

PINE TOWNSHIP PLANNING COMMISSION
Crawford County , Pennsylvania

November 1994

Mr. James R. Stewart, Chairman
Pine Township Supervisors
c/o Ione Davis, Secretary
R.D. #2, Box 19
Linesville, Pa. 16424

Dear Ione,

Our Planning Commission, working with the Crawford County Planning Office, has completed a revised comprehensive plan for our Township, and we submit it to your Board for review. This plan was made possible through the use of a Small Communities Planning Assistance Program grant made available to us by the Pennsylvania Department of Community Affairs and specifically by the Erie Regional Office of DCA.

Our Commission will hold a public meeting, pursuant to public notice, on this plan after which it will be placed into your hands. Upon your receipt of this plan you should hold a public hearing, also pursuant to a public notice. After you have considered the results of the public hearing, we request that you adopt this plan (or the plan modified) by resolution. This plan will become the basis for proposed revisions to the Township's zoning ordinance, and it should have many other uses for the Township.

Our Commission thanks the Township Supervisors for the support you have given to this extensive effort. The Commission also thanks DCA and the County Planning Office for all of its help in accomplishing this task.

Sincerely,

Lloyd Gillette
President

TABLE OF CONTENTS

I. INTRODUCTION	1
II. BACKGROUND INFORMATION	
The Existing Land Use Of Land	3
Physical Characteristics Of Pine Township	8
Topography	8
Suitability Of Soils, For On-Lot Sewage	8
Groundwater Resources	12
Class I & II Agricultural Soils	16
Lands Subject To Flooding	16
Lands Classified As Wetlands	17
Transportation: The Road Network	19
Community Facilities & Services	26
Study Of Sanitary Sewer & Water Supply Options	31
Housing In The Township	34
Attitude Survey	38
Socio Economic Characteristics	39
Population Data, Population Forecast	44
The Township Fiscal Affairs	47
Regional Context	49
Planning Issues	50
III. THE PLAN	52
Preliminary Remarks	53
Plan Objectives	53
Policies, Projects, Programs	55
Concluding Remarks	57

MAP EXHIBITS

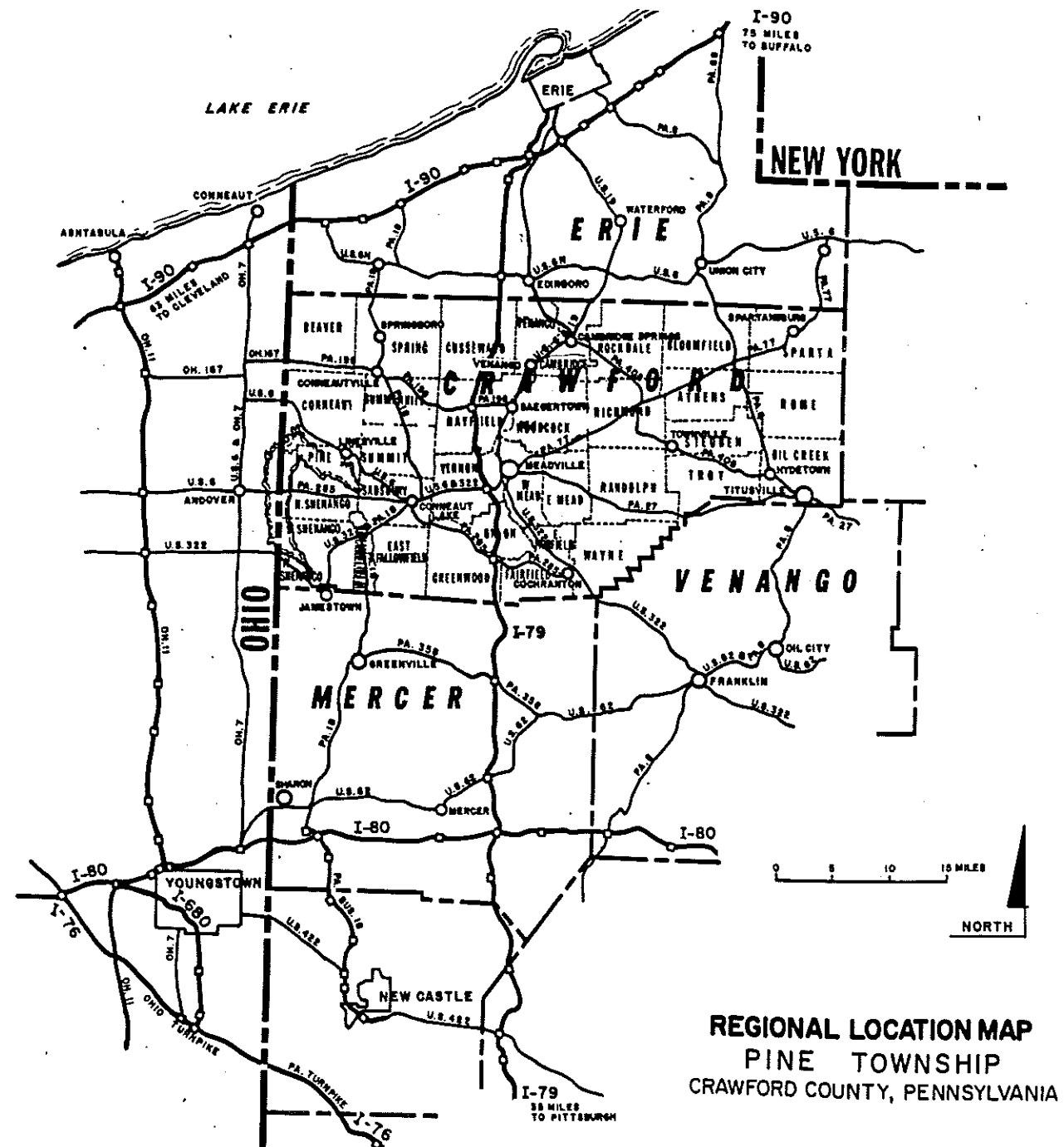
Location Map	1
Existing Land Use	5
Suitability Of Soils - On-lot Sewage	10
Location Of Glacial Outwash	11
Cross-Section Showing Bedrocks	14
Showing Cussewago Sandstone	15
Map Of Wetland Areas	18
Official Highway Classification Map #1	21
Official Highway Classification Map #2	22
Roads By Ownership & Surface Map #1	23
Roads By Ownership & Surface Map #2	24
Map Showing Community Facilities	28
Land Use Plan	54
Attitude Survey Form (Pocket inside rear cover)	58

I. INTRODUCTION

Geographically, in Crawford County, Pine Township clearly has one distinction: It is the smallest township in terms of land mass! There are four townships in the county with less than 10,000 acres:

West Shenango	6,170 acres
West Fallowfield	7,644 acres
Pine	7,831 acres
Union	9,836 acres

However, a glance at the location map provided as an insert on this page shows that about 50% of Pine Township is covered by the waters of the Pymatuning Reservoir. As the location map demonstrates the township is close to the State of Ohio; it surrounds Linesville Borough; and it forms some of the most interesting shoreline with the Reservoir.



In 1990 the township's population was counted at 455 persons. What it lacks in numbers it provides in a citizenry which is concerned about the form, shape and development of its physical community and the human services and social activities which are part of a community. This concern is evident in the formation of a township planning commission which has met faithfully for 2½ years, at whose meetings there are also interested citizens and township supervisors. The immediate mission of the planning commission is the writing (and delineating) of a revised comprehensive plan and the development of revised zoning and subdivision ordinances.

A comprehensive plan is a reflective document. It develops facts and background information on the township; it identifies and discusses issues which in some cases are problems and in other cases are opportunities; it then should set forth, broadly, township objectives and penetrating further, and being reflective, it needs to establish as best it can policies concerning the growth and development of Pine Township which will be translated into specific projects and programs (which are listed in the plan) that can command consensus and be acted upon now and in the flow of years to follow.

Out of the interaction of a professional community planner and the Pine Township Planning Commission through its scheduled monthly meetings (included the interested citizens and public officials which also attended these meetings) this planning report was created. Discussions about life in the township were normally candid. The meetings were friendly; there was always good will and congeniality present. It is the hope of the writer of this plan that it reflects the spirit of those meetings and that it is truly useful to the people of Pine Township in providing them fuller and richer lives.

THE EXISTING USE OF LAND

LAND USE CATEGORIES

Mapping all of the various uses of land in a community is an arduous but always a significant task in community planning. We must know how land is used, and we need to know the amount of land devoted to the various land uses. Recording and mapping existing land use was begun in the summer of 1992 and completed in the summer of 1993. We first set forth the data gathered, and we shall follow up with some observations about existing land use. Except for three residential subdivisions existing land use is mapped at a scale of 1" equals 1000'.

The categories of land use which were used in Pine Township are listed and defined as follows:

Woodland and Brush. Land which is substantially wooded or fields no longer being used for agricultural purposes and which are supporting infant, immature, tree stands.

Agriculture. Land utilized for present or recent food crop production and/or pastureland.

Residential. Dwelling units which accommodate a single family in a conventionally constructed residence; this includes, of course, a residence which is part of a farm complex, and it includes mobile homes and recreational vehicles which are established on the site. Generally, in the mapping, a single family dwelling is assigned a area of 2 acres. However, where the lot on which the residence stands is less than 5 acres, the entire lot is shown as residential land use.

Mobile Home Residential. Because of the many mobile homes (housing transported to the lot on a chassis and appearing as a housing unit no wider than 14 feet) in the township this residential sub-type is counted separately in the housing discussion.

Multifamily Residential. Housing where there are two or more dwelling units in a structure.

Commercial. A use of the land for retail and/or service business use; this category does not include manufacturing activity.

Mixed Residential and Commercial. Includes uses which combine residential and commercial activities.

Industrial. Goods producing (manufacturing) activities.

Public (Pymatuning State Park). All of the land within the boundaries of the park in Pine Township. This includes land occupied by the Pennsylvania Fish and Game Commissions and by the Univeristy of Pittsburgh. Also uses which derive from government and its obligations to the citizenry.

Semi Public. Uses which are partially public and/or institutional in nature such as churches, cemeteries, public utilities, etc.

Vacant Subdivided Lots. Property which has been recorded as lots in a land subdivision but which does not, currently, host structures.

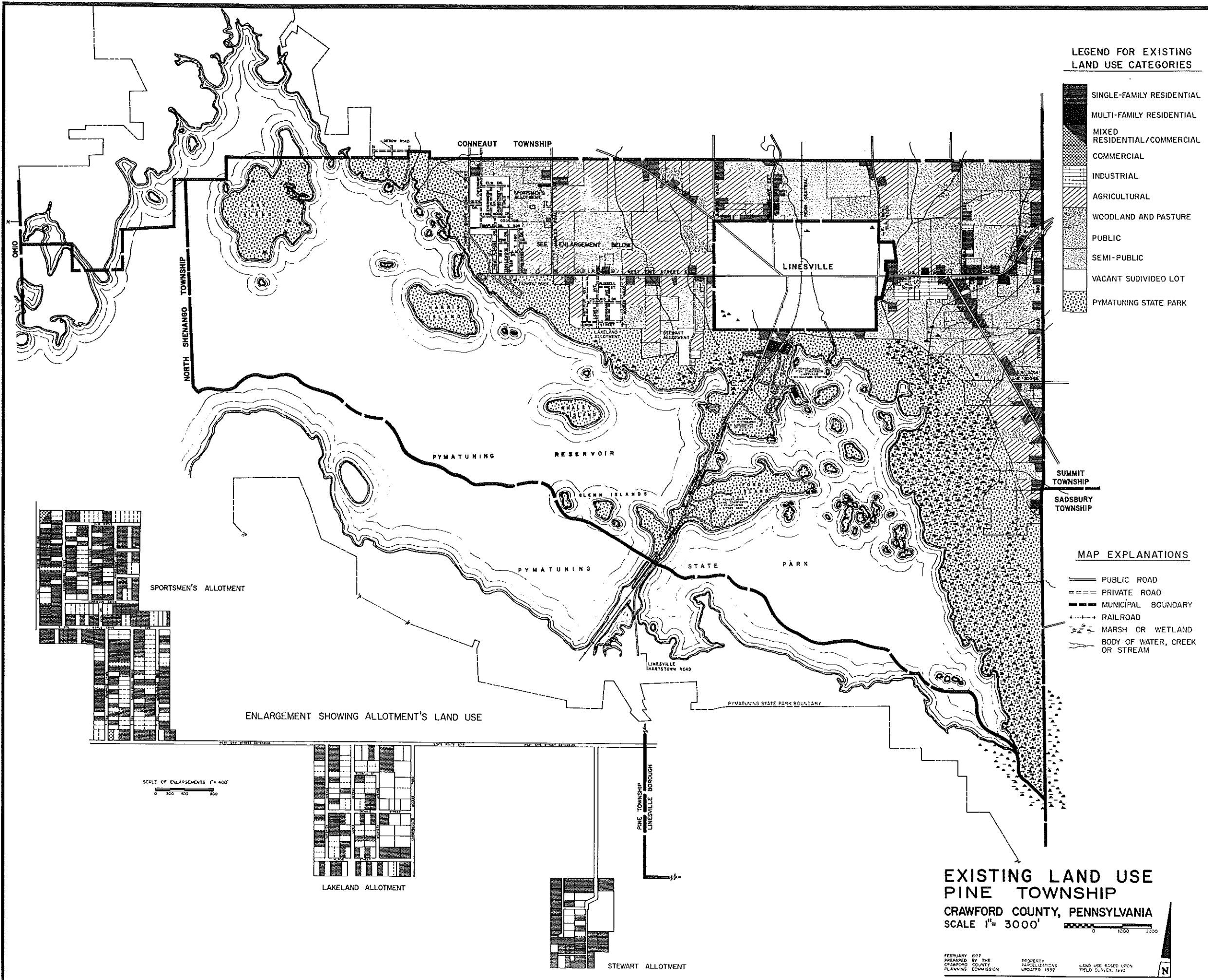
Roads. All roads shown on the township base map whether they be public, private or unbuilt roads.

Following is a table showing land use statistics (accounts).

EXISTING LAND USE ACCOUNTS: 1992-93
PINE TOWNSHIP

Use Categories ⁽¹⁾	Acres	Percent Of Total
Woodland and Brush ⁽²⁾	1,058	25.6
Agriculture ⁽²⁾	688	16.6
Residential ⁽³⁾	192	5.0
Mobile Home Residential	70	1.7
Multifamily Residential	11	0.3
Commercial	4	0.1
Mixed Residential and Commercial	5	0.1
Industrial	27	0.6
Public (Pymatuning State Park)	1,949	47.0
Semipublic	7	0.2
Vacant Subdivided Lots	11	0.3
Roads ⁽⁴⁾	<u>100</u>	<u>2.5</u>
Totals	4,122	100.0%

- Notes: (1) No water areas are made a part of this accounting.
- (2) This land use category was determined from aerial survey information. The aerial survey dates from 1982.
- (3) Where a residence was located on a property of approximately 5 acres or less the entire property was shown as residential. Where residences were located on properties larger than 5 acres the residential land use was shown at about 2 acres.
- (4) Approximately 87,100 lineal feet of roads were identified. The area figure was obtained by arbitrarily assigning 50 feet of width to all roads.



LEGEND FOR EXISTING LAND USE CATEGORIES

- SINGLE-FAMILY RESIDENTIAL
- MULTI-FAMILY RESIDENTIAL
- MIXED RESIDENTIAL/COMMERCIAL
- COMMERCIAL
- INDUSTRIAL
- AGRICULTURAL
- WOODLAND AND PASTURE
- PUBLIC
- SEMI-PUBLIC
- VACANT SUDIVIDED LOT
- PYMATUNING STATE PARK

MAP EXPLANATIONS

- PUBLIC ROAD
- PRIVATE ROAD
- MUNICIPAL BOUNDARY
- RAILROAD
- MARSH OR WETLAND
- BODY OF WATER, CREEK OR STREAM

**EXISTING LAND USE
PINE TOWNSHIP
CRAWFORD COUNTY, PENNSYLVANIA
SCALE 1" = 3000'**

FEBRUARY 1977
PREPARED BY THE
CRAWFORD COUNTY
PLANNING COMMISSION

PROPERTY
PARCELIZATIONS
UPDATED 1982

LAND USE BASED UPON
FIELD SURVEY, 1983

SOME OBSERVATIONS

A study of the Existing Land Use Map and the land use accounts data leads one to the following observations.

- * Agriculture is a weak activity in the Township.
- * Alternately public land holdings dominate the use of land in the Township. The three residential subdivisions that have occurred in the Township are all nestled against public land which is largely free of wetland characteristics. The public land which includes Pymatuning Reservoir has been an attractor for development.
- * Any public road which is paved and well maintained normally will attract development. In the township the land adjacent to West Erie Street has served to attract rather large residential developments. Erie Street or U. S. Route 6 east of Linesville has attracted a number of commercial and industrial uses. This east west road routing through the Township and Linesville Borough is the dominant corridor for development.
- * There is relatively little commercial use in the Township. However there are three industrial uses in the Township which are significant in the Linesville Area's exmployment base: Molded Fiber Glass Tray Co., Utililty Constructors Inc. and Harmony Forged Inc.

A CLOSER LOOK AT THREE RESIDENTIAL SUBDIVISIONS

The following statistics have been assembled for the Sportsmens, Lakeland and Stewart Allotments:

SPORTSMENS ALLOTMENT

	<u>No.</u>	<u>Acres</u>	<u>% of Total Area</u>
Conventional Residences	27	10	13
Mobile Homes	45	37	48
Recreational Vehicles	4	1	-
Vacant Lots	<u>50</u>	<u>29</u>	<u>38</u>
Totals	126	77	100%

LAKELAND ALLOTMENT

	<u>No.</u>	<u>Acres</u>	<u>% of Total Area</u>
Conventional Residences	21	9	19
Mobile Homes	30	7	24
Recreational Vehicles	3	2	4
Vacant Lots	<u>21</u>	<u>29</u>	<u>62</u>
Totals	75	47	100%

STEWART ALLOTMENT

	<u>No.</u>	<u>Acres</u>	<u>% of Total Area</u>
Conventional Residences	9	7	44
Mobile Homes	9	5	29
Recreational Vehicle	1	1	6
Vacant Lots	<u>6</u>	<u>4</u>	<u>24</u>
Totals	25	17	100%

The eye catching issue in these land use tables is the high amount of vacant land in these subdivisions, all of which are close to a special amenity, Pymatuning Reservoir. Especially in the Lakeland Allotment is there a high percentage of vacant land - 62%. Also significant is the variety of residences in these allotments; there are more mobile homes (84) than conventional houses (57). The roads in Lakeland and Stewart Allotments are privately maintained.

