

Land Use Planning Initiative 2011



Mining in New York

- Mined materials are essential for infrastructure, economic development
 - Per capita annual use of mineral aggregates in NY is 9 tons
- Opposition to mining and failure to appropriately plan for mining at the local level has created shortages of mined materials
- If this trend continues, material shortages will become more common thus requiring materials to be moved over longer distances at higher cost and with greater impacts to the environment and the economy
- A solution can be found using resource planning

DEC as Regulator and Resource Manager

- In Section 23-2707 of the Environmental Conservation Law, the Legislature declared that it is the policy of New York to:
 - Assure reclamation of affected lands
 - Prevent pollution and protect the taxable value of property
 - Protect the health, safety and general welfare of the public
 - Protect the aesthetic value of affected lands
 - Foster & encourage an economically stable mining industry and the orderly development of domestic mineral resources and reserves necessary to assure satisfaction of economic needs



The Mined Land Reclamation Law

- Requires a permit for excavations of more than 1000 tons in 12 months
- Permit is an approval to conduct regulated activities at a specific site
- Requires reclamation of affected lands
- MLRL supersedes all other state & local laws pertaining to mining
- Local governments are not prohibited from determining whether mining is a permissible use in zoning districts



2010 Statistics

- Active mines: 2,090 (2,475 in 2000, 2041 as of December 1, 2011)
- 38 new permits issued (71 in 2000, 25 year to date 2011)
- 112 permit modifications
- 248 straight permit renewals
- \$209 million in reclamation financial security held by DEC
- \$4.3 million in regulatory fees billed
- 2,339 site inspections conducted
- 130,674 miles traveled by mining staff
- 2,196 acres reclaimed in 2010 (32,398 acres since program inception in 1975)

Economic Impact

- Economic impact of NY's mining and construction materials industry is approximately \$5 billion
 - Sales = \$3.5 billion
 - Taxes = \$101 million
 - Labor = \$1.3 billion
- Jobs = 30,400
- Median salary = \$49,000

From "The Economic Impact of the New York State Mining and Construction Materials Industry June, 2009" prepared for the New York State Geological Survey/New York State Museum by the Center for Governmental Research



Historical Information

- DEC records indicate that 881 towns and 61 counties have had permitted mining facilities within their borders at one time or another.
- These activities have benefitted the local and regional economies as well as building and construction industries.
- Local govt's do not always recognize the benefits but do recognize potential impacts.

Issues and Problems

- Number of active mines in state are decreasing
- New mining applications have declined
- Potential reserves still exist in many parts of the state
- However, localized shortages are occurring due to a reduction in the availability of mineral aggregates

Why ?

- Depletion of near market supplies
 - Nature dictates the location of sand and gravel deposits - supplies are finite
- Changes in governmental specifications for construction materials
 - Some mining sites unsuitable
- Local governments have enacted restrictive zoning, often as a reaction rather than planning
- Effective elimination of some valuable mineral aggregate resources by other types of development...
 - Housing, commercial activities occurring over or adjacent to deposits

Land Use Planning Solution

- Towns and Counties must recognize, plan for and protect New York's sand and gravel resources
- Short term - increase awareness of the issue
 - Highlight the need and benefits
 - How impacts are managed
 - Reclamation – mining is not forever
 - Build support – Pilot Study
- Long term - Develop legislation/ regulation, resource assessments and funding mechanisms



Short Term Objective

- Coordinate with government associations to select a town for a pilot study to incorporate mineral resources into comprehensive land use planning
- The pilot study would in part include a mineral resource assessment similar to the following:



Summary

- Long term planning for mineral aggregate resources as part of the basis for the economic vitality and stability of New York is crucial
- Unplanned growth threatens this important component of economic development
- This proposal would establish by law that mineral resources are a matter of State importance for current and future needs



Conclusions

- Plans should incorporate protection & conservation of natural resources
- Need to plan for development of resources in relation to market needs
- Planning encourages quality reclamation consistent with the land use plan

Reclamation





Mined Land Reclamation Program

- Reclamation is in our name.
- Effective land use plans allow the Department to work with operators to develop innovative reclamation objectives which are well suited to the land uses designated for the mine location and is congruent with and enhances the adjacent lands
- As the name implies and the Mined Land Reclamation Law mandates in part:
“for reclamation of affected lands; to encourage productive use including but not restricted to the planting of forests, the planting of crops for harvest, the seeding of grass and legumes for grazing purposes, the protection and enhancement of wildlife and aquatic resources, the establishment of recreational, home, commercial, and industrial sites; to provide for the conservation, development, utilization, management and appropriate use of all the natural resources of such areas for compatible multiple purposes”.



Reclamation Statistics

- Since 1975: 33,609 acres reclaimed
 - In 2007: 1,073 acres reclaimed
 - In 2008: 1,842 acres reclaimed
 - In 2009: 1,665 acres reclaimed
 - In 2010: 2,196 acres reclaimed



Total Money Held by NYSDEC for Reclamation

- \$220,136,433
- Consists of letters of credit, certificates of deposit and reclamation bonds
- Held in separate account

Porter's Concrete



Dolomite Group—Allen Creek



Red Wing Velie Road Mine



Den Besten Kinderhook Mine



Frozen Ropes Sports Complex



Colonial Sand & Gravel



Shearing Sand & Gravel





NATURAL RESOURCE ASSESSMENT: SAND AND GRAVEL



Planning for Future Sand and Gravel Resources

- Sand and gravel is a non-renewable resource
- Sand and gravel must be mined where it occurs
- Little, if any, governmental planning is being done to locate and preserve our dwindling sand and gravel resources for future use
- Some parts of state already experiencing shortages leading to increased costs
- Without new sources, parts of the state will experience severe shortfalls



Some Factors Affecting How a Potential Mine is Located

- Sand and gravel must be present in sufficient amounts to warrant investment
- Sand and gravel must meet stringent quality requirements
- Sand and gravel must be accessible
- The site must meet State and local permit requirements
- There must be a way to get the material to market



Overview of Work

- Overlaid all possible deposits based on published soils and geologic mapping on a base map
- Overlaid sensitive environmental areas, developed lands and public lands on the map
- Removed from consideration the deposits located in these areas
- Performed a reconnaissance field check of the remaining potential deposits to assess their size, quality and access to market



