

X. Future Land Use

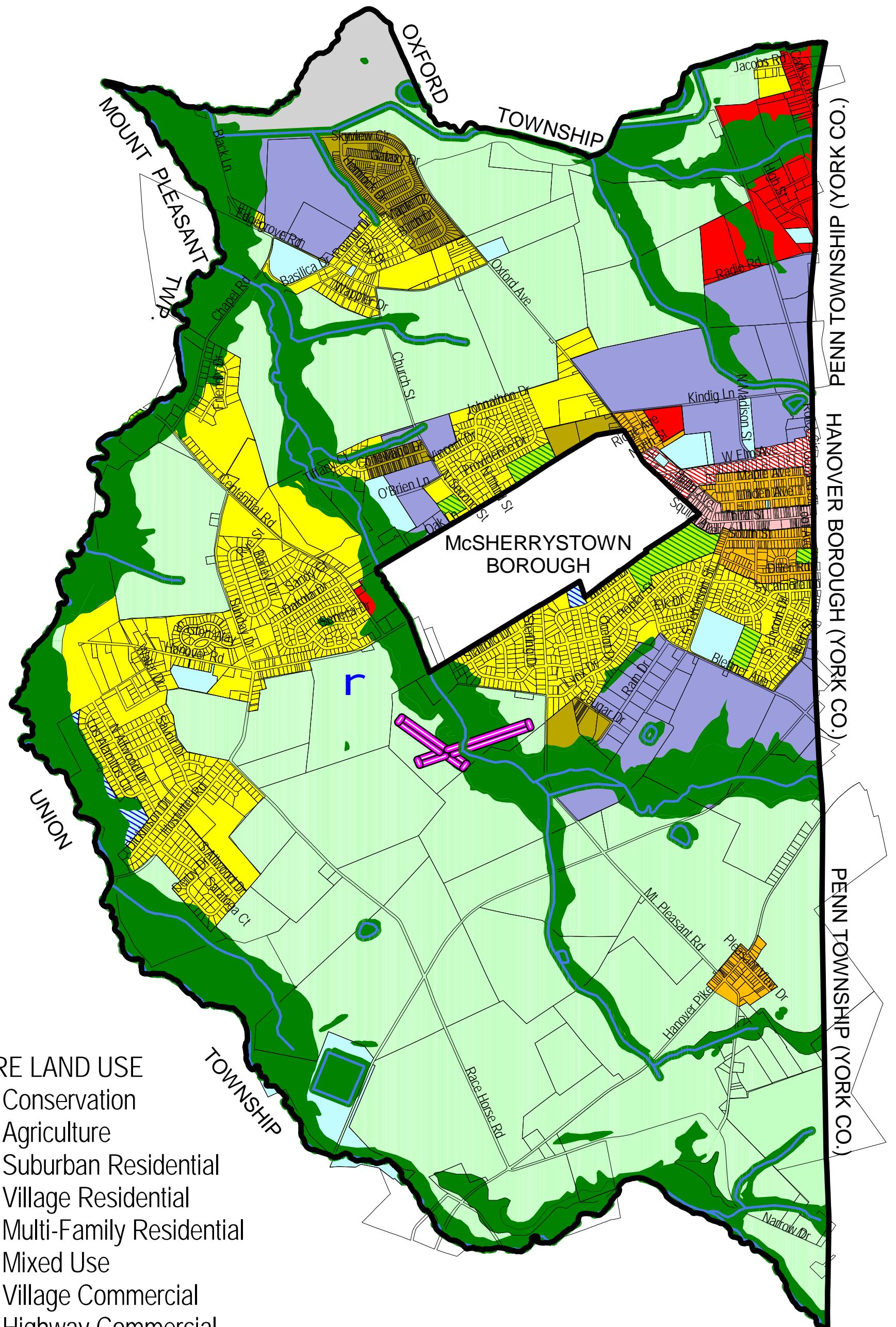
One element important to the comprehensive planning process is the charting of appropriate future land uses and growth areas. This effort embodies all of the background information collected regarding natural features, public facilities and utilities, existing land use, population studies, and traffic patterns. Then, these resources are allocated in a manner that responds to the Township's desires, as expressed in the Community Planning Goals in Chapter II. ***What results is a future land use map that should be used to adjust zoning boundaries, and help properly locate future municipal investments, so as to maximize their efficiency. This chapter should be used in conjunction with the Future Land Use Map. Also, the Future Land Use Plan can guide and justify decision making regarding all sorts of other municipal activities and functions (e.g. grant applications, utility and infrastructure planning, public improvements and investments, etc.)***

The preparation of the Future Land Use Map was accomplished according to several "ground rules"; an understanding of these "ground rules" will lead to a better understanding of the Plan's recommendations.

First, this Plan is designed to address future conditions until the year 2020. Accordingly, future growth areas have been generally located and sized to accommodate the growth that is projected during this time frame. This results in a "staged" future land use scheme that (1) reduces the conversion of productive farmlands and sensitive natural features, (2) confines development areas so that public improvements and services can be provided efficiently to a compact area, and (3) predominately focuses infill development around existing settlements. ***The benefits of this approach are significant, but require that the municipalities commit to the Plan's updating on or before the year 2020.***

Second, local officials are keenly aware that Adams County has been interested in improving east-west traffic flow between the Carlisle Pike through Conewago Township to serve municipalities to the west. The County has preliminarily identified a conceptual corridor that passes through the Township as part of its Official Comprehensive Plan. While the Township acknowledges the need for improved east-west access, it does not want to sacrifice its rural landscape for this purpose that will principally serve motorists from other nearby municipalities. The future land use scheme assumes that any new road would be aligned and designed to conform to the Township's community development and preservation objectives.

Third, a great deal of emphasis was placed on existing land uses in developed areas. In some limited cases, existing development types were recommended for changes to another land use category to enhance compatibility. In rare instances, existing uses were not reflected to suggest the need for change within that given locale toward which regulatory efforts can strive. Similarly, isolated land uses (particularly scattered businesses) within the rural landscape are not identified. This helps to convey the Plan's overall approach towards targeted growth in designated growth areas and conservation of outlying natural features and farms. Furthermore, this document deals with future land use on a property-by-property basis; however, in rural settings individual home sites upon farms are not reflected as they



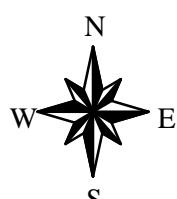
FUTURE LAND USE

- Conservation
- Agriculture
- Suburban Residential
- Village Residential
- Multi-Family Residential
- Mixed Use
- Village Commercial
- Highway Commercial
- Industrial
- Public
- Quarry
- Private Park
- Public Park
- Airport
- PROPOSED PARK & FIRE HOUSE

2000 0 2000 4000 Feet

Conewago Township

Adams County, PA



are considered a part of the farming principal use. Overall, this emphasis on existing land use will keep the Plan practical and should make it more useful to local officials in their evaluation of future land use decisions.

Fourth, based upon goals to concentrate development around the “edges of town and villages” and where public utilities can be provided, much of the designated future growth is located within close proximity of existing Boroughs and Villages with available utility lines. Specifically, the Plan attempts to distinguish between “town” areas in which planned growth will be served by public utilities and services, and the “country” where agricultural preservation and the conservation of natural features is the priority along with protection of a rural independent lifestyle.

Fifth, another important goal that strongly influences the future land use pattern relates to local business promotion. Local officials hope to promote local business ownership and operation, offer locally-based employment and generate local tax revenues. Therefore, the Plan proposes commercial and industrial nodes at logical locations that are sized, configured and located to promote such uses that are “home-grown” and won’t threaten other local economies.

Finally, this Comprehensive Plan will only be effective if it is implemented. While there are numerous recommendations made throughout the Plan that do not require new regulations, land use protection will ultimately demand revised zoning and subdivision and land development ordinances. Conewago Township should quickly and firmly align its development policies and practices to reflect the recommendations within this Plan in accordance with Section 303.(d) of the Municipalities Planning Code.

A. AGRICULTURE

Throughout history, agriculture, which includes forestry, has played a primary role within Pennsylvania, Adams County and the Township; today, this is still true as evidenced in Chapter V (Existing Land Use). As the Soils and Geology Map contained within Chapter III (Natural & Cultural Features) of this Plan reveals, a generous amount of prime agricultural soils extend throughout the Township.



These fertile areas have a characteristically flat to gently rolling landform. These areas contain the highest concentrations of farms that are part of the designated Township’s Agricultural Security Areas (ASA). Although some parcelization and development has occurred here in the past, a suitable critical mass of this landscape is still devoted to agricultural operations. These resources are being put to good use by the Township’s farmers who have largely embraced the need to preserve their farms as evidenced by their voluntary participation in the Township’s ASA.

In planning for agricultural land, the Township should adopt a philosophy and policy not to consider agricultural land as “undeveloped farmland awaiting another use.” Rather it should be viewed as “developed land” that is being used to produce a valuable product. Farming is a land-intensive, manufacturing process that converts raw materials into a product, comparable to other industrial operations, with occasional accompanying impacts of noise, odor and dust. Therefore, this plan advocates a position that this agricultural area not be considered as a holding zone, but as an area having a positive purpose of utilizing the Township's natural and non-renewable resources for the benefit of the entire community and beyond. ***This agricultural area should be protected by zoning regulations that prevent interference by incompatible uses which weaken the ability to conduct normal farming practices. Permitted residential densities should be kept very low with small maximum permitted lot sizes. Many municipalities employ a fixed ratio that allows one new dwelling unit for each 20, 25 and even 50 acres of farmland. Such new dwellings can only occupy one to two acres each unless they consume non-productive areas.*** In this manner, local farming is preserved and unsuspecting future residents are spared the sometimes intensive impacts associated with agricultural operations.

Traditionally, farming has involved the growing of crops for either sale off of the farm or for consumption by animals on the farm with the subsequent marketing of either meat or milk. Thus, the viability of the farming operation was very much tied to the productivity of the land. Recent years have seen the advent of concentrated animal feeding operations (CAFOS). These involve the concentration of large numbers of cows, hogs or poultry on a single tract of land with the feed being bought off-site. Because the food these animals eat is often not grown on the tract of land where they are housed, very high animal concentrations can be achieved. These highly concentrated operations often create acute odor impacts on neighboring residents. These odors can arise from the animals themselves, but more often from their waste products, both at the site where produced and where they are land-applied. Agricultural zoning ordinances enacted by a municipality should be consistent with, but cannot be more restrictive than PA Act 38 of 2005 (House Bill 1646) Agriculture Communities and Rural Environment (ACRE), or any legislation superseding PA Act 38 of 2005.



Past absent or lenient zoning policies have enabled the development of numerous rural homes are stripped-out along the roads within the agricultural landscape. ***Nonetheless these homes exist and future zoning regulations should specifically permit them as permitted uses within this area.*** In so doing the homes avoid the classification as nonconforming uses. This will enable residents to make logical adjustments to these lots/homes without the need to gain approval from a local zoning hearing board for variances or expansions to nonconforming uses. ***However, future residential lots within the Agricultural area should require careful design and layout so that such residences minimize common property lines with active farming operations.*** The use of rural clusters where several homes share unified street access and minimize borders with adjoining farms improve compatibility.

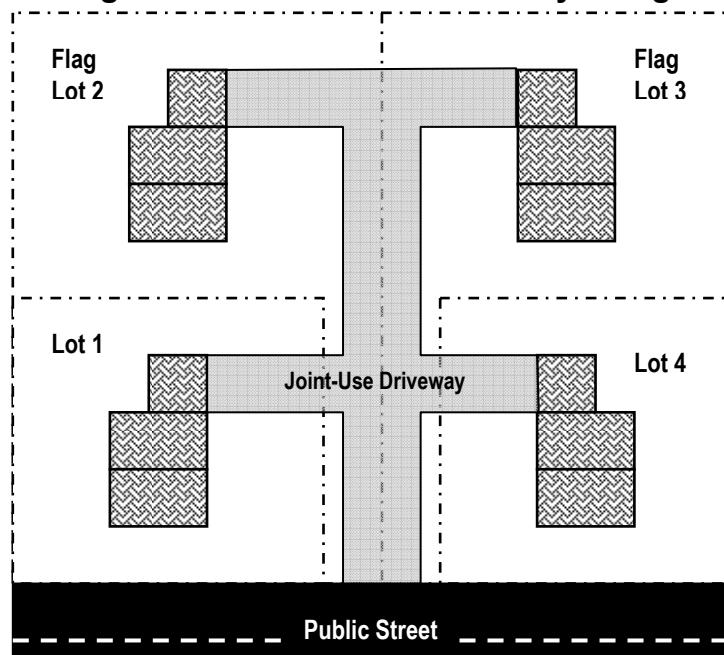
Next, uses within this area will rely upon on-lot sewage disposal systems (OLDSs). On-lot disposal systems, if constructed and maintained properly, can provide a reliable and efficient means of wastewater treatment in rural and suburban areas where population density is low. However, where such systems are improperly installed or not maintained, contamination of on-site water supplies can result.

Therefore, it is recommended that the Township continue to implement its OLDS management program. Such program requires the routine maintenance of systems to include the “pumping-out” of subsurface septic tanks on a regular cycle. The extension of public sewers across the countryside is an expensive proposition which usually falls to local government when malfunctioning systems occur and then injects pressure to rezone and develop amid the rural landscape. An OLDS management program is preventive maintenance that avoids costly public investments that only serve a few residents. This should be an important component of any updates and / or new Act 537 Plans, as they occur.

