN, NJ	15.48	R-1
39	5 DELUCA ENTERPRISES INC	975 EASTON RD STE 200	WARRINGTON, PA	19	R-1
40	12 SWEDESBO RO INC	2387 KINGS HIGHWAY	WOOLWICH TWP, NJ	25.35	R-1
40	14 SWEDESBO RO INC	2387 KINGS HIGHWAY	WOOLWICH TWP, NJ	69.59	R-1
41	1 ROBERTS, ARTHUR C JR & MARION E	141 HARRISONVILLE RD.	WOOLWICH TWP, NJ	46.73	R-1
41	8 SORBELLO, THOMAS & MARIE ETALS	216 PORCHES MILL ROAD	SWEDESBO RO, NJ	42.65	R-1
42	2 SORBELLO, GRACE	885 RUSSELL MILL ROAD	WOOLWICH TWP, NJ	34.1	R-1
42	203 SORBELLO, FRANK M & JENNIEL	1015 OLDMANSCREEK RD.	WOOLWICH TWP, NJ	15.92	R-1
43	10 ROBERTS, ARTHUR C JR & MARION E	141 HARRISONVILLE RD.	WOOLWICH TWP, NJ	37.39	R-1
43	3 KING, DAVID & FEUCHT, CAROLINE	107 DAVIDSON ROAD	WOOLWICH TWP, NJ	15.12	R-1
43	5 ROBERTS, KENNETH A & WHITE, HELEN A	141 HARRISONVILLE ROAD	WOOLWICH TWP., NJ	9.64	R-1
43	13 DIBELLA, JOSEPH & WRIGHT, ROSEMARY	421 WHIG LANE ROAD	PILES GROVE, NJ	126.79	R-1
43	14 DIBELLA, JOSEPH & WRIGHT, ROSEMARY	421 WHIG LANE ROAD	PILES GROVE, NJ	1	R-1
44	7 CHIUCCARIELLO, MICHAEL	610 RUSSELL MILL ROAD	WOOLWICH TWP, NJ	55.12	R-1
44	8 DIBELLA, MICHAELS & JANE B	707 RUSSELL MILL ROAD	WOOLWICH TWP, NJ	62.25	R-1
44	802 DIBELLA, MICHAELS & JANE B	707 RUSSELL MILL ROAD	WOOLWICH TWP, NJ	31.89	R-1
46	301 CALI, ANNA ESTATE OF	201 MONROEVILLE RD.	WOOLWICH TWP, NJ	77.61	R-1
46	6 DAVIDSON, ELMA C.	121 DAVIDSON ROAD	WOOLWICH TWP, NJ	30.43	R-1
46	8 THOMPINS, JOHN SR & MABEL TRUSEE	1039 EXCELSIOR DRIVE	ASTON, PA	26.09	R-1
46	9 DIBELLA, JOSEPH A	184 DAVIDSON ROAD	WOOLWICH TWP, NJ 08085	17.67	R-1
46	901 FINNOCHIARO, JOSEPHINE TRUSTEE	290 MONROEVILLE RD.	WOOLWICH TWP, NJ	16.33	R-1
46	11 FINNOCHIARO, JOSEPHINE TRUSTEE	290 MONROEVILLE RD.	WOOLWICH TWP, NJ	40.39	R-1
46	12 DIBELLA, CARMEN A & JOSEPHINE	525 RUSSELL MILL ROAD	WOOLWICH TWP, NJ	5.42	R-1
46	1201 DIBELLA, CARMEN A & JOSEPHINE	525 RUSSELL MILL ROAD	WOOLWICH TWP, NJ	17.47	R-1
47	2 HORNER, WILLIAM C	263 FRANKLINVILLE RD	WOOLWICH TWP, NJ	27.61	R-1
47	201 HORNER, WILLIAM C	263 FRANKLINVILLE RD	WOOLWICH TWP, NJ	10.89	R-1
47	4 BUTLER, MARTHA	304 FRANKLINVILLE RD.	WOOLWICH TWP, NJ	28.71	R-1
47	502 FINNOCHIARO, JOSEPHINE TRUSTEE	290 MONROEVILLE RD.	WOOLWICH TWP, NJ	26.52	R-1
47	503 FINNOCHIARO, JOSEPH A	503 W 45TH STAPT 3E	NEW YORK, NY	12.62	R-1

Table 1
Sending Area Parcels--Part 2

Block Lot	Owner	Owner Address	City	Acres	Zoning	
47	504 FINOCCHIARO, MARY LOUISE	343 RUSSELL MILL ROAD	WOOLWICH TWP, NJ	8.87	R-1	
48	1 AUSEC, TIMOTHY & DIANE	431 FRANKLINVILLE RD.	WOOLWICH TWP, NJ	28	R-1	
48	901 SUIT, CURTIS & CHRISTINE	480 MONROEVILLE RD.	WOOLWICH TWP, NJ	08085	10.82	R-1
48	10 SUIT, CURTIS D & CHRISTINE O	480 MONROEVILLE RD.	WOOLWICH TWP, NJ		10.03	R-1
48	401 PETRONGOLO EVERGREEN PLANTATION	754 WEYMOUTH ROAD	HAMMONTON, NJ		47.45	R-1
49	2					R-1
50	2					R-1
50	4 BUTLER, MARTHA	304 FRANKLINVILLE RD.	WOOLWICH TWP, NJ		14.55	R-1
55	1 GROPPENBACHER, @ NIKK HORNER	PO BOX 108	HARRISONVILLE NJ		79.3	R-1
55	3 VANDERGRACHT, TRACIE	240 FRANKLINVILLE RD.	WOOLWICH TWP, NJ		17.8	R-1
55	401 BUTLER, MARTHA	304 FRANKLINVILLE RD.	WOOLWICH TWP, NJ		15.54	R-1
55	402 HORNER, WILLIAM C	253 FRANKLINVILLE RD.	WOOLWICH TWP, NJ		9	R-1
55	7 DORSETT, LAWRENCE & ANN	169 RUSSELL MILL ROAD	WOOLWICH TWP, NJ		69.38	R-1
56	1 BUTLER, GLADYS G	170 RUSSELL MILL ROAD	WOOLWICH TWP, NJ		108.45	R-1
56	3 CARDILLO, RUSSELL ESTATE OF	52 SADDLEBROOK DRIVE	SEWELL, NJ		25.73	R-1
1	3 MACCARONE, SAMUEL	2200 OLDMANSCREBK RD	WOOLWICH TWP, NJ		123	R-2
1	4 CATALANO, SALVATORE & ETALS	216 PORCHES MILL ROAD	WOOLWICH TWP, NJ		140	R-2
1	501 SORBELLO, THOMAS EXECUTOR & ETALS	216 PORCHES MILL ROAD	SWEDENSBORO, NJ		28.02	R-2
1	6 VSWOOLWICH, INC.	1200 OAKPOINT AVE	BRONX, NY		176.95	R-2
1	8 RIZZI, JOSEPH H & FLORENCE	2012 OLDMANSCREBK RD	WOOLWICH TWP, NJ		128.6	R-2
1	11 MAUGERI, ANNA R	1991 OLDMANSCREBK RD	WOOLWICH TWP, NJ	08085	10.5	R-2
2	10 WMP REALTY CO.	PO BOX 2170	BOOTHWYN, PA		79	R-2
2	11 WMP REALTY CO.	PO BOX 2170	BOOTHWYN, PA		12	R-2
2	12 MAUGERI, ANNA R	1991 OLDMANSCREBK RD	WOOLWICH TWP, NJ		95.2	R-2
2	13 NICCOLSI BROS	2063 OLDMANSCREBK RD.	WOOLWICH TWP, NJ		82.5	R-2
2	14 CATALANO, SALVATORE & ETALS	216 PORCHES MILL ROAD	WOOLWICH TWP, NJ		15.85	R-2
2	15 CATALANO, SALVATORE & ETALS	216 PORCHES MILL ROAD	WOOLWICH TWP, NJ		68.55	R-2
2	16 CJR REALTY CO	P O BOX 2170	BOOTHWYN, PA		46.2	R-2
2	18 MARINO, RUSSELL S & ETALS	1211 ELDERON DRIVE	WILMINGTON, DE		33.27	R-2
2	23 DESTEFANO, EDWARD & KATHUNE	1276 TOWNSHIP LINE RD.	WOOLWICH TWP, NJ		55.38	R-2
11	1 MACCARONE, SAMUEL	341 STONE MTG. HOUSE RD.	WOOLWICH TWP, NJ		34.45	R-2
12	6 VIERBECK, LARRY E & DAVID W	110 VIERBECK ROAD	WOOLWICH TWP, NJ		4	R-2
13	202 VIERBECK, LARRY E & DAVID W	110 VIERBECK ROAD	WOOLWICH TWP, NJ		11.95	R-2
13	3 RACITE, DOMINIC	119 CENTER SQUARE ROAD	LOGAN TWP, NJ		20	R-2
13	4 SARBELLO, ROSE M & JOSEPH ETAL	80 PANCOAST ROAD	WOOLWICH TWP, NJ		17.65	R-2
13	5 BELFIORE @ C EASTLACK	361 PAULSBORO ROAD	WOOLWICH TWP, NJ		7.95	R-2
14	13 STILES, LYNNEH & ETALS	388 GRIECON DRIVE	SALEM, NJ		79	R-2
14	5 SANDY HILL FARMS @ C EASTLACK	361 PAULSBORO ROAD	WOOLWICH TWP, NJ		6.28	R-2
14	501 SANDY HILL FARMS @ C EASTLACK	361 PAULSBORO ROAD	WOOLWICH TWP, NJ		32.82	R-2
14	503 BELFIORE @ C EASTLACK	361 PAULSBORO ROAD	WOOLWICH TWP, NJ		4.29	R-2

**Table 1
Sending Area Parcels—Part 3**

Block Lot	Owner	Owner Address	City	Acres	Zoning
14	6.02 FARIAS, LADISLAW & MAUREEN	439 PAULSBORO ROAD	WOOLWICH TWP, NJ 08085	15.42	R-2
14	9 MUSUMECI, PETER & RENARD	447 PAULSBORO ROAD	WOOLWICH TWP, NJ	7.65	R-2
14	12				R-2
17	6 GAROZZA, CATHERINE	140 MILL ROAD	WOOLWICH TWP, NJ	60.25	R-2
19	1 PREVITERA, ALFID & CATHLEEN	191 MILL ROAD	WOOLWICH TWP, NJ	31	R-2
19	2 GIESCHEN, DANIEL D & ALISON V	382 ASBURY STATION ROAD	WOOLWICH TWP, NJ	7.49	R-2
19	4 GAROZZA, CATHERINE MRS	140 MILL ROAD	WOOLWICH TWP, NJ	34.8	R-2
20	1 GARDNER, PHILIP	410 MULLICA HILL RD	GLASSBORO, NJ	32.82	R-2
20	3 CURIALE, ANTHONY & CHRISTINA	369 ASBURY STATION RD	WOOLWICH TWP, NJ	16	R-2
20	4 HELM, WM W & EILEEN	15 MILL ROAD	WOOLWICH TWP, NJ	42.7	R-2
20	6 HELM, WM W & EILEEN	15 MILL ROAD	WOOLWICH TWP, NJ	23	R-2
21	1 KING'SVIEW ESTATES LLC	700 LANTERN WAY	SEWELL, NJ	45.2	R-2
21	2 KING'SVIEW ESTATES LLC	570 MANTUA BLVD	SEWELL, NJ	13	R-2
21	3 KING'SVIEW ESTATES LLC	700 LANTERN WAY	SEWELL, NJ	15.3	R-2
21	4 KING'SVIEW ESTATES LLC	700 LANTERN WAY	SEWELL, NJ	55.6	R-2
21	5 BBER, ERNEST JR. & ELINOR	825 KINGS HIGHWAY	MIDDLETON, N J	13	R-2
24	2 WMP REALTY, CO.	PO BOX 2170	BOOTHWYN, PA	23.62	R-2
24	4.14 MERCER, CHRISTOPHER T & TIFFANY C	22 VICTORIA DRIVE	WOOLWICH TWP, NJ	10.09	R-2
28	1 WMP REALTY CO	PO BOX 2170	BOOTHWYN, PA	41.62	R-2
54	3 LAUGHLIN JR, JOSEPH D & JOANN	PO BOX 37	SWANEBORO, NJ 08085	15.66	R-2
54	9.01 THOMAS, WILBERT A III & MARGUERITE	110 FRANKLINVILLE RD	WOOLWICH TWP, NJ 08085	10.2	R-2
57	7 CAVALLARO, ALFRED L, ETAL	167 COUNTY HOUSE ROAD	MT ROYAL, NJ 08061	17.17	R-2
1	2 MAUGERI, ANNA R	1991 OLD MANS CREEK RD	WOOLWICH TWP, NJ	76.4	R-3
5	5 AG LAND LLC	PO BOX 69	SWANEBORO, NJ	9.7	R-3
5	6 WRIGHT, ROGINA	223 HIGH HILL ROAD	WOOLWICH TWP, NJ 08085	64.85	R-3
5	6.05 FARE, CHARLES J. SR., & CAROLL	231 HIGH HILL ROAD	WOOLWICH TWP, NJ 08085	10.79	R-3
5	6.05 VILLANOVA, KENNETH R JR & SUSAN	233 HIGH HILL ROAD	WOOLWICH TWP, NJ 08085	10.12	R-3
25	5 MOXLEY, MILTON R & ELMA L	2061 KINGS HIGHWAY	WOOLWICH TWP, NJ	7.63	SAC
26	1 ARROYO, EFRAIN, JR. & NERBIDA	2027 OLD MANS CREEK ROAD	WOOLWICH TWP, NJ 08085	22.6	SAC
36	4 SCHMIDT, FRANCES & DONALD	600 WOODSTOWN ROAD	WOOLWICH TWP, NJ	17	SAC
36	5 HARGRAVE, JAMES D	20 OUP HANTS MILL ROAD	WOOLWICH TWP, NJ 08085	30.6	SAC
36	10 SCHMIDT, FRANCES & DONALD ETALS	600 WOODSTOWN ROAD	WOOLWICH TWP, NJ 08085	11.93	SAC

Total

R-1 TOTAL
R-2 TOTAL
R-3 TOTAL
SAC TOTAL
GRAND TOTAL

Acres

1665.6
1889.1
171.9
89.8
3617

Table 2 Receiving Area Parcels--Part 1

Route 322 Receiving Area #1--West of Turnpike

Block Lot	Owner	Owner Address	City	Acres	Zoning
10	2 RODE, JR EARL C & ELAINE	PO BOX 219	Swedesboro	2.4	FCC
10	3 OTTO C RODE, INC.	PAULSBORO ROAD PO BOX 219	Swedesboro	25.13	FOC
10	4 TOMAC LIMITED PARTNERSHIP	1940 TREADWELL TERRACE	The Villages, FL	30.64	FCC
10	5 CALTABIANO, SALVATORE A & MARGARET	48 GARWIN ROAD	Swedesboro	20.69	FCC
10	5.01 CALTABIANO, SALVATORE A & MARGARET	48 GARWIN ROAD	Swedesboro	6	FCC
10	5.02 CALTABIANO, ALFRED J II	10 GARWIN ROAD	Swedesboro	1	FCC
10	5.03 CALTABIANO, STEVEN M & BRENDA L	312 CARSON AVE	Gibbstown	3.68	FCC
10	6 NANAKAUTO FUEL INC.	111 S FOX FORD LANE	Mullica Hill	1.199	FCC
10	6.01 RODE, JR. EARL C. INC.	533 KINGS HIGHWAY	Swedesboro	3.097	FCC
10	7 RODE, WILLIAM OTTO	19 PAULSBORO ROAD	Swedesboro	0.51	FCC
11	8 STECHER, RAYMOND & JACQUELINE	895 BRIDGETON PIKE	SEWELL	5	FCC
11	6.01 MUSUMECI, JOSEPH J & ANNE	2115 US 322	WOOLWICH TWP	6.19	FCC
11	6.02 MUSUMECI, JOSEPH J JR & ROSELLA M	242 OAK GROVE ROAD	Swedesboro	1.854	FCC
11	6.03 TWISS, HAROLD M & LINDA	248 OAK GROVE ROAD	Swedesboro	4.28	FCC
11	7 MUSUMECI, JOSEPH J & ANNE M	2115 US 322	WOOLWICH TWP	2.09	FCC
11	8 STECHER, RAYMOND & JACQUE			1	FCC
12	1 NANAKAUTO FUEL INC	23 EAGLE DRIVE	GLASSBORO	1.04	FCC
12	2 WOOLWICH DEVELOPMENT COMPANY LLC	6 BLUE SPRUCE LANE	Swedesboro	18	FCC
12	3 MADDEN, WILLIAM J	695 TOMLIN STATION ROAD	MULLICA HILL	40.3	FCC
12	3.01 KURICHI, JASON G & JISBY E	2961 RT 322	WOOLWICH TWP	1	FCC
12	3.02 CRISP, CHRISTINA E.	PO BOX 999	Mullica Hill	1	FCC
12	4.01 MUSUMECI, PAUL N & GIUSEPPINA	231 OAK GROVE ROAD	Swedesboro	1	FCC
14	1.01 RUSHYON, ROBERT	1198 BALTIMORE PIKE	Springfield, PA	3.374	FCC
14	1.02 JUSTICE, GILBERT L JR	4450 N 50 W	Angola, IN	3.23	FCC
14	1.03 SANDY HILL FARMS @C EASTLACK	361 PAULSBORO ROAD	Swedesboro	1.328	FCC
14	1.04 JUSTICE JR, GILBERT L	4450 N 50 W	Angola, IN	1.67	FCC
14	1.05 JUSTICE JR, GILBERT L	4450 N 50 W	Angola, IN	1.85	FCC
14	1.06 JUSTICE, JR, GILBERT L	4450 N 50 W	Angola, IN	1.81	FCC
14	1.07 OAKWOOD CAPITAL, L.L.C.	2780 SKYPARK DR STE 460	Torrance, CA	1.48	FCC
14	1.08 OAKWOOD CAPITAL, L.L.C.	2780 SKYPARK DR STE 460	Torrance, CA	1.55	FCC
14	1.09 OAKWOOD CAPITAL, L.L.C.	2780 SKYPARK DR STE 460	Torrance, CA	2.91	FCC
14	1.1 OAKWOOD CAPITAL, L.L.C.	2780 SKYPARK DR STE 460	Torrance, CA	1.44	FCC
14	1.11 OAKWOOD CAPITAL, L.L.C.	2780 SKYPARK DR STE 460	Torrance, CA	1.92	FCC
14	1.12 RUSHYON, ROBERT	1198 BALTIMORE PIKE	Springfield, PA	2.91	FCC
14	14 BERNARD VENTURES, INC.	PO BOX 460	Swedesboro	10	FCC
14	15 RUSHYON, ROBERT C JR & DOROTHY M	739 BARRY DRIVE	Springfield, PA	5	FCC
14	15.01 CASELLA, SAMUEL & ROSE MARY	131 RULON ROAD	Swedesboro	0.74	FCC
14	16 CASELLA BROS SONS INC	PO BOX 35	Swedesboro	2.3	R-2
14	17 PAYNE, NAOMI MRS	P.O. BOX 342	Swedesboro	54	R-2
14	2 UNITED STATES OF AMERICA	WASHINGTON	D C	33.17	FCC
14	3 MUSUMECI, JOSEPH & HELEN	RD#1 PAULSBORO SWEDESBORO	SWEDESBORO	69.5	R-2
14	3.01 LANG, MARCUS P & JENNIFER A	301 PAULSBORO ROAD	Swedesboro	1.08	R-2
14	3.02 MUSUMECI, JOSEPH & HELEN	RD#1 PAULSBORO SWEDESBORO	SWEDESBORO	1.26	R-2
14	5.01 SANDY HILL FARMS @C EASTLACK	361 PAULSBORO ROAD	Swedesboro	14.13	R-2
14	5.02 DOPPLER, JUSTIN D	347 PAULSBORO ROAD	Swedesboro	1.18	R-2
15	2 WOOLWICH DEVELOPMENT CO LLC	6 BLUE SPRUCE LN	Swedesboro	11.6	FCC
15	3 STOUCH, SANDRA M	81 NORTH RAILROAD AVENUE	PEDRICKTOWN	1.325	R-2
15	3.01 LIPPINCOTT, ROBERT T & MARGARET W	118 GARWIN ROAD	Swedesboro	1	R-2
15	3.02 LIPPINCOTT, RICHARD T & JANE S	122 GARWIN ROAD	Swedesboro	1	R-2
15	1 DE CAMELUS, CARMINE & JILL	11 GARWIN ROAD	Swedesboro	1	FCC
15	2 DILKE, PAMELA S	19 GARWIN ROAD	Swedesboro	0.5	FCC
15	4 JUNK, RONALD D & VICKI U TDV	373 KINGS HIGHWAY	Swedesboro	1.93	FCC

**Table 2
Receiving Area Parcels--Part 2**

16	4.01 LEE, KANG	27 GARWIN ROAD	WOOLWICH TWP	0.93	FOC
16	5 CLENDINING INV LLC & VIERECK LLC	51 VIERECK ROAD	SweDESboro	19	FOC
57	1 NOT LISTED				FOC
57	2 ELWELL, LAWRENCE & IRMA	12 BACK CREEK ROAD	SweDESboro	1.6	FOC
57	2.01 MAGAZU, MARK F & CAROL	396 KINGS HIGHWAY	SweDESboro	1	FOC
57	3 MAGAZU, MARK F & CAROL Y	396 KINGS HIGHWAY	WatwIch TownshIp	28.85	FOC
57	3.01 MAGAZU, MARK F & CAROL Y	396 KINGS HIGHWAY	SweDESboro	8.09	FOC
57	3.02 CALTABIANO, ALFRED S III & ALISON	300 KINGS HIGHWAY	WOOLWICH TWP	1.5	FOC
6	5 MATLACK ESTATE C/O IRV SHEPHERD JR	151 WITHEROW RD	Sewickley, PA	31.15	FOC
6	6 SAVOY, JOHN R & PATRICIA A	PO BOX 339	Claymont, DE	35.75	FOC
7	4 MADMIK LANDSCAPE SUPPLY LLC	251 LOCKE AVENUE	WOOLWICH TOWNSHIP	6.074	FOC
7	4.01 LOCKE PARTNERS LLC	74 MAIN STREET	Bridgeport	23.863	FOC
7	4.02 MADMIK LANDSCAPE SUPPLY,			4.254	FOC
7	5 BONACCORSI, JOHN	2020 US 322	WOOLWICH TWP	43.94	FOC
7	5.01 WWA, INC.	260 W BALTIMORE PIKE	Media, PA	1.99	FOC
8	1 BARBAGALLO, CHERYL	909 RUSSELL MILL RD	WOOLWICH TWP	2	FOC
8	10 VESUVIO PROPERTY LLC	40 GLEN ECHO AVENUE	SWEDESBORO	0.4	FOC
8	2 RODE, OTTO C INC	PO BOX 219	SweDESboro	4.01	FOC
8	3.01 EYRE, DONALD R JR & JANE	13 TALNTON ROAD	Medford	0.38	FOC
8	4 RODE, JEAN M	PO BOX 219	SWEDESBORO	0.17	FOC
8	5 RODE, DAVID E	PO BOX 219	SweDESboro	0.38	FOC
8	6 RODE, EARL JR	PO BOX 219	SweDESboro	0.11	FOC
8	7 RODE, JR EARL C & ELAINE	PO BOX 219	SweDESboro	0.27	FOC
8	8 REISENWEAVER, ROY A & WENDY J	14 PAULSBORO ROAD	SweDESboro	0.15	FOC
8	9 OTTO C RODE, INC.	PAULSBORO ROAD PO BOX 219	SweDESboro	0.8	FOC
9	1 WALSH, JOHN J	83 PAULSBORO ROAD	SweDESboro	1.03	FOC
9	2 BONACCORSI, MARY & CARMELA	2020 US 322	WOOLWICH TWP	1	FOC
9	3 SOLDA, JACKLYN R	99 PAULSBORO ROAD	SweDESboro	1.62	FOC
9	4 MACCARONE, CONCETTA & ROSARIA	105 PAULSBORO ROAD	SweDESboro	3	FOC
9	5 SANDY HILL FARMS @ C EASTLACK	301 PAULSBORO ROAD	SweDESboro	5.5	FOC
9	5.01 BELFIORE @ C EASTLACK	301 PAULSBORO ROAD	SweDESboro	1	FOC
9	6 PULLIAM, DR JOHN JR	430 VIRGINIA AVE.	Calvin	3.5	FOC
Total				646.51	

Route 322 Receiving Area #1--East of Turnpike

Block Lot	Owner	Owner Address	City	Acres	Zoning
59	5 NEW JERSEY TURNPIKE AUTHORITY	PO BOX 1121	New Brunswick	1	FOC
59	6 STEWARD, JONATHAN MOORE & ROBIN L	1082 US 322	WOOLWICH TWP	1	FOC
59	6.01 STEWARD, HARRY R & JUDITH	1050 US 322	WOOLWICH TWP	6.13	FOC
59	6.02 STEWARD, HARRY R & JUDITH	1050 US 322	WOOLWICH TWP	7	FOC
59	7 TUTING, HENRY	304 BACK CREEK ROAD	SweDESboro	0.96	FOC
59	8 STEWARD, HARRY R & JUDITH	1050 US 322	WOOLWICH TWP	42.5	FOC
59	10 LEONE, JOSEPH A	299 JESSUP MILL RD	CLARKSBORO	12.2	FOC
62	1 NEW JERSEY TURNPIKE AUTHORITY	PO BOX 1121	New Brunswick	7.1	FOC
62	2 STEWARD, HARRY R & JUDITH	1050 US 322	WOOLWICH TWP	17.4	FOC
62	3 NOT LISTED			1.2	FOC
Total				96.51	

Auburn Road Receiving Area #2

Block Lot	Owner	Owner Address	City	Acres	Zoning
2	9 WMP REALTY CO	PO BOX 2170	Boothwyn, PA	125	R-3

SENDING & RECEIVING AREA ZONING

Sending Area

Zoning in the Sending Area includes four classifications: R-1; R-2; R-3; and 5AC. The 3,817 acres of the sending area are divided among these four classifications in this manner:

•	R-1	1,667 acres
•	R-2	1,889 acres
•	R-3	172 acres
•	5AC	90 acres

All four zoning classifications limit allowable uses to single-family detached dwellings; agriculture, horticulture, farmhouses, farm buildings, farm markets, and related uses; certain community residences; public and nonprofit park & recreation facilities; and Township buildings. As conditional uses, the R-1, R-2, and R-3 classifications allow for schools, libraries, museums, and certain utility facilities. The maximum allowed densities are:

•	R-1	0.50 dwelling units per acre
•	R-2	0.66 dwelling units per acre
•	R-3	2.17 dwelling units per acre
•	5AC	0.20 dwelling units per acre

The parcels zoned R-3 within the Sending Area are outside of the sewer service area; under this circumstance, zoning requires R-2 density, even though the parcel is within a R-3 district. More detailed descriptions of these allowable uses and other applicable portions of the Zoning Code for the Township of Woolwich are attached as Appendix 1. Proposed Zoning Code changes can be found in the *Woolwich Township Zoning Regulations and Design Standards*.