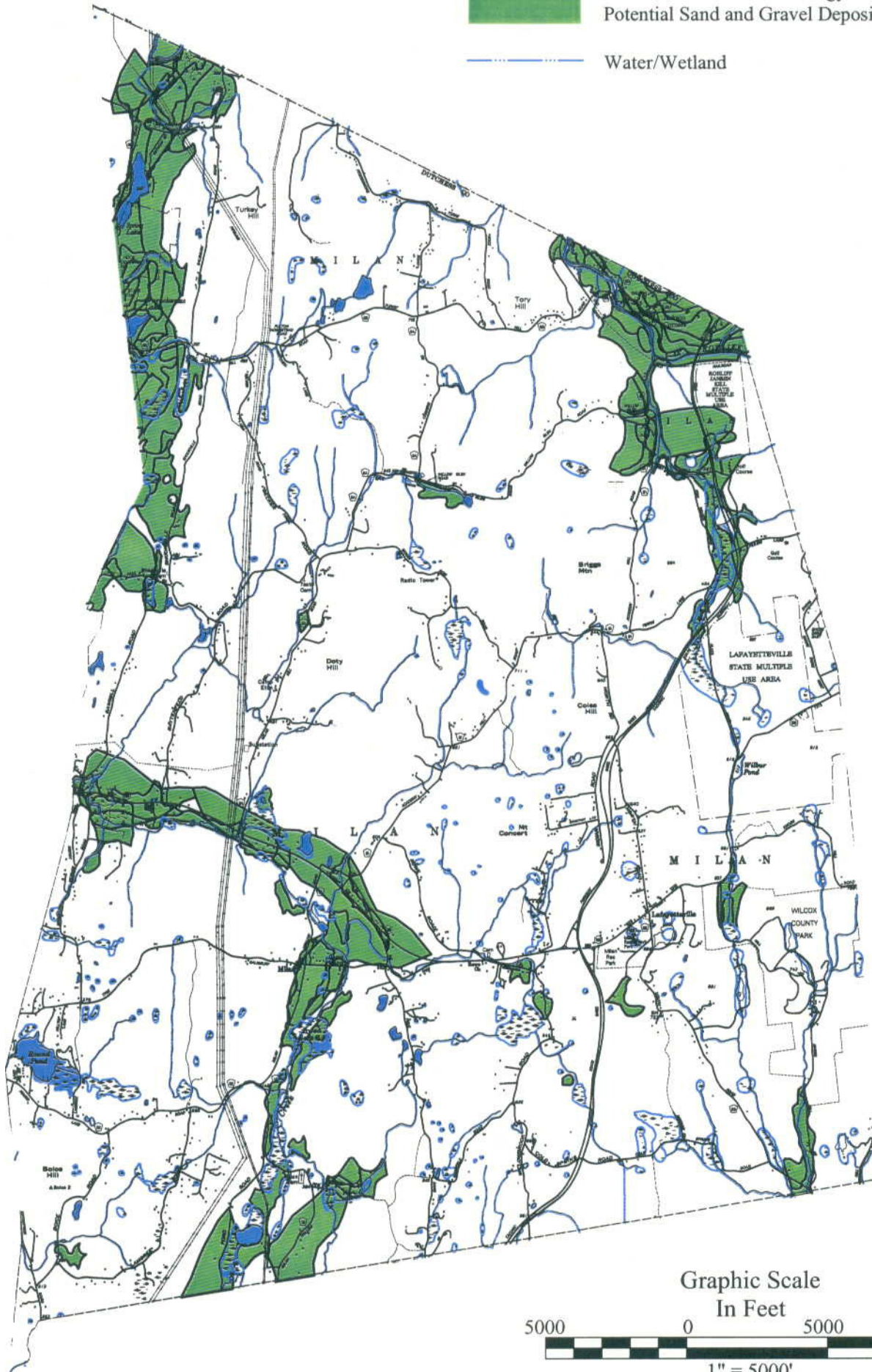
Map 1: All Potential Sand and Gravel Deposits



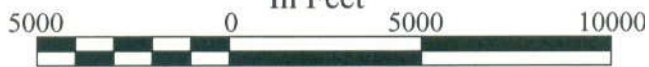
Soils and/or Surficial Geology Indicating Potential Sand and Gravel Deposits