Along the same lines, zoning regulations should require new lots to provide a primary disposal site and another replacement disposal site to be approved by the Township SEO. Furthermore, the Township Zoning Ordinance should also require that any permit issued for a new use that would rely upon a new OLDS, specifically depict and protect the alternate disposal site from disturbance.

Flexible design standards should be used to enable efficient lotting of new homes amid prime farmlands and natural features. Many municipalities provide for the use of flag lots in rural areas for this purpose. In addition, limited use of joint use driveways can prevent the inefficient and unattractive strip housing pattern along the Township's rural roads. ***However, the use of flag lots and joint use driveways should be tied to a proposed development that seeks to avoid disruption of important natural features and productive farmlands.***

Flag Lots with Joint-Use Driveway Design



As an alternative to freestanding lots with separate on-lot utilities, the Township could also permit the use of conservation design subdivisions that employ low-tech community based utility systems. Here greater density can accommodate the few homes on less acreage and avoid disruption of adjoining farming operations. This will require greater administrative effort and more advanced zoning techniques, but this option is useful in blending farming with rural neighborhoods. It is important to note; however, that local officials should always be mindful that the primary purpose of this land use category is to accommodate active farming and the more homes that are placed within the midst of agriculture, the more

opportunity for conflicts will increase. Conservation design neighborhoods should incorporate design standards that locate and use the "required" open space to buffer the homes from impacts associated with normal farming practices.

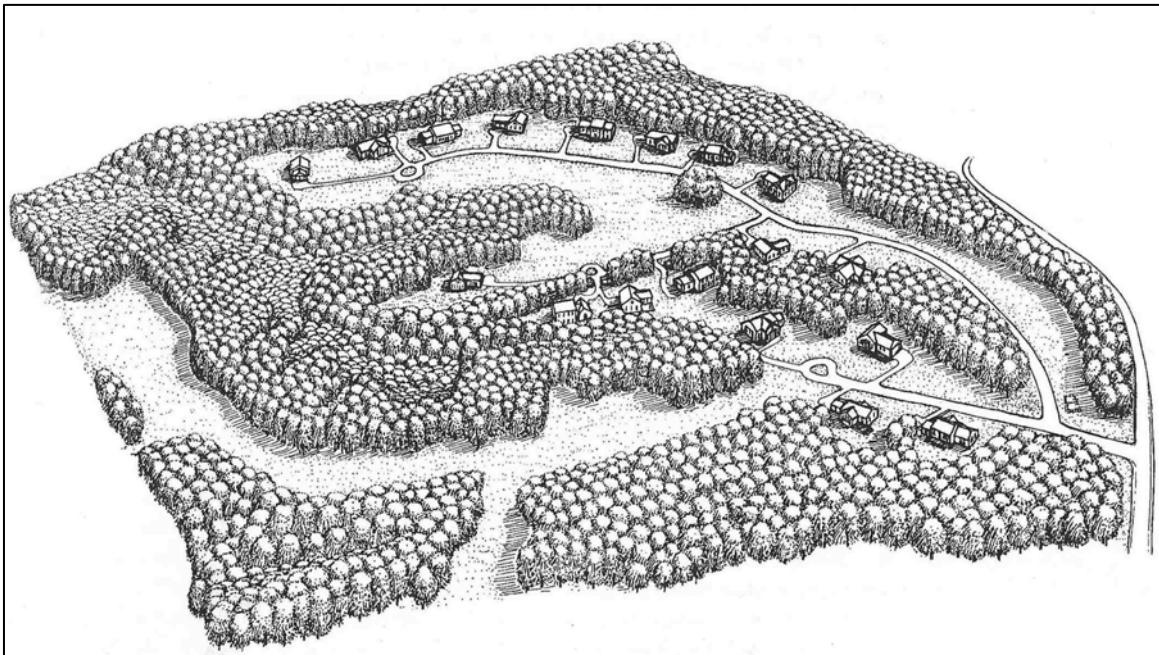


Image Source: Growing Greener, Natural Lands Trust, Inc., PA Dept. of Conservation & Natural Resources, Pennsylvania State University Cooperative Extension Service, April, 1997. Cover.

Next, the use of accessory businesses should be permitted within the Agricultural Zone to offer close-to-home employment and promote local rural-based tourism.

Home occupations should be confined to uses that can be adequately conducted from within the dwelling unit itself with limited non-resident employees; these uses can be permitted by right. Rural occupations expand on the home occupation concept and enable other more intensive uses that can make efficient use of rural outbuildings and outdoor storage. Here impacts of noise, light, traffic, dust, hours, screening and odor should be scrutinized prior to approval to ensure that adjoining properties are not adversely affected. Farm occupations (e.g. accessory businesses, auxiliary enterprises, etc.) should be encouraged to financially assist active farming operations and can be conducted in barns. Here local residents from the site and its neighborhood can engage in non-farm activities provided the impacts are contained upon the site and the operator continues to farm. In all cases (home, rural and farm occupations) the applicant should demonstrate safe means of waste disposal that does not threaten the environment.



Farm stands and accessory businesses are valuable features in an agricultural setting. Image Source – Chester County Plan. Comm.

Beyond the “accessory occupations” described above that are associated with another principal use, some rural communities also permit freestanding farm-related businesses as principal uses. These are usually tied to offering some service or goods used by local farmers with up-set size limitations so that proper local scale is achieved. Farm equipment dealers, seed and fertilizer distributors, blacksmiths and buggy shops, dry goods stores are examples of suitable farm-related businesses. Land owners expanding their businesses as their principal source of revenue, may be subject to Clean and Green penalties because the business changes the land use from agriculture to commercial.

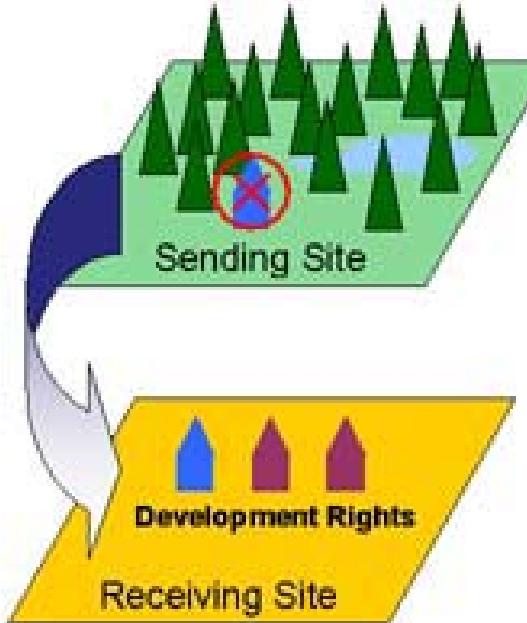
Because of its rural character, the Township should locate certain uses (e.g. golf courses, airports, campgrounds, shooting ranges, and etc.) within this area to offer suitable opportunity for such uses and separate impacts from more densely developed settings. Some of these should require conditional use approval to ensure that they are located, designed and operated in a manner that is compatible within the rural setting.

Although an effective agricultural zoning ordinance can help preserve farmlands in the short run, certain legal principles on accommodating growth can threaten their long-term integrity. Therefore **the Township should support efforts of the County’s Agricultural Land Preservation Board conservation easement program, the Land Conservancy of Adams County and the Township’s Agricultural Security Area programs.** Certainly easement funds are limited and all prime lands cannot be purchased immediately. Therefore, local officials should commit to the preservation of farmlands through zoning until easements can be purchased through this program.

Also, it may be beneficial to consider the implementation a transfer of development rights (TDR) program to financially compensate farmers in lieu of residential development; although this may lead to increased development potential in localized areas of the Township where the development rights would be used to increase development density.

One of the nation’s most pressing environmental and economic dilemmas involves the preservation of natural areas and farmlands that often results in a perceived financial loss of affected property owners. Across the country, many farmers and large landowners consider their property as their total sum of wealth and “retirement fund.” They expect the opportunity to sell their properties for development purposes at the end of their career or pass along this wealth to the next generation of their family. This causes resistance to the adoption of stricter land use controls needed to preserve farmlands and natural areas by severely restricting future residential development. To overcome this problem, the legislature amended the MPC to specifically authorize the use transferable development rights (TDR).

The use of TDR enables farmers/landowners to sell the development rights of their properties to developers or other parties, yet retain the ability to farm or otherwise make use of their properties for non-development purposes. In turn, developers apply the TDR acquired from the farm elsewhere; hence, the “transfer of development rights.”



TDR is a program that presents no risk to the farmer/landowner. Essentially, the municipality assigns a number of "development rights" which are generally tied to the sizes of farms/lands (e.g., one TDR per five acres of land) within the area to be preserved. This area is called the "sending area" as TDR's are "sent" from it. Within the Township, the sending areas could be the Agricultural Zone.

Next, the municipality identifies an area or areas within which developers can use their acquired TDR's to increase the intensity of permitted development. This area is called the "receiving area," as TDR's are "received" into it. Within the Township, the receiving areas could be the residential, commercial and/or industrial zones.

Again, it is important to state that a TDR program costs the original farmer/landowner nothing. He/she simply is given TDR's that he/she can keep and/or sell. Any sale prices of individual TDR's are determined between the farmer/landowner and the buyer, and given the land values within the Township these should reach thousands of dollars per TDR. Once a farmer/landowner sells all of his/her TDR's, no additional residential development can occur on the farm.

TDR provides a means of financially compensating landowners within agricultural/conservation settings who are willing to preserve their properties. TDR also enables these landowners to share in the wealth created by growth and development within the municipality, at no risk. ***To implement the TDR program the Township will need to conduct a detailed analysis of both the sending and receiving areas, as well as develop the ordinance and methods to administer this program; these efforts will require considerable expense, time and commitment but will yield the potential for many acres of permanently preserved open space at no cost to the Township.***

Most municipalities with TDR programs use their residential zones as receiving areas. ***To make effective use of these zones the Township should ensure that the base permitted density has "room" so that there are real incentives for the acquisition of TDRs. Then the Township can offer density bonuses for the use of TDRs exceeding the original density subject to compliance with all applicable design standards.*** It is important that the Township not deprive the residential landowner reasonable use of his/her property absent the use of TDRs; however, it is equally important that the Township keep base densities sufficiently low to encourage TDR usage. It is also vital that the Township provide sufficient acreage for potential residential development to satisfy its legal fair-share of growth and development. ***Final permitted densities with the application of TDRs should also be consistent with affected infrastructure capacities and prevailing neighborhood densities so that compatibility is assured.***

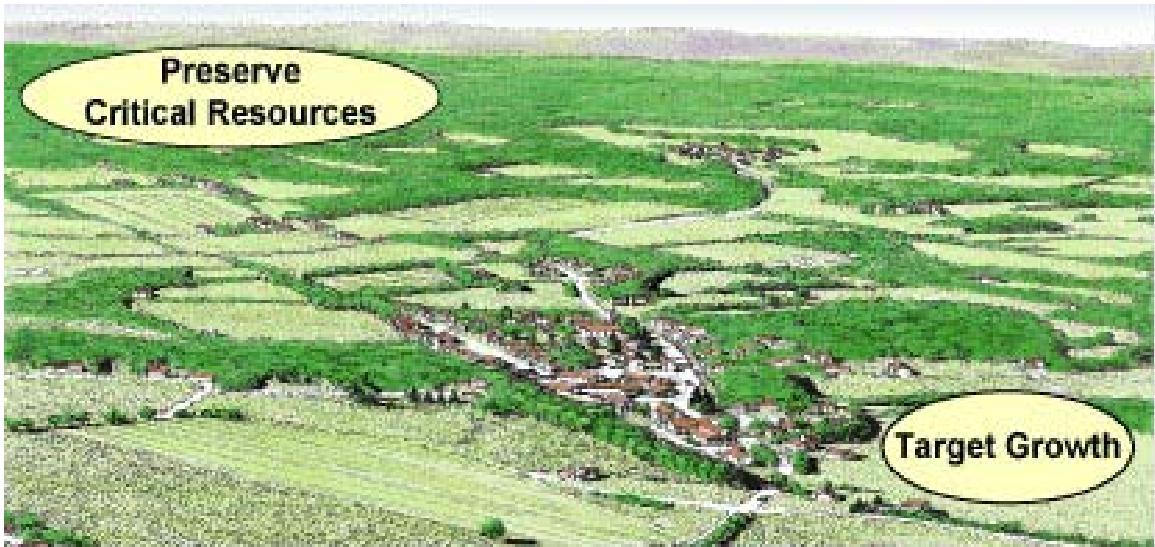


Image Source - www.nj.gov/dca/osg/resources/tdr/index.shtml

While most municipalities rely upon their residential development to drive their TDR programs, some have begun to identify receiving areas for nonresidential developments. Because the land values of commercial and industrial sites are generally significantly higher than residential development sites, there is greater potential for the purchase of TDRs when applied to commercial/industrial development sites. Within these Zones, regulations should limit permitted lot coverage at some base level (say fifty-percent) beyond which additional coverage can be obtained via the acquisition and assignment of TDR's from the sending area. Then for each TDR applied, the lot coverage can be increased by a prescribed size (say 2000 square feet) up to the maximum permitted lot coverage of say 70 percent. Again, the Township must not deprive the nonresidential landowner reasonable use of his/her property absent the use of TDRs, but the base lot coverages should be set low enough to offer real incentives for TDR usage. It is also vital that the Township provide sufficient acreage for potential commercial/industrial development to satisfy its legal fair-share of growth and development.

Finally, permitted coverages with the TDRs should be consistent with affected infrastructure capacities and reflect community development objectives for these areas.