PHYSICAL CHARACTERISTICS OF PINE TOWNSHIP

TOPOGRAPHY

Land gradients in the Township are hardly ever a constraining factor in development. Drainage ways sharply etched into the landscape present obstacles especially on the eastern boundary of the Township where eight of them descend from the high ground at the boundary to the Pymatuning Reservoir in a horizontal distance of only 1,350 feet. But these are relatively minor issues. Some of the steepest gradients are on the land directly north of Linesville Borough; but the gradients here, at the maximum, are not greater than 7 to 9%. The land between U. S. Route 6 and Pymatuning State Park is all on a gentle grade as is the land directly east of Linesville on U. S. Route 6. The elevation of Pine Township at the Pymatuning Reservoir is approximately 1010 feet. The highest point in the Township is in its northeast corner where the elevation is 1260 feet. This represents a differential of 250 feet.

The slope of land has an effect on its developability. Slope is normally measured in terms of a percentage. For example, if a stretch of land is said to have a 4% slope, this means from the beginning to the end of the section of land spoken of, it drops in elevation at the rate of four feet for every 100 feet of horizontal distance. Four categories of land slope are given below:

0 - 8%	Slopes of this nature are easily manageable for development of all types. Normally commercial and industrial uses require terrain that has a slope no greater than 8%. In fact these uses prefer slopes in the 2 to 4% range.
8.1 - 16%	Slopes of this magnitude are feasible only for the development of residential uses.
16.1 - 24%	Slopes of this gradient can be developed but only with careful land design. Most development on slopes of this magnitude is for housing.
24.1%+	Slopes of this steepness should be left undeveloped.

Virtually all of the Township's topography can be obtained on the U.S.G.S. 7.5 Quadrangle map named Linesville, PA. The scale of this map is 1 inch equal 2,000 feet. Small portions of the extreme west and south ends of the Township are not given on this map and must be obtained from adjacent quadrangle sheets.

SUITABILITY OF SOILS FOR ON-LOT SEWAGE

The Township's soils were examined for their suitability to accommodate on-lot sewage systems. The county is fortunate because it has a thorough soils study which was published in 1979. There are 23 basic soil classifications in Crawford County. All of these soils were grouped in four categories which define the utility of these soils for use in the construction of on-lot sewage systems. These categories are given as follows;

- * Soils having no limitations for on-lot disposal of sewage. These soils are well drained and are easily adapted to the use of conventionally constructed on-lot systems.

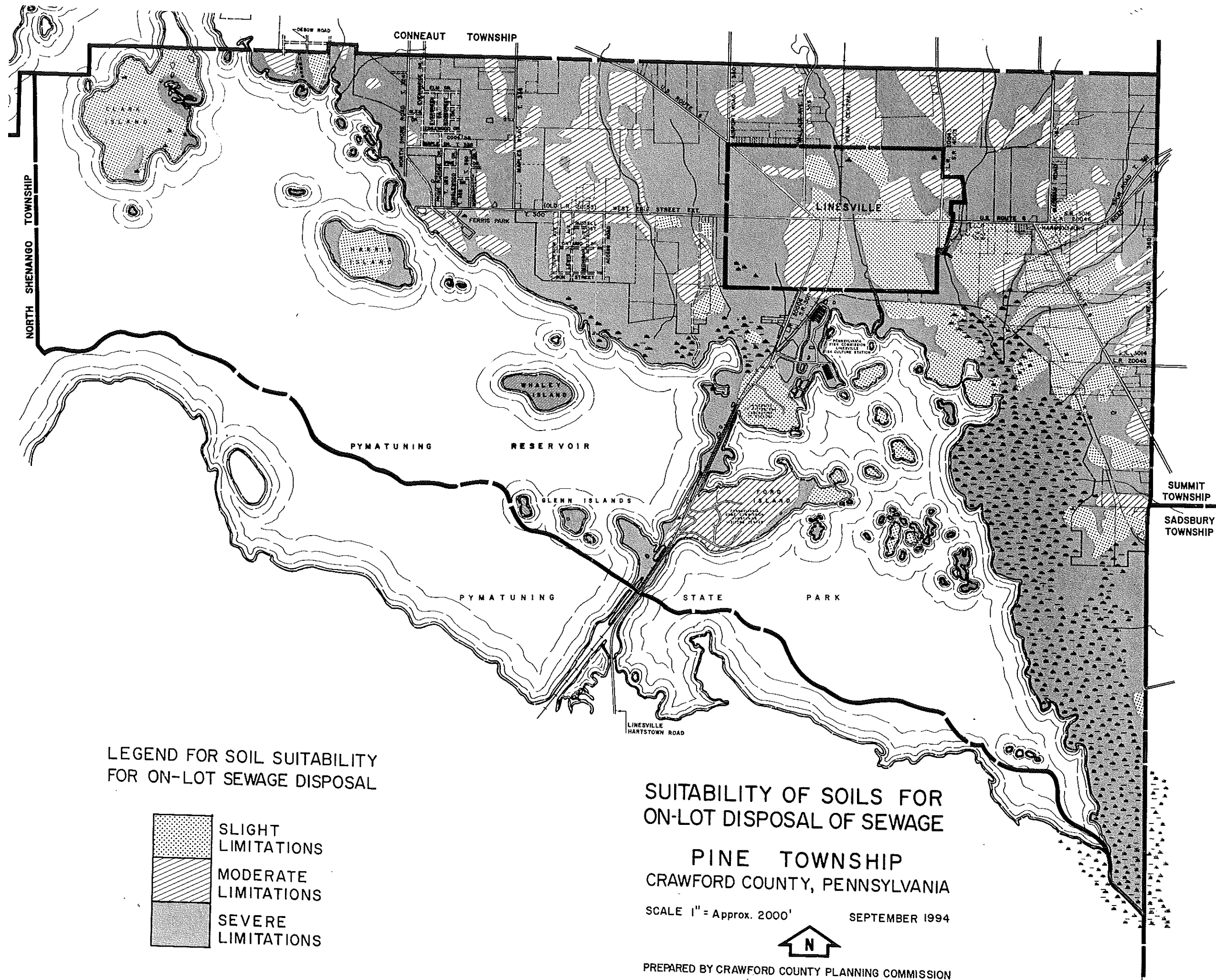
- * Soils having slight limitations for on-lot disposal of sewage. These soils are also well drained; in fact they are extremely well drained consisting in large part of gravel deposits. The difficulty associated with installing on-lot systems in these soils is that they allow effluents to reach groundwater too rapidly; this condition may result in contamination of the groundwater because the cleaning effects of the trickling process are too abbreviated.
- * Soils having moderate limitations for on-lot disposal of sewage. These soils are partially permeable and can be satisfactory for on-lot sewage systems. But there are some constraining factors. For example PennDER standards indicate that in order for a conventional on-lot sewage system to be designed and constructed on a property there should be 6 feet between the ground surface and the maximum height of the seasonal groundwater table. The maximum height of the groundwater table is, in fact, the level at which the "hardpan" or impervious soils occur in the soil profile. Soils in this moderate limitations category normally have a distance of between 18 inches and 3 feet from the ground surface to the seasonal groundwater table. This distance is not adequate based on PennDER standards. However, where a mounding technique is used at the ground surface, PennDER standards can be met by bringing in permeable soil and placing a layer of this on the surface where the on-lot sewage system's tile field will be placed. Thence, the soils in this category make it possible to construct what have been termed sand mound systems in order to satisfy sewage disposal requirements.
- * Soils having Severe limitations for on-lot disposal of sewage. These soils are characterized by a high seasonal water table: between 6 inches and 18 inches from the ground surface. The sand mound construction technique is not suited to such a shallow permeable soil profile. PennDER standards do not permit the construction of on-lot sewage systems in soils with these permeability characteristics.

The map on page 10 depicts the pattern these four categories of soil forms in a somewhat generalized way for Pine Township. In the Crawford County Planning Office located in the Courthouse in Meadville and in the Township Secretary's office there is a larger map at the scale of 1" = 1000' which shows this information in greater detail; this map displays this information superimposed on a property line base map of the Township. The following table tabulates the amount of acreage in each of the four categories, and to make these numbers more meaningful for considerations of township development no land in Pymatuning State Park was counted in this tabulation.

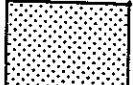
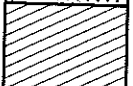

ON-LOT SEWAGE CONSTRAINT CATEGORIES

Category	Acreage	Percent of Total
None To Slight Limitations	0	0
Slight Limitations	621	16
Moderate Limitations	754	19
Severe Limitations	<u>2,607</u>	<u>65</u>
Totals	3,982 Acres	100%

Note: The 3,982 acre figure represents all of the "land" in Pine Township including the land in Pymatuning State Park, some of which are undeveloped islands.



LEGEND FOR SOIL SUITABILITY FOR ON-LOT SEWAGE DISPOSAL

-  SLIGHT LIMITATIONS
-  MODERATE LIMITATIONS
-  SEVERE LIMITATIONS

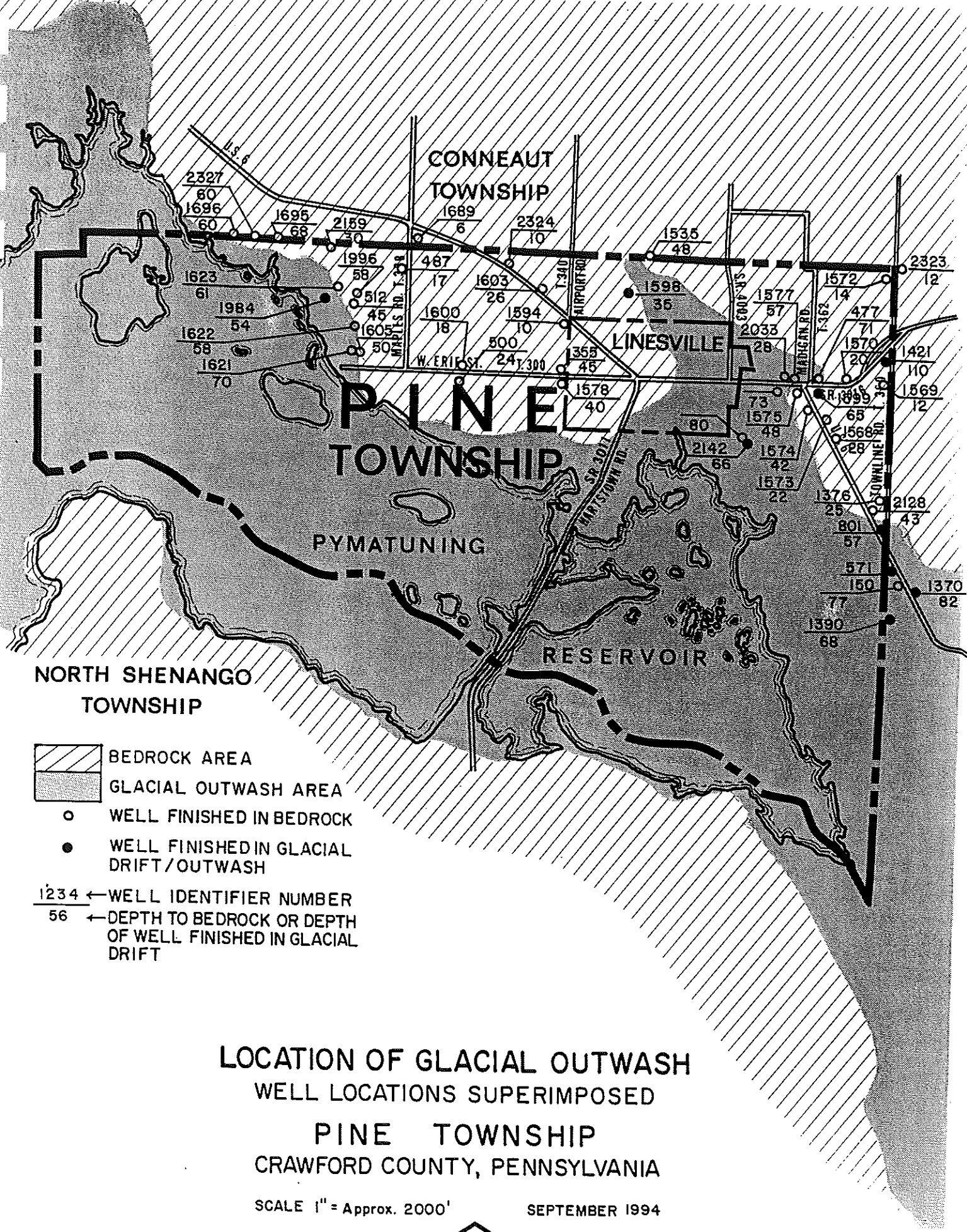
SUITABILITY OF SOILS FOR ON-LOT DISPOSAL OF SEWAGE

PINE TOWNSHIP
CRAWFORD COUNTY, PENNSYLVANIA

SCALE 1" = Approx. 2000' SEPTEMBER 1994



PREPARED BY CRAWFORD COUNTY PLANNING COMMISSION



**LOCATION OF GLACIAL OUTWASH
 WELL LOCATIONS SUPERIMPOSED
 PINE TOWNSHIP
 CRAWFORD COUNTY, PENNSYLVANIA**

SCALE 1" = Approx. 2000'

SEPTEMBER 1994



It is interesting to note that nearly all of the Sportsman's Allotment is severely constrained for on-lot sewage systems. In both the Lakeland and Stewart Allotments about one-half of the land area is severely constrained for on-lot sewage systems. In terms of any thoughts regarding continuous and fuller community development in Pine Township, the above data indicate it will be very difficult without public sewerage systems.

Having said all of the above with respect to the suitability of the township's soil for on-lot sewage systems, it must be acknowledged that soils survey data are generalized, and specific tests on a site, be it 20,000 square feet or one acre in area, may reveal that the soil can support an on-lot sewage system. In fact public sewerage systems being as expensive as they are, there is a current-day emphasis on designing on-lot sewage systems to higher standards so that they can function in less than ideal soils. For example dosing techniques are used whereby sewage effluent is collected and periodically pumped into a tile drain system, flooding the whole system and using its cleansing action more efficiently. Alternate tile fields are used thus providing rest periods for each system, prolonging the life of the entire tile disposal system. Also small sewage treatment facilities involving chlorination of the eventual effluent and discharging it to an existing water course are permitted for individual users. Man-holes are constructed in the tile system areas in order to provide for cleanout opportunities. Applying these new technologies will require the construction of more elaborate, more expensive on-lot systems. But these systems have the ability to function efficiently, and they may be the only way future development can take place in many areas of the township. Development done this way normally will not allow the planning and development of future Sportsman's or Lakeland Allotments where lot sizes are 12,000 to 20,000 square feet. Lots given over to the use of so-called alternative on-lot sewage systems will require from 25,000 square feet to one acre (43,560 square feet) of land.

GROUNDWATER RESOURCES

Extremely good information is available for areas of Crawford County west of the French Creek Basin, which of course includes Pine Township. The U. S. Geological Survey in cooperation with the Pennsylvania Geologic Survey published a report entitled, "Geology And Groundwater Resources Of Western Crawford County, Pennsylvania, Water Resources Report 46." The authors of this report were: George Schiner and John Gallaher. The publication date was 1979; however, many years of research preceded the publication date. The major portion of the research involved a careful study of well information which well drillers are required to provide to the state government.

Two observations can quickly be made regarding groundwater resources in Pine Township based on this study. Some of the northern portions of the Township are underlain by the Cussewago Sandstone, an outstanding aquifer. This sandstone is approximately 40 feet thick in the Township and not far below the ground's surface. The second observation is that the southern portion of the Township has considerable amounts of glacial till - in some areas adjacent to the Reservoir this till is over 100 feet in depth.

All of Crawford County was covered by glaciers in prehistoric time. Because of this glaciation the Township's land can be placed in two general categories (1) glacial outwash areas, and (2) glacial till/bedrock areas. In reality, however, bedrock underlies all of the Township, but in areas where there is over 50 feet in glacial till one can categorize such locations as being dominated by glacial outwash. The map on page 11, Location of Glacial Outwash in Pine Township, shows where the outwash is, and as one would expect it underlays the Pymatuning Reservoir.

Glacial drift is the term used to define any sediment deposited as a result of glacial activity. Drift is the leavings of the glaciers. All of Pine Township is "topped off" by glacial drift. This drift is either glacial till or glacial outwash. Where the drift material was deposited directly without any "sorting" activity by water the drift is called glacial till. Till deposits are not normally any deeper than 25 feet. Where the drift material was sorted by standing or running water in prehistoric times, the deposits are called outwash. The depth of outwash deposits ranges from 50 to as much as 500 feet in some areas of the county (for example underlying Pymatuning Reservoir).

The map referred to in the previous paragraph shows the location of all wells in the township where drilling records were evaluated by the Shiner/Gallaher study. The wells shown by the open circles were finished in bedrock; the upper number associated with this well identifies the well, and the number below the line indicates the depth to the bedrock. The wells shown in the solid circles were finished in glacial drift; the upper number, again, identifies the well, and the number below the line indicates the depth of the well in the glacial drift.

Normally wells finished in glacial outwash areas are very productive. Wells finished in glacial till areas are hardly ever productive; yields from these wells seldom are more than 6 gallons per minute (gpm).