Water/Wetland



Graphic Scale
In Feet






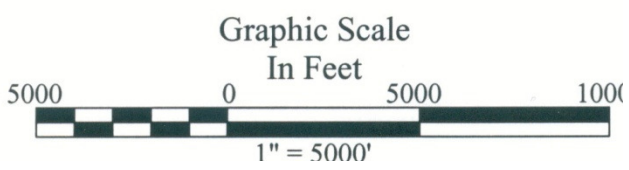
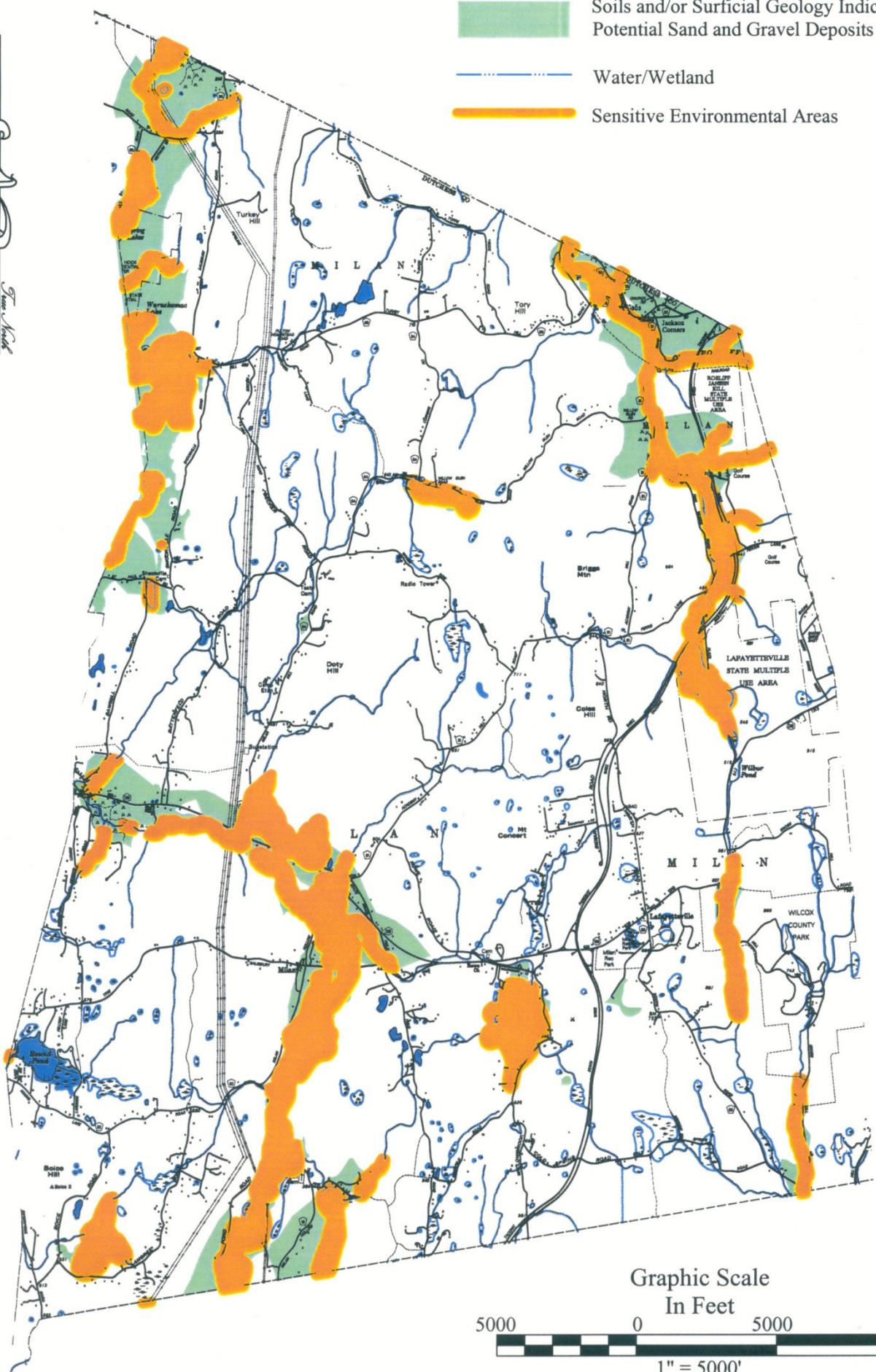
1" = 5000'



Map 2: Potential Deposits with Sensitive Environmental Area Overlay

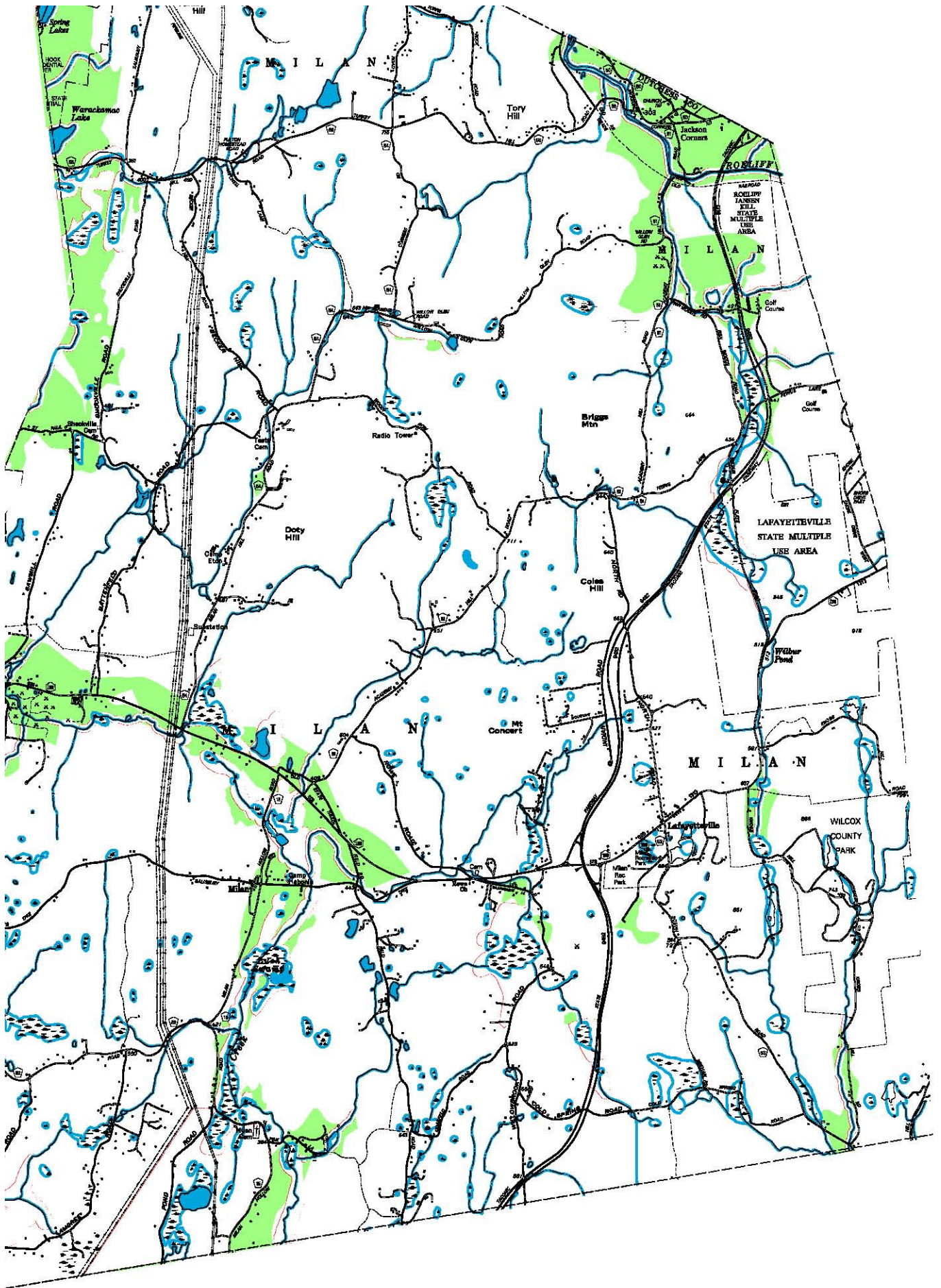


-  Soils and/or Surficial Geology Indicating Potential Sand and Gravel Deposits
-  Water/Wetland
-  Sensitive Environmental Areas