Usually TDRs are purchased by developers from farmers/landowners, but nothing prevents others from purchasing development rights. In one instance, a municipality contemplated conducting an annual reverse-auction for the purchase of development rights. This auction would provide a convenient mechanism at which developers and others could join with farmers to transact TDR transfers. *Local and county government agencies can also acquire development rights for their ultimate retirement and/or their resale to developers at a profit. This creates an opportunity for conservation-oriented groups to preserve resources and generate funds for a revolving program of purchase and resale of TDRs. The Township, too could act as a middle-man in this process. Then, the developers could access one centralized bank from which to acquire needed development rights.* This is but one example of the creativity that can be applied in the development process to preserve natural resources yet enable managed growth and development.

The Agricultural category includes large areas within the Township that drain directly into the Conewago and Plum Creeks. Historically, intensive agricultural production has created surface water degradation due to erosion and the application of fertilizers. The Agriculture Communities and Rural Environmental (ACRE) Initiative, PA Act 38 of 2005, provides the regulatory framework for nutrient management and non-point source pollution abatement. ***Local officials should work with the Adams County Conservation District and employ a variety of techniques that encourage farmers to install riparian buffers along the creek and its tributaries.***

Local officials should also consider a riparian buffer ordinance in those areas where water quality is, or could be, significantly degraded by agricultural operations and urban development. Then compliance should be required whenever a zoning permit is needed. Tax assessment officials should be required to reduce assessed values of agricultural lands within riparian buffers.

Farmers should also be educated about the various state and federal conservation programs and income tax deductions that are made available to property owners who place conservation easements upon their properties for riparian buffers. Local watershed groups, local officials, and County, State and Federal agencies should partner with landowners to improve surface water quality using best management practices.



Photo of creek with and without a riparian buffer through farmland.

Image source: York County Planning Commission.

A sample riparian buffer ordinance is presented on page 132 of this Chapter and additional discussion can be found on pages 72-75 of this Plan.

To manage these issues, it is recommended that a new effective Agricultural Zone be applied to this area with the following components:

1. ***A deliberately worded purpose statement that cites the valid public purpose to protect and preserve prime agricultural soils and valuable farming operations in compliance with Section 604.(3) of the Municipalities Planning Code;***
2. ***An unobtrusive regulatory approach to farms conducting normal farming operations;***
3. ***A fixed ratio of permitted residential density, for all agricultural lands, determined by local officials, that restricts development potential;***
4. ***A minimum and maximum lot area of 1 and 2 acres, respectively, for non-farm uses;***
5. ***Liberal accessory use regulations that specifically include farm occupations, roadside stands and other rural pursuits, and freestanding farm-related businesses provided that these uses have little impact and that adequate provision is made for the safe disposal of wastes;***

6. *Siting standards for future dwelling units proposed that protect sunlight easements/equipment turning radii onto adjoining farms and locate homes so as to minimize land use conflict;*
7. *Language that specifically authorizes pre-existing homes as permitted uses;*
8. *An Agricultural Nuisance Disclaimer that informs prospective residents of the potential impacts associated with normal farming practices that are protected under the PA Right to Farm Law and the PA Agricultural Security Law and Agriculture Communities and Rural Environment (ACRE), PA Act 38 of 2005;*
9. *Alternate OLDs protection and maintenance and the possible use of conservation design with community systems;*
10. *Siting of certain large-scale land uses separated from residential areas;*
11. *Identification of the Agricultural Zone as a sending area for transferable development rights (TDRs); and,*
12. *A riparian buffer requirement to protect surface water quality.*

B. CONSERVATION

Conewago Township has a landscape that is relatively devoid of large areas of environmental sensitivity. Because of its carbonate geology, the resulting landform is largely tillable and developable with proper care. Accordingly, the Township's Conservation Zones are confined to floodplains, wetlands woodlands and slopes along the Townships sparse watercourses. Nonetheless, these features offer scenic beauty, natural habitats and passive recreation opportunities that are foremost in the minds of many local officials and residents. All of these features form the basis for the assignment of the Conservation Zone. In addition, they offer some general perspective on the presence of conditions with a given locale. However, the specific location and extent of these features will require more detailed refinement and analysis during preliminary plan review of the subdivision process.

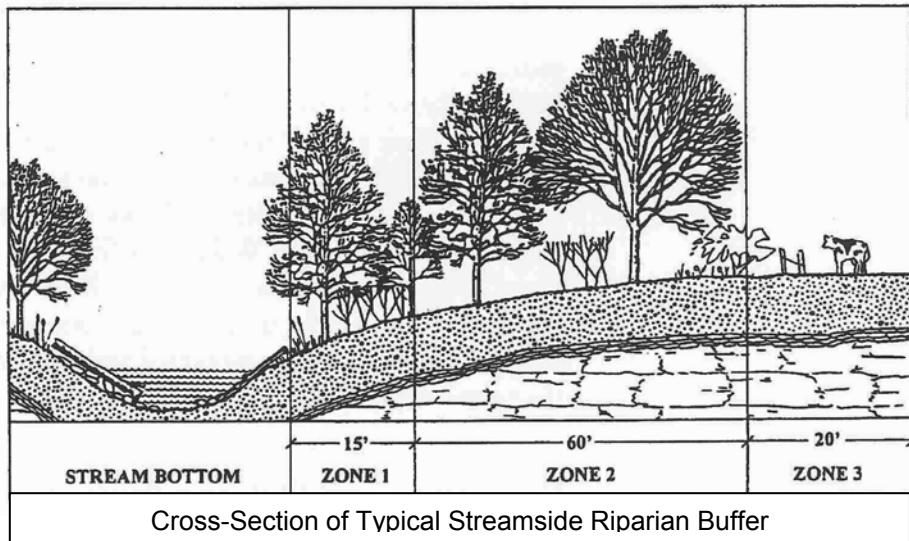
Consequently, applicable subdivision and land development regulations should require the preparation of an environmental impact report as a prerequisite to subdivision of new lots. This report should require an applicant to identify important natural features on the site and keep proposed development activities away or manage impacts within acceptable levels. Prospective developers should be required to demonstrate that their proposed use engaged a proper site planning process to identify, protect and maintain important natural features during and after site construction. This will require considerable work on the part of an applicant and the Township but will ensure that proposed developments are designed to respect the Township's valuable natural features.

Since this Zone contains the largest areas of woodland, specific requirements should be imposed upon forestry and logging operations in accordance with recent changes to the Municipalities Planning Code. Such regulations should ensure that a suitable timber harvesting plan complies with required conservation laws and practices. A recent amendment to the MPC requires that forestry uses be permitted by right within every zone of every municipality within the Commonwealth. Since forestry uses typically occur within conservation settings this discussion is presented here; however, **the Township must permit forestry uses in each of its zones.** At about the same time the MPC was amended to require forestry uses, the Pennsylvania State Township Association of Supervisors (PSATS), Pennsylvania State University (PSU) and PA Department of Conservation and Natural Resources (PA DCNR) prepared a model ordinance to help regulate and monitor forestry operations. **An updated and revised copy of this model**

ordinance that has been reviewed by various County Conservation Districts is contained on page 131 which should be applied throughout the Township.

As described above the Conservation Zone depicted on the Future Land Use Map, includes FEMA Floodplains, alluvial soils, US Department of Interior Wetlands and Riparian Buffers have been overlain upon the Township. While protection of floodplains and wetlands are widely accepted land use management techniques, recent awareness of diminishing surface water quality suggests the need for more protection for surface water. Because many of the Township's streams have been identified as "Impaired Waters" (see pages 24-25 of this Plan) the Township should initiate a program to improve surface water quality.

Studies conducted by the U.S. Forest Service demonstrate that 60-to-95-foot wide riparian buffers offer real advantages in the removal of harmful nutrients and sediment from storm water before it enters the stream. These same



Cross-Section of Typical Streamside Riparian Buffer

riparian buffers can increase the food supply and create interconnected natural systems of movement for local wildlife. Riparian buffers are areas adjoining streams where naturally successive vegetation is provided and protected. More information about this subject can be found on pages 72-75, and a model ordinance is contained on page 132 of this Chapter.

Local officials should adopt Riparian Buffer Overlay regulations and apply them throughout the Township.

SECTION 1 FORESTRY USES MODEL ORDINANCE

- A. **FORESTRY PERMITTED IN ALL DISTRICTS** - In accordance with State law, forestry (as defined herein) uses are permitted, by right, in every Zone, subject to the following standards:
- B. **TIMBER HARVESTING PLAN REQUIREMENTS** - Every landowner on whose land timber harvesting is to occur shall obtain a zoning permit, as required by this Ordinance. In applying for said permit, the applicant shall prepare and submit a written timber harvesting plan in the form specified below. No timber harvesting shall occur until a zoning permit has been issued. The provisions of the permit shall be followed throughout the operation. The timber harvesting plan shall be available at the harvest site at all times during the operation, and shall be provided to the Zoning Officer upon request. The landowner and the operator shall be jointly and severally responsible for complying with the terms of the timber harvesting plan and the zoning permit. All timber harvesting operations will be conducted only in accordance with this ordinance and the approved timber harvesting plan.
1. A forest regeneration plan that identifies the principle species of trees intended to be logged and their respective method or methods of forest regeneration, including each species respective forest regeneration schedule (i.e. in terms of years.) As soon as practical and consistent with sound forest management practices, after the conclusion of the timber harvesting operation, the applicant(s)/owner(s) shall cause to be implemented the forest regeneration schedule of the timber harvesting plan.
 2. **Site Plan** - Each timber harvesting plan shall include a scaled drawing containing the following information:
 - A. Site location and boundaries, including both the boundaries of the property on which the timber harvest will take place, and the boundaries of the proposed harvest area within that property;
 - B. *Significant topographic features related to potential environmental problems and all of the natural and cultural features required within this Article 5 of this Ordinance;*
 - C. Location of all earth disturbance activities, such as roads, landings and water control measures and structures;
 - D. Location of all crossings of waters of the Commonwealth; and,
 - E. The general location of the proposed operation to municipal and State highways, including any accesses to those highways.
 3. **Compliance With State Law** - The timber harvesting plan shall address and comply with the requirements of all applicable State regulations, including, but not limited to, the following:
 - A. Erosion and sedimentation control regulations contained in Title 25 Pennsylvania Code, Chapter 102, promulgated pursuant to The Clean Streams Law (35 P.S. §691.1. et seq.); and,
 - B. Stream crossing and wetlands protection regulations contained in Title 25 Pennsylvania Code, Chapter 105, promulgated pursuant to the Dam Safety and Encroachments Act (32 P.S. §693.1 et seq.).
 4. **Relationship of State Laws, Regulations and Permits to the Timber Harvesting Plan** - Any permits required by State laws and regulations shall be attached to and become part of the timber harvesting plan. An erosion and sedimentation pollution control plan that satisfies the requirements of Title 25 Pennsylvania Code, Chapter 102, shall also satisfy the requirements for the timber harvesting plan and associated maps specified in Sections 1.B.1. and 1.B.2., provided that all information required by these sections is included or attached.
 5. **Required Marking of Trees** - Before any permitted timber harvesting operation begins, all trees that are at least six (6) inches in diameter as measured four and one-half feet (4.5') above grade to be felled in connection therewith shall be clearly marked on the trunk and the stump so that the same may be easily identified both before and after a tree has been felled. No tree shall be felled which has not been designated for removal on the approved timber harvesting plan.
- C. **REQUIRED NOTIFICATIONS**
1. The holder of a permit to conduct a timber harvesting operation shall notify the Township in writing at least forty-eight (48) hours before any cutting of trees is to begin including, but not limited to, those in connection with the construction of roads or trails. Such notification shall also indicate an estimated completion date.
 2. The holder of a permit to conduct a timber harvesting operation shall notify the Township in writing within forty-eight (48) hours of the completion date of the timber harvesting operation.
- D. **REQUIRED FOREST PRACTICES**
1. The following requirements shall apply to all timber harvesting operations:
 - A. Timber harvesting shall be accomplished with those professionally-accepted silvicultural practices that are most appropriate to the particular timber stand as indicated in the approved timber harvest plan.
 - B. No treetops or slash shall be left within the fifty (50) feet of any public street, private roadway providing access to any adjoining residential property or Residential District, adjoining property or designated trail; or within ten (10) feet of any natural or artificial swale or drainage ditch. All tree tops and slash shall be lopped to a maximum height of four (4) feet above the ground.
 - C. Felling or skidding on or across property of others is prohibited without the express written consent of the owners of such property. No treetops or slash shall be left on or across the boundary of any property adjoining the operation without the consent of the owner thereof.
 - D. Littering is prohibited and litter resulting from a timber harvesting operation shall be removed from the site on a daily basis.
 - E. All cutting, removing, skidding and transporting of trees shall be planned and performed in such a manner as to minimize the disturbance of or damage to other trees and vegetation and the land itself, unless authorized in the approved timber harvesting plan.
 - F. Roads and trails shall be constructed, maintained and abandoned in such manner as to prevent soil erosion and permanent damage to soil and waterways.
 - G. Roads and trails shall be only wide enough to accommodate the type equipment used and grades shall be kept as low as possible.
 - H. Where possible, stream crossings shall be avoided, but where deemed to be necessary, crossings shall be made at a right angle across suitable culverts or bridges.
 - I. Skidding across live or intermittent streams is prohibited except over bridges or culverts.
 - J. Unless superseded by the Erosion and sedimentation control regulations contained in Title 25 Pennsylvania Code, Chapter 102, promulgated pursuant to The Clean Streams Law (35 P.S. §691.1. et seq.), "No Timber Harvesting Buffer Zones" are established in accordance with the following table. Except for the construction and use of roads and trails described in the approved timber harvesting plan, no trees shall be cut, removed, skidded or transported in a No Timber harvesting Buffer Zone.
- | No Timber Harvesting Buffer Zones | |
|---|--------------------------|
| Use | Required Minimum Setback |
| Adjoining street | 50 feet |
| Adjoining property | 50 feet |
| Streams or other watercourse | 25 feet |
| Designated Trails | 25 feet |
| Springs, vernal ponds, seeps, Natural or artificial swale or drainage ditches | 25 feet |
- K. Everything practicable shall be done to prevent damage or injury to young growth and trees not designated for cutting unless authorized within the approved timber harvesting plan.
 - L. All limbs and stubs shall be removed from felled trees prior to skidding.
 - M. All trees bent or held down by felled trees shall be released promptly.
 - N. No trees shall be left lodged in the process of felling with as little damage as possible to the remaining trees.
 - O. Felling or skidding on or across any public street is prohibited without the express written consent of the Township in the case of Township streets or the Pennsylvania Department of Transportation in the case of state Highways.
 - P. The stumps of all felled trees shall be permitted to remain for soil for stabilization provided that they extend no more than two feet (2') above grade.
 - Q. During the periods of abnormal forest fire danger, as determined by the Fire Chiefs Association of Conewago Township, the Township shall have the right to order a suspension of timber harvesting operations until the danger subsides.
 - R. Upon completion of a timber harvesting operation, all roads shall be graded to eliminate any wheel ruts, and access to such roads from any public street by motor vehicles of any kind shall be effectively blocked.
- E. **RESPONSIBILITY FOR ROAD MAINTENANCE AND REPAIR; ROAD BONDING** - Pursuant to Title 75 of the Pennsylvania Consolidated Statutes, Chapter 49; and Title 67 Pennsylvania Code, Chapter 189, the landowner and the operator shall be responsible for repairing any damage to Township roads caused by traffic associated with the timber harvesting operation, to the extent the damage is in excess of that caused by normal traffic, and shall be required to furnish a bond to guarantee the repair of such potential damages, as determined by the Township Board of Supervisors with advice from the Township Engineer.
- F. **TOWNSHIP'S RIGHT TO INSPECT**
1. The Township may, by its own personnel or outside agent, go upon the site of any proposed timber harvesting operation after an application to conduct such operation has been filed for the purpose of reviewing the plans for the proposed operation and thereafter recommending or opposing the proposed operation or recommending or requiring changes or modifications thereto.

