

MILFORD CITY COUNCIL
MINUTES OF MEETING
May 23, 2011

The Milford City Council held Public Hearings on the following matters on Monday, May 23, 2011 in the Joseph Ronnie Rogers Council Chambers at Milford City Hall, 201 South Walnut Street, Milford, Delaware

PRESIDING: Honorable Mayor Joseph Ronnie Rogers

IN ATTENDANCE: Councilpersons Steve Johnson, Garrett Grier III, S. Allen Pikus, Dirk Gleysteen, Owen Brooks, Jr., Douglas Morrow, James Starling, Sr. and Katrina Wilson

ALSO: City Manager David Baird, Police Chief Keith Hudson and City Clerk/Recorder Terri Hudson

COUNSEL: City Solicitor Timothy Willard

Mayor Rogers called the Public Hearing to order at 7:00 p.m.

Davis, Bowen and Friedel, Incorporated on behalf of Fordmill, LLC requesting the Minor Subdivision of one parcel into two parcels in an R-3 District; site located on the northeast side of Milford-Harrington Highway, 400 feet northwest of Holly Hill Road, Milford, Delaware; Tax Parcel MD-16-173.00-01-06.00; Area of Petition 91.526 +/- Acres.

City Planner Gary Norris presented the land development plan for Fordmill LLC for a subdivision of approximately twenty acres. The subdivided parcel is being purchased by the City of Milford for use as an electrical subdivision. The Planning Commissioner reviewed the application and recommended approval by a vote of 6-0.

Tim Metzner of Davis, Bowen and Friedel reiterated this will be used by the city and that all necessary approvals have been obtained.

There were no questions or comments by city council or the public. Mayor Rogers then closed the public hearing.

Mr. Pikus moved for approval of the Minor Subdivision of the Fordmill LLC property, seconded by Ms. Wilson. Motion carried by unanimous roll call vote.

*Refinancing General Obligation Refunding Bonds, Series of 2002
& Issuance of General Obligation Bonds, Series B of 2011*

L. Gordon Walker, Managing Director of the PFM Group and Financial Advisor, recalled the 2008 Referendum approved by city voters. He anticipated debt (principal and interest) on the sewer project to be \$3.5 million with a 20.5 year term and an approximate yield of 3.971%. On the electric project, \$5.5 million will be borrowed at an anticipated yield of 4.347% for 25.5 years.

Mr. Walker advised council that in 2008, the city received a Standard and Poor's AA- rating. He does not believe that will change and will affirm that rating tomorrow.

The annual payment on the sewer debt is projected to be approximately \$256,000; the annual payment on the electric debt is anticipated to be around \$365,000.

He reported that the refinanced bonds will be sold through a separate sale. To get both issues bank-qualified, the sales will be separated by two weeks to ensure a better interest rate. Current interest rates range from 3.4% to 4.45%. Currently, there is \$3,770,000 left on the 2002 bonds which became callable in 2009. Expected savings are approximately \$166,000.

Mr. Walker emphasized that the numbers provided tonight are preliminary; final numbers will not be available until

after the sale.

Bonds will be sold through a competitive sale which means the parties bid until they are unable. That determines the best bid/lowest cost. The auction will be accessible on the website by every bidder in the United States.

The \$9 million/electric and sewer project bonds (A Bonds) will be sold June 1st; the \$3.8 million/refunding bonds (B Bonds) are being sold on June 16th. Both will have 5-year callable features. Closing on both issues will be June 30th.

Tim Anderson, Bond Counsel, then referred to the two ordinances being considered. Ordinance 2011-14 amends an ordinance adopted in October 2008. The first ordinance approved financing of a water project, sewer project and an electric project. The bonds were termed 'Series of 2008 Bonds' and were to be sold via negotiated sale with a final maturity of 2033. That is being changed to finance a sewer and electric project. The bonds will now be referred to as '2011 A Series Bonds' with a final maturity date of 2037.

Mr. Anderson advised Ordinance 2011-13 addresses the 'Series B 2011 Bonds' which are the refunding bonds. The 2002 bonds they are refunding will be redeemed July 1st.

Mayor Rogers asked for comments from the public. No one responded. The mayor then closed the public hearing.

Resolution 2011-4 grants final authorization to move forward with the refunding (B Bonds).

Adoption of Resolution 2011-4

*Final Authorization-Refinancing General Obligation Refunding Bonds,
Series of 2002 & Issue General Obligation Bonds, Series B of 2011*

Mr. Pikus motioned to adopt Resolution 2011-4, seconded by Mr. Brooks

WHEREAS, the City Council of the City of Milford, Delaware ("City Council") has been advised that the City of Milford can achieve present value debt service savings by refinancing a portion of the City's outstanding General Obligation Refunding Bonds, Series of 2002 (the "Refunding Program").

NOW, THEREFORE, BE IT RESOLVED, and it is resolved that the City Council of the City of Milford, Delaware, after a public hearing held this day, does hereby provide final authorization for the borrowing (the provisions of which shall be set forth in an Ordinance) of an amount of money not exceeding \$3,975,000 for the Refunding Program described above, and to pay certain costs associated with the issuance of its General Obligation Bonds, Series B of 2011 (the "2011B Bonds"). The average rate of interest on the 2011B Bonds shall not exceed 5.00%. The 2011B Bonds shall be secured by the full faith and credit of the City, shall be paid or funded by available revenues of the City and shall in all instances comply with the terms and conditions of a certain ordinance enacted this day in connection with the issuance of the 2011B Bonds.

s/Joseph Ronnie Rogers

Motion carried by unanimous roll call vote.

Adoption of Ordinance 2011-13/Refunding 2008 Bonds/2011 Series B Bonds

Mr. Pikus moved to adopt Ordinance 2011-13, seconded by Mr. Morrow:

Authorizing a certain 2011 Refunding Project herein described and the incurrance of indebtedness; authorizing the issuance of General Obligation Bonds, Series B of 2011 (the "2011 Series B Bonds") to provide funds for and toward such 2011 Refunding Project; setting forth terms of the 2011 Series B Bonds; providing for book-entry only bonds; approving the form of and authorizing the execution of a paying agent agreement and providing for the appointment of a paying agent; covenanting to budget, appropriate and pay debt service on the 2011 Series B Bonds and pledging

the full faith and credit of the city for payment of the 2011 Series B Bonds; setting forth the substantial form of the 2011 Series B Bonds; providing for the execution and authentication of the 2011 Series B Bonds; creating a debt service fund for the 2011 Series B Bonds; providing for the sale of the 2011 Series B Bonds and authorizing the acceptance of a bond purchase agreement for the purchase of the 2011 Series B Bonds, setting forth the maximum interest rate and underwriter's discount on the 2011 Series Bonds; setting forth certain federal tax covenants; providing for the application of 2011 Series B Bond proceeds; authorizing officers to act; approving the content and form of a preliminary official statement and authorizing the distribution thereof and authorizing the preparation, execution and delivery of an official statement and the undertaking of certain continuing disclosure; setting forth bond insurance provisions; setting forth the date of the 2011 Series B Bonds and other documents; authorizing other necessary action; providing for severability of provisions; repealing all inconsistent ordinances; adopted May 23, 2011.

Motion carried by unanimous roll call vote.

Adoption of Ordinance 2011-14/Capital Projects/2011 Series A Bonds

Mr. Pikus moved to adopt Ordinance 2011-14, seconded by Mr. Brooks.

Authorizing amendments to Ordinance No. 2008 -17 heretofore enacted by the City of Milford, Delaware, in connection with the issuance of General Obligation Bonds to provide funds to finance certain capital improvements as described herein; authorizing other necessary action; confirmation of the above described ordinance; adopted May 23, 2011.

Motion carried by unanimous roll call vote.

With no further business, the Public Hearing session was adjourned at 7:19 p.m.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "Terri K. Hudson".

Terri K. Hudson, CMC
City Clerk/Recorder

MILFORD CITY COUNCIL
MINUTES OF MEETING
May 23, 2011

The City Council of the City of Milford met in Workshop Session on Monday, May 23, 2011 in the Joseph Ronnie Rogers Council Chambers of Milford City Hall, 201 South Walnut Street, Milford, Delaware.

PRESIDING: Honorable Mayor Joseph Ronnie Rogers

IN ATTENDANCE: Councilpersons Steve Johnson, Garrett Grier III, S. Allen Pikus, Dirk Gleysteen,
Owen Brooks, Jr., Douglas Morrow, Sr., James Starling, Sr., and Katrina Wilson

City Manager David Baird, Police Chief Keith Hudson and City Clerk/Recorder
Terri Hudson

City Solicitor David Rutt

The Workshop Session of Milford City Council convened at 7:20 p.m.

Carlisle Fire Company/Life Safety Rings Program/Follow Up

John Watson, Chairman of the Mispillion Life Ring Committee updated council on the Life Safety Ring Program. The project is funded with donations, in memory of Dee'jion Fullman, the Milford Middle School student who drowned in the river in the summer of 2010. A demonstration of the floatation device was provided to council.

The fire company's original plan called for eight life rings to be placed along bridges and areas surrounding the river. The outpouring of support and donations has resulted in eleven having been purchased and monies received for twelve additional life rings. The success of the program will allow them to place life rings in other areas of town. Additional monies will allow a scholarship to be established and awarded to Fullman's graduating class.

A brick monument honoring Fullman is also planned in the park area; further details will follow.

Mayor Rogers thanked the fire company for the effort they have put into this project and their continued support of the community.

With no further business, the Workshop Session concluded at 7:31 p.m.

Respectfully submitted,



Terri K. Hudson, CMC
City Clerk/Recorder

MILFORD CITY COUNCIL
MINUTES OF MEETING
May 23, 2011

A Meeting of Milford City Council was held in the Joseph Ronnie Rogers Council Chambers at Milford City Hall on Monday, May 23, 2011.

PRESIDING: Honorable Mayor Joseph Ronnie Rogers

IN ATTENDANCE: Councilpersons Steve Johnson, Garrett Grier III, S. Allen Pikus, Dirk Gleysteen
Owen Brooks, Jr., Douglas Morrow, Sr. and Katrina Wilson

City Manager David Baird, Police Chief Keith Hudson and City Clerk/Recorder
Terri Hudson

City Solicitor David Rutt

CALL TO ORDER

Mayor Rogers called the Council Meeting to order at 7:31 p.m.

INVOCATION AND PLEDGE

The Pledge of Allegiance followed the invocation given by Councilwoman Wilson.

RECOGNITION

No special guests were in attendance.

COMMUNICATIONS

Mayor Rogers advised that Finance Committee Meetings are scheduled June 6, June 7 and June 8, 2011 beginning at 6:00 p.m.

NEW BUSINESS

I&I Repairs/Bid Result

The city manager reported that Tri-State Grouting LLC was the sole bidder of the project. Their total bid was \$3,341,095.50 and over the estimated budget.

The bid proposal initially included both in-line repairs of sewer lines and open cut work. It has been decided to separate the projects into two contracts and rebid them.

Mr. Baird hopes to have the projects bid by June 10th with a deadline/opening date no later than June 30th.

National League of Cities/Annual Dues

Mr. Brooks motioned to approve payment to National League of Cities for our annual dues in the amount of \$1,117.00, seconded by Mr. Morrow. Motion carried.

Mr. Baird added that Delaware League of Local Government is an affiliate of National League of Cities.

Resolution 2011-5/Silicato-Wood Commercial Development/Acceptance of Public Improvements

City Engineer Mark Mallamo informed council this is a commercial subdivision whose street will be maintained by DeIDOT. The street, water and sewer systems are 100% complete and have been tested for accuracy. This dedicates those utilities to the city for maintenance purposes. A letter of credit is on file to ensure the maintenance for one year as is standard practice.

Mr. Brooks confirmed that snow removal of the street will be handled by DeIDOT and not the city. Mr. Mallamo further clarified that the stormwater system (pond and open swale system) will be maintained by the developer. The city will only be responsible for any stormwater issues in the catch basins on the street as other state-maintained streets are handled. The city will sell water and sewer service to the businesses in the subdivision and is responsible for the maintenance of the pump station.

Mr. Morrow moved to adopt Resolution 2011-5, seconded by Mr. Starling:

ACCEPTING PUBLIC IMPROVEMENTS FOR SILICATO-WOOD COMMERCIAL DEVELOPMENT SUBDIVISION

WHEREAS, Chapter 200 provides that public utilities shall be accepted into the City of Milford's Public Utility System by resolution of City Council; and

WHEREAS, The City Engineer has determined that all required improvements to the Silicato-Wood Commercial Development Subdivision water and sewer utility systems have been completed; and

WHEREAS, approval to operate those utilities has been obtained from the applicable State Agencies; and

WHEREAS, the Silicato-Wood Commercial Development Subdivision Developer has provided the City of Milford with a Letter of Credit for the Public Improvements and Public Utilities guaranteeing said improvements for one year from the date of acceptance; and

WHEREAS, said Developer has provided as-built drawings of the utilities to the City.

NOW, THEREFORE BE IT RESOLVED that the City Council of the City of Milford during a regular session of Council, by a favorable majority vote, accepts the Public Utilities of the Silicato-Wood Commercial Development Subdivision being dedicated for Public Use into the City of Milford's Public Utility System and the City of Milford shall assume responsibility for the future maintenance and repair of the public utility system in the Silicato-Wood Commercial Development Subdivision.

Motion carried.

Budget for Downtown Milford Project

Mr. Baird recalled city council approving matching funds in the amount of \$375,000 to the Northeast Front Street/Streetscaping Project. Because of its scope, that project is not moving forward due to funding issues. However, Downtown Milford plans to replace the trees and grates in the downtown area from city hall to Wilmington Trust on Walnut Street and from Washington Street to Church Street on North Front Street.

Downtown Milford has requested a reallocation of the \$125,000 from the Northeast Front Street/Streetscaping Project into the Tree and Grate Project. Should the streetscaping project resume, they will submit another request to replace the \$125,000. It was confirmed by council that no additional funds are being provided.

Mr. Brooks asked how the original \$125,000 will be replaced; Mr. Baird explained another request will be submitted to the city at the time the streetscaping project moves forward. There is no guarantee and will approval will depend on the available sources at that time. He added that approximately \$200,000 is left as some of the funding was used for design purposes.

Mr. Pikus moved to authorize and transfer \$125,000 from the Streetscaping Funds to Downtown Milford, Incorporated to be used for the Tree and Grate Project. Ms. Wilson seconded motion. Motion carried by unanimous roll call vote.

Southeast Milford Master Plan/City Planner Gary Norris

City Planner Gary Norris advised that three public workshops were held on the plan at Carlisle Fire Hall in September and October of 2009. Citizen and property owners were encouraged to attend and discuss the future of this area. Because a portion of this area is outside city limits, both city and county residents were included in the mailing with more than 1,000 invitation mailed. The meetings were also advertised through local newspapers and on the city website.

During the past several months, City Planner Gary Norris advised that city staff and a variety of state agencies have been working on the draft plan for the Southeast Neighborhood. That plan is now complete.

Mr. Norris thanked Planning Director Connie Holland and Circuit Rider/Planner David Edgell for their oversight and assistance with the plan. In addition, he acknowledged Scott Blair from the Department of Agriculture, Kevin Cole from DNREC and Bryan Hall from Sussex County for their input.

He then presented a Powerpoint on that plan (see attached) noting it was originally prepared by Carol Bason, Program Manager/CommunityViz of the University of Delaware. The changes made were primarily based on the type of dwelling units currently being constructed in the southeast area in addition to what is permitted in the current zoning ordinance.

Ms. Bason prepared various growth scenarios for this planning area and in particular for the 2020 scenario and the 2030 scenario as well as some comparison analysis and visualizations.

Land use and density parameters for the southeast planning area were reviewed. Existing land use profiles and characteristics show a predominantly rural landscape with over 80% community agricultural with environmentally sensitive lands to the north. The intent is to maintain some of the rural and village character with a proposal of the Transfer of Development Rights to preserve agricultural lands which would increase density in other areas of the southeast planning area.

The south Milford Public Option Preferred Scenario was also discussed as well as its revision.

Mr. Norris noted there are currently 2,000 dwelling units in the southeast planning areas. They estimate there will only be an additional 500 dwelling units constructed by 2020. By 2030, a commercial development is projected across from Hearthstone II along with an expansion of Innovation Park. Proposed dwelling units are anticipated to be 3,000 which another 500 units will be adjacent to the employment and town center areas.

Using the current data, the city planner expects the southeast planning area to grow at a 2% annual rate in housing each year, which calculates from forty to fifty houses. The entire city is only averaging fifty dwelling units per year. Currently there is approximately 4,000 residential lots throughout the city. At that rate, it would take eighty years to reach complete build out.

He said council needs to be cognizant of the following issues:

Transportation improvements will be made on rural roads. When that occurs, the speed limits will increase in addition to increased traffic and possible congestion.

Future annexations in the southeast planning area will need to be zoned R-1 or R-2 zone in order for the Transfer of Development Rights Program to work. Additional units are then purchased from the green area, which will come into the city at designated sites for increased development. The developer will need to buy those rights to protect the farmland in order to increase his density. If land is annexed at R-3 or R-8, the program will not work. In those situations, the developer would have his density but not protect the farmland.

Requirements and recommendations will be made by state agencies.

Public utilities will have to be constructed in the southeast planning area.

Henceforth, the plan will be presented to the planning commission on June 16th. Public hearings are scheduled on June 21st before the planning commission at which time a recommendation will be made to city council. City Council will hold a final public hearing on July 11th after which the plan could be adopted.

David Hitchens of Key Properties Group then made a presentation on Innovation Park, a state of the art medical facility and research park. The complex, planned for a 200-acre plot along Cedar Neck Road east of Route 1, will bring quality healthcare and medical jobs to Milford. Plans include an elder care and assisted living facility, a medical school, a ten-story specialty hospital and hotel.

Mr. Gleysteen stated that when he received a copy of the high school survey orchestrated by the Economic Development Advisory Panel, the majority of high school students want to come back to Milford and work. However, only 35% feel they will find the job they want in Milford. He feels those type things need to be addressed so we are able to provide opportunities for our children to work here and raise their family.

Mayor Rogers thanked all those persons that worked diligently on the master plan, especially City Planner Norris and State Planning Director Connie Holland and Planner David Edgell.

Director Holland then addressed council. She pointed out that Delaware is the oldest state in the nation and Milford has taken its destiny to heart. She said this has been a three-year process but believes this will be an award winning plan. She added that Milford will be the first city in the state to not just have a master plan, but to have a comprehensive master plan and congratulated the city on the accomplishment.

She concluded by thanking her colleagues that were present and acknowledged DRNEC, stating the transfer development rights concept does work. It will give farmers the prerogative to sell or not sell. She said the plan is phenomenal and gives visibility and housing options. When it is completed and Innovation Park built, she believes Milford will become the center of the universe.

UNFINISHED BUSINESS

Confirmation or Rejection/Wawa Land Sale

Mr. Baird advised there was no bidders at the May 19th auction though Wawa was legally bound to submit a bid per their current lease. City Solicitor David Rutt followed up with a Wawa representative who confirmed their bid is for \$1.2 million. He noted the bid is subject to the Right of First Refusal. Council will need to accept or reject the \$1.2 million bid from Wawa.

Mr. Pikus moved to accept the \$1.2 million bid from Wawa adding that those proceeds can only be spent to purchase lands for economic development, seconded by Ms. Wilson.

When asked how this is allocated in the budget and whether it is a \$1.2 million sale or \$100,000 income, Mr. Pikus explained the \$1.2 million sale will be used to purchase additional lands to be used for an industrial/business park for economic development. The proposed budget does not include the \$100,000 annual revenue.

Mr. Baird then verified there are no expenses related to the lease will need to be paid from the sale proceeds.

Mr. Gleysteen asked if there is a potential for the land value to increase in the future should we not sell at this time. It was noted the \$1.2 million was a pre-determined value based on appraisals when the lease was created. The city manager agreed the value could increase though the terms of the lease allow a fixed amount without an escalator which could impact the property sale and keep the value down.

It was confirmed that Wawa currently pays property taxes on the property even though it is owned by the city.

Motion carried by a roll call vote of 7-0 with Councilman Grier abstaining.

Mr. Gleysteen votes yes because the lease was not written to the city's advantage and in his opinion, loses value as time goes on.

Mr. Morrow votes yes noting this will provide some funds that can be injected into business development.

Economic Development Director Richard Carmean then addressed council. He recalled that at the time the contract was negotiated, the purpose was to give Wawa some guarantees in investing in Milford. As was stated at the time, the intent was to provide a five-year contract because the city did not want to be in the real estate business. He agrees that escalator clauses should have been added had the city intended to keep the property beyond the five-year period. However, part of the deal at that time was to require Wawa pay property taxes. Over this time span, the city has received \$1 million from the lease. The \$1.2 million was a bonafide appraisal of the property at the time.

EXECUTIVE SESSION

Mr. Pikus moved to go into executive session, pursuant to 29 Del. C. §10004(b)(9) personnel matters, seconded by Mr. Morrow. Motion carried.

Mayor Rogers temporarily recessed the Council Meeting at 8:30 p.m. to go into a closed session.

Return to Open Session

Council returned to open session at 8:43 p.m.

Executive Session Matter

Mr. Morrow moved to approve and allow Milford Police Department to apply for the COPS Grant for an additional police officer, seconded by Mr. Starling. Motion carried by unanimous roll call vote.

ADJOURN

Mayor Rogers adjourned the Council Meeting at 8:46 p.m.

Respectfully submitted,



Terri K. Hudson, CMC
City Clerk/Recorder

Attachment: Southeast Milford Master Plan Powerpoint

Dare to be first.



Milford's SE Neighborhood Master Plan and Growth Scenarios

Source: UD-SCC Community Land Use Model

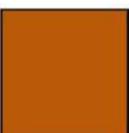


Prepared By Carol Bason
Program Manager, CommunityViz
University of Delaware
Sustainable Coastal Communities Initiative
April 22, 2011

Products

- **UD-SCC Community Land Use Model & Density Parameters**
- **Existing Land Use (Baseline)**
- **“Preferred” Scenario from Public Workshops**
- **Revision of the Public Option (“Preferred”) Scenario**
- **Master Plan & Growth Scenarios**
 - **Master Plan “Preferred-Revised” Scenario**
 - **Growth 2020 Scenario**
 - **Growth 2030 Scenario**
- **Comparative Analysis**
- **Density Visualizations**

UD-SCC Community Land Use Model

Land Use Crayon	Land Use Name	Description	3D Google Earth Representation
	T100 Rural	Category: RURAL Farm land, open space, preserved space, critical resources. Density: 1 DU/100A Range: 0-4 DU	
	T20 Rural	Category: RURAL Rural area, agriculture and recreational and camping. Typically 20-Acre lots. Density: 5 DU/100A Range: 5-20 DU	
	T2 Suburban	Category: RESIDENTIAL Residential only, Cluster Subdivision. No commercial. May be conditional use or self-employed. Includes recreational facilities and schools. Examples: Lewes Beach, Cripple Creek Development. Density: 2 DU/A Range: 51 to 200 DU	
	T6 Urban Mixed	Category: MIXED USE TND; Residential and commercial mixed, includes SFR, MFR, and TH, offices, hospitals, and retail. Example: Village of Five Points Density: 6 DU/A Range: 401 to 600 DU NR: 300,000 SQFT	
	T8 Town Center	Category: MIXED USE Municipalities & Towns. Mixed Use; MU Buildings; Medium High density residential, business & medical offices, retail and lodging. Examples: The Vineyards, Seaford. Density: 8 DU/A Range: 601 to 800 DU NR: 500,000 SQFT	

Land Use Crayon	Land Use Name	Description	3D Google Earth Representation
	T30 Employment	Category: NONRESIDENTIAL Small business, utilities, transportation, institutional, civic, planned industrial, NO residential. Examples: Ross Business Park, Georgetown Airport, Indian River Power Plant, Chicken Processing & DuPont Plants, Del Tech DU: 0 NR: 200,000 SQFT	
	T200 Retail	Category: NONRESIDENTIAL Regional shopping center, NO residential. PLUS Example: Overbrook Center DU: 0 NR: 800,000 SQFT	

Source: UD-SCC Community Land Use Model

COLOR CODE

- **GREEN** REPRESENTS RURAL/AGRICULTURE
- **PURPLE** REPRESENTS EMPLOYMENT
- **RED** REPRESENTS RETAIL/COMMERCIAL
- **ALL OTHER** COLORS REPRESENT SOME TYPE OF RESIDENTIAL WITH LIMITED COMMERCIAL
- **WHEN THE PUBLIC MEETINGS WERE HELD A 100 ACRE SQUARE WAS USED TO DETERMINE THE EXISTING AND FUTURE LAND USE PATTERN FOR THE SE PLANNING AREA.**

T 20 RURAL (5 D.U./ 100 ACRES) RANGE OF 5 TO 20 D.U. -GREEN



T 20 RURAL



T 2 SUBURBAN (2 D.U./ACRE) RANGE 51 TO 200 UNITS/100 ACRES



T 4 CITY RESIDENTIAL (3-4 D.U./ACRE – 300 TO 400/100 ACRES)



T- 4 RESIDENTIAL



T- 8 CITY MULTI –FAMILY 8 D.U./ ACRE



T-12 CITY MULTI-FAMILY 12 D.U. /ACRE



T – 8 TOWN CENTER



T- 8 TOWN CENTER



T – 30 EMPLOYMENT



T -30 EMPLOYMENT



T – 30 EMPLOYMENT



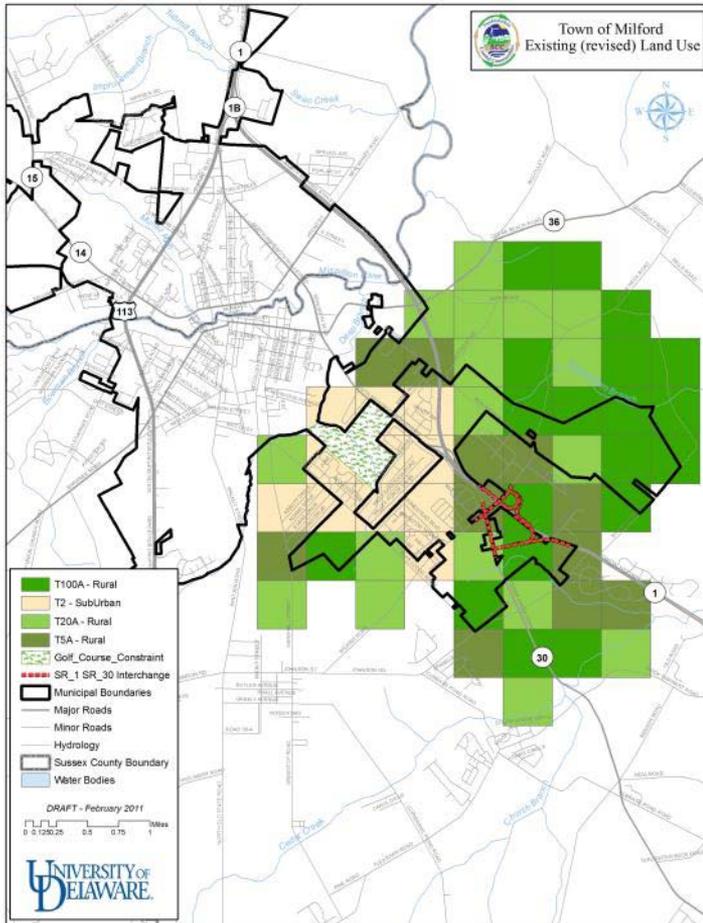
T- 200 RETAIL



Land Uses & Density Parameters -- South Milford

Community Land Use Type	Legend	Density (Residential DU)	Floor Area (SQFT) (Nonresidential) (Per 100 Acres)	Build Efficiency (Full Occupancy)	Mixed Use Factor	Net Density (Residential DU) (Per 100 Acres)	Net Floor Area (Residential) (Per 100 Acres)
T100 – Rural		4 DU / 100A	0	100%		4	
T20 – Rural		20 DU / 100 A	0	100%		20	
T2 – Suburban		2 DU / A	0	70%		140	
T4 – Suburban		4 DU / A	0	80%		320	
T10 - Suburban		10 DU / A	0	90%		900	
T6 – Urban Mixed		6 DU / A	300,000 SQFT	75%	70%:30%	315	225,000 SQFT
T8 – Town Center		8 DU / A	500,000 SQFT	90%	50%:50%	360	450,000 SQFT
T12 – Urban Mixed		12 DU / A	500,000 SQFT	90%	50%:50%	540	450,000 SQFT
T30 -Employment		0	200,000 SQFT	80%		0	160,000 SQFT
T200 – Retail		0	800,000 SQFT	80%		0	640,000 SQFT