Route 322 Receiving Area #1

Zoning in the Route 322 Receiving Area #1 includes two classifications: R-2 and FOC. The 743 acres of this receiving area are divided among these two classifications in this manner:

•	R-2	147 acres
•	FOC	596 acres

The uses and densities allowed in classification R-2 are detailed above. The FOC classification allows offices; banks; certain amusement, recreation and leisure uses; business and household service uses including repair shops for business equipment, appliances, and the shops of tradesmen such as plumbers and electricians; and warehouse, distribution, and light manufacturing uses, provided that they are located at least 400 feet from the right-of-way of U.S. Route 322. As conditional uses, the FOC classification allows for auto dealerships, telecommunications towers, libraries, museums, certain

utility facilities, and automobile service stations and repair facilities. The maximum allowed floor-to-area ratio is .15, resulting in maximum development of 6,534 SF per acre.

Auburn Road Receiving Area #2

The 125-acre parcel in the Auburn Road Receiving Area #2 is zoned R-3, allowing for single-family detached dwellings; agriculture, horticulture, farmhouses, farm buildings, farm markets, and related uses; certain community residences; public and nonprofit park & recreation facilities; and Township buildings. As conditional uses, the R-3 classifications allow for schools, libraries, museums, and certain utility facilities. The maximum allowed density is 2.17 dwelling units per acre provided that sewer service is available.

COMMUNITY TRENDS

Woolwich Township is a rapidly growing community in Gloucester County which currently faces strong development pressures. Population in the 1990s grew from 1,459 to 3,032, a 108% increase. Similarly, housing development increased the total housing units from 498 to 1,026, a 106% increase. Most of that growth occurred in the 1997-1999 period when 385 building permits for single-family homes were issued (see Table 3). Since 2000, Woolwich has issued building permits for 2,007 units, tripling the size of the community in six years and totaling a sixfold increase since 1990. Development pressures are illustrated on Map 2.

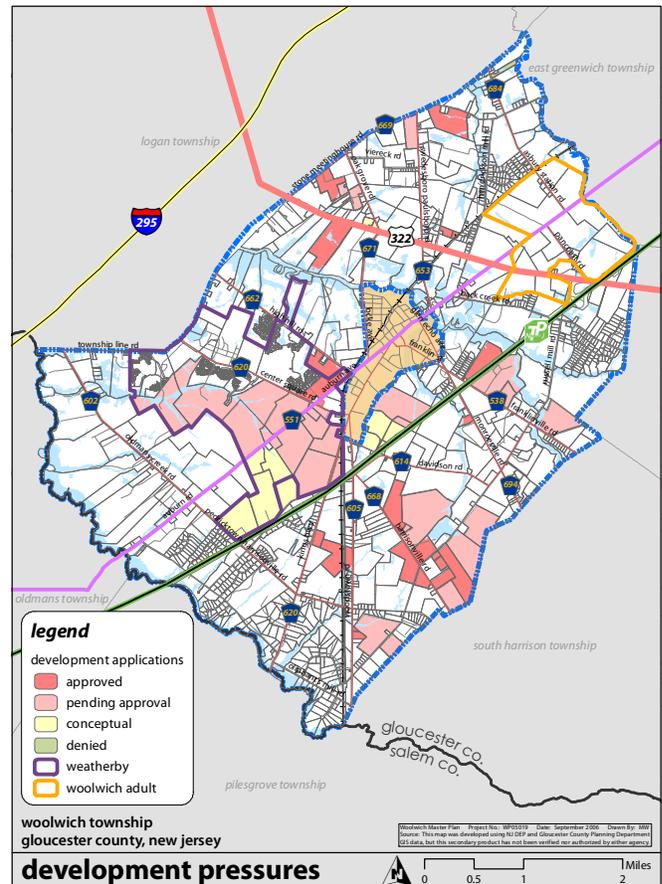


Table 3
Building Permit Activity

Year	Woolwich Permits Single-Family	Woolwich Permits Multi-Family	Gloucester County Permits Single-Family	Gloucester County Permits Multi-Family	Woolwich As Percent Of Gloucester County Single-Family	Woolwich As Percent Of Gloucester County Multi-Family
1996	32		1,018	39	3.14%	0.00%
1997	88		1,151	16	7.65%	0.00%
1998	83		1,238	128	6.70%	0.00%
1999	214		1,310	217	16.34%	0.00%
2000	225		1,294	43	17.39%	0.00%
2001	259		1,338	297	19.36%	0.00%
2002	342		1,689	113	20.25%	0.00%
2003	200		1,560	299	12.82%	0.00%
2004	285	229	1,638	412	17.40%	55.58%
2005	387		1,882	193	20.56%	0.00%
2006 (8 mo.)	80		793	39	10.09%	0.00%
Total	2,195	229	14,911	1,796	14.72%	12.75%
Since 2000	1,778	229	10,194	1,396	17.44%	16.40%
Average Since 2000	267	34	1,529	209		

Source: New Jersey Department of Labor; Urban Partners

In 2000, 73% of the housing stock in Gloucester County and 99% of housing in Woolwich was single-family detached units (see Table 4). By tenure, 80% of Gloucester County households were owner-occupants; 20% were renters. For Woolwich, 92% were owner-occupants; 8% renters.

Table 4
Housing Stock--2000

Housing Type	Woolwich Total	Woolwich Owner-Occupied	Woolwich Renter-Occupied	Woolwich Vacant	Gloucester County Total	Gloucester County Owner-Occupied	Gloucester County Renter-Occupied	Gloucester County Vacant
Single Family Detached	1,014	879	68	67	69,213	63,126	3,917	2,170
Townhomes or Twins					7,147	5,281	1,597	269
Duplexes	8	4	4		2,650	498	2,120	232
Multi-Family					13,081	1,435	10,311	1,335
Mobile Home & Vehicle	4	4			2,763	2,142	290	331
Total	1,026	887	72	67	95,054	72,482	18,235	4,337

Nearly 50% of this recent development has occurred in the planned Weatherby development. At full buildout, this planned community projects a total of 4,500 housing units. To date, the development is one-quarter built-out, with 80% of those units being single-family detached dwellings. The remaining 50% of new housing have been constructed on large lots (one to two acres) in small developments scattered throughout the Township. As of 2006, the estimated population is 7,560 in 3,030 housing units.

Housing growth averaged 53 units annually in the 1990s, accelerating to an average of 301 units annually since 2000. The peak year for building permits was 2004 with 514 units—285 single family homes Township-wide and 229 townhomes and garden apartments in Weatherby. There has been some development slowdown recently as higher interest rates have slowed housing development.

Since 2000, residential development in Woolwich Township has represented about one-sixth of all residential development in Gloucester County, both for single-family homes and for multi-family development. There has been little experience in Gloucester County with twins. Townhomes and other non-single-family detached housing have represented 12% of residential building permits in Gloucester County since 2000 and townhomes (new and existing product together) have been 4% to 5% of all home sales in the County over the past four years.

The Township's population and housing forecasts anticipate that the recent housing development slowdown will last only from 2006 to 2008, with demand growing again after 2008.

Current and future development plans anticipate three market segments in Woolwich—(1) larger unit singles & twins; (2) smaller unit townhomes, flats, and apartments; and (3) active adult and senior housing. Recent sales patterns and growth forecasts suggest demand for 200 units of the single-family & twin housing type in slow growth years (2006 to 2008) and 300 units annually thereafter.

Active adult and senior housing products are only now being introduced in Woolwich. The Weatherby development includes 1,000 units of active adult housing in the Four Seasons by K. Hovnanian and also shows plans for 500 senior units. The Township's settlement with Woolwich Adult LLC provides for 925 units of age-restricted housing units and 104 affordable senior units. The first of these products are now being introduced; others will not become available for several years (most likely after 2012).

Absent any substantial experience with this product in Woolwich, estimates of absorption are speculative. However, the current and proposed developers are nationally prominent and have successful track records with this product. Typically, individual active adult developments achieve absorption of 50 to 100 units annually. The first sales of the Four Seasons product matched this expectation: the initial sales was recorded in January, 2005, while, in the first nine months of that year, 68 units were sold, a pace of roughly 90 units annually. At this pace, the Four Seasons absorption should result in full buildout by 2015. The other planned active adult and senior developments totaling more than 1,500 units may be expected to continue construction through 2025.

Smaller-unit townhome and flat development are also new products in Woolwich. Weatherby has undertaken townhome sales and some rental units with a building permit for 229 units issued in 2004. Based on the overall experience of Gloucester County, we would expect 25% of all residential development to be in these unit types; of this total, 40% to 50% would likely be sales units and 50% to 60% rental product.

Taking these anticipated absorption rates together, we forecast total buildout for Woolwich of nearly 9,600 additional housing units in the 2006 through 2029 period (see Table 5). This buildout will include 4,050 units of single-family detached homes and twins, 2,440 units of active adult and senior housing, and 3,100 units of townhomes and flats. The remaining capacity of the Weatherby development will accommodate 3,450 of these units; 1,385 are expected to be located in other scattered sites throughout the Township; 1,029 active adult and senior COAH units will be included in the Woolwich Adult LLC parcels; and the remaining 3,720 units are anticipated to be located in the two designated receiving areas—3,220 in the Route 322 Receiving Area #1 and 500 in the Auburn Road Receiving Area #2.

Total absorption is expected to peak at approximately 600 units per year in the 2009 to 2018 period when multiple products are being marketed at Weatherby, Woolwich Adult LLC, the Receiving Areas, and at a few other residual locations throughout the Township. During these peak years, Woolwich will be absorbing approximately 25% to 30% of all new residential development in Gloucester County—compatible with 2004 when Woolwich developments were 25% of new Gloucester County residential development.

Based on these forecasts, all other sites in the Township will be fully built out by 2019—only the Receiving Areas and the Woolwich Adult LLC site will have remaining capacity. Total unit absorption in the Receiving Areas is anticipated to be 220 units annually beginning in 2012, peaking at 400 to 450 units annually in 2018 and 2019, and then declining to approximately 130 units annually through 2029.

**Table 5
Housing Buildout Forecast
Receiving Areas**

Year	Woolwich Total Housing Absorption	Woolwich SFR & Twin Housing Absorption	Woolwich Active Adult/Senior Housing Absorption	Woolwich Townhome/Flats Housing Absorption	Other Sites Total Housing Absorption	Other Sites SFR & Twin Housing Absorption	Other Sites Active Adult/Senior Housing Absorption	Other Sites Townhome/Flats Housing Absorption	Receiving Areas Total Housing Absorption	Receiving Areas SFR & Twin Housing Absorption	Receiving Areas Townhome/Flats Housing Absorption
2006	290	200	90		290	200	90				
2007	390	200	90	100	390	200	90	100			
2008	390	200	90	100	390	200	90	100			
2009	590	300	140	150	590	300	140	150			
2010	590	300	140	150	590	300	140	150			
2011	590	300	140	150	590	300	140	150			
2012	630	300	170	160	410	200	170	40	220	100	120
2013	630	300	170	160	410	200	170	40	220	100	120
2014	635	300	175	160	415	200	175	40	220	100	120
2015	635	300	175	160	375	200	175		260	100	160
2016	610	300	150	160	350	200	150		260	100	160
2017	610	300	150	160	300	150	150		310	150	160
2018	610	300	150	160	150	150	150		460	300	160
2019	530	300	100	130	100	100	100		430	300	130
2020	380	150	100	130	100	100	100		280	150	130
2021	230		100	130	100	100	100		130		130
2022	230		100	130	100	100	100		130		130
2023	230		100	130	100	100	100		130		130
2024	230		100	130	100	100	100		130		130
2025	140		10	130	10		10		130		130
2026	130			130					130		130
2027	130			130					130		130
2028	130			130					130		130
2029	30			30					30		30
Total	9,590	4,050	2,440	3,100	5,860	2,650	2,440	770	3,730	1,400	2,330

Source: Urban Partners

RECEIVING ZONE ANALYSIS

As noted above, the proposed Receiving Zone includes two separate Receiving Areas: Route 322 Receiving Area #1 located along the Route 322 Corridor with 743 acres and Auburn Road Receiving Area #2 located along Auburn Road just south of the Weatherby planned development with 125 acres.

Route 322 Receiving Area #1

Route 322 Receiving Area #1 includes 147 acres of R-2 zoned land and 596 acres of FOC zoned land. Terrain in this Receiving Area #1 is flat and the boundaries of the Receiving Area have been drawn to exclude all environmentally sensitive areas adjacent to the Zone. Maximum buildout under this current zoning would allow for 90 to 100 units of single-family housing in the R-2 zoned area and up to 3.89 million square feet of commercial space in the FOC zoned area. 73% of the land is currently used for agriculture and various forms of open space; 14% is in light commercial use; 6% is public use related to the New Jersey Turnpike & the Nike site; and 7% (51 acres) is in residential use.

Zoning of the Code of the Township of Woolwich, NJ was adopted in 1992. According to the Township Clerk, the R2 zoning district was established at that time. Since then, district regulations have undergone several minor changes via periodic amendments. Amendments in 2003 introduced the FOC zoning district, according to the municipal clerk. In 2003, the code was also amended to introduce a density bonus associated with conservation subdivisions (a form of cluster development) in the R2 zoning district. This provision was amended to the current ordinance by a 2005 amendment which eliminated the density bonus.

Auburn Road Receiving Area #2

Auburn Road Receiving Area #2 includes one 125-acre parcel of land zoned R-3. Terrain in this Receiving Area #2 is flat and the parcel does not appear to have any environmental limitations. Maximum buildout under this zoning would allow for 291 units of single-family housing and twins. The parcel is currently in agriculture and open space use.

Zoning of the Code of the Township of Woolwich, NJ was adopted in 1992. According to the Township Clerk, the R3 zoning district was established at that time. Since then, district regulations have undergone several minor changes via periodic amendments. Amendments in 2003 introduced the FOC zoning district, according to the municipal clerk. In 2005, conservation subdivisions (a form of cluster development) are now permitted in the R3 zoning district.

Recent Subdivision and Site Plan Activity

Table 6 provides a list of all subdivision and site plan applications that have been submitted to the Township for land in these two receiving areas since October 1, 2001, and describes the action taken by the Township on these applications. Four applications have been processed, all involving parcels in the western portion of the Route 322 Receiving Area #1. Three of these applications were for general commercial uses—a storage facility, an animal hospital, and a truck service facility. The fourth application was for a new larger-format Wawa convenience store and gas station.

Table 6: Woolwich Site Plan Applications in TDR Receiving Zones

Site Plan	Block	Lot	Sq. Ft.	Status
Ample Storage	14	15,16	99,365	Final Approval
Swedes Animal Hospital	57	3.01	5,225	Prelim Review
Liberty Kenworth	6	5	17,710	Final Approval
Wawa	9	5	5,740	Extension of Prelim & Final Approval granted in 2006

Recent Sales Activity

In the past four years there have been 12 recorded sales transactions involving land in the Route 322 Receiving Area #1 and no transactions within the Auburn Road Receiving Area #2 (see Table 7). Six of these transactions have involved homes or commercial property where the sales price appears to be based on continued use of the property as a home or business. All six of these properties are on parcels of one to one and one-half acres. The commercial building sold for \$730,000 in 2002, while the five homes sold for prices between \$112,000 and \$403,000 in 2004 and 2005.

The remaining six transactions involve sales of farmland. The most expensive transaction was purchase of a prime corner

Table 7
Recent Sales Transactions In Route 322 Receiving Area #1

Address	Owner	Owner Address	Current Use	Sale Price	Acres	Price/Acre	Sale Date
<i>Land Transactions</i>							
1004 Route 322	Joseph A. Leone	299 Jessups Mill Road	Clarksboro, NJ 08020	Farms	\$347,869	12.20	\$28,514 06/20/2003
1630 Route 322	John Pulliam	430 Virginia Ave.	West Collingswood, NJ 08107	Farms	\$500,000	3.50	\$142,857 12/03/2004
123 Paulsboro Road	Wawa, Inc.	260 W. Baltimore Pike	Media, PA 19063	Farms	\$1,600,000	5.50	\$290,909 12/28/2005
1601 Route 322	Woolwich Dev. Co. LLC	6 Blue Spruce Lane	Swedesboro, NJ 08085	Farms	\$750,000	11.60	\$64,655 01/30/2006
2021 Route 322	Woolwich Dev. Co. LLC	6 Blue Spruce Lane	Swedesboro, NJ 08085	Farms	\$1,260,000	18.00	\$70,000 01/30/2006
2062 Route 322	GLA Associates LLC	15B W. Highland Ave., 2nd Fl.	Philadelphia, PA 19118	Farms	\$900,000	6.07	\$148,270 06/08/2006
<i>Current Use Transactions</i>							
2011 Route 322	Nanak Auto Fuel, Inc.	111 S. Ford Road	Mullica Hill, NJ 08062	Commercial Building	\$730,000	1.04	\$701,923 06/27/2002
27 Garwin Road	Kang Lee	27 Garwin Road	Swedesboro, NJ 08085	SFR	\$290,000	0.93	\$311,828 04/01/2004
118 Garwin Road	Robert T. & Margaret W. Lippincott	118 Garwin Road	Swedesboro, NJ 08085	SFR	\$112,000	1.00	\$112,000 04/09/2004
2061 Route 322	Jaison G. & Jibby E. Kurichi	2061 Route 322	Swedesboro, NJ 08085	SFR	\$172,000	1.00	\$172,000 03/29/2005
347 Paulsboro Road	Justin D. Doppler	347 Paulsboro Road	Swedesboro, NJ 08085	SFR	\$330,000	1.16	\$284,483 07/29/2005
380 King's Highway	Alfred S. Caltabiano	380 King's Highway	Swedesboro, NJ 08085	SFR	\$403,200	1.50	\$268,800 09/06/2005

Source: Win2Data; Urban Partners

property for a new larger-format Wawa convenience store and gas station. This parcel includes 5.5 acres and sold for \$290,000 per acre at the end of 2005. Three transactions involving parcels between 6 and 18 acres occurred in 2006. Sales prices varied between \$65,000 and \$148,000 per acre.

DEVELOPMENT POTENTIAL FOR RECEIVING AREA PROPERTY

Route 322 Receiving Area #1

Route 322 Receiving Area #1 currently includes 147 acres of R-2 zoned land and 596 acres of FOC zoned land. A physical description of Receiving Area #1 is described in Section 7, the Route 322 Receiving Zone Chapter.

The development potential of the Route 322 Receiving Area #1 is strongly impacted by two factors: (1) the very strong housing demand which have been placing residential development pressure on Woolwich Township for more than a decade and (2) the excellent regional access afforded parcels in the Route 322 Receiving Area #1 by U.S. Route 322 traversing the area, the presence of an entrance/exit to I-295 one mile to the west, and especially the location of Exit 2 of the New Jersey Turnpike within the Receiving Area.

These factors strongly suggest that comparatively intense residential and retail development are the highest and best uses for land within this Receiving Area.

The attractiveness of these uses is borne out by the strong development interest in the residential and retail components of the Woolwich Adult LLC project that links the western and eastern portions of this Receiving Area.

Based on these planned adjacent uses, the extensive road network in place, and the extreme residential development pressures currently evident in Woolwich, this Receiving Area #1 is ideally situated for mixed-use (residential, retail, office/commercial) development. The mixed-use development combined with the transportation infrastructure is highly compatible with a center-based design as represented in the New Jersey State Plan.

Uses proposed for this Route 322 Receiving Area #1 under the proposed Transfer of Development Rights program include:

- 100 units of single-family detached housing
- 1,000 units of twins
- 1,617 units in townhomes, multi-family building flats, etc.
- 500 units in apartments or condominiums as part of mixed use buildings
- 250,000 SF of retail and/or office uses in the first floor of these mixed use buildings
- 2.6 million SF of retail, office, or flex use in commercial buildings.

As noted above, the projected overall housing demand for Woolwich Township through 2029 anticipates 9,600 additional housing units, including 4,050 units of single-family detached homes and twins, 2,440 units of active adult and senior housing, and 3,100 units of townhomes and flats. Within this forecast there is sufficient capacity for residential development in the Route 322 Receiving Area #1 of 1,100 units of single-family and twins and 2,120 units of townhomes, flats, and units above retail and office space.

The overall residential buildout forecast for Woolwich will add approximately 31,000 new residents by 2029 to the current estimate of 7,500. Purchases of retail goods and services by these 38,500 residents will support retailers occupying 1.5 million to 2.0 million SF of commercial space. 25% to 30% of this retail demand is likely to be met outside the Route 322 Corridor at other existing and proposed retail/commercial centers in Woolwich. Therefore, Route 322 Corridor sites are likely to capture 1.0 million to 1.5 million SF of this retail requirement over the next 20 years.

In addition, the regional access available in and near this Receiving Area #1 will make this an attractive location for retailers serving a broader regional marketplace. The proposed development of 1.0 million SF of large format retailing in the Woolwich Adult LLC parcels ("Woolwich Commons") is expected to establish the anchors to attract this larger retail shopping base. This regional shopping base could add 1.7 million to 2.5 million SF of retail development in the Route 322 Corridor, bringing total retail space demand in the Corridor to 2.7 million to 4.0 million SF.

The 1.6 million SF of retail development provided for in the Woolwich Adult LLC settlement is likely to capture the first large increments of this space demand. The Receiving Area #1 is the likely location for the second increments of retail development, which could support 1.1 million SF up to 2.1 million SF of retail space in the Receiving Area.

The remaining 500,000 SF to 1.5 million SF of commercial space available in the Receiving Area #1 will likely require office and/or flex users to fill this space. This property will be competing with 1.1 million SF of office/flex space provided for in the Woolwich Adult LLC settlement. To a great extent, zoning for this use in the Receiving Area #1 is similar to current and recent FOC zoned land in this area, for which demand has been slow. The greater variety of office environments available under the proposed Transfer of Development Rights zoning may modestly increase the attractiveness of this location for office users.

Based on this analysis and assuming the development patterns apparent in this portion of Gloucester County for the past decade remain in place, there appears to be sufficient residential, retail, and office/commercial demand to absorb the 3,217 residential units proposed for Receiving Area #1 during the 2012 through 2029 period. In addition, retail market conditions and the superior regional access available in the Route 322 Corridor should provide sufficient market to add 1.1 million to 2.1 million SF of retail space in the Receiving Area #1 during this same period. The market for the remaining 500,000 SF to 1.5 million SF of office/flex space will be no weaker than under current (pre-TDR) conditions.

Auburn Road Receiving Area #2

Auburn Road Receiving Area #2 includes one 125-acre parcel of land currently zoned R-3. Maximum buildout under this current zoning would allow for 195 units of single-family housing. A physical description of Receiving Area #2 is described in Section 8, the Auburn Road Receiving Zone Chapter.

The development potential of the Auburn Road Receiving Area #2 is strongly impacted by its immediate adjacency to the 4,500-unit Weatherby development. Weatherby has already seen absorption of 1,051 units in eight years in multiple housing products. Auburn Road Receiving Area #2 should benefit from similar market conditions.

These factors strongly suggest that moderately-dense residential development, supplemented by convenience retail services, is the highest and best use for land within this Receiving Area.

Uses proposed for this Auburn Road Receiving Area #2 under the proposed Transfer of Development Rights program include:

- 130 units of single-family detached housing
- 162 units of twins, of which 52 are through TDR and 110 are "by right" converted from 65 single-family detached units that could be constructed under previous zoning
- 210 units in townhomes
- 60,000 to 70,000 SF of retail or office in commercial buildings.

As noted above, the projected overall housing demand for Woolwich Township through 2029 anticipates 9,600 additional housing units. Within this forecast there is sufficient capacity for residential development in the Auburn Road Receiving Area #2 of 291 units of single-family and twins and 210 units of townhomes. The significant growth in retail demand from these new housing units will readily absorb 60,000 to 70,000 SF of convenience retail at this site.