SECTION 1 RIPARIAN BUFFERS MODEL ORDINANCE

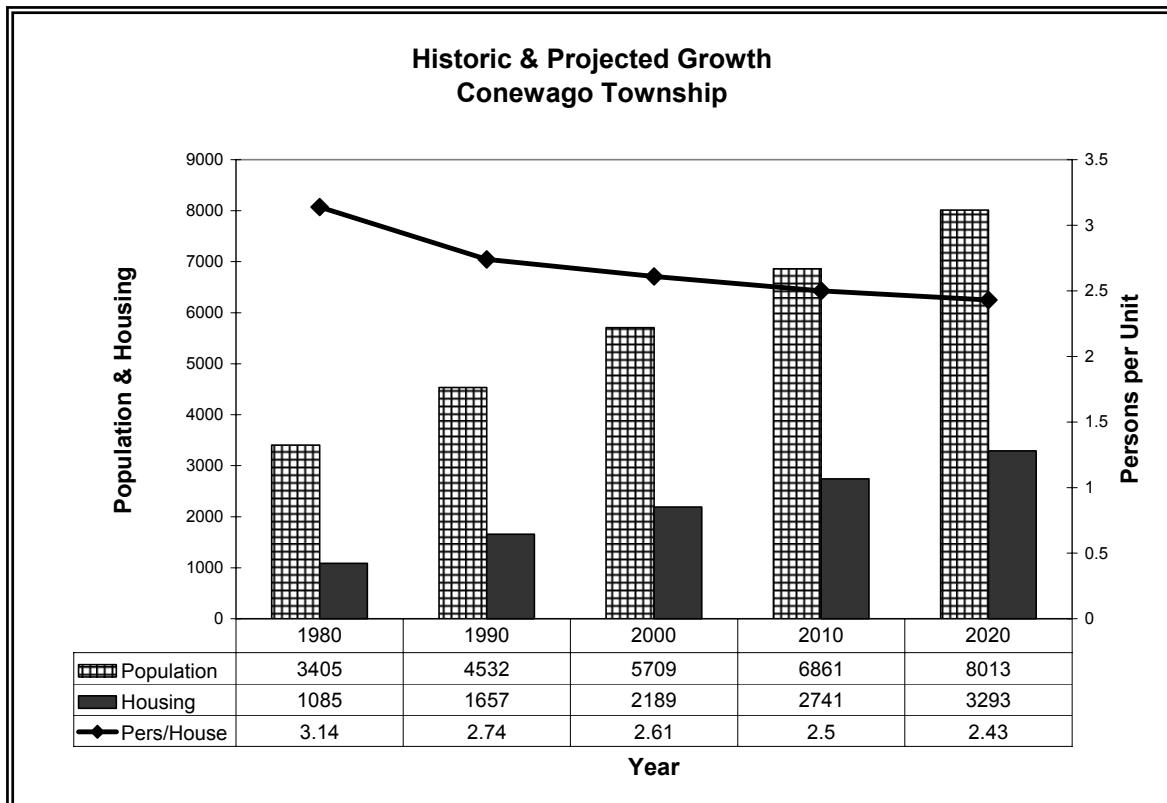
- A. **PURPOSE** - The requirements of this Section help to create and/or restore wooded buffers along important watercourses and surface water bodies upon the Township's landscape. Specific measures will promote beneficial vegetation to reduce harmful erosion, absorb nutrients, reduce surface water pollution, offer year-round nourishment and habitat for animal wildlife both within and adjoining the water feature, reduce surface water temperature, offer interconnected linear paths for habitat migration and close-to-home passive open spaces amid the developing landscape.
- B. **APPLICABILITY** - Any application for subdivision and/or land development application for property adjoining a watercourse or portion thereof, that is typically inundated throughout the year (under non-drought conditions) shall provide a riparian buffer in accordance with the following standards or, in the alternative, as approved by the Adams County Conservation District (ACCD) with input from the Township. (It is noted that landowners are encouraged to review the manual entitled "A Guide for Establishing and Maintaining Riparian Forest Buffers" published by the Chesapeake Bay Program.
- C. **RIPARIAN BUFFER DELINEATION**
1. The applicant shall clearly depict upon the Natural and Cultural Features Map the proposed riparian buffer as approved by the Adams County Conservation District (ACCD) along with written verification from the ACCD of their review and approval of the proposed riparian buffer design.
 2. As an alternative the applicant shall clearly depict upon the Natural and Cultural Features Map the proposed riparian buffer comprised of the following three separate Zones:
 - A. **Zone 1:** The landward area located between the streambank edge under typical flow conditions, or the high water level for pond or lake shorelines and fifteen feet (15'), as measured directly perpendicular from the streambank/shoreline edge.
 - B. **Zone 2:** The area beginning at the inland edge of the above-described Zone 1 and the largest combined width of all of the following:
 1. fifty feet (50'), as measured directly perpendicular from the streambank/shoreline edge;
 2. the 100-year floodplain;
 3. any adjoining identified wetlands; and/or,
 4. any adjoining area characterized by slopes exceeding twenty-five percent (25%).
 - C. **Zone 3:** The area beginning at the inland edge of the above-described Zone 2 and extending at least ten feet (10') inland therefrom. Where a pasture is proposed just beyond the above-described Zone 2, no Zone 3 is required.
- D. **RIPARIAN BUFFER PLANTINGS** - Each of the respective Zones of the riparian buffer shall include vegetation that already exists or will be planted using native species and maintained (except for invasive or noxious species as defined herein) by the applicant that satisfies the following design objectives. The applicant shall submit expert evidence that the existing and/or proposed vegetation satisfies such objectives that shall include a graphic depiction of proposed plantings and a schedule of vegetative species:
1. **Zone 1:** This Zone must include large maturing canopy trees and a ground cover of native seasonal grasses. New tree plantings should be selected, arranged and managed to accelerate canopy growth, and offer native species habitat and food supply. New grass plantings shall be selected and managed to filter out pollutants and offer habitat. All vegetation selected for this Zone must thrive in wet conditions;
 2. **Zone 2:** This Zone must include large maturing canopy trees generally three rows deep with a natural undercover. New tree plantings shall be selected that are rapid growing to intercept passing nutrients. Such trees shall be arranged and managed to accelerate canopy growth, and offer native species habitat and food supply. Successive understory plants shall be allowed to "evolve" with the canopy of this Zone; and,
 3. **Zone 3:** This Zone shall be planted with warm season grasses that are allowed to mature naturally without mowing. The tall grasses shall be managed to produce uniform overland stormwater flows that do not "channel" into Zone 2. New grass plantings shall be selected and managed to enable controlled grazing or haying so long as the grasses are not reduced to a point such that they no longer effectively disperse the surface flow.
- E. **RIPARIAN BUFFER MAINTENANCE**
1. Riparian buffers must be generally undisturbed. Mature trees and long grasses absorb more nutrients than do manicured plants. Similarly, the more extensive root systems retain passing sediments. These characteristics reduce pollution and yield abundant food and habitat for wildlife. The temptation to "over-maintain" the streamside must be overcome.
 2. Where riparian buffers are to be located upon common property, the applicant must include a working plan that ensures perpetual maintenance of such buffer zones as specified in this Section 1.E.
 3. Where riparian buffers are to be located upon private property, the applicant must include a legally-binding instrument (e.g. easement, covenant, deed restriction, etc.) in a form acceptable to the Township Solicitor which shall designate Conewago Township as the grantee and ensures perpetual maintenance of such buffer zones as specified in this Section 1.E. Then all affected landowners shall be required to abide by such legal instrument.
 4. The following lists required maintenance activities for each zone:
 - A. **Zone 1:** This Zone compels little maintenance. As trees mature, die and decay, it is important that such natural debris be allowed to decompose within the stream. This will provide important food and habitat for beneficial microorganisms, fish and amphibious animals. However, any debris that may cause a rise in the floodplain due to obstruction or displacement shall be removed promptly. Streamside grasses shall be allowed to seasonally flourish and recede. Streamside cleanup of junk and man-made debris is permitted.
 - B. **Zone 2:** This zone requires the most attention, but not for some time after initial planting. Here, the objective is to develop a stable and broad canopy of tree cover. The trees within Zone 2 are fast-growing and therefore consume many nutrients. The regular pruning and trimming of these trees will increase their nutrient consumption, and growth rate and decrease the time to establishment as a closed canopy buffer, but should not jeopardize the important overhead canopy of shade. The natural understory shall be undisturbed, except for periodic litter cleanup; and,
 - C. **Zone 3:** This Zone also requires little maintenance. Long summer grasses shall be allowed to flourish and recede with the seasons. Grazing and haying are permitted so long as the residual grass length is sufficient to disperse overland stormwater flows into Zone 2 and avoid channelization.
- F. **RIPARIAN BUFFER USE**
1. **Permitted uses** - No use shall be permitted that interferes with the natural maturation of the above described buffer plantings, except as follows:
 - A. Corridor crossings for farm vehicles and livestock and livestock watering facilities , all of which are accompanied by written evidence of approval of a water obstruction permit by the ACCD.
 - B. Corridor crossings for roads and railroads provided that such crossings are accomplished upon the least possible land area and disruption of the adjoining riparian buffer is minimized.
 - C. Public sewer lines, public water lines and public utility transmission lines, provided such lines are installed in such a manner that is most compatible with the installation and ongoing maintenance of the required buffer plantings as described in Section 1.D. of this Ordinance.
 - D. Passive recreation uses that prevent the harmful compaction of soil, tree root damage and avoid the channelization (natural or man-made) of surface water flow. Pedestrian paths can weave through Zone 2, but shall be provided with raised walkways. Impervious surface lot coverage is expressly prohibited.
 - E. Application of pesticides and herbicides that are specifically approved for the treatment and/or removal of invasive and/or noxious species within close proximity of watercourses, provided such pesticides and herbicides are used in strict accord with label instruction. Any materials applied as part of a County and/or State approved pest control program (e.g. West Nile Virus and etc.)
 2. **Prohibited uses** – The following uses and activities are expressly prohibited within a riparian buffer. This listing of prohibited uses and activities shall not be interpreted to permit other activities not listed, unless they are permitted by Sections 1.F.1. of this Ordinance:
 - A. Except as permitted in the above Section 1.F.1., any use that interferes with the natural maturation of the buffer plantings required in Section 1.D. of this Ordinance.
 - B. Except as permitted in the above Section 1.F.1., any use that interferes with the maintenance of the buffer plantings required in Section 1.E. of this Ordinance.
 - C. Storage and/or disposal of any toxic, hazardous or noxious materials and substances.
 - D. Except as permitted in the above Section 1.F.1.E., the application of fertilizers, pesticides, herbicides and/or other chemicals in excess of that permitted on an approved conservation and/or nutrient management plan as approved by the ACCD and/or local office of the USDA Pennsylvania Natural resources and Conservation Service.
 - E. Areas devoted to the on-site absorption of sewage effluent and/or agricultural fertilizers including but not limited to manure.