South Milford Existing Land Use (2010)



Dwelling Units	1,900
Residents	4,700
Nonresidential Floor Area	0
Employees	260

Employees of Existing scenario are home-based employees

South Milford : Existing Land Use Profile

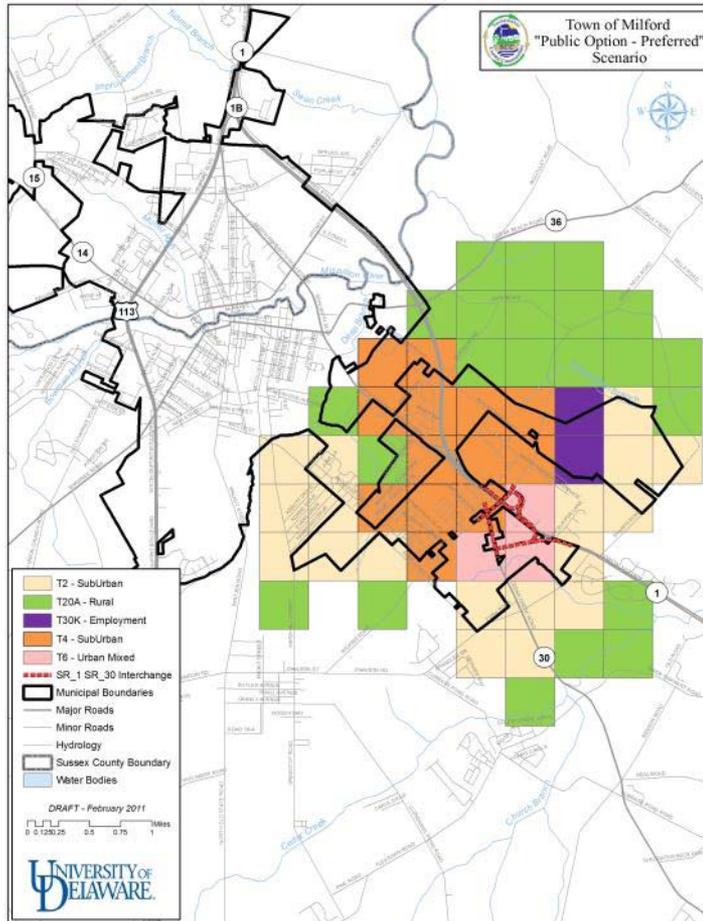
SE Neighborhood Character

- Predominantly rural landscape
- Approximately 20% of neighborhood comprised of low density residential villages offering single family (SF) and multi-family (MF) villa-type homes with golf course/open space connected to Milford City Center
- Multijurisdictional with intermingled incorporated lands (City of Milford) and unincorporated lands from Sussex County; borders Kent County at northern edge
- Over 80% of community agricultural along with environmentally sensitive riverine lands to north, east and south
- Scenic highway corridor (SR 1) provides opportunity for transportation-oriented development and retail center at SR 30 Interchange

Growth Opportunities and Challenges

- Maintain rural and village character
- Development of Transfer of Development Rights (TDR) Program to preserve sensitive riverine lands and agricultural economy
- Expansion of highway corridor into overpass and Regional Center
- Cost of annexation to City (expanded public services, utilities, and infrastructure) to support growth; challenging in economic downturn

South Milford -- Public Option "Preferred Scenario"



Dwelling Units	7,600
Residents	19,500
Nonresidential Floor Area	995,000
Employees	2,500

South Milford -- Public Option Profile

SE Neighborhood Character

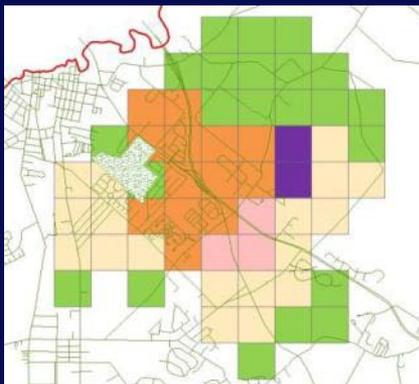
- Community predominately residential, accommodating growth adjacent to Milford City Center and at new Town Center Hub. Moderate density residential adjacent to City Center fans out to surrounding low density residential subdivisions to south and east
- Green space and agricultural acreage to north, east, and south (DNREC-cited Cedar Creek, Swiggetts and Cabbage Ponds) preserve rural riverine lands and agricultural base
- New, well-defined mixed use hub at expanded SR1/SR30 Interchange and adjacent 200 A Employment Center provide new public-envisioned “Town Center” with retail centers and localized compact mixed housing

Growth Opportunities and Challenges

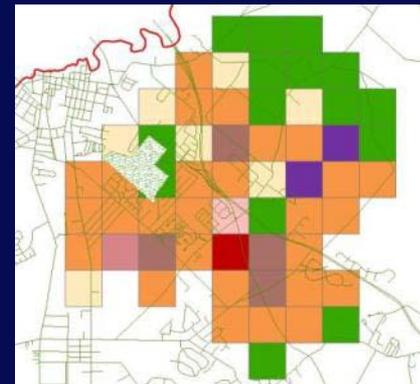
- Residential growth plan, while half of Milford Comprehensive Plan for SE Neighborhood, quadruples number of residents from Existing Land Use and provides previously nonexistent economic growth opportunities
- Pattern of Growth supports sustainable development principles while preserving much of the rural character. Offers localized multiple housing types and potential transit-oriented development for economically growing community
- TDR Program required to preserve sensitive riverine lands and agricultural economy
- Funding needed for annexation to City (expanded public services, utilities, and infrastructure) to support growth challenging in economic downturn

Revision of the Public “Preferred” Scenario

- The reason and the rationale behind the changes to the Public Option (“Preferred” Scenario) and the Master Plan (Preferred –Revised Scenario) is based on two reasons.
- 1. The existing proposed residential development currently being developed is at a higher density than a T- 2 (2 d.u./acre) which is closer to a T-8 (8 d.u./acre). **Wickersham and Hearthstone II are two examples.**
- 2. In City of Milford’s Zoning Ordinance in the R-1 Zoning District the minimum lot size is **10,000 sq. ft** instead of $\frac{1}{2}$ to $\frac{3}{4}$ (21,000 sq. ft to 32,000sq. Ft.) of an acre in Sussex County



Public Option

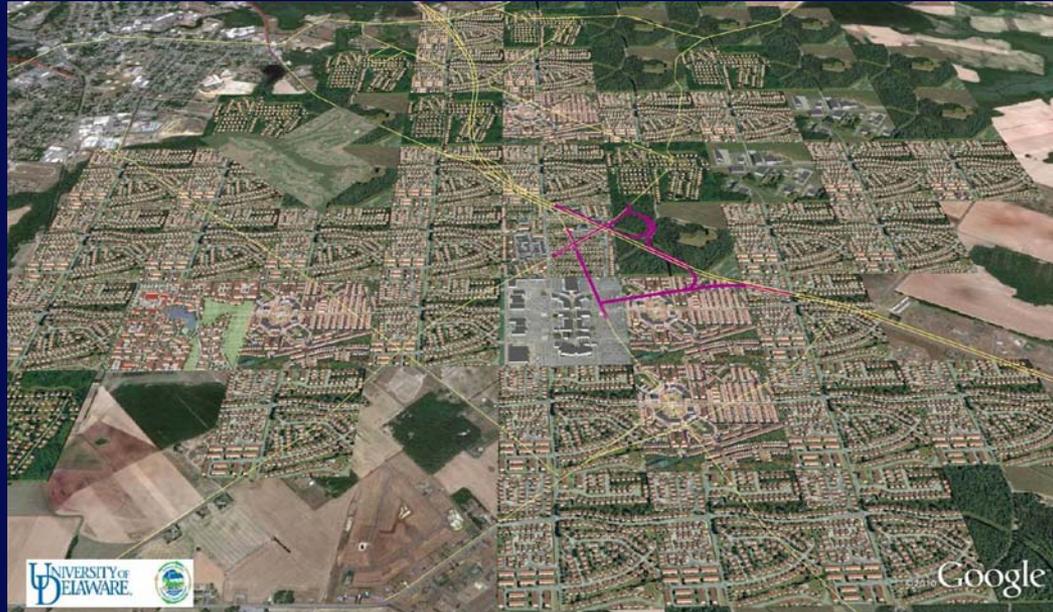
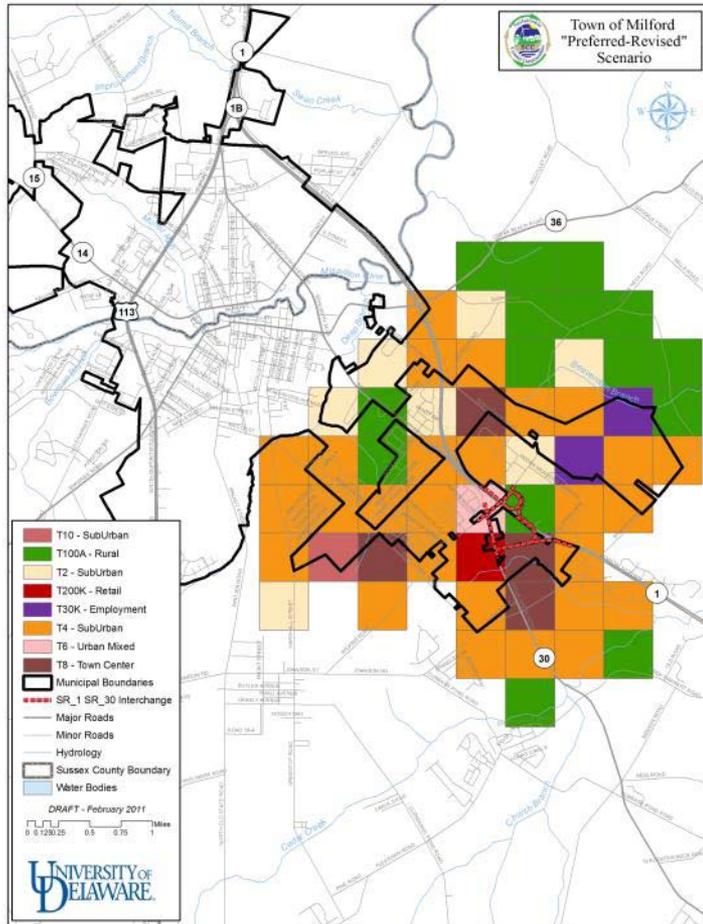


Master Plan

T -2 becomes a T -8



South Milford – Master Plan “Build-Out” “Preferred-Revised Scenario”



Dwelling Units	11,800
Residents	30,700
Nonresidential Floor Area	3,000,000
Employees	4,900

South Milford – Master Plan Profile

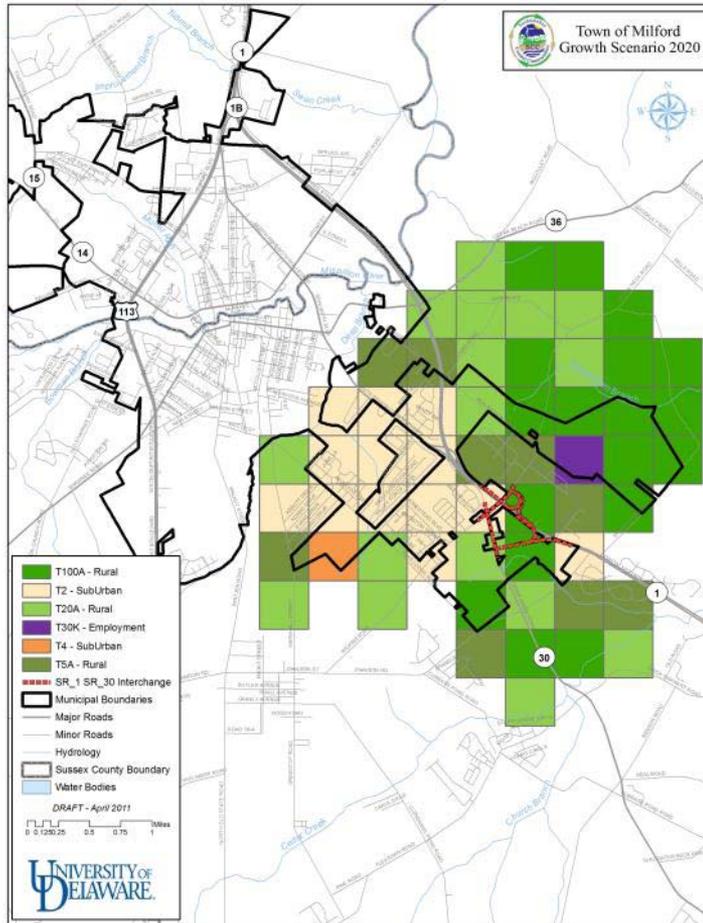
SE Neighborhood Character

- Master Plan assumes annexation of the SE Neighborhood into the City of Milford
- Area becomes a mix of medium to high density residential communities consistent with City of Milford zoning; both SF and MF housing options. Higher density mixed use areas dot the landscape.
- New Regional Commercial Center is surrounded by multifamily and/or mixed use neighborhoods, with hub at enhanced SR1/SR30 Interchange and new public-envisioned Town Center. 200-Acre Employment Center adjacent to interchange hub
- TDR Receiving Areas identified in three mixed use hubs around Commercial Center
- Agricultural lands to northeast and TDR Sending Areas identified for preservation purposes

Growth Opportunities and Challenges

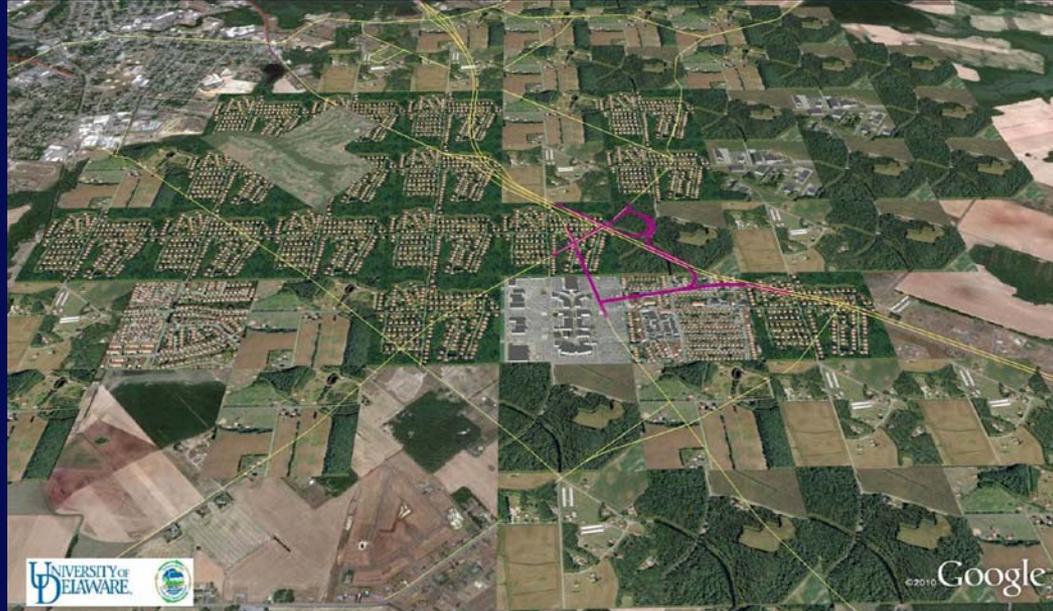
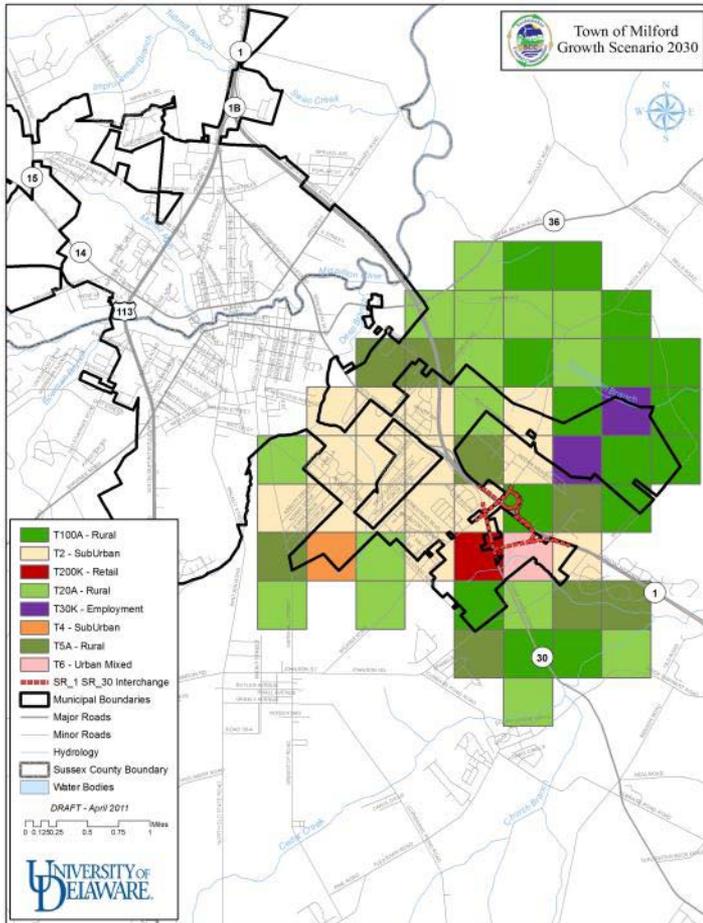
- Higher density residential replaces Public Option's low density residential communities. Opportunity for residential growth 75% of Comprehensive Plan; 1.5 times Public Option. Promotes compact, diverse housing types and mixed use growth principles
- Potential for transit-oriented development and new local employment opportunities
- Funding for infrastructure & services required for annexation challenging in economic downturn
- Plan based more on current zoning regulations – may limit long-term vision
- DNREC-cited environmentally sensitive lands not directly protected by land use designation

South Milford Master Plan : Growth 2020



Dwelling Units	2,400
Residents	6,000
Nonresidential Floor Area	160,000
Employees	700

South Milford Master Plan: Growth 2030



Dwelling Units	3,000
Residents	8,000
Nonresidential Floor Area	1,185,000
Employees	2,300

South Milford : Growth 2020 & 2030 Profile

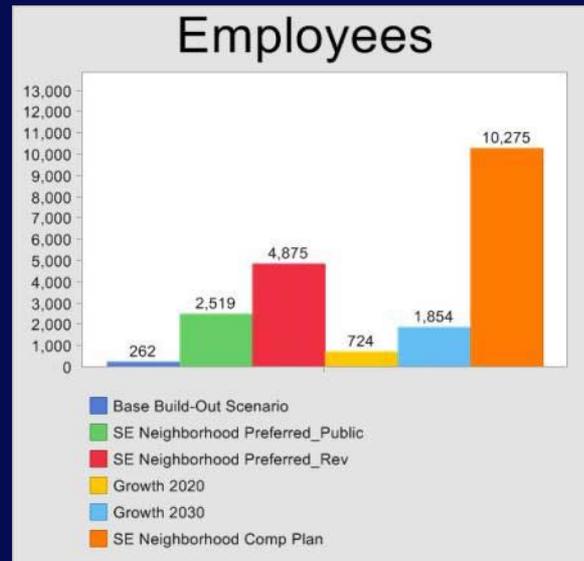
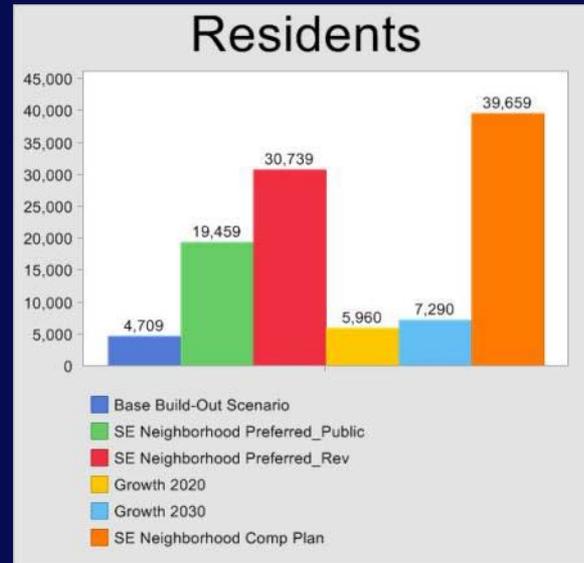
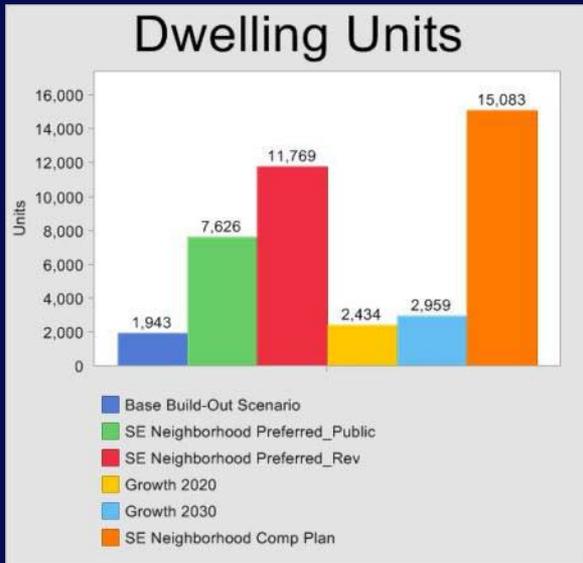
SE Neighborhood Character

- Depicts 10 and 20-year growth of SE Neighborhood assuming 1) 2% per year growth rate; 2) implementation of SE Neighborhood Master Plan; and 3) annexation into the City of Milford
- Two of Master Plan areas are “built-out” while almost 90% of the rural landscape remains (agriculture, villages, and low density subdivisions)
 - **Scenario 1:** Development of 500 residential units and 160,000 square feet of nonresidential space in existing neighborhood. Hearthstone II subdivision is underway, building to approximately 400 of the 900 expected SF/MF residential units. 100 acres of the new Employment Center (medical/professional park) is operational
 - **Scenario 2:** Adds 500 more residential units adjacent to Employment Center and new proposed Town Center with mixed use. Regional Shopping Center at enhanced interchange is built and Medical/Professional Employment Center is complete. Total square footage climbs to over 1,000,000 square feet

Growth Opportunities and Challenges

- 20-Year growth plan implements new “town center” as envisioned by Public Option scenario. Adds centralized retail, commercial, and professional economic opportunities to neighborhood
- 20-Year growth plan doesn’t show implementation of TDR program, therefore potentially jeopardizing identified agricultural preserve areas by development
- New services/infrastructure funding more feasible as growth areas predominately in City bounds

Comparing the Numbers



Density Visualization -- Existing Land Use



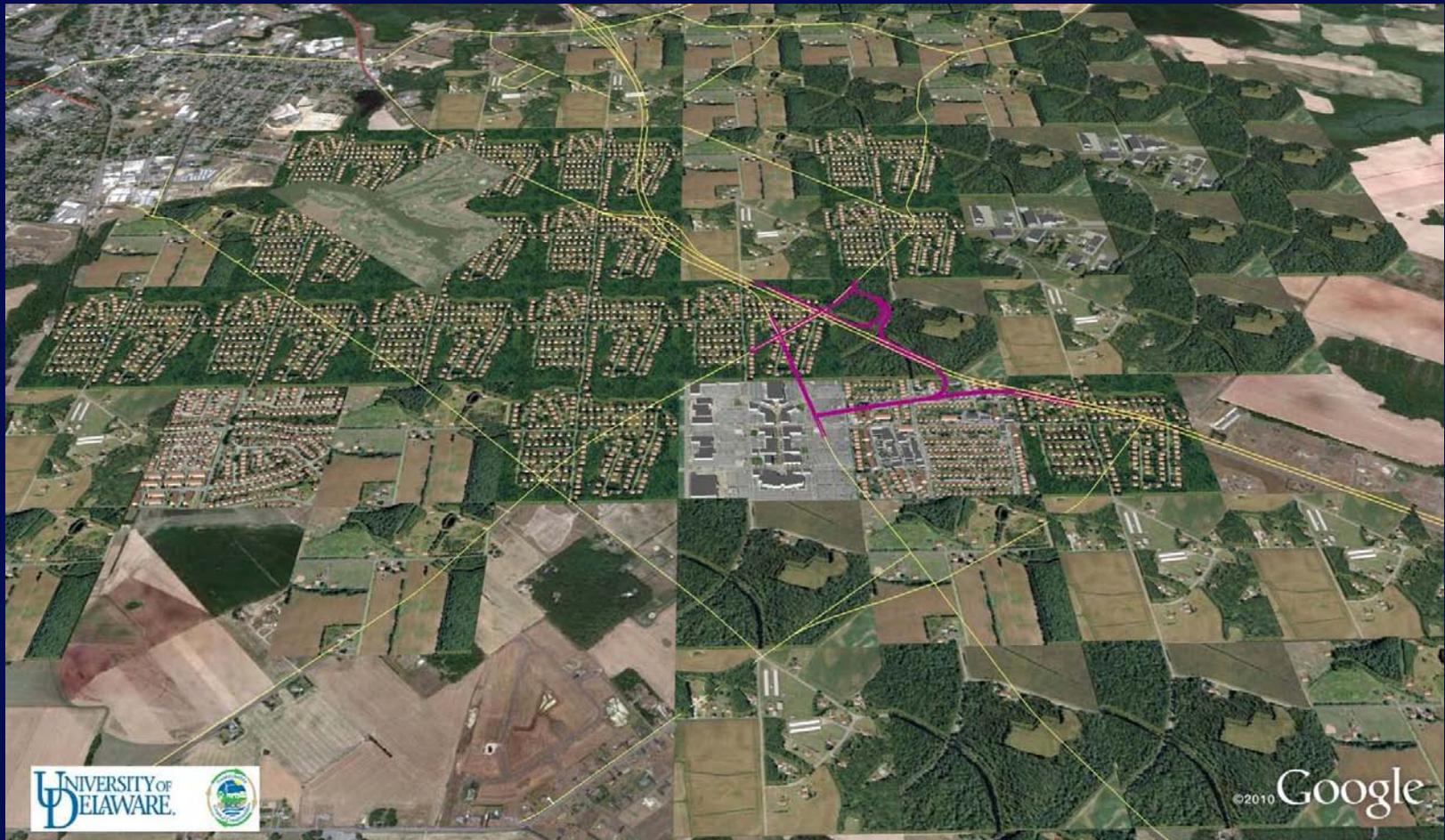
Density Visualization -- Public Option Scenario