Based on this analysis and assuming the development patterns apparent in this portion of Gloucester County for the past

decade remain in place, there appears to be sufficient residential and retail/commercial demand to absorb the 502 residential units proposed for Receiving Area #2 during the 2012 through 2029 period. This residential development will support the modest 60,000 SF to 70,000 SF of convenience retail space programmed for this Receiving Area #2.

SENDING ZONE ANALYSIS

As noted above, the proposed Sending Area includes 112 parcels (see Map 1). About half these parcels are located east of the New Jersey Turnpike; one quarter in the far northern portion of the Township abutting Logan & East Greenwich Townships; and one-fifth in the far western portion of the Township along either side of Oldman's Creek Road. These 112 parcels range in size from 4 to 177 acres and include a total of 3,817.3 acres.

The Sending Area includes 1,667 acres in R-1 zoning; 1,889 acres in R-2 zoning; 172 acres in R-3 zoning; and 90 acres in 5AC zoning. Table 8 analyzes these parcels in terms of their development potential. Based on current zoning, these 112 parcels could result in a maximum buildout of 1,950 units. However, preliminary assessment of soils and topography conditions on these parcels suggests that effective development potential will be reduced by these conditions to 1,283 units.

Land use in the Sending Area is currently agriculture and various forms of open space.

Zoning of the Code of the Township of Woolwich, NJ was adopted in 1992. According to the Township Clerk, the R1, R2, R3, Five Acre zoning districts were established at that time. Since then, district regulations have undergone several minor changes via periodic amendments. In 2003, the code was amended to introduce a density bonus associated with conservation subdivisions (a form of cluster development) in the R1 and R2 zoning districts. This provision was amended to the current ordinance by a 2005 amendment which eliminated the density bonus. Conservation subdivisions are also now permitted in the R3 zoning district.

Recent Subdivision and Site Plan Activity

Table 9 provides a list of all subdivision and site plan applications that have been submitted to the Township for land in the Sending Area since October 1, 2001, and describes the action taken by the Township on these applications. Eight applications have been processed, all during the past two years. All of these applications were for residential

Table 8
Sending Area Development Potential

Block	Lot	Zoning	Acres	Net Acres*	Zoning	Soil Constraint	Block	Lot	Zoning	Acres	Net Acres*	Zoning	Soil Constraint
					Unit Yield	Unit Yield						Unit Yield	Unit Yield
14	28	R-1	13.00	11.44	6	3	1	4	R-2	140.00	123.20	82	51
14	29	R-1	5.32	4.68	2	0	1	5.01	R-2	28.02	24.66	16	15
14	30	R-1	16.75	14.74	7	3	1	6	R-2	176.96	155.72	104	47
31	3.01	R-1	50.06	44.05	22	18	1	8	R-2	128.60	113.17	75	33
31	4	R-1	61.71	54.30	27	18	1	11	R-2	10.50	9.24	6	4
31.01	12	R-1	14.81	13.03	7	3	2	10	R-2	79.00	69.52	46	36
38	4	R-1	66.38	58.41	29	21	2	11	R-2	12.00	10.56	7	6
38	5	R-1	11.45	10.08	5	3	2	12	R-2	95.20	83.78	56	37
39	1	R-1	10.08	8.87	4	4	2	13	R-2	82.50	72.60	48	29
39	2	R-1	13.54	11.92	6	5	2	14	R-2	15.86	13.96	9	6
39	3	R-1	12.82	11.28	6	5	2	15	R-2	68.55	60.32	40	19
39	4	R-1	15.48	13.62	7	7	2	16	R-2	46.20	40.66	27	20
39	5	R-1	19.00	16.72	8	8	2	18	R-2	33.27	29.28	20	8
40	12	R-1	25.36	22.32	11	5	2	23	R-2	55.38	48.73	32	15
40	14	R-1	69.59	61.24	31	16	11	1	R-2	34.46	30.32	20	9
41	1	R-1	46.73	41.12	21	16	12	6	R-2	47.00	41.36	28	27
41	8	R-1	42.65	37.53	19	9	13	2.02	R-2	11.96	10.52	7	6
42	2	R-1	34.10	30.01	15	13	13	3	R-2	20.00	17.60	12	9
42	2.03	R-1	15.92	14.01	7	6	13	4	R-2	17.66	15.54	10	9
43	10	R-1	37.39	32.90	16	9	13	5	R-2	7.96	7.00	5	5
43	3	R-1	15.12	13.31	7	0	14	13	R-2	79.00	69.52	46	33
43	5	R-1	9.64	8.48	4	1	14	5	R-2	6.28	5.53	4	4
43	13	R-1	126.79	111.58	56	59	14	5.01	R-2	32.82	28.88	19	16
43	14	R-1	1.00	0.88			14	5.03	R-2	4.29	3.78	3	3
44	7	R-1	55.12	48.51	24	21	14	6.02	R-2	15.42	13.57	9	9
44	8	R-1	62.26	54.79	27	38	14	9	R-2	7.65	6.73	4	4
44	8.02	R-1	31.89	28.06	14		14	12	R-2				30
46	3.01	R-1	77.61	68.30	34	10	17	6	R-2	60.25	53.02	35	21
46	6	R-1	30.43	26.78	13	1	19	1	R-2	31.00	27.28	18	3
46	8	R-1	26.09	22.96	11	3	19	2	R-2	7.49	6.59	4	2
46	9	R-1	17.67	15.55	8	3	19	4	R-2	34.80	30.62	20	7
46	9.01	R-1	16.33	14.37	7	4	20	1	R-2	32.82	28.88	19	3
46	11	R-1	40.39	35.54	18	16	20	3	R-2	16.00	14.08	9	2
46	12	R-1	5.42	4.77	2	2	20	4	R-2	42.70	37.58	25	15
46	12.01	R-1	17.47	15.37	8	7	20	6	R-2	23.00	20.24	13	7
47	2	R-1	27.61	24.30	12	11	21	1	R-2	46.20	40.66	27	24
47	2.01	R-1	10.89	9.58	5	5	21	2	R-2	13.00	11.44	8	1
47	4	R-1	28.71	25.26	13	9	21	3	R-2	15.30	13.46	9	8
47	5.02	R-1	26.52	23.34	12	7	21	4	R-2	55.60	48.93	33	24
47	5.03	R-1	12.62	11.11	6	6	21	5	R-2	13.00	11.44	8	6
47	5.04	R-1	8.87	7.81	4	4	24	2	R-2	23.62	20.79	14	6
48	1	R-1	28.00	24.64	12	4	24	4.14	R-2	10.09	8.88	6	1
48	9.01	R-1	10.82	9.52	5	3	28	1	R-2	41.62	36.63	24	15
48	10	R-1	10.03	8.83	4	2	54	3	R-2	15.66	13.78	9	3
48	4.01	R-1	47.45	41.76	21	20	54	9.01	R-2	10.20	8.98	6	6
49	2	R-1					57	7	R-2	17.17	15.11	10	9
50	2	R-1					1	2	R-3	76.40	61.12	41	26
50	4	R-1	14.56	12.81	6	1	5	5	R-3	9.70	7.76	5	3
55	1	R-1	79.30	69.78	35	20	5	6	R-3	64.85	51.88	35	9
55	3	R-1	17.80	15.66	8	8	5	6.05	R-3	10.79	8.63	6	2
55	4.01	R-1	15.54	13.68	7	3	5	6.06	R-3	10.12	8.10	5	1
55	4.02	R-1	9.00	7.92	4	4	25	5	5AC	7.63	7.40	1	0
55	7	R-1	69.38	61.05	31	18	26	1	5AC	22.60	21.92	4	3
56	1	R-1	108.45	95.44	48	18	36	4	5AC	17.00	16.49	3	1
56	3	R-1	25.73	22.64	11	5	36	5	5AC	30.60	29.68	6	3
1	3	R-2	123.00	108.24	72	56	36	10	5AC	11.93	11.57	2	1
Total												1,950	1,283

* Net Acres are calculated by multiplying Gross Acres by .88 in the R-1 and R-2 Zones, by .8 in the R-3 Zone and by .97 in the 5AC Zone.

Table 9**Woolwich Township—Sending Area Subdivision & Site Plan Applications**

Last Updated – August 8, 2006

Subdivision:	Block and Lot	# of Units	Status	Date
Colchester	B-44, L-7	25	Complete	02/03/05
			Denied	08/18/05
			Re-Submitted	
			Complete	08/03/06

CONTACT: Gary Bolis
 Bolis Properties
 900 East Eighth Avenue
 Suite 300
 King of Prussia, Pa 19406-1361
 (610) 768-8006

Subdivision:	Block and Lot	# of Units	Status	Date
Fawn Hollow	B-43, L-13 & 14	49	Complete	02/17/05
			Denied	06/02/05
			Re-Submitted	04/24/06
			Preliminary	06/15/06

CONTACT: John J. Renz
 Ivymont Properties
 182 Wabasso Trail
 Medford Lakes, NJ 08055
 (856) 313-0700

Subdivision:	Block and Lot	# of Units	Status	Date
DiBella Tract	B-44, L-8 & 8.02	39	Complete	02/02/06
			Preliminary	08/03/06

CONTACT: Michael J. Procacci
 239-A Taunton Blvd.
 Medford, NJ 08055
 (856) 983-7160

Subdivision:	Block and Lot	# of Units	Status	Date
Daylesford Meadows	B-38, L-4 B-39, L-5	31	Preliminary	08/04/05

CONTACT: DeLuca Homes
107 Floralvale Blvd.
Yardley, Pa 19067

Subdivision:	Block and Lot	# of Units	Status	Date
Previtera Parcel	B-14, L-12	31	Preliminary Final	12/16/04 09/01/05

CONTACT: OHB Homes
3333 Street Road; One Greenwood Sq.
Bensalem, Pa 19020
(215) 245-7500

Subdivision:	Block and Lot	# of Units	Status	Date
White Oaks Estates Phase I and II	B-49, L-2 B-50, L-2	32	Complete Preliminary	08/04/05 04/06/06

CONTACT: JJR-1, LLC
P.O. Box 215; 432 S. Evergreen Avenue
Woodbury Heights, NJ 08097
(856) 845-3848

Subdivision:	Block and Lot	# of Units	Status	Date
Vandergracht Tract	B-55, L-3	8	Complete	07/14/06

CONTACT: Brian D. Lozuke, Zane & Lozuke
131 Delaware Street
Woodbury, NJ 08096
856-848-6121

Subdivision:	Block and Lot	# of Units	Status	Date
Cardinal Estates	B-55, L-1	26	Complete	06/01/06

CONTACT: Heatherwood Farms III, LLC
200 Franklinville Road
Woolwich Township, NJ 08085
856-848-9292

development; the eight together proposed 241 units of new housing. One application for 31 units received final approval; four applications for a total of 151 units have received preliminary approval. The remaining three applications for a total of 59 units are complete and under review.

Recent Sales Activity

In the past four years there have been 5 recorded sales transactions involving land in the Sending Area (see Table 10). All these transactions have involved the sale of farmland and vacant property. The first four of these transactions occurred

Table 10
Recent Land Sales Transactions In Sending Area

Address	Owner	Owner Address	Current Use	Sale Price	Acres	Price/Acre	Estimated DU Count	Price/Unit	Sale Date
289 High Hill Road	AG Land LLC	P.O. Box 69, Swedesboro, NJ 08085	Farms	\$100,000	9.70	\$10,309	6	\$16,667	11/08/2002
1010 Russell Mill Road	Thomas Sorbello	216 Porches Mill Rd., Swedesboro, NJ 08085	Farms	\$225,000	15.48	\$14,535	7	\$32,143	11/12/2004
107 Davidson Road	David King	107 Davidson Road, Swedesboro, NJ 08085	Farms	\$540,000	16.12	\$33,499	7	\$77,143	05/16/2005
22 Victoria Drive	Christopher & Tiffany C. Mercer	22 Victoria Drive, Woolwich Twp., NJ 08085	Vacant Land	\$457,545	10.09	\$45,346	6	\$76,258	02/27/2006
980-1001 Russell Mill Rd.	DeLuca Enterprises, Inc.	980 Russell Mill Rd., Swedesboro, NJ 08085	Farms	\$1,953,000	85.38	\$22,874	30	\$65,100	05/03/2006

Source: Wfn2Data; Urban Partners

between November, 2002, and February, 2006. Each involved the sale of ten to sixteen acres of land upon which current zoning would likely allow six or seven lots for home development. The price of parcels that sold in 2005 and early 2006 was approximately \$75,000 to \$80,000 per lot.

A much larger transaction involving a parcel of 85 acres occurred in May, 2006. Current zoning for this parcel could allow for approximately 30 units and the sales price was approximately \$65,000 per unit. This somewhat lower sales price may reflect the impact of COAH requirements on recent land transactions or the slowing of the housing market in recent months may have impacted land pricing.

DEVELOPMENT POTENTIAL FOR SENDING AREA PROPERTY

As noted above, based on current zoning and estimates of the soils and topographic conditions of the Sending Area parcels, the total potential buildout of the Sending Area is estimated at 1,283 units of single-family detached housing. Also, as noted above in Community Trends, Woolwich Township has issued building permits for an annual average of 250 units of single-family detached housing since 2000 and growth forecasts suggest demand for 200 units of this housing type in slow growth years (2006 to 2008) and 300 units annually thereafter.

Without the adjustments proposed in the Transfer of Development Rights program, this forecasted housing demand would be met through development of housing at five locations within Woolwich: (1) the continued development of the Weatherby planned community with capacity for another 1,270 single-family detached (not Active Adult) units; (2) development of perhaps 20 additional housing units in the proposed Route 322 Receiving Area #1; (3) development of 195 units under current zoning at the Auburn Road Receiving Area #2 parcel; (4) these estimated 1,283 units in the Sending Area; and (5) 1,385 units located in other scattered sites throughout the Township.

This total residential buildout would result in development of 4,153 new single-family detached (non-Active Adult) units. Housing demand forecasts suggest that this supply of new housing would be absorbed by 2020.

These factors suggest that based on current zoning, single family detached residential development is the highest and best use for land within this Sending Area. Also, considering other competition for this single family detached housing market, sites in the Sending Area could expect to achieve about 90 units per year of housing development until full buildout is achieved in the year 2020.

SENDING AREA LAND VALUES UNDER CURRENT ZONING

As noted above, based on current zoning and estimates of the soils and topographic conditions of the Sending Area parcels, the total potential for development in the Sending Area is 1,283 units of single family detached housing. Interviews with current and potential developers active in the area and an analysis of recent sales transactions indicates that the typical home proposed for development in the Sending Area under these economic conditions is a single-family detached house of 3,000 to 5,000 SF with at least a two-car garage. These homes can be of either average or custom quality and can be expected to result in sales prices of \$115 to \$140 per square foot (\$350,000 to \$700,000). A review of recent sales of such newly-constructed homes (see Table 11) indicates a sales range of \$300,000 to \$800,000 (other than a couple of exceptions) over the past two years, with very few sales in the past twelve months in this product category.

Depending on lot size and the quality of construction anticipated, developers have previously reported the willingness

to pay \$80,000 up to, in rare cases, \$120,000 per developable lot. These prices are for unimproved sites, but with development approvals. Woolwich, however, has just implemented a Round Three COAH program requiring developers to produce one COAH unit for each eight market rate units. Since the application of this COAH requirement, there has been very little experience in Woolwich with land purchases for one to two acre lot housing development. Furthermore, the application of this requirement has come at a time when the overall housing market is facing a slowdown. Therefore, land sale comparables under these circumstances are difficult to identify. In general, however, this requirement would be expected to reduce land pricing because of two factors: (1) a land value of \$0 generally must be applied to the COAH unit; therefore, land pricing must be reduced by a minimum of 11% to account for the COAH unit's \$0 contribution; (2) the pricing of the COAH unit will generally be below construction costs, requiring an additional subsidy from the overall development budget. Given these factors, we would expect land prices to decrease by a minimum of 11% and more likely 15% to 20% below previous levels.

There have been only a few actual sales of land in the sending area within the past two years (see Table 10). These sales were at prices in the \$65,000 to \$80,000 per lot range. The most recent \$65,000 per lot price may reflect the assumed impact of the COAH requirement. There have also been reports that many parcels in the sending area have been under agreements of sale for some time on terms consistent with the previous \$80,000 plus per lot pricing.

For purposes of this real estate market analysis, we assume that the application of the COAH requirement has reduced (or will reduce) land prices in the sending area to the range of \$65,000 to \$80,000 per developable lot, at 2006 pricing. These

Table 11
Recent New Home Sales In Sending Area

Address	Sale Price	Builder	Lot Size (Acres)	Sale Date	Address	Sale Price	Builder	Lot Size (Acres)	Sale Date
226 Casella Way	\$440,000	RJS Heritage Homes, Inc.	1.27	08/06/2004	3 Blue Spruce Lane	\$401,353	Blue Spruce LLC	1.13	03/31/2005
346 Nicklaus Court	\$320,702	Signature Homes of Links LLC	1.52	08/27/2004	127 Erica Court	\$687,742	Piersol Homes	1.00	04/13/2005
4 Judy's Homeplace	\$367,095	Bruce Paparone, Inc.	1.00	08/31/2004	347 Nicklaus Court	\$320,807	Signature Homes of Links LLC	1.55	04/28/2005
310 Nicklaus Court	\$398,927	Signature Homes of Links LLC	1.99	09/03/2004	1 Terry's Terrace	\$347,795	Bruce Paparone, Inc.	1.11	04/29/2005
36 Messina Drive	\$501,027	Piersol Homes	1.50	09/23/2004	35 Natalie Drive	\$440,900	Willow Pond Homes, Inc.	1.50	04/29/2005
4 Karens Court	\$328,350	Bruce Paparone, Inc.	1.13	09/23/2004	8 Karens Court	\$385,800	Bruce Paparone, Inc.	1.04	04/29/2005
6 Judy's Homeplace	\$396,965	Bruce Paparone, Inc.	1.00	09/23/2004	110 Erica Court	\$507,692	Piersol Homes	1.31	05/06/2005
116 Erica Court	\$708,296	Piersol Homes	1.12	09/30/2004	10 Karens Court	\$356,349	Bruce Paparone, Inc.	1.78	05/12/2005
5 Karens Court	\$327,900	Bruce Paparone, Inc.	1.00	10/07/2004	110 Cedar Court	\$543,392	Piersol Homes	1.11	05/27/2005
109 Nocentino Dr.	\$300,000	Blue Spruce LLC	1.14	10/08/2004	3 Terry's Terrace	\$384,180	Bruce Paparone, Inc.	1.18	05/27/2005
1 Karens Court	\$333,550	Bruce Paparone, Inc.	1.04	10/14/2004	7 Georges Landing	\$367,495	Bruce Paparone, Inc.	1.11	05/27/2005
21 Georges Landing	\$370,970	Bruce Paparone, Inc.	1.30	10/14/2004	153 Cedar Court	\$600,497	Piersol Homes	1.13	05/28/2005
25 Georges Landing	\$396,275	Bruce Paparone, Inc.	1.15	10/14/2004	408 Rainey Road	\$665,166	Piersol Homes	1.51	06/03/2005
109 Curtis Court	\$421,310	Signature Homes of Links LLC	1.51	10/15/2004	2 Blue Spruce Lane	\$430,000	Blue Spruce LLC	1.19	06/09/2005
6 Karens Court	\$331,900	Bruce Paparone, Inc.	1.00	10/27/2004	125 Arbor Drive	\$672,679	Piersol Homes	1.09	06/10/2005
8 Judy's Homeplace	\$396,412	Bruce Paparone, Inc.	1.39	10/28/2004	160 Erica Court	\$700,000	Piersol Homes	1.89	06/14/2005
111 Nocentino Dr.	\$355,677	Blue Spruce LLC	1.12	10/29/2004	130 Cedar Court	\$619,900	Piersol Homes	1.77	06/17/2005
9 Karens Court	\$332,150	Bruce Paparone, Inc.	1.02	11/03/2004	19 Georges Landing	\$367,833	Bruce Paparone, Inc.	1.39	06/17/2005
110 Nocentino Dr.	\$404,971	Blue Spruce LLC	1.06	11/05/2004	282 Moravian Church Road	\$476,392	Masterwork Homes LLC	1.59	06/17/2005
17 Georges Landing	\$345,150	Bruce Paparone, Inc.	1.02	11/22/2004	27 Georges Landing	\$360,140	Bruce Paparone, Inc.	1.30	06/23/2005
103 Arbor Court	\$659,072	Piersol Homes	1.02	11/23/2004	141 Steeplebush Run	\$534,525	Masterwork Homes LLC	1.65	06/24/2005
1 Barbagallo Court	\$358,419	Blue Spruce LLC	1.01	11/29/2004	24 Georges Landing	\$362,520	Bruce Paparone, Inc.	1.02	06/29/2005
3 Barbagallo Court	\$350,000	Blue Spruce LLC	1.00	12/03/2004	28 Georges Landing	\$345,080	Bruce Paparone, Inc.	1.23	06/29/2005
11 Georges Landing	\$351,190	Bruce Paparone, Inc.	1.06	12/06/2004	351 Nicklaus Court	\$424,517	Signature Homes of Links LLC	1.64	06/29/2005
20 Georges Landing	\$349,698	Bruce Paparone, Inc.	1.13	12/09/2004	5 Georges Landing	\$361,370	Bruce Paparone, Inc.	1.06	06/29/2005
7 Judy's Homeplace	\$323,800	Bruce Paparone, Inc.	1.03	12/09/2004	103 Cedar Court	\$774,238	Piersol Homes	1.00	06/30/2005
367 Back Creek Road	\$403,548	Blue Spruce LLC	1.00	12/13/2004	123 Cedar Court	\$786,570	Piersol Homes	1.05	06/30/2005
9 Georges Landing	\$396,775	Bruce Paparone, Inc.	1.12	12/14/2004	6 Victoria Drive	\$365,626	Bruce Paparone, Inc.	1.52	07/07/2005
15 Georges Landing	\$405,445	Bruce Paparone, Inc.	1.00	12/18/2004	20 Victoria Drive	\$364,150	Bruce Paparone, Inc.	1.21	07/13/2005
339 Nicklaus Court	\$465,895	Signature Homes of Links LLC	1.56	12/21/2004	906 Oldman's Creek Road	\$411,815	Richmond American Homes	1.75	07/22/2005
4 Blue Spruce Lane	\$417,387	Blue Spruce LLC	1.08	12/23/2004	3 Joseph Court	\$447,235	Bruce Paparone, Inc.	1.38	07/25/2005
102 Nocentino Dr.	\$356,936	Blue Spruce LLC	1.00	12/27/2004	300 Moravian Church Road	\$471,861	Masterwork Homes LLC	1.76	07/28/2005
121 Steeplebush Run	\$516,000	Masterwork Homes LLC	1.53	12/28/2004	4 Joseph Court	\$414,825	Bruce Paparone, Inc.	1.02	07/28/2005
105 Nocentino Dr.	\$440,013	Blue Spruce LLC	1.05	12/30/2004	107 Nocentino Dr.	\$448,900	Blue Spruce LLC	1.09	08/01/2005
6 Blue Spruce Lane	\$442,375	Blue Spruce LLC	1.03	12/30/2004	234 Daniels Way	\$449,900	Willow Pond Homes, Inc.	1.21	08/03/2005
4 Terry's Terrace	\$398,975	Bruce Paparone, Inc.	1.05	01/03/2005	157 Tara Run	\$795,747	Piersol Homes	1.50	08/11/2005
140 Steeplebush Run	\$644,000	Masterwork Homes LLC	1.53	01/04/2005	1228 Oldman's Creek Road	\$434,227	Richmond American Homes	1.50	08/12/2005
162 Rainey Road	\$450,541	Signature Homes of Links LLC	1.50	01/21/2005	163 Erica Court	\$725,090	Piersol Homes	1.70	08/12/2005
23 Georges Landing	\$414,250	Bruce Paparone, Inc.	1.26	01/27/2005	203 Inveness Drive	\$415,000	Chateau Ridge LLC	1.50	08/29/2005
22 Georges Landing	\$332,750	Bruce Paparone, Inc.	1.01	02/09/2005	286 Moravian Church Road	\$505,649	Masterwork Homes LLC	1.74	08/29/2005
294 Moravian Church Road	\$413,619	Masterwork Homes LLC	1.78	02/11/2005	1222 Oldman's Creek Road	\$522,077	Richmond American Homes	1.94	08/30/2005
242 Inveness Drive	\$398,600	Chateau Ridge LLC	1.53	02/25/2005	2 Joseph Court	\$443,600	Bruce Paparone, Inc.	1.28	08/31/2005
106 Hunters Run	\$325,000	Piersol Homes	1.52	03/02/2005	2 James Court	\$394,645	Bruce Paparone, Inc.	1.28	09/13/2005
108 Nocentino Dr.	\$329,900	Blue Spruce LLC	1.00	03/21/2005	144 Jules Drive	\$537,540	Piersol Homes	1.01	09/28/2005
7 Karens Court	\$312,400	Bruce Paparone, Inc.	1.13	03/28/2005	150 Fox Run	\$375,000	New Jersey Home Construction,	1.02	09/29/2005
104 Nocentino Dr.	\$382,394	Blue Spruce LLC	1.14	03/29/2005	1 James Court	\$375,900	Bruce Paparone, Inc.	1.05	09/30/2005
104 Fox Run	\$262,475	Peak Builders LLC	1.03	03/31/2005	237 Casella Way	\$501,000	RJS Heritage Homes, Inc.	1.91	03/15/2006
218 Daniels Way	\$380,000	Willow Pond Homes, Inc.	1.00	03/31/2005	114 Steeplebush Run	\$695,000	Masterwork Homes LLC	1.50	03/31/2006

Source: Win2Data; Urban Partners

prices are for unimproved sites with development approval.