C. RESIDENTIAL (SR, VR, & MFR)

As described in Chapter VIII (Existing Land Use) of this Plan, the Township contains a variety of residential forms. Rural housing lies in outlying areas on large lots with on-lot utilities in Agricultural and Conservation areas. Most of these are scattered along the Township's roads. These rural areas are not part of this discussion but are covered by their respective previous land use categories (Agriculture or Conservation) depending upon their location.

Instead this Section describes the planned neighborhoods that are largely concentrated in and around the McSherrystown and Hanover Boroughs and the Township's several villages. These neighborhoods are to receive the vast majority of the Township's planned residential growth and are, or will be, fitted with public sewer and public water as well as other public services.

Chapter IV (Demographics) of this Plan analyzed population and housing trends within the Township. The following graphs past and projected growth across the entire Township. The net projected population and housing growth is summarized below:



PROJECTED NET CHANGES	
Year	2007 to 2020
Population	1498
Housing	718

In order to avoid claims of exclusionary zoning practices and to reflect contemporary housing styles, Chapter 4 (Demographics) recommended that the Township specifically plan to rely less upon single-family detached units in the future. In addition national housing trends suggest greater reliance on more dense/multi-family units and compact detached units. For these reasons it is recommended that the Township allocate future land use to meet the target growth in the following residential categories:

TARGET PROJECTED NEW HOUSING UNITS BY STRUCTURAL TYPE				
Total Units 2007-2020	Target single-family detached	Target attached & duplex	Total multi-family	Mobile Homes
718	+503 = (70%)	+ 108 = (15.0%)	+ 54 = (7.5%)	+54 = (7.5%)

As presented in Chapter V (Existing Land Use) of this Plan, the Township has considerable residential development that has been approved that has not yet been constructed and occupied. The following tabulates such residential "Pipeline Developments" whose locations are depicted on the Existing Land Use Map contained in Chapter V. These units will certainly contribute to the supply of new dwelling units to meet the Township's projected residential development:

PIPELINE DEVELOPMENT PROJECTS		
Development Name	Map No.	Uses Yet To Be Built
Chapel Ridge II	R1	96 duplexes / 1 single family detached
Villas at Cattail	R2	42 single family detached
Oak Hill Phases 1 & 2	R3	56 duplexes / 13 single family detached
Chapel View Phase 2	R4	38 single family detached
Allwood Manor Phase V	R5	31 single family detached
Conewago Heights	R6	5 single family detached
Total pipeline dwelling units – 152 duplexes & 130 single family detached units		

The following table lists the various Residential Zones depicted on the Future Land Use Plan (in addition to the "Pipeline Development" properties) along with measurements of land area and potential developments based upon permitted densities:

PLANNED RESIDENTIAL GROWTH				
Land Use Category	Planned Acreage	Area (75%) devoted to development features ¹	Base Density Units/Acre ²	Total Potential Planned Units
SR	228	178	4	714
VR	5	3.75	6	22
MFR	22.8	17.1	6	102
Township	255.8	191.85	4-6	838

¹These figures reduce the area for development to reflect:

- the considerable areas of significant development constraint that exist throughout the Township;
- the features within developments that cannot be devoted to actual residential use (e.g. roads, utility easements, parks and etc.); and,
- the "Right-to-Travel" doctrine which requires that municipalities provide for some choice in personal mobility and residency.

²These figures may need to be adjusted depending upon the use of Residential Zones as TDR Receiving Zones.

Next by combining the pipeline development units with those that are potential based upon planned future land uses results in the following:

COMBINED PIPELINE AND PLANNED DWELLING UNITS	
Pipeline Development Dwelling Units	282 units
Planned Land Use Dwelling Units	838 units
Total Potential Dwelling Units	1120

As can be seen the total number of potential housing units represents more than 155 percent of the projected residential growth (718 units) within the Township between years 2007 and 2020. Therefore, local officials can resist claims that the Plan does not provide for a fair-share of residential growth within the Township.

Furthermore by assigning potential dwelling unit types based upon the prevailing design standards for each respective pipeline development and Residential Zone the following table predicts that availability of land to be used for various housing unit types along with a comparison of the target projections derived to ensure a proper diversity of housing types as follows:

COMPARISON OF POTENTIAL RESIDENTIAL DWELLINGS WITH "TARGET" RESIDENTIAL PROJECTIONS				
Pipeline Development Name	Single family detached	Duplex and attached	Multi-family	Mobile homes
Chapel Ridge II	1	96		
Villas at Cattail	42			
Oak Hill Phases 1 & 2	13	56		
Chapel View Phase 2	38			
Allwood Manor Phase V	31			
Conewago Heights	5			
Proposed Zone				
Suburban Residential	642 (90%)			71 (10%)
Village Residential	11 (50%)	11 (50%)		
Multi-Family Res.			102 (100%)	
Total Potential Units	783	163	102	71
Target Units Projected	503	108	54	54
% Provided vs. Target	156%	151%	188%	131%

As the table reveals, the development potential each of the various housing types is exceeded; therefore ***local officials can act confidently that they have met their burdens to offer sufficient areas for residential development according to projected growth and provide for a suitable variety of housing unit types and densities.***

Next specific recommendations and strategies will be presented for each of the planned residential zones along with typical and/or suggested design standards.

Suburban Residential (SR) - Within the Township, much of the residential development that has occurred over the last few decades has taken the form of suburban housing. This Plan acknowledges this existing pattern and provides for logical yet tight expansion of these neighborhoods and in some cases in-fill development sites. In all 228 undeveloped acres have been identified on the Future Land Use Map in addition to those "pipeline" development projects described above. These planned areas could accommodate 713 new dwelling units at a base density of 4 units per acre and pipeline developments are expected to add another 130 detached dwelling units. The Township might also want to reduce the base density to 3 units per acre to incentivize the use of TDRs sent from the Agricultural Zone to achieve greater density and/or the preferred use of Traditional Neighborhood Design (TND) which will be discussed later in this Section.

The locations of these planned neighborhoods often follow the Township's extensive network of utility lines. Therefore the Township should require that all new developments make use of both public sewer and public water with the following minimum design standards:

SUITABLE DESIGN STANDARDS FOR THE SR ZONE								
Utilized Public Utilities	Lot Area	Lot Width at Building Setback Line	Maximum Lot Coverage	Minimum Yard Setbacks				Maximum Permitted Height
				Front	One Side	Both Sides	Rear	
Both Public Sewer & Water	10,000 sq. ft.	80-100 ft.	35%	35 ft.	15 ft.	30 ft.	35 ft.	35 ft.

Planning for residential growth involves more than merely assigning acres for development. Municipalities have a responsibility to provide for a wide range of housing types and costs. Development of the SR Zone exclusively for suburban-style single-family detached dwellings would continue the Township's sprawling development pattern that would consume valuable natural features and productive farmlands at an unnecessarily high rate.

Instead the goals for this Plan emphasize the need to cluster compact forms of residential development at higher densities with a wide range of "urban amenities" (e.g. sidewalks, porches, street trees, on-street parking and rear yard alleys with garages). Therefore ***it is recommended that the SR Zone include an optional set of "overlay" standards. These standards should adopt a "Traditional Neighborhood Design" (TND) philosophy that departs from the base suburban style.***

TNDs feature designs and characteristics that resemble communities more like the adjoining Boroughs, than sprawling suburbs. A mixture of housing unit types balances the community with diversity and interest. These communities are sweeping the nation as society recognizes the consumptive and dissociative aspects of suburban sprawl. Recent amendments to the Municipalities Planning Code specifically enable and encourage this new approach. This recommendation also directly responds to one of this Plan's stated goals:

"Promote cluster and TND development as a means of creating a more compact arrangement for future housing and as a means of defining open space around and on the perimeter of new neighborhoods."

In return, the Township will receive neighborhoods that feature a better integration of important natural and cultural features, more common open space, better pedestrian access and mobility, more diverse housing styles, and a setting that invites neighborliness and interaction.



The Preserves contain some neo-traditional design features that promote a pleasant compact neighborhood.

However, developers are often reluctant to undertake traditional neighborhood designs when they require special zoning reviews as conditional uses or special exceptions. They also resist strict prescribed design requirements that offer little flexibility. Consequently, very few contemporary examples of traditional neighborhood designs have been built within Central Pennsylvania; although that is changing. ***It is important that the local officials invite the use of traditional neighborhood designs through a variety of short-term and ongoing actions.***

First, as part of the development of new zoning policies local officials should participate in a joint workshop to develop a set of traditional neighborhood design regulations that meet their needs. This work should be undertaken with representatives from the staff along with the Township's development review advisors (engineers, attorneys and consultants). Suitable regulations should:

1. Require a “proper site planning process” and review early in the development review process that effectively incorporates and protects important natural and cultural features, and then provides an opportunity for the developers and the community to reach some agreement on the design priorities for the site;
2. Ensure a diversity of housing types, sizes, and costs, with particular emphasis on scattered-site, affordable housing opportunities at higher densities than that permitted under the base density of the respective Zone (e.g. of up to 6 units per acre);
3. Provide for interconnected and rectilinear narrow street and intersection designs with-on street and rear yard off-street parking, and abundant well-lit sidewalks to promote pedestrian mobility and safety;
4. Require the provision and efficient use of local infrastructure and services;
6. Reflect the historic and traditional building styles of the region;
7. Reserve and feature civic uses and open spaces as community focal points;

8. Invite regular and frequent social interaction among its inhabitants through reduced building setbacks and the use of front porches;
9. Blend all of these above-described features in a way that promotes community identification and a “sense-of-belonging” for the residents; and,
10. Provide for a set of requirements that achieves the preceding designs, yet allows enough flexibility for developer ingenuity and creativity, and applies a development review process that is streamlined and can be effectively managed by local officials and staff.

Once a draft ordinance is prepared, a series of local official training sessions to familiarize and seek feedback from would-be users of the ordinance should be conducted:

1. The first work session should be held for local staff, engineers, planning commissioners, and elected officials. Here, local officials need to be educated about the benefits of TND and trained on how they would administer the ordinance. Local officials should be shown with actual or hypothetical examples of how the ordinance is applied. Feedback during this process should be used to fine-tune the ordinance;
2. After local officials have had the chance to understand and refine the TND ordinance, another work session should invite review and comment from local developers. Local officials should emphasize their intent to “get serious” about TND as the preferred development form, and plainly explain that a higher standard of design is expected from all developers. Then, local officials should invite constructive review of the TND ordinance, to enable practical use by the developers. This will likely take several weeks as the developers study the ordinance and its consequences. Suggestions to streamline the review process should be incorporated, unless local officials fear a lack of control over the process and its outcome. Revisions to the design standards should be made when local officials are convinced that a better standard results; and,
3. Finally, a similar public education and awareness session should be held to explain the ordinance and its impact on respective neighborhoods. Local officials should promote the benefits of TND to citizens and homeowners groups. They should also candidly explain their intent to approve TND developments within the various neighborhoods, along with their higher densities. In this manner, local officials can forewarn would-be NIMBY opponents of the municipality’s commitment to this form of development, and invite constructive neighbor involvement during the review process. This display will also assure prospective developers that local officials would not allow NIMBY opponents to prevent approval of an otherwise preferred TND.

Once these meetings have been held and the Ordinance is adopted, the real work begins. Local staff and officials need to be ever-vigilant in their desire to promote TND within the community. Initial developer resistance is likely, and unless local officials turn-away substandard plans, their TND efforts will have been in vain. Developers who miss the mark should have their plans denied firmly and quickly. Conversely, developers who attempt TND designs should be welcomed and assisted in their development review process and approval. Over time, this will

“send the right message” to developers and citizens alike.

Finally, as the Township possesses no mobile home parks, it is recommended that this SR Zone be fitted with a mobile home park conditional use. The criteria for this use should offer sufficient density and dimension to ensure an efficient yet functional design that can be buffered from adjoining traditional neighborhoods.

Village Residential (VR) –

Historically much of the Township’s housing diversity has been anchored within the older neighborhoods of Midway and Pleasant View Villages. Within these areas, the traditional residential pattern of development must be reflected to continue and grow. Detached dwellings, side-by-side duplexes and conversion apartments are common. Most of these neighborhoods feature long and narrow lots with tightly-knit houses built close to the sidewalks and on-street/alley parking. There exists some diversity in density and lot dimensions throughout the Township; however, the grid street/block pattern generally creates uniform lot depths from one neighborhood to the next. Some rear yard garages upon narrow alleys also exist.



Typical streetscape within the Village of Midway with tightly-knit housing, sidewalks and on-street parking.

The Future Land Use Map depicts a total of about 5 acres of undeveloped land within this VR Zone which could produce up to 22 dwelling units at 6 units per acre. Within the Village of Midway such areas are exclusively provided as infill developments while in the Village of Pleasant View some village expansion is planned.

A few of the key community planning goals identified for this Plan emphasize the need to encourage the use of infill developments “to reinforce and add value to existing neighborhoods” “by minimizing ordinance restrictions to enhance the appeal of infill.” To encourage infill developments it is recommended that regulations for such developments be simple and practical. The following presents observed design standards within these areas that will afford efficient infill development that is consistent with adjoining uses:

SUITABLE DESIGN STANDARDS FOR THE VR ZONE								
Dwelling Unit Type	Lot Area	Lot Width at Building Setback Line	Maximum Lot Coverage	Minimum Yard Setbacks				Maximum Permitted Height
				Front*	One Side	Both Sides	Rear**	
Detached	4500 sq. ft.	25 ft.	20%	10 ft.	5 ft.	10 ft.	35 ft.	35 ft.
Duplex	3240 sq. ft.	18 ft.	25%	10 ft.	2 ft.	NA ft.	35 ft.	35 ft.