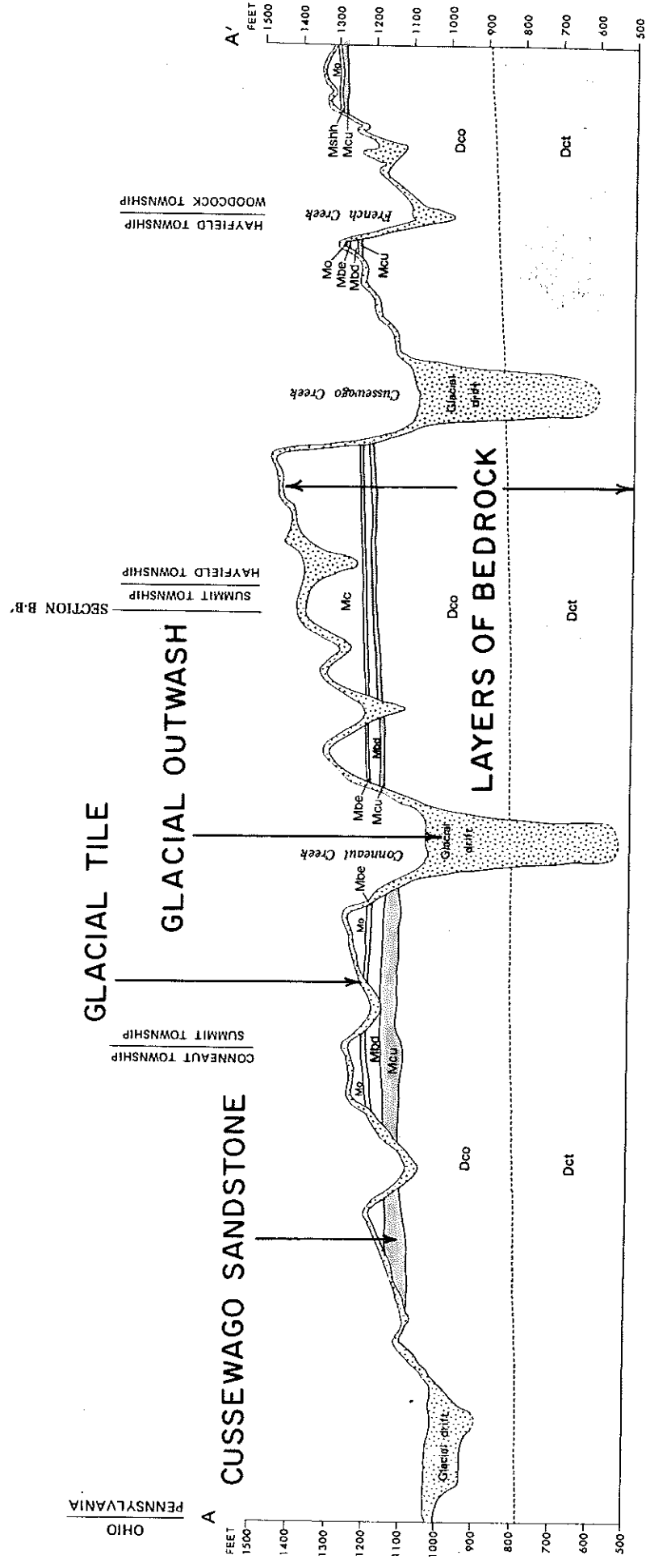
Bedrock is formed in layers or strata which are stacked one on top of the other. A cross sectional drawing on page 14 shows the relationship of the bedrock formations to the glacial drift (either outwash or till) areas. This cross sectional drawing begins at the Ohio boundary only about one mile north of Pine Township and runs eastward. The layers of bedrock are of varying thickness, and often times they are positioned in an angular way in relation to the land's surface. The two best water bearing strata are the Sharpsville and Cussewago Sandstones. The Cussewago Sandstone exists in Pine Township and its location is shown on the map on page 15. The Cussewago Sandstone in Pine Township is approximately 40 feet in depth and it is 10 to 30 feet below the surface in many cases.

Following are some statistics from the Water Resources Report 46 taken from the well log information in this report.

STATISTICS FROM DRILLED WELL LOGS

WELLS FINISHED IN BEDROCK

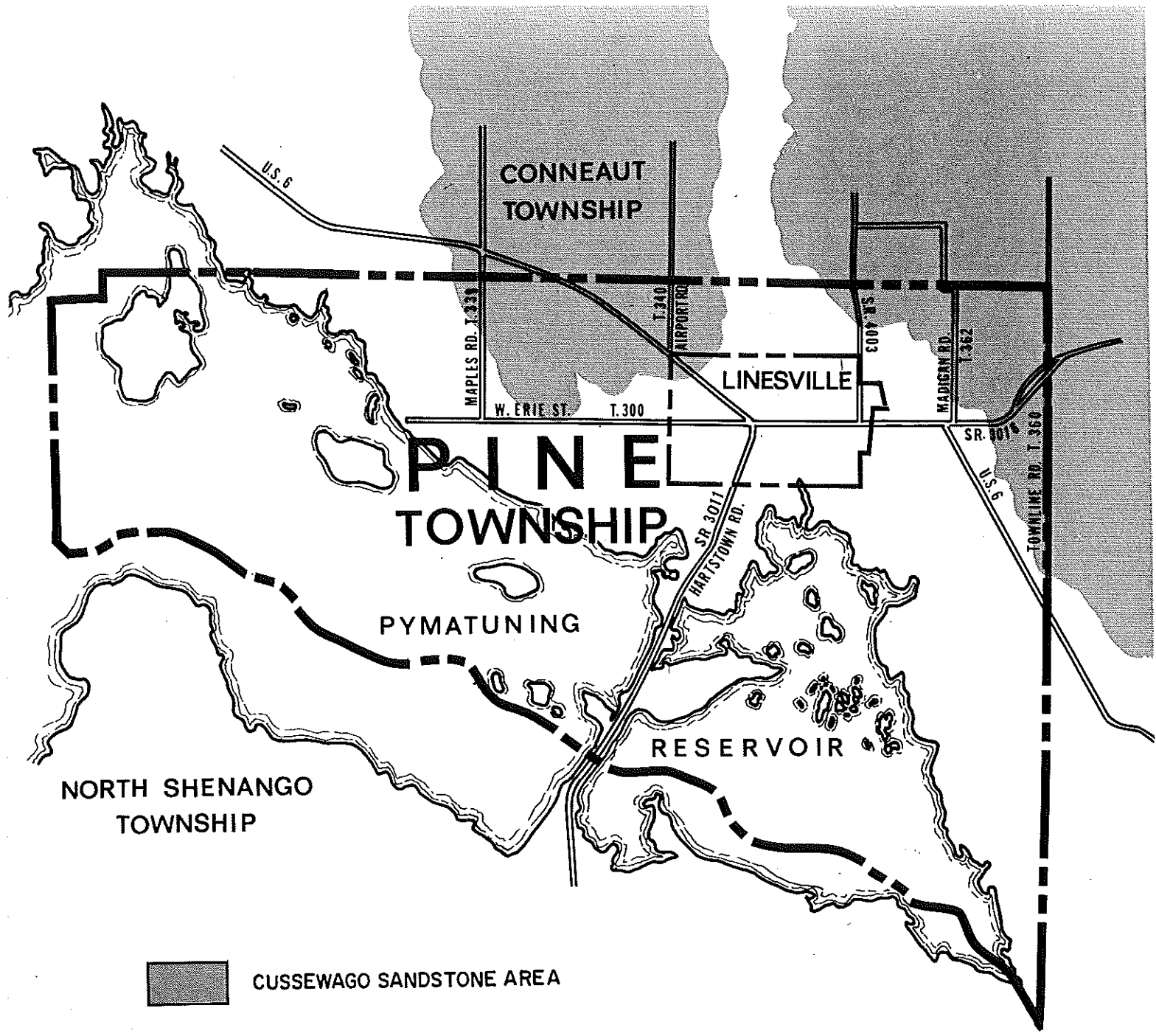
Well Number	Gallons Per Minute	Depth of Well
476	20 GPM	48'
487	4	17
500	6	18
512	6	34
1568	14	20
1572	10	115
1573	15	4
1594	40	23
1600	9	18
1603	7	8
1605	1	20
1996	8	18
2324	10	45



EARTH'S CROSS-SECTION OHIO BOUNDARY TO MEADVILLE AREA

OCTOBER 1994

PREPARED BY CRAWFORD COUNTY PLANNING COMMISSION



LOCATION OF CUSSEWAGO SANDSTONE

**PINE TOWNSHIP
CRAWFORD COUNTY, PENNSYLVANIA**

SCALE 1" = Approx. 4166'

SEPTEMBER 1994



PREPARED BY CRAWFORD COUNTY PLANNING COMMISSION

WELLS FINISHED IN GLACIAL DRIFT

Well Number	Gallons Per Minutes	Depth of Well
576	10	50'
801	5	48
1421	20	25
1598	10	25
1599	1	6
1984	2	4

CLASS I & II AGRICULTURAL SOILS

It is useful to identify the extent of Class I & II agricultural soils in a municipality as part of the comprehensive planning program. These are prime soils for agricultural production and decisions to promote uses other than agriculture on such lands should be made knowingly. In Crawford County the following soils, because of their characteristics are prime agricultural resources.

Name	Symbol
Braceville gravelly loam	Br.A
Braceville gravelly loam	Br.B
Cambridge silt loam	Ca A
Cambridge silt loam	Ca B
Chenango gravelly silt loam	Co A
Chenango gravelly silt loam	Co B
Hanover silt loam	Hn.A
Hanover silt loam	Hn.B
Haven silt loam	Hv A
Haven silt loam	Hv B
Pope loam	Po
Scio silt loam	Sc A
Scio silt loam	Sc B
Valois gravelly silt loam	Va B
Valois Cambridge complex	Cn B

Note: The last letter in the symbol identification indicates the degree of slope on the land. "A" denotes a slope of 0 to 3% and "B" denotes a slope of 3 to 8%.

A discussion of Class I & II soils is found in Crawford County's Soil Survey report published in May 1979. The names of the soils as given above are listed in this publication. The extent of these prime soils was quantified for this planning report. There are 898 acres of Class I & II soils in Pine Township; of this acreage there are only 452 acres on non-state owned land. The pattern of Class I & II soils is shown on the Land Use Plan in this report.

LANDS SUBJECT TO FLOODING

Pine Township, as nearly all of the 35 townships in Crawford County, has been obliged

to regulate development which may be located in the 100 year flood hazard area as defined by federal flood plain studies normally done by the U. S. Corps of Army Engineers and administered by the Federal Emergency Management Agency (FEMA). Township officials are administering a 100 year flood hazard area map for Pine Township dated June 19, 1985. There are some extensive flood hazard areas delineated in the township, but they are located in Pymatuning State Park. The only significant flood hazard area in the developable portions of the township is located along Linesville Creek between where this creek crosses Wallace Avenue Extension and the Linesville Borough north boundary.

LANDS CLASSIFIED AS WETLANDS

Wetland regulations have assumed an increasing importance in the life of communities especially those with many acres of undeveloped land such as Pine Township. Current regulatory practice makes it almost impossible to fill in wetland areas and incorporate the filled land into a developed site plan. One must respect delineated wetlands and leave them untouched - developing around them, not through them.

Although by no means is it a definitive wetland delineation, the U. S. Department of the Interior has produced a mapped National Wetlands Inventory. This work is done on the USGS 7.5 Quadrangle map series at 1" = 2000 feet. Observing the delineations in this inventory done for Pine Township, we note that 90 acres of wetlands have been shown in Pine Township - not counting land in Pymatuning State Park, where there are a considerably greater amount of wetlands shown. These 90 acres of wetlands are shown on the map on page 18; they are shown with a special tone to distinguishing them from the wetlands that are delineated in Pymatuning State Park.

TRANSPORTATION: THE ROAD NETWORK

INTRODUCTION

The road network makes up the development framework for any municipality; road locations shape the township. Pine Township and the Borough of Linesville are a hub in the pattern of roads serving the west-central portion of Crawford County. U.S. Route 6 and the Harmonsburg Road (S.R.3016) provide the major east/west roads in this portion of the county, accessing Meadville to the east and Ohio to the west (Ohio Route 7 connects the cities of Conneaut and Youngstown). The north/south roads are not as significant in terms of their regional characters, but they are important facilities connecting to the Borough of Conneautville on the north (S.R. 4003) and the Village of Hartstown on the south (S.R. 3011).

In Pine Township's 1971 Comprehensive Plan U.S. 6 was considered of such importance that the plan proposed this route bypass Linesville on its north side; this bypass would have been constructed entirely within Pine Township's boundaries. Today, in 1994, there is a very different attitude about such a bypass. No one feels it is needed; it was never seriously considered as a proposal in this revised plan. There simply is not that much growth in the county to justify a Route 6 bypass of Linesville; the destinations east and west of Pine Township do not warrant a bypass facility. In the following paragraphs, with mapped support, important facts about the road network are provided.

CLASSIFICATION OF ROADS

Key to understanding the planning for roads is the recognition that they form a network, and the relationship of the roads in the network is important because all roads should not serve the same function. The network concept is based on the fact that there is a hierarchy of roads; some roads serve interstate and intercounty needs; others serve intertownship travel requirements, and still others function only to provide access to abutting properties. Often times the reality of things is that the same road serves too many functions in which case problems can arise. Roads serving only the properties in the adjacent neighborhood need not have wide rights-of-way nor have wide pavements.

The Federal Functional Classification System defines a "hierarchy" for roads. The Pennsylvania Department of Transportation (PennDOT) accepts the federal system as the classification system to use in describing and categorizing roads, and this plan, therefore, follows the nomenclature in the Federal Functional System. The road classifications in this system are as follows:

Minor Arterial. A road which serves interstate and intercounty travel and where trips are normally of long duration. In Pine Township there are no roads in this category.

Major Collector. A road serving intercounty travel and which connects development centers within a county. State Routes 0006, 3016 (Harmonsburg Road), 4003 and 3011 are in this category.

Minor Collector. A road which collects traffic from the local road system and funnels it to the major collector and minor arterial systems. In the Township there are no roads designated in this category but perhaps there should be, for example S.R. 3014 which connects Pine Township to S.R. 618 at Conneaut Lake.

The three categories described above have considerable continuity and are almost always state maintained roads; most of them are designated with state route numbers. The right-of-way widths of these roads should be 60 to 80 feet, and depending on the situation 100 feet of right-of-way may be preferable. The following two categories demonstrate a dif-

ference in the continuity characteristic, especially the local access road.

Local (Collector). This category of road is named local in the Federal System. It includes all Township maintained roads. However, from the perspective of local people some Township roads have continuity throughout the municipality and serve many acres of land. Other roads could easily be built "out from" the so-called Township roads serving newly formed subdivisions. If this were to happen it would be easy to demonstrate that the so-called local roads are collector roads. In this plan a number of Township roads are designated as collectors if they have reasonable continuity. The right-of-way for this category of road should have a width of 50 - 60 feet.

Local Access. This is the true local road, a road which would never - even with full development on it and around it - carry appreciable through traffic and which primarily serves as access for abutting property owners. In Pine Township there are many examples of this type of road, for example in the Sportsman's and the Lakeland Allotments. Such roads need to have a right-of-way width of no greater than 50 feet.

Besides providing a convenient way to organize one's thinking about the township road network the Federal Functional System has other important characteristics. It denotes the amount of financial help the federal government will supply to a particular road category. It also is a key to relative road importance and major improvement priorities. Minor Arterial and Major Collector roads qualify for substantial federal aid. Minor Collector and Local (Collector) roads do not participate in the conventional federal aid programs. The Official Highways Classification Map, page 21, shows the classification designations for Pine Township. This map should be related to the map which follows it in this plan text, Crawford County's Official Highway Classification Map. These road classification designations have particular importance for the subdivision ordinance which the Township administers as will be discussed in a later part of this plan.

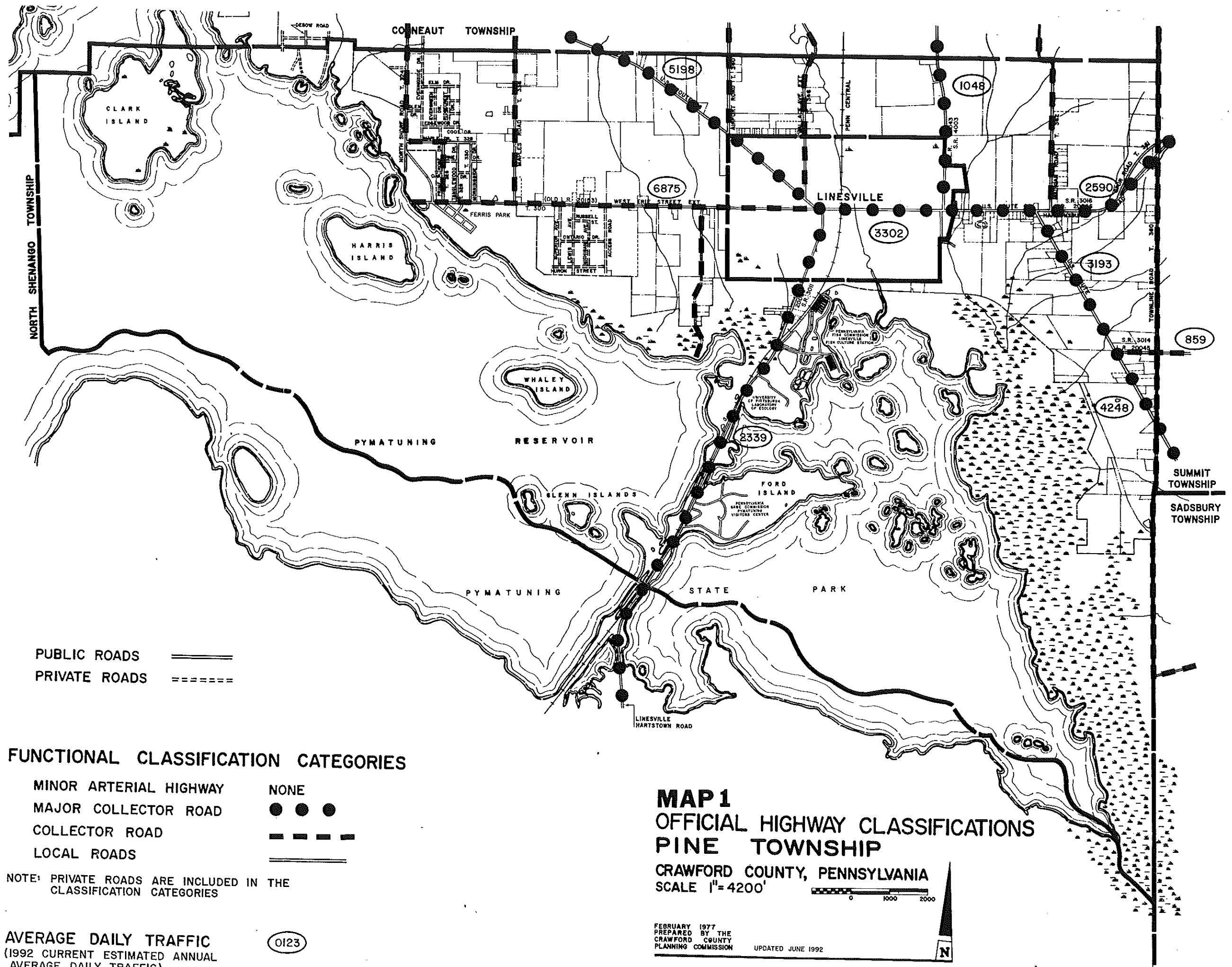
STATE VERSUS TOWNSHIP ROADS: PUBLIC VERSUS PRIVATE ROADS

The classification system previously described, although developed by the federal government mainly to provide an ordering for state maintained roads, has been articulated and organized in this report to include Township maintained roads. It can be said that the Township has three types of roads based on ownership, state roads, Township maintained roads and private roads. The distinctions between these three types of road show on the map on page 23. All state and Township roads have number designations. There are three digits in the Township numbers, and there are four digits in the state numbers. Where a state road has a route designation, this route designation is reflected in the four digit number, for example 0006 is the number for U.S. Route 6. All Township roads also have road names which are reflected in the accompanying maps.