Based on the 1,283 development credits assumed to be available from the Sending Area's 3,817 acres, this pricing level results in land values of \$21,800 to \$26,900 per gross acre, for a property with average environmental constraints.

SENDING AREA LAND VALUES AFTER TRANSFER OF DEVELOPMENT RIGHTS

After transfer of development rights, land in the sending area would have some residual value based on its use as farmland and based on its post-TDR development rights under the proposed zoning. The value of individual parcels as farmland varies depending on certain soil conditions, susceptibility to flooding, etc. Several recent farmland sales in Gloucester

Table 12
Recent Farmland Sales In Gloucester County

Address	Township	Sale Price	Lot Size (Acres)	Price/Acre	Sale Date
899 Aura Road, Glassboro	Elk Twp.	\$50,000	40.98	\$1,220	11/24/03
423 Bridgeton Pike, Mullica Hill	Elk Twp.	\$300,267	139.80	\$2,148	12/11/03
141 Railroad Avenue, Monroeville	Elk Twp.	\$115,000	33.18	\$3,466	05/14/04
329 Richwood Road, Mullica Hill	Harrison Twp.	\$130,000	68.29	\$1,904	06/22/04
Pitman Road, Sewell	Mantua Twp.	\$225,000	34.62	\$6,499	06/14/04
1866 Willow Grove Road, Monroeville	Elk Twp.	\$50,000	46.10	\$1,085	08/30/04
N. Main Street, Mullica Hill	Harrison Twp.	\$304,800	38.19	\$7,981	11/02/04
Victoria Avenue, Newfield	Franklin Twp.	\$245,000	40.12	\$6,107	11/17/04
Swedesboro Road, Monroeville	Franklin Twp.	\$75,000	40.56	\$1,849	04/12/05
Buck Road	Elk Twp.	\$1,000,000	124.45	\$8,035	05/23/05
Piney Hollow Road, Newfield	Franklin Twp.	\$350,000	290.06	\$1,207	09/26/05
Main Road	Franklin Twp.	\$430,000	53.07	\$8,103	04/21/06
1278 Piney Hollow Road, Newfield	Franklin Twp.	\$500,000	61.60	\$8,117	06/29/06
Whitehall Road, Newfield	Franklin Twp.	\$199,284	135.85	\$1,467	01/25/06

Source: Win2Data; Urban Partners

County are detailed on Table 12. In general, sales prices range up to \$8,000 per acre. For purposes of this real estate market analysis, we assume that the average residual value of Sending Area property as farmland will be \$6,000 per acre, at 2006 pricing.

The proposed zoning and deed restrictions of these Sending Area parcels after transfer of development rights requires a 50 acre lot (or the equivalent acreage in TDR restriction); that is, one dwelling unit per 50 acres. For purposes of this analysis, we will assume that this future development is speculative and, therefore, will not add to the value of the land post-TDR beyond the underlying farmland valuation. As a result, post-TDR development will not figure into the pricing of development credits in the Sending Area.

Based on these assumptions, the value of property post TDR is assumed to be \$6,000 per acre, in 2006 pricing.

Development Credit Value

It is difficult to estimate the specific value of development credits from specific parcels since this pricing will vary within a range based on the location of the parcel, the yield of developable lots per acre, the value of the residual parcel as farmland, and other factors. However, for purposes of this analysis, we will develop an estimated average valuation for a development credit in the Sending Area based on these factors:

- the value of a developable lot in the Sending Area at 2006 pricing is in the range of \$65,000 to \$80,000 for unimproved sites with development approval;
- the average value of residual farmland is estimated at \$6,000 per acre;
- the Sending Area includes 3,817 acres and is estimated to include 1,262 developable lots.

These factors suggest that the average value of a developable lot is \$72,500, that the average acreage per developable lot is 3.02 acres, and that the residual farmland value of that average lot is \$18,100.

Based on these factors, the average value of a development credit is assumed to be \$55,000 per development credit, in 2006 pricing. These prices are for credit purchases completed after development approval has been achieved for the Receiving Area parcel.

DEVELOPMENT POTENTIAL FOR RECEIVING AREA PROPERTIES

Receiving Area Land Values Under Current Zoning

Route 322 Receiving Area #1

Land value conditions in the Route 322 Receiving Area #1 are quite complex. The chief factors influencing land value include:

- Current zoning/development rights. Zoning in this Receiving Area #1 includes 10 parcels totaling 147 acres in R-2 zoning and 84 parcels with 596 acres in FOC zoning. As described above, the current value of land for larger home development in Woolwich appears to be \$65,000 to \$80,000 per developable lot, or under R-2 zoning with positive site development conditions, approximately \$38,000 to \$47,000 per acre.

Pricing of FOC zoned land has fluctuated. One land sale in June 2003 was in the range of \$28,000 to \$30,000 per acre. Some recent sales that include comparatively attractive Route 322 frontage have been at the \$65,000 to \$70,000 per acre pricepoint. There is indication that land prices have increased recently in anticipation of the TDR zoning.

- Site-specific access amenities. Some parcels are immediately adjacent to the New Jersey Turnpike exit; 35 parcels have direct access to Route 322, including 12 properties which are situated at intersections with traffic lights. All of these access factors influence the relative value of property in this Receiving Area #1. For example, among recent sales, a 5.5 acre property at the corner of Swedesboro Paulsboro Road and Route 322 sold for \$291,000 per acre; the adjacent 3.5 acre property with Route 322 access sold for \$148,000 per acre; while another larger property with a smaller proportion of frontage along Route 322 sold for \$70,000 per acre.

- Current development. 55 of the 94 parcels in the Receiving Area #1 include a residential or commercial structure. These include 37 homes and 18 commercial buildings. 32 of the 37 parcels with residential buildings are less than 2 acres in size and, therefore, essentially fully built out

against current zoning. 14 of the 18 parcels with commercial structures are four acres or less in size and, therefore, also essentially fully built out. For these 46 properties, especially, but also to some extent for the other 9 properties with residential or commercial structures, property values will be much more closely aligned with the value of the particular building than with pure land value.

These many site-specific factors as well as uncertainty concerning the impact of the TDR program on property values make it extremely difficult to accurately estimate land values in Receiving Area #1 under current zoning.

As noted above, for 46 of the 94 parcels, values appear to be based predominantly on the quality and size of the existing structure. These smaller parcels total 61 acres of the 743 acres in Receiving Area #1. Therefore, we believe that (1) conditions on these parcels cannot be used to determine the economics of a Transfer of Development Rights program; (2) these parcels are likely to participate in TDR only after overall values have grown significantly in the Receiving Area or as a result of adjacent parcel activity; and (3) we should not assume that TDR participation by these parcels will result in rights purchases from the Sending Area.

Excluding these 46 parcels, the remaining 48 parcels in Receiving Area #1 total 682 acres. Two parcels totaling one acre are related to public rights-of-way. Of the remaining 46 parcels, 20 with a total of 259 acres do not have Route 322 frontage; 18 with a total of 278 acres have Route 322 frontage but not at key traffic light intersections; and 8 parcels with a total of 144 acres are located at key lighted intersections (see Table 13).

Of the 20 parcels (259 acres) without Route 322 frontage, four parcels, with a total of 140 acres are zoned R-2 and 16 parcels, with a total of 119 acres, are zoned FOC. For the 140 acres of R-2 zoned land, as described above, the current lot value for larger home development appears to be \$65,000 to \$80,000 or approximately \$38,000 to \$47,000 per acre. There is no recent sale of FOC zoned property that lacks Route 322 frontage; however, sales of property with Route 322 frontage at \$65,000 per acre would appear to place a ceiling on pricing.

Based on these recent sales transactions, and with the observation that land pricing in Receiving Area #1 is highly volatile, we estimate that for purposes of this real estate analysis, *land values in Receiving Area #1 for parcels without Route 322 frontage are in the range of \$45,000 to \$55,000 per acre, at 2006 pricing, under both R-2 and FOC zoning.*

All 18 parcels (278 acres) with Route 322 frontage (but not adjacent to signaled intersections) are zoned FOC. Four of these parcels totaling 46 acres have sold in the past three years at prices ranging from \$30,000 per acre to \$143,000 per acre (for a 3.5 acre parcel near a key lighted intersection, with 50% of the parcel located within 200 feet of Route 322). The 8 parcels (144 acres) zoned FOC and located at lighted intersections present an even greater premium. Two sales of such parcels in the past year have been for \$1.6 million for 5.5 acres (\$291,000 per acre) and \$900,000 for 6.07 acres (\$148,000 per acre).

The range of pricing for Route 322 frontage parcels and, especially, for parcels at lighted intersections suggests that there is a significant premium for the portion of land which fronts Route 322 (perhaps the first 200 feet of depth) and an even more substantial premium for the corners. However, the portion of land located more distant from the highway appears to be priced similarly to land with no highway frontage.

**Table 13
Larger Parcels In Route 322 Receiving Area#1**

Block	Lot	Total Parcel Acreage	Use	Zoning
Non-Route 322 Parcels				
14	3	69.50	Farm	R-2
14	5.01	14.13	Farm	R-2
14	16	2.30	Farm	R-2
14	17	54.00	Farm	R-2
7	4.02	4.25	Vacant Land	FOC
8	9	0.80	Vacant Land	FOC
8	10	0.40	Vacant Land	FOC
9	4	3.00	Residential	FOC
10	2	2.40	Residential	FOC
10	3	25.13	Commercial	FOC
10	5	20.69	Farm	FOC
10	5.03	3.68	Vacant Land	FOC
11	6.03	4.28	Residential	FOC
14	1.08	1.55	Vacant Land	FOC
14	1.1	1.44	Vacant Land	FOC
14	1.11	1.92	Vacant Land	FOC
14	1.12	2.91	Vacant Land	FOC
14	2	33.17	Nike Site	FOC
14	15	5.00	Residential	FOC
57	3.01	8.09	Commercial	FOC
Total		258.64		
Route 322 Frontage Parcels				
6	5	31.18	Commercial	FOC
7	4.01	23.86	Farm	FOC
7	5	43.94	Farm	FOC
9	6	3.50	Farm	FOC
10	4	30.64	Farm	FOC
11	6	5.00	Farm	FOC
11	6.01	6.19	Farm	FOC
12	2	18.00	Farm	FOC
14	14	10.00	Commercial	FOC
15	2	11.60	Farm	FOC
59	6.01	6.13	Farm	FOC
59	6.02	7.00	Farm	FOC
59	7	0.98	Farm	FOC
59	8	42.50	Farm	FOC
59	10	12.20	Farm	FOC
62	1	7.10	Public Property	FOC
62	2	17.40	Farm	FOC
62	3	1.20	Farm	FOC
Total		278.42		
Route 322 Frontage Parcels At Key Lights				
6	6	35.76	Farm	FOC
7	4	6.07	Farm	FOC
9	5	5.50	Farm	FOC
10	5.01	6.00	Residential	FOC
11	7	2.09	Farm	FOC
12	3	40.30	Farm	FOC
16	5	19.00	Farm	FOC
57	3	28.86	Farm	FOC
Total		143.58		

Source: Melvin/Kernan; Urban Partners

We should note that higher land prices adjacent to intersections with traffic lights are usually the result of market opportunities for higher valued highway-oriented retail and commercial uses such as gasoline stations, convenience stores, banks, fast food restaurants, full-service restaurants, drug stores, and hotels. Within the current FOC zoning, only banks from this list of uses are allowed by right, while gasoline service stations can be built as a conditional use.

Based on these recent sales transactions, we estimate that for purposes of this real estate analysis, *land values under the current FOC zoning in Receiving Area #1 for parcels with Route 322 frontage are in the range of \$45,000 to \$55,000 per acre, at 2006 pricing, for land located more than 200 feet from Route 322 and in the range of \$200,000 to \$250,000 per acre for land located less than 200 feet from Route 322. In addition, there appears to be a "corner" premium of up to \$700,000 for a parcel with a prime corner location.*

Within Receiving Area #1, there are approximately 80 acres of undeveloped land within 200 feet of the Route 322 highway.

Auburn Road Receiving Area #2

Auburn Road Receiving Area #2 includes one 125-acre parcel of land currently zoned R-3. Maximum buildout under this current zoning would allow for 195 units of single-family housing. As described above, the current value of land for larger home development in Woolwich appears to be \$65,000 to \$80,000 per developable lot. Recent experience with larger homes on half-acre lots (as would be the case in this Receiving Area under current zoning) is that their value is in the lower end of this \$65,000 to \$80,000 range. These prices are for unimproved sites with development approval.

Based on development of 195 units under current zoning, the value of 125 acres of land in Receiving Area #2 is approximately \$100,000 to \$110,000 per acre.

RECEIVING AREA LAND VALUES AFTER TRANSFER OF DEVELOPMENT RIGHTS

Route 322 Receiving Area #1

Uses proposed for this Route 322 Receiving Area #1 under the proposed Transfer of Development Rights program include:

- 100 units of single-family detached housing at an average lot size of 9,500 SF
- 1,000 units of twins at an average lot size of 5,000 SF
- 500 units in apartments or

condominiums as part of mixed use buildings

- 250,000 SF of retail and/or office uses in the first floor of these mixed use buildings
- 1,617 units in townhomes, multi-family building flats, etc. at densities of 15 to 28 dwelling units per gross acre
- up to 325,000 SF of retail and/or office uses on the first floors of multi-family buildings located adjacent to Route 322
- 2.6 million SF of retail, office, or flex use in commercial buildings.

The mixed use building development is seen as the organizing core of the Receiving Area #1 and will be allowed to develop "by-right" with no required Transfer of Development Rights. The 2.6 million SF of retail, office, or flex use in commercial buildings will also be allowed "by right" to the extent this development can be accommodated within the currently permitted .15 FAR.

Transfer of Development Rights will be required for development of the 100 units of single-family detached housing; 1,000 units of twins; 1,617 units in townhomes, multi-family building flats, etc.; and to increase allowable FAR in the commercial buildings above .15 FAR to a maximum of .3 FAR.

The value of homesites for development of these housing types is below that of one- and two-acre lot single family detached houses:

- Depending on the quality of home construction, homes built on quarter-acre lots appear to sustain land prices to developers of approximately 75% of the value of a one- to two-acre lot, or \$50,000 to \$60,000 per unit;
- Similarly, twins built on 5,000 SF+ lots sustain land prices to developers of approximately 55% of the value of a one- to two-acre lot, or \$35,000 to \$45,000 per unit;
- Custom quality townhomes (2,500 SF +/-) can sustain a land price to developers of approximately 45% of the value of a one- to two-acre lot, or \$29,000 to \$36,000 per unit; and
- Average quality townhomes (1,200 SF to 1,800 SF) can sustain a land price of 20% to 30% of the value of a one- to two-acre lot, or \$13,000 to \$24,000 per unit.

All these values have been adjusted to reflect the impact of COAH requirements on developers.

There is little experience in this market with multi-family

building flats, elevator condominiums, and other housing types. For purposes of this analysis, we believe a conservative estimate of land values associated with these building types is \$12 to \$15 per gross building residential square foot. For buildings with gross building square footage averaging 1,500 SF per unit, this translates to a value of \$20,000 per unit.

As noted above, recent land sales for retail/commercial development along the Route 322 corridor suggest values of \$45,000 to \$55,000 per acre at 2006 prices (for parcels without Route 322 frontage), \$225,000 per acre for portions of parcels directly abutting Route 322, and even higher premiums for corner commercial properties. All these prices assume .15 FAR development controls, and result in land prices of \$10 to \$35 (or more) per built square foot of commercial space, depending on location. The higher land values (\$35 per SF) are also consistent with the supportable land values of \$35 to \$40 per built square foot that are typically found in retail locations.

Adjusting for projected environmental constraints, we estimate land prices in this Receiving Area #1 after application of TDR zoning to be in the range of \$50,000 to \$60,000 per developable lot, at 2006 pricing, for the 100 single family detached units on 9,500 SF average lots; \$35,000 to \$45,000 per developable lot for the 1000 twin units; \$20,000 to \$30,000 per developable lot for townhomes; and \$20,000 per unit for other residential types. These prices are for unimproved sites with development approval. Retail, office, and flex development can support land values of \$10 to \$35 per built square foot.

We should note that these land values assume infrastructure costs for roadways, utilities, and site preparation equivalent to similar infrastructure costs elsewhere in Woolwich for each proposed housing type. As noted above, these land values have already been adjusted to reflect the impact of COAH obligations on developer costs and willingness to pay for land under the assumption of these affordable housing obligations. There is no proposed change in the level or structure of developer COAH obligations under the Transfer of Development Rights program from current requirements.

Auburn Road Receiving Area #2

Uses proposed for this Auburn Road Receiving Area #2 under the proposed Transfer of Development Rights program include:

- 130 units of single-family detached housing constructed at an average lot size of 12,000 SF
- 162 units of twins, of which 52 are through TDR and 110 are "by right" converted from 65 single-family detached units that could be constructed under previous zoning. Twins are constructed at an average lot size of 5,000 SF
- 210 units in townhomes constructed at an average lot size of 2,500 SF
- 60,000 to 70,000 SF of retail or office in commercial buildings.

The increment of development for which development rights would need to be transferred is 52 units of twins and 210 townhomes.

There have been a number of new home sales—at least 32 in the past 11 months—in the adjacent Weatherby development of homes on roughly 3,000 SF lots. These homes have sold in the \$260,000 to \$340,000 range. These sales indicate the viability of small lot home development in this location.

The value of homesites for twins and townhomes is below that of single family detached houses:

- Twins built on 5,000 SF+ lots sustain land prices to developers of approximately 55% of the value of a one- to two-acre lot, or \$35,000 to \$45,000 per unit;
- Custom quality townhomes (2,500 SF +/-) can sustain a land price to developers of approximately 45% of the value of a one- to two-acre lot, or \$29,000 to \$36,000 per unit; and
- Average quality townhomes (1,200 SF to 1,800 SF) can sustain a land price of 20% to 30% of the value of a one- to two-acre lot, or \$13,000 to \$24,000 per unit.

All these values have been adjusted to reflect the impact of COAH requirements on developers.

Adjusting for projected environmental constraints, we estimate land prices in this Receiving Area #2 after application of TDR zoning to be in the range of \$55,000 to \$65,000 per developable lot, at 2006 pricing, for the 130 single family detached units on 12,000 SF average lots; \$35,000 to \$45,000 per developable lot for the 162 twin units; and \$20,000 to \$30,000 per developable lot for the 210 townhome units. These prices are for unimproved sites with development approval.

There is little experience in Woolwich with land sales for retail/commercial development outside the Route 322 corridor. The proposed 60,000 SF to 70,000 SF of retail/ commercial use in Receiving Area #2 will be “by-right” and no purchase of development rights will be required.

We should note that these land values assume infrastructure costs for roadways, utilities, and site preparation equivalent to similar infrastructure costs elsewhere in Woolwich for each proposed housing type. As noted above, these land values have already been adjusted to reflect the impact of COAH obligations on developer costs and willingness to pay for land under the assumption of these affordable housing obligations. There is no proposed change in the level or structure of developer COAH obligations under the Transfer of Development Rights program from current requirements.

DEVELOPMENT CREDIT REQUIREMENTS, BONUS, AND AFFORDABILITY TO FACILITATE TRANSFER OF DEVELOPMENT RIGHTS

Route 322 Receiving Area #1

For the Route 322 Receiving Area #1, the increment of development for which development rights would need to be transferred is 100 units of single-family detached housing; 1,000 units of twins; 1,617 units in townhomes, multi-family building flats, etc.; and to increase allowable FAR in commercial buildings above .15 FAR to a maximum of .3 FAR.

As noted above (see Table 12), almost all development potential within Receiving Area #1 occurs on 46 parcels with a total of 681 acres. Four of these parcels, with a total of 140 acres, are zoned R-2; the remaining 42 parcels, with a total of 541 acres, are zoned FOC. In terms of future land use, approximately 200 acres are devoted to retail, office, and flex

Table 14
Development Program Land Values
Receiving Area #1

Development Type	Development Program –Units	Development Program –Retail SF	Land Value /Unit	Land Value /Retail SF	Supportable Land Value
Single Family Units–9,500 SF Avg. Lot	100		\$55,000		\$5,500,000
Twins–5,000 SF Avg. Lot	1,000		\$40,000		\$40,000,000
Townhomes–1875 SF Average Lot	500		\$26,000		\$13,000,000
Multi-Family Flats, Etc.–28 DUs/Gross Acre	317		\$20,000		\$6,340,000
Multi-Family Flats, w. Retail–16 DUs/Gross Acre	800	325,000	\$20,000	\$30	\$25,750,000
Total	2,717	325,000			

Source: Urban Partners

commercial development; 150 acres to open space; 50 acres to the mixed use core; 225 to 250 acres to residential development at various densities; and 50 acres to multi-family building development adjacent to Route 322 with the option of retail/ commercial first floor use.

Most transfer of development rights will occur for residential developments. On Table 14, we have shown the underlying development economics for the various housing types. As noted above, single-family homes on 9,500 SF average lots can support land values of \$50,000 to \$60,000 per unit; we assume an average land value of \$55,000. Similarly, twins can support land values of \$35,000 to \$45,000 per unit; we assume an average land value of \$40,000; and townhomes can support land values of \$20,000 to \$30,000 per unit; we assume an average land value of \$26,000. These prices are for unimproved sites with development approval.

The supportable land values from multi-family building types vary depending on density and first floor commercial use. For this analysis, we assume that without commercial first floors, these buildings could be at densities up to 28 dwelling units per gross acre with surface parking. Supportable land values would be an average of \$20,000 per unit or up to \$560,000 per gross acre at 28 dus per acre. With commercial first floors, development density would be up to .15 FAR retail/commercial and up to 16 dwelling units per gross acre with surface parking. Supportable land values would be \$20,000 per unit and \$30 per commercial square foot or up to \$515,000 per gross acre at 16 dus and .15 commercial FAR per acre.

Based on these factors, the 100 units of single family detached housing can support \$5,500,000 of land acquisition cost; the 1,000 twin units can support \$40 million of land acquisition; and 500 townhomes support \$13 million of land acquisition. The proposed land use identifies locations for 317 units of multi-family buildings in locations where retail/commercial first floor uses are impractical. At 28 dus per acre, these multi-family buildings can support \$6.34 million of land acquisition. Similarly, 800 units of multi-family housing are programmed for locations where first floor retail/commercial uses are likely to be developed. These sites support 325,000 SF of retail/commercial uses; the retail and housing uses together support \$25.75 million in land acquisition values (see Table 14).

Table 15 details for each of these land use types the acreage required in the Receiving Area #1 for development of the

Table 15
Development Credit Requirements
Receiving Area #1

Development Type	Receiving Area Land Requirement (Acres)	Receiving Area Land Cost	Available For Development Credit Purchase	Required Development Credits	Receiving Area Development Credits By Right	Development Credit Shortfall
Single Family Units--9,500 SF Avg. Lot	29.1	\$1,450,000	\$4,050,000	100	17	83
Twins--5,000 SF Avg. Lot	153.0	\$7,650,000	\$32,350,000	1,000	90	910
Townhomes-1875 SF Average Lot	40.5	\$2,025,000	\$10,975,000	500	24	476
Multi-Family Flats, Etc.--28 DUs/Gross Acre	11.3	\$575,000	\$5,765,000	317	7	310
Multi-Family Flats, w. Retail--16 DUs/Gross Acre	50.0	\$9,500,000	\$16,250,000	800	0	800
Total	283.9			2,717	137	2,580

Source: Urban Partners

programmed number of residential units at the proscribed densities. The total required acreage is nearly 284 acres. Table 15 also details the cost of this land at the approximately \$50,000 per acre current market cost for most Receiving Area #1 locations. An exception to this \$50,000 per acre average is the 50 acres of land located near Route 322 and programmed for multi-family housing with retail/commercial first floor use. As noted above, under current zoning, recent land pricing for property located within 200 feet of Route 322 has been in the range of \$200,000 to \$250,000 per acre. The parcels programmed for this multi-family housing/commercial mixed use are approximately 80% located within this zone of higher current land pricing. Therefore, we have assumed an average land cost of \$190,000 per acre for Receiving Area Land Cost in this zone.

In all cases, the supportable land values determined in Table 14 exceed the estimated cost of Receiving Area land, leaving at least some surplus value available for purchase of development credits in the Sending Area (see Table 15). The required number of development credits is the shortfall between the number of credits required to construct the programmed development mix and the credits provided "by right" based on Receiving Area zoning.

Total required development credits (for residential development) are 2,717, as detailed in the desired programming for Receiving Area #1. Current underlying zoning provides one development credit per 1.5 developable acres in the portion of Receiving Area #1 currently zoned R-2. To attain consistency throughout the Receiving Area, the proposed post-TDR zoning will provide the same one credit per 1.5 acres in the portions of the FOC zoned area programmed exclusively for residential use. This allocation of "by-right" residential development capacity will apply only where the parcel is participating in Transfer of Development Rights. Based on this "by-right" allocation, 137 of the proposed 2,717 housing units can be developed on the basis of development rights associated with Receiving Area land (see Table 15). This leaves a shortfall of 2,580 development credits which must be purchased from the Sending Area or provided through "bonus" credits.