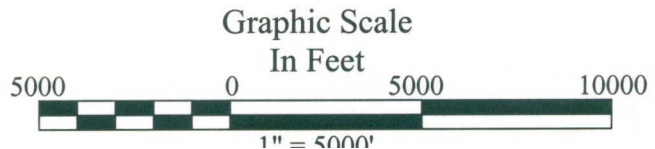
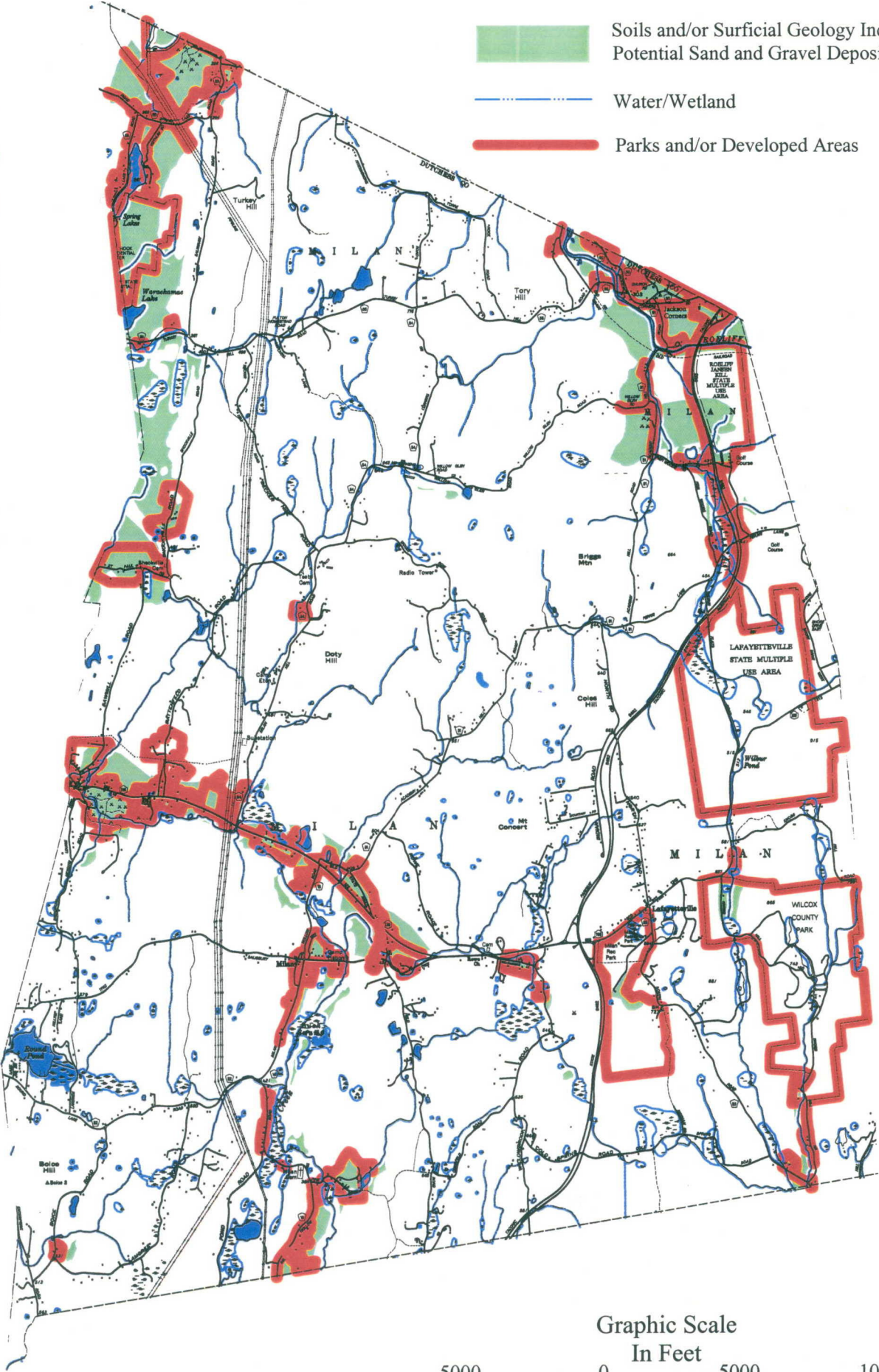
Map 3: Deposits Outside of Sensitive Environmental Areas