* Should be subject to adjustment based upon the prevailing setbacks of adjoining uses.
** Rear yard garages should be setback no less than 20 feet from adjoining alleys.

To accommodate logical change in these neighborhoods, zoning policies must align with the preceding design standards. This will enable residents to undertake projects that are consistent and compatible with nearby uses, without the need for variance and/or special exception applications and hearings. This will ease municipal workload and increase public acceptance of municipal practices and policies.

Accordingly, these standards represent common denominators that are at a higher density with smaller setbacks imposed than those found on some of the properties within these neighborhoods. **Hence the Township should include language within the VR Zone that specifically varies required setbacks (particularly in front yards) to reflect those found on the same block.** This will ensure compatibility on a block-by-block basis. **Building height is generally between 2 and 3 stories; this too should be reflected in design standards.**

Another issue that is commonly problematic within densely-developed neighborhoods relates to accessory uses. Accessory uses are structures or activities that are incidental to the primary use of a property. For example, a residential accessory structure could include a detached garage, swimming pool or satellite dish antenna. Similarly, a residential accessory activity could be a yard sale, the storage of a boat or trailer, or the repair of personal automobiles.

The impacts of accessory uses are more easily absorbed in rural or suburban areas where lot-to-lot separation is greater. Within the Villages, however, such separation is impossible and neighbors are more easily affected by another's activities and actions. **It is recommended that applicable residential accessory land use regulations be incorporated within the VR category; however, not to the point that they violate recently adopted amendments to the Municipalities Planning Code which authorizes widespread use of "home-based businesses."**

The VR Zones' central locations cause them to be linked with the Village Commercial and Mixed Use Zones within the Village of Midway. Consequently, these neighborhoods already include other nonresidential uses that contribute to the Township's small-town character. **These uses should be specifically accommodated. Civic uses, churches, schools, parks and playgrounds and limited day care facilities should all be permitted as they provide important services within these established neighborhoods. Signage associated with these other use should reflect a residential and pedestrian orientation.**

Existing neighborhoods within the VR Zone have conversion apartments interspersed with detached dwellings. **Conversion apartments provide opportunities for scattered site affordable housing that can be used as starter units for young families or empty-nest units for the elderly. These housing opportunities should be incorporated into the VR category; the following presents "typical" criteria imposed upon these uses:**

Section _____ Conversion Apartments

1. Within the (VR) Residential Zone, an existing single family detached dwelling with at least _____ square feet of habitable floor area that existed on the effective date of this ordinance may be converted into one (1) additional dwelling unit, subject to the following criteria:
2. The applicant shall furnish evidence that an approved system of water supply and sewage disposal will be utilized;
3. No modifications to the exterior of the building (except fire escapes) that would alter its residential character shall be permitted unless authorized by the Historic Architecture Review Board;
4. Each dwelling unit/use shall have at least 400 square feet of habitable floor area and a direct means of escape to ground level; and,
5. The applicant must provide for one (1) off-street parking space assigned to the proposed unit.

Multi-Family Residential (MFR) – Conewago Township is planned to experience

considerable growth of higher-density forms of housing. In the year 2000, the US Census reported that the Township contained 485 dwelling units that were not detached dwellings or just under 23 percent of the Township's total housing stock. In order to reflect national housing trends, to reduce suburban sprawl and to offer a variety of housing unit types and densities, the MFR Zone with its pipeline development projects has the potential to accommodate an additional 251 duplex, attached and multi-family units by the year 2020. The MFR Zone accommodates the Chapel Ridge II and Oak Hill Phases 1 & 2 pipeline development projects and provides for 22.8 acres which could accommodate 102 new units. It should also be noted that the types of housing units permitted within the VR Zone and the TND option under the SR Zone all provide for the opportunity for multi-family housing unit types.



Townhouses along Conewago Drive



Sunset Vista multi-family dwelling

Areas planned in this category largely acknowledge existing uses and the presence of public utilities. New MFR Zones are confined to one area adjoining Ram Drive and another located along the west side of Oxford Avenue just north of the McSherrystown Borough boundary. The locations of these Zones have been deliberately scattered to "spread" the traffic impact across several local traffic sheds. ***All areas are planned for public utility service and should be fitted with sidewalks and access to other nearby public facilities (eg. parks, churches, schools, post offices, etc.). The table on the following page presents recommended high-density residential design standards that should be applied to the MFR Zone.***

Another consideration with high-density housing relates to off-street parking. Generally, units with assigned off-street parking spaces yield higher values and likelihood for owner occupancy as opposed to rental occupancy. Consequently, municipalities have begun to offer design incentives for parking arrangements that foster these preferred arrangements. ***Local officials should carefully explore a range of parking schemes and shared driveways for the various housing unit types and determine if one or more schemes best fit the local demands and community development objectives.***

Like in the VR Zone, ***it is recommended that applicable residential accessory land use regulations be incorporated within the MFR Zone; however, not to the point that they violate recently adopted amendments to the Municipalities Planning Code which authorizes widespread use of “home-based businesses.”***

Like in the SR Zone, the Township should encourage the use of TND within the MFR Zone. Base densities permitted within the MFR Zone should be limited so that density bonuses can be provided when the preferred TND option is applied. Similarly, a reduced base density would also enable the receipt of TDRs from the Agricultural Zone to achieve greater density and assist in the permanent preservation of farmland.

Finally, this category should also regulate other specialized high-density residences such as assisted living, nursing, rest or retirement homes and campuses, and boarding houses. These uses often involve specific needs that compel special attention and review, either by special exception or conditional use.

SUGGESTED BASE DESIGN STANDARDS FOR THE MFR ZONE									
Use	Minimum Lot Area (sq ft.)	Maximum Permitted Height	Minimum Lot Width @ Setback/(Frontage)		Maximum Lot Coverage	Minimum Required Yards			
			Front	One Side		Both Sides	Rear		
Detached Dwelling	8,000	35 ft.	80 ft. (60 ft.)		40%	25 ft.	10 ft. ¹	20 ft.	15 ft.
Duplexes	3,500 per unit	35 ft.	35 ft. per unit (25 ft. per unit)		60%	25 ft.	10 ft.	N/A	15 ft.
Townhouses ²	2,400 per unit	35 ft.	24 ft. per unit (18 ft.) per unit		70%	25 ft.	15 ft.	(End Units)	20 ft.
Multiple-Family ³	1- 2 acres	35 ft.	200 ft. (200 ft.)		60%	35 ft.	30 ft.	60 ft.	35 ft.

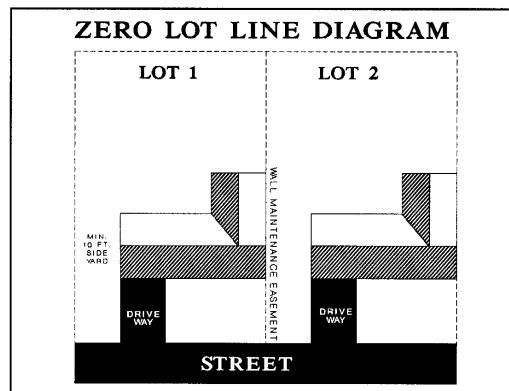
¹Within the MFR Zone, single-family detached dwellings may employ a zero-lot-line design when the following conditions have been satisfied:

- a. Minimum lot width shall be forty-five feet (45') and thirty-five feet (35') at the building setback and the lot frontage, respectively.
- b. One side wall of the structure may be located no less than one inch (1") from one of the side lot lines when adjoining another zero-lot-line dwelling lot. The opposite side yard shall be at least ten feet (10') wide.
- c. A perpetual six foot (6') wall-maintenance easement shall be provided on the lot adjacent to the zero-lot line, which shall be kept clear of structures and vegetation. This easement shall be shown on the plat and incorporated into each deed transferring title to the property. The wall shall be maintained in its original color and treatment, unless otherwise agreed to in writing by the two affected lot owners.
- d. Roof overhangs may penetrate the easement on the adjacent lot a maximum of twenty-four inches (24"), but the roof shall be so designed that water runoff from the dwelling place on the lot line is limited to the easement area.
- e. The wall of a dwelling located along the zero-lot-line shall have no openings (e.g., windows, doors, air conditioning units, vents, etc.), unless such openings are located at least eight feet (8') above grade, and have translucent panels.

²No townhouse building shall contain more than eight (8) units. For each townhouse building containing more than four (4) units, no more than sixty percent (60%) of such units shall have the same front yard setback; the minimum variation of setback shall be two feet (2'). In addition, no more than two (2) contiguous units shall have identical roof lines that generally parallel the ground along the same horizontal plane. All townhouse buildings shall be set back a minimum of fifteen feet (15') from any interior access drives, or parking facilities contained on commonly-held lands. All townhouse buildings shall be set back at least thirty feet (30') from any perimeter boundary of the development site. In those instances where several townhouse buildings are located on the same lot, the following footnote 3 shall apply.

³In those instances where several multiple-family dwelling buildings and/or townhouse buildings are located on the same lot, the following separation distances will be provided between each building:

- a. Front to front, rear to rear, or front to rear, parallel buildings shall have at least fifty feet (50') between faces of the building. If the front or rear faces are obliquely aligned, the above distances may be decreased by as much as ten feet (10') at one end if increased by similar or greater distance at the other end.
- b. A minimum yard space of thirty feet (30') is required between end walls of buildings. If the buildings are at right angles to each other, the distance between the corners of the end walls of the building may be reduced to a minimum of twenty feet (20').
- c. A minimum yard space of thirty feet (30') is required between end walls and front or rear faces of buildings.
- d. All multiple-family dwelling buildings shall be set back a minimum of fifteen feet (15') from any interior access drives or parking facilities contained on commonly-held lands.



D. MIXED USE (MU)

Conewago Township's location along several older travel routes and nearby Boroughs has caused its settlement pattern to change over time. What were once acceptable locations for residential development are now less desirable due to increased traffic and its attendant impacts. Third Street (PA Route 116) is an important historic highway that links Hanover Borough to Conewago Township and beyond. Hanover Borough has served as the central business district for this locale. But just beyond this commercial core are homes that line this road.

As society has grown and become more mobile, demand for even more commercial services increased along this road. However, the tightly knit neighborhoods that have developed here leave little room for commercial expansion, except within the existing homes along the highway. With even more growth and mobility came traffic congestion and the impacts of traffic streams along the highways. All of these factors combined to promote the conversion of the older homes into other uses, besides detached dwellings.

Over time, some of these former homes have been converted into small retail, business and office uses, and/or conversion apartment units. In addition, some smaller sites that were once vacant, have now been occupied by small commercial buildings. This conversion has occurred because of the high volume of traffic that uses the road and provides a captive market to small businesses.



A Mixed Use Zone along 3rd Street will facilitate adaptive reuse of homes along this busy street while protecting the predominate residential character.

Recognizing these factors, the Plan recommends a Mixed Use Zone along this corridor. However, it is vital that existing single-family residence clusters be preserved in their midst. To enhance compatibility within this Zone, it is recommended that the MU Zone permit residences by right under the same terms as the VR Zone. However, this area should also allow permit the adaptation of existing buildings for non-residential use.

Specifically, limited businesses, services, offices and conversion apartments should be permitted by special exception or conditional use. Uses should be limited in size and scale and should be tied with the ready pedestrian access afforded by the existing sidewalks. Any proposed access drives along Third Street should be limited to one or two lanes only so as not to conflict with safe pedestrian travel.

Nonresidential land uses should be subject to specifically established and strictly applied design standards for lot coverage, landscaping/screening, signage, outdoor

storage and pedestrian access. Also, ***this Zone should provide a deliberate disincentive for the razing of existing buildings*** to accommodate more contemporary commercial building styles (eg. 1-story block buildings with flat roofs) that would be incongruous with the prevailing residential development pattern. ***Signage associated with these other use should reflect a residential and pedestrian orientation.***

On the other hand, setbacks, parking, loading and driveway access conditions should be subject to site plan review, in the hopes that several adjoining properties can become integrated. Such integration will help to reduce traffic congestion, while allowing for reasonable land use along these corridors.

The adaptation of mixed-use neighborhoods does not occur rapidly or without controversy. Nonetheless, if the Township is committed to preserving its small-town qualities, this Zone can provide for limited and practical adaptive reuse of its residential housing stock that acknowledges the impacts of the adjoining roads without succumbing to wholesale strip commercial development. This effort will also improve traffic flow along this route by reducing conflicting traffic movements.

Finally, depending upon the commitment to preserve this corridor's historic character, the Township could target these areas for a local historical district to preserve significant historical resources. This would require the creation of a Historical Architecture Review Board (HARB) and would be subject to the rules described in Commonwealth of Pennsylvania Act 167 (1961), as amended. This program could help to significantly protect the "small-town" charm exhibited in the older structures.

E. COMMERCIAL (VC & HC)

Within the Conewago Township there are three separate areas of proposed Commercial Zoning. The first is located in the Village of Midway straddling West Elm Avenue and along Third Street and Oxford Avenue. Next is the existing shopping center located in the northwest quadrant of the intersection of Centennial and Hanover Roads. Last is a large commercial area generally north of Radio Road along both High Street and the Carlisle Pike.