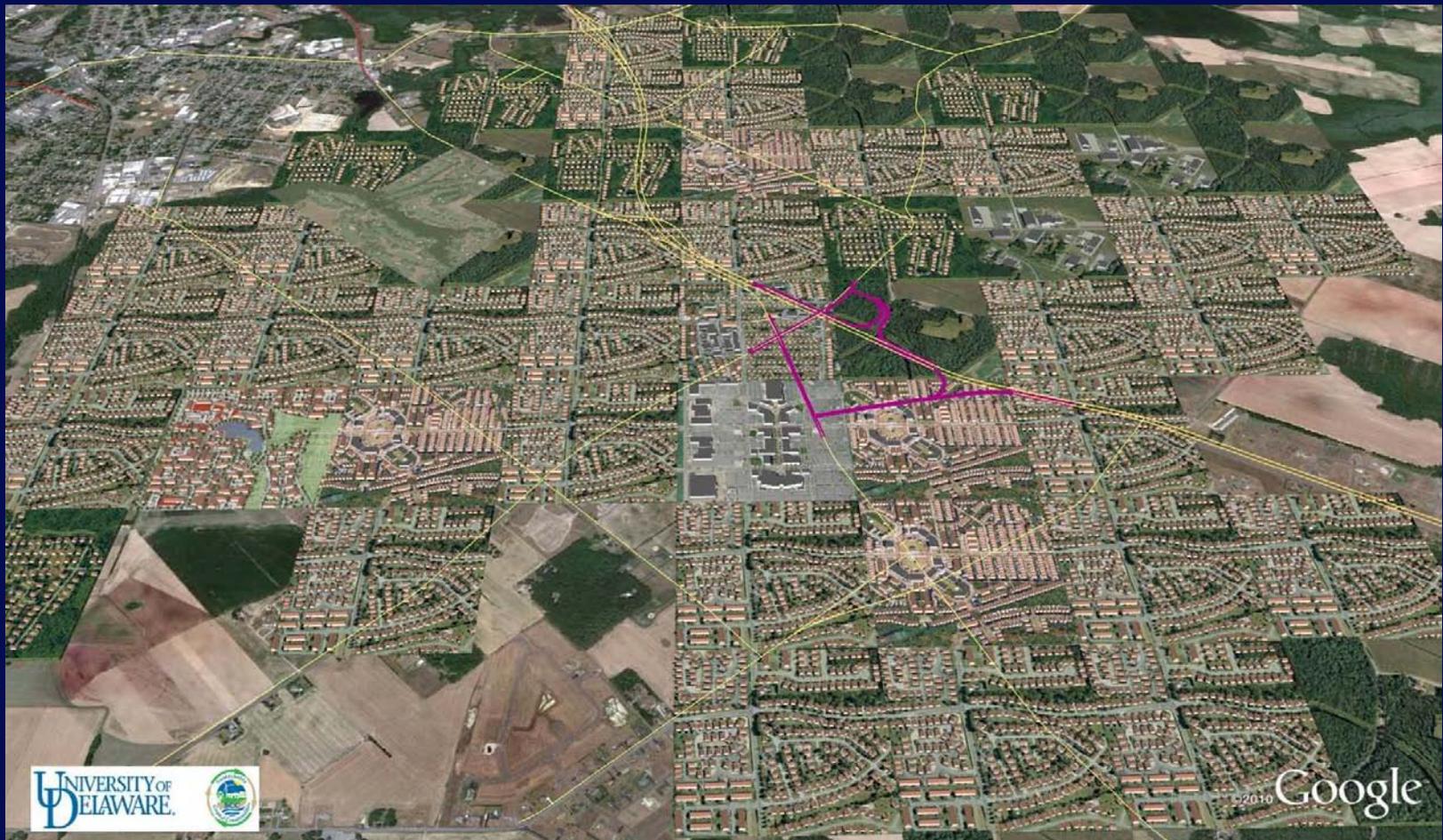
Density Visualization – Growth 2020



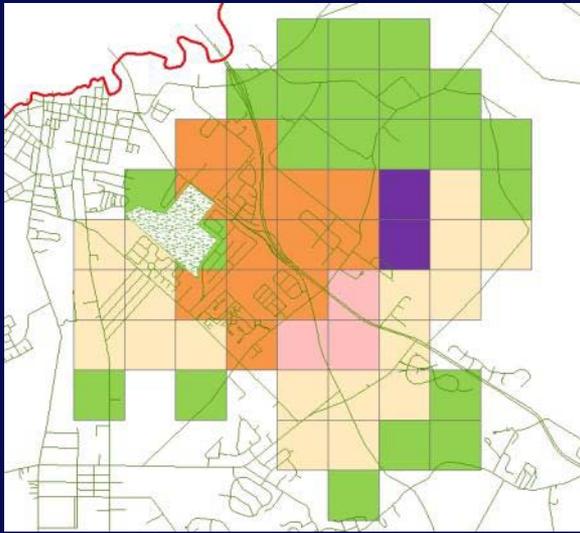
Density Visualization – Growth 2030



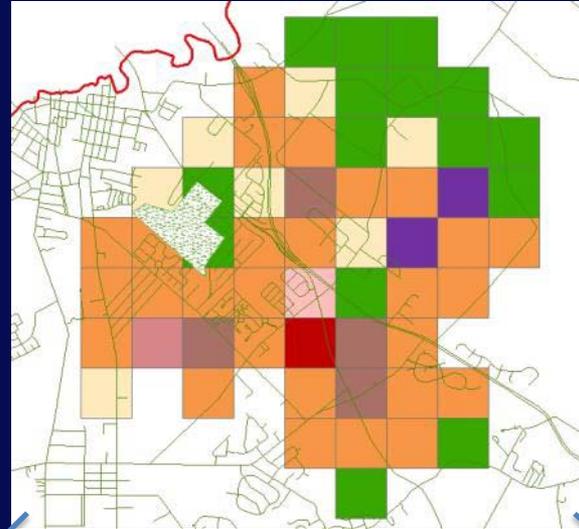
Density Visualization – Master Plan



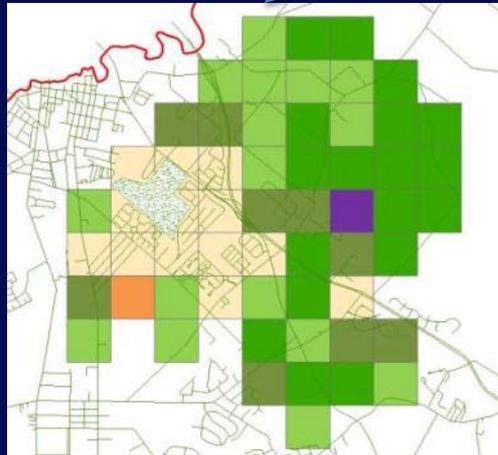
UD-SCC Scenarios: Public Option → Preferred Revision



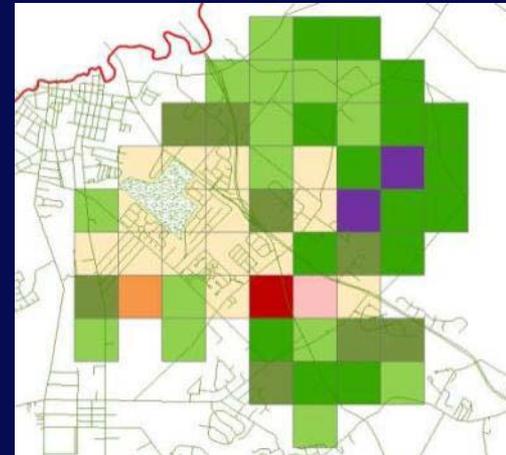
Public Option



Preferred Revision



Growth 2020



Growth 2030

SUMMARY

- **The expected growth using current data is that the SE Planning Area will grow at a 2% annual rate in housing. (approximately 40 -50 houses to be constructed each year)**
- **The City's residential construction for the entire city is averaging 50 units per year.**
- **The City has approximately 4,000 approved residential lots throughout the City**

CITY COUNCIL AWARENESS

- **1. Transportation improvements will be made on rural roads, upgrading these roads increasing speed limits, traffic, and possibly congestion.**
- **2. Future annexations in the SE Planning Area will have to be annexed at **R-1 or R-2** in order for the Transfer of Development Rights Program to work**
- **3. Requirements and Recommendations by State Agencies**
- **4. Public utilities will have to be constructed.**

PROPOSED AGENDA

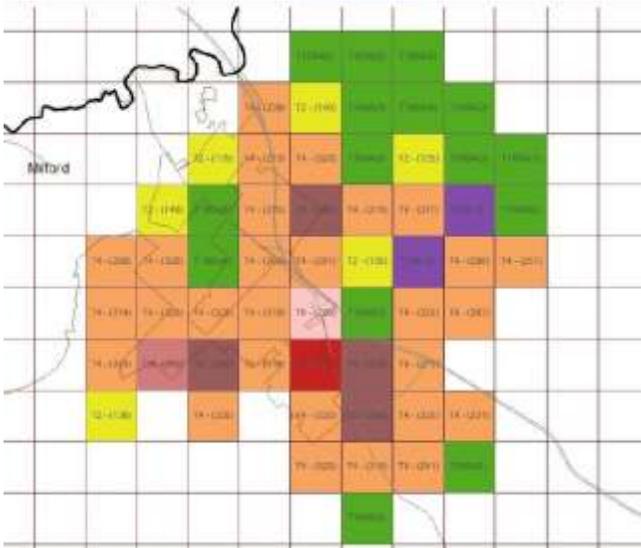
- **1. Initial presentation to City Council**
- **2. Public meeting at Carlisle Fire Company inviting the participants from the three meetings.**
- **Review and recommendation by Planning Commission**
- **Review of Public Comment**
- **Approval by City Council amending the Comprehensive Plan**

Sources & Tools

- **UD-SCC Community Land Use Model, 2011**
 - Land Use Designations and Maps (Vector & 3D Visualization)
 - Build-Out Analyses & Profiles
 - Comparative Analysis
- **Software Tools**
 - **ArcGIS (ESRI)**
 - **CommunityViz (Placeways, LLC.)**
 - **Google Earth Pro**
 - **Google SketchUp**
- **GIS Data**
 - City of Milford Planning Department
 - Delaware Office of State Planning (OSPC)
 - Delaware Department of Transportation (DelDOT)
 - University of Delaware

Milford South East Neighborhood Master Plan

Public Review DRAFT – May 6, 2011



Adopted and Certified as an Amendment to the
City of Milford Comprehensive Plan
DATE, 2011

Prepared by:

The City of Milford, Delaware

In conjunction with:

The State of Delaware

With assistance from the:

University of Delaware
Sustainable Coastal Communities Program

Acknowledgements

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Chapter 1

Overview of the Master Plan

Milford's Comprehensive Plans

The City of Milford has a long history of comprehensive planning. In the early 1990s the City developed a comprehensive plan that included land use, growth, and annexation recommendations for an area that surrounded the existing City. Despite a rather large growth area, annexations were slow during this time. In 2003, Milford updated that plan with a new comprehensive plan designed to comply with the State's new planning statutes. That plan was eventually reviewed and certified by the State of Delaware in accordance with the new requirements in the Delaware Code.

During the mid-2000s, the national economy experienced what was then thought of as a "housing boom." Milford was not immune to this economic force, and experienced a rapid increase in annexation and subdivision requests during this time period. The development community aggressively sought to take advantage of new market opportunities, eventually subdividing over 8,000 lots in the City alone. Several of the annexations requested required amendments to Milford's plan. Milford amended their plan in 2004, 2005 and 2006 to address new annexation opportunities, among other changes to their plan document.

Annexation in the South East Neighborhood

Prior to 2005, the land to the East of State Route 1 (SR 1) South East of Milford was farmland interspersed with a few large lot subdivisions and various rural homes on large lots. In 2005, a land developer proposed a major subdivision consisting of approximately 780 single family homes in this area. The developer's intention was to develop this subdivision under existing Sussex County regulations. This property was not adjacent to the City of Milford, but was very close to property that was already in the City limits. The City became concerned that if this subdivision was constructed, they would be the de-facto provider of services (fire, police, library, parks and possibly even sewer and water eventually) without the benefit of a tax base to support those services.

Milford engaged in discussions with the developer, other adjacent property owners, and the Office of State Planning Coordination to explore the annexation of this area. The City was neutral regarding whether or not this area should be developed. However, if the area was to be developed the City's position was that they would rather have it in the municipal jurisdiction in order to provide necessary public services and infrastructure in a cost effective manner. The

State and its agencies were concerned about “urban sprawl” in this area compromising active, productive farmland, some of which had been permanently protected using State tax dollars. There are also many environmentally sensitive resources in this area associated with Cedar Creek and its tributaries. And finally, the location East of SR1 was difficult and dangerous to access due to an at-grade cross over and heavy traffic, especially during the summer months.

After much discussion, a consensus was reached. The State supported a comprehensive plan amendment that would allow for annexation and development of this area. The caveat was that the development must occur in accordance with a Master Plan to be developed collaboratively by the City and the State. This Master Plan would address detailed strategies to protect farmland and open space, provide needed transportation and utility infrastructure, and prevent further development activities to the East of this area. This document is the Master Plan that was envisioned during these discussions.

Milford’s comprehensive plan was amended in 2006 to include this area as an annexation area, subject to the Master Plan. Annexations of some of these parcels began shortly thereafter.

The Memorandum of Agreement

The process of developing this Master Plan began in earnest with the signing of a Memorandum of Agreement (MOA) by the City and the State in March, 2008. The MOA set out the general parameters that formed the consensus of all parties to work together on development in this area. These parameters included a commitment to work collaboratively; to include other stakeholders; to address utility and road infrastructure in a comprehensive manner; to protect the agricultural economy through farmland preservation and limits on further utility expansions; protect natural resources; and to ensure an appropriate mix of land uses in the developed area.

The original signatories of the MOA included the City, the Office of State Planning Coordination, the Delaware Department of Transportation and the Delaware Department of Agriculture. As the development of this document has progressed, the Delaware Department of Natural Resources, the Delaware State Housing Authority, and the State Historic Preservation Office have all contributed materials and have become partners in this endeavor.

The project area covered by the MOA was originally limited to areas East of SR1. In 2008 the City engaged in a complete re-write of their comprehensive plan which culminated in an entirely new plan document that was adopted in early 2009. The new plan separated the city into several “neighborhoods” for planning purposes. The area covered by the MOA was located

in the South East Neighborhood, which also included lands west of SR1 including a number of existing and developing subdivisions. By mutual consent, all parties agreed that it made sense to adopt the entire South East Neighborhood as the project boundary for this Master Plan. The City's new 2009 comprehensive plan included other planning concepts that have been integrated into the Master Plan, including an urban growth boundary and a greenbelt with open space and farmland within and adjacent to the Eastern edge of the project area.

What is a Master Plan?

Definition of a Master Plan

A Land Use Plan focused on one or more sites within an area that identifies access and general improvements, and is intended to guide growth and development over a number of years or in phases.

From the Planners Dictionary, American Planning Association

While the City's comprehensive plan forms the foundation for the Master Plan, the Master Plan differs from a local government's comprehensive plan in a number of ways:

- A more detailed plan for land use, including build-out calculations
- Detailed planning for the provision of infrastructure and services, including timing , phasing, and funding
- Partnerships and collaborative planning between and among different levels of government
- A more predictable plan that addresses items necessary for implementation
- Commitments, agreements and timeframes for implementation coordinated among the various partners in the planning process.

The Master Plan Process

The development of the Master Plan proceeded from 2008 until today. The City and the Office of State Planning Coordination have been the co-chairs of this planning effort. The process was kicked off with a series of three public meetings to consider ideas and public opinions about the future of this area. The University of Delaware's Sustainable Coastal Communities program provided support for these workshops, and has continued to work with the City to assist with land use modeling and phasing of development.

After gathering public input, Milford’s City Planner developed a consensus land use plan that reflected a composite of the public’s input. That land use plan has continued to be revised based on input from the other stakeholder agencies, and the City’s plans for utilities in the area. All of the stakeholder agencies have worked with the co-chairs to develop chapters for this Master Plan. The stakeholders have included the City itself, DDA, DNREC, and DelDOT. In addition, the Delaware State Housing Authority (DSHA) and the State Historic Preservation Office (SHPO) have provided valuable input.

This draft represents the first public release of the full document. It is the first time that all of the chapters have been placed in a single document for review. The City and the State Agency partners welcome public input. The process will continue with a series of public hearings and workshops for citizens, landowners, developers and other stakeholders. After all public input is collected and addressed; this Master Plan will be adopted as an amendment to Milford’s comprehensive plan and will guide future development and preservation activities in Milford’s South East Neighborhood.

The Result: Predictable, Shovel-Ready Development along with Proactive Preservation

This process has resulted in the achievement of two complimentary goals for this Master Plan Area.

Ready for Economic Development

The detail of this Master Plan has addressed many of the infrastructure issues that would have been managed in an ad-hoc manner through conventional development practices. As such, in the areas that are identified for future development developers will know in advance how utilities will be provided and what their other contributions and requirements would be. Notably, the City and State have designed the following “package” of infrastructure improvements for the area:

- DelDOT will be constructing a new grade separated intersection at Routes 1 and 30. Construction is currently scheduled for 2012 and 2013, with completion due in late 2013. This improvement will allow safe, efficient movement of traffic between the East and West sides of the Master Plan Area, and enable to development of the area East of SR 1. See Chapter 8 for more details.
- The City will be constructing a new water system in the Master Plan Area that will include a water tower and distribution lines. Depending on the acquisition of easements and other siting factors, this infrastructure may extend East of SR 1. Funding is in place to construct this system in the immediate term future. See Chapter 9 for more details.

- The City has commissioned their engineering consultant to design the sewer transmission system for the Master Plan Area. The basics of the design are described further in Chapter 9. The City's commitment extends to actually completing the engineering necessary to have the system installed, and permitting the system so that it is ready to be constructed as soon as there is a user ready to build a new project and tie in to it. The City will work with interested developers to identify financing options that will enable development to occur in accordance with the Master Plan.

The impact of these infrastructure commitments is that virtually any parcel within the Master Plan Area will be ready for development and occupancy. Areas to the West of SR 1 could be constructed at any time, pending completion of the water system. Areas to the East of SR 1 could be ready for occupancy in late 2013, which is when the road access is projected to be completed by DelDOT.

Poised for Preservation

The Master Plan is not only about preparing land for development. Much of the detailed work that has gone into preparing this Master Plan has been done to assure that any new development is completed in a way that does not negatively impact the natural environment or the viability of the agricultural lands located in the Master Plan Area.

- The Delaware Department of Agriculture has developed an innovative Transfer of Development Rights (TDR) program that provides land owners incentives and options to preserve the lands that are identified as Open Space Agriculture in this plan. This program is but one of many options land owners have to remain in farming and protect their land. The Land Use Plan clearly identifies where land is to be protected and where development is to be promoted so that issues of fragmentation and encroachment are minimized. See Chapter 4 for more details.
- The Delaware Department of Natural Resources and Environmental Control has identified significant natural resources in the Master Plan Area, and promoted design guidelines to protect these areas. Most of the critical resources are located along the tributaries of Cedar Creek, and include wooded areas, rare species, excellent wildlife habitat, wetlands, and sensitive watercourses. The Master Plan directs dense development away from these areas. When parcels that contain sensitive resources are subject to future development, DNREC has offered design guidelines which will enable development that does not degrade or encroach on these important natural features. See Chapter 5 for more details.

Chapter 2

Public Workshop Sessions

To kick off the Master Plan process, the City held three public workshops at the Carlyle Fire Hall in September and October of 2009. The goal was to engage citizens and property owners in the Master Plan area in a discussion about the future of the neighborhood. Over 1000 invitations were mailed to those who lived or owned property in this area. Only a portion of this land is currently in the City limits, so both City and County residents were included in this mailing. The meetings were also widely advertised through newspapers and on the City's website.

The University of Delaware's Sustainable Coastal Communities Program was engaged to help structure and run the workshops to maximize public participation and ensure that productive input was received. UD devised the three workshops as a series: the expectation was for residents to attend all three in sequence as each built upon the last. More than 70 individuals attended the first workshop, and over 30 people remained with the process for all three.

The UD project team used CommunityViz geographic information system software to develop the "University of Delaware SCC Land Use Model." This model was developed for use throughout Sussex County, and was immediately useful for this process because the entire South East Neighborhood is in Sussex. The model uses 100-acre tiles in a grid across Sussex County to illustrate potential development patterns. A palette of colors ("crayons") represents 13 typical land use types (4 rural, 6 suburban/urban mixed, and 3 non-residential), each with its associated residential and non-residential densities, population, employment, tax, water and wastewater usage, and traffic generation characteristics. To help people visualize the land uses, the team used computer graphics programs including CommunityViz Scenario 3D and Google Earth to create three-dimensional models for each of the 13 land use types.

At Meeting One, citizens reviewed current plans for the neighborhood, learned about constraints to development, and identified their values. They viewed and deliberated about three potential long-range growth scenarios based on 3D representations of land use types and their associated demographics.

At Meeting Two, citizens used a table exercise to plan the Southeast Neighborhood, using colored tile "crayons" placed on an aerial map. The attendees produced seven somewhat different plans that were merged into three scenarios: "Current Trends," "New Community," and "Suburban." Build-outs of each scenario were analyzed in numeric terms, mapped, and

visualized in 3D, and had their associated demographic impacts estimated.

At Meeting Three, citizens viewed the results of the analyses and discussed the benefits, challenges and cost implications of each. They used keypads to vote on preferred scenarios. A resulting Composite Scenario was developed by Milford's City Planner and has become the basis for this Master Plan for the neighborhood.

The project modeled an expanded public process combining scenario development and deliberation, analysis, and decision-making. According to UD project leaders, citizens were astounded to be able to significantly influence the resulting plan. The County Plan had envisioned approximately 18,000 dwelling units for the area and the City Plan showed approximately 15,000 dwelling units. The agreed-upon Composite Scenario (labeled Preferred – Alt) results in only 8,500 dwelling units, incorporates open space, consolidates commercial areas, and retains areas of farmland. Map 2.1 shows the Preferred-Alt Scenario developed at the workshops.

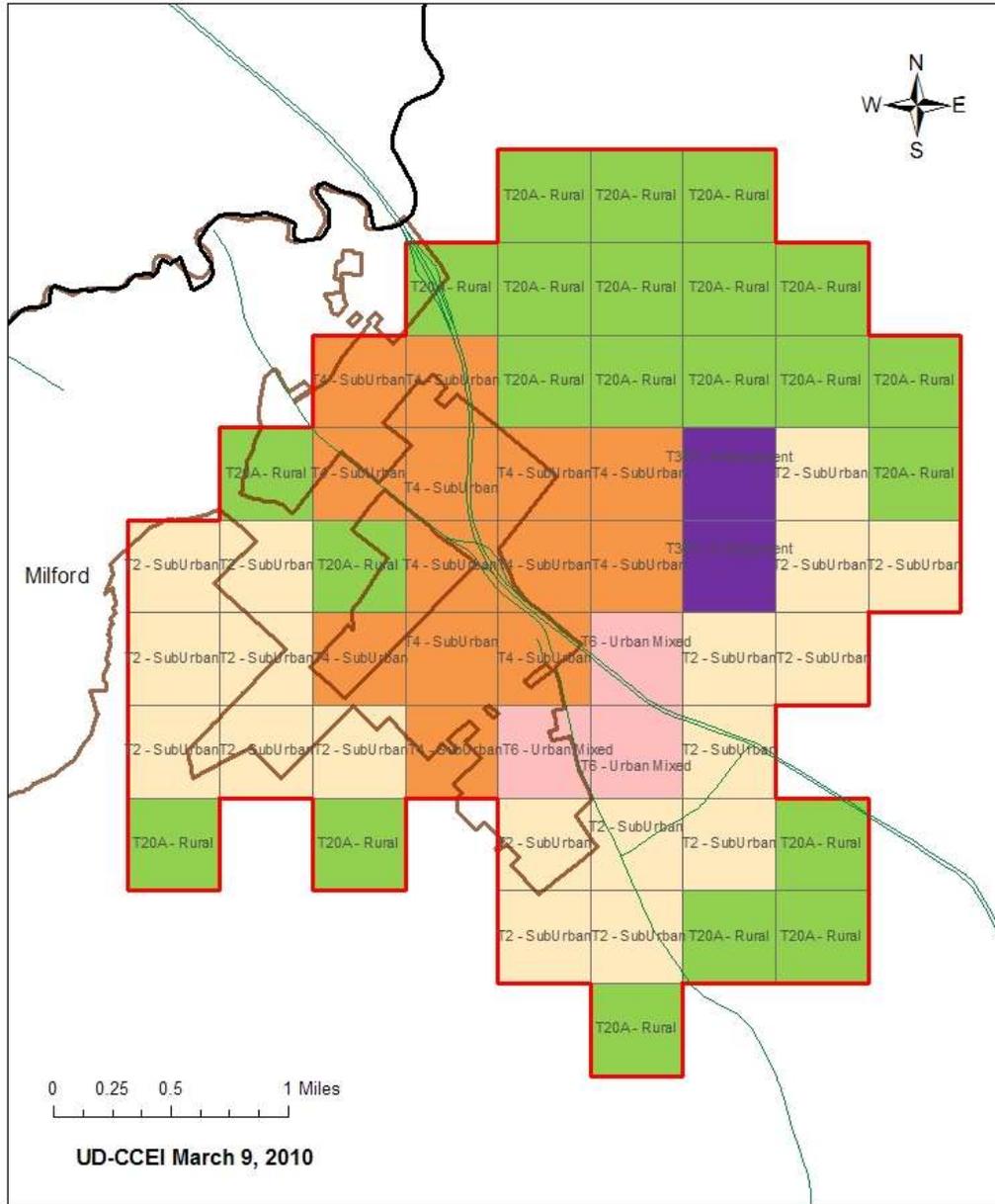
UD has continued to assist the partners as they have developed detailed plan elements. CommunityViz software has been very helpful to estimate build-out potential for the area and phasing for infrastructure improvements. The final version of the land use plan (known as Preferred – Revised) contains the potential for approximately 11,700 dwelling units and corresponding increases in commercial space and jobs. The increases over the Preferred-Alt scenario are due to a more accurate accounting of existing units and approved and recorded subdivisions, as well as a reflection that the base density in the City is approximately 3 du / acre corresponding to the least dense zoning district available. The Preferred- Revised Scenario is more fully described in the Land Use Plan, Chapter 3.

Portions of this chapter have been adapted from a Community-Viz case study titled "Community Planning with Digital Crayons and Real-Time 3D" written by Carol Bason and Bill McGowan of the University of Delaware Sustainable Coastal Communities Program. This document has been used with permission. The software vendor, Placeways LLC, has this case study on their website. To view the full case study, please visit:

<http://placeways.com/communityviz/gallery/casestudies.php>

Map 2.1. The Preferred – Alt Scenario

SE Neighborhood - Milford "Preferred" Scenario Map by Land Use



Chapter 3

Land Use Plan

The standard way of thinking about Land Use for the Southeast Planning area was that it would continue as it had in the past, in a rather haphazard way, commonly referred to as “urban sprawl.” As a result of public input at the workshop series and through many meetings and with input from State agencies including the Office of State Planning Coordination, DelDOT, DNREC, the Department of Agriculture, the University of Delaware and the City of Milford a new planning concept has emerged. This new “planning model” as proposed protects and preserves valuable farm land from development through a program called Transfer of Development Rights, conserving approximately over five hundred (500) acres of agricultural lands for future generations. This plan shields the environment through recommendations from DNREC concerning encroachment of the flood plain, storm water management in designated water recharge areas and the protection of aquifer areas. With the cooperation of DelDOT, a Transportation Element has been developed for the Southeast Neighborhood Planning Area that identified and analyzed the transportation improvements that will be required to accommodate the expected changes in land use and increases in traffic volumes for this area. The City of Milford’s part in this program was the preparation of a master plan for the construction of water and sewer utilities to serve this neighborhood in a cost efficient manner ensuring that development would be served adequately and that this new development would pay its fair share through a variety of options. The second contribution from the City was the preparation of a Land Use Plan for this area, which would reflect the actual development presently occurring in this neighborhood and guide future development in accordance with this Master Plan.

Public Input: The “Preferred – Alt” Plan

The public input received at the three public meetings described in Chapter 2 formed the basis for this Land Use Plan. The final result of these three meetings was the development, by the public, of three (3) Future Land Use Map Scenarios. The first was labeled “Current Trends” because it reflected a business as usual approach to development. The second was called “New Community” because it consolidated growth, particularly non-residential uses, around the interchange that was to be built at Routes 30 and 1. The third was labeled “Suburban.” This scenario drastically reduced density and removed most commercial or employment uses. At the last civic meeting the participants voted on the three Scenarios. After the vote was tallied there was no clear cut preference for the most representative Future Land Use Map. Milford’s

City Planner took the three scenarios and consolidated them into the “best choice” Future Land Use Map. This version of the map was titled Preferred – Alt (see Map 2.1).