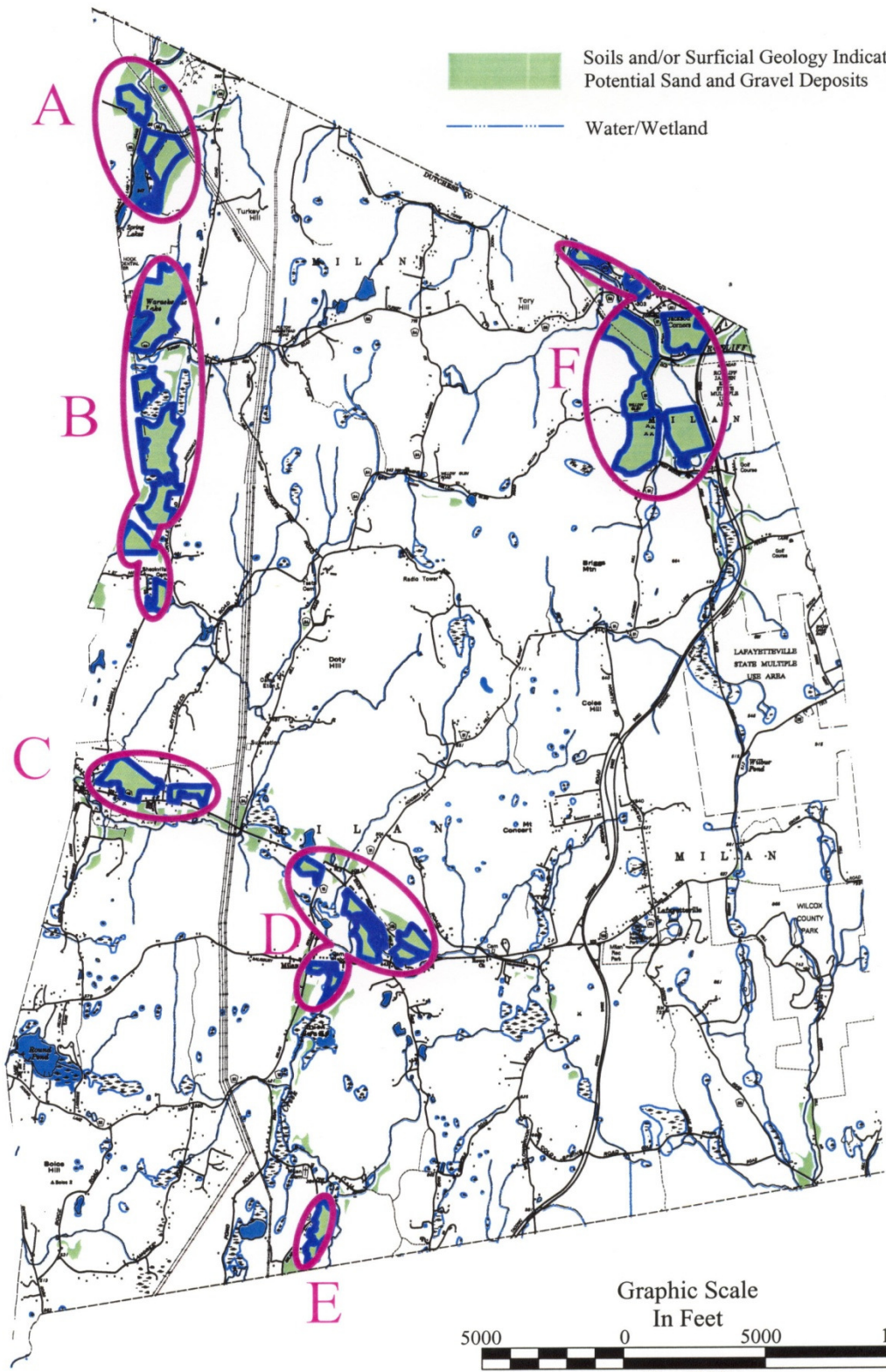
Map 4: Remaining Deposits and Developed Areas

-  Soils and/or Surficial Geology Indicating Potential Sand and Gravel Deposits
-  Water/Wetland
-  Parks and/or Developed Areas





Map 5: Remaining Deposits--Field Checked for Feasibility



Soils and/or Surficial Geology Indicating Potential Sand and Gravel Deposits

Water/Wetland

Graphic Scale
In Feet

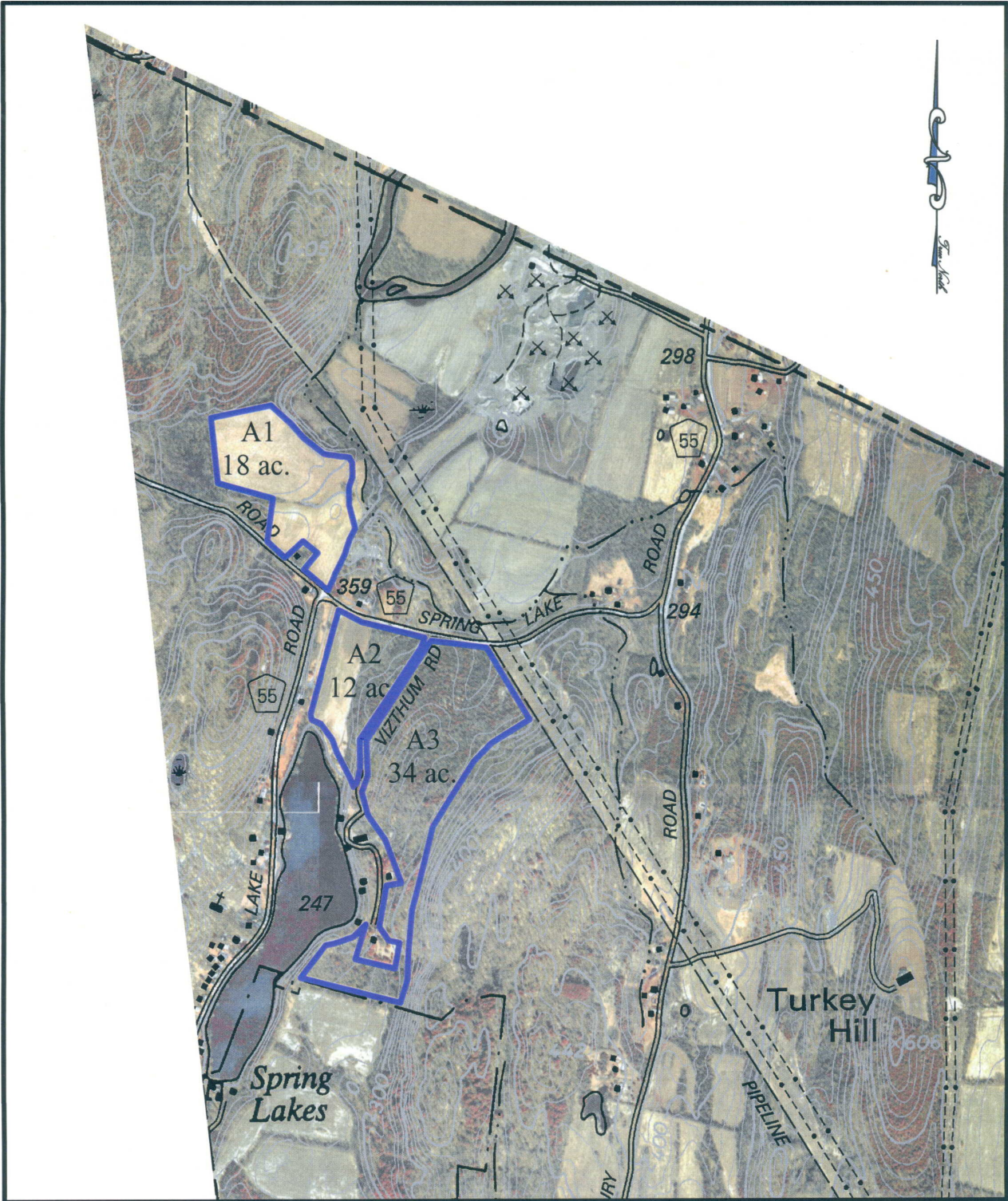
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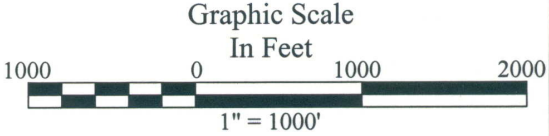
Purpose of Field Check

