

# Master Address Database (MAD) Development



Town of Westford GIS

# Did You Know?

► What do the following tasks or functions performed daily in Westford have in common.....

- Building Permit
- Tax Bill
- Voter Registration
- Water Bill
- Dog License
- Legal Notice
- Warrant for Arrest
- Work order for a fallen tree
- 911 call response
- Hazardous Waste Permit
- BookMobile Delivery

# Answer

- ▶ It is possible that all of these departmental operations involved one single address.
  - 5 Olive Street, Apt 1
- ▶ It is also possible that each department used a different spelling or abbreviation when dealing with that address.
  - 5 Olive Street #1
  - 5 Olives St Unit 1
  - Unit 1, 5 Olive St
  - 5 Olive Str Apartment 1
  - OLIVE STREET, 5
- ▶ These inconsistencies in address data prevent departments from sharing information and utilizing available resources... Time for MAD!

# What is a Master Address Database (MAD)?

- ▶ Centralized, secure database of all addresses in Westford.
- ▶ All addresses have an accurate spatial location represented by a point in the GIS.
- ▶ Modifications and updates are managed by a database administrator.
- ▶ GIS address points provide instant access to various relational databases through the WebGIS interface. *(click on the point to bring up any database that is linked)*

# Westford needs a Master Address Database

- ▶ Accurate address information is essential in all Town business processes.
  - Centralization would reduce redundancy and ensure more accurate communication between departments.  
*(Interoperability)*
- ▶ Departments would not have to worry about keeping track of new address information.
  - New subdivisions require new addresses.
  - More than 130 address changes occurred since 1999.
- ▶ Allows for more efficient maintenance of address data.

# MAD Maintenance

- Updates to the database will occur only after approval from necessary departments.



TOWN OF WESTFORD  
BUILDING DEPARTMENT

TOWN HALL  
55 Main Street  
WESTFORD, MA 01836  
(978) 692-5524 FAX (978) 692-9607

TO: James & Adrienne Levine Fire Department  
Police Department Town Clerk's Office  
Water Department Assessor's Office  
Post Office Board of Health

FROM: Donald E. Kinney, Building Commissioner

DATE: September 23, 1999

RE: 30A North Street

Please be advised that effective immediately the property known as **30A North Street**, (map 30, parcel 29 0002) will be changed to **26 North Street**. Please contact me if you have any questions at 692-5527.

\_\_\_\_\_  
Fire Department

\_\_\_\_\_  
Police Department

*This policy is all ready in place.*

# Process

- ▶ Assemble all of the address data from Town Departments.
- ▶ Compare datasets
  - Identify conflicts, gaps and errors.
- ▶ Compile a list of conflicts and missing or incorrect address information.
- ▶ When resolving conflicts in street numbering consult with E911 and Post Office.

# Process

- ▶ Assign street numbers to properties with missing information.
  1. Businesses or apartments will require field work and research to find missing information.
  2. Many properties containing facilities, structures and open spaces do not have addresses.
    - water tanks, well houses, water treatment facilities, recreation areas, conservation land, memorials, etc..

# Mapping Process

▶ Address points will be positioned near the front entrance of buildings.