All of the partners agreed that this map reflected the goals of the public during the public workshops, while also reflecting existing conditions, approved subdivisions, and known infrastructure improvements occurring in the neighborhood. Density and commercial development were reduced from the current comprehensive plan, development was concentrated around the interchange, and open space and agricultural lands were protected around the periphery of the planning area.

Refining the Public’s Vision: The “Preferred – Revised” Plan

The City and the partner agencies worked over the next year and a half to refine the Preferred – Alt Land Use Plan into the plan that has become the Future Land Use Plan for this Master Plan. The important components of the revision process are described below.

Moving from 100 Acre Grids to Parcels

The land use model developed by the University of Delaware using CommunityViz software was designed using 100 acre grids as a unit of measure. This makes it easy for planners and members of the public to visualize different land use and neighborhood types. It is easy to move the grids around to create different land use scenarios, even in public meeting settings such as those held at the fire hall. The relative simplicity of this model allows the software to “recalculate” the impact of new land use scenarios quickly, even when using a standard laptop computer.

While this model is perfect for working with the public to visualize different land use scenarios, it is not accurate enough to plan for new infrastructure such as sewer, water, and roads. The Delaware Department of Transportation, a partner in this project, offered their staff expertise to provide detailed mapping of the Master Plan Area using their Geographic Information System (GIS) software. Very early on in the process the project team worked with DeIDOT GIS and planning staff to develop a version the preferred scenario at the parcel level. This map has continued to be refined and is now known as the Land Use Map, Map 1.

Accurately Reflecting Existing Units and Approved Subdivisions

The Master Plan Area currently contains many existing houses, subdivisions and approved subdivisions. Moving to a parcel based map allowed the project team to accurately count those units. Although the area is quite large and has a lot of land left to develop, the team quickly realized that many of the parcels already had approved and recorded subdivisions located on

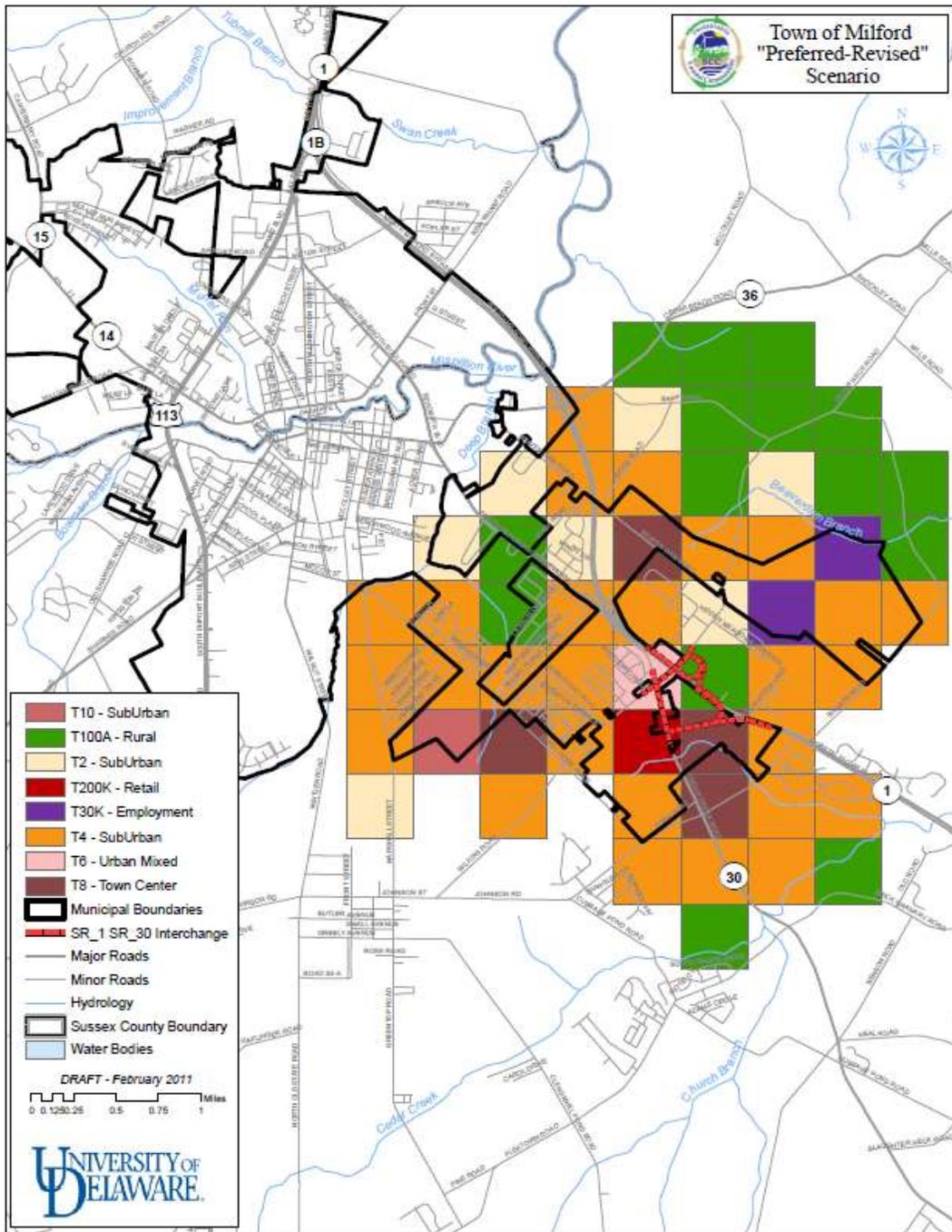
them. Some of those subdivisions had already started to be constructed, although construction had slowed by this time due to economic conditions. The decision was made to assume that these subdivisions would eventually be built as they are currently designed. This left a smaller sub-set of parcels that would be the focus of new residential, commercial and employment land uses. This information is reflected on the Future Land Use Map (Map 1), and eventually was fed back in to the CommunityViz land use model to become the Preferred – Revised Scenario (Map 3.1).

Coordinate Land Use Plan with Agricultural Preservation

As a partner in this project, the Delaware Department of Agriculture (DDA) worked to develop a strategy to preserve the agricultural lands along the eastern portion of the Master Plan Area. A number of large farms have already been preserved in this area, and they developed a program to encourage land owners of near-by farms to preserve their land as well. This program is called Transfer of Development Rights (TDRs), and is fully described in Chapter 4.

DDA evaluated the lands within the Master Plan Area in detail and determined which farms had the characteristics and suitability to remain productive. These were identified for future preservation, and have been shown as Open Space Agriculture on Map 1. Should the land owners choose to preserve their land using the TDR program, they would be compensated for their “development rights” and those rights would be transferred to another area. Those areas would be called “receiving areas” where higher densities would be permitted only by redeeming rights purchased from landowners willing to sell them and protect their land. The land use plan identified three receiving areas where up to eight units per acre would be permitted. These areas are shown as hatch marks on Map 1.

Map 3.1. The Preferred – Revised Scenario



The Land Use and Transportation Connection

As DelDOT was developing their transportation plan for the Master Plan Area (see Chapter 8), they identified the concept of transit loops that would link residential, employment, and commercial uses in the developing area with the existing downtown. Transit service is not viable at the low densities that are present in the area today. In order for transit to be efficient and cost effective, there must be “nodes” or locations of activity where people or jobs are clustered together so that they might take advantage of bus service or other transit.

The Master Plan initially provided two important nodes of activity. The first is a commercial center or district that is planned West of SR 1 in the vicinity of the planned grade separated intersection at Routes 1 and 30. The other is the proposed employment center located to the East of the same interchange. Both areas will provide a concentration of jobs and services that make them ideal locations for future bus stops. The TDR receiving areas conceived by DDA would also be ideal locations because they would allow for higher density residential uses, up to 8 du / acre. The project team carefully planned the location of the TDR receiving areas so that they would be along the bus routes, providing bus stop locations to ensure the future viability of transit service for the Master Plan Area.

Base Density in Milford

The Preferred – Alt land use scenario developed as a composite of the public input received at the workshops identified a large portion of the land area to be for single family housing at a density of 2 units per acre. This is consistent with the density permitted by-right under Sussex County’s regulations with access to sewer and water. The City’s position is that any lands that will receive sewer and water must annex into the City limits. Milford’s zoning ordinance allows for a minimum base density of approximately 3 du/acre through their R-1 Zoning District. The City finds that sewer and water utilities are not cost effective with densities of less than this amount. This information was loaded back into the Community Viz model as a part of the Preferred – Revised scenario.

Milford South East Neighborhood Master Plan - Land Use Plan

The final map that will guide future land use in the Master Plan Area is the Land Use Plan, included as Map 1. The land uses identified on this are described as follows:

Residential – Low Density. The majority of the residential land uses in the Master Plan Area are low density, which includes many existing homes and subdivisions, some of which are unbuilt. It

is assumed that undeveloped lands would be built as mostly single family homes at a density of about 3 units per acre if annexed into Milford.

Residential – High Density. This land use category is reserved for two approved subdivisions that are planned for up to 12 units per acre. One of these subdivisions, Hearthstone I, has been under construction for many years. The other is currently unbuilt.

Open Space Agriculture. The Eastern portion of the Master Plan Area is identified for open space and agriculture. This will protect the viability of the agricultural industry in this area, protect the environment, and create a “greenbelt” to prevent future development from encroaching future to the East towards Slaughter Beach and the sensitive coastal environment near the Delaware Bay. This land use category is also used for the golf course at Shawnee Country Club, as the assumption was made that this land would stay as open space of some type.

Innovation Park (Employment). This land use category is named for the current proposal for the lands East of SR 1 that are intended for future institutional use. The current concept is for a medical campus that would provide many jobs and medical services for the region. Regardless of the ultimate user, it is intended that this land use be associated with a large employer to bring jobs and economic development to the Master Plan Area.

Commercial. This land use category is used to identify a future commercial use or district in the vicinity of the proposed interchange at SR 1 and Rt. 30. It is expected and encouraged that this commercial district may include some mixed uses, such as residential condos or apartments over stores, to provide a vibrant community center that will serve the entire Master Plan Area with needed services and recreation.

TDR Receiving Areas. In these areas the City will allow residential development of up to 3 du / acre “by-right.” In addition to this, developers will be given the opportunity to purchase TDR credits through the program described in Chapter 4 and build at a density of up to 8 du / acre. The areas are hatch marked to indicate that the boundaries are subject to change based on design review at the time of development. The only criterion is that all of the higher density units must be within ¼ mile of a current or future transit stop. Mixed uses, such as small scale commercial to serve the residents, may be considered at the time of development.

DeIDOT Owned Property. Lands in this category are owned by DeIDOT to allow for the construction of the grade separated intersection at Routes 1 and 30.

By the Numbers: Build-Out Timing and Phasing

The land use details included in Map 1 were loaded back into the CommunityViz software in order to generate build-out calculations for the area. This allowed the project team to compare the Land Use Plan with the Preferred – Alt scenario developed as a composite from the workshops. It also allowed comparisons to the current Milford Comp Plan. See Table 3.1 for a summary of the differences, and Appendix 1 for a more detailed review of the model output.

Build-Out: How Much Could be Built Some Day?

Planners use the term “build-out” to describe how much development could be achieved in a given plan or planning area. This is a very effective and necessary exercise for this Master Plan, as it has allowed the project team to properly design and size infrastructure improvements such as roads, water and sewer.

The current Milford Comprehensive Plan would allow for up to 15,000 new dwelling units and approximately 39,700 new residents. The Preferred – Alt scenario yielded approximately 7,600 new homes and 19,500 residents. The Land Use Plan, reflected by the Preferred – Revised scenario on Table 3.1, has room for about 11,800 homes and 30,700 residents. This is less than the current comp plan but more than the Preferred – Alt scenario. The increases are due to Milford’s base density for low density development, and the higher accuracy in accounting for existing homes as well as approved subdivisions.

In terms of jobs and non-residential space, the relationship is similar. The current comprehensive plan would allow for a massive amount of commercial space, almost 8 million square feet and 10,200 jobs. In the workshops, the public drastically reduced this amount of commercial to just less than 1 million square feet and about 2,500 jobs. Perhaps more importantly, the commercial activities and employment land uses were clustered around the new grade separated intersection to allow for safe road access. Other positive effects of this choice were that these areas can be served by transit and have the potential to serve as a commercial district for the new community. The project team revised the amount of building square footage up to about 3 million and 4,800 jobs to account for developer’s plans for these areas, but did not increase the overall amount of land devoted to commercial and employment uses. In fact, the team realized that some of the commercial lands identified in the current comprehensive plan were not able to be safely accessed from the roadways, and were thus changed to low density residential future land use.

Timing and Phasing: How Long Will This Take?

While the “build-out” exercise is important for planners and engineers, the question that most people want to know the answer to is, “when will all of this development get built?” The answer to this question is very important to planners as well because it is necessary to develop timing and phasing plans to ensure that infrastructure is in place when it is needed by new residents and businesses. It is not a cost effective use of tax dollars to build infrastructure before it is needed, either. So timing is critical.

The project team developed some realistic assumptions about the pace and timing of development based on regional and Statewide data about population growth, and data specific to Milford in the form of building and development permits. Many people can remember the frantic pace of building and land development activity just a few short years ago in the mid-2000s. We all know now that this was what economists call a “bubble,” and was an unusual and short term phenomenon that does not reflect what might happen in the future over a longer period of time. Actual growth and development rates will be much more modest and sustainable based on economic realities, not market “bubbles.”

The team selected a growth rate of approximately 2% per year for Milford, including the Master Plan Area. This averages out to about 40 new houses and 80 new residents per year, which is similar to the historic average experienced in Milford. Using the CommunityViz software, two future scenarios were developed to reflect what is expected in future years. In 2020 it is expected that an additional 491 houses and 1,251 residents would be in the Master Plan Area. This scenario also assumes that a small amount of new commercial is constructed, only 160,000 square feet employing 462 people. The second scenario assumes the same rate for residential growth, with an additional 525 houses and 1,330 people. However, by 2030 the team assumed that some of the larger commercial and employment uses would be constructed and operational (perhaps a new shopping center, or even a medical campus at the Innovation Park site). As such, more than 1 million non-residential square feet of building space and over 1,100 new employees would be expected by 2030.

Table 3.1. Summary of Alternative Plan Scenarios from Community Viz

	Existing Land Use	Preferred Alt (at buildout)	Preferred Revised (at buildout)	Growth 2020	Growth 2030	Milford Comp Plan as adopted (at buildout)
Dwelling Units	1,943	7,626	11,769	2,434	2,959	15,083
Number of Residents	4,709	19,459	30,739	5,960	7,290	39,659
Commercial Floor Area	0	995,000	2,985,000	160,000	1,185,000	7,970,000
Employees	262	2,519	4,875	724	1,854	10,275
Date Created	Oct. 2009	Oct. 2009	Dec. 2010	Apr. 2011	Apr 2011	Jan. 2009

Sources: University of Delaware Sustainable Coastal Communities Program. Growth 2020 and 2030 Scenarios developed by City of Milford, Office of State Planning Coordination, and UD based on Delaware Population Consortium growth rates and City of Milford building permit information.



Milford South East Neighborhood Master Plan

Map #1 Land Use

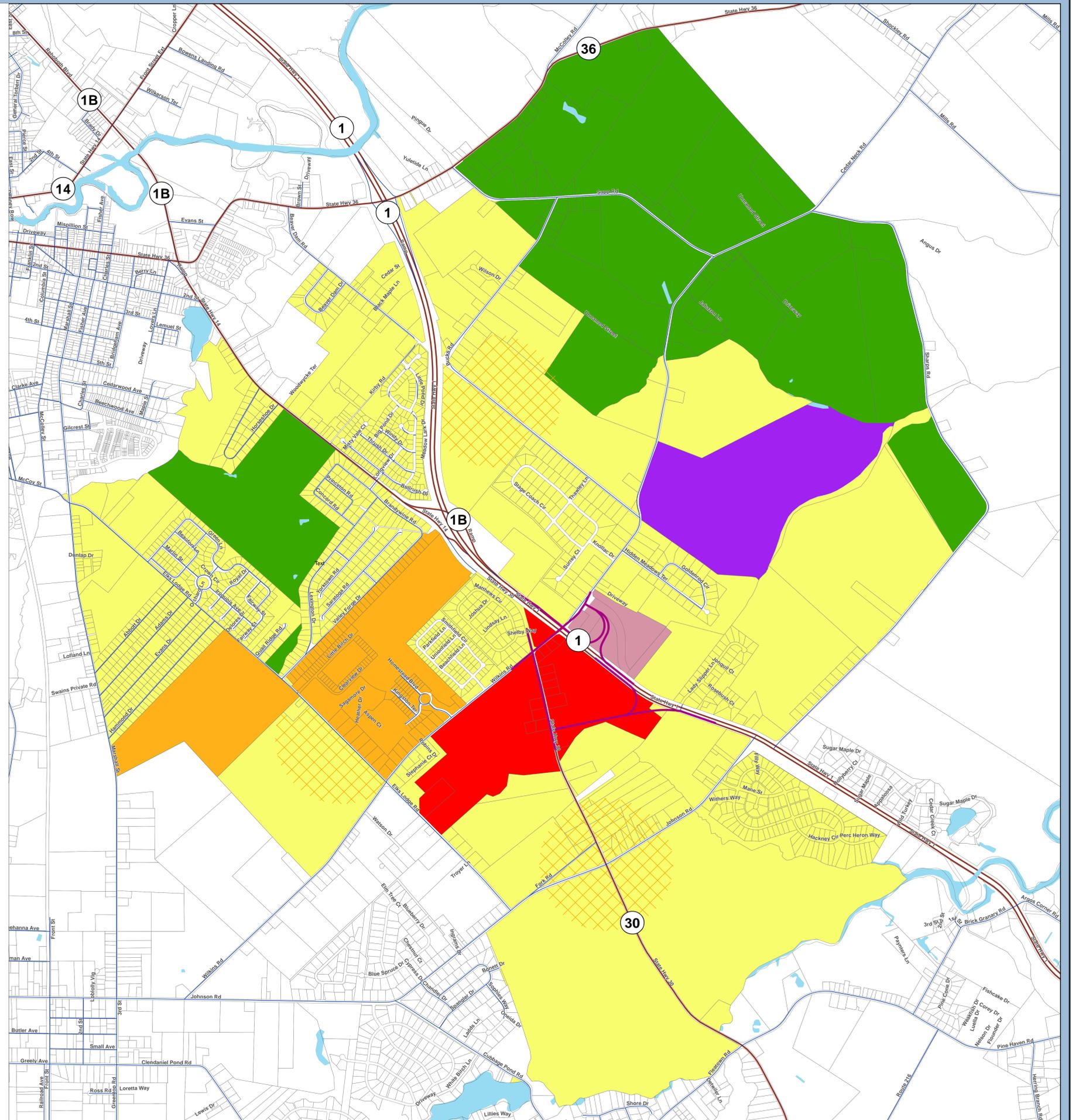
Legend

-  Residential - Low Density
-  Residential - High Density
-  Open Space Agricultural
-  Innovation Park
-  Commercial
-  TDR Receiving Areas
-  DelDOT Owned Property

Map created by DelDOT Division of Planning



0 0.25 0.5 1 Miles



Chapter 4

Agricultural Preservation

The Delaware Department of Agriculture (DDA) supports and endorses the City of Milford South East Neighborhood Master Plan. The Department is especially encouraged to see the large area of farmland to southeast designated as continued agricultural use. The state has already made a significant investment of taxpayer's money to permanently preserve a number of farms in this area through the Delaware Agricultural Lands Preservation Foundation (DALPF). In addition, the Department has performed a Land Evaluation/Site Assessment (LESA) analysis of the parcels designated as Open Space-Agricultural in the plan. The LESA model was developed by the United State Department of Agriculture (USDA) to evaluate a parcel of land's suitability to remain in agriculture for the foreseeable future. The analysis showed all of the parcels are well-suited, and best used, for agricultural in the future. The DDA will continue to work with land owners in this area to preserve their farms permanently, and build on the investment the state has already made.

Simply preserving farmland is not enough to encourage and support farming in the state. State government and municipalities must make the occupation of farming a viable and rewarding living for the farmer and their family. The Department offers some suggestions below that are mutually beneficial to both the city and the surrounding farms. In addition, the Department has outlined a plan for a transfer of development rights (TDR) program whereby the city and DALPF can partner to permanently preserve the farmland identified in the master plan.

In addition to providing a living to farmers, farmland provides a number of intangible benefits to the cities and people who live around them. In the case of Milford, preserving the farmland to the southeast will create a predictable city limit, with no threat that the land can be developed into residential developments through Sussex County. This would ensure that city's services and infrastructure will not be stressed and overextended without additional tax base to support it.

The farmland will also provide a visual amenity of open green space to city residents along the southeast boundary of the city. There are also environmental benefits such as cleansing precipitation before it recharges the underlying aquifers that feed the city's well fields. The surrounding farm businesses will also be a source of income for the city's businesses, when farm families shop in city. Nearby farms also present the possibility of providing fresh local fruits and vegetables to city residents via roadside produce stands or "u-picks".

Milford Southeast Neighborhood Master Plan Transfer of Development Rights Program

The Delaware Agricultural Lands Preservation Foundation (DALPF) will partner with the City to develop a Transfer of Development Rights (TDR) program. The Department suggests a program whereby the city selects which farms they want to permanently preserve, and which properties within the city would be allowed to use the TDR credits to build additional dwelling units.

Although the city would have discretion in choosing which farms to preserve, the Department recommends the farms be enrolled in the DALPF program first in order to be eligible. The DALPF is a voluntary program whereby the landowner initially agrees not to develop their land for 10 years. During that 10 year period, the landowner is eligible to sell their developments rights to the state and receive money in exchange for permanently preserving the property in agriculture. In this area, the landowner will also have the option to sell Transfer of Development Rights through the program that will be described in this chapter. Land owners will have at least two options for preservation to choose from.

The DALPF is a well-established program for preserving farmland. It has been operation for nearly 20 years, and has permanently preserved over 100,000 acres in Delaware. This 100,000 acres represents nearly 20% of the state's available farmland, and approximately 8% of the state's total land area.

By partnering with the DALPF, the City will avoid the initial financial expenditures required to preserve a parcel of land. These expenditures include paying to survey the property, paying the legal costs of a real estate settlement, and other associated administrative costs. The DALPF would bear those costs. In addition, the city would avoid the future obligation of monitoring the preserved farms to make sure they remain in compliance with the preservation agreement (easement). The DALPF would assume that responsibility, and would add any properties preserved by Milford to the hundreds of permanently preserved farms it already monitors. In addition, should any future litigation be required to uphold the preservation easement, the City would not have to incur any legal costs.

How a Transfer of Development Rights (TDR) Program Works:

In order for a TDR program to work, a viable market has to be created through a number of steps, including ordinances.

The first step in the process is for the City of Milford to identify “sending areas” and “receiving areas.” TDR sending areas are defined as the areas, and properties, where TDR credits will come from. The goal is to permanently preserve these areas as farmland and open space through deed restriction/easement. In return for agreeing to permanently preserve their farm, the landowner would be compensated monetarily. The number of dwelling units (DUs) that could have been built on the property would then be “sent”, or “transferred” to a previously designated receiving area where the city is prepared for development at higher densities. In addition to sending areas, the City would also have to identify “receiving areas” within their municipal boundary. These areas would have to have the available infrastructure to accept higher density. The City would also need strong ordinances in place that would only allow additional density if the developer participated in the city’s TDR program. In addition, the ordinance must make the addition of more DUs (higher density) through the TDR program “by right.”

Milford’s TDR Program

Selecting the Sending Areas

In order to identify suitable sending areas, the DDA performed a GIS analysis of properties just outside, or straddling, the city’s future projected growth boundary to the southeast. In order to determine which farm parcels would be most suitable for preservation, the department applied the same qualifying criteria used by the state’s Agricultural Lands Preservation Program. The analysis identified 11 farm parcels encompassing 720 acres. These properties are shown in Table 4.1 and on the Agriculture Map, Map 2. This area is ideal because a number of farms have already been permanently preserved by the Delaware Agricultural Lands Preservation Program. In addition, there are several other farms in the area that are currently enrolled in the DALPF program, waiting to be permanently preserved. The farms in the sending area currently zoned for two (2) units to the acre under Sussex County zoning code. Therefore, approximately 1,452 dwelling units could be transferred into the City of Milford, and used on properties designated as receiving areas. The proposed sending areas are shown as “Open Space Agriculture” (green color on legend) on the land use map (Map 1).

Selecting the Receiving Areas

Finding eligible farms willing to sell their development rights is only one side of the equation. The City must also identify areas prepared to accept additional dwelling units above the maximum number allowed by the underlying zoning. The additional DUs would only be allowed if the developer participated in the City’s TDR program. Receiving areas have been identified

based on a number of enabling factors, including: sewer and water availability, road and traffic considerations, availability of public transportation, existing density in the area, proximity to public services, environmental considerations, and other factors.

After considering and weighing all the factors previously discussed, the Department supports the City using the three (3) areas defined by the hatched areas on the Land Use Map (Map 1). These areas are centered on future public transportation locations, or nodes. These areas are in proximity to future employment centers, commercial services and are not located on environmentally sensitive lands as identified by DNREC. See Table 4.2 for more details.

Some the land in the receiving areas is already in Milford's municipal boundaries. In order for the other lands to participate as receiving areas through this program they will have to be annexed into the City of Milford. Upon annexation, these lands will be zoned at the base density, currently known as R-1 under Milford's existing zoning ordinance. This ordinance currently allows development at up to approximately (3) dwelling units per acre. Property owners / developers would be allowed to develop at that density under the current regulations. However, if the property owner / developer choose to participate in the TDR program, the land could be developed at up to eight (8) dwelling units per acre if they transfer units from the sending area. This transfer would be "by-right," meaning that there is no special approval needed to complete the transfer as long as the parameters and requirements of the program are adhered to. The developer's plan would still have to go through the standard subdivision review process through the Planning Commission and City Council, to ensure it met city code requirements. The area encompassed by the hatched areas equals approximately 280 acres. Therefore, multiplying that area by five (5) additional units per acre, would allow up to 1,400 units to be transferred, potentially preserving 720 acres of farmland in the receiving area.

Table 4.1. TDR Sending Area Analysis

Parcel Number	LESA Score	Acres	Zoning Yield ¹
330-12.00-10.00	185.08	60	120
330-08.00-47.00	220.19	14.7	28
330-12.00-08.00	222.51	117.4	235
330-08.00-28.00	172.61	46.2	92
330-08.00-24.00	189.26	41.29	101
330-12.00-01.03 ²	210.7	118.18	236
330-12.00-01.02 ²	Part of 330-12.00		
330-12.00-01.02 ² (Unit 21805)	Part of 330-12.00		
330-12.00-01.00	181.54	66.8	132
330-08.00-19.00	192.19	85.5	170
330-08.00-19.02	192.19	16.3	32
330-08.00-20.00	232.5	105.6	210
330-07.00-75.00	184.27	48.4	96
Totals		720.37	1,452

Source: Delaware Department of Agriculture

¹ Zoning Yield reflects 2 dwelling units per acre, which is currently allowed in the Sussex County AR-1 Zoning District

² Shaded parcels are currently enrolled in an existing Agricultural District

Table 4.2. TDR Receiving Area Analysis

Milford TDR Receiving Areas: Located within ¼ Mile of Public Transportation Nodes				
Node	Acres	Base Zoning at 3 DU / Acre	TDR Zoning at 8 DU / Acre	Additional DUs through TDR Use
1	58	174	696	522
2	118	354	1,416	1,062
3	104	312	1,248	936
Totals	280	840	2,240	1,400

Source: Delaware Department of Agriculture, City of Milford, and Office of State Planning Coordination

Purchasing Development Rights Using a TDR Bank Concept

Some traditional TDR programs require the developer to find a suitable farm to preserve and a landowner willing to sell their development rights. The developer would have to negotiate a price with the owner, and handle all of the legal and administrative requirements to permanently preserve a parcel of land from future development. This process typically requires a lot of time and money from the developer. This is generally not in the developer’s best interest if they are trying to take advantage of prevailing real estate market conditions favoring building at higher densities.