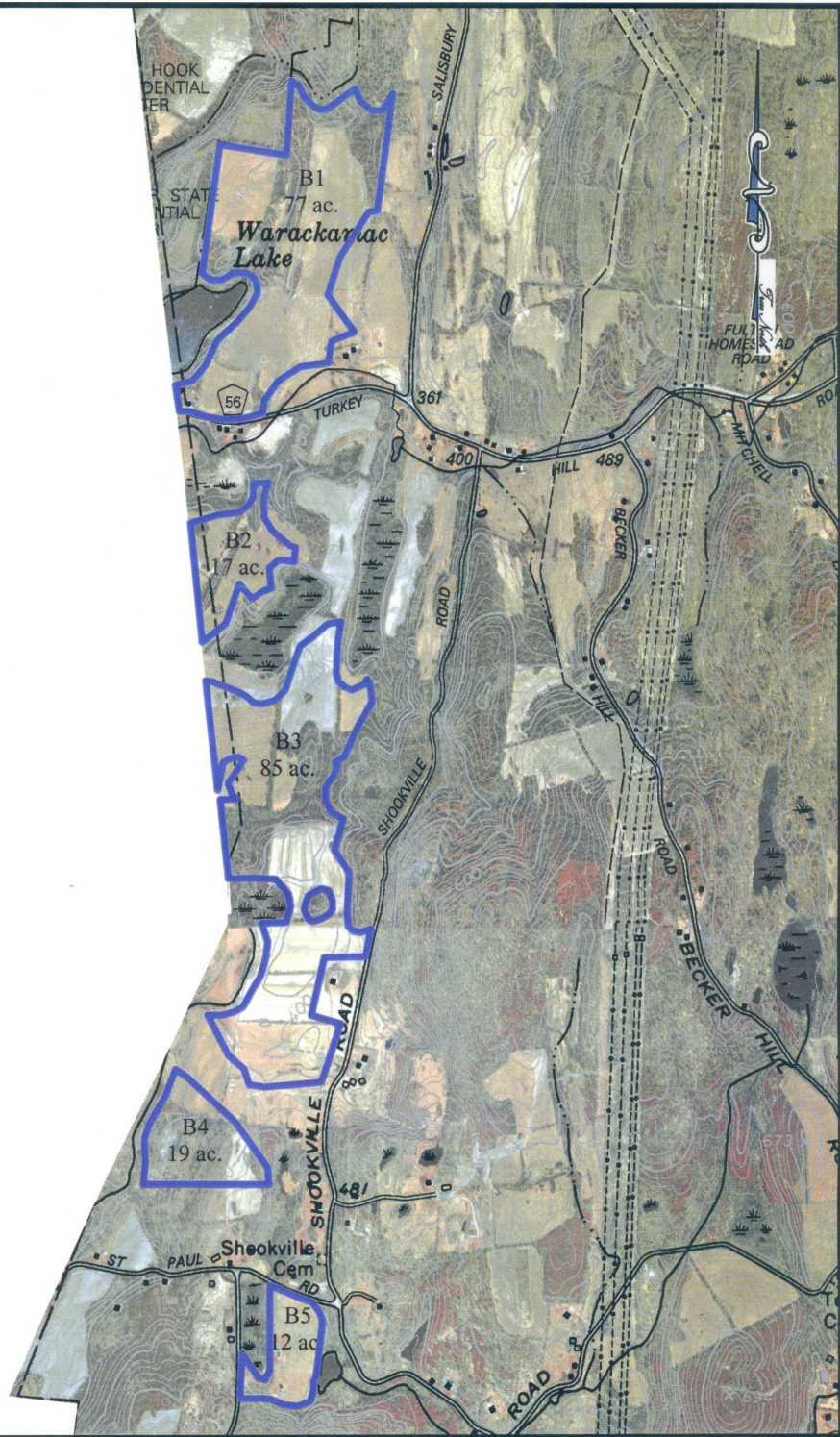
- Confirm published mapping information
- Estimate size and thickness of deposit
- Estimate quality of deposit
- Check access to market




***NATURAL RESOURCE
ASSESSMENT MAP:
LOCATION A***

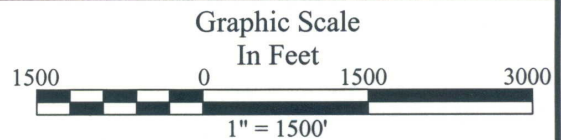
 Sites That May Have a Potential as a Sand and Gravel Mine.