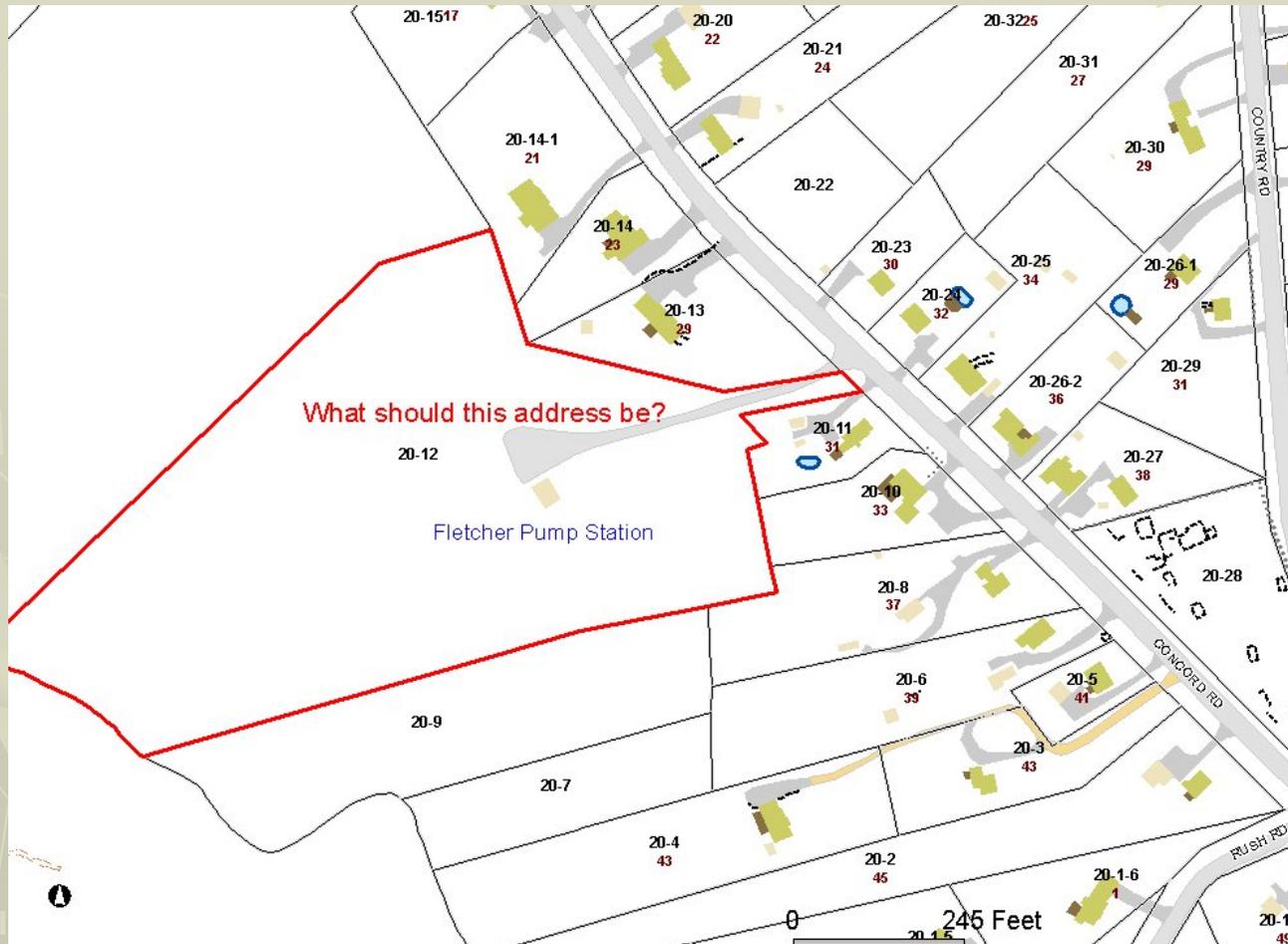


▶ Address points for open spaces will be positioned at the driveway or main access point from the street.

▶ Multi-level condos and business addresses will have the points stacked near the front side of the building.

# Issues

- ▶ Properties that do not have a proper address in the Assessor's database.