Village Commercial (VC) – Like Third Street as described above in the MU Zone, West Elm Avenue is another older street that has radiated out of Hanover Borough into Conewago Township. Here a greater concentration of residences has been replaced and/or converted with nonresidential purposes. Several of these newer redevelopments have assembled parcels to create attractive and functional strip commercial shopping centers. ***This is the perfect response for this corridor and the Township should continue and refine its commercial development policies to further encourage similar redevelopments.***

First, the Township should be selective in the uses allowed in the VC Zone to be pedestrian-friendly and at a proper scale. This will allow for confident reinvestment as owners will be assured of a pleasant and intimate setting that is free of more intensive and objectionable uses. This does not suggest that customers will suddenly stop visiting the area via automobile, but that "potential" uses should be ones that can serve pedestrians equally well. Such uses would have the added benefit of not requiring the frequent delivery of merchandise via large tractor-trailers, in an area lacking adequate off-street loading

space. Examples of suitable uses include:

card, book, magazine, newspaper, music, and video shops; specialty food stores; bakeries; delicatessens; wine shops; clothing boutiques; barber and beauty salons, sporting goods and musical instrument shops; drug, tobacco, hardware, and 5 and 10 cent stores; restaurants, taverns, ice cream parlors, and outdoor cafes; bed and breakfasts; photographic, art and dance studios; offices; photocopy and office supplies; computer and software sales; arcades and movie theaters; tailors; laundromats and dry cleaning drop-off stations; flower shops; jewelry, watch and small appliance sales and repair; corner grocery stores, including outdoor display, etc. In addition, various civic uses like churches, cemeteries and post offices are also appropriate.

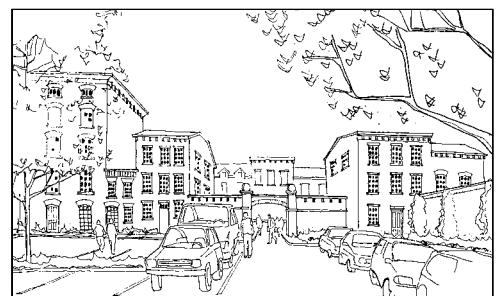
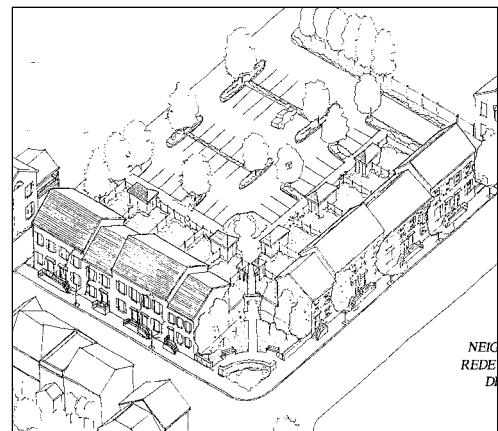
Overall retail size per store should be limited, so as not to exceed its local orientation, this is not the right place for big-box stores but rather small local goods and services. The development of multi-shop arcades or small strip shopping centers should be encouraged.

In addition, some communities permit residences on upper floors for those persons who can benefit from proximity to nearby goods and services and/or cannot afford their own residence. ***However, it is recommended that the upper level apartments be permitted only as accessory to the principal commercial uses of street level floor space so that*** property owners don't convert their entire buildings into apartments. In this manner commercial potential is sustained and residential parking demands would largely occur in the evening after businesses have closed.

The Township could offer some relief from the off-street parking requirements for properties that clearly promote pedestrian use by incorporating streetscape amenities, such as signs, canopies, benches, light poles, and on-street parking. ***All commercial signs should be limited to reflect their pedestrian orientation.***

Zoning requirements could also prohibit the placement of off-street parking and/or loading within the front yard, in favor of sidewalk "build-to" lines with outdoor cafes and limited outdoor display bins. Other outdoor storage areas should be prohibited to enhance site-to-site compatibility. Common rear yard parking lots with connecting walkways reflect the most contemporary commercial designs enhancing the vitality of the streetscape. The following drawings illustrate this innovative concept.

To efficiently use this space, several adjoining rear yards would need to be assembled and developed together. The Zoning Ordinance should allow for, and even encourage, such an arrangement by waiving parking setbacks and enabling shared vehicular access drives. Then, landscape screening should be applied along the alley to protect adjoining residential properties located on the other side of the alley and/or street.



Ground-level view of mid-block walkway from common parking lot toward Street.

Pedestrian access from the parking lots to the downtown streetscape should be provided by at least one mid-block landscaped walkway. Such walkways should be well lighted for safe nighttime passage and security. They should also reflect the desirable amenities of the downtown streetscape (landscaping, benches, old-style light fixtures, archways, modest directional signage, waste receptacles, etc.).

The VC Zone's streetscapes are functional and attractive at some locations but not so at others. Some beautification would promote a cohesive and coordinated sense-of-place.

The Township should consider streetscape beautification projects that would provide for uniform and ADA-compliant sidewalk designs, street and directional signs, historic lighting fixtures, standard benches, tree grates and trash receptacles. The staff should constantly monitor grant monies that would be available for such projects.

The Home Town Streets and Safe Routes to School Program (HTS/SR2S) is a Federal reimbursement program established with the intent of improving downtown and commercial center streetscapes and providing physical improvements that promote safe walking and biking passages to our schools. Typical improvements provided by this program include sidewalk improvements, street lighting, crosswalks, bicycle amenities, signage, curb extensions and some traffic calming projects among others. Additional information about the program can be found at the Adams County Office of Planning and Development and at the following website:

<ftp://ftp.dot.state.pa.us/public/Bureaus/Cpdm/WEB/HTS%20-%20SR2S-TE-2005-06.pdf>

To promote revitalization, local officials also need to advertise their willingness to work with local entrepreneurs to achieve the right type of development. Too often, would-be proprietors are afraid of the development review process and the local opposition that can emerge. Local officials should emphasize their willingness to cooperate and work through any specific difficulties that jeopardize reinvestment. This is not to say that they should approve every request, but the local business community should feel as though they have an ally in the review process when the right type of use is proposed. This will require an ongoing demonstration of this commitment. Over time, local entrepreneurs will come to trust the Township officials and feel free to exercise their creativity and entrepreneurial spirit through reinvestment to the benefit of the community and Township.

Township Officials should challenge and energize the local business owners associations to oversee and nurture these areas through various programs and activities. This group should be vigilant in their advocacy for these areas at all times, and keep the local officials' and public's attention squarely on its needs over the "long haul." This should be accomplished as a short-term activity that will lead to an ongoing process of improvement.

Many commuters travel along West Elm Street each day. **It is recommended that local businesses provide goods and services that target these daily commuters.** Convenience goods and services and breakfast and supper-time menus can create new customers, and intercept others who may look for similar services on their way to and from work or school. **Also, regularly scheduled weeknight business hours (eg. Wednesday nights) or special events (Friday night bazaars or concerts) can enliven this area as an activity center and distinctive destination.**

Any proposed access drives should be limited to one or two lanes only so as not to conflict with safe pedestrian travel and drive-thru lanes should not be permitted separate direct access onto adjoining roads.



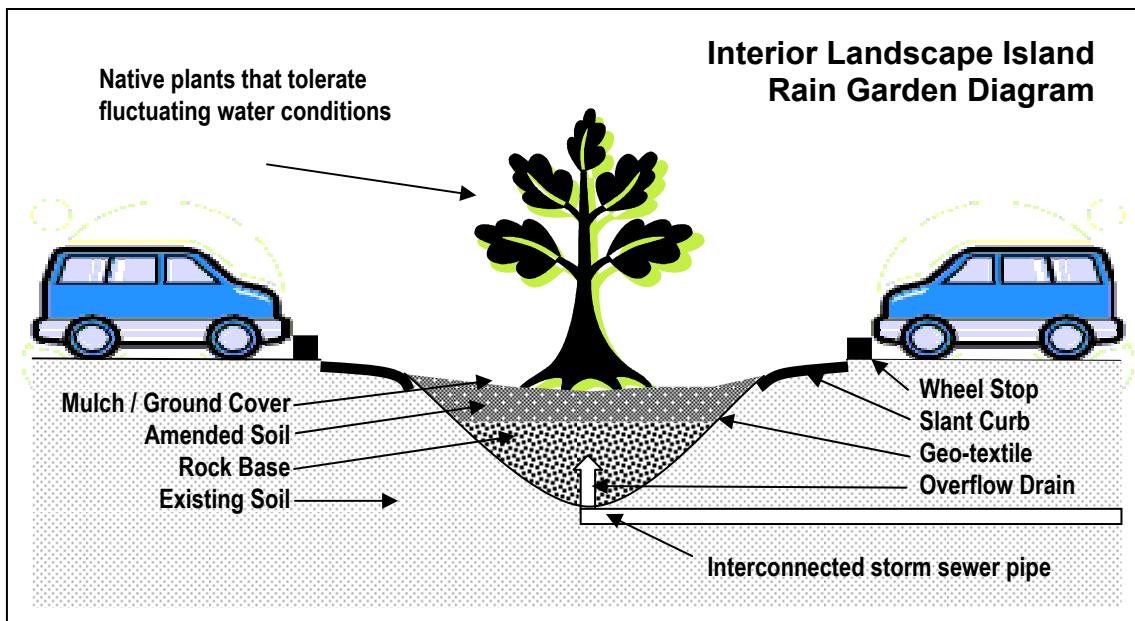
Township Officials should continue and refine its commercial development policies to promote new integrated shopping centers along West Elm Avenue like the recently developed Linden Mill Center.

Zoning design standards should promote shared use of access drives, and off-street parking and loading spaces. Outdoor storage should be prohibited in most cases and, if allowed, effectively screened from adjoining roads and residences; this will be particularly important for those uses located along the south side of West Elm Avenue that abut existing residential neighborhoods.

Highway Commercial (HC) - Unlike many other areas within Central Pennsylvania, Conewago Township has a relative lack of strip highway commercial development. While strip commerce clearly serves Township residents, it is mostly located in Hanover Borough. In any event the Township has two developing commercial areas that are characterized with Highway Commercial Zone features and locations. The first is the combination grocery and variety store located just west of McSherrystown Borough within a small shopping center. It would appear that a branch bank is under development as a freestanding pad site. This site features shared access, loading, parking, stormwater management and signage.

This site could benefit from increased landscape materials to define travel lanes, reduce thermal pollution and soften the appearance of the expansive parking lot. While this site is largely developed ***the Township should consider strengthening its landscaping strip and internal landscape island requirements. Then as new uses seek occupancy over time, the shopping center should be required to gain gradual compliance.***

One more recent approach to interior landscaping are called rain gardens. These small and scattered landscape islands act as stormwater management collection basins that promote stormwater regeneration at various locations across the site. They essentially serve multiple functions of landscaping and stormwater management at the same time. During periods of excessive stormwater runoff, these rain gardens have overflow drains that interconnect with the overall stormwater management system. The following illustrates some of the elements of a rain garden landscape island:



The second concentration of recently developed commerce exists straddling High Street in the northeast corner of the Township. In this vicinity retail uses appear to be premised upon nearby Carlisle Pike in York County. Here can be found auto dealerships, an archery center, health clinic, music store, bank, hobby shop, day care, lighting store, as well as several strip centers with a print shop, glass and mirror shops a notary, salon, chiropractor, mortgage office, tanning salon, credit union, learning center and physical therapist. This area tends to feature higher site design with most contemporary amenities; however, landscape strips and islands lack trees and shrubs.

Again the Township should strengthen its landscaping requirements. Because the Township must accommodate every conceivable land use, this HC Zone should provide for a wide range of commercial uses and activities. ***Specific zoning regulations should be developed to respond to those uses that pose specific concern (e.g. adult uses, fast-food restaurants, nightclubs, casinos and etc.) and then engage a deliberate and careful special exception or conditional use zoning review process.***

Furthermore, general zoning regulations applied to all uses should seek to confine impacts to respective development sites. Regulations governing off-street parking lots, off-street loading spaces, access drives, signs, noise, lighting, outdoor storage, waste storage and operations and performance should all be kept to community standards and then vigorously applied.

Another recent trend in both commercial and industrial land use relates to required building height. So many of today's standard commercial developers produce single-story big box stores with massive at grade parking lots. This practice is the result of an ability to secure land at relatively low cost and the community's legal mandate to keep a ready supply of such developable commercial zoning.

Some municipalities have grown tired of this consumptive practice and now require large-scale developers to build multi-story buildings and garages. Given Conewago Township's limited commercial land area, it should strongly consider this new approach. What once might have take 15 or 20 acres to construct can now be accomplished upon half or even less than that. Consider the following illustration.