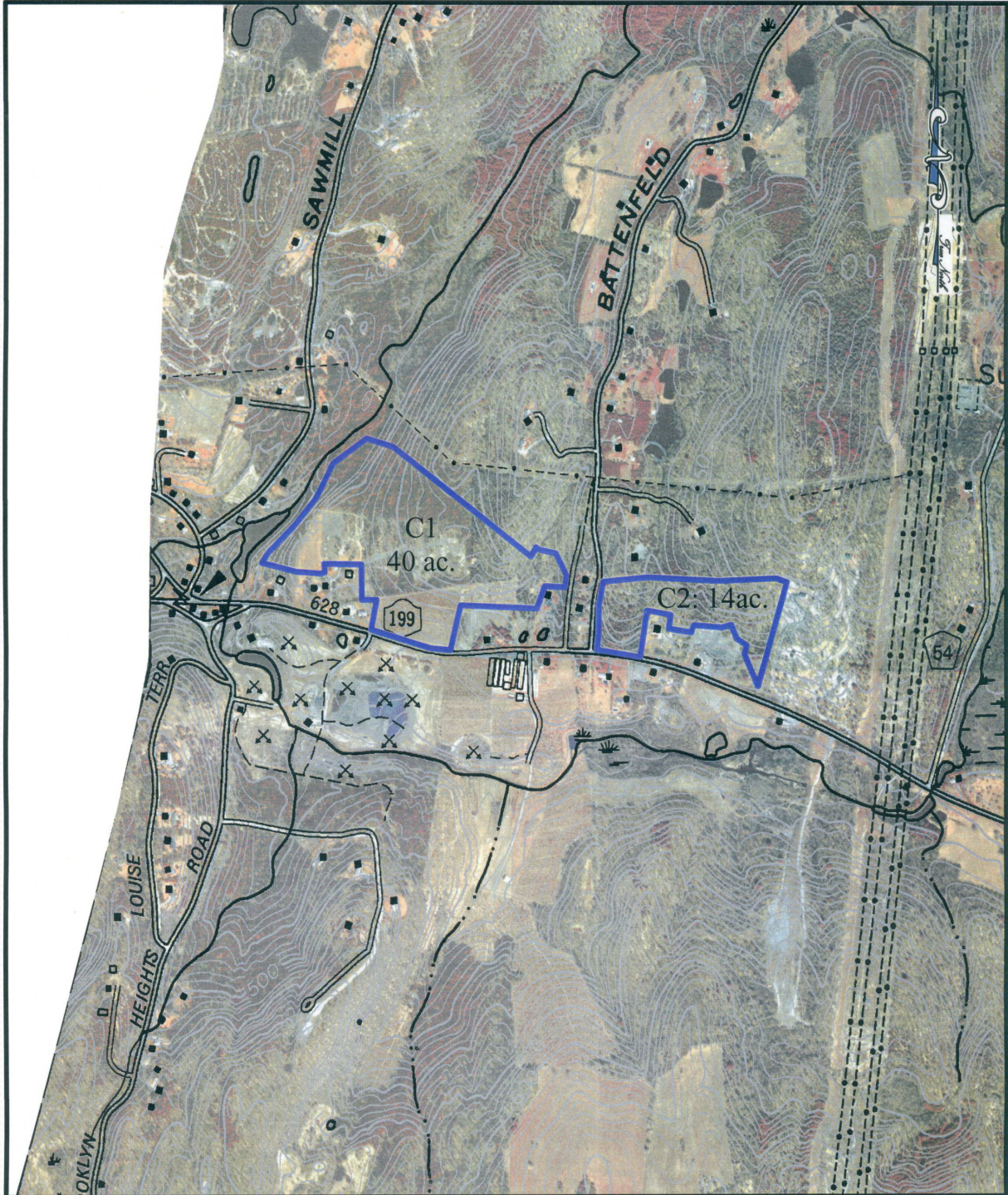




**NATURAL RESOURCE
ASSESSMENT MAP:
LOCATION B**

 Sites That May Have a Potential as a Sand and Gravel Mine.





**NATURAL RESOURCE
ASSESSMENT MAP:
LOCATION C**

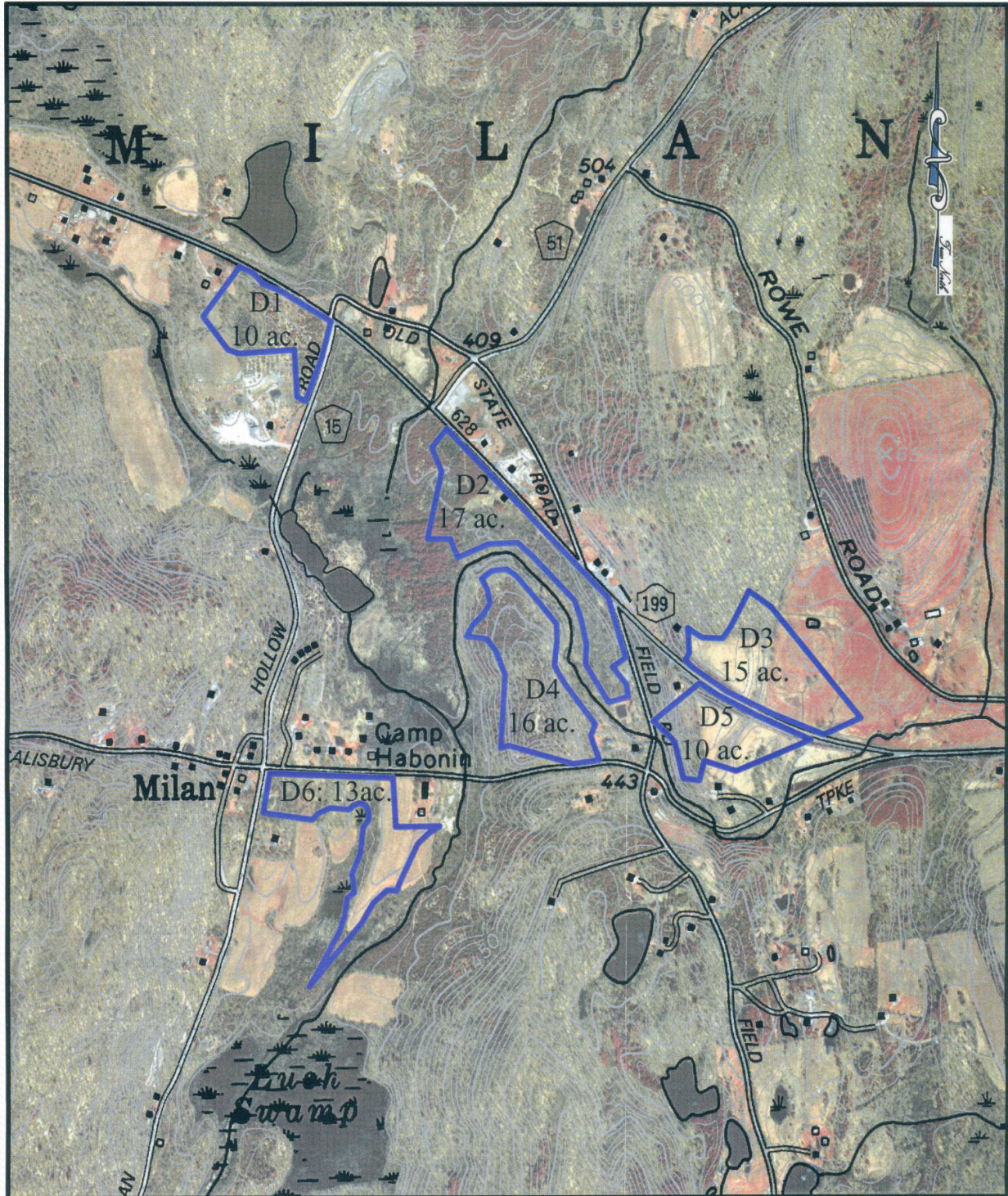


Sites That May Have a Potential
as a Sand and Gravel Mine.