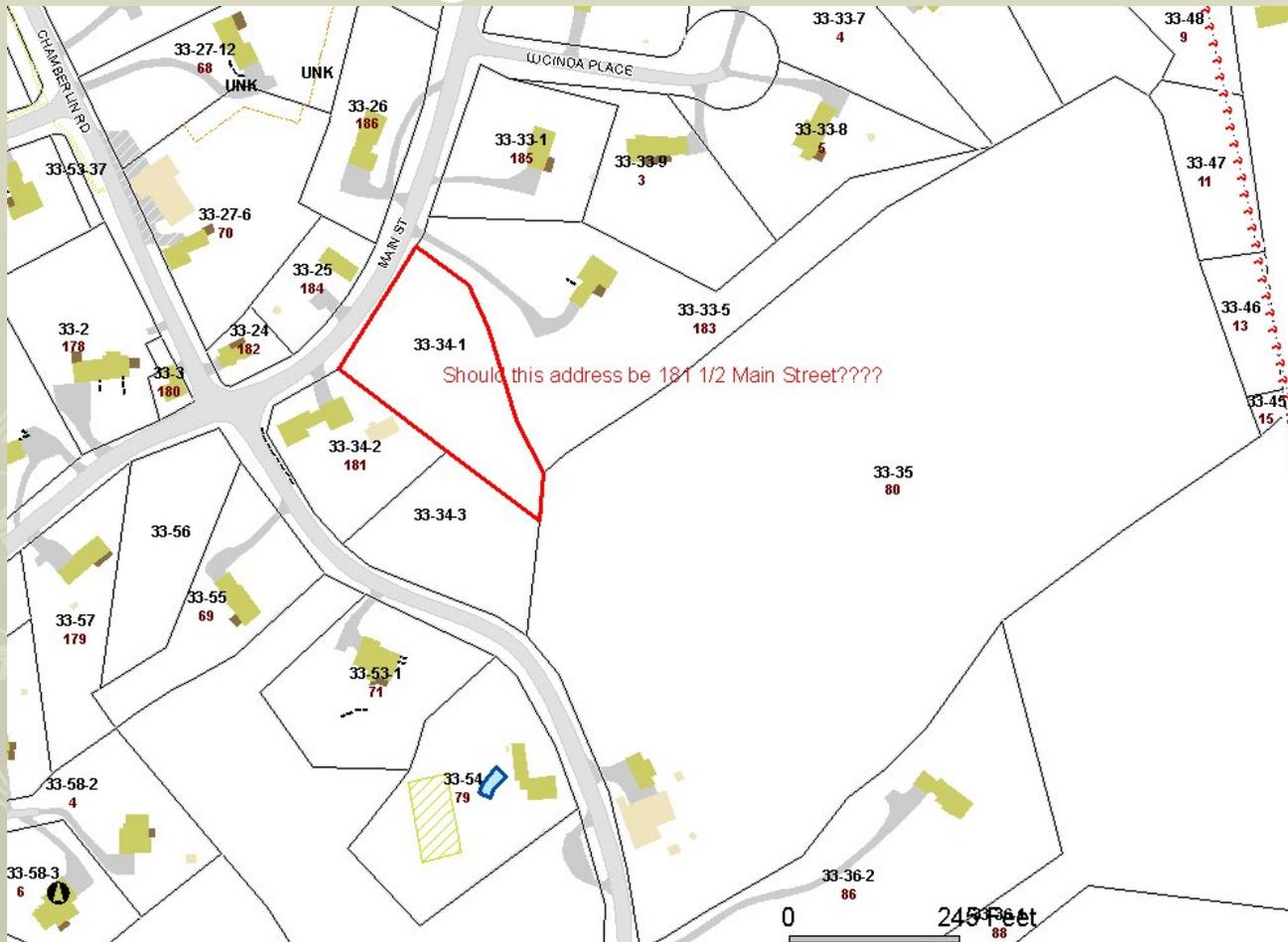


Approx. 600 parcels in the Assessor's database have missing or incorrect street address.

(Town buildings, parks, undeveloped land, etc)