Table 16
Development Credit Bonus & Affordability
Receiving Area #1

Development Type	Development Credit Shortfall	Development Credit Bonus Ratio	Bonus Development Credits	Development Credits Needed From Sending Area	Sending Area Development Credit Cost	Available For Development Credit Purchase	Funds Available For Credit Purchase As Percentage of Credit Cost
Single Family Units—9,500 SF Avg. Lot	83	0.30	19	64	\$3,510,000	\$4,050,000	115.38%
Twins—5,000 SF Avg. Lot	910	0.80	405	506	\$27,810,000	\$32,350,000	116.33%
Townhomes-1875 SF Average Lot	476	1.80	306	170	\$9,360,000	\$10,975,000	117.25%
Multi-Family Flats, Etc.—28 DUs/Gross Acre	310	2.00	207	104	\$5,690,000	\$5,765,000	101.32%
Multi-Family Flats, w. Retail—16 DUs/Gross Acre	800	2.00	533	267	\$14,670,000	\$16,250,000	110.77%
Total	2,580		1,470	1,110			

Source: Urban Partners

The proposed Development Credit Bonus Ratios are detailed on Table 16. The proposed *bonus ratios for Route 322 Receiving Area #1 are 0.30 for single-family detached housing; 0.80 for twins; 1.80 for townhomes; and 2.00 for multi-family building flats, etc.* These bonus ratios are applied to the total of development credits purchased from the Sending Area. For example, if a developer purchased 20 development credits from the Sending Area for the purpose of constructing single family detached homes in the Receiving Area #1, the proposed development would receive a bonus of 6 credits (20 purchased times 0.30) and 26 units could be constructed. This would be in addition to the approximately 5 units which could be constructed “by right” from the development credits associated with the Receiving Area land.

Similarly, if a developer purchased 20 development credits from the Sending Area for the purpose of constructing twin homes in the Receiving Area #1, the proposed development would receive a bonus of 16 credits (20 purchased times 0.80) and 36 units could be constructed. This would be in addition to the approximately 4 units which could be constructed “by right” from the development credits associated with the Receiving Area land. If the developer purchased the 20 development credits from the Sending Area for the purpose of constructing townhomes, the proposed development would receive a bonus of 36 credits (20 purchased times 1.80) and 56 units could be constructed, in addition to the approximately 3 units which could be constructed “by right.”

Based on these bonus ratios and the proposed allocation of land to various housing densities in the Receiving Area #1, 1,110 development credits would need to be purchased from the Sending Area to complete development of the overall development program in the Receiving Area #1. These purchased development credits would leverage 1,470 bonus credits and, when added to the 137 “by right” development credits, provide the overall development rights for construction of 2,717 residential units.

On Table 16, we have also considered the feasibility that this TDR program will encourage the purchase of these 1,110 development credits in the Sending Area. Based on the \$55,000 value of a development credit outlined above, the cost of the necessary development credits for all housing types is less than the available funds identified in Table 15. In fact, as outlined on Table 16, the available funds exceed the anticipated credit cost in the Sending Area by 11% to 17% for almost all housing types, resulting in a financial incentive to developers to pursue the purchase of these development credits.

Commercial Buildings in Route 322 Receiving Area #1

Transferred development rights are also proposed for use to increase allowable FAR in commercial buildings above .15 FAR to a maximum of .3 FAR. The proposed future land use for this Receiving Area includes approximately 200 acres devoted to retail, office, and flex commercial development in purely commercial buildings. Zoning permitting retail use represents a change from the current FOC zoning. Most retail development can be effectively accommodated with surface parking at densities above .15 FAR, provided that access to sewage treatment facilities is available.

The Transfer of Development Rights element provides for development in exclusively commercial buildings to have increased FAR (up to .3 FAR) with the purchase of one development credit in the Sending Area for each 10,000 SF of additional commercial development beyond the .15 FAR. At \$55,000 per development credit, this would require an investment of \$5.50 per additional built square foot of retail/commercial space (\$55,000 for the right to build 10,000 additional square feet of space). The current price of FOC zoned land is \$50,000 per acre for the right to construct up to 6,534 square feet of commercial building. This is equivalent to \$7.65 per square foot of built commercial space. This pricing would make purchase of development credits more cost effective (\$5.50 per built square foot vs. \$7.65 per built square foot) than additional land purchases.

Based on 200 acres of land proposed for exclusively commercial development and up to 6,534 square feet of additional development per acre, an additional 1.3 million square feet of commercial space could be accommodated within Receiving Area #1 under this proposed Transfer of Development Rights feature. At one development credit per 10,000 square feet of additional commercial development, demand for as many as 130 additional development credits would be created within this area devoted to exclusively commercial buildings.

Auburn Road Receiving Area #2

For the Auburn Road Receiving Area #2, the increment of development for which development rights would need to be

Table 17 Development Program Land Values Receiving Area #2

Development Type	Development Program	Land Value /Unit	Supportable Land Value
Twins--5,000 SF Avg. Lot	52	\$40,000	\$2,080,000
Townhomes-2,500 SF Avg. Lot	210	\$26,000	\$5,460,000
Total	262		

Source: Urban Partners

transferred is 52 units of twins and 210 townhomes. Development credits will need to be secured for all these units since these 262 units are in addition to a modified “by-right” development program for this parcel.

On Table 17, we have shown the underlying development economics for these two housing types in Woolwich. As noted above, twins can support land values of \$35,000 to \$45,000 per unit; we assume an average land value of \$40,000. Similarly, townhomes can support land values of \$20,000 to \$30,000 per unit; we assume an average land value of \$26,000. These prices are for unimproved sites with development approval.

Based on 52 twin units and 210 townhomes, the supportable land values are \$2.08 million for the twins and \$5.46 million for the townhomes. We assume no on-site land cost for this development, since this increment of development is in addition to the “by-right” development associated with this parcel. This leaves a shortfall of 262 development credits which must be purchased from the Sending Area or provided through “bonus” credits.

The proposed Development Credit Bonus Ratios are detailed on Table 18. The proposed *bonus ratios for Auburn Road Receiving Area #2 are 0.60 for twins and 1.50 for townhomes.* These bonus ratios are applied to the total of development

**Table 18
Development Credit Requirements, Bonus & Affordability
Receiving Area #2**

Development Type	Required Development Credits	Development Credit Bonus Ratio	Bonus Development Credits	Development Credits Needed From Sending Area	Sending Area Development Credit Cost	Supportable Land Value	Funds Available For Credit Purchase As Percentage of Credit Cost
Twins--5,000 SF Avg. Lot	52	0.60	20	33	\$1,790,000	\$2,080,000	116.20%
Townhomes-2,500 SF Avg. Lot	210	1.50	126	84	\$4,620,000	\$5,460,000	118.18%
Total	262		146	117			

Source: Urban Partners

credits purchased from the Sending Area. For example, if a developer purchased 20 development credits from the Sending Area for the purpose of constructing twin homes in the Receiving Area #2, the proposed development would receive a bonus of 12 credits (20 purchased times 0.60) and 32 units could be constructed. Similarly, if a developer purchased 20 development credits from the Sending Area for the purpose of constructing townhomes in the Receiving Area #2, the proposed development would receive a bonus of 30 credits (20 purchased times 1.50) and 50 units could be constructed.

Based on these bonus ratios and the proposed allocation of land to twins and townhomes in the Receiving Area #1, 117 development credits would need to be purchased from the Sending Area to complete development of the overall development program in the Receiving Area #2. These purchased development credits would leverage 146 bonus credits and provide the overall development rights for construction of 262 residential units.

On Table 18, we have also considered the feasibility that this TDR program will encourage the purchase of these 117 development credits in the Sending Area. Based on the \$55,000 value of a development credit outlined above, *the cost of the necessary development credits for both housing types is less than the available funds identified in Table 17. In fact, as outlined on Table 18, the available funds exceed the anticipated credit cost in the Sending Area by 16% to 18% for both housing types, resulting in a financial incentive to developers to pursue the purchase of these development credits.*

VIABILITY OF THE TRANSFER OF DEVELOPMENT RIGHTS PROGRAM

Impact of Infrastructure and COAH Costs on Potential Development Rights Transfer

The Capital Improvement Program and Utility Service Plan supporting the proposed development program in Route 322 Receiving Area #1 has identified infrastructure costs for each type of development (commercial, single-family housing, twins, townhomes, etc.) that are similar to the infrastructure costs for each type of development elsewhere in the Township.

Based on these cost calculations—that infrastructure costs for roadways, utilities, and site preparation in Receiving Area #1 will be equivalent to similar infrastructure costs elsewhere in Woolwich for each proposed housing type—we conclude that necessary infrastructure investment and per unit costs will be low enough to support the viability of the Transfer of Development Rights program.

Similarly, the Auburn Road Receiving Area #2 is directly adjacent to the Weatherby development and is already within the Sewer Service Area. Therefore, *for purposes of this real estate market analysis and the determination of viability of the Transfer of Development Rights program, we assume that infrastructure costs for roadways, utilities, and site preparation in this Receiving Area #2 will be equivalent to similar infrastructure costs elsewhere in Woolwich for both proposed housing types, and specifically those costs at the adjacent Weatherby development.*

As noted above, the impact of COAH obligations on developer costs and on the pricing of land purchases by developers under the assumption of these affordable housing obligations has already been included in the analysis of current land values for various housing types. There is no proposed change in the level or structure of developer COAH obligations under the Transfer of Development Rights program from current requirements. Therefore, *for purposes of this real estate market analysis and the determination of viability of the Transfer of Development Rights program, we assume that the costs of providing affordable housing under COAH requirements will be identical to those under current conditions and that these costs have been already incorporated in land pricing.*

Effect of Other Impact Fees

The only existing impact fees in Woolwich Township involve escrows to guarantee maintenance of required landscaping and fees related to the provision of recreation facilities. For landscaping impacts, the current requirements are that "the applicant shall be required to escrow sufficient funds for the maintenance and/or replacement of the proposed vegetation, including compensatory plantings, during the two-year guarantee period. The escrow amount shall be equivalent to 110% of the amount of the cost estimate submitted with the approved landscape plan. In addition, an escrow shall be required for existing plants being disturbed by construction activities and/or transplanted plants that are being used to satisfy the minimum requirements contained in this chapter. This amount shall be equivalent to 110% of the cost of replacement with nursery-grown stock, based on the number of tree credits received for each existing tree or transplant." These landscaping plan requirements will be applied equivalently in the Sending and Receiving Areas as well as elsewhere in the Township.

For the recreation facilities requirement, the provision requires that "all lands set aside for open space shall be developed with active and passive recreational facilities to service the needs of the future residential population." At the discretion of the Planning Board, these facilities may include: ball fields, multipurpose fields, tennis courts, multipurpose court areas, children's playground equipment, passive picnic or sitting areas, swimming pools, bicycle baths, jogging trails, and other facilities. New facility requirements are based on standards tied to the total population increment, calculated using 3.6 persons per single-family detached unit, 2.6 persons per single-family attached or two-family unit and 2.5 persons per multifamily unit. Recreation facilities requirements will be applied equivalently in the Sending and Receiving Areas as well as elsewhere in the Township. The standards applied will be identical for the same unit types wherever they are located in the Township.

Therefore, *the relative applicability of existing impact fees (landscaping and recreation) will have no impact on the valuation of land in the Sending and Receiving Areas or on the viability of the Transfer of Development Rights program.*

These landscaping plan requirements will be applied equivalently in the Sending and Receiving Areas as well as elsewhere in the Township. Therefore, *the relative applicability of existing impact fees will have no impact on the valuation of land in the Sending and Receiving Areas or on the viability of the Transfer of Development Rights program.*

Market Conditions Assumptions

The validity of the real estate market analysis incorporated in this report and the determination in this report of the viability of the Transfer of Development Rights program proposed for Woolwich Township are dependent on a number of assumptions concerning overall economic conditions and policies at the national, state, regional, county, and local level. Most critical among these assumptions are the following:

- that the overall growth of the national economy remain generally consistent with patterns of the past fifteen years. Short-term adjustments in this pattern of growth will have only year-to-year impacts on the pace of development analyzed here; however, a longer-term economic decline could structurally impact demand for new housing and retail services and invalidate the assumptions of this analysis;
- that international issues of security and energy availability do not create structural changes in the security of U.S. communities, in the use of automobiles, or long-term dramatic changes in the cost of energy compared to other items;
- that U.S. monetary policy maintain interest rates within the ranges of rates seen in the past fifteen years. As noted above in Community Trends, there has been some development slowdown recently as higher interest rates have slowed housing development. This real estate market analysis assumes that this adjustment will be short-term and that monetary conditions will support housing demand in the long-term;
- that the Philadelphia region will continue to maintain the moderate pace of economic growth that has prevailed during the past fifteen years;
- that New Jersey and Gloucester County tax and public services policies will remain consistent relative to other regional counties; and
- that Woolwich Township will remain a location of choice for new housing development until full buildout is achieved.

Based on the maintenance of these policies and conditions, the underlying housing and retail development demand forecasted in this analysis should provide the market forces necessary to facilitate the proposed Transfer of Development Rights program and full buildout of the two designated Receiving Areas.

Specific economic relationships among different housing types and land uses (retail vs. housing, for instance) can change over the proposed thirty year buildout period forecasted here. These could occur due to the evolution of desired housing types, changes in retail technology which cause adjustments in the types of store space that are needed or effective, etc. These slowly-evolving consumer and production trends can and should be monitored. If necessary, economic relationships incorporated in the Transfer of Development Rights element (the specific “bonus” credit multipliers; the relative allocation of land within the Receiving Areas among different land uses, etc.) can and should be adjusted based on any such changes in consumer behavior or production technology.

Table 19
Capacity of Receiving Areas To Accommodate Sending Area Development Credits

Receiving Area	Development Credits To Be Purchased From Sending Area	Available Sending Area Development Credits
Receiving Area #1 Housing Development	1,110	
Receiving Area #1 Increased Commercial FAR	130	
Receiving Area #2 Housing Development	117	
Total	1,357	1,283

Source: Urban Partners

Viability of the Transfer of Development Rights Program

The above analysis has detailed the specific demand for Development Credits that will be generated from the two Receiving Areas. Table 19 summarizes this demand, identifying the total economic potential for purchase of 1,357 development credits that would be required for full buildout of the two Receiving Areas under the proposed development programs. This total potential demand for 1,357 development credits from the Sending Area exceeds by 5.7% the total estimated 1,283 development credits desired to be transferred from the Sending Area.

The demand for Development Credits from the Sending Area is based on a specific development program for each Receiving Area and the availability of "bonus" development credits to stimulate the Transfer of Development Rights program. Based on the market analysis detailed above and assuming the development patterns apparent in this portion of Gloucester County for the past decade remain in place, there appears to be sufficient residential, retail, and office/commercial demand to absorb the 3,217 residential units proposed for Receiving Area #1 and the 502 residential units proposed for Receiving Area #2 during the 2012 through 2029 period.

In addition, retail market conditions and the superior regional access available in the Route 322 Corridor should provide sufficient market to add 1.1 million to 2.1 million SF of retail space in the Receiving Area #1 during this same period. The market for the remaining 500,000 SF to 1.5 million SF of office/flex space will be no weaker than under current (pre-TDR) conditions. Residential development in Receiving Area #2 should support the modest 60,000 SF to 70,000 SF of convenience retail space programmed there.

This level of residential and retail demand, coupled with the proposed "bonus" development credits will provide sufficient market to support needed sales of the desired 1,283 Development Credits in the Sending Area. This demand will assure that all sending area credits can find buyers from the Receiving Areas during the forecast period (through 2029) provided that Development Credit sellers in the Sending Area price those credits competitively.

Also as detailed above, the cost of the necessary development credits for all housing types in both Receiving Areas is less than the available funds identified in Tables 15 and 17. In fact, as outlined on Tables 16 and 18, the available funds exceed the anticipated credit cost in the Sending Area by 11% to 17% for almost all housing types, resulting in a financial incentive to developers to pursue the purchase of these development credits.

Based on this analysis, we conclude that the proposed Transfer of Development Rights Program is based upon sufficient market demand and provides sufficient economic incentive to Development Credit buyers to support the needed sales of 1,283 Development Credits in the Sending Area during the forecast period (through 2029).

Appendix

EXISTING DESIGNATED ZONE DISTRICTS AND EXISTING ZONING ORDINANCE

ARTICLE IV Establishment of Districts [Amended 12-15-2003 by Ord. No. 2003-24]

§ 203-34. District designations.

For the purpose of lessening congestion in the streets; securing safety from fire, panic and other dangers; protecting health, morals and the general welfare; providing adequate light and air; preventing the overcrowding of land and buildings; avoiding undue concentration of population, with reasonable consideration to the character of the district and its peculiar suitability for particular uses and with the objective of conserving the value of property and encouraging the most appropriate use of land throughout the municipality, the Township of Woolwich is hereby divided into nine districts which shall be designated as follows:

5A Five Acre District (§ 203-39)

R-1 Residential District (§ 203-40)

R-2 Residential District (§ 203-41)

R-3 Residential District (§ 203-42)

RLM Residential Low/Moderate District (§ 203-43)

PAC Planned Adult Community District (§ 203-44)

PUD Planned Unit Development District (§ 203-45)

FOC Flexible Office Commercial District (§ 203-46)

CO Conservation Overly District (§ 203-47)

LIO Light Industrial/Office District (§ 203-48)

ARTICLE V District Regulations [Amended 4-5-1993 by Ord. No. 93-3; 4-19-1993 by Ord. No. 93-5; 9-9-1993 by Ord. No. 93-7; 3-21-1994 by Ord. No. 94-2; 10-2-1995 by Ord. No. 95-11; 3-15-1999 by Ord. No. 99-6; 2-7-2000 by Ord. No. 00-2; 4-21-2003 by Ord. No. 2003-07; 12-15-2003 by Ord. No. 2003-24]

§ 203-39. 5A Five Acre Residential District.

The intent in establishing the Five Acre District is to recognize and maintain the unique character of this area by encouraging residents to adhere to the special conditions which existed in the area that was subdivided in 1983 and known as “Five Acres and Independence.”

A. Use regulations.

(1) Principal uses. In the 5A District, no building or premises shall be used and no building shall be erected or altered which is arranged, intended or designed to be used, except for one or more of the following uses:

(a) Single-family detached dwellings.

(b) Farmhouses and farm buildings.

(c) Community residences for the developmentally disabled, community shelters for victims of domestic violence, community residences for the terminally ill and community residences for persons with head injuries shall be subject to the same standards and requirements for single-family detached residences in this district, provided that they conform to the definitions found in N.J.S.A. 40:55D-66.2.

(d) Public and nonprofit playgrounds, athletic fields, swimming pools, conservation areas, parks and public purpose uses.

(e) Temporary buildings, temporary construction offices and temporary storage of materials, provided that such use is located on the lot where construction is taking place or on a lot adjacent to or part of the de-

velopment site and that such temporary use is to be terminated within 30 days of issuance of a final certificate of occupancy for the total project or when work is abandoned.

- (f) Building structures and uses owned and operated by the Township.
- (g) Agriculture and horticulture, including farm markets located on and operated in conjunction with farm property qualifying for farmland assessment.
- (h) Accessory uses and accessory buildings incidental to the above permitted principal uses.

- (2) Conditional uses. In the 5A District, the following uses may be permitted as conditional uses:
 - (a) Home occupations as an accessory to a residential use subject to the requirements of § 203-61.
 - (b) The keeping of horses or ponies, subject to the special requirements of § 203-62.
 - (c) Intensive fowl or livestock farms, subject to the special requirements of § 203-67.

B. Bulk and area regulations.

- (1) Minimum lot size: five acres.
- (2) Minimum lot width: 200 feet.
- (3) Minimum yards.
 - (a) Front yard: 75 feet.
 - (b) Side yard: 25 feet.
 - (c) Rear yard: 50 feet.
- (4) Maximum building coverage: 5%.
- (5) Maximum impervious coverage: 15%.
- (6) Maximum building height: 35 feet.
- (7) Maximum gross density: 0.2 dwelling units/acre.

C. Special requirements.

- (1) No parking of any vehicle shall be permitted upon any roads or streets within the district.
- (2) No junk cars or abandoned vehicles shall be stored or permitted upon any lot, road or street.
- (3) Removal of topsoil from any lot is prohibited.
- (4) For all lots fronting on Kings Highway, access shall be via established access roads as shown on the filed plans. Direct access to Kings Highway shall not be permitted unless approved by the Gloucester County Planning Department.
- (5) Accessory buildings, including storage sheds, greenhouses, and other outbuildings, shall be subject to the following regulations, which shall supersede the requirements of § 203-59A in this district.
 - (a) The gross floor area of any building shall not exceed 2% of the lot area, and the total size of all accessory buildings shall not exceed 4% of the lot area.
 - (b) No accessory building shall be located within 15 feet of any side or rear property line.
 - (c) No accessory building shall be permitted between the building line and the street line.
 - (d) The height of an accessory building shall not exceed 25 feet or the height of the principal building, whichever is less.

§ 203-40. R-1 District. [Amended 8-1-2005 by Ord. No. 2005-25]

A. Intent.

- (1) The intent of the R-1 Residential District is to provide appropriate regulations for the preservation of agriculture, natural resources, scenic vistas and the rural landscape of Woolwich Township, along with the development of single-family detached dwellings and other permitted uses in portions of the Township characterized as rural, regardless of presence or absence of public sewer or water service. The Township is offering three development options in the R-1 District. Options 1 and 2 are strongly encouraged as the means to best maintain the rural character while preserving open space and natural resources in the R-1 Dis-

tract. Additionally, the Township is seeking to encourage the incorporation of affordable housing within the normal development of the Township so as to afford all individuals the opportunity to benefit from the rural character of Woolwich Township. In conformance with the MLUL, the purposes of Options 1 and 2 are as follows:

- (a) To conserve open land, including those areas containing unique and sensitive natural features such as woodlands, steep slopes, streams, floodplains and wetlands, by setting them aside from development;
- (b) To provide greater design flexibility and efficiency in the design of services and infrastructure, including the opportunity to reduce length of roads, utility runs and the amount of paving required for residential development;
- (c) To reduce erosion and sedimentation by the retention of existing vegetation and the minimization of development on steep slopes;
- (d) To provide for a diversity of lot sizes, building densities and housing choices to accommodate a variety of age and income groups, and residential preferences, so that the community's population diversity may be maintained;
- (e) To implement adopted municipal policies to conserve a variety of irreplaceable and environmentally sensitive resource lands as set forth in the municipality's Open Space Plan, including provisions for reasonable incentives to create a greenway system for the benefit of present and future residents;
- (f) To implement adopted land use, transportation and community policies as identified in the municipality's Master Plan;
- (g) To protect areas of the municipality with productive agricultural soils for continued or future agricultural use, by conserving blocks of land large enough to allow for efficient farm operations;
- (h) To create neighborhoods with direct visual access to open land, with amenities in the form of neighborhood open space, and with a strong neighborhood identity;
- (i) To provide for the conservation and maintenance of open land within the municipality to achieve the above-mentioned goals and for active or passive recreational use by residents;
- (j) To provide multiple options for landowners in order to minimize impacts on environmental resources (sensitive lands such as wetlands, floodplain and steep slopes) and disturbance of natural or cultural features (such as mature woodlands, hedgerows and tree lines, critical wildlife habitats, historic buildings and field-stone walls);
- (k) To provide standards reflecting the varying circumstances and interests of individual landowners, and the individual characteristics of their properties.
- (l) To conserve scenic views and elements of the municipality's rural character, and to minimize perceived density, by minimizing views of new development from existing roads; and
- (m) To provide for the incorporation of affordable housing in a way that provides the opportunity for all residents to share in the benefits of living in Woolwich Township.

(2) In order to achieve these purposes, this section provides for flexibility in designing new residential subdivisions in the R-1 Residential District by allowing two forms of conservation zoning based upon the number of DU (dwelling units) as determined by the conventional zoning by-right development.

- (a) Option 1: neutral density and basic conservation, providing for residential uses at the density permitted by the underlying R-1 Zoning District. Greenway lands shall comprise at least half the tract.
- (b) Option 2: country properties, providing for very low densities appropriate to rural situations, with flexible and reduced design standards in instances where a permanent conservation easement is offered to maintain such uses.
- (c) Option 3: conventional lotting. In addition to the above preferred options for subdivision, Option 3, conventional lotting, at a minimum lot size of two acres, is also permitted.
- (d) COAH overlay. Regardless of the option chosen from the above, COAH housing units are able to be incorporated within a subdivision.

B. Use regulations.

(1) Principal uses. In the R-1 District, no building or premises shall be used and no building shall be erected or altered which is arranged, intended or designed to be used except for one or more of the following uses: all principal and accessory uses permitted in the 5A District.

(2) Conditional uses. In the R-1 District, the following uses may be permitted as conditional uses:

(a) Home occupations as part of a continued existing residential use may occur, subject to the criteria governing such home occupations as contained in § 203-60.

(b) Public and private elementary, middle and high schools, subject to the requirements of the minimum lot sizes as established by the New Jersey State Department of Education for school facilities, and subject further to the following:

[1] Location of access driveways, landscaping and site plan design shall be compatible with the neighborhood in which it is to be located.

[2] No building or part thereof or any parking or loading area shall be located nearer than 50 feet to any street line or lot line.

(c) Public libraries and museums, subject to the following:

[1] Location of access driveways, landscaping and site plan design shall be compatible with the neighborhood in which it is to be located.

[2] No building or part thereof or any parking or loading area shall be located nearer than 50 feet to any street line or lot line.

[3] A site plan in accordance with the Woolwich Township site plan requirements submitted to the Planning Board pursuant to its conditional use review authority (N.J.S.A. 40:55D-67).

(d) Water storage tank or tower, water reservoir, water or sewer pumping station and water or sewage treatment plant, 400 square feet or greater in size, subject to the following special requirements:

[1] Project shall be designed to be structurally compatible and in keeping with the architectural character of the neighborhood in which it is to be located.