Graphic Scale
In Feet



1" = 1000'

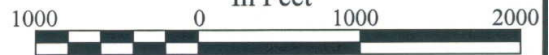


**NATURAL RESOURCE
ASSESSMENT MAP:
LOCATION D**



Sites That May Have a Potential
as a Sand and Gravel Mine.


Graphic Scale
In Feet

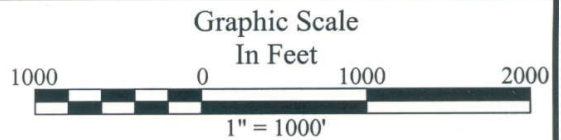


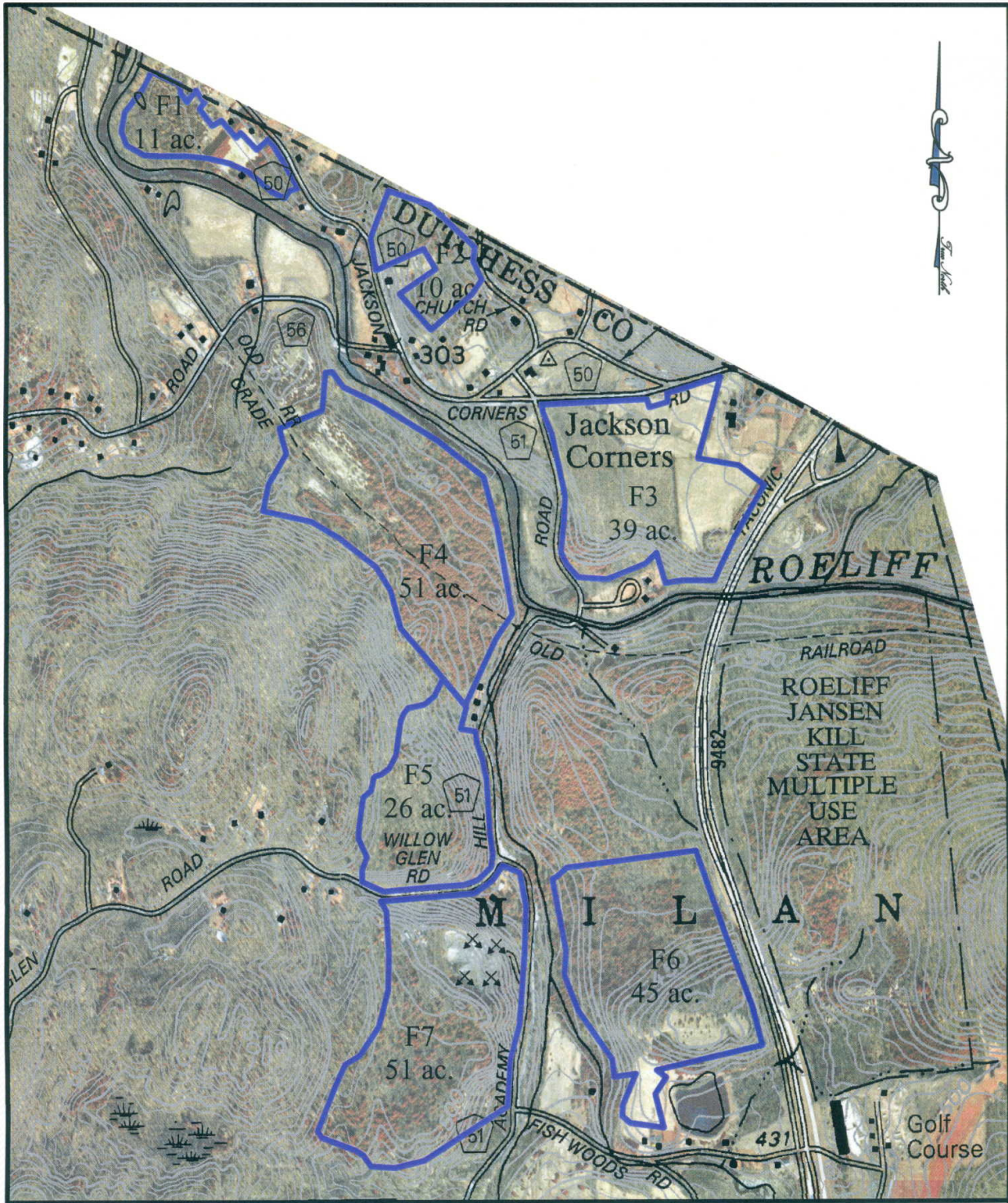
1" = 1000'




***NATURAL RESOURCE
ASSESSMENT MAP:
LOCATION E***

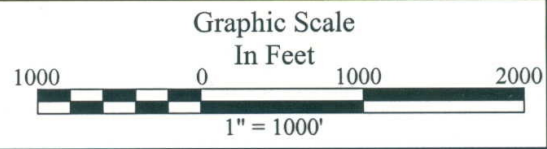
 Sites That May Have a Potential as a Sand and Gravel Mine.





**NATURAL RESOURCE
ASSESSMENT MAP:
LOCATION F**

 Sites That May Have a Potential as a Sand and Gravel Mine.



Areas of the Town with Economic Deposits

The only deposits left in the Town worth mining occupy 1.1% of the Town's total land area (23,000 acres):

- Northwest part of Town (87 acres)
- Northeast part of Town near Jackson Corners (167 acres)



Conclusions

“The few remaining economically viable sand and gravel deposits in the Town identified in this report should be zoned so that they can be mined to meet the current and future needs of the community and region”



Long Term

- Build on success with pilot projects statewide
- Formalize planning process in statute and/or regulation
- Develop mechanism and sustained funding source for resource assessments and planning efforts to assist local governments

Pilot Project Candidates

- Identify a Town willing to consider the benefits of mining
 - Existing mines
 - Open-minded Board
- In the planning process
- Funding/resources available
 - County?
 - External funding/third party?