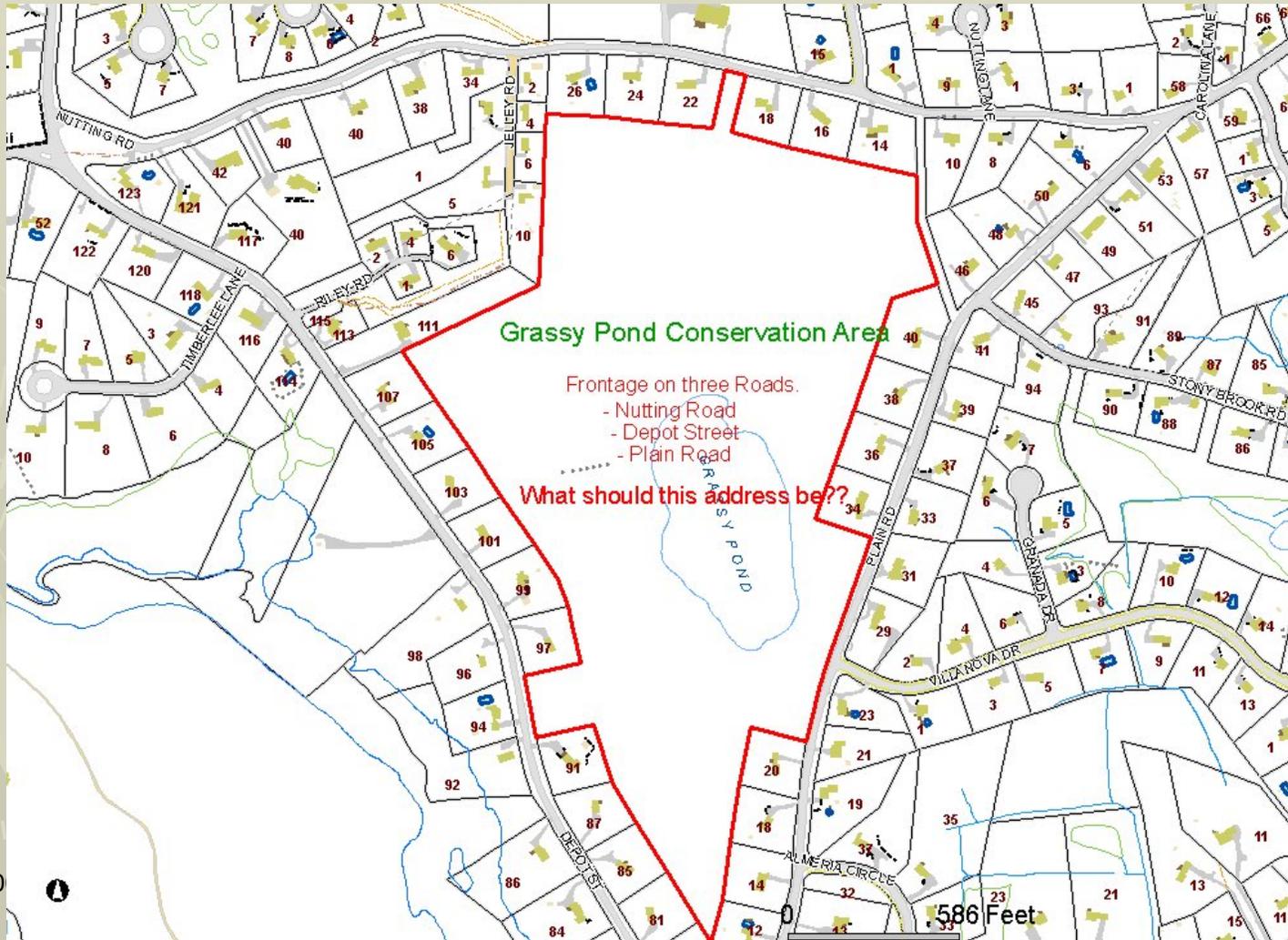
# Other Issues

- ▶ What about new residences that are between existing addresses?