The Department will assist the City in the creation and administration of a TDR bank in lieu of the aforementioned process. In a TDR bank concept, the City would begin with either seed money or TDR credits from lands already preserved. Developers would purchase TDR units to allow them to build at higher density from the bank. An administrative fee may also be assessed to account for legal and other costs that may be necessary to complete the transfer. The City (aka “the bank”) would aggregate all the funds it collects from developers who purchase these rights and use that money to purchase the development rights on properties enrolled in the DALPF program and located in the city’s designated sending area. These units would then be available to be re-sold to future developers. The City would choose which farms they wanted to purchase based on predetermined criteria they establish.

In addition to the funds the city would have, they would also be eligible for state-matching funds from the DALPF, as well as any federal matching funds from United States Department of Agriculture (USDA) Farm and Ranch Lands Protection Program (FRPP). As allowed by law, these matching funds would be awarded to the city based on availability. If the city were able to capture state and federal matching funds, they could significantly leverage their funds with additional money, and preserve additional farm land.

Setting the Cost of TDR Credits or Units:

The DALPF recommends the value/cost of a unit of development rights for transfer be based on the most recent real estate appraisals done on properties near the designated sending areas. If there are insufficient real estate appraisals to determine a value, the DALPF could undertake a sample appraisal process to establish a fair value. The value could be established for a given calendar year, or on any other schedule the City deems appropriate. Pricing could be done by land classification if the rights were variable in the city’s system, again based on recent appraisal information. As another option, the city could set values based on the presumed value of the rights, with a deduction for the developer’s profit. Studies have shown that a developer needs to realize a 35 percent profit margin when buying TDR credits in order to have an incentive to buy them.

Summary of Benefits of this Program:

- The TDR Bank allows developers to purchase rights at pre-set prices. No need to locate willing land owners and negotiate prices.
- Farmers and landowners can sell directly to the TDR Bank at pre-set prices, determined through fair appraisal methods. No need to negotiate with developers.

- TDRs can be sold and purchased in appropriate increments based on needs and market conditions at the time. No need to match a farmer / landowner with a developer who needs exactly the number of TDRs they wish to sell.
- Additional density would be allowed “by right”, the developer will not have to go through a separate public approval process to use the credits.
- As a part of this program, the use of TDRs will entitle the builder / developer to all of the benefits of expedited review and processing that accrue to those who adhere to the recommendations and requirements in the Master Plan area (See Implementation, page XX).
- The City and the State will also dedicate a permanent plaque or marker in the development, and the farmland that was preserved, that memorializes and recognizes the developer’s contribution.

Additional Recommendations for Implementation of Agricultural Preservation:

1). The Department recommends the city require any property developed adjacent to land designated Open Space Agriculture to include a forested buffer between the property and adjacent farmland. This is already required by Sussex County. As a courtesy to Sussex County, the DDA Forest Service reviews the effectiveness of the buffer, and makes a recommendation to the County on whether or not to accept the buffer as is, or require modifications. The Department would offer the same service to the City.

2). In addition to a forested buffer requirement, the Department also asks that the City work with developers on where they “mass” their houses or buildings. Whenever practicable, the Department requests that the City require developers to cluster their approved building lots, and place as much of the residual community open space near adjacent farm parcels. This would further help eliminate or mitigate any conflict that may arise from dissimilar land uses.

3). The Department asks that the city review its zoning ordinances for compatibility with future agricultural business or agricultural related uses. It is important to provide provisions and flexibility in the zoning code to accommodate future agricultural related activities.

4). The Department would note that all properties enrolled in the state’s farmland preservation program are afforded the protections listed in Appendix 3. In addition, Sussex County adopted a “mirror” ordinance to provide these protections to all farms located in Sussex County. These protections should be considered during the city’s planning process in an attempt to place more

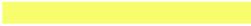
compatible land uses next to properties engaged in agriculture. In addition, there is a restriction on the location of water wells in DNREC's regulations that should be considered.



Milford South East Neighborhood Master Plan

Map #2 Land Use & Agriculture

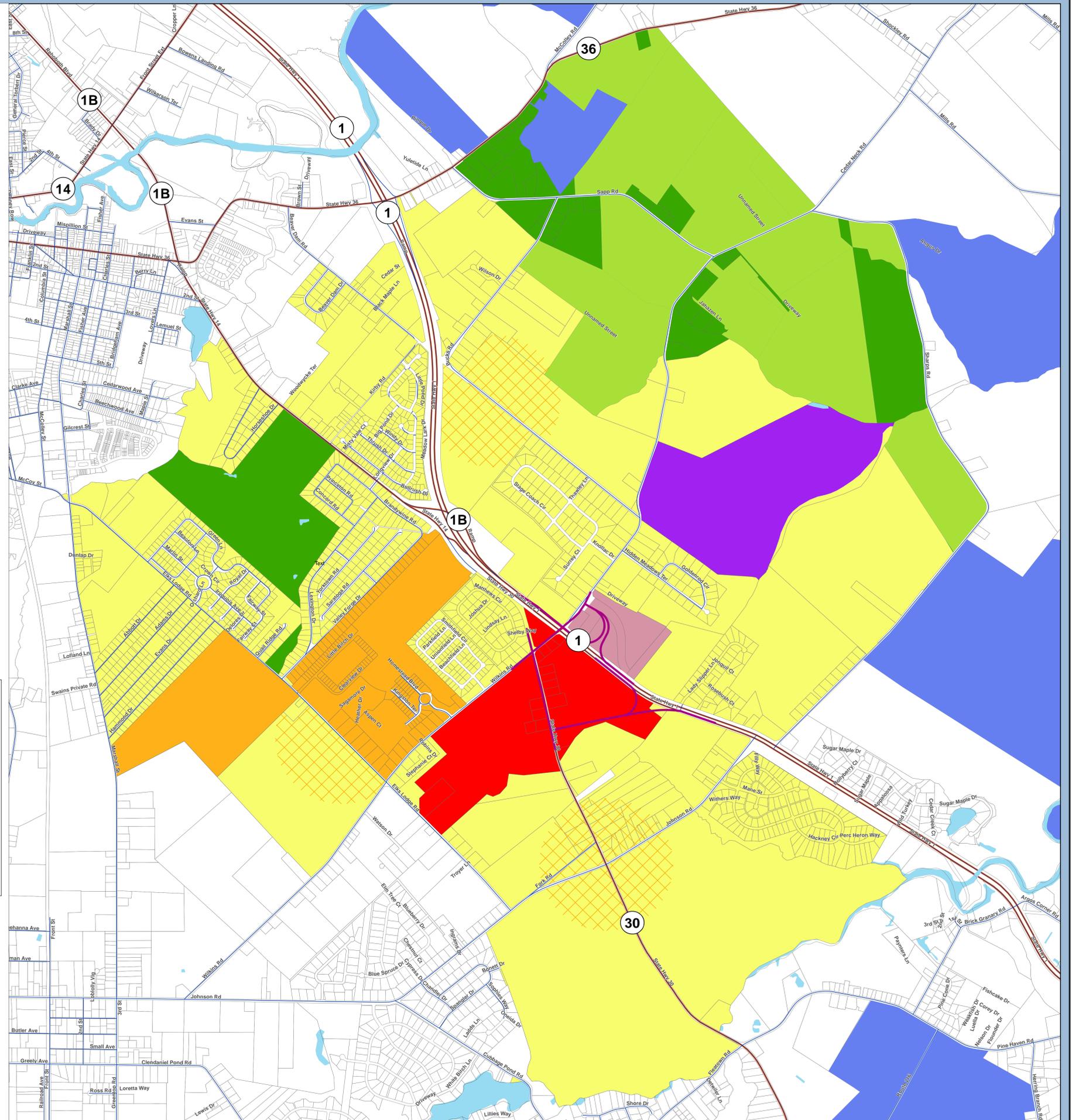
Legend

-  Residential - Low Density
-  Residential - High Density
-  Open Space Agricultural
-  Innovation Park
-  Commercial
-  TDR Receiving Areas
-  DeIDOT Owned Property
-  Agricultural Easement
-  TDR Sending Areas

Map created by DeIDOT Division of Planning



0 0.25 0.5 1 Miles

Chapter 5

Environmental Protection

The Delaware Department and Natural Resources and Environmental Control (DNREC) has evaluated Milford's South East Neighborhood in order to develop a proactive environmental protection strategy to be a part of this plan. This plan will allow the development of the master plan area to proceed while protecting key resources and creating more livable and connected communities in that area. DNREC utilized GIS resources and a collaborative planning process involving several programs within the Department to identify three opportunity areas for preservation and environmental protection. The first area is the medical / commercial area east of Route 1 (Area 1). The second is the mixed use shopping area at the intersection of Route 30 and Johnson Road (Area 2). The third area is the southernmost boundary of the South East Neighborhood along Swiggetts Pond and Cedar Creek (Area 3).

Environmental Overview of the Master Plan Area

Delaware's natural life support system (often referred to as green infrastructure) is a network of natural areas, parks, conservation areas, and working lands all with conservation value. Many of these areas are carefully planned and managed by federal, state or local governments, not-for-profit organizations and individual landowners. These components support native species, maintain natural ecological processes, sustain air and water resources, agricultural enterprises and contribute to the health and quality of life for Delaware's communities and people.

The Department of Natural Resources and Environmental Control (DNREC) has embraced as its core policy for natural resource protection, the following eight Ecological Guidelines:

- 1) Maintain large areas of contiguous habitat and avoid fragmenting these areas;
- 2) Maintain meaningful wildlife corridors and potential non-consumptive bicycle and pedestrian connections between habitat areas and adjacent land uses;
- 3) Protect rare landscape elements, sensitive areas, and associated species;
- 4) Allow natural patterns of disturbance to continue to maintain diversity and resilience of habitat types;
- 5) Minimize direct and indirect human disturbances and the introduction and spread of nonnative species and favor native plants and animals;
- 6) Minimize human introduction of nutrients, chemicals, and pollutants;

- 7) Avoid land uses that deplete natural resources over a broad area and allocating such land uses to areas of minimal natural resource impacts; and
- 8) Compensate for adverse effects of development on natural processes.

Excellent Recharge Areas

There is a number of excellent recharge areas within the South East Neighborhood, notably in the vicinity of the employment center proposed east of Rt. 1 (Area One). The protection of excellent recharge areas offers multiple long-term environmental benefits. These benefits include water quantity, water quality, and the preservation of stream/wetland ecological functions. An estimated one third of Milford's total drinking water supply is withdrawn from a shallow unconfined aquifer known as the Columbia aquifer. The Columbia aquifer's major source of water recharge is from those areas delineated as areas of excellent recharge. Therefore, using this area of excellent recharge to site building structures and/or water infiltration structures may reduce the quality and quantity of water available to existing and future residents from wells that obtain drinking water from this aquifer. Moreover, the impact to water quality and quantity is likely to extend to those residents that live far beyond the proposed project site as the Columbia aquifer is a major drinking water source for a significant portion of the population that resides in Kent and Sussex counties. The upshot to development in the area of excellent water recharge is to pass those water quality and water quantity impacts in the form of increased water utility rates to existing and future residents as the waters of the Columbia aquifer are depleted and/or contaminated.

Regional Stormwater Management

DNREC originally had urged the City to consider regional approaches to stormwater management for new development in the planning area. A GIS review of the terrain and natural features indicated that a regional stormwater management approach is not practical at this time. In order to obtain sufficient drainage area for a regional system to work, existing subdivisions would need to be retrofitted and stormwater from DeIDOT roads and road improvements would have to be included. Neither is likely to happen in the short term, or on a regional scale in this area. This is due to both the topography as well as the fact that there are numerous existing developments that are not likely to re-develop in the foreseeable future.

However, there is an opportunity for greater communication and coordination between DNREC and DeIDOT with regards to stormwater management and road improvements. This coordination will be ongoing throughout the development of this master plan area.

Opportunities to share facilities and streamline the review process will be continually evaluated and implemented as individual properties within the master plan area develop and re-develop.

A stormwater utility is a legal and financial structure to allow stormwater facilities to be constructed, managed and maintained in common by a local government or other entity that functions as a public utility. A stormwater utility would be modeled after a sewer or water utility, only the infrastructure would be stormwater ponds, pipes, outfalls, ditches, drainage ways and the like. Stormwater management facilities rarely impact only one property, which is what makes the utility approach a logical tool to manage drainage. This master plan area is well suited to such a utility, although there are many ways to structure such an entity. Both the City and DNREC agree to explore this option in more detail as this area develops in accordance with this master plan.

Cedar Creek Natural Area.

Sections of the wooded areas of the Milford Southeast Master Plan Area are part of the Cedar Creek Natural Area (see Map 5.1). Natural Areas contain lands of statewide significance identified by the Natural Areas Advisory Council as the highest quality and most important natural lands remaining in Delaware. The Milford Southeast Area Master Plan acknowledges and provides protection for the Cedar Creek Natural Area.

Natural Area protections are listed below. These protections are included as Design Guidelines in Chapter 10:

1. Prohibit/limit the removal of trees within the Natural Area
2. Provide buffers to the Natural Area. Prohibit additional development within 300 ft. of the existing Natural Area
3. Prohibit storm water structures in the Natural Area
4. Require green technologies to manage stormwater in the master plan area, and particularly in the vicinity of the natural area. These best management practices use the natural processes of vegetation to filter stormwater and take up harmful pollutants and improve groundwater recharge without expensive infrastructure.

Cedar Creek Nature Preserve.

Cedar Creek Nature Preserve is adjacent to the south end of the Southeast Planning Area (see Map 5.1). A number of rare species can be found in association with this habitat type. To protect the rest of this contiguous forest area it should be preserved as a Nature Preserve. A Nature Preserve is a special designation that provides additional protection for this important natural resource area. Such a designation would be achieved with the assistance of the State Office of Nature Preserves within DNREC. Should these areas be annexed as envisioned by the Master Plan, Milford will work with private landowners and the State Office of Nature Preserves to promote the dedication of the Natural Area as a Nature Preserve.

Wildlife Habitat.

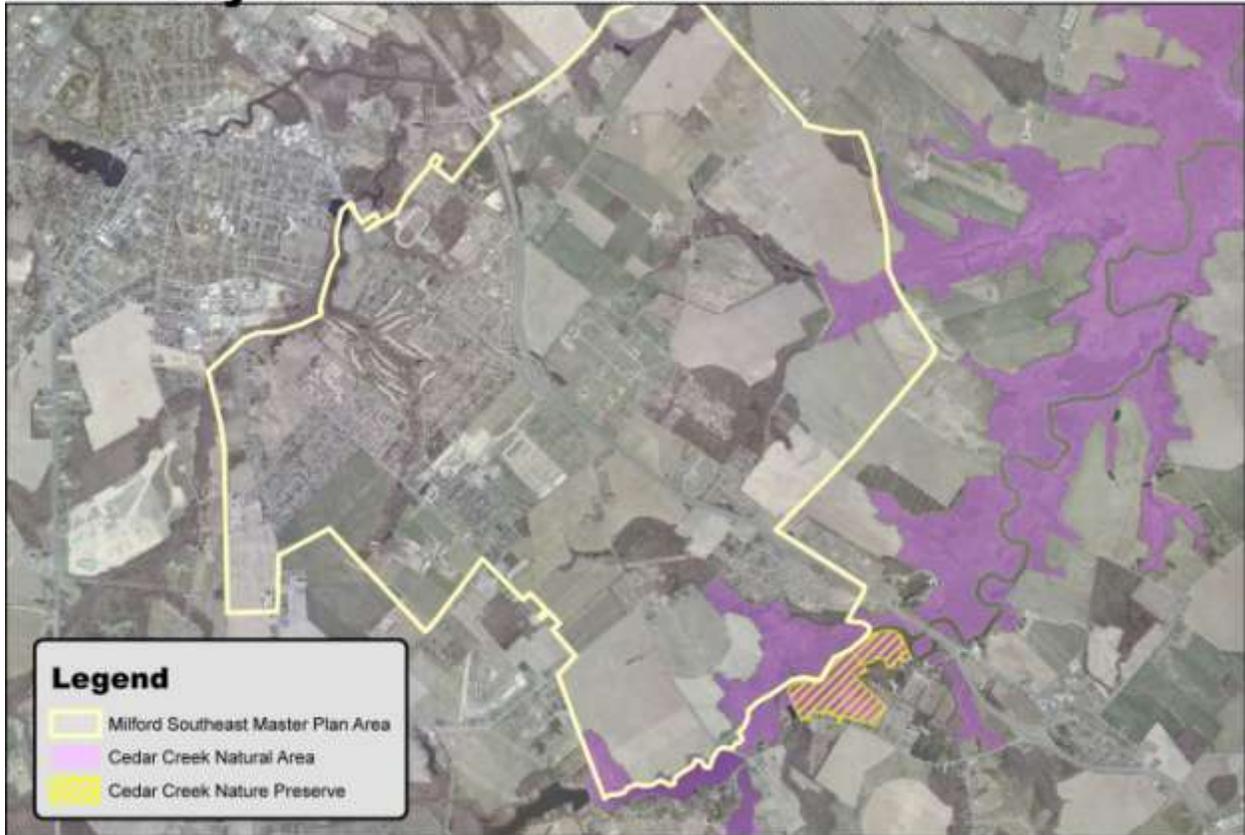
There are several significant natural features in the Southeast Master Plan Area, including the aforementioned Cedar Creek Natural Area and Cedar Creek Nature Preserve, which provide habitat for a wide variety of plant and animal species. Key Wildlife Habitats (KWH), a designation found within the Delaware Wildlife Action Plan (DEWAP) are rare, have special significance in Delaware, are particularly sensitive to disturbance, and/or have a high diversity of rare plants. Large blocks of unfragmented forests and wetlands are also considered to be KWH because of their importance to area-sensitive species, particularly vertebrates.

Priority areas include riparian buffers, contiguous forest blocks, and forested corridors. In order to retain the ecological function of the forests within the Southeast Master Plan Area, fragmentation of existing forest blocks would need to be minimized. Preserving larger, connected areas of forest as open space will provide wildlife with needed food, water, shelter and places to raise young.

A minimum 300-foot upland buffer is recommended in all areas that support State-rare Atlantic White Cedar Wetlands (AWCW), specifically in Area One and Area Three. Swamp pink, a federally threatened plant, occurs within the AWCW and is very sensitive to changes in hydrology, especially increases in pH and inputs of sediment. To protect water quality for other wetlands, water courses, and water bodies, and to provide wildlife habitat for wetland dependent species, upland buffers of at least 100 feet are recommended within the planning area.

Map 5.1. Cedar Creek Natural Area and Nature Preserve

Cedar Creek Nature Preserve City of Milford SE Area Master Plan



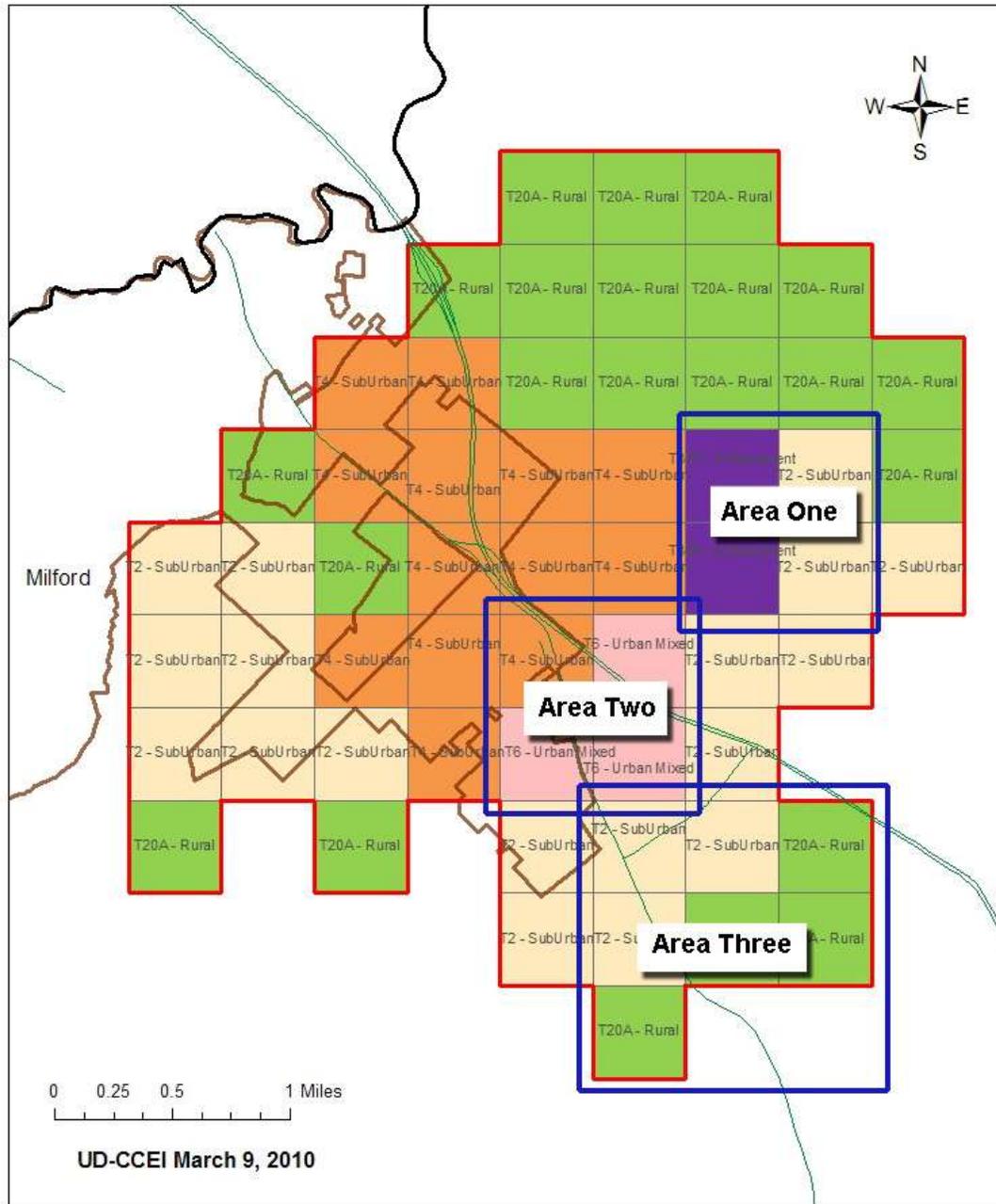
Parks and Recreation.

The City of Milford has been awarded a grant through the Delaware Land and Water Conservation Trust Fund (DTF) to develop a Pedestrian/Multi-Modal Master Plan. The purpose of this plan will be to identify new routes within the City of Milford that need to be designated for bicycle facilities and multi-modal paths as well as gaps in the existing connectivity system and links to other modes of transportation. The plan will expand the existing transportation system and will support economic activity and growth by integrating land use and transportation planning through coordinated bike and multi-modal routes. The recommendations and findings of this plan will be implemented in the Master Plan area in coordination with Chapter 8, Transportation.

The 2008 - 2011 Statewide Comprehensive Outdoor Recreation Plan (SCORP) provides guidance for investments in needed outdoor recreation facilities. Citizens surveyed in Milford and eastern Sussex list the following as high priorities for recreation: walking/jogging paths, bicycle paths, public swimming pools, playgrounds, open space/passive recreation, picnic areas, hiking trails and fishing areas. In the Master Plan area, these outdoor recreation priorities will be implemented through the development of complete streets and a multi-modal transportation network as described in Chapter 8, Transportation. They will also be addressed through the design of new communities in accordance with Chapter 10, Design Guidelines, and the other ordinances found within the City of Milford Subdivision Ordinance.

Map 5.2. Specific Conservation Areas in the Master Plan

SE Neighborhood - Milford "Preferred" Scenario Map by Land Use



Specific Conservation Areas

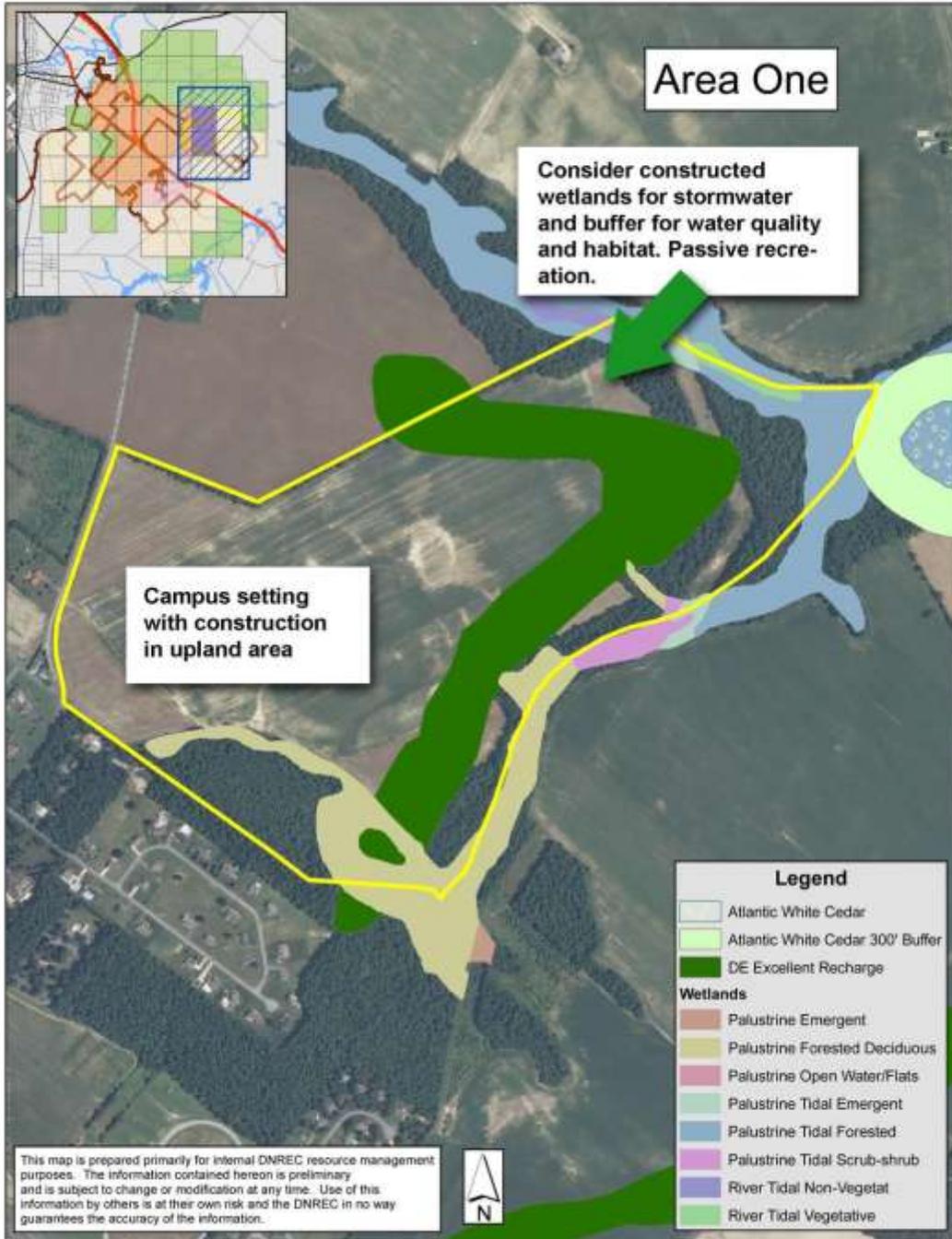
Area One - Employment Center

Area One consists of the lands proposed for an employment center in the master plan. The current proposal for the development of this area contains a commercial and medical campus. This area contains a large excellent recharge area (see Map 5.3, Area One) and forested tidal wetlands on its easternmost edge.

The current developers have said they intend for this complex to be developed as a campus, with the likelihood of multiple stories and even structured parking. Such an approach is necessary to limit impervious cover and protect these key resources. Intense development should be clustered on the upland portion of the parcel, and that the eastern portion would be used for passive recreation and open space.