[2] Project shall be in keeping with the Master Plan or Utility Master Plan of the Township.

[3] Project shall conform with yard setbacks for the district in which it is to be located.

[4] Adequate landscaping in conformance with standards established in § 203-68 and § 203-69.

(e) Substation, electric and gas facilities, and all other public utilities, 400 square feet or greater in size, subject to the following requirements:

[1] All those requirements of Subsection B(2)(d) of this section.

[2] No storage of materials and trucks and no repair facilities or housing of repair crews, except within completely enclosed buildings.

(f) Transmission lines, transmitting and receiving antennas or aerials, subject to the following special requirements:

[1] None shall exceed 55 feet in height.

[2] None shall be of such height or position that aircraft warning lights are required by any governmental agency.

(g) The keeping of horses or ponies, subject to the special requirements of § 203-62.

(h) Intensive fowl or livestock farms, subject to the special requirements of § 203-67.

(3) Special requirements.

(a) Accessory buildings, including storage sheds, greenhouses and other outbuildings, shall be subject to the following regulations, which shall supersede the requirements of § 203-59A in this district:

[1] For lots less than three acres in size, the gross floor area of any individual building shall not exceed

1,500 square feet, and the total size of all accessory buildings shall not exceed 2% of the lot area.

[2] For lots of three acres or greater in size, the gross floor area of any individual building shall not exceed 2% of the lot area, and the total size of all accessory buildings shall not exceed 4% of the lot area.

[3] No accessory building shall be located within 10 feet of any side or rear property line.

[4] No accessory building shall be permitted between the building line and the street line.

[5] The height of an accessory building shall not exceed 25 feet or the height of the principal building, whichever is less

C. Bulk and area regulations. In order to achieve these purposes, this section provides for flexibility in designing new residential subdivisions in the R-1 Residential District by allowing two forms of conservation zoning based upon the number of DU (dwelling units) as determined by the conventional zoning by-right development.

Table of Options

	Option 1 Neutral Density/Basic Conservation	Option 2 Country Properties	Option 3 Conventional Lotting
Density	87,120 sf/du maximum gross density	10 acres/du	87,120 sf/du
Lot size maximum with minimum lot width	1.3 acres 150 feet	NA	NA
Lot size average with minimum lot width	1 acre; 43,560 sf 125 feet	10 acres 300 feet	NA
Lot size minimum with minimum lot width	1/2 acre; 21,780 sf 100 feet	5 acres 300 feet	87,120 sf or 2 acres 185 feet
Open space	50%	No common open space	No common open space
Yards			
Front	30 feet	See Option 2: country properties	60 feet
Side	10 feet; 40 feet between buildings		25 feet
Rear	40 feet		50 feet
Maximum building coverage	NA	NA	10%
Maximum impervious coverage	30% on each lot	12%	30%
Maximum building height	35 feet	35 feet	35 feet

- (1) Option 1: neutral density and basic conservation, providing for residential uses at the density permitted by the underlying R-1 Zoning District. Greenway lands shall comprise at least half the tract.
- (a) Density: as determined though the yield plan described in Subsection C(1)(i) below.
- (b) Minimum required greenway land. The subdivision must include at least 50% of the gross tract area as greenway land. Greenway land shall not be used for residential lots.
- (c) Minimum lot area: 21,780 square feet.
- (d) Minimum lot width at building line: 100 feet.
- (e) Minimum street frontage: 25 feet.
- (f) Yard regulations. The builder or developer is urged to consider variations in the principal building position and orientation, but shall observe the following minimum standards:
- [1] Front: 30 feet; garage door must be set back a minimum of 40 feet.
- [2] Rear: 40 feet.
- [3] Side: 40 feet separation for principal buildings, with no side yard less than 10 feet.
- (g) Maximum impervious coverage: 30% limit on each lot.
- (h) Maximum height regulations: 35 feet.
- (i) Density determination for Option 1: yield plan approach. Determination of density, or maximum number of permitted dwelling units, shall be based upon the yield plan. Yield plans shall meet the following requirements:
- [1] Yield plans must be prepared as conceptual layout plans in accordance with the standards of the Subdivision of Land Ordinance, Editor's Note: See Ch. 163, Subdivision of Land. containing proposed lots, streets, rights-of-way and other pertinent features. Yield plans must be a realistic layout, based upon a field survey, that meets all district regulations and all bulk and area regulations for the underlying residential district(s) in which the tract is located. The yield plan must reflect a development pattern that could actually be built, delineating the presence of wetlands, floodplains, steep slopes, existing easements or encumbrances and, if unsewered, the suitability of soils for subsurface sewage disposal. When a tract of land has two (or more) underlying zoning designations according to the Zoning Map of the Township, the yield plan must be designed to the requirements of the underlying zoning for each zone. The yield plan must reflect the developer's plan should the Township choose not to grant the option of conservation zoning and instead require the developer to design the subdivision based upon the conventional zoning in place, Option 3.
- [2] The dimensional standards of Option 3, conventional zoning, shall be used in the development of yield plans for Option 1 subdivisions. The yield plan must identify the site's primary and secondary resources, as identified in the existing resources/site analysis plan (required in the Site Plan Review and Subdivision of Land Ordinances), Editor's Note: See Ch. 149, Site Plan Review, and Ch. 163, Subdivision of Land, respectively. and demonstrate that the primary resources could be successfully absorbed in the development process without disturbance.
- [3] On sites not served by central sewage disposal, density shall be further determined by evaluating the number of homes that could be supported by septic systems on conventional lots. Based on the primary and secondary resources, identified as part of the inventory and analysis, and observations made during an on-site visit of the property, the Planning Board shall select a ten-percent sample of the lots considered to be marginal for on-lot sewage disposal. The applicant is required to provide evidence that these lots meet the standards for an individual septic system; then they shall be granted the full density determined by the yield plan. Should any of the lots in a sample fail to meet the standard for individual septic system, those lots shall be deducted from the yield plan and a second ten-percent sample shall be selected by the Planning Board and tested for compliance. This process shall be repeated until all lots in a given sample meet the standard for an individual septic system.
- (j) Design standards for Option 1.
- [1] House lots shall not encroach upon primary conservation areas as identified in § 203-72, and their layout shall respect secondary conservation areas as described in both the Zoning Ordinance and in the Sub-

division/Site Plan Review Ordinances.

[2] All new dwellings shall meet the following setback requirements:

[a] From all external road rights-of-way: 100 feet.

[b] From all other tract boundaries: 50 feet.

[c] From cropland or pasture land: 150 feet.

[d] From preserved farms (preserved farms through the SADC program, the county program or through the Township's TDR program): 300 feet.

[e] From buildings or barnyards housing livestock: 300 feet.

[f] From active recreation areas such as courts or playing fields (not including tot lots): 150 feet.

[3] Views of house lots from exterior roads and abutting properties shall be minimized by the use of changes in topography, existing vegetation or additional landscaping which meets the landscaping requirements in Chapters 149, 163 and 203 of the Woolwich Code.

[4] House lots shall be accessed from interior streets rather than from roads bordering the tract.

[5] Standards pertaining to the use, quantity, quality, configuration, ownership and maintenance of the greenway land created under this section are contained in § 203-72 of this chapter.

[6] As per § 203-72D(2)(c), at the discretion of the Planning Board, four percent to six percent of the required greenway lands shall be in the form of neighborhood common greens. A neighborhood green will typically be a 44,000 square foot area, per 20 dwelling units, and shall be located internal to the developed areas. At least 1/2 of the lots shall abut the neighborhood green directly, and all shall be oriented to have the front of the dwelling face in the direction of the neighborhood green.

(2) Option 2: country properties, providing for very low densities appropriate to rural situations, with flexible and reduced design standards in instances where a permanent conservation easement is offered to maintain such uses.

(a) Maximum density: one dwelling unit per 10 acres.

(b) Minimum lot area: five acres, provided the average lot size in the tract is 10 acres.

(c) All such lots must be permanently protected from future subdivisions by conservation easements.

(d) Minimum lot width at building line: 300 feet.

(e) Yard regulations.

[1] Front: 150 feet from the rights-of-way of existing municipal roads, but 40 feet from the rights-of-way of new subdivision streets, country lanes or common driveways (where applicable).

[2] Rear: 50 feet minimum for principal buildings and 10 feet for accessory buildings (except that accessory buildings with a ground floor area exceeding 200 square feet shall conform to the setback requirements for principal structures).

[3] Side: 25 feet.

(f) Maximum impervious coverage: 12%.

(g) Maximum height regulations: 35 feet.

(3) Option 3: conventional lotting. In addition to the above preferred options for subdivision, Option 3, conventional lotting, at a minimum lot size of two acres, is also permitted.

(a) Minimum lot area: 87, 120 square feet.

(b) Minimum lot width: 185 feet.

(c) Front yard setback: 60 feet.

(d) Rear yard setback: 50 feet.

(e) Side yard setbacks: 25 feet.

(f) New dwelling setbacks.

[1] From all external road rights-of-way: 100 feet.

- [2] From all other tract boundaries: 50 feet.
- [3] From cropland or pasture land: 150 feet.
- [4] From preserved farms (preserved farms through the SADC program, the county program or through the Township's TDR program): 300 feet.
- [5] From buildings or barnyards housing livestock: 300.
- [6] From active recreation areas such as courts or playing fields (not including tot lots): 150 feet.

D. COAH overlay: reduction in minimum lot area and setbacks when the required 11.11% of affordable and moderate-income housing is included as interspersed units within the project. As required by state law, one COAH dwelling unit must be built for every eight market value units that are built. When these required COAH dwelling units are incorporated within a subdivision, there shall be no density bonus for such units and there shall be no encroachment of development into minimum required conservation open space.

- (1) The required number of COAH is as defined in the Township Ordinance No. 2005-05. (See § 203-101.)
- (2) All units must be affordable to low- and moderate-income households and must meet all applicable criteria necessary to render the units creditworthy, including, but not limited to, bedroom mix, the 50/50 low- and moderate-income housing split, phasing, affirmative marketing and other applicable laws as set forth in Mount Laurel II, 92 N.J. 158 (1983) and its progeny, the Fair Housing Act (N.J.S.A. 52:27D-301 et seq.), the regulations of the New Jersey Council on Affordable Housing (COAH) and other applicable laws as well as the COAH requirements of the Township as outlined in Ordinance No. 2005-05. (See § 203-101.)
- (3) The minimum lot size for a COAH housing unit, for those units constructed in a non-sewer service area, shall be determined by the minimum amount of land necessary to provide for a wastewater disposal system and fresh water well that is approved by, and meets all conditions of, applicable state and county authorities. The minimum lot size for a COAH housing unit, for those units constructed in a sewer area under R-1 zoning, shall be 8,000 square feet.
- (4) The COAH housing units may be constructed as twins.
- (5) Minimum street frontage: 25 feet.
- (6) Yard regulations. The builder or developer is urged to consider variations in the principal building position and orientation, but shall observe the following minimum standards:
 - (a) Front: 30 feet; garage door must be set back a minimum of 40 feet.
 - (b) Rear: 25 feet.
 - (c) Side: 15 feet separation for principal buildings, with no side yard less than 10 feet; except twins units, built to meet the Township's COAH requirements, will have a zero side yard setback on the shared wall side (by definition).
- (7) Maximum impervious coverage: 40% limit on each lot.
- (8) Maximum height regulations: 35 feet.

§ 203-41. R-2 District. [Amended 8-1-2005 by Ord. No. 2005-25]

A. Intent.

(1) The intent of the R-2 Residential District is to provide appropriate regulations for the preservation of agriculture, natural resources, scenic vistas and the rural landscape of Woolwich Township, along with the development of single-family detached dwellings and other permitted uses in portions of the Township characterized as rural, regardless of presence or absence of public sewer or water service. The Township is offering three development options in the R-2 District. Options 1 and 2 are strongly encouraged as the means to best maintain the rural character while preserving open space and natural resources in the R-2 District. Additionally, the Township is seeking to encourage the incorporation of affordable housing within the normal development of the Township so as to afford all individuals the opportunity to benefit from the rural

character of Woolwich Township. In conformance with the MLUL, the purposes of Options 1 and 2 are as follows:

- (a) To conserve open land, including those areas containing unique and sensitive natural features such as woodlands, steep slopes, streams, floodplains and wetlands, by setting them aside from development;
- (b) To provide greater design flexibility and efficiency in the design of services and infrastructure, including the opportunity to reduce length of roads, utility runs and the amount of paving required for residential development;
- (c) To reduce erosion and sedimentation by the retention of existing vegetation and the minimization of development on steep slopes;
- (d) To provide for a diversity of lot sizes, building densities and housing choices to accommodate a variety of age and income groups, and residential preferences, so that the community's population diversity may be maintained;
- (e) To implement adopted municipal policies to conserve a variety of irreplaceable and environmentally sensitive resource lands as set forth in the municipality's Open Space Plan, including provisions for reasonable incentives to create a greenway system for the benefit of present and future residents;
- (f) To implement adopted land use, transportation and community policies as identified in the municipality's Master Plan;
- (g) To protect areas of the municipality with productive agricultural soils for continued or future agricultural use, by conserving blocks of land large enough to allow for efficient farm operations;
- (h) To create neighborhoods with direct visual access to open land, with amenities in the form of neighborhood open space, and with a strong neighborhood identity;
- (i) To provide for the conservation and maintenance of open land within the municipality to achieve the above-mentioned goals and for active or passive recreational use by residents;
- (j) To provide multiple options for landowners in order to minimize impacts on environmental resources (sensitive lands such as wetlands, floodplain and steep slopes) and disturbance of natural or cultural features (such as mature woodlands, hedgerows and tree lines, critical wildlife habitats, historic buildings and field-stone walls);
- (k) To provide standards reflecting the varying circumstances and interests of individual landowners, and the individual characteristics of their properties.
- (l) To conserve scenic views and elements of the municipality's rural character, and to minimize perceived density, by minimizing views of new development from existing roads; and
- (m) To provide for the incorporation of affordable housing in a way that provides the opportunity for all residents to share in the benefits of living in Woolwich Township.

(2) In order to achieve these purposes, this section provides for flexibility in designing new residential subdivisions in the R-2 Residential District by allowing two forms of conservation zoning based upon the number of DU (dwelling units) as determined by the conventional zoning by-right development.

- (a) Option 1: neutral density and basic conservation, providing for residential uses at the density permitted by the underlying R-2 Zoning District. Greenway lands shall comprise at least half the tract.
- (b) Option 2: country properties, providing for very low densities appropriate to rural situations, with flexible and reduced design standards in instances where a permanent conservation easement is offered to maintain such uses.
- (c) Option 3: conventional lotting. In addition to the above preferred options for subdivision, Option 3, conventional lotting, at a minimum lot size of 1.5 acres, is also permitted.
- (d) COAH overlay. Regardless of the option chosen from the above, COAH housing units are able to be incorporated within a subdivision.

B. Use regulations.

- (1) Principal uses. In the R-2 District, no building or premises shall be used and no building shall be

erected or altered which is arranged, intended or designed to be used except for one or more of the following uses: all principal and accessory uses permitted in the 5A District.

(2) Conditional uses. In the R-2 District, the following uses may be permitted as conditional uses:

(a) Home occupations as part of a continued existing residential use may occur, subject to the criteria governing such home occupations as contained in § 203-60.

(b) Public and private elementary, middle and high schools, subject to the requirements of the minimum lot sizes as established by the New Jersey State Department of Education for school facilities, and subject further to the following:

[1] Location of access driveways, landscaping and site plan design shall be compatible with the neighborhood in which it is to be located.

[2] No building or part thereof or any parking or loading area shall be located nearer than 50 feet to any street line or lot line.

(c) Public libraries and museums, subject to the following:

[1] Location of access driveways, landscaping and site plan design shall be compatible with the neighborhood in which it is to be located.

[2] No building or part thereof or any parking or loading area shall be located nearer than 50 feet to any street line or lot line.

[3] A site plan in accordance with the Woolwich Township site plan requirements submitted to the Planning Board pursuant to its conditional use review authority (N.J.S.A. 40:55D-67).

(d) Water storage tank or tower, water reservoir, water or sewer pumping station and water or sewage treatment plant, 400 square feet or greater in size, subject to the following special requirements:

[1] Project shall be designed to be structurally compatible and in keeping with the architectural character of the neighborhood in which it is to be located.

[2] Project shall be in keeping with the Master Plan or Utility Master Plan of the Township.

[3] Project shall conform with yard setbacks for the district in which it is to be located,

[4] Adequate landscaping in conformance with standards established in §§ 203-68 and 203-69.

(e) Substation, electric and gas facilities, and all other public utilities, 400 square feet or greater in size, subject to the following requirements:

[1] All those requirements of Subsection B(2)(d) of this section.

[2] No storage of materials and trucks and no repair facilities or housing of repair crews, except within completely enclosed buildings.

(f) Transmission lines, transmitting and receiving antennas or aerials, subject to the following special requirements:

[1] None shall exceed 55 feet in height.

[2] None shall be of such height or position that aircraft warning lights are required by any governmental agency.

(g) The keeping of horses or ponies, subject to the special requirements of § 203-62.

(h) Intensive fowl or livestock farms, subject to the special requirements of § 203-67.

(3) Special requirements.

(a) Accessory buildings, including storage sheds, greenhouses and other outbuildings, shall be subject to the following regulations, which shall supersede the requirements of § 203-59A in this district:

[1] For lots less than three acres in size, the gross floor area of any individual building shall not exceed 1,500 square feet, and the total size of all accessory buildings shall not exceed 2% of the lot area.

[2] For lots of three acres or greater in size, the gross floor area of any individual building shall not ex-

ceed 2% of the lot area, and the total size of all accessory buildings shall not exceed 4% of the lot area.

[3] No accessory building shall be located within 10 feet of any side or rear property line.

[4] No accessory building shall be permitted between the building line and the street line.

[5] The height of an accessory building shall not exceed 25 feet or the height of the principal building, whichever is less.

C. Bulk and area regulations. In order to achieve these purposes, this section provides for flexibility in designing new residential subdivisions in the R-2 Residential District by allowing two forms of conservation zoning based upon the number of DU (dwelling units) as determined by the conventional zoning by-right development.

Table of Options

	Option 1 Neutral Density/Basic Conservation	Option 2 Country Properties	Option 3
Conventional Lotting			
Density	65,340 sf/du maximum gross density	7 acres/du	65,340 sf/du
Lot size maximum with minimum lot width	1 acre 150 feet	NA	NA
Lot size average with minimum lot width	32,670 sf 115 feet	7 acres 300 feet	NA
Lot size minimum with minimum lot width	1/2 acre; 21,780 sf 100 feet	3 acres 200 feet	
	65,340 sf or 1.5 acres 160 feet		
Open space	50%	No common open space	No common open space
Yards			
Front	25 feet	See Option 2: country properties	50 feet
Side	10 feet; 35 feet between buildings		20 feet
Rear	40 feet	30 feet	
Maximum building coverage	NA	NA	10%
Maximum impervious coverage	30% on each lot	15%	35%
Maximum building height	35 feet	35 feet	35 feet

(1) Option 1: neutral density and basic conservation, providing for residential uses at the density permitted by the underlying R-2 Zoning District. Greenway lands shall comprise at least half the tract.

(a) Density: as determined through the yield plan described in Subsection C(1)(i) below.

(b) Minimum required greenway land. The subdivision must include at least 50% of the gross tract area as greenway land. Greenway land shall not be used for residential lots.

(c) Minimum lot area: 21,780 square feet.

(d) Minimum lot width at building line: 100 feet.

(e) Minimum street frontage: 25 feet.

(f) Yard regulations. The builder or developer is urged to consider variations in the principal building position and orientation, but shall observe the following minimum standards:

[1] Front: 30 feet; garage door must be set back a minimum of 40 feet.

[2] Rear: 40 feet.

[3] Side: 40 feet separation for principal buildings, with no side yard less than 10 feet.

(g) Maximum impervious coverage: 30% limit on each lot.

(h) Maximum height regulations: 35 feet.

(i) Density determination for Option 1: yield plan approach. Determination of density, or maximum number of permitted dwelling units, shall be based upon the yield plan. Yield plans shall meet the following requirements:

[1] Yield plans must be prepared as conceptual layout plans in accordance with the standards of the Subdivision of Land Ordinance, Editor's Note: See Ch. 163, Subdivision of Land. containing proposed lots, streets, rights-of-way and other pertinent features. Yield plans must be a realistic layout, based upon a field

survey, that meets all district regulations and all bulk and area regulations for the underlying residential district(s) in which the tract is located. The yield plan must reflect a development pattern that could actually be built, delineating the presence of wetlands, floodplains, steep slopes, existing easements or encumbrances and, if unsewered, the suitability of soils for subsurface sewage disposal. When a tract of land has two (or more) underlying zoning designations according to the Zoning Map of the Township, the yield plan must be designed to the requirements of the underlying zoning for each zone. The yield plan must reflect the developer's plan should the Township chose not to grant the option of conservation zoning and instead require the developer to design the subdivision based upon the conventional zoning in place, Option 3.

[2] The dimensional standards of Option 3, conventional zoning, shall be used in the development of yield plans for Option 1 subdivisions. The yield plan must identify the site's primary and secondary resources, as identified in the existing resources/site analysis plan (required in the Site Plan Review and Subdivision of Land Ordinances), Editor's Note: See Ch. 149, Site Plan Review, and Ch. 163, Subdivision of Land, respectively. and demonstrate that the primary resources could be successfully absorbed in the development process without disturbance.

[3] On sites not served by central sewage disposal, density shall be further determined by evaluating the number of homes that could be supported by septic systems on conventional lots. Based on the primary and secondary resources, identified as part of the inventory and analysis, and observations made during an on-site visit of the property, the Planning Board shall select a ten-percent sample of the lots considered to be marginal for on-lot sewage disposal. The applicant is required to provide evidence that these lots meet the standards for an individual septic system; then they shall be granted the full density determined by the yield plan. Should any of the lots in a sample fail to meet the standard for individual septic system, those lots shall be deducted from the yield plan and a second ten-percent sample shall be selected by the Planning Board and tested for compliance. This process shall be repeated until all lots in a given sample meet the standard for an individual septic system.

(j) Design standards for Option 1.

[1] House lots shall not encroach upon primary conservation areas as identified in § 203-72, and their layout shall respect secondary conservation areas as described in both the Zoning Ordinance and in the Subdivision/Site Plan Review Ordinances.

[2] All new dwellings shall meet the following setback requirements:

[a] From all external road rights-of-way: 100 feet.

[b] From all other tract boundaries: 50 feet.

[c] From cropland or pasture land: 150 feet.

[d] From preserved farms (preserved farms through the SADC program, the county program or through the Township's TDR program): 300 feet.

[e] From buildings or barnyards housing livestock: 300 feet.

[f] From active recreation areas such as courts or playing fields (not including tot lots): 150 feet.

[3] Views of house lots from exterior roads and abutting properties shall be minimized by the use of changes in topography, existing vegetation or additional landscaping which meets the landscaping requirements in Chapters 149, 163 and 203 of the Woolwich Code.

[4] House lots shall be accessed from interior streets rather than from roads bordering the tract.

[5] Standards pertaining to the use, quantity, quality, configuration, ownership and maintenance of the greenway land created under this section are contained in § 203-72 of this chapter.

[6] As per § 203-72D(2)(c), at the discretion of the Planning Board, four percent to six percent of the required greenway lands shall be in the form of neighborhood common greens. A neighborhood green will typically be a 44,000 square feet area, per 20 dwelling units, and shall be located internal to the developed areas. At least 1/2 of the lots shall abut the neighborhood green directly, and all shall be oriented to have the front of the dwelling face in the direction of the neighborhood green.

(2) Option 2: country properties, providing for very low densities appropriate to rural situations, with flexible and reduced design standards in instances where a permanent conservation easement is offered to maintain such uses.

(a) Maximum density: one dwelling unit per seven acres.

(b) Minimum lot area: three acres, provided the average lot size in the tract is 10 acres.

(c) All such lots must be permanently protected from future subdivisions by conservation easements.

(d) Minimum lot width at building line: 300 feet.

(e) Yard regulations.

[1] Front: 150 feet from the rights-of-way of existing municipal roads, but 40 feet from the rights-of-way of new subdivision streets, country lanes or common driveways (where applicable).

[2] Rear: 50 feet minimum for principal buildings and 10 feet for accessory buildings (except that accessory buildings with a ground floor area exceeding 200 square feet shall conform to the setback requirements for principal structures).

[3] Side: 25 feet.

(f) Maximum impervious coverage: 15%.

(g) Maximum height regulations: 35 feet.

(3) Option 3: conventional lotting. In addition to the above preferred options for subdivision, Option 3, conventional lotting, at a minimum lot size of two acres, is also permitted.

(a) Minimum lot area: 65,340 square feet.

(b) Minimum lot width: 160 feet.

(c) Front yard setback: 50 feet.

(d) Rear yard setback: 30 feet.

(e) Side yard setbacks: 20 feet.

(f) New dwelling setbacks:

[1] From all external road rights-of-way: 100 feet.

[2] From all other tract boundaries: 50 feet.

[3] From cropland or pasture land: 150 feet.

[4] From preserved farms (preserved farms through the SADC program, the county program or through the Township's TDR program): 300 feet.

[5] From buildings or barnyards housing livestock: 300.

[6] From active recreation areas such as courts or playing fields (not including tot lots): 150 feet.