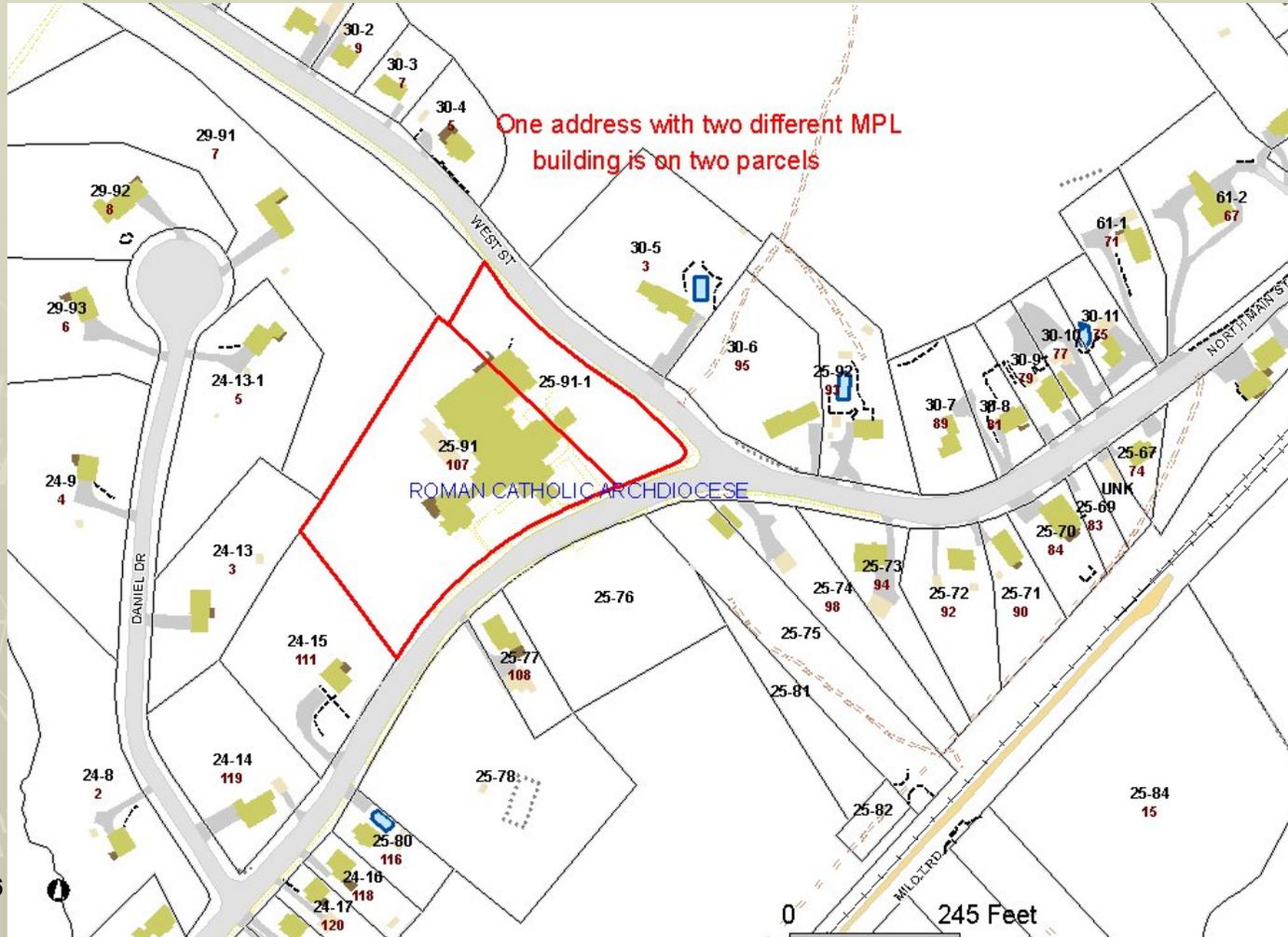
# Other Issues

- ▶ Large parcels of open space with frontage on two or more streets?