Private roads are a different matter. These roads do not have numbers; most of them have names. There are a number of private roads in the Township in the Lakeland and Stewart Allotments particularly. In many instances the families on private roads want it this way. Often these families are summertime residents only and they believe the private road status is a way of guaranteeing privacy. Where the Board of Township Supervisors has not taken official action to accept a road into its network such a road is a private road and must be maintained by abutting property owners. Normally the Township will not accept a road into its official system unless the right-of-way is a minimum of 33 feet and the construction of the road meets Township standards. The intent of the Township's subdivision and land development ordinance is to eliminate the generation of any new private roads. The map on page 23 distinguishes private from public roads.

AVERAGE DAILY TRAFFIC

Average daily traffic (ADT) is a term used to express the number of vehicles which use roads. As the term implies it measures the number of vehicles which use a particular



PUBLIC ROADS **=====**
 PRIVATE ROADS **-----**

FUNCTIONAL CLASSIFICATION CATEGORIES

MINOR ARTERIAL HIGHWAY	● ● ●
MAJOR COLLECTOR ROAD	— — — —
COLLECTOR ROAD	=====
LOCAL ROADS	-----

NOTE: PRIVATE ROADS ARE INCLUDED IN THE CLASSIFICATION CATEGORIES

AVERAGE DAILY TRAFFIC
 (1992 CURRENT ESTIMATED ANNUAL AVERAGE DAILY TRAFFIC)

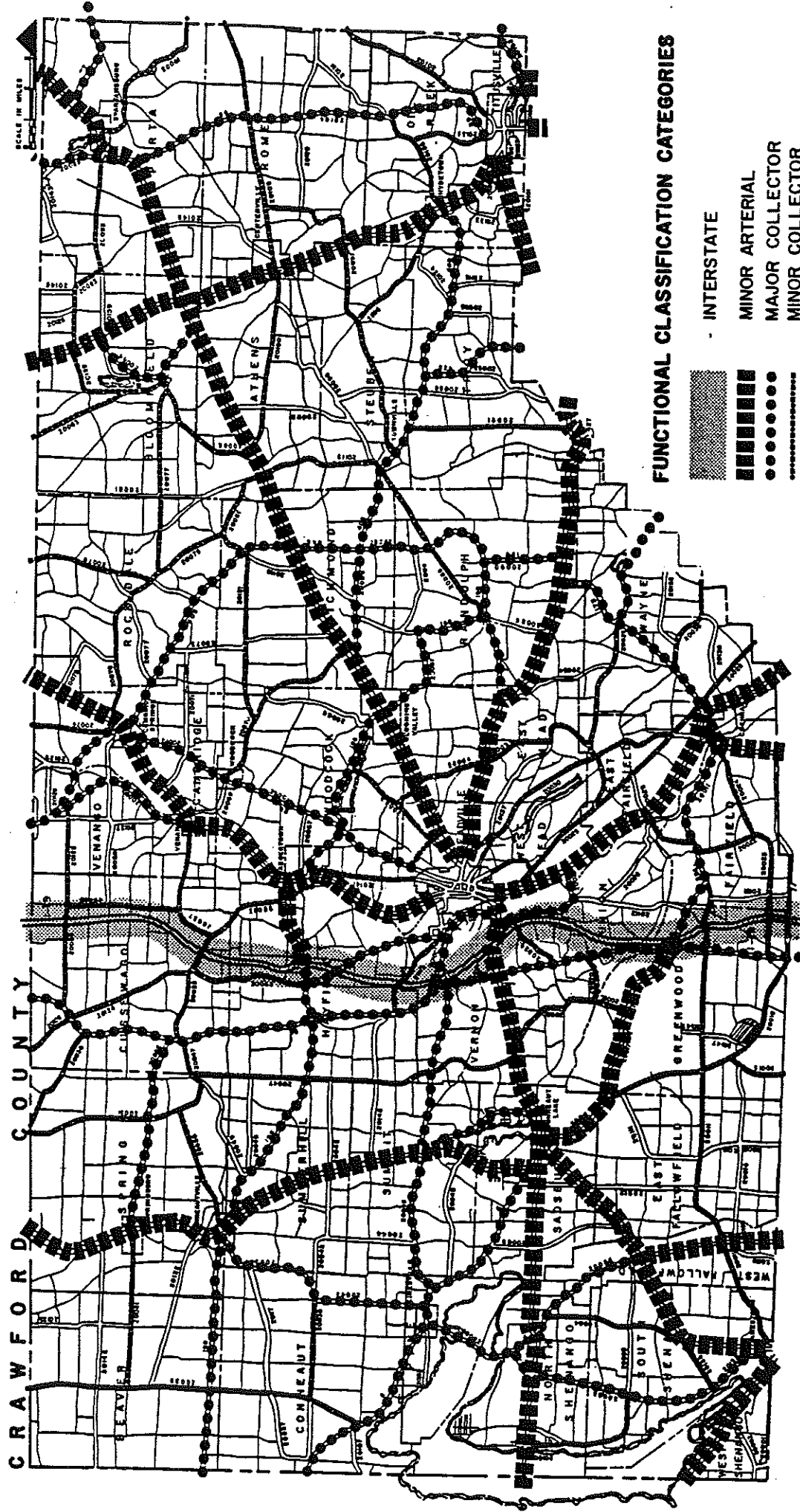
0123

MAP 1
OFFICIAL HIGHWAY CLASSIFICATIONS
PINE TOWNSHIP
 CRAWFORD COUNTY, PENNSYLVANIA
 SCALE 1"=4200'



FEBRUARY 1977
 PREPARED BY THE
 CRAWFORD COUNTY
 PLANNING COMMISSION
 UPDATED JUNE 1992

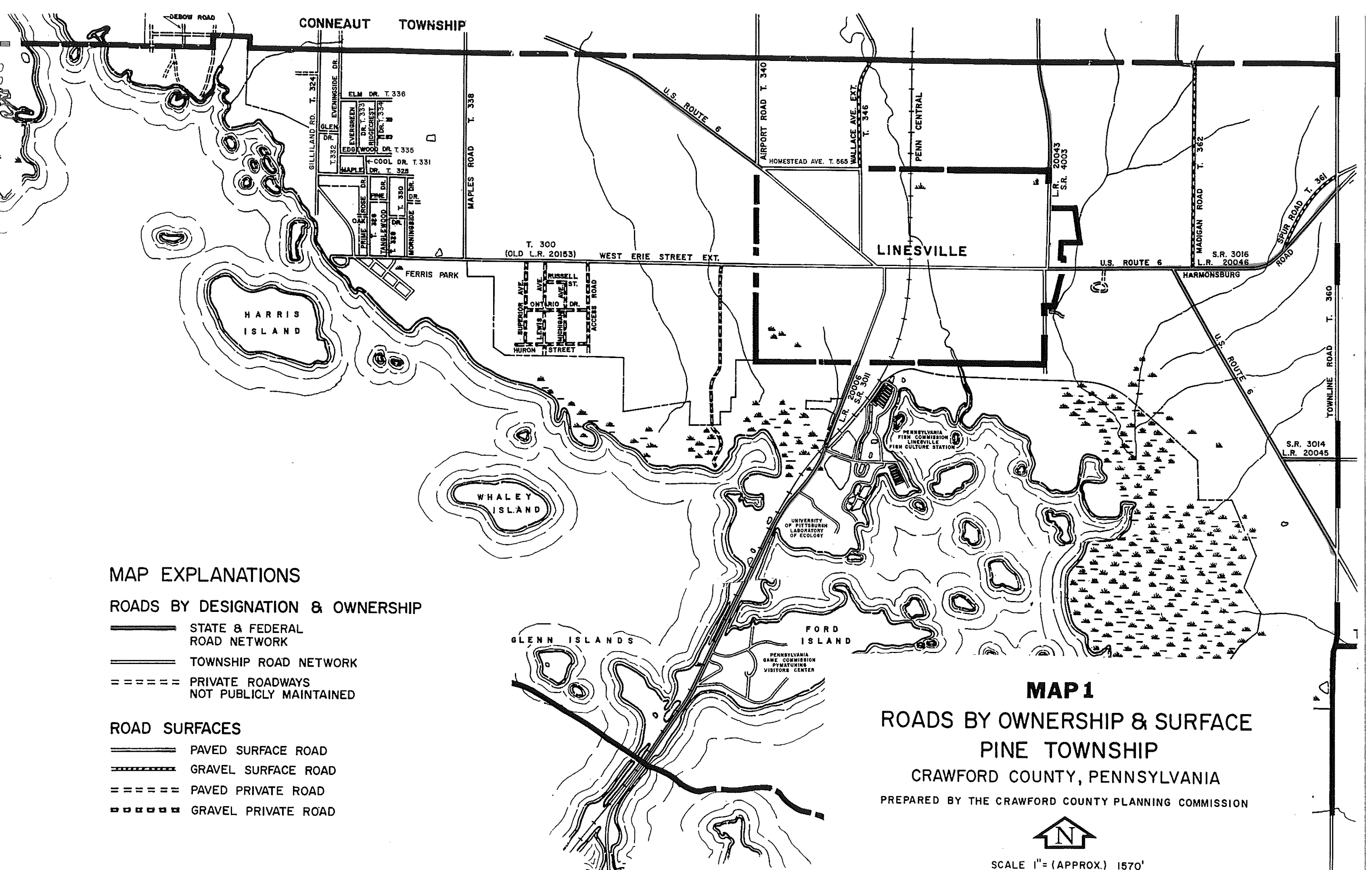




MAP 2




**OFFICIAL FEDERAL & STATE
HIGHWAY CLASSIFICATION MAP
CRAWFORD COUNTY**

PREPARED BY CRAWFORD COUNTY PLANNING COMMISSION FEBRUARY 1979







MAP EXPLANATIONS

ROADS BY DESIGNATION & OWNERSHIP

-  STATE & FEDERAL ROAD NETWORK
-  TOWNSHIP ROAD NETWORK
-  PRIVATE ROADWAYS NOT PUBLICLY MAINTAINED

ROAD SURFACES

-  PAVED SURFACE ROAD
-  GRAVEL SURFACE ROAD
-  PAVED PRIVATE ROAD
-  GRAVEL PRIVATE ROAD

MAP 1
ROADS BY OWNERSHIP & SURFACE
PINE TOWNSHIP
CRAWFORD COUNTY, PENNSYLVANIA
 PREPARED BY THE CRAWFORD COUNTY PLANNING COMMISSION

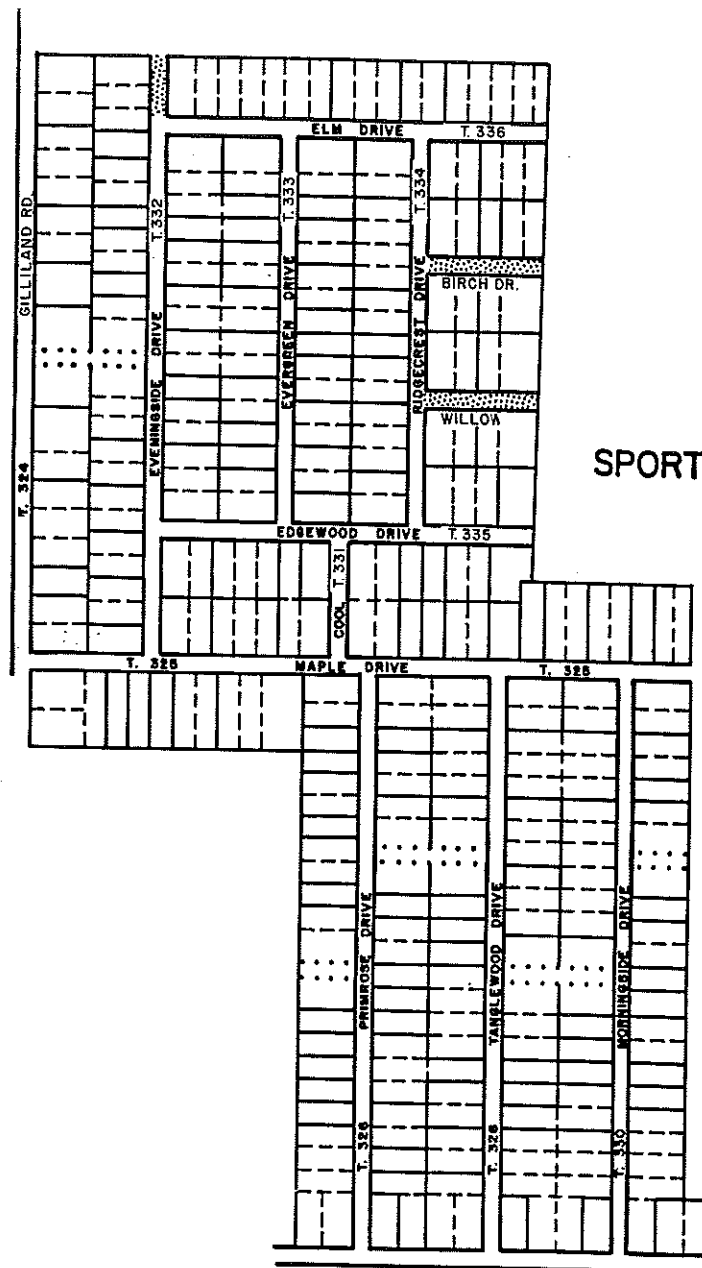


SCALE 1" = (APPROX.) 1570'

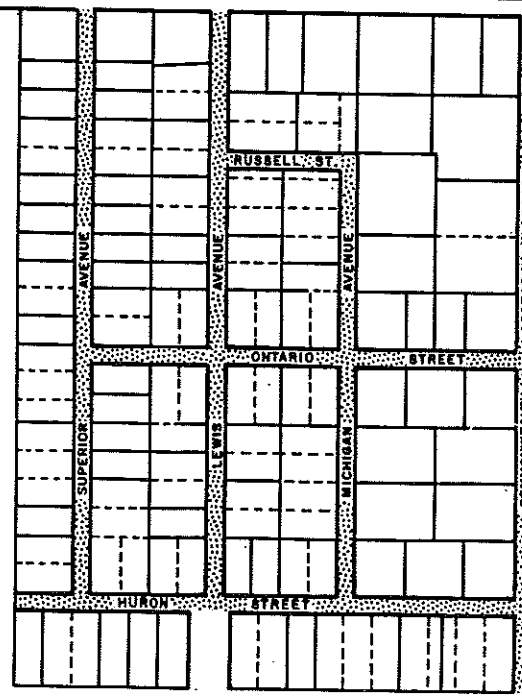
MAP 2
ROADS BY OWNERSHIP & SURFACE
PINE TOWNSHIP
CRAWFORD COUNTY, PENNSYLVANIA
 PREPARED BY THE CRAWFORD COUNTY PLANNING COMMISSION



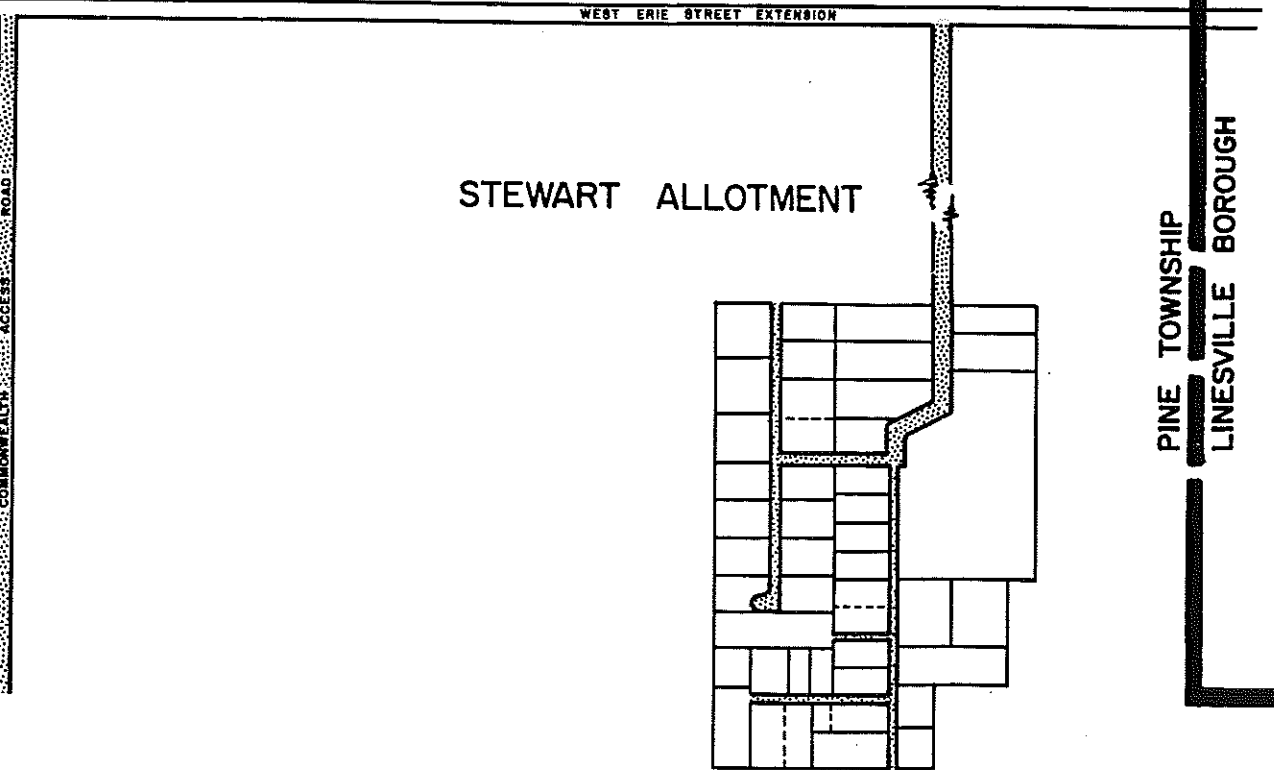
SCALE 1" = (APPROX.) 514'