D. COAH overlay: Reduction in minimum lot area and setbacks when the required 11.11% of affordable and moderate-income housing is included as interspersed units within the project. As required by state law, one COAH dwelling unit must be built for every eight market value units that are built. When these required COAH dwelling units are incorporated within a subdivision, there shall be no density bonus for such units and there shall be no encroachment of development into minimum required conservation open space.

(1) The required number of COAH is as defined in the Township Ordinance No. 2005-05. (See § 203-101.)

(2) All units must be affordable to low- and moderate-income households and must meet all applicable criteria necessary to render the units creditworthy, including, but not limited to, bedroom mix, the 50/50 low- and moderate-income housing split, phasing, affirmative marketing and other applicable laws as set forth in Mount Laurel II, 92 N.J. 158 (1983) and its progeny, the Fair Housing Act (N.J.S.A. 52:27D-301 et seq.), the regulations of the New Jersey Council on Affordable Housing (COAH) and other applicable laws as well as the COAH requirements of the Township as outlined in Ordinance No. 2005-05. (See § 203-101.)

(3) The minimum lot size for a COAH housing unit, for those units constructed in a non-sewer service area, shall be determined by the minimum amount of land necessary to provide for a wastewater disposal

system and fresh water well that is approved by, and meets all conditions of, applicable state and county authorities. The minimum lot size for a COAH housing unit, for those units constructed in a sewer area under R-2 zoning, shall be 8,000 square feet.

- (4) The COAH housing units may be constructed as twins.
- (5) Minimum street frontage: 25 feet.
- (6) Yard regulations. The builder or developer is urged to consider variations in the principal building position and orientation, but shall observe the following minimum standards:
 - (a) Front: 30 feet; garage door must be set back a minimum of 40 feet.
 - (b) Rear: 25 feet.
 - (c) Side: 15 feet separation for principal buildings, with no side yard less than 10 feet; except twins units, built to meet the Township's COAH requirements, will have a zero side yard setback on the shared wall side (by definition).
- (7) Maximum impervious coverage: 40% limit on each lot.
- (8) Maximum height regulations: 35 feet.

§ 203-42. R-3 Residential District. [Amended 8-1-2005 by Ord. No. 2005-25]

A. Intent.

(1) The intent of the R-3 Residential District is to provide appropriate regulations for the preservation of agriculture, natural resources, scenic vistas and the rural landscape of Woolwich Township, along with the development of moderate-density single-family detached dwellings and other permitted uses in portions of the Township which are located within the existing public sewer service area, as of 2004, but which are not part of any planned unit development. Where public sewer is unavailable, the regulations of the R-2 Residential District shall apply. The Township is offering two development options in the R-3 district. Option 1 is strongly encouraged as the means to best maintain the rural character while preserving open space and natural resources in the R-3 District. Additionally, the Township is seeking to encourage the incorporation of affordable housing within the normal development of the Township so as to afford all individuals the opportunity to benefit from the rural character of Woolwich Township. In conformance with the MLUL, the purposes of Option 1 is as follows:

- (a) To conserve open land, including those areas containing unique and sensitive natural features such as woodlands, steep slopes, streams, floodplains and wetlands, by setting them aside from development;
- (b) To provide greater design flexibility and efficiency in the design of services and infrastructure, including the opportunity to reduce length of roads, utility runs and the amount of paving required for residential development;
- (c) To reduce erosion and sedimentation by the retention of existing vegetation and the minimization of development on steep slopes;
- (d) To provide for a diversity of lot sizes, building densities and housing choices to accommodate a variety of age and income groups, and residential preferences, so that the community's population diversity may be maintained;
- (e) To implement adopted municipal policies to conserve a variety of irreplaceable and environmentally sensitive resource lands as set forth in the municipality's Open Space Plan, including provisions for reasonable incentives to create a greenway system for the benefit of present and future residents;
- (f) To implement adopted land use, transportation and community policies as identified in the municipality's Master Plan;
- (g) To protect areas of the municipality with productive agricultural soils for continued or future agricultural use, by conserving blocks of land large enough to allow for efficient farm operations;
- (h) To create neighborhoods with direct visual access to open land, with amenities in the form of neighborhood open space, and with a strong neighborhood identity;
- (i) To provide for the conservation and maintenance of open land within the municipality to achieve the above-mentioned goals and for active or passive recreational use by residents;

(j) To provide multiple options for landowners in order to minimize impacts on environmental resources (sensitive lands such as wetlands, floodplain and steep slopes) and disturbance of natural or cultural features (such as mature woodlands, hedgerows and tree lines, critical wildlife habitats, historic buildings and field-stone walls);

(k) To provide standards reflecting the varying circumstances and interests of individual landowners, and the individual characteristics of their properties.

(l) To conserve scenic views and elements of the municipality's rural character, and to minimize perceived density, by minimizing views of new development from existing roads; and

(m) To provide for the incorporation of affordable housing in a way that provides the opportunity for all residents to share in the benefits of living in Woolwich Township.

(2) In order to achieve these purposes, this section provides for flexibility in designing new residential subdivisions in the R-3 Residential District by allowing a form of conservation zoning based upon the number of DU (dwelling units) as determined by the conventional zoning by-right development.

(a) Option 1: neutral density and basic conservation, providing for residential uses at the density permitted by the underlying R-3 Zoning District. Greenway lands shall comprise at least half the tract.

(b) Option 2: conventional lotting. In addition to the above preferred options for subdivision, Option 2, conventional lotting, at a minimum lot size of 20,000 square feet, is also permitted.

(c) COAH overlay. Regardless of the option chosen from the above, COAH housing units are able to be incorporated within a subdivision.

B. Use regulations.

(1) Principal uses. In the R-3 District, no building or premises shall be used and no building shall be erected or altered which is arranged, intended or designed to be used except for one or more of the following uses: all principal and accessory uses permitted in the 5A District.

(2) Conditional uses. In the R-3 District, the conditional uses as permitted in the R-1 District are allowed.

(3) Special requirements.

(a) Accessory buildings, including storage sheds, greenhouses and other outbuildings, shall be subject to the following regulations, which shall supersede the requirements of § 203-59A in this district:

[1] The gross floor area of any individual building shall not exceed 400 square feet and the total size of all accessory buildings shall not exceed 2% of the lot area.

[2] No accessory building shall be located within 10 feet of any side or rear property line.

[3] No accessory building shall be permitted between the building line and the street line.

[4] The height of an accessory building shall not exceed 20 feet or the height of the principal building, whichever is less

C. Bulk and area regulations. In order to achieve these purposes, this section provides for flexibility in designing new residential subdivisions in the R-3 Residential District by allowing one form of conservation zoning based upon the number of DU (dwelling units) as determined by the conventional zoning by-right development.

Table of Options

	Option 1 Neutral Density/Basic Conservation	Option 2 Country Properties	Option 3 Conventional Lotting
Density	87,120 sf/du maximum gross density	10 acres/du	87,120 sf/du
Lot size maximum with minimum lot width	1.3 acres 150 feet	NA	NA
Lot size average with minimum lot width	1 acre; 43,560 sf 125 feet	10 acres 300 feet	NA
Lot size minimum with minimum lot width	1/2 acre; 21,780 sf 100 feet	5 acres 300 feet	87,120 sf/du acres 185
Open space	50%	No common open space	No common space
Yards			
Front	30 feet	See Option 2: country properties	60 feet
Side	10 feet; 40 feet between buildings		25 feet
Rear	40 feet		50 feet
Maximum building coverage	NA	NA	10%
Maximum impervious coverage	30% on each lot	12%	30%
Maximum building height	35 feet	35 feet	35 feet

(1) Option 1: neutral density and basic conservation, providing for residential uses at the density permitted by the underlying R-1 Zoning District. Greenway lands shall comprise at least half the tract.

(a) Density: As determined through the yield plan described in Subsection C(1)(i) below.

(b) Minimum required greenway land. The subdivision must include at least 40% of the gross tract area as greenway land. Greenway land shall not be used for residential lots.

- (c) Minimum lot area: 8,000 square feet.
- (d) Minimum lot width at building line: 75 feet.
- (e) Minimum street frontage: 25 feet.
- (f) Yard regulations. The builder or developer is urged to consider variations in the principal building position and orientation, but shall observe the following minimum standards:
 - [1] Front: 30 feet; garage door must be set back a minimum of 40 feet.
 - [2] Rear: 40 feet.
 - [3] Side: 20 feet separation for principal buildings, with no side yard less than 10 feet.
- (g) Maximum impervious coverage: 40% limit on each lot.
- (h) Maximum height regulations: 35 feet.
- (i) Density determination for Option 1: yield plan approach. Determination of density, or maximum number of permitted dwelling units, shall be based upon the yield plan. Yield plans shall meet the following requirements:
 - [1] Yield plans must be prepared as conceptual layout plans in accordance with the standards of the Subdivision of Land Ordinance, Editor's Note: See Ch. 163, Subdivision of Land. containing proposed lots, streets, rights-of-way and other pertinent features. Yield plans must be a realistic layout, based upon a field survey that meets all district regulations and bulk and area regulations for the underlying residential district(s) in which the tract is located. The yield plan must reflect a development pattern that could actually be built, delineating the presence of wetlands, floodplains, steep slopes, existing easements or encumbrances and, if unsewered, the suitability of soils for subsurface sewage disposal. When a tract of land has two (or more) underlying zoning designations according to the Zoning Map of the Township, the yield plan must be designed to the requirements of the underlying zoning for each zone. The yield plan must reflect the developer's plan should the Township chose not to grant the option of conservation zoning and instead require the developer to design the subdivision based upon the conventional zoning in place, Option 2.
 - [2] The dimensional standards of Option 2, conventional zoning, shall be used in the development of yield plans for Option 1 subdivisions. The yield plan must identify the site's primary and secondary resources, as identified in the existing resources/site analysis plan (required in the Site Plan Review and Subdivision of Land Ordinances), Editor's Note: See Ch. 149, Site Plan Review, and Ch. 163, Subdivision of Land, respectively. and demonstrate that the primary resources could be successfully absorbed in the development process without disturbance.
 - [3] On sites not served by central sewage disposal, as stated above, R2 zoning applies.
- (j) Design standards for Option 1.
 - [1] House lots shall not encroach upon primary conservation areas as identified in § 203-72, and their layout shall respect secondary conservation areas as described in both the Zoning Ordinance and in the Subdivision/Site Plan Review Ordinances.
 - [2] All new dwellings shall meet the following setback requirements:
 - [a] From all external road rights-of-way: 60 feet.
 - [b] From all other tract boundaries: 25 feet.
 - [c] From cropland or pasture land: 100 feet.
 - [d] From preserved farms (preserved farms through the SADC program, the county program or through the Township's TDR program): 200 feet.
 - [e] From buildings or barnyards housing livestock: 200 feet.
 - [f] From active recreation areas such as courts or playing fields (not including tot lots): 150 feet.
 - [3] Views of house lots from exterior roads and abutting properties shall be minimized by the use of changes in topography, existing vegetation or additional landscaping which meets the landscaping requirements in Chapters 149, 163 and 203 of the Woolwich Code.
 - [4] House lots shall be accessed from interior streets rather than from roads bordering the tract.

[5] Standards pertaining to the use, quantity, quality, configuration, ownership and maintenance of the greenway land created under this section are contained in § 203-72 of this chapter.

[6] As per § 203-72D(2)(c) at the discretion of the Planning Board, four percent to six percent of the required greenway lands shall be in the form of neighborhood common greens. A neighborhood green will typically be a 44,000 square foot area, per 20 dwelling units, and shall be located internal to the developed areas. At least 1/2 of the lots shall abut the neighborhood green directly, and all shall be oriented to have the front of the dwelling face in the direction of the neighborhood green.

(2) Option 2: conventional lotting. In addition to the above preferred option for subdivision, Option 2, conventional lotting, at a minimum lot size of 20,000, is also permitted.

(a) Minimum lot area: 20,000 square feet.

(b) Minimum lot width: 100 feet.

(c) Front yard setback: 35 feet.

(d) Rear yard setback: 25 feet.

(e) Side yard setbacks: 15 feet.

(f) New dwelling setbacks.

[1] From all external road rights-of-way: 60 feet.

[2] From all other tract boundaries: 25 feet.

[3] From cropland or pasture land: 100 feet.

[4] From preserved farms (preserved farms through the SADC program, the county program or through the Township's TDR program): 200 feet.

[5] From buildings or barnyards housing livestock: 200.

[6] From active recreation areas such as courts or playing fields (not including tot lots): 100 feet.

D. COAH overlay. Reduction in minimum lot area and setbacks when the required 11.11% of affordable and moderate-income housing is included as interspersed units within the project as required by state law, one COAH dwelling unit must be built for every eight market value units that are built. When these required COAH dwelling units are incorporated within a subdivision, there shall be no density bonus for such units and there shall be no encroachment of development into minimum required conservation open space.

(1) The required number of COAH is as defined in the Township Ordinance No. 2005-05. (See § 203-101.)

(2) All units must be affordable to low- and moderate-income households and must meet all applicable criteria necessary to render the units creditworthy, including, but not limited to, bedroom mix, the 50/50 low- and moderate-income housing split, phasing, affirmative marketing and other applicable laws as set forth in Mount Laurel II, 92 N.J. 158 (1983) and its progeny, the Fair Housing Act (N.J.S.A. 52:27D-301 et seq.), the regulations of the New Jersey Council on Affordable Housing (COAH) and other applicable laws as well as the COAH requirements of the Township as outlined in Ordinance No. 2005-05. (See § 203-101.)

(3) The minimum lot size for a COAH housing unit shall be 6,000 square feet.

(4) The COAH housing units may be constructed as twins.

(5) Minimum street frontage: 25 feet.

(6) Yard regulations. The builder or developer is urged to consider variations in the principal building position and orientation, but shall observe the following minimum standards:

(a) Front: 25 feet; garage door must be set back a minimum of 30 feet.

(b) Rear: 20 feet.

(c) Side: 15 feet separation for principal buildings, with no side yard less than 7.5 feet; except twins units, built to meet the Township's COAH requirements, will have a zero side yard setback on the shared wall side (by definition).

- (7) Maximum impervious coverage: 40% limit on each lot.
- (8) Maximum height regulations: 35 feet.

§ 203-44. PAC Planned Adult Community.

The intent of this section is to implement the terms of the settlement of a case entitled “Woolwich Adult LLC v Woolwich Township, et al., Docket No. 413-01.” The PAC District will provide an opportunity to develop integrated residential communities on large tracts of land that are situated at locations convenient to shopping. Planned adult communities are intended for occupancy by households in which at least one member of the household is age 55 or older, and no permanent member of the resident household is age 18 or less. Said developments are also intended to offer a full range of recreational opportunities consistent with the lifestyle of its residents and developed as part of a well-planned development. It is the further intent of this article to promote the long-term health, safety and welfare of the public by promoting greater variety and flexibility in the uses permitted within a planned development than would otherwise be permitted, and likewise it will advance the principles of smart growth. The Township Committee finds that such variety and flexibility will accomplish comparatively greater benefits to residents, will protect the natural environment and enhance the provision of public services and facilities. A planned adult community will provide opportunities for senior citizen housing construction, which is a specific purpose of zoning. The planned adult community is intended to permit the development of a balanced community with a range of densities, recreational facilities and related uses, while preserving a significant amount of public and common open space.

A. Use regulations.

- (1) Principal and accessory uses. In the PAC District, no building or premises shall be used and no building shall be erected or altered which is arranged, intended or designed to be used, except for one or more of the following uses: all principal and accessory uses permitted in the 5A District. In addition, townhouses or multifamily apartment buildings affordable to low- and moderate-income households, as defined by the Council on Affordable Housing, shall be permitted, as well as the following accessory uses:
 - (a) Golf courses.
 - (b) Clubhouses with restaurants, catering facilities, and retail shops related to the golf course and associated recreational facilities, or planned adult community including, but not limited to, swimming pools, tennis courts, and practice ranges.
 - (c) Community centers associated with the planned adult community and usual and customary accessory uses thereto.
 - (d) Community gardens.
- (2) Conditional uses. All conditional uses permitted in the R-1 Residence District and the following additional uses that may be permitted as conditional uses.

B. Bulk and area regulations.

- (1) Minimum tract area: 200 acres.
- (2) Single-family detached dwellings.
 - (a) Minimum lot size: 5,720 square feet.
 - (b) Minimum lot width: 52 feet at the building setback line.
 - (c) Minimum yards.
 - [1] Front yard: 20 feet.
 - [2] Side yard.
 - [a] Aggregate: 12 feet.
 - [b] Minimum: None required with three feet maintenance easement.

- [3] Rear yard: 20 feet.
- (d) Maximum building coverage: 50%.
- (e) Maximum impervious coverage: 70%.
- (f) Maximum building height: 35 feet.
- (3) Multifamily apartment buildings.
 - (a) All units must be affordable to low- and moderate-income households and must meet all applicable criteria necessary to render the units creditworthy including, but not limited to, bedroom mix, the 50/50 low- and moderate-income housing split, phasing, affirmative marketing, and other applicable laws as set forth in Mount Laurel II, 92 N.J. 158 (1983) and its progeny, the Fair Housing Act (N.J.S.A. 52:27D-301 et seq.), the regulations of the New Jersey Council on Affordable Housing (COAH) and other applicable laws.
 - (b) A fifty-foot perimeter setback from public streets and property lines shall be required on all sides of the apartment portion of the development. This perimeter setback shall be occupied by a thirty-five-foot landscaped buffer, as provided for by §§ 203-68 and 203-69, and shall not be encroached upon by any accessory buildings or structure, other than fences and walls, or by any off-street parking or loading facility.
 - (c) Minimum distance between buildings shall be as follows:
 - [1] Front wall to front wall: 50 feet.
 - [2] Side wall to either front or rear wall: 35 feet.
 - [3] Side wall to side wall: 25 feet.
 - [4] Front to rear, rear to rear: 50 feet.
 - (d) Maximum building height: 35 feet.
- (4) Townhouses.
 - (a) All units must be affordable to low- and moderate-income households and must meet all applicable criteria necessary to render the units creditworthy including, but not limited to, bedroom mix, the 50/50 low- and moderate-income housing split, phasing, affirmative marketing, and other applicable laws as set forth in Mount Laurel II, 92 N.J. 158 (1983) and its progeny, the Fair Housing Act (N.J.S.A. 52:27D-301 et seq.), the regulations of the New Jersey Council on Affordable Housing (COAH) and other applicable laws.
 - (b) Minimum lot size.
 - [1] Condominium or rental ownership: none required.
 - [2] Fee simple ownership: 2,400 square feet.
 - (c) Minimum lot width (fee simple ownership): 26 feet.
 - (d) Minimum unit width: 24 feet.
 - (e) Maximum building height: 35 feet.
- (5) Trash disposal areas shall be enclosed, and the enclosure shall be of a material, the color and texture of which is consistent with that of the principal buildings.
- (6) Pedestrian access shall be provided to the rear of all townhouse units.
- (7) Storage units for each dwelling unit shall be designed by the developer as an integral part of each building or privacy fence. Freestanding accessory storage buildings are prohibited.
- (8) There shall be no unbroken building plane in excess of 100 feet without a change of building plane of not less than two feet.
- (9) Maximum gross density, based upon the area of the PAC, the accessory uses and their associated lands, and the area of the golf course: four dwelling units/acre.
- (10) Preservation of open space. In the PAC district a minimum of 50% of the tract area shall be preserved as open space but this area may include the golf course in addition to common open space and drainage basins reserved for the residents of the development. At least 10% of the required open space shall

be reserved for resident use. Resident open space shall be free from environmental constraints and shall be distributed through each section of the PAC development.

(11) All development in the PAC District shall be connected to public sewer and water systems, and said connection shall be mandatory if public sewer and water lines exist within 500 linear feet of the closest lot line. In the event that public sewer and water is unavailable within a distance of 500 feet from the tract boundary, or if the property in question does not meet the minimum tract requirement for this district, the development regulations of the R-2 Residence District shall apply.

(12) An essential and nonseverable condition of any right to develop in the PAC zone shall be complete compliance with the settlement agreement for Woolwich Adult LLC v Woolwich Township, et al., Docket No. 413-01.

§ 203-46. FOC Flexible Office Commercial District.

The FOC Flexible Office Commercial District is designed to encourage more intensive nonresidential uses along the Route 322 corridor that adhere to strong design standards and in which planned, innovative and integrated development is encouraged. A flexible mix of permitted uses is allowed, including, office, light industrial, and warehouse/distribution uses, subject to locational standards found in this article.

A. Use regulations.

(1) Principal uses. In the FOC District, no building or premises shall be used and no building shall be erected or altered which is arranged, intended or designed to be used, except for one or more of the following uses:

- (a) Kingsway Commercial Overlay, subject to the provisions of § 203-46D.
- (b) Offices for administrative, executive, professional, business sales and similar uses.
- (c) Banks and other financial institutions.
- (d) Amusement, recreation and leisure uses.
- (e) Business and household service uses including repair shops for business equipment, appliances, and the shops of tradesmen such as plumbers and electricians.
- (f) Warehouse and distribution uses, provided that they are located at least 400 feet from the right-of-way of U.S. Route 322.
- (g) Light manufacturing and assembly operations, provided that they are located at least 400 feet from the right-of-way of U.S. Route 322.
- (h) Public transportation stations and shelters.
- (i) Agriculture and horticulture, including farm markets.
- (j) Accessory uses and accessory buildings incidental to the above permitted principal uses.

(2) Conditional uses. In the FOC District, the following uses may be permitted as conditional uses:

- (a) Automobile dealerships for new cars and trucks, subject to § 203-66.
- (b) Telecommunications towers and antenna, subject to the provisions of § 203-50.
- (c) Public libraries and museums subject to:

[1] Location of access driveways, landscaping and site plan design being compatible with the neighborhood in which it is to be located.

[2] No building or part thereof or any parking or loading area shall be located nearer than 50 feet to any street line or lot line.

[3] A site plan in accordance with the Woolwich Township site plan requirements submitted to the Planning Board pursuant to its conditional use review authority (N.J.S.A. 40:55D-67).

(d) Utility facilities, including telephone, water, sewer, electricity and gas 400 square feet or greater in size pursuant to the requirements of § 203-39A(2)(e) and (f).

(e) Service stations and auto repair shops, subject to the special requirements of § 203-66.

(f) Public and commercial garages, subject to the special requirements of § 203-66.

- (3) Prohibited uses.
- (a) Sexually oriented adult entertainment, video, or book shops.

B. Bulk and area regulations. Bulk standards are designed to encourage the consolidation of smaller lots into larger tracts and to promote integrated, planned development. Accordingly, bulk and area standards are more restrictive for smaller parcels than for larger tracts, and all area and bulk standards are controlled by the minimum lot areas.

- (1) Minimum lot size: four acres, 10 acres, 25 acres.
- (2) Minimum lot width: 350 feet, 500 feet, 1,000 feet.
- (3) Minimum yards.
 - (a) Front yard.
 - [1] Parking screened by building: 50 feet, 50 feet, 50 feet.
 - [2] Parking not screened by building: 100 feet, 100 feet, 100 feet.
 - (b) Side yard (each, where applicable): 35 feet, 50 feet, 50 feet.
 - (c) Rear yard: 50 feet, 75 feet, 75 feet.
- (4) Maximum building coverage: 10%, 12%, 15%.
- (5) Maximum floor area ratio: 0.10, 0.12, 0.15.
- (6) Maximum impervious coverage: 50%, 60%, 70%.
- (7) Maximum building height, exclusive of parapet walls: 25 feet, 40 feet, 40 feet.

C. Site development requirements. All proposed development shall comply with the applicable regulations set forth in Article VII of this chapter, Chapter 149, Site Plan Review, and Chapter 163, Subdivision of Land, and the following requirements:

- (1) All development in this district shall comply with the design standards contained in § 203-48.
- (2) Except as provided herein, no lot shall have thereon more than one freestanding principal building and more than one principal permitted or conditional use.
- (3) Except as provided herein, no building shall have therein more than one principal permitted or conditional use.
- (4) Industrial parks and office parks may have more than one freestanding principal building on a lot, more than one principal permitted or conditional use on a lot and more than one principal permitted or conditional use in a building, provided that:
 - (a) The development is designed in a unified and comprehensive plan; and
 - (b) The development parcel is a minimum of five acres.
- (5) Along both principal and secondary frontage in a proposed development, it is required that, at a minimum, sidewalks and street trees be installed in accordance with municipal specifications and of an appropriate and acceptable nature to the Planning Board. In the event that such facilities are already present or are otherwise to be provided, the Planning Board may require provision of other reasonable amenities related to the establishment or improvement of a streetscape environment. In all cases, provision of streetscape amenities that are beyond and in addition to sidewalks and street trees (such as benches, grass strips, planters, statues and other street furniture) shall be encouraged, subject to Planning Board approval.
- (6) Where a development in the FOC District abuts any residential district, special buffering improvements shall be mandatory within required rear and/or side setbacks on the site. Said improvements shall be designed so as to significantly reduce visibility, noise, litter and (unlimited) pedestrian access and shall consist of combinations of any of the following, at the discretion of the Planning Board, as needed: dense plantings, including hedges, coniferous or broad-leaf evergreens; oversized earth berms; visually imper-

meable fences or walls; retention of natural vegetation; and retention of natural topographic features and watercourses. Buffers shall be in accordance with §§ 203-68 and 203-69. Buffers may occur in required yard areas, but the applicant's desire to place parking or drive aisles within the required buffer area shall not constitute grounds for zoning relief from this requirement.

(7) All development in the FOC District shall be connected to public sewer and water systems when practical, and said connection shall be mandatory if public sewer and water lines exist within 500 linear feet of the closest lot line. In the event that public sewer and water is unavailable within a distance of 500 feet from the edge of the tract boundary closest to the available utility in question, a maximum lot coverage of 50% of the amount otherwise authorized by § 203-46B(5) shall be permitted.