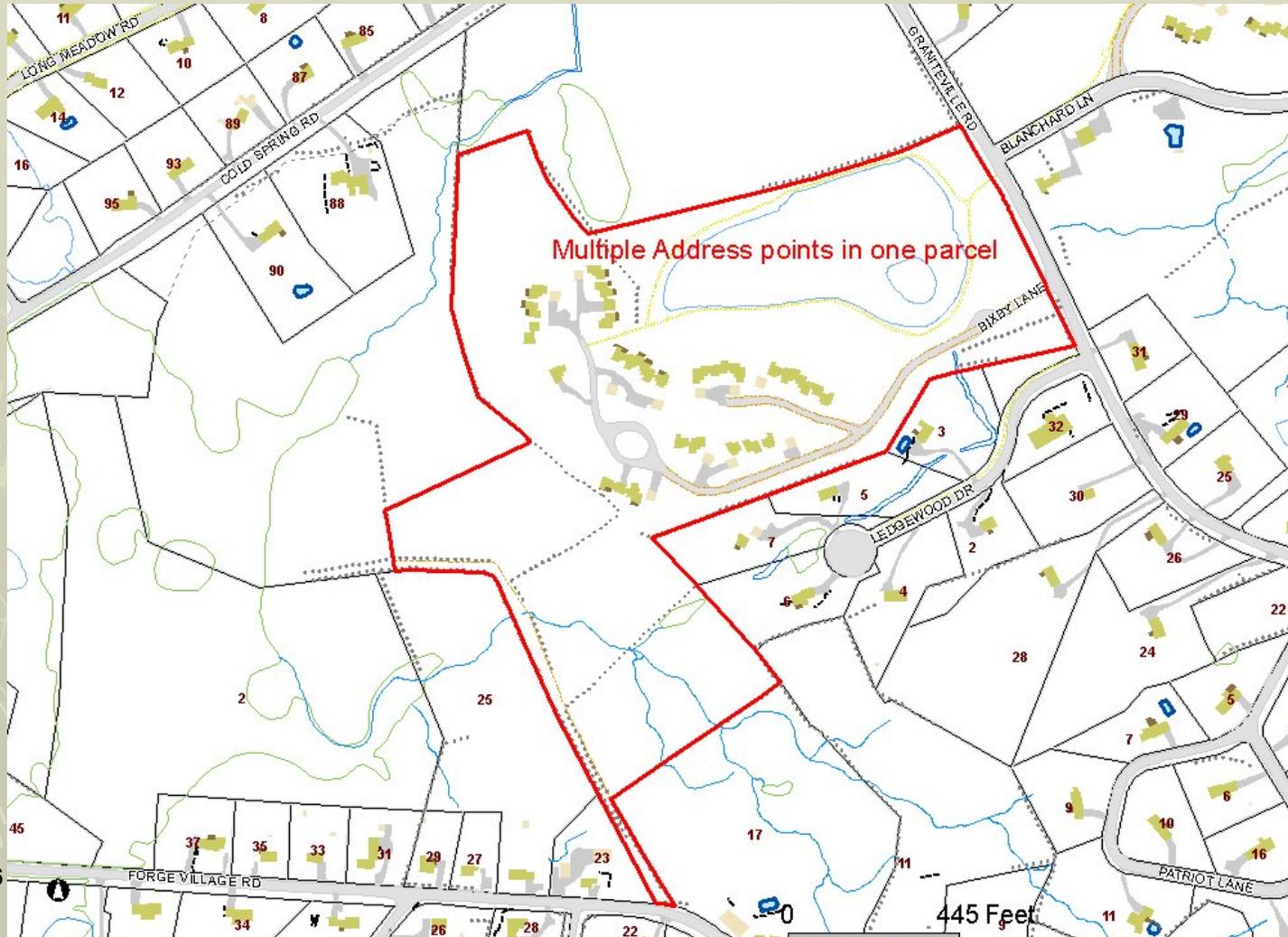
# Other Issues

- ▶ What about properties with two or more parcels with the same address?



# Other Issues

- ▶ What about multiple addresses on a single parcel? (i.e.: Blanchard Farms Condominium)



# Many to Many Relationships

## One point for each address....

- ▶ Many address points may be linked to one parcel.

Also...

- ▶ Many parcels may be linked to one address point.

# Next Step

- ▶ Submit digital versions of address databases from each department.
- ▶ Look into obtaining digital versions of E911, USPS, and US Census Bureau address data.
- ▶ Create a committee
  - to develop standards and policies for addressing
  - provide direction and oversight during the process of MAD development.
  - Resolve issues from the previous slides

# Who Benefits From MAD?