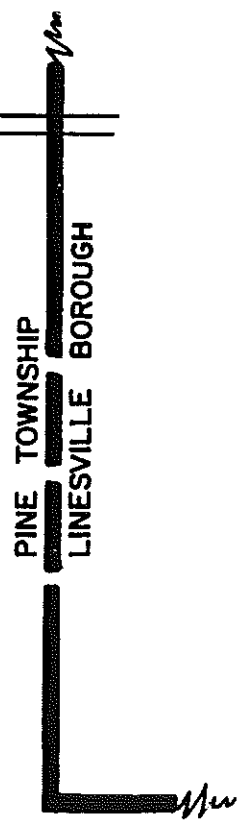
SPORTSMEN'S ALLOTMENT



LAKELAND ALLOTMENT



STEWART ALLOTMENT



MAP EXPLANATIONS

ROADS BY DESIGNATION & OWNERSHIP

- TOWNSHIP ROAD NETWORK
- PRIVATE ROADWAYS NOT PUBLICLY MAINTAINED
- PAPER STREET UNDEVELOPED RIGHT-OF-WAY

ROAD SURFACES

- PAVED SURFACE ROAD
- GRAVEL SURFACE ROAD

portion of road in a 24 hour period averaged over the time span of one year. PennDOT staff do counts at selected points on certain roads. The map on page 23 shows the ADT counts that are available for Pine Township. The counts are based on data from PennDOT's RMS Report dated July 29, 1993. In examining the traffic counts one should keep in mind that a two lane highway in a rural area has a carrying capacity of approximately 7,500 average daily trips; this refers to a reasonably well maintained road with a minimum travel way of 20 or 21 feet.

Examining the ADT counts one notes that the highest count is on West Erie Street leading to Ferris Park. This number is 6,875 and must reflect the use generated by the park facility. The other higher counts are positioned on U.S. Route 6.

ROAD RIGHT-OF-WAY; ROAD PAVEMENTS

The term road right-of-way refers to the entire dedicated area of land within which the travelway (or cartway) and any other associated roadway improvements are located. Normally right-of-way widths should be designated and related to relative road importance, i.e. the relative position of the road in the classification hierarchy. An examination of PennDOT records for Township right-of-ways indicate that where the right-of-way widths are known they are all 50 feet. Some roads seem to have a poor record history and the right-of-way width is unknown. Anyone searching the records will find that it is difficult to determine official road right-of-way widths. In addition to PennDOT records there is a record system maintained in the county courthouse by the Clerk of Courts. In bygone years roads were ordained by the courts. However, these records are often ambiguous on road locations and on right-of-way widths. This plan report gives only the information in the PennDOT records. PennDOT officials prefer that all state roads have a minimum right-of-way width of 60 feet. For local access roads they feel 50 feet of right-of-way is acceptable. For Township collector roads, the right-of-way should be between 50 to 60 feet.

Pine Township has made it a policy to pave all of its roads which are public. They have done so. Only South Chestnut Street going towards Pymatuning State Park is a gravel road. Pine Township's paved roads should foster development because of the desirability of this road surface.

HIGHWAY RELATED PROBLEMS

Summarizing problems associated with the Township's road system the following are noted:

- * There are a number of private roads in Lakeland and the Stewart Allotments. This real estate is underutilized perhaps partly due to this reality.
- * The right-of-way width on West Erie Street is unknown. Judging from the development patterns along the road the right-of-way it is thought to be only 33'. This right-of-way should be greater because of the bike and hike way proposed to travel in this right-of-way connecting Linesville with Ferris Park. There is considerable pedestrian traffic on this road currently and the safety of this traffic leaves much to be desired.
- * S.R. 3014 is not designated as a collector of any kind under PennDOT classifications. Its importance making a connection to Conneaut Lake Park would seem to justify a higher classification status.

COMMUNITY FACILITIES AND SERVICES

INTRODUCTION

Pine Township is one of Crawford County's smallest townships. The county has a total of 35 townships. Because of the way the township boundary is drawn through large areas of Pymatuning Reservoir, there is almost as much "water" area as there is land area; there are 4,175 acres of land and 3,691 acres of water for a total township area of 7,886 acres. We have seen that the current population of the township is approximately 455 persons. Consequently, relatively few services are provided directly within the township's boundaries. Pine Township depends on the urban communities in Crawford County and to some extent on the Village of Andover in Ohio for many services. This section of the Plan shall summarize information on the facilities and service systems which serve the residents' needs.

MUNICIPAL GOVERNMENT

Pine Township is a township of the Second Class under Pennsylvania law. It has all the government powers except those in the area of education. Three township supervisors are elected "at large" by township residents for staggered six year terms, and these supervisors exercise all administrative and legislative powers. The supervisors employ four part-time persons who work a total of approximately 500 hours per year. One of these part-time workers is the township secretary. The work of the other three employees is entirely on the township road network. Other elected offices which serve the township are those of tax collector, assessor and auditor (Three auditors are elected.). The Board of Township Supervisors also use the services of a solicitor, a sewage enforcement officer and a zoning/building permit officer; these positions are used only on an "as needed" basis. The township is part of the 21st United States Congressional District, the 50th State Senatorial District and the 5th State General Assembly District.

The Board of Supervisors, in the late 1960's, created a Pine Township Planning Commission consisting of five members. Working through this Planning Commission the township supervisors completed a comprehensive plan and eventually adopted zoning and subdivision ordinances in the early 1970's. Other ordinances which the township enacted over the years which have a relationship to community development are as follows:

- * Regulation of junk yards providing for a licensing fee and containing development and maintenance standards for such facilities; enacted in 1963.
- * Building permit requirements which made it obligatory for permits to be issued covering all building development activities; enacted in 1974.
- * Sewage facilities control which enabled the township to assume a role that state government previously played in the issuance of permits for on-lot sewage disposal systems; enacted in 1978.
- * Holding tank ordinance which allows the use of tanks to accept raw sewage. This sewage would be hauled away to a treatment plant. The supervisors agreed to monitor this process; enacted in 1992.
- * Requiring either the repair of or demolition of dilapidated buildings constituting a threat to the health and general welfare of the residents; enacted in 1984.

TOWNSHIP PROPERTY AND EQUIPMENT

Pine Township because of its size does not own or maintain a township building

and/or garage. The supervisors own one truck, a snowplow and a spreader. Most of the work done on township roads is contracted.

FIRE PROTECTION

Pine Township receives fire protection from the Linesville Volunteer Fire Department located in the triangular block bounded by Wallace Avenue, Penn Street (U. S. Route 6) and West Erie Street. The Department has approximately 50 active members with an auxiliary group of about 20 women. The Linesville Volunteer Fire Department (LVFD) serves all of Linesville and Pine Township and about 2/3rds of Conneaut Township. The Department has the following major items of equipment:

- * A 1980 FMC Truck with 1000 gallons of water storage and a 1500 gpm (gallons per minute) pump.
- * A 1969 International truck with 1500 gallons of storage and a 1000 gpm pump.
- * A 1984 3/4 ton Chevrolet truck which serves as a water supply truck. It has 4-wheel drive and 300 gallons of storage; it has a 3500 gpm pump.
- * A 1975 Chevrolet rescue van which is used to carry fire support equipment. It is also used for automobile and miscellaneous accidents.
- * A rescue boat which is mounted on a trailer and which can provide quick response time for any mishap that may occur around Pymatuning Reservoir. Pymatuning State Park also has a rescue boat but it is left in the water near Jamestown. The Department's boat (a Grummon) has a 28 horsepower Johnson motor and it is 16 feet long.

POLICE PROTECTION

Pine Township is entirely dependent on the Pennsylvania State Police for protective services. The state police are based at the Meadville Barracks in Vernon Township. There appears to be no particular concern that township residents have over the level of police protection.

AMBULANCE SERVICE

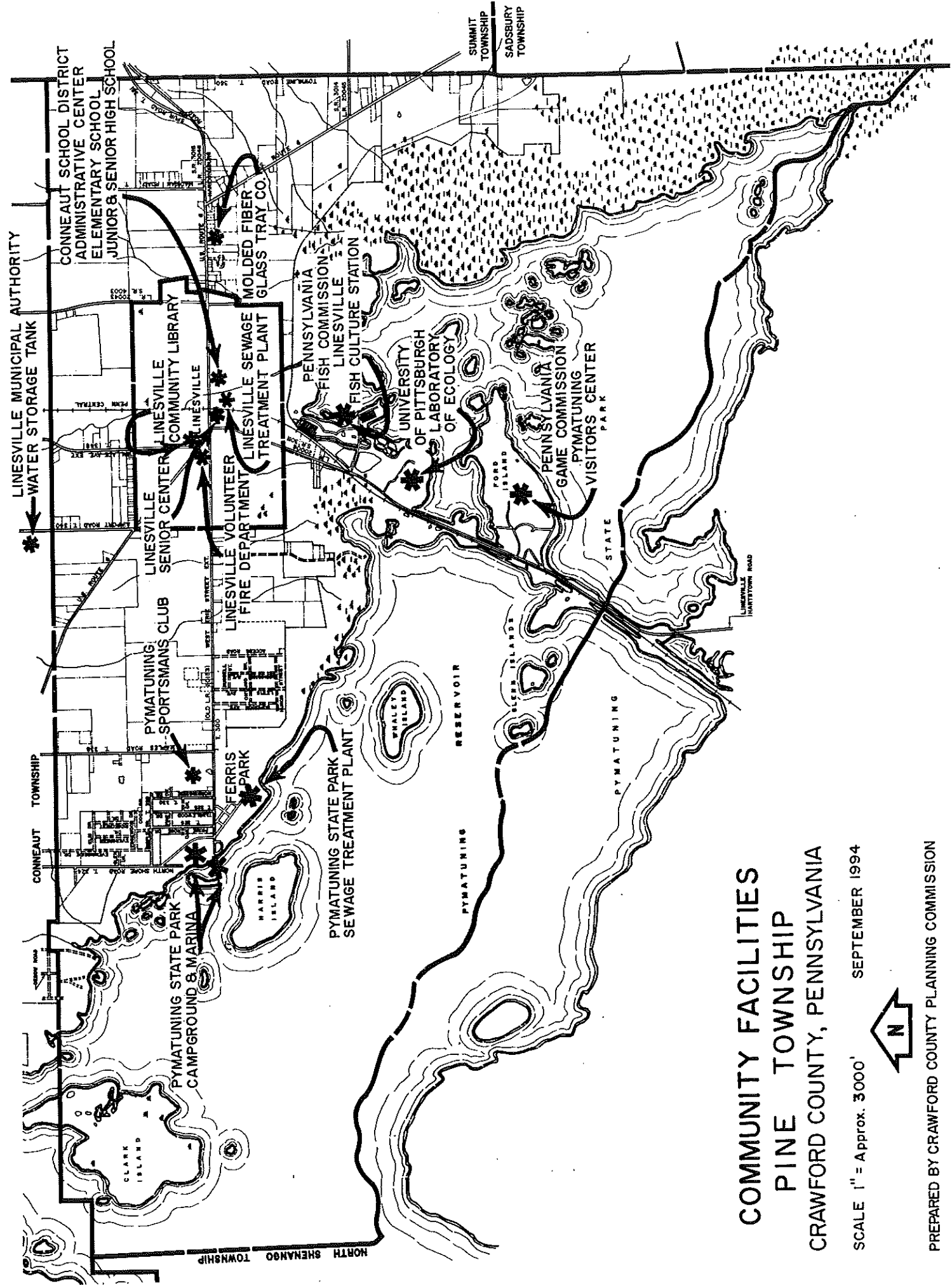
Ambulance service is based out of Linesville Volunteer Fire Department. Two ambulances are available and they serve a primary target area consisting of Pine Township, Linesville, North Shenango Township and about one-half of Conneaut Township. Membership in the service is \$35 per family per year. If one needs ambulance service and he/she is not a member of the service a trip would cost in the vicinity of \$300.

HEALTH CARE AND OTHER HUMAN SERVICES

Currently there are two doctors who see patients in Linesville. There is also one dentist in Linesville. Andover, Ohio is approximately 10 miles from Linesville, and some residents of the Linesville Area purchase medical services there. Andover has two dentists and the Warren, Ohio General Hospital maintains a medical emergency center in Andover.

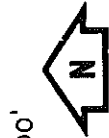
Where hospital care is needed the choices for people in the Linesville Area are the Meadville Medical Center or the Greenville (Mercer County) Regional Hospital - pretty much on a 50-50 basis.

Nearly all of the human service programs are headquartered in Meadville, mainly because county government is responsible for many of them and the county seat is in



**COMMUNITY FACILITIES
PINE TOWNSHIP
CRAWFORD COUNTY, PENNSYLVANIA**

SCALE 1" = Approx. 3,000'



SEPTEMBER 1994

PREPARED BY CRAWFORD COUNTY PLANNING COMMISSION

Meadville. The four principal groups of services offered through the county are:

Children & Youth Services - foster care, counseling, adoptions

Mental Health and Mental Retardation Services - care for persons afflicted with these problems, often through 3rd party contracts; funding for a mental health clinic

Drug and Alcohol Services - counseling, educational programming, treatment services through 3rd party contracts

Aging Services - a whole host of programs for interested elderly persons. Also there is a small senior citizens center in Linesville.

A listing of other human service organizations sited in Meadville is given as follows: American Cancer Society, American Red Cross, Associated Family Services, Association for Retarded Citizens, Community Health Services, Domestic Relations (child support services), Head Start Programming, Northwestern Legal Aid Services, State Department of Welfare, State Unemployment Services, Salvation Army, United Community Independence Programs, Vallonia (shelter for handicapped), Greenhouse (shelter for battered and/or homeless women), YMCA, YWCA.

LIBRARY SERVICE

The township has no library but township residents can use, free of charge, any one of the libraries in the Crawford County Federated Library System. The library in this system which is closest to township residents is the Linesville Community Public Library, located at Penn and Mill Streets in Linesville Borough. The other libraries in this federated system which is supported, in part, by the county-wide .6 mill levy on real property, are located as follows:

Meadville
Titusville
Cambridge Springs
Cochran
Conneaut Lake
Conneautville
Saegertown
Springboro

In addition there are reading stations (not full-fledged libraries) at Harmonsburg (a village in Summit Township) and Venango Borough.

Currently, based on the local effort in raising dollars to support these libraries, the state provides the County Federated System approximately \$190,000 per year. It is reassuring to know that if a particular library does not have a book one wants a quick search of the other libraries in the "system" - county, region and state - by using a computer can turn up where the book may be found. An order can then be placed for this book. Recorded music, paintings and movies are also accessible through this system.

The Linesville Community Public Library is governed by a nine person private non-profit board of directors. Some of these directors are from Pine Township.

RECREATION AND PARKS

The township does not provide any recreation programs nor does it own or maintain recreation sites or park properties. Recreation as used in this report refers to sites where games or active play of whatever type can occur. The term park refers

to an area of land given over mainly to the passive use of land for relaxation and enjoyment. Picnicing, camping and walking are common activities in park areas. Of course parks can include areas for recreation or active play; for example a swimming beach in a park is this sort of thing.

Pine Township does have park areas within its boundaries, all of them supported to a greater or lesser extent by state government. These areas are

Ferris Park, part of Pymatuning State Park

Pennsylvania Fish Commission Linesville Fish Culture Station

University of Pittsburgh Laboratory of Ecology

Pennsylvania Game Commission Pymatuning Visitors Center.

REFUSE COLLECTION

The township has adopted a strictly hands-off policy vis-a-vis the collection of refuse and garbage. State laws govern in this area of need; one cannot dispose of garbage on one's own property except that strict rules of disposal are adhered to. Of course, the average family finds it convenient, - really necessary -, to contract with a garbage hauler; and this is what is done. Waste Management is the firm that collects most of the garbage in Pine Township and Linesville. This company bills and collects from each household served under its own system. There are no disposal sites in Pine Township.

UTILITIES

There are no public sewerage or water systems in the township with the exception of a water line going through the township to service the state's Ferris Park. A separate report on sanitary sewer and water issues is included in this plan. Ferris Park also maintains a small sanitary sewage treatment plant which it operates only in the summer months.

In terms of electric power all of the rural areas of Pine Township are served by the Northwestern Rural Electric Cooperative Association (NRECA). The Borough of Linesville is served by Penelec as well as areas in the township near to Linesville.

National Fuel Gas provides natural gas service to Linesville Borough. Natural gas lines approaching the borough on East Erie Street and on North Chestnut Street (the Conneautville Road) provide service to the developed areas along the way.

PUBLIC SCHOOLS

The township is part of the Conneaut School District whose headquarters are in Linesville. There are no public schools in Pine Township nor in the adjacent townships of Conneaut or North Shenango. All school facilities are located in Linesville where a rather large site accommodates elementary and junior and senior high school instruction. These school facilities are, of course, very handy, locationally, for Pine Township residents.