The Downer and Ingleside soils in Area One are the preferred location for stormwater infiltration. The excellent recharge areas should be protected so that they may function for the maximum benefit possible to limit the generation of stormwater runoff. When these areas are to be utilized for any stormwater runoff management practices, the pretreatment of stormwater may be necessary prior to infiltration. Another possibility is to construct wetlands between the excellent recharge area and the forested tidal wetlands to manage stormwater and strengthen the buffer between the tidal areas and the developed portion of the property. This is one area that could benefit from a stormwater utility approach. Revenues from a stormwater utility could be used to purchase easements and/or construct and maintain those wetlands as stormwater facilities by the City or other management entity identified in the design of the utility.

Map 5.3. Area One

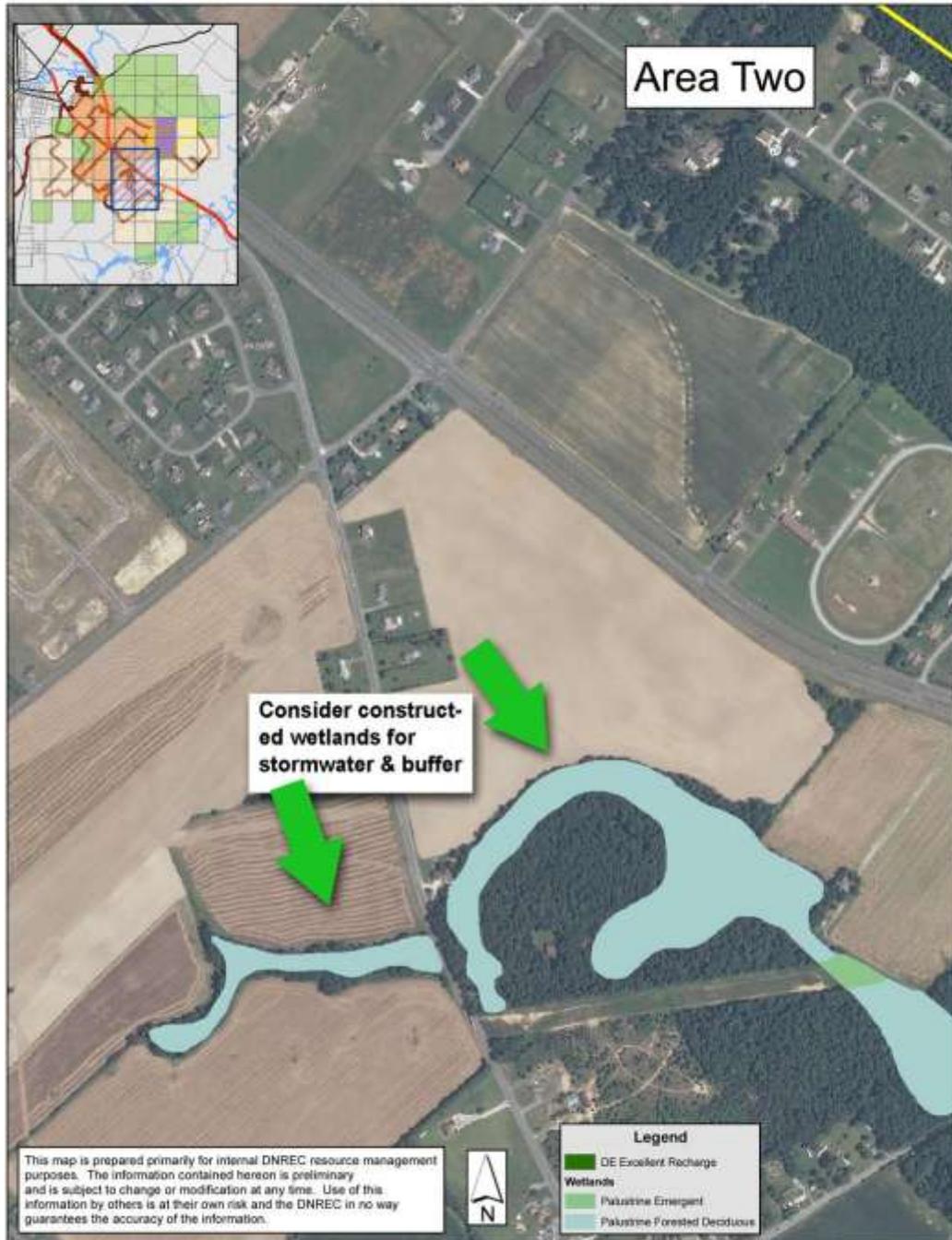


Area Two - Commercial / Mixed Use Area

A large mixed use residential and retail development is planned for Area Two (see Map 5.4, Area Two). Our chief area of concern here is protecting the forested wetlands that are mapped in the southern end of this area, on both sides of Route 30. Because of the falling elevations from the north end of this area toward the mapped wetlands, we advise that optimal stormwater management would be constructed wetlands or other green technology best management practices in the area immediately north of the forested wetlands, on either side of Route 30. They would help buffer the wooded wetlands from development.

The wooded section in this area also supports Key Wildlife Habitat. Generous riparian buffers (300 feet or greater) are important to protect water quality and preserve forested areas surrounding the tributaries of Cedar Creek to enable these rare species to thrive.

Map 5.4. Area Two



Area Three – Southern Master Plan Area

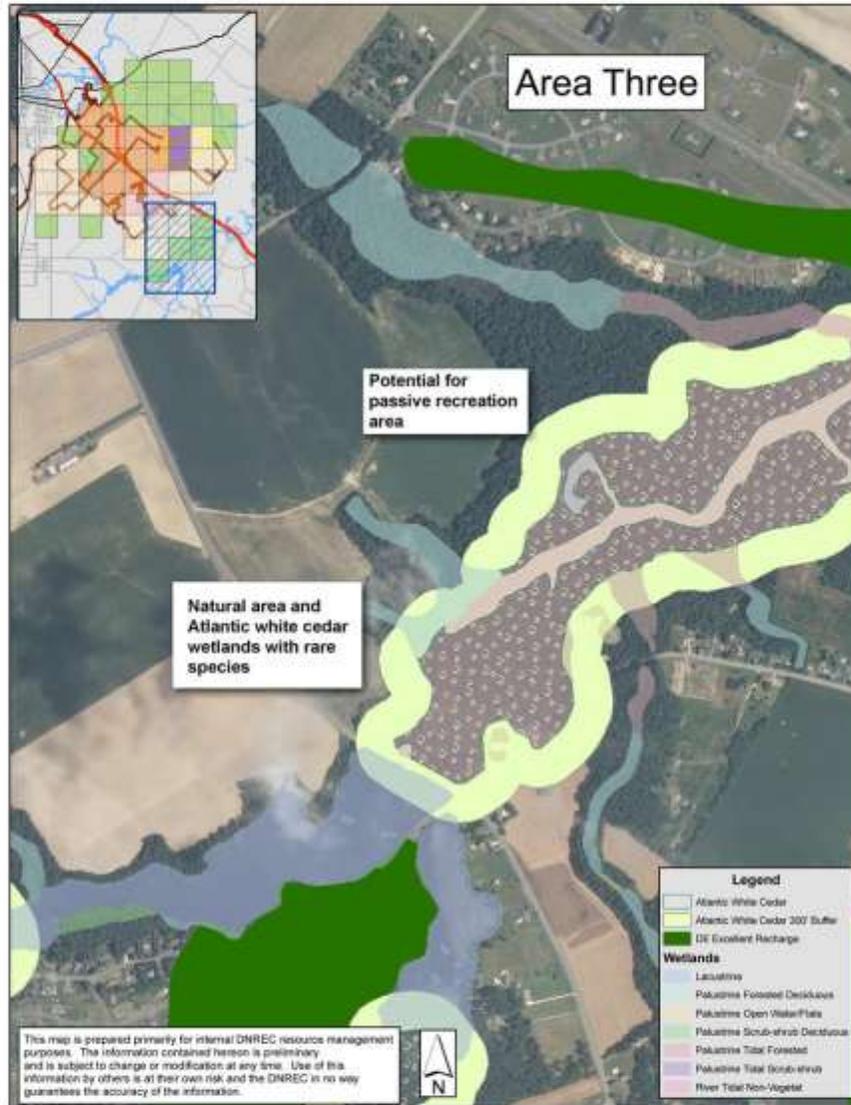
Area Three (see Map 5.5, Area Three) contains Atlantic White Cedar Wetlands, which are considered very rare within the state and support rare species. This vegetative community grows under unique conditions and is sensitive to changes in water quality – especially pH. Adequate upland buffers are extremely important to the persistence of these wetlands and the species it supports.

Rare plant, insect, mussel, fish and birds occur within the forest and wetland areas association with the Cedar Creek drainage, as well as impoundments such as Swiggetts Pond and Cabbage Pond. Known occurrences of the federally threatened plant, swamp pink (*Hellonias bullata*) have been documented within wetlands associated with Beaverdam Branch and Cedar Creek.

In most cases, we recommend at least a 300 foot upland buffer primarily due to the presence of or potential for swamp pink. The buffer would also be instrumental in achieving the Total Maximum Daily Load (TMDL) pollution limits for this portion of the Mispillion watershed.

We believe the recommended buffer also provides an opportunity for Milford to work with landowners, DNREC and other partners to establish a passive recreation resource that could include a kayak launch and allow for birding and hiking on unpaved trails in and around the Cedar Creek Natural Area.

Map 5.5. Area Three



Chapter 6

Housing

The Delaware State Housing Authority (DSHA) supports the inclusion of affordable housing in the Master Plan area. The Master Plan area includes all of the elements of a complete community, including employment, transit, commercial services, and opportunities for the construction of a variety of housing types, especially in Transfer of Development Rights (TDR) receiving areas. Consider these factors:

- Moderate-income working families benefit the most from having access to transit, employment, retail, and services. They are also the most likely to use transit. Typically, well designed developments on transit and nearby community amenities become desirable places to live. As a result, if left unchecked, prices quickly rise beyond the reach of the families that would most benefit.
- Even though there is a surplus of housing on the market, most of the surplus is large homes for move-up buyers. As a result, there is a significant mismatch between product available and housing demand. To better meet demand, these master planned areas should provide different types of housing in more compact configurations to create more housing choices, which often means more affordable options.

How DSHA can contribute to the current master planning efforts.

Low Income Housing Tax Credit Program

DSHA administers the Low Income Housing Tax Credit program which provides direct federal income tax credit to qualified owners and investors to build, acquire or rehabilitate rental housing units. DSHA has just revised its Qualified Allocation Plan (QAP), which is our selection criteria to be used to determine housing priorities, to ensure developments facilitated through the LIHTC program are well integrated in to communities.

Up to fifteen (15) points can now be awarded to developments that demonstrate overall quality of location, access to services and transit, community design and compatibility, connectivity to surrounding communities (via Complete Streets), and protection of environmental resources. DSHA is exploring other incentives to include in the QAP to prioritize affordable housing in areas that are considered 'strategically important' by the State. Master Plan areas such as this

one in Milford may be considered as we work with the Office of State Planning Coordination to define “strategically important” and integrate those areas into our criteria.

Affordable Housing Resource Center

DSHA has developed an online Affordable Housing Resource Center that communities can access to learn about different strategies that can be used to encourage affordable housing. In addition, DSHA has a range of homeownership, rental, and rehabilitation programs, as well as relationships with non-profits, that are familiar with DSHA’s programs that we can bring into these master planning efforts.

Design Assistance

DSHA finds value in Form-Based Codes (FBC) in that they emphasize the physical character of development and deemphasize the regulation of land use. FBCs provide greater predictability about the look and feel of development and offer developers a clearer understanding of what the community seeks. More importantly, they emphasize site design and building form over density and land uses and therefore encourage a mix of uses and housing types. As this master plan area develops, DSHA would be willing to work with the City of Milford, the Office of State Planning Coordination and others to develop a FBC or something similar to ensure good design in the master plan area.

Future Grant Opportunities

The Partnership for Sustainable Communities is a national effort to coordinate the activities of the Department of Housing and Urban Development (HUD), the Department of Transportation (DOT), and the Environmental Protection Agency (EPA) to help communities become economically strong and environmentally sustainable. Through the Partnership and guided by six Livability Principles, the three agencies are coordinating investments and aligning policies to support communities that want to give Americans more housing choices, make transportation systems more efficient and reliable, reinforce existing investments, and support vibrant and healthy neighborhoods that attract businesses. Last year, this Partnership provided several grant opportunities that supported activities similar to those being considered in the Milford and Georgetown master plan areas.

While we realize that the Federal government is going through severe budget cuts and that these initiatives may suffer as a result, we would be interested in participating on a working group to do some of the pre-planning work that would be needed in case another grant opportunity is available, either from the Sustainable Communities effort or some other effort, that the master planning efforts would be competitive.

Chapter 7

Historic and Cultural Preservation

The Division of Historical and Cultural Affairs/State Historic Preservation Office (DHCA/DE SHPO) is the state agency responsible for promoting and protecting Delaware's historic identity through its leadership in museums, collections, historic preservation, and stewardship of historic properties. The DE SHPO Research Center manages information collected statewide about historic buildings and structures, archaeological sites, and cultural landscapes. DE SHPO provides project developers, interested parties, and agencies with information on historic buildings and sites that may be affected by their projects and makes recommendations on how to avoid or reduce any adverse effects.

In general, the DE SHPO performs the following services:

- Reviews federally-funded, permitted, or licensed undertakings/projects and advises the sponsors of the effects on cultural resources that include historic properties and sites
- Reviews and comments on land use and development proposals under the State Preliminary Land Use Service
- Leads efforts in securing and accepting nominations of significant properties and sites to the National Register of Historic Places in conjunction with the Delaware State Review Board for Historic Preservation
- Encourages and assists local governments in securing Certified Local Government designation for potential awarding of federal grants in the area of historic preservation activities
- Administers federal and state historic preservation tax incentive programs for the rehabilitation of properties listed in the National Register of Historic Places
- Monitors and enforces the terms of maintenance and public benefit covenants and easements under the stewardship of the Division of Historical and Cultural Affairs

- Provides guidance upon the discovery of historical unmarked human remains and for the identification, treatment, and disposition of non-Native-American historical unmarked human burials and/or skeletal remains
- Conducts, or supports others in conducting, statewide cultural resource surveys of historic properties
- Maintains a central research repository of historical and cultural resource information related to historic properties and sites in Delaware
- Provides technical assistance to the public as regards historic preservation topics
- Provides and participates in educational programs about Delaware history, archaeology, and historic architecture
- Drafts every five years and maintains a commitment to Delaware's State Historic Preservation Plan
- Disseminates historic preservation information via the latest information technology

DHCA is responsible for overseeing the requirements of three major preservation laws in Delaware: the National Historic Preservation Act of 1966 (as amended); the State Antiquities Act of 1933 (last amended 2005); and the Unmarked Human Remains Act of 1987. All of these laws are applicable to future preservation and development activities in the Milford Master Plan Area.

National Historic Preservation Act

The National Historic Preservation Act established a federal-state partnership approach to the identification, study, and preservation of historic properties, creating the National Register of Historic Places as the standard for determining if a property is worthy of preservation or not. Section 106 of the Act mandates a review process for all federally funded, permitted, or licensed projects that may impact properties listed in, or eligible for listing in, the National Register. The main purpose of the Section 106 review process is to minimize potential harm to historic properties and sites. A federal agency whose project (undertaking) may harm a historic property must consider alternative plans for its project. If it is believed that such a project would not have an adverse effect, the federal agency is required to document this finding. If an

adverse effect is expected, the agency is required to work with the State Historic Preservation Office to ensure that all interested parties are given an opportunity to review the proposed work and provide comments. DE SHPO staff members assist planners, developers, research consultants, agencies, and interested parties in planning for projects while maintaining compliance with applicable laws and regulations and protecting important resources from adverse effects. This federal review often requires that an agency or its client conduct architectural and/or archaeological surveys and mitigations prior to any construction. Much of the information and reports in the Research Center has been generated by these reviews.

Delaware State Antiquities Act

The State Antiquities Act requires that archaeological excavations on state-owned or controlled lands must be done under a permit from the Director of DHCA. Recent amendments also give the Director authority to close or restrict access to state lands, including sections of public beaches and shorelines, if needed to protect an archaeological resource from damage.

Delaware Unmarked Human Remains Act

DE SHPO administers provisions under Delaware's Unmarked Human Burials and Human Skeletal Remains law, 7 Delaware Code, Chapter 54. The law is generally triggered when, in the course of construction or archaeological activities, human remains are discovered. The law assigns certain duties to the Division of Historical and Cultural Affairs to investigate, attempt to identify, protect, and ensure the proper treatment of historical unmarked human remains that do not fall under the jurisdiction of the State Medical Examiner.

DE SHPO staff carries out procedures under this law relating to public notification, assisting in the development of treatment and disposition plans, and, where indicated, conducting the dignified reburial of disturbed remains.

Discovery of Forgotten Burials and Cemeteries

On occasion, historical human remains (that is, remains that were interred a long time ago) are accidentally discovered in Delaware. These discoveries are often made during construction and other earth-moving activities. In such cases, state law protects the historical remains from further damage, first by requiring that the actions that uncovered the remains stop immediately, and then that the Division of Historical and Cultural Affairs and the state Medical Examiner's Office be notified.

Within 24 hours of notification, a DE SHPO archaeologist will visit the discovery site to determine if the remains are human and to ascertain the approximate time period in which the

remains were interred. Any time that remains are determined to be of human origin, the Division of Historical and Cultural Affairs is required to notify the state Medical Examiner's Office of the discovery. The Medical Examiner's Office then determines whether the case is, or is not, under its jurisdiction.

The preferred approach for managing historical human remains that have been discovered is to leave them in situ—that is, to keep them where they have been found—until a treatment and disposition plan can be developed. In the event that historical remains need to be removed for safekeeping, they will be transported to DE SHPO's curation facility. DE SHPO holds any recovered remains for appropriate study and storage until they can be respectfully re-interred. The project, developer, or agency that inadvertently disturbed the remains generally pays for historical research and an archaeological survey of the area, to determine the extent of possible other burials or remains that could be damaged by the project, and to determine the approximate date and origin of the remains. (Because this process is costly in both money and time, DE SHPO often advises developers to hire an archaeological consultant prior to any construction and have the project area investigated for the presence of a small family cemetery or Native American site with burials.)

If the remains are determined to be from a historical period cemetery or burial, DE SHPO advertises for next-of-kin, based on the date of the burials and the ownership history of the property. If the remains are determined to be Native American, a committee defined by law convenes to develop a treatment and disposition plan.

In both cases, DE SHPO writes the plan for the treatment and ultimate disposition of the remains in consultation with the next-of-kin (if any come forward); or the committee, the land owner, and the project developer, or other representative. Once agreement is reached, the plan is put into action.

The preferred option for reburial is always in the original location. If this is possible, a preservation covenant recorded with the deed is usually placed on the area to prevent any disturbance of the remains in the future. If removal and re-interment in another location is the decision, any associated archaeological, acreage, reburial, and marking costs are borne by the project, developer, or agency requiring the removal. Next-of-kin have the option of claiming their kin and paying for re-interment in a cemetery and plot of their choice.

What if you uncover or see remains that you think are human?

First, leave them in place if at all possible. If you think the remains are recent in origin, perhaps due to accident or criminal action, notify the police (911) immediately. If not, call DE SHPO at 302-736-7400.

Historic Properties Research and Assistance

DHCA staff members are available to assist agencies and developers with questions about any of these processes and with information on historic properties. The DE SHPO Research Center is open Monday through Friday, 8:30 am to 4:00 pm, except for state holidays; an appointment is recommended to use the Center. DHCA also has an on-line web portal, the Cultural and Historical Resource Information System (CHRIS). While the public has some access, full access to archaeological site location information and other features requires a password. Information on this system and an application form for a password can be found at <http://history.delaware.gov/preservation/research/gis.shtml>.

Historical and Cultural Resources in the Milford Master Plan Area

This area falls within Cedar Creek Hundred. Native Americans began populating this area thousands of years ago. European settlement began in Cedar Creek as early as the 1670s. Milford was an early crossing point, and the area around it quickly became farmland.

The first historic architectural survey of Cedar Creek Hundred was in 1983. The located buildings and structures included 19th- and 20th-century farms with dwellings, barns, and other outbuildings, a school, and bridges. These have not been evaluated for their importance to Delaware's history at this point, but probably would contribute to our understanding of farming, settlement, education, and transportation in this area.

More recently, DelDOT hired consultants to perform further historic architectural survey of this area in preparation for the Route 113 project. This survey added a number of early- to mid-20th-century dwellings and commercial buildings to DHCA's inventory. Much of this area however is now outside of the narrowed project area under consideration, and these properties will not be evaluated further. They too probably contribute to our understanding of changes in settlement in this area during the 20th century.

The area has not been comprehensively surveyed for archaeological sites. Two small projects have been done, with reports on file at DHCA. There are several areas of high probability for the location of prehistoric, colonial, and 19th-century sites. Such sites have the potential to contain significant information to our understanding of prehistoric and historic settlement and lifeways in Delaware.

Because many family farms included family cemeteries, this area also has a high potential for unmarked human burials. Two cemeteries are recorded in the area. Unmarked human remains are protected in state law (see 7 Del. Code Ch. 57).

A table describing known historic properties and sites and some aerial pictures showing their locations is included as Appendix 4.



Milford South East Neighborhood Master Plan

Map #3 Land Use & Environment

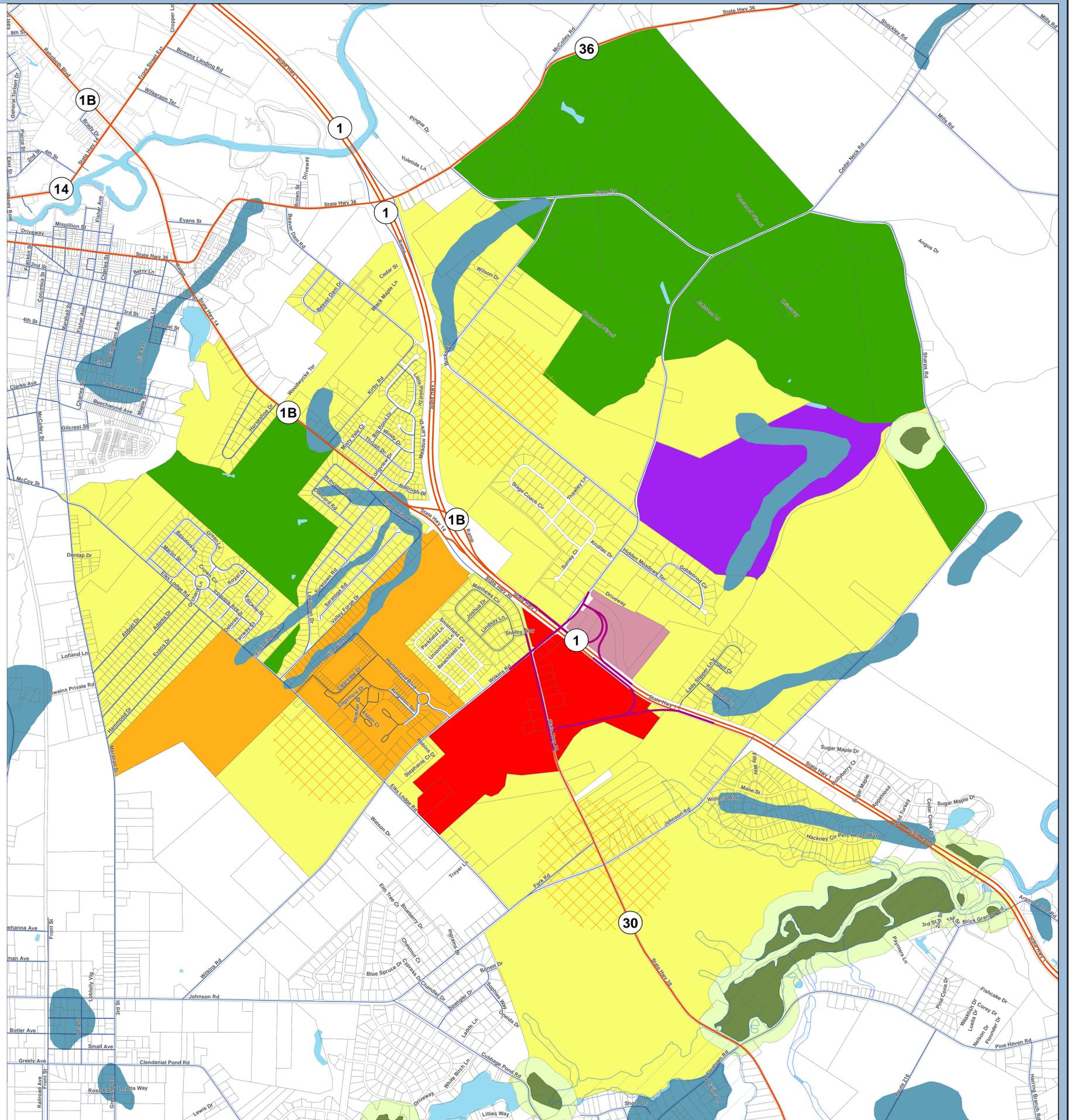
Legend

- Residential - Low Density
- Residential - High Density
- Open Space Agricultural
- Innovation Park
- Commercial
- TDR Receiving Areas
- DeIDOT Owned Property
- Wetlands
- Excellent Recharge Area
- Atlantic White Cedar
- Atlantic White Cedar 300' Buffer

Map created by DeIDOT Division of Planning



0 0.25 0.5 1 Miles



Chapter 8

Transportation Plan

This chapter documents transportation recommendations developed by the Delaware Department of Transportation (DelDOT) Division of Planning that are required to support the implementation of the Milford South East Neighborhood Master Plan (hereon referred to as the Master Plan). The Master Plan was developed by the City (with assistance from the Office of State Planning Coordination, State agencies including DelDOT, and the University of Delaware) to provide the community with a plan that will be used to oversee the orderly development of south-east Milford including those areas identified in the City's Comprehensive Plan Urban Growth Boundary.