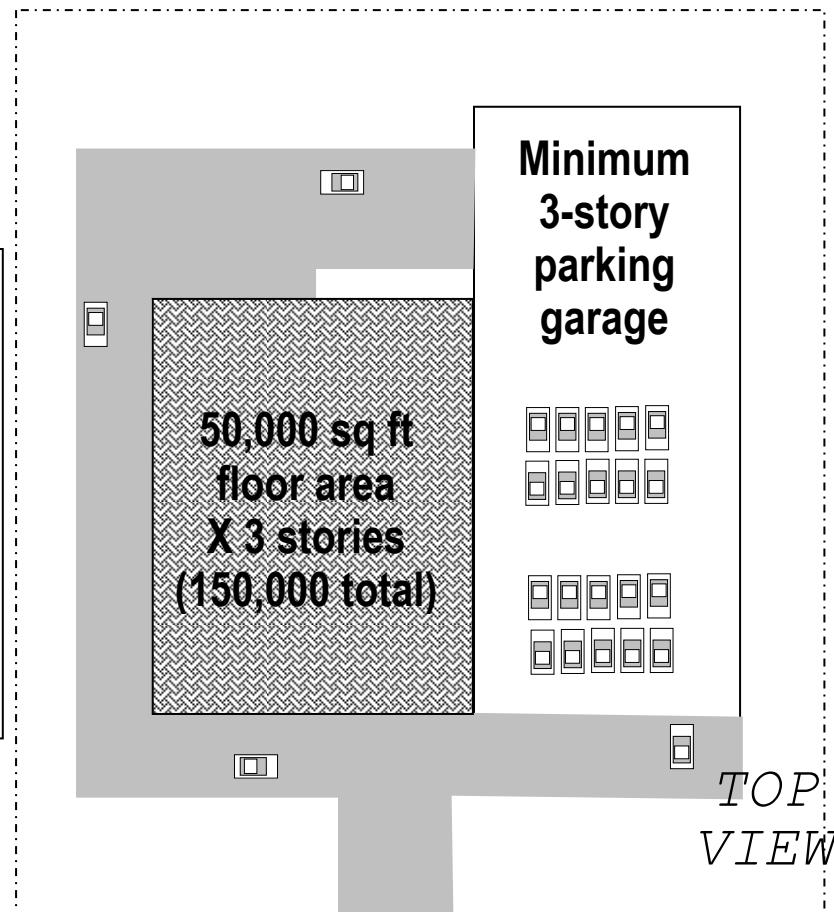
MAXI-MART (150,000+ square feet)

RothPlan

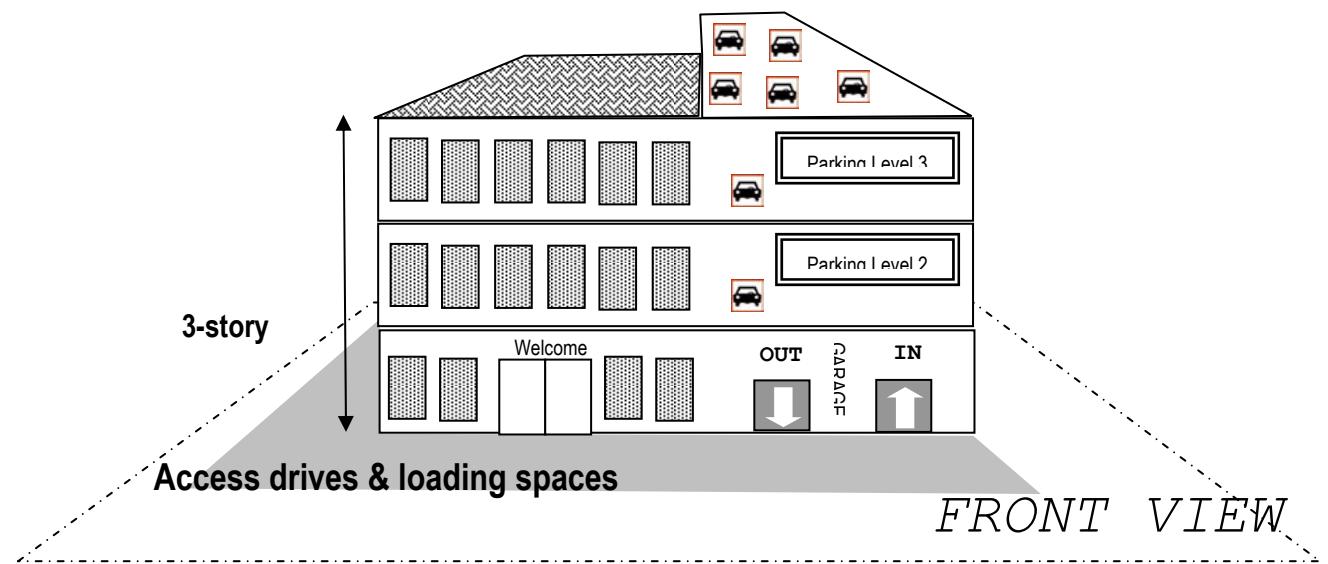
COMMENT:

This size use requires a 3-story building and parking garage thereby reducing:

- lot area (14 to 8 ac)
- lot coverage (75 to 65%) even with increased setbacks.



TOP
VIEW



By imposing mandatory multi-story design, the Township can require commercial lands be used efficiently. Some municipalities use 60,000 square feet (size of local grocery store) as the threshold above which mandatory multi-story design is required. Still others have multiple thresholds where increasing sizes require greater use of multi-story design.

The HC Zones have been sized and configured to allow for coordinated developments and shopping centers that share access drives, off-street parking and loading, signs and stormwater management facilities. Since many of the uses already in place have developed without these shared features, it will take time for this site coordination to spread throughout the area. ***Lot coverage requirements should be applied to manage overall development intensity and offer sufficient room for natural stormwater management facilities, landscape strips and interior landscaping. Moreover, the Township could offer a slight lot coverage density bonus for the use of TDRs from the Agricultural Zone.***

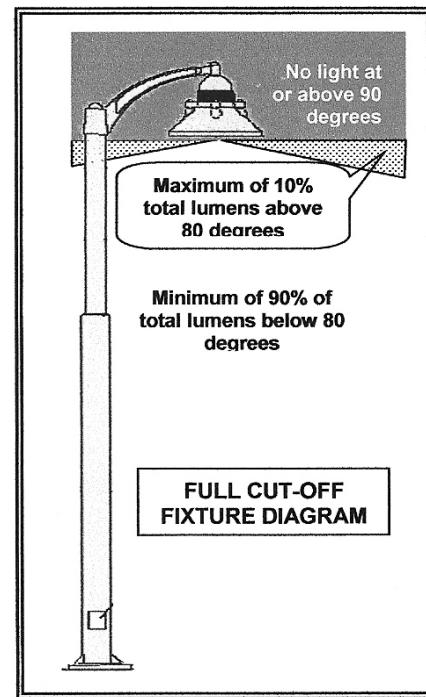
The Township should adjust its zoning regulations that require and/or strongly encourage shared development features. This can be done by limiting access drive locations, waiving setbacks for shared features, providing lot coverage bonuses and other design incentives for shared features. Next local officials must be vigilant in communicating to prospective developers the Township's desire for these coordinated designs as existing businesses seek to change and new ones emerge. These changes should help to improve the function and appearance of adjoining roads including those that act as gateways to the Township and adjoining Boroughs.

Beyond these shared features, other contemporary design features should also be used. First, the use of front yard landscape strips should be required along the road. ***These strips will help to define road/site travel lanes and soften the appearance of the roadside and offer shade for pedestrians.*** A minimum 10-foot wide landscape strip should be required, along with ornamental shade trees and sidewalks.

Off-street loading spaces and outdoor storage areas (exclusive of outdoor sales) should be screened from the roads and adjoining properties.

Sign standards should reflect the vehicle-oriented customers of the area, but should produce signs that are informative without being loud and obtrusive. It is important that signs be large enough so that motorists can easily read them at prevailing speed limits. The number of signs should be limited so that they do not compete for driver's attention, and the use of coordinated signage is encouraged. ***Dynamic message display signs should be carefully regulated so as not to permit any device that distracts motorists.***

On-site lighting of buildings and surrounding areas should employ hooded or screened fixtures that confine glare to the site, and security lighting should be directed toward the building, rather than



the area around it. Security lighting levels should be established to enable the detection of suspicious movement, rather than the recognition of definitive detail.

Public address systems used in external areas should be designed to keep audible impact at ambient levels.

Finally, it is noted that a number of scattered highway-oriented businesses exist throughout the Township. The absence of these uses within the planned Highway Commercial area reflects a vision of the future for the Township where such uses are confined to areas served by public utilities and services. Some of these scattered businesses could be permitted within their respective areas (e.g. Agriculture) as they would be logical uses within those contexts. For example, a country inn or bed & breakfast is an appropriate use within the Agricultural Zone. Similarly, a nursery and garden center can also be justified within an Agricultural Zone. Conversely, many of these uses are not consistent with rural settings unless they are limited in scale as accessory occupations (home, rural and farm occupations). In such cases these uses should be regulated as nonconforming uses.

F. INDUSTRIAL (I & Q) (Industrial, & Quarry/Mining)

Industrial Zone – The Township has an abundance of industry. Overall the Township has five sizable industrial areas. The largest single use is the Conewago Enterprises site located between the Village of Edgegrove and the Hanover Quarry in the northwest corner of the Township. Next several larger industries and smaller uses can be found along Kindig Road and extending north along High Street. North of McSherrystown Borough is a small node of industry straddling Church Street. South of the Preserves along Ram Drive, is another concentration of industry. The final industrial node is located straddling Bletner Street along the Township east central border with Hanover Borough.

During the field survey conducted to prepare the Existing Land Use Inventory in Chapter V of this Plan, it was noted that most of the existing industries should be retro-fitted with improved screening and landscaping. Of particular concern is the need to screen outdoor storage areas from adjoining roads, residences and properties.



Screening should be added for the outdoor storage areas for industry along Ram Drive

It is important to note that limited rural and farm occupations that were observed to be accessory to a principal form or rural residence were not included within this land use category. Instead, these accessory businesses were classified with the principal land use (e.g. farm or residence).

The Industrial Zone is suitable for a wide range of industrial activities that contribute to the well-being of the Township by diversifying its economy and providing valuable employment opportunities. **Zoning should allow for small, start-up business and light industry as permitted uses. However, more intensive uses (listed below) should require the obtainment of a conditional use:**

- Billboards;
- Heavy equipment sales, service and repair, such as excavation machinery, farm equipment, commercial trucks, buses, mobile homes, trailers, and other similar machinery;
- Truck or motor freight terminals;
- Warehousing and wholesale trade establishments;
- Adult-related uses;
- Junkyards;
- Quarries and mines;
- Sawmills;
- Septage and spent mushroom compost processing;
- Slaughtering, processing, rendering, and packaging operations;
- Solid waste disposal, and processing facilities; and,
- Any other industrial activity that presents adverse impact to surrounding areas.

Trailer storage should be screened from homes across Filbert Street



By requiring a conditional use review local officials realize the following benefits:

- (1) require the developer to fully explain the nature of the proposed uses;
- (2) give local citizens the opportunity to express support or concern over the use;
- (3) application of specific criteria aimed at minimizing adverse impact to the community and adjoining properties;
- (4) provide the Township time to engage professional review assistance of the use and its expected impacts; and,
- (5) allow local officials to attach reasonable conditions of approval to mitigate any negative effects of the use.

Regulations should also limit the number of driveway cuts and freestanding signs, and manage outdoor storage, off-street loading and parking. **Design standards should encourage functional, yet attractive, sites when viewed from adjoining properties and**

roads. This involves required landscaping, screening and buffering, and dumpster storage standards.

Lot coverage requirements should be applied to manage overall development intensity and offer sufficient room for natural stormwater management facilities, landscape strips and interior landscaping. Moreover, the Township could offer a slight lot coverage density bonus for the use of TDRs from the Agricultural Zone.

Additionally, prospective industries should demonstrate compliance with all applicable Federal and State operations standards. As described the Township should strengthen its noise and lighting standards to ensure compatibility from one site to the next.

Quarries and Mining - As reported in Chapter V (Existing Land Use) within the extreme northern reach of the Township lies the Hanover Quarry. This massive deep pit operation affords valuable needed building materials locally and offers products that support a variety of industries within the Township and beyond.



Conewago Industries produces pre-cast concrete from materials mined at the adjoining Hanover Quarry.

There appears to be some confusion about whether or not the Quarry is actually located within Conewago Township. This confusion stems from the fact that the Township's adjoining boundary was based upon an historic alignment of the unnamed tributary to the South Branch of the Conewago Creek. The massive excavation that has taken place here has caused this natural watercourse to be diverted to a man-made concrete swale which shifts the original flow further south. In any event, the basemap for this project relies upon the GIS plotting of the historic watercourse and therefore depicts portions of the quarry within the Township. The quarry has provided considerable buffering, screening and berthing which protects adjoining areas within the Township from immediate impacts.

Although no new areas are planned, the Township must regulate ongoing operations and their subsequent reclamation. Because of their intensive operations, and potentially detrimental impacts, quarry and mining operations are usually highly controversial.

For this purpose a new Quarry Zone is recommended. This new zone should permit agricultural uses, public uses and utilities, and parks and recreation by right; quarries, mines and processing and/or recycling of mineral materials and solid waste disposal sites should be allowed only through the obtainment of a conditional use. Conditional uses should be strictly regulated with numerous specific use criteria that consider their grave impact on nearby neighborhoods, roads, and the environment.

Finally, all quarrying should be required to at all times demonstrate compliance with the Pennsylvania Noncoal Surface Mining Conservation and Reclamation Act (as may be amended). As part of compliance with this State Act, quarry owners are required to propose a reclamation land use once quarrying operations cease. Local officials should carefully scrutinize such reclamation uses to determine their suitability with long-range comprehensive planning for that locale.

As stated above, this plan only recommends the existing quarry location. Should this use require expansion or a new use be proposed, local officials can scrutinize potential locations via a rezoning hearing process. At the same time, they can review an accompanying conditional use application, thereby streamlining the development approval process.

G. PUBLIC / PRIVATE PARK / PUBLIC PARK / AIRPORT

As reported in Chapter V (Existing Land Use) the Township's public and nonprofit uses have been depicted as they exist to assist in user orientation of the Future Land Use Map. Since zoning regulations that would limit uses to ones of a public nature would be considered confiscatory, it is not recommended that the Township adopt public use zones. ***Rather, these public and quasi-public uses should be permitted within their respective zones as they occur throughout the Township and are depicted on the Future Land Use Map.***