STUDY OF SANITARY SEWER AND WATER SUPPLY OPTIONS

PRELIMINARY REMARKS

Except for special activities in the Township, namely the Molded Fiber Glass Tray Co., the Pennsylvania Fish Commission's offices and museum and Ferris Park, and except for uses that are located adjacent to Linesville Borough's boundaries, development in Pine Township is dependant on on-lot sewage and water systems. Given the fact that the natural soils in the Township, for the most part, are unsuitable for the favorable functioning of on-lot sewage systems, and knowing that significant business/manufacturing establishments and institutional uses normally require public sewerage, a study of public sanitary sewer and water supply options was considered to be an important part of this comprehensive plan revision. Based on an open and competitive procurement/selection process Chester Environmental of Pittsburgh was chosen to do such a study. This section of the plan summarizes this study. The full 60 page study (plus foldout maps), entitled Wastewater And Water Systems Study, dated March 1993, is available from the Crawford County Planning Office and from Pine Township.

STUDY AREAS

To facilitate the study of these utility system options the Township was "broken down" into 6 study areas. The study area caption in some cases describes the location quite well:

1. Sportsman's Allotment
2. Lakeland Allotment
3. Stewarts Allotment
4. Linesville, West Side; this includes the land area immediately adjacent to the west boundary of Linesville between West Erie Street and U. S. Route 6
5. Homestead Avenue
6. Linesville, East Side; this includes the land area along East Erie Street extending east from the Linesville boundary to the intersection of the Harmonsburg Road and U. S. Route 6 and the development along Route 6 as one travels south.

EXISTING SANITARY SEWER & WATER SUPPLY FACILITIES

There are two sewage treatment facilities in the study area. The main one is the Linesville sewage treatment plant located along Linesville Creek just south of Erie Street: This plant was upgraded in 1990-91 to remove ammonia and phosphorus and to provide for sewage sludge dewatering. It has a designed capacity to handle 205,000 gallons per day (.205 million gallons per day); it has a designed peak capacity of .512 mgd. This plant should have the capacity to serve 2,050 persons; but because of hydraulic overloads on the system it cannot serve any additional persons beyond those in its current service area. Linesville's population in 1990 was 1,166. Most of the sanitary sewer lines are 8" lines.

The state owns a sewage treatment plant in Ferris Park just south of the Sportsman's Allotment. This plant is designed to handle 28,000 gallons per day of wastewater. This plant operates only in the summer months. The treatment process is based on wastewater grinding, aeration and sedimentation processes, passing the effluent through sand filters, then chlorination before releasing the effluent to a stream. Although the state Department of Environmental Resources does not have good records

on the operation of this plant, it is safe to say that currently this plant handles no more than 4,800 gallons of flow per day. The extra capacity in this plant could accommodate approximately 100 households, based on the assumption that each person generates 100 gallons of wastewater per day and that the average household has 2.37 persons.

Linesville has the only public water system in the study area. This system has two sources for its water: (1) a series of springs in the north central portion of the Borough and directly north of the springs in the Borough into the Township between Linesville Creek and the Conneautville Road, (2) wells located in the northwest corner of the Borough. The spring water is collected in a 68,000 gallon reservoir, and the well water is collected in a 70,000 gallon reservoir. Water is held only temporarily in the reservoirs; this water is pumped to a 500,000 gallon storage tank located on Airport Road in Conneaut Township. It is estimated that about 2/3rds of the Borough's water supply is obtained from the springs source.

Linesville supplies water to two large users located in the Township: (1) a 4" line travels about 2,000 feet to serve the Pennsylvania Fish Commission's installation, and (2) a 8" line serves DER's Ferris Park, about 8,000 feet from the Borough boundary. The 8" line serving Ferris Park is owned by the state. It is understood the state would consider putting this water line in the hands of the Linesville Municipal Authority if a satisfactory arrangement can be worked out. The state also would consider making arrangements to provide the Ferris Park sewage treatment plant to the Authority if mutually satisfactory arrangements can be developed.

Linesville stated to Chester Environmental that the capacity of its water system is limited to 200,000 gpd; the Borough itself uses 120,000 gpd, and it believes there is not sufficient extra water capacity to serve the Township unless more water sources are developed and brought "on line" by the Borough.

PLAN OPTIONS

Chester Environmental Suggested a series of interesting sanitary sewer plan options. They are discussed briefly as follows:

Alternative A. Work with the Borough of Linesville to upgrade its sewage treatment plant to accommodate the Homestead Avenue, Linesville West and the Linesville East Study Areas.

Alternative B. Purchase the Ferris Park treatment facility and upgrade it to accommodate mainly the Sportsman's Allotment. Perhaps Lakeland Allotment could also be directed to this treatment facility.

Alternative C. Construct a new sewage treatment plant in Ferris Park and through a series of gravity and force main sewers conduct sewerage from each of the 6 study areas to this plant. The total cost of this alternative was estimated at \$3,562,000.

Alternative D. Construct a new sewage treatment plant in Ferris Park but serve only 4 of the study areas in this plant: Sportsman's, Lakeland, Stewart and Linesville West. The other two study areas could be served by an expanded Linesville facility. The cost of this alternative was estimated at \$2,685,000.

Alternative E. Provide no public sanitary sewer system and rely only on the on-lot systems. With this alternative extra administrative measures would be adopted by the Township to insure that the individual systems worked as well as possible.

With regard to a public water system the Chester study pointed out that if Linesville Borough could be assured that its well and springs sources for water were sufficient

to provide the 120,000 gallons of water per day which the current Borough users need it could be aggressive about marketing water to Pine Township users. The Department of Environmental Resources is willing to turn over to the Borough Authority its 8" water line out to Ferris Park. With this line the water system could serve new development north and south of West Erie Street in Pine Township.

RECOMMENDED POLICIES

The Wastewater And Water Systems Study recommended that Pine Township, at this time, continue to rely on on-lot sewage and water systems to serve its people. Should significant proposals for new development occur in the Township, however, particularly west of Linesville Borough, this study provides useful suggestions on how public systems for sanitary sewer and water could be established to serve this development.

HOUSING IN PINE TOWNSHIP

INTRODUCTORY COMMENTS

Housing in Pine Township historically has been mainly a private sector concern. This is the way it is in nearly all of the county's municipalities; the only true exceptions being the cities of Meadville and Titusville. Few municipalities in Crawford County have housing or building codes; Pine Township is such a municipality. There is no "housing program" thinking in Pine Township's approach to governing.

The cities of Meadville and Titusville do concern themselves with housing issues. Each city has a housing authority which owns and manages housing. Each city has housing and building codes. Each city, also, has had for a number of years a housing rehabilitation program. Federal and state monies have been used in the form of grants and loans to assist in rehabilitating the housing stock for qualified homeowners and/or tenants. This aid has been given to persons whose incomes are classified as low or moderate (LMI); LMI households are those whose gross incomes are 85% of the county's median income or lower.

Pine Township in reality is too small in area and in population to have its own housing program. Townships like Pine must depend for assistance in the area of housing on county government. Crawford County created a housing authority in the 1940's, but it never was given sufficient appointees, and it never had a staff. Accordingly, the county never participated in the many housing programs sponsored by the state and federal governments since the 1930's - until 1993 as the reader will see in the following paragraph.

Currently the county has a presence in housing. Through its County Planning Office it secured a \$800,000 HOME (Home Investment Partnership Program) grant in 1993 and this office is overseeing the expenditure of this money to rehabilitate 80 homes throughout the county. This program is targeted to single family residences occupied by the homeowner. Houses are rehabilitated to federal "Section 8 Housing Rehabilitation Standards". Homeowners seeking this assistance should be referred to the Crawford County Planning Office. The program is designed to spend, on the average, \$10,000 per residence.

HOUSING SURVEY

In the autumn of 1993 a windshield survey of the Township's housing quality was made. The type, age and condition of the housing was given a quick evaluation. With regard to housing type the following categories were used:

- Conventional Residences
- Mobile Homes
- Double-wide (modular) Homes (Modular homes were sometimes difficult to identify.)
- Recreational Vehicles

Three age categories were used:

- Houses built prior to 1900
- Houses built between 1901 and 1940
- Houses built (mobile homes established) after 1940

Housing quality evaluations were made up of three major criteria, each given good, fair or poor ratings:

Condition of the foundation
 Condition of the exterior walls
 Condition of the roof

Also a rating was given under category termed minor criteria which consisted of:

Need of window and/or door replacement
 Deteriorated porch or chimney
 Gutters and downspouts lacking or in poor repair
 Dilapidated entrance steps.

In the following tabular listings the results of this survey are given.

AGE OF HOUSING

<u>Time Period</u>	<u>Number</u>	<u>%</u>
Built before 1900	10	3
Built between 1901 and 1940	37	10
Built or established after 1940	<u>313</u>	<u>87</u>
Total	360	100%

TYPE OF HOUSING

<u>Type</u>	<u>Number</u>	<u>%</u>
Conventional Residences	202	56
Mobile Homes	136	38
Double-wide Mobile Homes/Modular	10	3
Recreational Vehicles	<u>12</u>	<u>3</u>
Total	360	100%

CONDITION OF HOUSING

<u>Condition Category</u>	<u>Number</u>	<u>%</u>
Basically good	288	80
One Major Criteria either fair or poor	13	4
Two or Three Major Criteria either fair or poor	51	14
One or more minor criteria showing evidence of deficiency*	<u>8</u>	<u>2</u>
Total	360	100%

* Note: Where a house was evaluated to have one or more major criteria either fair or poor as well as minor criteria deficiencies, the house was counted in the appropriate former category - not in the minor criteria category.

These tabulations speak for themselves. Most of the Township's housing is post World War II. There are a significant number of mobile homes established in Pine Township. The condition of the housing is basically good. It must be pointed out however that the interiors of the homes were not examined. There could have been serious electrical wiring problems; the plumbing and heating system could have been substandard; and the kitchen and bathroom furnishings could have been extremely obsolete.

HOUSING DATA FROM THE 1990 U. S. Census

As pointed out elsewhere in this plan there were 455 persons counted as residents of Pine Township when the 1990 U. S. Census was made. The housing units in which these people lived in the Township at this time, by occupancy and by type, are given as follows:

HOUSING UNITS BY OCCUPANCY & TYPE

	HOUSING		UNITS	
	Owner Occupied	Renter Occupied	Vacant	Total
Single Family Conventional Construction	121	26	71	218
Multi-Family Conventional Construction	3	3	0	6
Mobile Home or Recreational Vehicle	<u>32</u>	<u>7</u>	<u>124</u>	<u>163</u>
Totals	156	36	195	387

Persons living in owner occupied housing were counted to be 355 or 78% of the total population.

The value of the Township's housing is given in the following table. These figures pertain only to owner-occupied housing units.

VALUE OF HOUSING UNITS

Range of Value	Number In This Range
Less than \$15,000	4
\$15,000 to \$19,999	4
\$20,000 to \$24,999	9
\$25,000 to \$29,999	5
\$30,000 to \$34,999	7
\$35,000 to \$39,999	14
\$40,000 to \$44,999	9
\$45,000 to \$49,999	7
\$50,000 to \$59,999	14
\$60,000 to \$74,999	19
\$75,000 to \$99,999	7
The median value of housing units	\$43,600
The median value of housing units in all of Crawford County.	\$43,200

A series of characteristics on the Township's housing stock is given as follows:

- * Median amount of rent paid by renter occupied households \$ \$ 186 @ month
- * Housing units lacking complete plumbing 8
Housing units lacking complete kitchen facilities 10
- * Housing units having no telephone 10
- * Source of water
 - Public system or private company 22 units
 - Individual drilled wells , , , , 357 units
 - Individual dug well. 7 units
 - Some other source 5 units
- * Source of house heating fuel
 - Utility gas 71 units
 - Bottled gas 19 units
 - Electricity 20 units
 - Fuel oil 68 units
 - Wood 19 units
- * Number of persons per occupied housing unit. . 2.37
- * Vacancy rate: Of the 387 housing units in the Township, 195 are vacant. This is a vacancy rate of 50%, which is unusually high. Of the 195 vacant units 124 of them are mobile homes. The reason for the high vacancy rate is the very dominant seasonal housing characteristic of Pine Township and the Pymatuning Reservoir area.

ATTITUDE SURVEY

INTRODUCTION

It was decided to do an attitude survey of the Township's households in order to broaden the base of information on Township issues and to insure that the planning effort was participatory. The questionnaire which was mailed to the households in the sample is provided in the jacket fastened to the rear cover of this plan report.

A random sample of the Township's households was developed. There are 387 households in Pine Township; the sample size selected was 250 households. Of the 250 surveys mailed it was hoped we would get a return of approximately 192 of them. We did not get this response; 118 surveys were returned for a 46% response rate.

Listed below are some significant characteristics of the persons/households who returned the survey.

- * Average length of residency in the Township - 18.8 years
- * 95% of the respondents owned their homes
- * 39% (46) of the respondents were retired
- * 25% (30) of the respondents were managerial/professional persons

Complete survey results are printed in separate reports available at the County Planning Office.

SURVEY RESULTS

Opinion on Township Growth

48% of the respondents want the Township to remain the same.
32% want to see the Township grow.

Where People Go For Services

75% of the respondents go to Linesville either daily or weekly for shopping.
38% go to Meadville for medical services.

Satisfaction With Cable TV Service

67% of the respondents who have cable TV are dissatisfied with the service and 76% would like to see the Township explore competing franchises.

Satisfaction With Water Supply

95% say they have adequate drinking water.

Land Use Issues

62% believe land should be reserved for industry.
75% believe that recreational vehicles should be located only in certain areas.
35% of the respondents object to mobile homes when they are located near conventional homes.

Paying Taxes

There was no service which a substantial number of respondents were willing to pay increased taxes for.

Pine Township/Linesville Merger

50% of the respondents said there should be no merger of these two governments.
39% indicated a merger would be ok; however, 68% said a merger should not result in Pine Township residents paying additional taxes.

SOCIOECONOMIC CHARACTERISTICS

INTRODUCTION

This section of the plan is devoted to an examination of the social and economic characteristics of the Township. These characteristics are determined mainly from the information provided in the 1990 decennial U. S. Census. The information given in the following pages is four years old at this writing, but it is impossible to get data as comprehensive as these that would be more current.

THE LABOR FORCE AND ITS CHARACTERISTICS

According to the 1990 Census there are 379 persons 16 years of age and older. Of these 185, or 49% are not in the labor force; this is very natural for many of the younger persons are still being schooled and many persons are retired and no longer in the work force. The unemployment rate calculated from the following statistics is 10.8%. These figures date from the spring of 1990.

TABLE 1.
PERSONS 16 YEARS AND OVER BY SEX AND BY LABOR FORCE STATUS

	Male	Female	Total
In labor force	106 (55%)	88 (45%)	194
Armed forces	0	0	0
Civilian forces			
Employed	97 (56%)	76 (44%)	173
Unemployed	9 (43%)	12 (57%)	21
Not in labor force	90	95	185

The next two tables are among the most interesting in this section. They show the nature of the labor force, indicating the kind of work families do to earn their livelihoods. Township statistics are arrayed alongside of county-wide statistics to facilitate comparisons.

TABLE 2.
EMPLOYED PERSONS 16 YEARS AND OVER BY OCCUPATION
IN PINE TOWNSHIP AND IN THE COUNTY

	Number in Pine Township	Percent, Pine Township	Percent, Crawford County
Managerial & professional specialty			
Executive, administrative, managerial	10	6%	9%
Professional Specialty	20	12%	11%
Technical, sales, administrative support			
Technicians & related support	5	3%	3%
Sales	26	15%	9%
Administrative support, clerical	18	10%	12%
Service			
Private household	3	2%	0.3%
Protective	-	-	1%
All other service work	16	9%	13%
Farming, forestry & fishing	2	1%	5%
Precision production, craft & repair	33	19%	14%
Operators, fabricators & laborers			
Machine operators, assemblers, inspectors	25	14%	12%
Transportation & material moving	5	3%	6%
Handlers, helpers, laborers	10	6%	5%
Total	173	100%	100%

TABLE 3.

EMPLOYED PERSONS 16 YEARS AND OVER BY INDUSTRY
IN PINE TOWNSHIP AND IN THE COUNTY

	Number	Percent, Pine Township	Percent, Crawford County
Agriculture, forestry, fishing	6	3%	4%
Mining	5	3%	1%
Construction	16	9%	6%
Manufacturing			
Nondurable goods	14	8%	5%
Durable goods	41	24%	22%
Transportation	8	5%	4%
Communications, other public utilities	2	1%	1%
Wholesale trade	5	3%	2%
Retail trade	31	18%	18%
Finance, insurance, real estate	4	2%	4%
Business and repair services	2	1%	3%
Personal Services	8	5%	2%
Entertainment and recreation services	-	-	1%
Health Services	7	4%	9%
Educational Services	16	9%	10%
Other professional and related services	5	3%	5%
Public Administration	3	2%	3%
Total	173	100%	100%

An analysis of these tables produces the following observations.

- * As important as agriculture may appear to be in the Township, this industry does not supply many residents with their family income.
- * Manufacturing, retail trade and professional services (health, educational and other) provide two-thirds (66%) of the employment for Township residents.
- * The largest single employment category is the manufacture of durable goods (31 workers). Recessionary trends in the national economy normally constitute very difficult times for this industry.
- * An unusually large number of the Township residents (26 or 15%) are employed in sales as compared to the County as a whole where only 9% are employed in sales.
- * The occupations and industrial categories characteristic for the Township's labor force parallel fairly closely the county-wide categories except for the precision production, craft and repair and sales categories which are described above.

INCOME DATA

The census data show that household income is somewhat lower in the Township than in the county as a whole. The following measures of income compare the Township to all of Crawford County; they report 1989 incomes.

	Pine Township	Crawford County
Median household income	\$ 18,906	\$ 23,083
Per Capita Income	\$ 10,314	\$ 10,833

The following table shows this same fact. Note the higher percentages under the Township column at the lower ranges of income.

TABLE 4.

HOUSEHOLD INCOME IN 1989 IN PINE TOWNSHIP
AND IN CRAWFORD COUNTY

(The household includes all persons who occupy a housing unit.)