The Master Plan also seeks to ensure that new residential and commercial growth within the study area encompasses the goals and objectives of good planning practice including:

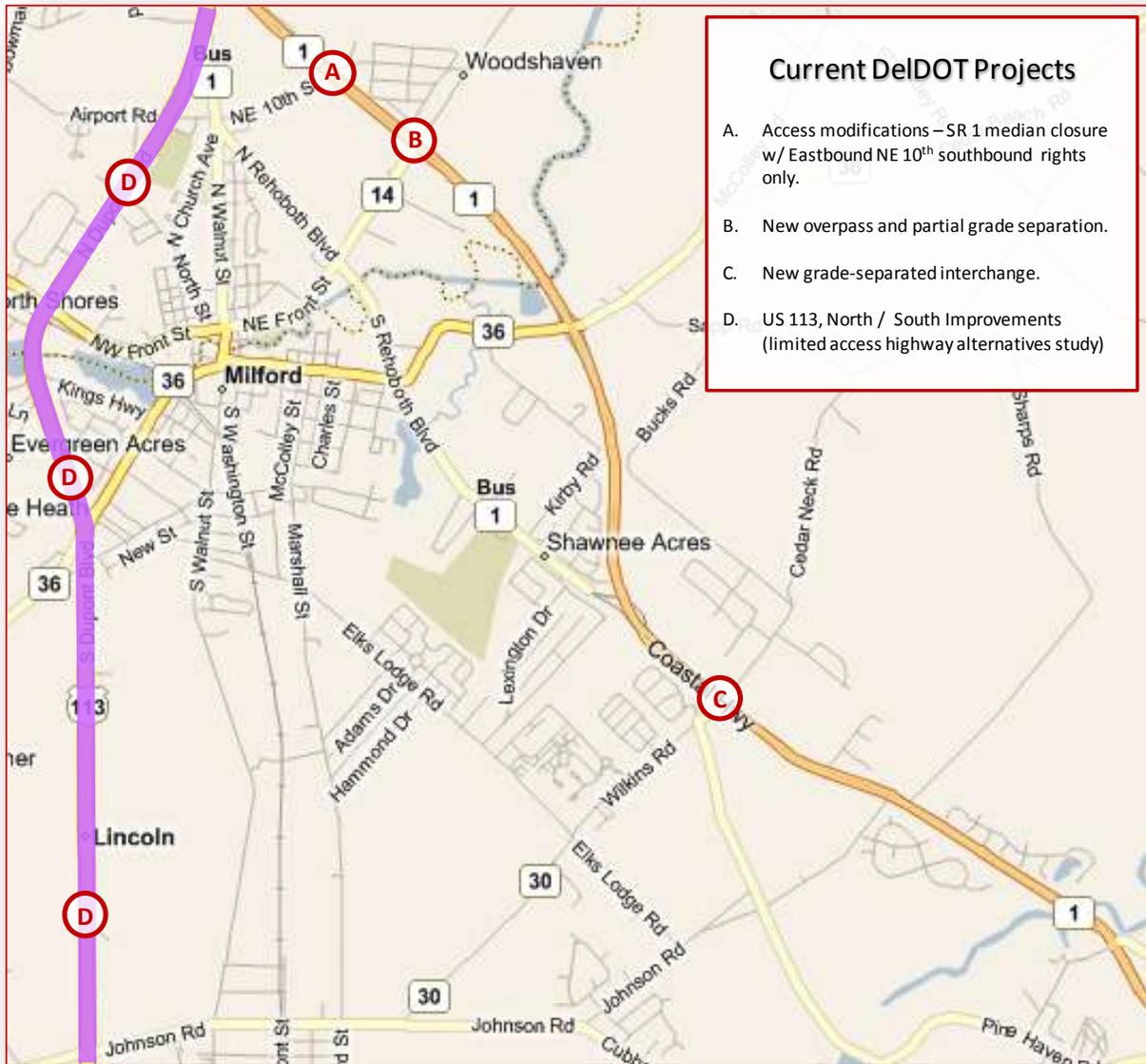
- More efficient land use
- Farmland preservation
- Greater variety in housing types and affordability
- More bicycle and pedestrian facilities and connections
- Transit Opportunities

Current DelDOT Projects

DelDOT currently has several capital projects (see Map 8.1) within or near the study area that are either in the planning, design, or construction stages. The DelDOT Capital Transportation Program (FY 2010-2015) contains the following major projects:

- (a) SR 1 / NE 10th Street – access modifications
- (b) SR 1 / NE Front Street – new overpass and partial grade separation
- (c) SR 1 / SR 10 – new grade separated interchange
- (d) US 113 – limited access highway study

Map 8.1. Current DelDOT Projects



Master Plan – Transportation Element

The primary role of DeIDOT in the development and implementation of the Master Plan is to identify and analyze transportation improvements that will be required to accommodate projected traffic volume projections associated with the Plan's land use designations and demographic projections. Many of the transportation project recommendations found in this report will be implemented in conjunction with private and/or public land use development as it occurs. This document provides a framework by which those future projects will be identified and implemented and includes the following goals and objectives:

- Establish the Master Plan study area as a DeIDOT Transportation Investment District (TID).
- Increase the mode share of non-vehicle trips by supporting and proposing transportation projects that enhance the expansion of pedestrian, bicycle, and transit facilities within the study area.
- Formally partner with the development community and the public to ensure that transportation improvements are constructed and sequenced in a proper order that supports the quality of life goals and objectives of the Master Plan.
- Ensure that traffic studies associated with DeIDOT projects or new development are coordinated in a manner that improves efficiency and reduces costs.
- Support smart growth concepts and design in all future proposed land use development and implement the DeIDOT Community Streets program when designing and constructing any transportation projects deemed necessary to support the Master Plan.

Similar to other Master Plan agreements within the State, DeIDOT will work with the City, development community, and the public to forge an agreement that encompasses the following responsibilities:

1. DeIDOT – Conduct traffic analysis for the purposes of identifying needed roadway improvements, right-of-way, and funding requirements by the public and private sectors.
2. City – Plan and identify and funding mechanisms for needed electrical, water and sewer service.

3. Development Community – contribute equitable funding to roadway projects, donate right-of-way where necessary, and work with the City and DeDOT to maximize the most efficient vehicle, transit, and bicycle and pedestrian connections and services.

Master Plan Preferred Land Use Scenario

The Master Plan preferred land use scenario was developed by the City with assistance from the Office of State Planning Coordination and the University of Delaware. Community VIZ software was utilized at several public workshops to gather input from the public regarding what type of land uses they desired for the study area. Land use preferences derived from the public workshops were at the grid level and did not follow any natural or man-made boundaries. A final land use map produced at the tax parcel level that also included three transfer of development right (TDR) receiving areas was created and adopted by the technical working group in October, 2010 (see Map 1 and Map 4).

Outputs from the Community VIZ software included residential and commercial daily vehicle trips for each grid within the study area. The Preferred Land Use Scenario is considered a build-out plan.

Projected demographic changes (Table XX) associated with the scenario, as compared to existing land use, are as follows:

- * +5,581 dwelling units (+272%)
- * +14,503 population (+292%)
- * +2,268 employment (+903%)
- * +76,260 daily residential vehicle trips (+272%)
- * +24,875 daily commercial vehicle trips (n/a)

Editor’s Note: DeDOT model runs are based upon the first Community Viz future land use scenario, labeled “Preferred Alt” in Table 8.1 below. The City of Milford and the University of Delaware continued to refine this scenario from October 2009 through December of 2010. The resulting final scenario labeled “Preferred Revised” reflects a more accurate count of existing dwelling units, approved and recorded subdivisions, and a based density of approximately 3 du/acre in Milford’s R-1 zoning district, the least dense available. This resulted in +9,826 dwelling units, and corresponding increases in population and employment as well. At time of publication, The City and the Office of State Planning Coordination are consulting with DeDOT about whether or not the transportation model runs should be re-run to reflect these increases.

Table 8.1. Summary of Alternative Plan Scenarios from Community Viz

	Existing Land Use	Preferred Alt (at buildout)	Preferred Revised (at buildout)	Growth 2020	Growth 2040	Milford Comp Plan as adopted (at buildout)
Dwelling Units	1,943	7,626	11,769	2,434	2,959	15,083
Number of Residents	4,709	19,459	30,739	5,960	7,290	39,659
Commercial Floor Area	0	995,000	2,985,000	160,000	1,185,000	7,970,000
Employees	262	2,519	4,875	724	1,854	10,275
Date Created	Oct. 2009	Oct. 2009	Dec. 2010	Apr. 2011	Apr 2011	Jan. 2009

Source: University of Delaware, Sustainable Coastal Communities Program

Methodology

DeIDOT utilized the following methodology for incorporating and analyzing the daily vehicle trip outputs from Community VIZ into the DeIDOT Travel Demand Model (CUBE 5):

1. Create new traffic analysis zones (TAZs) in CUBE 5 model to match Community VIZ grids.
2. Create additional road network detail in CUBE 5 model to match the study area.
3. Import Community VIZ daily trip data into CUBE 5 model.
4. Run CUBE 5 model.
5. Analyze outputs (Level of Service and Volume/Capacity ratio) from model to compare existing conditions with Preferred Scenario.
6. Create and analyzed additional road network improvements as necessary.
7. Develop recommendations.

Recommendations

Project recommendations contained in this chapter are broken into the following categories and are reflective of both quantitative results from the travel demand model and qualitative goals aimed at improving transportation choices for residents and employees within the study area:

- Bicycle facilities
- Pedestrian facilities
- Transit facilities
- Park and Ride facilities
- Intersection upgrades or modification

- Road upgrades
- Smart Growth
- Policy

The project and policy recommendations contained in this report are also reflective of the DeIDOT Complete Streets policy which was adopted in 2009. This policy mandates that any new transportation projects in the state right-of-way (road reconstruction and/or widening) take into consideration all transportation modes and accommodate accordingly.

Transportation modes include all travelers including public transit users, bicyclists, pedestrians and motorists.

Please note that a summary listing of this report's transportation recommendations can be found in **Table XX** at the end of this chapter.

Bicycle Facilities

Currently there are no DelDOT designated bicycle routes within the study area. While bicycle use is allowed by law on all of the study area roads (with the exception of SR 1) many of these roads do not include shoulders which enhance rider safety (see Map 8.2). Approximately 28% of the study area roadways have hard surface shoulders with a width of 3 feet or greater. Similarly, there are few sidewalks or other pedestrian facilities within the study area.

Recommendations:

On-road bicycle facilities should be included as part of any new roadway construction, entrance plans, widening and rehabilitation of existing roadway facilities. Implement specific bicycle recommendations as per Table 8.2.

Pedestrian Facilities

Currently there are limited pedestrian facilities within the study area (see Map 8.2). The City of Milford does not now require, however, the construction of sidewalk facilities for new residential streets within its municipal boundaries.

DelDOT is in the process of implementing the Delaware Statewide Pedestrian Action Plan which includes the following elements:

- (1) Inventory of pedestrian facilities
- (2) Transition Plan identifying all gaps and non Americans with Disabilities Act (ADA) compliant facilities
- (3) Complete Streets policy and implementation plan
- (4) Development of a transition plan

The Pedestrian Action Plan will identify gaps in the system and opportunities for enhanced pedestrian facilities for the City of Milford. It will also look at access issues to transit locations and make recommendations for improvements.

Recommendations:

Evaluate the need for bicycle and pedestrian facilities and transit stops as part of any new roadway construction, entrance plans, widening and rehabilitation of existing roadway facilities in accordance with the Complete Streets policy, the Statewide Bicycle Plan and the Statewide Pedestrian Action Plan. Implement specific recommendations as per Table 8.1.

Map 8.2. Existing Pedestrian and Roadway Shoulder Facilities



Transit Facilities

Between 2,500 and 4,900 new employees are projected to be added to the City of Milford's South East Neighborhood under the adopted Master Plan. Many of these new employees are expected to work at a new major employment center east of SR 1 along Cedar Neck Rd. This employment center, currently known as "Innovation Park" presents DelDOT with a unique opportunity to establish a new transit loop that would service Innovation Park while also making a connection to currently established residential neighborhoods and businesses west of SR 1.

Recommendations:

Establish a new DART transit loop to connect existing and new development on east and west side of SR 1. The transit loop would consist of the following three phases and locations:

Phase I – Establish new transit route adjacent to existing and developing residential and employment areas west of SR 1 utilizing the following road network:

- Business Route 1
- Wilkens Rd
- SE Front St
- State Route 36
- Marshall St
- Elks Lodge Rd

Phase II – Establish new transit route east of SR 1 for the purpose of providing access between the east and western side of Milford and to service the proposed "Innovation Park" employment center utilizing the following road network:

- Cedar Neck Rd
- Bucks Rd
- Sapp Rd
- State Route 36

Phase III – Establish new transit route west of SR 1 in southern portion of study area for the purpose of servicing proposed new residential and employment areas utilizing the following road network:

- Elks Lodge Rd
- Johnson Rd
- State Route 30

Intersection Upgrades or Modifications

A projected increase of nearly 100,000 new residential and commercial daily vehicle trips in the study area will require upgrades or modifications to several existing intersections within the study area.

The proposed adoption by the City of Milford traffic to require traffic impact studies for new residential and employment developments within the study area will serve to provide DeIDOT with additional analysis needed to determine the various geometric improvements required for each intersection to function in an efficient manner. It is anticipated that additional intersections will need to be improved as development of the study area progresses in the future.

Preliminary traffic capacity analysis has identified the following intersections that would require improvements under the land use projections of the Master Plan:

- State Route 30 and Johnson Rd
- Elks Lodge Rd and Wilkens Rd
- Cedar Neck Rd and Bucks Rd

The following intersections or road segments have been identified for either removal or access modifications:

- SR 30 (Cedar Creek Rd) and Fork Rd – the removal of Fork Rd has inherent safety benefits that would result from the shifting of vehicles from Fork Rd to the Johnson Rd / SR 30 intersection.

The existing intersection approaches (Fork Rd at Johnson Rd/SR 30) are under-utilized and not necessary for area traffic flow needs.

Map 8.3: Fork Rd and SR 30



- SR 1 and Sharps Rd / Johnson Rd

DelDOT is aware and actively involved in identifying and proposing solutions for unsafe median crossings and access concerns from local roads onto SR 1. The Department is proposing the following safety enhancement improvements for Sharps Rd and Johnson Rd:

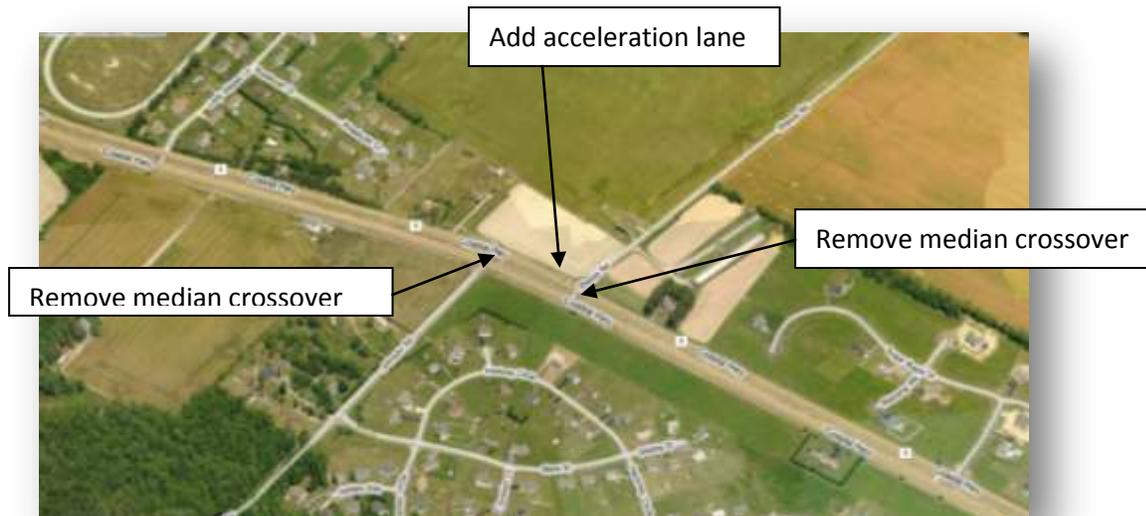
SR 1 / Sharps Rd

- (a) Revise movements from Sharps Rd to rights-in and rights-out only.
- (b) Remove SR 1 median crossover.

SR 1 / Johnson Rd

- (a) Revise movements from Johnson Rd to rights-in and rights-out only.
- (b) Add northbound acceleration lane on SR 1.
- (b) Remove SR 1 median crossover.

Map 8.4. SR 1 and Johnson Rd / Sharps Rd Improvements



Roadway Upgrades

Much of the study area road network east of SR 1 and south of Wilkins rd on the west side of SR 1 has served primarily rural and/or agricultural land uses in the past. A majority of these roads do not include any shoulders. In fact, only 28% of the entire study area roadways contain hard surface shoulders with a width of 3 feet or greater. As the study area continues to accommodate new and projected future residential and employment much of the transportation network will require upgrades including shoulders, intersection improvements, capacity increases, and possible new connections.

Recommendations:

Improve the following roadway facilities to meet a minimum standard of two 11 ft travel lanes and 5 ft shoulders:

- (1) Kirby Rd (from RD 14 to Cedar Beach Rd)
- (2) Bucks Rd – (from Sapp Rd to Cedar Neck Rd)
- (3) Sapp Rd (from Bucks Rd to Cedar Beach Rd)
- (4) Cedar Neck Rd (from Sapp Rd to SR 1)
- (5) Sharps Rd (from 1 mile north of SR 1 to SR 1)
- (6) Business Route 1 (from Wilkins Rd to SE Front St)
- (7) Cedar Beach Rd/SR 36 (from Sapp Rd Business Route 1)

The preceding road segments improvements also overlap proposed new transit routes which will in turn support pedestrian and bicycle accessibility to future bus stop locations.

Smart Growth

DelDOT seeks to further support the land use designations contained in the Milford Master Plan by implementing projects and policies that encourage the construction of smart growth based residential and commercial spaces.

Smart growth is a set of principles and guidelines that attempts to create a nexus between land use and transportation in which zoning, subdivision regulations, architectural standards and transportation design act as mutually supporting entities leading to greater efficiencies in vehicle and person movements and an enhanced sense of quality of life.

The Department supports the creation and adoption of a unified development ordinance by the City of Milford as a means for maximizing DelDOT's transportation investments in the study area.

Map 8.5. Bucks Rd Area - Conceptual New Residential Development



Map 8.6. Bucks Rd Area - Conceptual New Residential Development



Policy

The successful adoption and implementation of several policy initiatives are necessary for the Transportation Element to function as a successful component of the overall Master Plan for southeast Milford.

Recommendations:

- Adoption of the study area as a Transportation Investment District (TID) by DeIDOT for the purpose of allowing the Department to enter into agreements with the private sector community for the development and implementation of cost-sharing mechanisms to fund the transportation improvements identified in this report.
- Adoption of provision requiring traffic studies by the City of Milford to be undertaken when proposed residential or commercial development exceeds particular dwelling units and/or commercial square footage thresholds.
- Adoption of development ordinances by the City of Milford for the purpose of providing land development standards that support transportation improvement projects.

Table 8.2. Transportation Recommendations

Improvement	Area or Location	Type	Goal
Bicycle	Statewide Connector, Regional, and Statewide Bike Routes within Study Area	Install bike facilities as part of roadway improvements as per the Delaware Bicycle Facility Master Plan	Improve multi-modal options for residents
Pedestrian	Existing DART Bus Stop Locations	Provide safe pedestrian access to stops	Improve multi-modal options for residents
	Existing bus stops in the study area.	Install improvements at bus stops (bus stop signs, bus pad, benches, lighting, shelters)	Improve multi-modal options for residents
Transit	<u>New Local Circulator Routes</u> Phase I (see Map 4) Phase II Phase III	Increase frequency of bus service to provide access to downtown and new residential development / employment centers east of SR 1	Improve multi-modal options for residents
Park and Rides	To be identified		Reduce congestion
Intersection Upgrades	(1) Elks Lodge Rd / Wilkins Rd (2) SR 30 / Johnson Rd (3) Bucks Rd / Cedar Neck Rd (4) SE Front St / Marshall St	Add turn lanes and/or signalization to be determined by existing and projected traffic count data and studies	Improve safety and reduce delay

Intersection Modifications	(1) SR 1 / Johnson Rd (2) SR 1 / Sharps Rd	Revise movements to rights-in and rights-out only. Remove SR 1 median crossover. Add NB SR 1 acceleration lane.	Improve safety
Road Upgrades	(1) <u>Kirby Rd</u> (from RD 14 to Cedar Beach Rd) (2) <u>Bucks Rd</u> – (from Sapp Rd to Cedar Neck Rd) (3) <u>Sapp Rd</u> (from Bucks Rd to Cedar Beach Rd) (4) <u>Cedar Neck Rd</u> (from Sapp Rd to SR 1) (5) <u>Sharps Rd</u> (from 1 mile north of SR 1 to SR 1) (6) <u>Business Route 1</u> (from Wilkins Rd to SE Front St) (7) <u>Cedar Beach Rd/SR 36</u> (from Sapp Rd Business Route 1)	Improve to a minimum of two 11 ft travel lanes and 5 ft shoulders	Improve safety, reduce delay, enhance multi-modes of travel
Smart Growth	Master Plan Study Area	Assist City with integration of smart growth transportation designs and principles	Enhance quality of life

Table 8.2 – Transportation Recommendations (cont.)

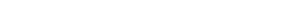
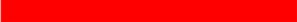
Policy	Master Plan study area	Transportation Investment District (TID)	(1) Coordination of land use and transportation projects as per DelDOT Complete Streets Policy (2) Private / Public partnership to identify and share costs associated with required capital transportation projects within study area
Policy	Master Plan study area	Development Ordinances	Efficient use of land use and transportation design standards
Policy	Assist City of Milford with drafting a traffic impact study requirement	City code	Collection of existing and projected traffic data



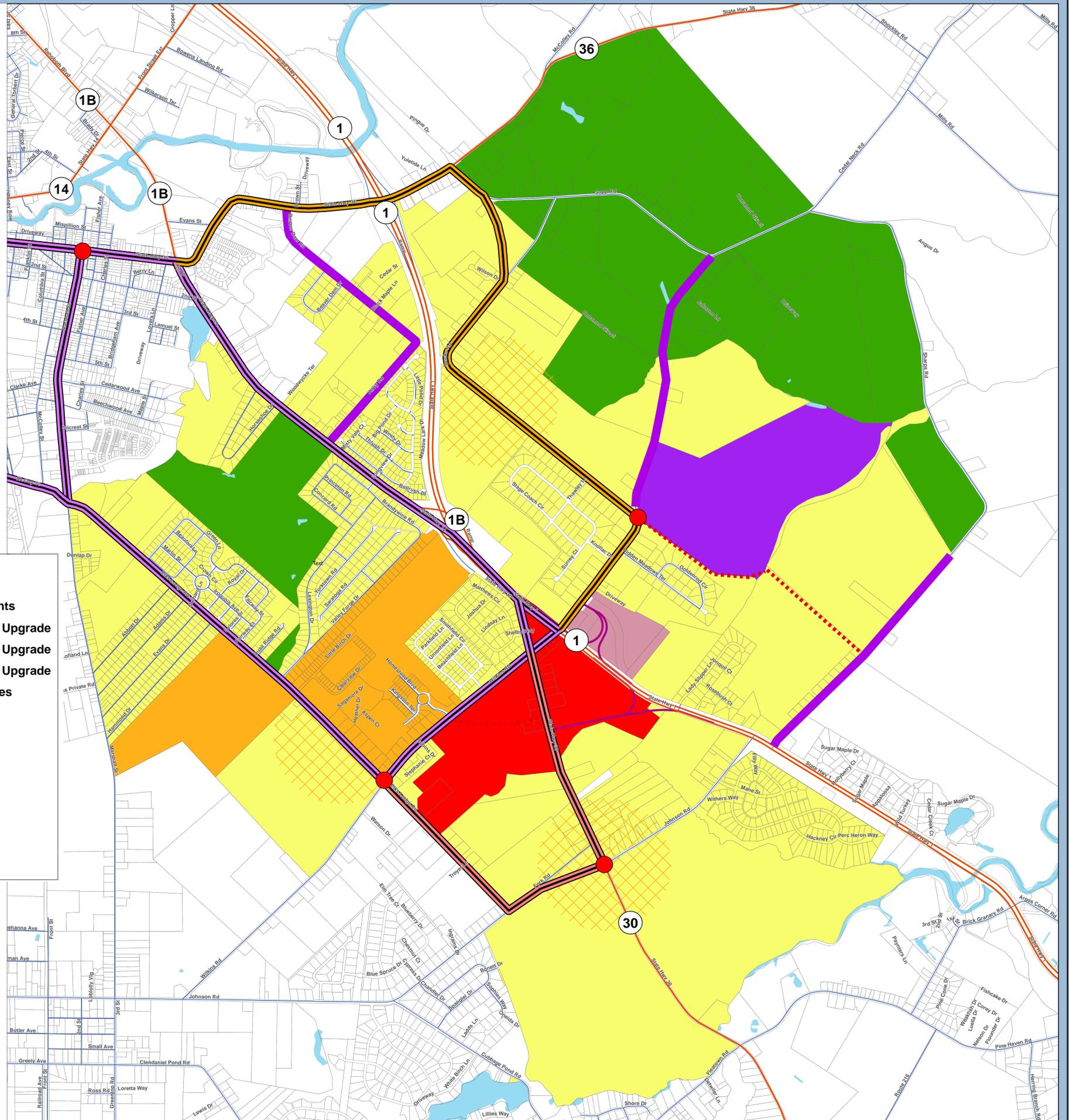
Milford South East Neighborhood Master Plan

Map #4 Transportation Recommendations

Legend

-  Proposed Intersection Improvements
-  Phase 1 - Transit Circulator / Road Upgrade
-  Phase 2 - Transit Circulator / Road Upgrade
-  Phase 3 - Transit Circulator / Road Upgrade
-  Proposed Additional Road Upgrades
-  Proposed New Connector Roads*
-  Residential - Low Density
-  Residential - High Density
-  Open Space Agricultural
-  Innovation Park
-  Commercial
-  TDR Receiving Areas
-  DeIDOT Owned Property

Map created by DelDOT Division of Planning
*Conceptual alignment subject to change



Chapter 9

Water and Sewer Infrastructure

One responsibility of the City of Milford for the SE Neighborhood is the planning, financing, and construction of public utilities for this area. These public utilities include water, sewer and electricity.

The City of Milford has engaged the engineering firm of Davis, Bowen, and Friedel to prepare the water and sewer extensions East of Route 1. After reviewing proposed and existing development, DB& F has prepared cost estimates and schematic drawings showing the proposed location of these public utilities (see Map 5).

Public Water System Improvements

The water extensions include a new elevated storage facility and a new proposed well either east of SR 1 or west of SR 1 depending on the flow rates, easements, and approval from DNREC. Addition water facilities include extension of a 12" water line from an existing connection near Meadows at Shawnee running southward near the three major properties east of SR 1 (Dugan Property, Isaac Property, and the Mill's Property) then westward along Johnson Road until it meets Cedar Creek Road. At this intersection the water line is reduced to a 10" water line then continues in a westerly direction until it meets Elks Lodge Road. At Elks Lodge Road it continues in a northerly direction until it connects with an existing water line near the Orchard Hills development. This proposed extension of the water utility into the SE East Planning area includes addition wells and will loop with the existing City of Milford water system providing improved water provisions, storage capabilities, and fire fighting capabilities.

The estimated cost of these improvements according to DB&F is approximately \$3.5 million dollars. Presently the City of Milford has funding in place through the U.S. Department of Agriculture for the construction of these water facilities.

Public Sewer System Improvements

Regarding the proposed sewer extensions for the SE Planning Area, again DB&F has provided cost estimates and schematic drawings showing the proposed location of these public utilities. The sewer extensions include the construction of a proposed 12" force main from an existing 18" force main near the Meadows of Shawnee along Rehoboth Blvd. running eastward then southward along the Dugan property which would serve the area east of DEL 1. Additional construction in this area would include the erection of a Pump Station on the Isaac's property.

Proposed sewer extension for the area west of DEL 1 include the construction of 12" force main near the Meadows at Shawnee on Rehoboth Blvd. continuing southward along Rehoboth Blvd. then along the right-of-way of DEL 1 near the Matlinds Estate housing development, then southward along Cedar Creek Road. This proposed sewer extension would serve all the proposed development west of DEL 1 and south of existing development within the corporate limits of the City of Milford (see Map 6).

Costs estimates prepared by DB&F for this sewer extension amount to \$3.6 million dollars.

Electric Utility

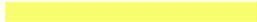
Electric serve would be provided by the City of Milford's Electric Department on an as needed basis according to submitted and approved development plans.