(8) New or upgraded public roadways shall meet local engineering/design standards and be dedicated to the municipality or other appropriate governmental jurisdiction. On-site driveways may be designated as site service drives and may be exempted from the preceding requirements, unless they are judged to carry volumes sufficient for the Planning Board to request their designation as public streets in accordance with Article VII, § 203-65. Curbing shall be required and curb cuts shall be designed so as to limit vehicular access in accordance with proper traffic engineering principles and the New Jersey Highway Access Code and, in doing so, promote traffic safety and efficiency of flow.

(9) All parking areas and walkways shall be adequately illuminated for security and safety purposes. The lighting plan in and around the parking areas shall provide for non glare lights focused downward. All lighting shall be shown on the lighting plan in sufficient detail to allow a determination of the effects upon adjacent properties, traffic safety and overhead sky glow. The objective is to minimize undesirable off-premises effects.

(10) All rights-of-way as required by the Woolwich Township Master Plan, by the County of Gloucester, or by the New Jersey Department of Transportation (as applicable) shall be offered for dedication at the time of site plan application.

(11) Parking and loading. Parking and loading spaces shall be provided in accordance with the regulations set forth in Article IX of this chapter provided, however, that no parking shall be permitted in any required front yard. When adjacent to any residential use, loading areas shall be screened with walls to obscure their view from the adjacent lot.

D. Kingsway Town Center and Commercial Overlay Districts. [Added 12-20-2004 by Ord. No. 2004-02]

(1) Intent.

(a) It is the intent of this subsection to establish an area within the FOC Zoning District where the most intensive commercial shopping centers and office campuses can be concentrated, so that the resulting potential for congestion can be more effectively controlled by limiting their location to a carefully regulated area in close proximity to the interchange of U.S. Highway 322 and Interchange 2 of the New Jersey Turnpike. Two such areas are identified on the Zoning Map as the Kingsway Commercial Overlay and the Kingsway Town Center Overlay.

(b) The Kingsway Town Center is subject to special regulations designed to encourage the creation of a pedestrian-oriented central area within the Township that contains an integrated mix of retail, office, and entertainment uses that can serve as a community focal point. The Kingsway Town Center will encourage innovative planning techniques, which will facilitate higher quality development that is consistent with the recommendations in the Woolwich Township Master Plan.

(c) The Kingsway Commercial Overlay is intended for higher-intensity retail, commercial and office uses that are more oriented to customers, clients and employees who will arrive by automobile and who are not expected to walk to a significant number of other destinations within the development.

(d) It is the goal of both component overlay areas to provide incentives in the form of increased building coverage, increased impervious coverage and increased floor area ratio to encourage the implementation of the Township Master Plan and a conceptual "bubble diagram-style" site plan submitted for the Kingsway Town Center and Commercial Overlays as part of a settlement agreement between Woolwich Township and

Woolwich Adult LLC.

(e) Kingsway Commercial and Town Center Overlays will encourage a unified architectural and building scheme within each section of the development, pedestrian-oriented walkways connecting buildings within each section of the development, unified landscaping and signage, coordinated storm drainage, and common open space areas. Special regulations shall be mandated to create the desired visual and practical results.

(f) The provisions of the Kingsway Commercial and Town Center Overlays shall apply only to those areas that are designated as such on the Zoning Map which meet the minimum tract area standard of this subsection.

(2) Use regulations.

(a) Principal uses. In the Kingsway Commercial Overlay and the Kingsway Town Center Overlay, no building or premises shall be used and no building shall be erected or altered which is arranged, intended or designed to be used except for one of the following uses, and in no case shall any commercial or retail use be permitted in any area designated for off-street parking or loading on the approved site plan:

[1] Retail sales and services, including but not limited to supermarkets, wholesale clubs, lumber, hardware and garden centers, convenience stores, the sale of a full range of retail merchandise, exclusive of automobile products, except when accessory to a retail store with a gross floor area of 75,000 square feet or more, and related uses without limitation;

[2] Offices for administrative, executive, professional, business sales, government offices and similar uses, provided that the use does not occur on the first floor portion of a building within the Town Center Overlay;

[3] Personal service businesses, including hair salons, tanning salons, nail salons, dry cleaning outlets, dressmaking or tailor shops, shoe repair shops and related uses, except for tattoo studios and body piercing establishments;

[4] Outpatient medical, rehabilitation or dental facilities, provided that the use does not occur on the first floor portion of a building within the Town Center Overlay;

[5] Banks and other financial institutions, including drive-in facilities;

[6] Restaurants, eating and drinking establishments located inside and outside and fast-food restaurants without limitation;

[7] Theaters for motion pictures and live performances;

[8] Amusement, recreation and leisure uses not otherwise prohibited;

[9] Shopping centers;

[10] Bakeries, confectioners, health clubs, dance and exercise studios;

[11] Hotels, motels, conference centers, bed-and-breakfasts, and inns;

[12] Day-care establishments for children and adults;

[13] Public and private elementary, middle and high schools, subject to the requirements of the minimum lot sizes as established by the New Jersey State Department of Education for school facilities, provided that the use is not permitted in the Kingsway Town Center Overlay and subject further to the following:

[a] Location of access driveways, landscaping and site plan design shall be compatible with the neighborhood in which it is to be located.

[b] No building or part thereof or any parking or loading area shall be located nearer than 50 feet to any street line or lot line.

[14] Funeral homes and mortuaries, provided that the use is not permitted in the Kingsway Town Center Overlay;

[15] Billboards, provided that the use is not permitted in the Kingsway Towns Center Overlay; that they are designed and constructed so that they may be viewed from the New Jersey Turnpike; and that they are not located within 750 feet of any other billboard;

[16] Public transportation stations and shelters;

- [17] Agriculture and horticulture, including farm markets;
- [18] Accessory uses and accessory buildings incidental to the above permitted principal uses;

(b) Conditional uses. In the Kingsway Commercial or Town Center Overlay Districts, the following uses may be permitted as conditional uses:

- [1] Telecommunications towers and antennas, subject to the provisions of § 203-50.
- [2] Public libraries and museums, subject to:
 - [a] Location of access driveways, landscaping and site plan design being compatible with the neighborhood in which it is to be located.
 - [b] No building or part thereof or any parking or loading area shall be located nearer than 35 feet to any street line or lot line.
 - [c] A site plan in accordance with the Woolwich Township site plan requirements submitted to the Planning Board pursuant to its conditional use review authority (N.J.S.A. 40:55D-67).

[3] Church or other place of worship subject to:

- [a] Location of access driveways, landscaping and site plan design being compatible with the neighborhood in which it is to be located.
- [b] No building or part thereof or any parking or loading area shall be located nearer than 35 feet to any street line or lot line.
- [c] A parish house, rectory or parsonage which shall conform to the requirements for a single-family detached dwelling.
- [d] A site plan in accordance with Woolwich Township site plan requirements submitted to the Planning Board pursuant to its conditional use review authority (N.J.S.A. 40:55D-67).

[4] Utility facilities, including telephone, water, sewer, electricity and gas, 400 square feet or greater in size, pursuant to the requirements of § 203-40A(2)(e) and (f).

(c) Prohibited uses within the Kingsway Commercial and Town Center Overlays:

- [1] Sexually oriented adult entertainment, video, or book shops.

(3) Bulk and area regulations. No waivers or variances shall be required to create a financial subdivision. A lot within a larger planned development may be subdivided and conveyed to an entity separate from the owner of the planned development, provided that the entire planned development is operated as a uniform development and is subject to reciprocal cross easements controlling access, parking, common area maintenance and the like. In the FOC District bulk standards are designed to encourage the consolidation of smaller lots into larger tracts and to promote integrated, planned development. The same concept applies to the Kingsway Commercial Overlay and to the Kingsway Town Center and the following standards shall apply in the overlays:

(a) Minimum tract area, including the combined area of lands within both the Kingsway Commercial and Town Center Overlays: 100 acres.

(b) Standards for retail or shopping center development in the Kingsway Commercial Overlay.

- [1] Minimum lot area: 25 acres.
- [2] Minimum aggregate street frontage.
 - [a] Lots fronting on Rt. 322: 500 feet.
 - [b] Lots not fronting on Rt. 322: 200 feet.

[3] Minimum setbacks for buildings.

- [a] Front yard: 25 feet.
- [b] Side yard:

- [i] Each, where applicable, not adjacent to a residential use or district: 25 feet.
 - [ii] Each, where applicable, adjacent to a residential use or district: 75 feet.
- [c] Rear yard:
- [i] Not adjacent to a residential use or district: 50 feet.
 - [ii] Adjacent to a residential use or district: 75 feet.
- [4] Maximum floor area ratio: 0.20.
- [5] Maximum total gross floor area (square feet).
- [a] Power center: 845,064.
- [b] Freestanding retail anchor store: 230,000.
- [6] Maximum building coverage: 0.20.
- [7] Maximum impervious coverage: 0.80.
- [8] Maximum building height; exclusive of parapet walls not exceeding a height of five feet: 42 feet.
- (c) Standards for office parks in the Kingsway Commercial Overlay:
- [1] Minimum lot area: four acres.
 - [2] Minimum aggregate street frontage: 200 feet.
 - [3] Minimum setbacks for buildings:
 - [a] Front yard: 35 feet.
 - [b] Side yard:
 - [i] Each, where applicable, not adjacent to a residential use or district: 25 feet.
 - [ii] Each, where applicable, adjacent to a residential use or district: 75 feet.
- [c] Rear yard:
- [i] Not adjacent to a residential use or district: 35 feet.
 - [ii] Adjacent to a residential use or district: 75 feet.
- [4] Maximum floor area ratio: 0.25.
- [5] Maximum total gross floor area (square feet): 1,034,550.
- [6] Maximum building coverage: 0.25.
- [7] Maximum impervious coverage: 0.80.
- [8] Maximum building height, exclusive of parapet walls not exceeding a height of five feet: 60 feet.
- (d) Standards for the Kingsway Town Center Overlay:
- [1] Minimum lot area: 25 acres.
 - [2] Minimum aggregate street frontage: 200 feet.
 - [3] Minimum perimeter setbacks (not applicable to individual buildings).
 - [a] Front yard: 35 feet.
 - [b] Side yard:
 - [i] Each, where applicable, not adjacent to a residential use or district): 35 feet.
 - [ii] Each, where applicable, adjacent to a residential use or district): 75 feet.
- [c] Rear yard:
- [i] Not adjacent to a residential use or district: 35 feet.
 - [ii] Adjacent to a residential use or district: 75 feet.

- [4] Maximum floor area ratio: 0.25.
- [5] Maximum total gross floor area (square feet): 718,740.
- [6] Maximum building coverage, exclusive of outdoor sales areas not enclosed within a building: 0.25.
- [7] Maximum impervious coverage: 0.80.
- [8] Maximum building height, exclusive of parapet walls not exceeding a height of five feet: 60 feet.
- [9] Special design standards applicable to the Kingsway Town Center Overlay:
 - [a] The Kingsway Town Center shall not require yard setbacks in the traditional sense. Building setbacks and buffers shall instead be regulated from adjacent uses, streets and parking areas.
 - [b] No setback is required from adjacent buildings, but when provided, buildings shall have a minimum separation of 25 feet.
 - [c] Buildings shall be set back from contiguous adjacent lots by streets or a landscaped buffer, as herein defined, as shown on the approved general development plan or on a subsequent approved preliminary and final site plan.
 - [d] Buildings shall be set back from US Route 322 by a landscaped buffer and screen, as herein defined, not less than 35 feet in width. The buffer shall be continuous, except for sidewalks, driveway and road crossings, and permitted signage. No surface parking lots shall be permitted between the buildings and this landscaped area.
 - [e] Buildings shall be set back from any interior road as shown on the approved general development plan or on a subsequent approved preliminary and final site plan. The area between the building and the street shall be occupied by sidewalks, landscaping, including street trees, plazas, street furniture, lighting and permitted signage only.

(4) Landscaping and buffers shall be in accordance with §§ 203-68 and 203-69; provided, however, that the applicant shall have the option of planting street and shade trees at an initial caliper of two inches to 2 1/2 inches in return for providing 1.5 times the quantity of trees otherwise required. All other landscaping requirements of the Township Code, including compensatory plantings, shall be applicable, excepting only facade plantings as modified above.

(5) In the event of a conflict between the maximum permitted impervious coverage and requirements of this subsection for landscaping off-street parking and loading and for vehicular and pedestrian circulation ways; the standards for landscaping, off-street parking and loading, and vehicular and pedestrian circulation shall take precedent over the standards for impervious coverage.

(6) When parking structures are utilized, the height of the structure shall not exceed the height of the building that it is designed to serve, provided that said structure is not located within 100 feet of any street frontage.

(7) Every development in the Town Center shall provide the following:

- (a) Pedestrian and vehicular connections with adjacent properties, to facilitate circulation.
- (b) A reduction in the number of curb cuts onto existing streets to the greatest extent practical, consistent with the principles of highway safety.
- (c) All developments shall be constructed in a uniformed architectural and building scheme and shall provide a unified landscaping and signage plan.
- (d) A coordinated storm drainage and common space plan shall be submitted and maintained by the landowner.

(e) All uses in this district shall be subject to the design standards contained in § 203-49. In addition, the design of the development shall place particular emphasis upon pedestrian circulation and aesthetics, including integrated architecture, landscaping and screening so as to ensure cohesive development. Mixed use buildings are permitted. The design shall be governed by the following criteria:

- [1] Architectural style of the development shall be designed to avoid the massive scale and uniform

impersonal appearances of a “big box” commercial center through facade ornamentation, building offsets, window treatments, variation in rooflines, entry treatments and building materials.

[2] First floor activities that promote multiple pedestrian destinations, such as retail, restaurant, banking and entertainment uses, are to be encouraged.

(f) All interior roads and collector drive aisles shall be private. When a zero building setback from the street is implemented, said private streets are required to have an effective cartway width of a minimum of 24 feet. When on-street parking is proposed, an additional ten-foot width will be added to the cartway for each side of the street containing on-street parking. Sidewalks, street trees and other required landscaping shall be provided outside of this cartway.

(g) Buildings shall be sited to form a progression of pedestrian-oriented open spaces, or promenades, with visual as well as pedestrian connections between such spaces. Vehicular circulation is permitted through these spaces, as is limited on-street parking. Parking lots are not permitted in these pedestrian areas and shall be screened by buildings or landscaping. Open air or enclosed pedestrian-oriented spaces shall act as connectors of buildings and shall contain such amenities as benches, water features, fountains, opportunities for entertainment, and seating areas to provide a sense of place and orientation for its users.

(h) The following additional design standards shall be required:

[1] The project shall strive to achieve the goal of a pedestrian-oriented village.

[2] Loading facilities shall be provided in a manner that is not visually or functionally obtrusive to patrons using the parking areas.

[3] One or more squares or plazas shall be provided, which are meant to identify places where people would congregate. Such places should be designed and built as a park or gathering place, marked with special pavements, shade trees, benches and other pedestrian amenities approved by the Township. The squares or plazas shall be the design focus of the development.

[4] Walkways shall be provided as follows:

[a] Walkways, not less than six feet in width, shall be provided along any building facade that is adjacent to a parking area or that adjoins a connecting passageway from a parking area to the pedestrian-oriented open space and walkways of not less than 10 feet shall be provided along any building facade that contains a main pedestrian entrance to the building.

§ 203-72. Open space and greenway lands. [Amended 8-1-2005 by Ord. No. 2005-25]

A. Intent. Protected open space and greenway lands (referred to herein as greenway lands) in all subdivisions shall meet the following standards.

B. Uses permitted on greenway lands. The following uses are permitted in greenway land areas:

(1) Conservation of open land in its natural state (for example, woodland, fallow field or managed meadow).

(2) Agricultural and horticultural uses on uplands (not stream corridors or wetlands). Such uses may include raising crops or livestock; wholesale nurseries; associated buildings that are specifically needed to support an active, viable agricultural or horticultural operation, but excluding residences.

(3) Pastureland for horses based on best management practices.

(4) Forestry, in keeping with established best management practices for selective harvesting and sustained-yield forestry.

(5) Neighborhood open space uses such as Village greens, commons, picnic areas, community gardens, trails and similar low-impact passive recreational uses, specifically excluding motorized off-road vehicles, shooting ranges and other uses similar in character and potential impact as determined by the Board.

(6) If greenway land becomes a public park: active noncommercial recreation areas, such as playing fields, playgrounds, courts and bikeways, provided such areas do not consume more than half of the minimum required greenway land. Playing fields, playgrounds and courts shall not be located within 100 feet

of abutting properties. Parking facilities for the same shall also be permitted, and they shall generally be gravel-surfaced, properly drained and provide safe ingress and egress.

- (7) Water supply systems and stormwater detention areas designed, landscaped and available for use as an integral part of the greenway.
- (8) Easements for drainage, access, sewer or water lines or other public purposes.
- (9) Underground utility rights-of-way. Aboveground utility and street rights-of-way may traverse conservation areas but shall not count toward the minimum required greenway land.
- (10) Golf course as defined in § 203-5 of this chapter. [Added 12-5-2005 by Ord. No. 2005-39]

C. Greenway design standards.

- (1) Greenway lands shall, whenever possible, be laid out in general accordance with the municipality's greenways system and farmland preservation designated maps as included in the Woolwich Township Open Space and Recreation Plan of 2004 to encourage the development of an interconnected network of open space. The required greenway land shall consist of a mixture of primary conservation areas (PCAs), all of which must be included, and Secondary Conservation Areas (SCAs), which shall be included in the greenway lands to the greatest extent possible. PCAs comprise floodplains, wetlands and slopes over 10%. SCAs include mapped areas showing high groundwater recharge (11 inches to 14 inches per year), natural heritage priority areas and critical habitat areas as designated by the landscape project, as well as other scenic, natural and historic features such as view sheds, natural swales and historic structures that may be unmapped but should be incorporated into site plans during the site visit.
- (2) In Option 1 subdivisions (as per §§ 203-40, 203-41 and 203-42), the greenway land comprises a minimum of 50% of the gross tract area. This land shall generally remain undivided and may be owned and maintained by a homeowners' association, land trust, another conservation organization recognized by the municipality or by a private individual (typically as part of the original farmhouse). However, in no case shall less than 20% of the gross tract area be available for the common use and passive enjoyment of the subdivision residents, except at the discretion of the Planning Board. These ownership options may be combined so that different parts of the greenway land may be owned by different entities.
- (3) Buffers for adjacent public parkland. Where the proposed development adjoins public parkland, a natural greenway buffer at least 150 feet deep shall be provided within the development along its common boundary with the parkland, within which no new structures shall be constructed, nor shall any clearing of trees or understory growth be permitted (except as may be necessary for street or trail construction). Where this buffer is unwooded, the board may require vegetative screening to be planted or that it be managed to encourage natural forest succession through no-mow policies and the periodic removal of invasive alien plant and tree species.

D. Other requirements.

- (1) No portion of any building lot may be used for meeting the minimum required greenway land unless the lot is deed restricted as a country property prohibiting any future subdivision of the lot. Active agricultural land with farm buildings, excluding areas used for residences, may be used to meet the minimum required greenway land.
- (2) Pedestrian and maintenance access, excluding those lands used for agricultural or horticultural purposes in accordance with Subsection B(2) herein, shall be provided to public greenway land in accordance with the following requirements:
 - (a) Each neighborhood shall provide one centrally located access point per 15 lots, a minimum of 35 feet in width.
 - (b) Access to greenway land used for agriculture may be appropriately restricted for public safety to prevent interference with agricultural operations, provided that access for farming operations is permitted.
 - (c) Neighborhood greens. At the discretion of the Planning Board, four percent to six percent of the required greenway lands shall be in the form of neighborhood common greens. A neighborhood green will typically be a 44,000 square feet area, per 20 dwelling units, and shall be located internal to the developed

areas. A green shall be created and maintained as the open space around which dwellings are arranged. Dwellings shall face with the front facade of the dwelling in the direction of the neighborhood green with which they are associated, and at least 50% must front directly onto the green. Greens shall be landscaped according to the landscape provisions in § 203-68.

(3) All greenway land areas that are not neighborhood greens, public park or farmed shall be left in a natural state. Greenway lands that are left in a natural state, whether held as public or private land, shall be exempt from the requirements of the Township Property Maintenance Ordinance, Editor's Note: See Ch. 143, Property Maintenance. with the exception of a six-foot wide buffer from roads, sidewalks and pathways.

E. Permanent greenway protection through conservation easements.

(1) In Option 1 subdivisions (as per §§ 203-40, 203-41 and 203-42), all greenway land provided shall be subject to permanent conservation easements prohibiting future development and defining the range of permitted activities. (For example, the clearing of woodland habitat shall generally be prohibited, except as necessary to create trails, active recreation facilities and to install subsurface septic disposal systems or spray irrigation facilities.) A list of permitted uses of greenway lands is contained in this section in Subsections B and D.

(2) In Option 2 subdivisions (as per §§ 203-40 and 203-41) (country properties) where applicants voluntarily opt to develop their properties at densities conforming with Option 2 standards (average 10 acres per principal dwelling gross density in R-1 and average seven acres per dwelling gross density in R-2), and offer to place a restrictive conservation easement preventing future subdivision of the newly created parcels, the board shall review the proposed easements and shall accept them, provided their wording accomplishes the purposes of this section and is consistent with the Master Plan and the Open Space and Recreation Plan.

F. Ownership of greenway land and common facilities.

(1) Development restrictions. All greenway land shall be permanently deed restricted from future subdivision and development. Under no circumstances shall any development be permitted in the open space at any time except for those uses listed in Subsection B.

(2) Ownership options. The following methods may be used, either individually or in combination, to own common facilities. Common facilities shall not be transferred to another entity except for transfer to another method of ownership permitted under this section, and then only when there is no change in the common facilities or in the open space ratio of the overall development. Ownership methods shall conform to the following:

(a) Fee simple dedication to the municipality. The municipality may, but shall not be required to, accept any portion of the common facilities, provided that:

[1] There is no cost of acquisition to the municipality; and

[2] The municipality agrees to and has access to maintain such facilities.

(b) Condominium association. Common facilities may be controlled through the use of condominium agreements. Such agreements shall be in accordance with relevant state law. All open land and common facilities shall be held as common element.

(c) Homeowners' association. Common facilities may be held in common ownership by a homeowners' association, subject to all of the provisions for homeowners' associations set forth in state regulations and statutes. In addition, the following regulations shall be met:

[1] The applicant shall provide the municipality a description of the organization of the proposed association, including its bylaws, and all documents governing ownership, maintenance, and use restrictions for common facilities.

[2] The proposed association shall be established by the owner or applicant and shall be operating (with financial subsidization by the owner or applicant, if necessary) before the sale of any dwelling units in the

development.

[3] Membership in the association shall be automatic (mandatory) for all purchasers of dwelling units therein and their successors in title.

[4] The association shall be responsible for maintenance and insurance of common facilities.

[5] The bylaws shall confer legal authority on the association to place a lien on the real property of any member who falls delinquent in his dues. Such dues shall be paid with the accrued interest before the lien may be lifted.

[6] Written notice of any proposed transfer of common facilities by the association or the assumption of maintenance for common facilities must be given to all members of the association and to the municipality no less than 30 days prior to such event.

[7] The association shall have adequate staff to administer, maintain and operate such common facilities.

(d) Private conservation organization or the county. With permission of the municipality, an owner may transfer either fee simple title of the open space or easements on the open space to a private nonprofit conservation organization or to the county, provided that:

[1] The conservation organization is acceptable to the municipality and is a bona fide conservation organization intended to exist indefinitely.

[2] The conveyance contains appropriate provisions for proper reversion or retransfer of ownership in the event that the organization or Gloucester County becomes unwilling or unable to continue carrying out its functions.

[3] The greenway land is permanently restricted from future development through a conservation easement and the municipality is given the ability to enforce these restrictions.

[4] A maintenance agreement acceptable to the municipality is established between the owner and the organization or Gloucester County.

(e) Noncommon private ownership. At the discretion of the Planning Board, up to 100% of the required greenway land may be included within one or more large conservancy lots of at least 10 acres, provided the open space is permanently restricted from future development through a conservation easement, except for those uses listed in Subsection B, and that the municipality is given the ability to enforce these restrictions.

(3) Dedication of easements to the municipality. The municipality may, but shall not be required to, accept easements for public use of any portion of the common land or facilities. In such cases, the facility remains in the ownership of the condominium association, homeowners' association or private conservation organization while the easements are held by the municipality. In addition, the following regulations shall apply:

(a) There shall be no cost of acquisition to the municipality.

(b) Any such easements for public use shall be accessible to the residents of the municipality.

(c) A satisfactory maintenance agreement shall be reached between the owner and the municipality.

(4) Maintenance of greenway land and common facilities.

(a) Unless otherwise agreed to by the board, the cost and responsibility of maintaining common facilities and greenway land shall be borne by the property owner, condominium association, homeowners' association or conservation organization.

(b) The applicant shall, at the time of preliminary plan submission, provide a plan for maintenance of greenway lands and operation of common facilities in accordance with the following requirements.

[1] The plan shall define ownership.

[2] The plan shall establish necessary regular and periodic operation and maintenance responsibilities for the various kinds of open space (i.e. lawns, meadow, pasture, cropland, woodlands, etc.).

[3] The plan shall estimate staffing needs, insurance requirements and associated costs, and define the means for funding the maintenance of the greenway land and operation of any common facilities on an on-