Income Range	Pine Township No. of Households	% of Total	Crawford County % of Total
Less than \$ 5,000	6	3.1	5.9
\$ 5,000 to 9,999	27	13.9	13.6
10,000 to 12,499	21	10.8	6.3
12,500 to 14,999	29	14.9	5.6
15,000 to 17,499	5	2.6	6.1
17,500 to 19,999	16	8.3	5.2
20,000 to 22,499	6	3.1	6.1
22,500 to 24,999	3	1.6	5.1
25,000 to 27,499	20	10.3	4.5
27,500 to 29,999	4	2.1	4.5
30,000 to 32,499	10	5.2	4.5
32,500 to 34,999	8	4.1	3.8
35,000 to 37,499	2	1.0	4.6
37,500 to 39,999	0	0.0	2.9
40,000 to 42,499	8	4.1	3.4
42,500 to 44,999	0	0.0	2.4
45,000 to 47,499	9	4.6	2.3
47,500 to 49,999	3	1.6	1.5
50,000 to 54,999	5	2.6	2.8
55,000 to 59,999	7	3.6	2.0
60,000 to 74,999	2	1.0	3.4
75,000 to 99,999	2	1.0	1.8
100,000 to 124,999	0	0.0	0.9
125,000 to 149,999	1	0.5	0.2
150,000 or more	0	0.0	0.6
Total	194	100 %	100 %

Statistics on poverty most appropriately may be shown under this category. The Township has a smaller percentage of families under the poverty level than the county as a whole except for the category of families without related children which is one-half of a percentage more than the County.

Poverty thresholds are established by the federal government and they are made sensitive to family size; they are done on a national basis; no attempt has been made to adjust these thresholds for local or regional variations in the cost of living. The poverty line or threshold was established based on a U. S. Department of Agriculture study which reflected family size and composition and which determined that families of three or more persons spend approximately one-third of their income on food; the poverty level for these families was set at three times the cost of an economy food plan. The more persons in the family the higher the poverty threshold. For smaller families (less than three) the cost of the economy food plan was multiplied by factors that were slightly higher in order to compensate for the relatively larger fixed expenses of these smaller households. The poverty thresholds are updated every year to reflect inflation.

TABLE 5.

FAMILIES BELOW THE POVERTY LEVEL IN 1989
IN PINE TOWNSHIP AND IN THE COUNTY

	Pine Township		Crawford County
	Number	% Of All Families In Township	% Of All Families In County
With related children:			
Under 18 years	8	6.0	9.3
Under 5 years only	2	1.5	4.6
Without related children	4	3.0	2.5
Total families below poverty level	12	9.0	11.7
Total families above poverty level (122)			

TABLE 6.

UNRELATED INDIVIDUALS BELOW THE POVERTY LEVEL
IN 1979 AND 1989 IN PINE TOWNSHIP

	Year	Above Poverty Level	Below Poverty Level	
		Number	Number	%
Total Unrelated Individuals (71)	1989	60	11	15.5
Total Unrelated Individuals (40)	1979	36	4	10.0

Note: Unrelated individuals may be persons living alone, persons living with others but not related to them, roomers, boarders, etc.

The percentage of unrelated individuals in Pine Township in 1989 is 15.6%, this has increased considerably over 1979 when 9.2% of the population consisted of unrelated persons. The County as a whole has not experienced this great an increase, with unrelated persons accounting for 10% of the County population in 1979 and for 13% in 1989.

EDUCATIONAL AND OTHER CHARACTERISTICS

The Township residents have an educational attainment paralleling the county-wide attainment. See the following table.

TABLE 7.

PERSONS 25 YEARS OLD AND OVER BY YEARS OF
SCHOOL COMPLETED

	Pine Township		Crawford County
	Number	%	%
Less than 9th grade	41	12.3	10.0
9th to 12th grade, no diploma	40	12.0	16.0
High school graduate	172	51.7	47.0
Some college, no degree	36	10.8	12.0
Associate degree	4	1.2	3.0
Bachelor's degree	26	7.8	7.3
Graduate or professional degree	14	4.2	4.7
Total	333	100.0	100.0

Of 169 workers (of ages 16 years or greater), 131 of them, or 77.5% drive alone to their place of employment; 16.6% of these workers use a carpool to accomplish their trip to work; 4.7% of these workers walked or worked at home.

TABLE 8.

AVAILABILITY OF VEHICLES IN OCCUPIED HOUSING
UNITS IN PINE TOWNSHIP AND IN THE COUNTY

	Pine Township		Crawford County
	<u>No. of Households</u>	<u>% Of Total</u>	<u>% Of Total</u>
No vehicles available	9	4.6	11.5
One vehicle available	87	44.2	39.0
Two vehicles available	73	37.0	37.2
Three or more vehicles available	28	14.2	12.3

If the ownership of vehicles (cars and trucks) is any measure of affluence then Pine Township residents are more affluent than county residents in general. However, living in a rural township such as Pine Township requires one to travel to work and to all service establishments and in reality vehicles are an absolute necessity.

POPULATION DATA
POPULATION FORECAST

DATA

As pointed out in earlier narrative Pine Township's population is very modest: 455 persons counted in the 1990 U.S. Census. All but 3 of these persons are of the white race; there are 3 black persons in the Township. There are 239 males and 216 females; this amounts to 52.5%/47.5% split. In all of Crawford County the male/female split is 48.5% male and 51.5% female. Accordingly in Pine Township, untypically, there are more men than women.

There are 192 households in the Township. The number of persons per household is 2.37. The households are of the following types.

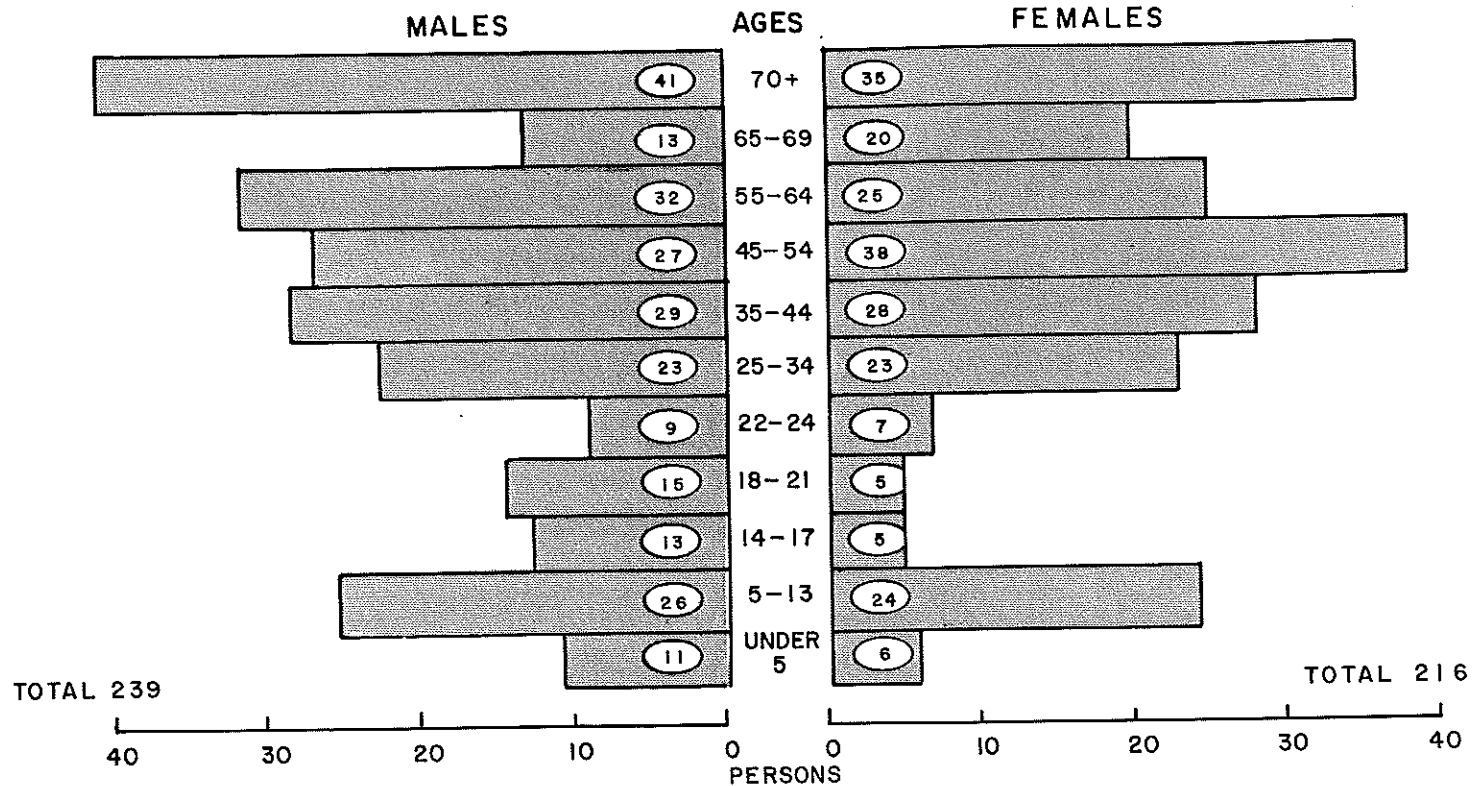
Family Households	133
Married Couples	114
Male-no wife present	6
Female-no husband present	13
Nonfamily Households	59
Male householder	32
Female householder	27
Grand Total	192

Households with one or more nonrelatives	14
Households with no nonrelatives	<u>178</u>
Grand Total.	192

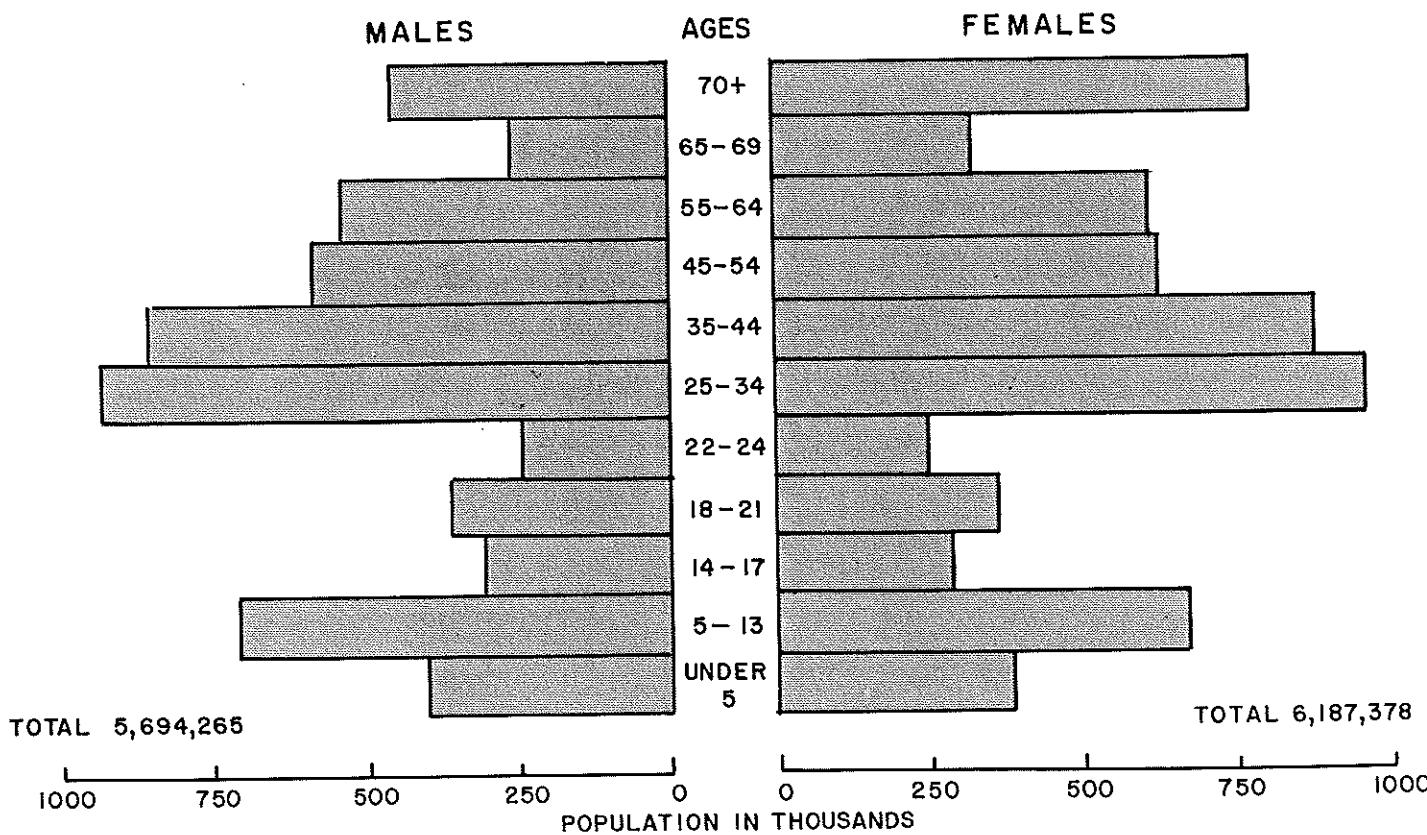
On the following page age/sex population pyramids have been developed, one for Pine Township and one for the State of Pennsylvania so that comparisons can be made. Some observations that can be made are:

- * A relative lack of people in the productive period of their lives - ages 25 to 44.
- * Fewer women than men in the age bracket 14 to 24.
- * A relative lack of newborns (birth to the age of 5). This fact coupled with the other two observations just made would indicate that there is a drain of young people away from the Township to other areas, most likely because of a lack of career and employment opportunities in Pine Township.
- * A preponderance, relatively speaking, of older people in the Township particularly in the age bracket 70 and above, with more of these being male than female. This fact is of course related to the drain of younger people away from Pine Township.

POPULATION BY AGE & SEX: 1990 PINE TOWNSHIP



STATE OF PENNSYLVANIA



SOURCE: 1990 U.S. CENSUS DATA COMPILED IN THIS FORM BY C.C.P.C. STAFF

POPULATION FORECAST

The population of Pine Township as counted in the 1990 U.S. Census was 455 persons. Since the population count in the Township in 1980 was 435, the more recent figure represents a ten year increase of 20 persons or 4.6%. An effective population forecasting technique is to "average out" historical population data. In more technical terms this is done by fitting a trend line to the past decennial census counts. This trend line is developed mathematically through a linear regression analysis. In the following table historical population data are provided for the Township and for all of Crawford County (for comparison purposes), and the results of the linear regression forecast are shown.

Year	U.S. Census Data		Difference From Preceding Count				Township Increase Over Previous Count
	Pine Township	Crawford County	Pine Township Number	%	Crawford County Number	%	
1940	263	71,664					
1950	350	78,948	+ 87	33.0	+7,284	10.2	
1960	327	77,956	- 23	- 6.5	- 992	- 1.3	
1970	392	81,342	+ 65	19.8	+3,386	4.3	
1980	435	88,869	+ 43	10.9	+7,527	9.3	
1990	455	86,169	+ 20	4.3	-2,700	- 3.0	
2000							
2010					<u>500</u>		45
					<u>535</u>		35

Based on 1990 U.S. Census data, the number of persons per occupied household unit in Pine Township is 2.37. Assuming this figure as typical for future households, in the year 2000 based on the above forecast there will be 19 new households added to the Township.

To compare the above population forecast with another projection technique the following information is presented. The population of all of Crawford County was subjected to linear regression analysis and in doing this the county's total population was projected to the years 2000 and 2010 with the following results:

Year	Crawford County Forecast
2000	90,263
2010	92,800

Keep in mind the county's population in 1990 has been counted as 86,169. Pine Township's percentage of the entire county's population was determined for six decennial census periods, from 1940 to 1990 inclusive. This average percentage was determined to be .004548 or .4548%. Applying this percentage to the projected county populations we obtain the following:

Year	Countywide Population Forecast	Pine Township Population Forecast
2000	90,263	410
2010	92,800	422

As one can see these forecasts are lower than those given above. This is true because Pine Township has shown a greater amount of relative growth since 1950 than Crawford County as a whole. For example the county's growth rate, 1950 to 1990, has been 9.1%. Pine Township's growth rate during this same period has been 30%.

THE TOWNSHIP'S FISCAL AFFAIRS

The Township in 1993 had a budget in the vicinity of \$45,000. The income categories in that budget which provided contributions to the general fund were as follows:

RECEIPTS

Property Tax	\$10,589
Per Capita Tax	1,566
Earned Income Tax	19,605
Realty Transfer Tax	2,161
Occupational Privilege Tax	3,050
Interest	681
Licenses & Fees	7,303
Miscellaneous	775
Total	\$45,730

These income streams need some explanation:

Property Tax. This tax in Pine Township is 1.5 mills. This tax is applied to \$7,475,200 (This is the assessed valuation as of October 1994; it was not this high when the 1993 taxes were collected. Also keep in mind collections are seldom at the 100% level) in assessed valuation. Assessed valuation is figured to be 75% of "market value". The market value of all real estate in the Township is \$12,307,799. Of this amount only \$9,966,933 is taxable; the remainder is tax exempt. In Crawford County the range of millage assigned by the county's 35 townships is from 0 mills to 4.5 mills.

Per Capita Tax. This is set at \$5.00 per person 18 years of age or older.

Earned Income Tax. This is paid by an employer to the municipality of residence of the employee. Of course the tax comes out of the employee's wages. It is 1% of the gross wages; one half of this amount goes to the municipality (Pine Township) and one half goes to the school district in which the employee resides. This tax is collected for the township by school district staff.

Realty Transfer Tax. 1% is taken from the consideration in each real estate transfer in the Township. This tax is split evenly between the municipality and the school district.

Occupational Privilege Tax. This tax is \$10.00 per worker and it is paid by the employer to the municipality where the employer has his plant or place of employment. Of course this money comes from worker's wages.

In addition to the \$45,730 income the Township also received \$18,326 in 1993 from PennDOT for use in maintaining its road system. This money must be used on road work.

Looking next at expenses the Township had, in 1993, the following line item expenditures which are listed below:

EXPENSES

General Government	\$ 8,686
Public Safety	3,707
Roads and Snow	23,760
Insurance	4,066
Miscellaneous	900
Total	\$41,119

The Township shows an additional expense of \$26,140 which was paid out for road system work and equipment.