Milford South East Neighborhood Master Plan

Map #5 Land Use & Water

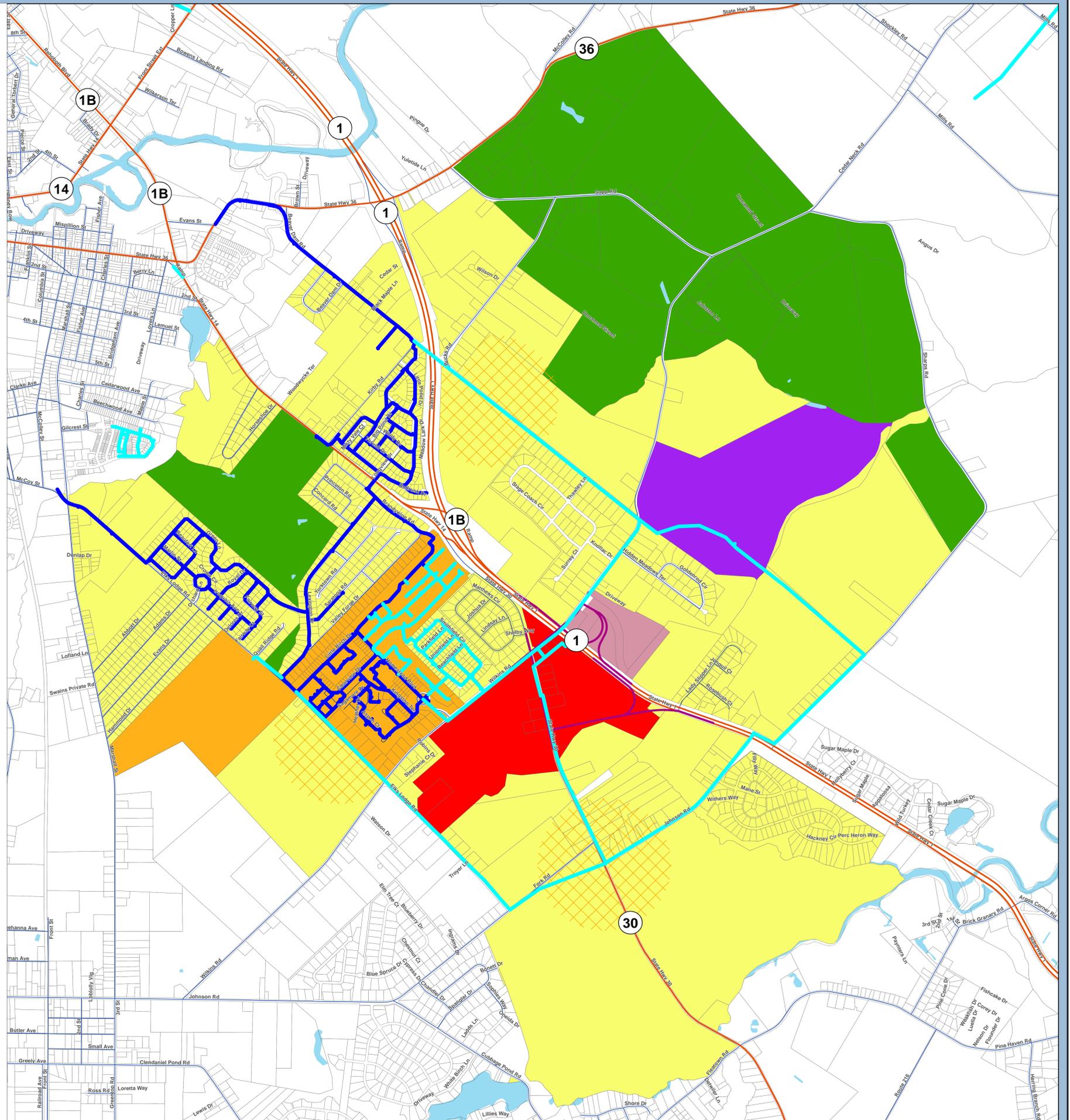
Legend

-  Residential - Low Density
-  Residential - High Density
-  Open Space Agricultural
-  Innovation Park
-  Commercial
-  TDR Receiving Areas
-  DeIDOT Owned Property
-  Existing Water System
-  Proposed Water System Extension

Map created by DelDOT Division of Planning



0 0.25 0.5 1 Miles

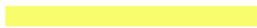




Milford South East Neighborhood Master Plan

Map #6 Land Use & Sewer

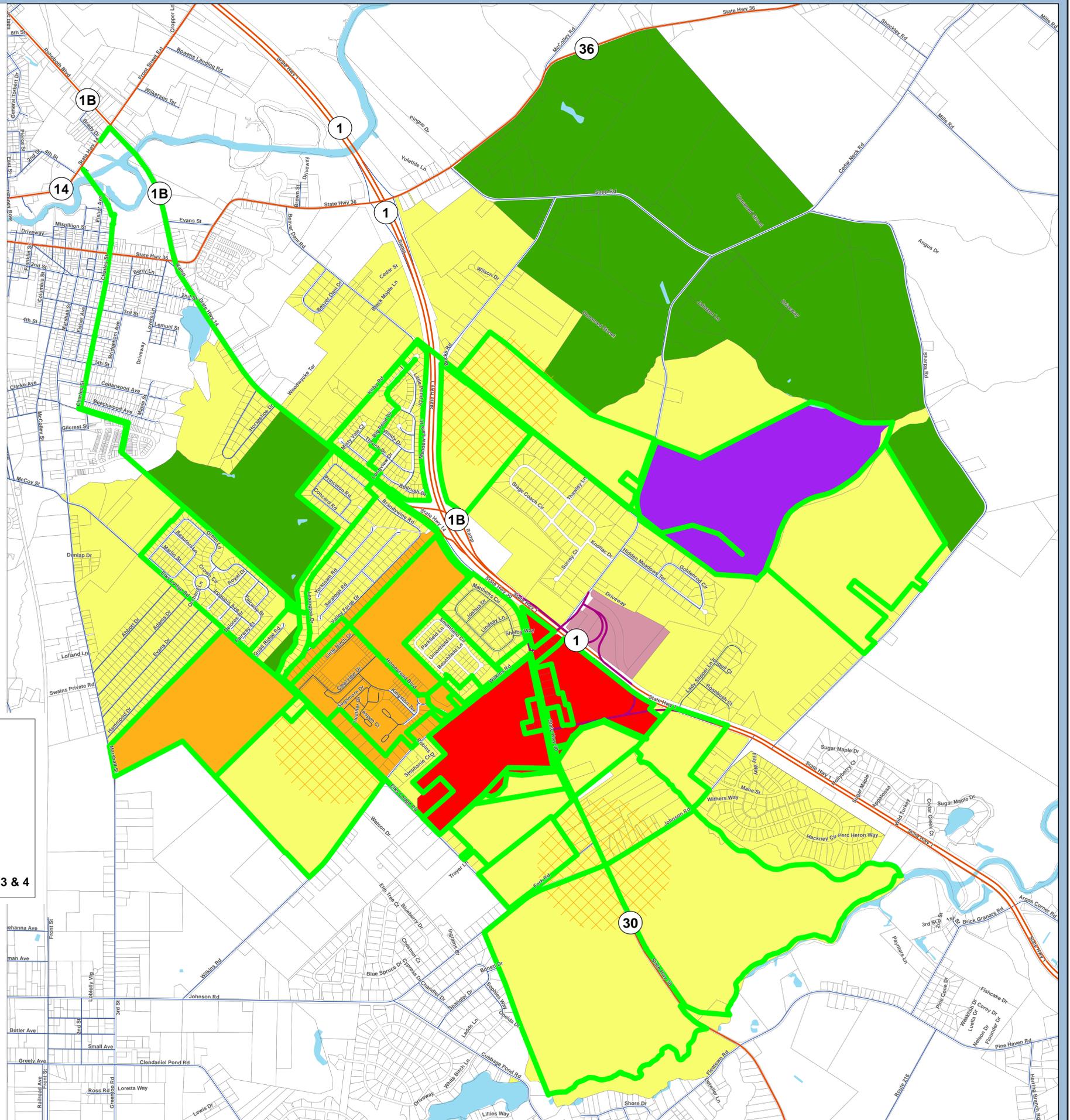
Legend

-  Residential - Low Density
-  Residential - High Density
-  Open Space Agricultural
-  Innovation Park
-  Commercial
-  TDR Receiving Areas
-  DeIDOT Owned Property
-  Proposed SE Sewer Extension Phases 3 & 4

Map created by DeIDOT Division of Planning



0 0.25 0.5 1 Miles

Chapter 10

Design Guidelines

1. The Department recommends the city require any property developed adjacent to land designated Open Space Agriculture to include a forested buffer between the property and adjacent farmland. This is already required by Sussex County. As a courtesy to Sussex County, the DDA Forest Service reviews the effectiveness of the buffer, and makes a recommendation to the County on whether or not to accept the buffer as is, or require modifications. The Department would offer the same service to the City.
2. In addition to a forested buffer requirement, the Department also asks that the City work with developers on where they “mass” their houses or buildings. Whenever practicable, the Department requests that the City require developers to cluster their approved building lots, and place as much of the residual community open space near adjacent farm parcels. This would further help eliminate or mitigate any conflict that may arise from dissimilar land uses.
3. As each new project is proposed, the City, DNREC, DeIDOT and the developer should coordinate to discuss opportunities to develop shared stormwater management facilities that integrate best practices for maximum flood protection and water quality protection and enhancement.
4. Utilize green technologies to manage stormwater. Green technology stormwater management is a best practice that uses the natural processes of vegetation to filter stormwater and take up harmful pollutants, improve groundwater recharge without expensive infrastructure.
5. Minimize the removal of trees within the Cedar Creek Natural Area to the greatest extent possible with the goal of preserving 100% of existing trees and all contiguous forested blocks (a map of this area was unavailable at time of publication).
6. Provide buffers to the Cedar Creek Natural Area. Prohibit additional development within 300 ft. of the existing Natural Area (a map of this area was unavailable at time of publication).

7. Do not place storm water structures in the Cedar Creek Natural Area (a map of this area was unavailable at time of publication).
8. Incorporate sidewalks, bike lanes, and multi-modal paths in the Master Plan Area in accordance with Chapter 8, Transportation and the Milford Pedestrian/Multi-Modal Master Plan.
9. Specific Conservation Areas, Area One (see Chapter 5 and Map 5.3, Area One)
 - a. Avoid building and/or stormwater infiltration in the area of excellent recharge
 - b. Limit intense development to the upland portion of the parcel; the eastern portion should be used for passive recreation and open space.
 - c. We recommend that the Downer and Ingleside soils in Area One be the preferred location for stormwater infiltration.
10. Specific Conservation Areas, Area Two (see Chapter 5 and Map 5.4, Area Two)
 - a. Protect the forested wetlands that are mapped in the southern end of Area Two, on both sides of Route 30. Because of the falling elevations from the north end of this area toward the mapped wetlands, we advise that optimal stormwater management would be constructed wetlands or other green technology best management practices in the area immediately north of the forested wetlands, on either side of Route 30.
 - b. The wooded section in this area also supports Key Wildlife Habitat. We recommend generous riparian buffers (300 feet or greater) to protect water quality and preserve forested areas surrounding the tributaries of Cedar Creek to enable these rare species to thrive.
11. Specific Conservation Areas, Area Three (see Chapter 5 and Map 5.5, Area Three)
 - a. Provide at least a 300 foot upland buffer primarily due to the presence of or potential for swamp pink. The buffer would also be instrumental in protecting the Atlantic White Cedar wetlands as well as achieving the Total Maximum Daily Load (TMDL) pollution limits for this portion of the Mispillion watershed.

Chapter 11

Implementation

Commitments:

The City of Milford

1. The City will develop and adopt an ordinance to enable to use of transfer of development rights credits (TDRs) in receiving zones. This ordinance will enable developers build at up to eight (8) units per acre by-right through the purchase of TDR credits from farms in the sending areas.
2. A stormwater utility is a legal and financial structure to allow stormwater management facilities to be constructed, managed and maintained in common by a local government or other entity. This master plan area is well suited to such a utility, although there are many ways to structure such an entity. Both the City and DNREC agree to explore this option in more detail as this area develops in accordance with this master plan.
3. The City will construct a public water system as described in Chapter 9 to serve the Master Plan Area. This is a funded project.
4. The City will design and permit a sewer system to serve the Master Plan Area as described in Chapter 9. Private developers will be responsible for funding and constructing this system. The City will discuss various financing and construction options with any developer.

Delaware Department of Agriculture

1. The Delaware Department of Agriculture (DDA) and the Delaware Agricultural Lands Preservation Foundation (DALPF) will partner with the City to establish a Transfer of Development Rights program as described in the Agricultural Preservation chapter of this document (Chapter 4).
2. By partnering with the DALPF, the City will avoid the initial financial expenditures required to preserve a parcel of land. These expenditures include paying to survey the property, paying the legal costs of a real estate settlement, and other associated administrative costs. The DALPF would bear those costs.
3. The City would avoid the future obligation of monitoring the preserved farms to make sure they remain in compliance with the preservation agreement (easement). The DALPF would assume that responsibility, and would add any properties preserved by Milford to the hundreds of permanently preserved farms it already monitors. In

addition, should any future litigation be required to uphold the preservation easement, the City would not have to incur any legal costs.

4. DDA will assist the City in the creation and administration of a TDR bank as described in the Agricultural Preservation chapter of this document (Chapter 4). This includes assistance with appraisals to set the fair market value of TDR units.
5. In addition to any funds the City would have for agricultural preservation and the TDR bank, they would also be eligible for state-matching funds from the DALPF, as well as any federal matching funds from United States Department of Agriculture (USDA) Farm and Ranch Lands Protection Program (FRPP). As allowed by law, these matching funds would be awarded to the city based on availability. If the City were able to capture state and federal matching funds, they could significantly leverage their funds with additional money, and preserve additional farm land.

Delaware Department of Natural Resources and Environmental Control (DNREC).

1. There is an opportunity for greater communication and coordination between DNREC and DelDOT with regards to stormwater management and road improvements. This coordination will be ongoing throughout the development of this master plan area. Opportunities to share facilities and streamline the review process will be continually evaluated and implemented as individual properties within the master plan area develop and re-develop. Streamlined review and approval processes will only be available in return for implementing “best practice” designs.
2. DNREC will work with the City to explore and implement the concept of a stormwater utility in the master plan area as development occurs.

The Delaware State Housing Authority (DSHA)

If requested, the DSHA stands ready to assist in the development of affordable housing opportunities in the Master Plan Area in the following ways:

1. Work with the Office of State Planning Coordination to further refine our criteria for tax credits, which may give more weight to Master Plan areas such as this one in the future.
2. Continue to provide developers information and resources through our Affordable Housing Resource Center and other sources.
3. Work with the City and the Office of State Planning Coordination on the development of ordinances, such as Form Based Codes, to ensure quality design in the Master Plan Area.
4. Participate with the City on future grant applications to facilitate development in the Master Plan Area.

The Delaware Department of Transportation (DelDOT)

1. DelDOT will fund and construct the grade separated interchange at SR 1 and Route 30 as per the current Capital Transportation Plan. The current timeline involves construction in 2012 and 2013, with completion in late 2013. Please note that the CTP is subject to amendment annually.
2. Work with the City of Milford to adopt this master plan area as a Transportation Improvement District (TID) to enable equitable and timely funding for roadway improvements within the area in accordance with the recommendations in this Master Plan.
3. DelDOT will work with the City to ensure that the road improvements identified in this report are implemented by the public and / or private sector in a phased manner that is paced with the timing of development activities.

Requirements:

Division of Historical and Cultural Resources: Delaware State Historic Preservation Office

1. Any project that involves Federal funds or permits must comply with Section 106 of the National Historic Preservation Act.
2. The State Antiquities Act requires that archaeological excavations on state-owned or controlled lands must be done under a permit from the Director of DHCA.
3. Any un-marked human remains that are disturbed during construction must be respectfully handled in conformance with the Delaware Unmarked Human Remains Act.

Recommendations:

Recommendations for Implementation of Agricultural Preservation:

1. The Department recommends the city require any property developed adjacent to land designated Open Space Agriculture to include a forested buffer between the property and adjacent farmland. This is already required by Sussex County. As a courtesy to Sussex County, the DDA Forest Service reviews the effectiveness of the buffer, and makes a recommendation to the County on whether or not to accept the buffer as is, or require modifications. The Department would offer the same service to the City.
2. In addition to a forested buffer requirement, the Department also asks that the City work with developers on where they “mass” their houses or buildings. Whenever

practicable, the Department requests that the City require developers to cluster their approved building lots, and place as much of the residual community open space near adjacent farm parcels. This would further help eliminate or mitigate any conflict that may arise from dissimilar land uses.

3. The Department asks that the city review its zoning ordinances for compatibility with future agricultural business or agricultural related uses. It is important to provide provisions and flexibility in the zoning code to accommodate future agricultural related activities.
4. The Department would note that all properties enrolled in the state's farmland preservation program are afforded the protections listed in Appendix 3. In addition, Sussex County adopted a "mirror" ordinance to provide these protections to all farms located in Sussex County. These protections should be considered during the city's planning process in an attempt to place more compatible land uses next to properties engaged in agriculture. In addition, there is a restriction on the location of water wells in DNREC's regulations that should be considered.

Recommendations for Protection of the Cedar Creek Natural Area

1. Sections of the wooded areas of the Milford Southeast Master Plan Area are part of the Cedar Creek Natural Area (see Map 5.1). All developments near or adjacent to this Natural Area are recommended to follow the design guidelines regarding protection of the Natural Area, found in Chapter 5.
2. Cedar Creek Nature Preserve is adjacent to the south end of the Southeast Planning Area (see Map 5.1). A number of rare species can be found in association with this habitat type. To protect the rest of this contiguous forest area it should be preserved as a Nature Preserve. A Nature Preserve is a special designation that provides additional protection for this important natural resource area. Such a designation would be achieved with the assistance of the State Office of Nature Preserves within DNREC. Should these areas be annexed as envisioned by the Master Plan, Milford will work with private landowners and the State Office of Nature Preserves to promote the dedication of the Natural Area as a Nature Preserve.

Recommendations for the Protection of Specific Conservation Areas

1. When designing development projects within Specific Conservation Areas One, Two and Three (see Chapter 5 and Maps 5.3, 5.4 and 5.5) the land developers and the City will collaborate and coordinate to ensure that the specific design guidelines related to these important conservation areas are incorporated into the site designs. The design guidelines are specifically listed in Chapter 10.

Transportation Recommendations

1. Upgrade primary circulation and transit routes (see Chapter 8, and Map 4) to 11 foot lanes and 5 foot shoulders.
2. Along these same routes, construct bicycle and pedestrian improvements to ensure interconnectivity, multi-modal connections and “complete streets.”
3. In order to accommodate increased traffic from new development activities, upgrade the intersections identified in Chapter 8 and shown on Map 4.
4. Encourage the use of TDRs to enable higher density developments (up to 8 du/acre) at the designated TDR receiving areas. These areas are planned around bus stops to enable the transit improvements envisioned to operate smoothly.

Signatures:

The undersigned agree to honor the above stated commitments, agreements, requirements and recommendations as they relate to the development and preservation of land within the Milford South East Neighborhood Master Plan area. This document, including text and maps, shall guide land development, agricultural preservation, environmental protection, and infrastructure investments in the Southeast Neighborhood Master Plan Area described herein. This document shall be in full force and effect until such time as all parties reconvene and mutually consent to amend this document and the commitments, agreements, requirements and recommendations.

Mayor, City of Milford

Director, Office of State Planning Coordination

Secretary, Delaware Department of Agriculture

Secretary, Delaware Department of Natural Resources and Environmental Control

Secretary, Delaware Department of Transportation

Appendixes

Appendix 1. South East Neighborhood Master Plan Land Use Scenarios Comparison

Appendix 2. TDR Sending and Receiving Area Analysis

Appendix 3. Proposed Agricultural Use Protections

Appendix 4. Historic and Cultural Resources in or Near the Master Plan Area

Appendix 1.

South East Neighborhood Master Plan Land Use Scenarios Comparison

South Milford Master Plan
SE Neighborhood Land Use Scenarios - Demographic Comparative Analysis
April 2011

Build-Out Results	Existing Land Use	Master Plan Build-Out Scenarios					Milford Camp Plan (SE Neighborhood)
		SE Neighborhood Public Option Preferred (ACT) Scenario ¹ October, 2009	SE Neighborhood Main Plan Preferred (Preferred) Scenario ² December, 2010	Growth 2020 ³ April, 2011	Growth 2030 ⁴ April, 2011	July, 2008	
Build-Out Numeric: Dwelling Units	1,943	7,626	11,768	2,436	2,409	35,082	
Build-Out Numeric: Buildings	1,943	6,813	10,319	2,419	2,409	7,579	
Build-Out Numeric: Floor Area	0	992,000	2,982,000	180,000	1,185,000	3,970,000	
RESIDENTIAL:							
Dwelling Units	1,943	7,626	11,768	2,436	2,409	35,082	
Residents	4,796	19,469	30,779	5,962	7,296	91,659	
Children	1,900	3,882	4,882	1,698	1,684	4,414	
Residential Tract	184,292	796,592	1,153,092	234,592	287,492	1,384,992	
Residential VTD	19,400	76,200	114,596	24,300	29,596	134,400	
Residential Water Withdraw	582,900	2,287,800	3,530,700	770,200	881,700	4,524,900	
Residential Water Use	582,900	2,287,800	3,530,700	770,200	881,700	4,524,900	
NONRESIDENTIAL:							
Commercial Floor Area (SQAFT)	0	995,000	2,985,000	180,000	1,185,000	3,970,000	
Employers ⁵	262	2,532	4,879	726	1,814	30,275	
Commercial Taxes	0	48,528	137,005	7,368	62,317	320,823	
Commercial VTD	0	24,879	70,692	4,005	30,891	179,000	
Commercial Water Withdraw	0	32,879	70,138	8,005	30,138	188,000	
Commercial Water Use	0	42,094	87,698	10,005	37,698	232,592	

¹ Existing Land Use Scenario employees are calculated as home-based employees, therefore no associated nonresidential space.

² SE Neighborhood "Preferred (ACT)" Scenario - composite of scenarios developed at Public Workshops, October, 2009

³ SE Neighborhood "Preferred (Preferred)" Public Option composite model December 2010 by City of Milford Planning office reviewing State Agency report # P-105

⁴ Growth 2020 and Growth 2030 Scenarios assume a growth rate of 2% per year

Source: UD-SECC Community Land Use Model
Analysis performed by the University of Delaware, Sustainable Coastal Communities (SCCC) Program, 2011

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Appendix 2 TDR Sending and Receiving Area Analysis

TDR Sending Area Analysis for Select Parcels East of Milford

Parcel Number	Owner Name	LESA Score	Acres	Zoning Yield ¹	Build Yield ²	Septic Yield ³
330-12.00-10.00	Ruth Williams	185.08	60	120	78	78
330-08.00-47.00	Richard Fay Shockley	220.19	14.7	28	19	19
330-12.00-08.00	GW Shockley & Sons, Inc.	222.51	117.4	235	153	99
330-08.00-28.00	Alan and Arenath Mills	172.61	46.2	92	60	60
330-08.00-24.00	Beverly & Louis O'Day	189.26	41.29	101	66	66
330-12.00-01.03	Howard & Katherine Webb ⁴	210.7	118.18	236	153	99
330-12.00-01.02	Howard & Katherine Webb ⁴	Part of 330-12.00				
330-12.00-01.02 (Unit 21805)	Howard & Katherine Webb ⁴	Part of 330-12.00				
330-12.00-01.00	BKW Farm Limited	181.54	66.8	132	86	86
330-08.00-19.00	Alan & Arenath Mills	192.19	85.5	170	111	99
330-08.00-19.02	Alan & Arenath Mills	192.19	16.3	32	21	21
330-08.00-20.00	Warnock Farms, LLC	232.5	105.6	210	137	99
330-07.00-75.00	GW Shockley & Sons, Inc.	184.27	48.4	96	63	63
Totals			720.37	1,452	947	789

¹ Sussex County AR-1 zoning provides for 2 units to the acre
² In practice, the average subdivision yields 1.3 units per acre
³ Del Code Title 7, Chapter 60 limits the number of individual on-site septic systems to 99; a community wastewater system is required to achieve the max. dwelling units allowed by zoning.
⁴ Existing Agricultural District

**Milford TDR Receiving Areas
Located within 1/4 Mile of Public Transportation Nodes**

Node	Acres	Base Zoning 3 DUs/acre	TDR Zoning 8 DUs/acre	Additional DUs through TDR use
1	58	174	696	522
2	118	354	1416	1062
3	104	312	1248	936
Total	280	840	2240	1,400

Appendix 3

Proposed Agricultural Use Protections

The following is sample language that the Delaware Department of Agriculture recommends the City of Milford integrate into their review of any subdivision located adjacent to an Agricultural Preservation District:

The proposed development is near two properties currently enrolled in the State's Agricultural Lands Preservation Program (Example: N & M Burton Farm Agricultural District, (Parcel Numbers # 2.34-16.00-11.00 and 2.34-16.00-17.00). Therefore, the activities conducted on these preserved properties will be protected by the agricultural use protections outlined in Title 3, Del. C., Chapter 9. These protections effect adjoining developing properties. The 300 foot notification requirement affects all new deeds in a subdivision located in whole or part within 300 feet of an Agricultural District. Please take note of these restrictions as follows:

§ 910. Agricultural use protections.

(a) Normal agricultural uses and activities conducted in a lawful manner are preferred and priority uses and activities in Agricultural Preservation Districts. In order to establish and maintain a preference and priority for such normal agricultural uses and activities and avert and negate complaints arising from normal noise, dust, manure and other odors, the use of agricultural chemicals and nighttime farm operations, land use adjacent to Agricultural Preservation Districts shall be subject to the following restrictions:

(1) For any new subdivision development located in whole or in part within 300 feet of the boundary of an Agricultural Preservation District, the owner of the development shall provide in the deed restrictions and any leases or agreements of sale for any residential lot or dwelling unit the following notice:

This property is located in the vicinity of an established Agricultural Preservation District in which normal agricultural uses and activities have been afforded the highest priority use status. It can be anticipated that such agricultural uses and activities may now or in the future involve noise, dust, manure and other odors, the use of agricultural chemicals and nighttime farm operations. The use and enjoyment of this property is

expressly conditioned on acceptance of any annoyance or inconvenience which may result from such normal agricultural uses and activities."

(2) For any new subdivision development located in whole or in part within 50 feet of the boundary of an Agricultural Preservation District, no improvement requiring an occupancy approval shall be constructed within 50 feet of the boundary of the Agricultural Preservation District.

(b) Normal agricultural uses and activities conducted in accordance with good husbandry and best management practices in Agricultural Preservation Districts shall be deemed protected actions and not subject to any claim or complaint of nuisance, including any such claims under any existing or future county or municipal code or ordinance. In the event a formal complaint alleging nuisance related to normal agricultural uses and activities is filed against an owner of lands located in an Agricultural Preservation District, such owner, upon prevailing in any such action, shall be entitled to recover reasonably incurred costs and expenses related to the defense of any such action, including reasonable attorney's fees (68 Del. Laws, c. 118, § 2.). In addition, if any wells are to be installed, Section 4.01(A)(2) of the Delaware Regulations Governing the Construction and Use of Wells will apply. This regulation states:

(2) For any parcel, lot, or subdivision created or recorded within fifty (50) feet of, or within the boundaries of, an Agricultural Lands Preservation District (as defined in Title 3, Del. C., Chapter 9); all wells constructed on such parcels shall be located a minimum of fifty (50) feet from any boundary of the Agricultural Lands Preservation District. This requirement does not apply to parcels recorded prior to the implementation date of these Regulations. However, it is recommended that all wells be placed the maximum distance possible from lands which are or have been used for the production of crops which have been subjected to the application of land applied federally regulated chemicals.

Section 1. Chapter 99, Code of Sussex Section 99-6 may also apply to this subdivision. The applicant should verify the applicability of this provision with Sussex County. This Section of the Code states:

G. Agricultural Use Protections.

(1) Normal agricultural uses and activities conducted in a lawful manner are preferred. In order to establish and maintain a preference and priority for such normal agricultural uses and activities and avert and negate complaints arising from normal noise, dust, manure and other odors, the use of agricultural

chemicals and nighttime farm operations, land uses adjacent to land used primarily for agricultural purposes shall be subject to the following restrictions:

(a) For any new subdivision development located in whole or in part within three hundred (300) feet of the boundary of land used primarily for agricultural purposes, the owner of the development shall provide in the deed restrictions and any leases or agreements of sale for any residential lot or dwelling unit the following notice:

“This property is located in the vicinity of land used primarily for agricultural purposes on which normal agricultural uses and activities have been afforded the highest priority use status. It can be anticipated that such agricultural uses and activities may now or in the future involve noise, dust, manure and other odors, the use of agricultural chemicals and nighttime farm operations. The use and enjoyment of this property is expressly conditioned on acceptance of any annoyance or inconvenience which may result from such normal agricultural uses and activities.”

(b) For any new subdivision development located in whole or in part within fifty (50) feet of the boundary of land used primarily for agricultural purposes no improvement requiring and occupancy approval for a residential type use shall be constructed within fifty (50) feet of the boundary of land used primarily for agricultural purposes.

Appendix 4
Historical and Cultural Resources in or Near the Master Plan Area