At the end of 1993 there were two carry over amounts. In the general fund \$25,229 was carried over into 1994. This amount is typical of the carry over the Township plans to have because this amount of money sustains Township operations until the following year's taxes come in. There was a carry over of \$6,458 in the state funded money for road work.

As one can see the Township is on reasonably good footing in terms of its financial affairs. It does not have a large amount of money, but it is not in debt and it could sustain modestly priced improvements. It could, in fact, undertake a program of capital improvements, if it desired to do so, by a very modest increase in the property tax millage. Summarizing the current property tax levies in Pine Township for 1994 they are as follows:

	Millage Levy
Pine Township	1.5
Crawford County	11.6
Conneaut School District	<u>29.0</u>
Total	42.1

REGIONAL CONTEXT

Pine Township is, geographically, the most unique municipality in Crawford County and a glance at a county map will quickly demonstrate why. The Township surrounds the Borough of Linesville. It is bordered itself by Conneaut Township on the north, Summit and Sadsbury Townships on the east and North Shenango Township on the south and west. Its "real" connection with North Shenango Township, however, is only by a narrow band of land termed, the Pymatuning Causeway; the balance of its contact with this Township occurs through a boundary line running in the Pymatuning Reservoir's waters. The Township's connection with Sadsbury Township is through land in Pymatuning State Park, virtually all of which is wetlands.

Its relationship to Linesville is its most important one. Most, but certainly not all, of the buildable land in Linesville is committed to development. Consequently future growth in Linesville has significant relationship to Pine Township. Linesville is Pine Township's most important service center. The activities and management of Pymatuning State Park have great significance for Pine Township simply because the park occupies considerable Township land and forms the entire south and west boundaries of the Township.

There are 3 residential subdivisions in Conneaut Township located between U.S. Route 6 and the Pymatuning Reservoir which are positioned just north of Pine Township's boundary and which if they are ever provided with public sanitary sewerage, should logically be part of a sewerage system in Pine Township. Gravity flows from the 3 subdivisions would be directed to the Sportsmen's Allotment in the Township.

Any plan for Pine Township should be aware of this regional context. Each of the municipalities touched by the Township is zoned, except for Conneaut Township.

PLANNING ISSUES

As a land use and facilities plan is developed there are a series of issues which have been discussed through the plan making process and which should be dealt with in the plan formulations. These issues are summarized below under a series of captions.

LAND USE ISSUES

- * There being no large area of agricultural land in the Township that is free of development pressures, is it reasonable to promote agricultural land as a highest and best use in Pine Township where farming activities currently exists?
- * Part of Linesville Borough's water supply generates from a spring-fed, basin-like area in the Township. Recognizing this area as a unique water resource, should the Township work to protect this natural resource through the use of zoning regulations?
- * Recognizing that Linesville Borough is the service and commercial center for western Crawford County how should the Township look upon future commercial and industrial development in land areas under its jurisdiction? How can the zoning ordinance be used to strengthen Linesville as the area's service center without harming Pine Township?

PUBLIC FACILITY ISSUES

- * Public sanitary sewer and water systems are normally necessary for future growth. Should the Township begin to work with Linesville regarding the extension of the Borough's systems into the Township? Or should the Township, expecting a large amount of growth, plan to construct its own sewage treatment plant?
- * Should Pine Township construct/renovate a building in which it would house its government operations - a Township building?
- * How should the Township deal with the reality of developed lots, mainly residential, being located on private roads?
- * Where neighborhoods have a preponderance of low/moderate income families and thus qualify for Community Development Block Grant (CDBG) monies, and where such neighborhoods do not have a density of use which causes health and environmental problems, should the Township play a leadership role in implementing sanitary sewer extension projects into these neighborhoods?
- * Is the pedestrian and bicycle travel between Linesville and Ferris Park along West Erie Street sufficiently heavy enough to warrant the construction of a bike/hike travelway between these two destinations?
- * Should there be an attempt made to upgrade S.R. 2014 into a minor collector designation? This designation relates to the Federal Functional Classification System discussed earlier in this plan. This road makes a direct connection to Conneaut Lake Park and if upgraded could tie Linesville's shopping area and recreation related development in Pine Township more closely to Conneaut Lake Park. PennDOT must be convinced to approve such an upgrading.
- * Should Pine Township actively support the Linesville Authority's acquisition of the 8" water line serving Ferris Park (currently owned by the DER)? Authority ownership of this line could lead to more development along West Erie Street in the Township.

GENERAL ISSUES

- * Is growth desirable for Pine Township? Assuming growth is desirable, should it be growth in a balanced way, that is with proportionate amounts of residential,

commercial and industrial uses? or should there be a different mix level, with an emphasis on residential development?

- * How can the significant amenity of the Pymatuning State Park use be linked to the increasing growth of the Township - that is assuming the Township wants to encourage growth.
- * Has the somewhat scattershot pattern of the placement of mobile homes and recreational vehicles damaged the Township's image - made it a less attractive area for housing developers to promote?

GOVERNMENT ISSUES

- * How can the Township cooperate more fully with Linesville Borough regarding all matters of government? Is it feasible to consider merging the two governments into one?
- * How much could the Township consider raising its property tax to pay for more government services and additional community facilities?
- * How can the handling of zoning and subdivision regulations be improved so that the citizens perceive these ordinances as fairly, impartially and efficiently administered?
- * Designation of specific land uses on a land use plan does not mean development will follow. How can particular land uses - like industrial - be implemented? Should there be a Linesville Area organization formed to foster economic development? Can the local area rely solely on the Meadville Area Industrial Commission (MAIC) to adequately promote economic development in the Linesville Area?

THE PLAN

PRELIMINARY REMARKS

The chief task of this planning report is to synthesize the background information gathered and to advance objectives, policies, projects, and programs which will serve to guide the public officials of the Township and private interests also (but less directly) in governing and in fostering the Township's development.

The plan's objectives and policies are partly expressed through a land use plan. The Pine Township Land Use Plan is provided on page 54. Embedded in this plan are a series of policy decisions which will be articulated in the ensuing pages of the plan section of this report.

Definitions are in order. The term objective should be understood to mean a general statement of purpose. The term policy should be understood to mean a more specific statement in connection with an issue or an action. The terms project and program shall be understood to mean specific undertakings which are intended to achieve and/or implement objectives and policies.

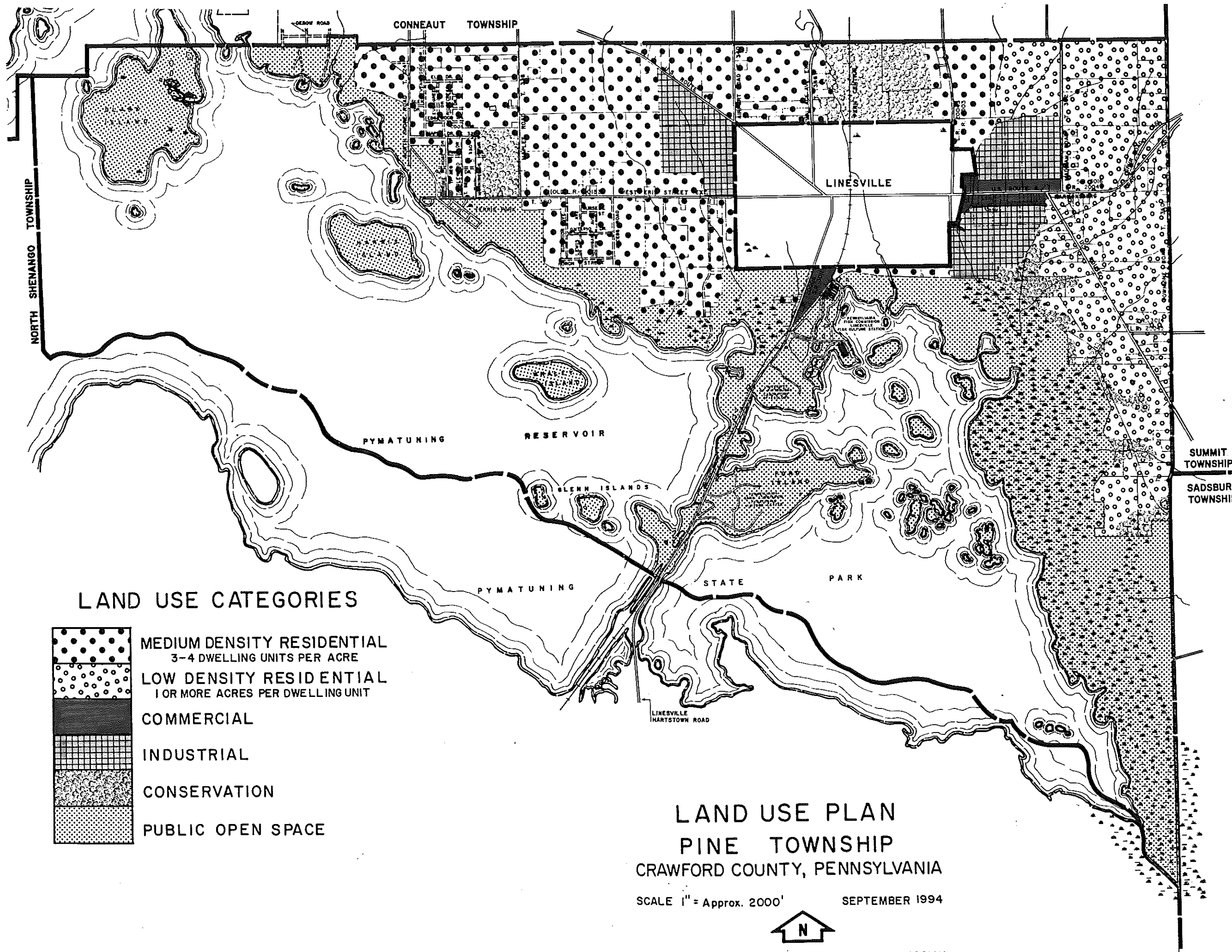
There is no separate facilities plan in this report because facility proposals are not extensive in Pine Township and they can be identified and discussed without the use of a plan or map.

PLAN OBJECTIVES

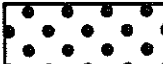





Six major plan objectives are established in this plan which should set the general course of the Township's development for the next 10 to 20 years.

- * To actively promote the growth of Pine Township. Within the 10 year time horizon of this plan to encourage primarily residential and light manufacturing growth.
- * To accommodate growth within the 10 year time horizon mainly with on-lot sanitary sewer and water supply systems.
- * To continue to upgrade and develop public facilities within the Township.
- * To make special and conscious efforts to forge cooperative links with Linesville Borough in all matters where there is any overlapping interest.
- * To continue to cultivate active and cooperative relationships with Pymatuning State Park officials.
- * To work to upgrade the administrative efficiency of the Township's zoning and subdivision regulations.

Flowing from these six development objectives there are a number of more specific "directions" for the Township to peruse; they are covered under a discussion of policies, projects and programs the Township should adopt and implement.



LAND USE CATEGORIES

-  MEDIUM DENSITY RESIDENTIAL
3-4 DWELLING UNITS PER ACRE
-  LOW DENSITY RESIDENTIAL
1 OR MORE ACRES PER DWELLING UNIT
-  COMMERCIAL
-  INDUSTRIAL
-  CONSERVATION
-  PUBLIC OPEN SPACE

**LAND USE PLAN
PINE TOWNSHIP
CRAWFORD COUNTY, PENNSYLVANIA**

SCALE 1" = Approx. 2000' SEPTEMBER 1994



PREPARED BY CRAWFORD COUNTY PLANNING COMMISSION

POLICIES, PROJECTS, PROGRAMS

POLICIES

The following policies, projects, and programs flow out of the development objectives for Pine Township. They are meant to provide meaningful direction for public officials and citizenry alike in making growth and development decisions for the Township's future:

- * Encourage agricultural activities on open land wherever they exist but take no action through zoning regulation to protect agricultural land. Because of the limited amount of land in the Township, because of the proximity of Pymatuning State Park and its considerable amenities and because public sanitary sewer and water extensions can be provided from Linesville Borough, the future development in the Township is more suited to residential and light manufacturing uses rather than agricultural use. The Township does not have a significant amount of Class I and II land which is the prime agricultural soil.
- * Through zoning regulations allow no development in the land area which is the source of the spring-fed water collection system, part of the water supply resources for Linesville's public water system.
- * Conduct land use regulations in the Township over the next 10 years in such a way as to encourage the commercial retail expansion in the Pine Township/Linesville area to occur in Linesville's commercial district, the service and shopping center of the community. On the other hand, to regulate growth in the Township so that (1) light manufacturing activities can be located in the Township where there are suitable sites and no shortage of open, undeveloped land, and (2) in the suitable areas residential development should be promoted.
- * Should growth in the Pine Township/Linesville area occur at a rate much greater than foreseen in this plan, due perhaps to significant expansion in light manufacturing activities which would provide job generation and residential development, there could be a need for large areas for commercial expansion which would be only practical in Pine Township. This plan should then be re-evaluated for areas that would be good locationally for commercial uses.
- * Regulate development such that building lot sizes are adequate enough to handle on-lot sewage systems but small enough so that a later conversion to public sanitary sewer and water service system can occur without economic hardship to the property owners.
- * Review large subdivision proposals in the context of the Wastewater and Water Systems Study completed for Pine Township in March 1993 by the Chester Environmental Company. Where a significant number of new lots may be proposed, public systems may become necessary.
- * Take an active stance in promoting economic development in the Pine Township/Linesville area by assisting in establishing a non-profit economic development organization whose objectives will be to acquire land which can be converted to sites for light manufacturing establishments and to establish linkage with the Meadville Area Industrial Commission to steer manufacturing opportunities into areas targeted by the non-profit organization.
- * Monitor the use of CDBG funds (Community Development Block Grant) administered by the Crawford County Commissioners/County Planning Office so that this program can be used (1) to assist in sanitary sewer and water systems developments that serve Township residents and (2) to provide funds to convert private roads to roads that are constructed adequately for acceptance into the Township's public system of roads.
- * Find specific projects to work on jointly with Linesville Borough and with Pymatuning State Park so that cooperative relationships with these publicly administered organizations can be strong.

PROJECTS

- * Develop and enact on updated subdivision and land development ordinance.
- * Develop and enact a revised zoning ordinance.
- * Construct a bike/hike pathway in and adjacent to the West Erie Street right-of-way between Linesville's borough boundary and Ferris Park. See the Pine Township Planning Commission's files for more specific plans for this facility.
- * Support efforts to implement the Pymatuning Trail through Pine Township. This trail would begin on Erie Street in Linesville and follow the abandoned railroad right-of-way south into North Shenango Township.
- * Establish a Township building to centralize Township records and administrative practices, produce a suitable place for voting and to promote Township unity.
- * Request Linesville to establish a joint committee with the Township and initiate a series of meetings which can culminate in the formation of an areawide economic development corporation. This corporation shall develop a funding plan so that it can acquire land and promote manufacturing starts in the area. The Township and the Borough shall provide initial "start-up" funding for this organization.
- * Set up a task force, again between Linesville Borough and the Township to discuss pooling talent and funds to have one person handle zoning and subdivision administration in the two municipalities. Final decisions will be made by each municipality separately but the administration will be centralized. Request the County Planning Office to provide training for the administrative officer chosen.

PROGRAMS

- * Designate a person to serve as zoning and building officer who can concentrate on this task. This officer should use the detailed map showing the location of all buildings in the "Allotments" to ensure that the zoning requirements are fairly and correctly applied.
- * The Township should make certain that there is always one person on its Township Planning Commission who can maintain in a direct way cordial relationships with Pymatuning State Park. Preferably this person should be a Park Staffer who lives in Pine Township, an arrangement which currently exists.
- * The Pine Township Planning Commission once this plan is approved and the new zoning and subdivision ordinances are enacted should plan to meet 2 to 4 times a year to evaluate progress on this plan's implementation. Special meetings may need to be called depending on the issues that arise.

CONCLUDING REMARKS

This plan provides another benchmark regarding the development of Pine Township. Once the newly proposed subdivision and land development and zoning ordinances are enacted the Township should concentrate on the sound administration of these ordinances.

Very likely the best way to insure that the development related ordinances (zoning and subdivision) are administered well is to pursue the suggestion in the plan whereby the Township structures a relationship with Linesville Borough and both municipalities use the same administrative officer. This technique should make the job "high profile" enough so that careful and efficient administrative services can be obtained by a person who obtains some training in this work. As the objectives of this plan state growth and development is the desired "state of being" for Pine Township and Linesville and this will not likely occur unless the two municipalities forge creative linkage with each other, not only on the administration of growth related ordinances but also on the activities necessary to encourage jobs to come into the area.

This plan and the zoning ordinance which it has fathered clearly represents an interim state of affairs. Linesville/Pine Township's relation to the Pymatuning Reservoir provides the basis for considerable growth. For whatever reasons this has not occurred. Assuming that some day it will occur, this plan must be promptly re-evaluated because the plan as it is drawn is predicated on minimal growth. For example sanitary sewer and water supply systems will have to be examined immediately if and when significant growth happens. The interrelationships of land uses will have to be analyzed again. Pine Township's Planning Commission needs to continue functioning so that the understanding it now has of development issues in its regional area is maintained and always sharp for future challenges. This Commission currently consists of the following members:

Lloyd Gillette, Chairman
Marion Blair
Dale Eyman
Dan Hootman
Dennis Mihoci
Don Ray

The attendance of these members through the planning process was exemplary, and they are to be thanked for their diligence.

Also the writer of this plan wants to thank the Pine Township Supervisors for their steady support of this work - and their Secretary:

James Stewart, Chairman
Dan Hootman
Don Moyer
Ione Davis, Secretary

Unquestionably, thanks need to be given to Anthony (Tony) Mottle for his patience in working for (praying for) the unfolding and completion of this plan. He and his supervisor in Harrisburg, Mr. Jim Bartley, gave consistent support to this undertaking. Thank You! As stated earlier this planning effort was funded in part by Pennsylvania Department of Community Affairs' Small Communities Planning Assistance Program. Finally the writer would like to thank County Planning staff for their invaluable and irreplaceable labors in grinding out detailed work: Lois May, Secretary, Lynne Kardosh and Bob Hopkins, Assistant Planners/Graphics production.