

August 25, 2004

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Common Council  
City of Danbury  
155 Dear Hill Avenue  
Danbury, CT 06810

RE: 47 Middle River Road, Danbury (Middle River Estates) SUB 04-01

Dear Councilmen:

Pursuant to a letter from the engineering department I hereby request approval for the City to accept storm drainage that will be installed by the developer when the above referenced subdivision is constructed. This request came from a letter dated July 29, 2004 from Patricia A. Ellsworth, P.E., Assistant City Engineer.

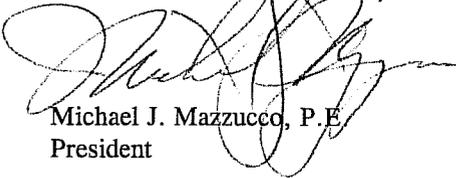
As noted in Item D of said letter, of which a copy is attached, Common Council approval is required in order for the City to accept the proposed storm drainage. In that letter it also mentions that an easement is required. The applicant is willing to construct the vegetative strip for water quality purposes as requested by the City, however, the applicant, nor the homeowners association will take responsibility for the maintenance of it. This drainage is part of the City's drainage system located on their land and any maintenance required for the same will be the done by the City. Based on this the need for an easement is questioned. If a Bill of Sale for the completed drainage system is required the applicant will provide one after it is found to be acceptable. It is understood that all costs associated with permits and the installation of the drainage and vegetated strip will be the responsibility of the developer, except as noted.

I have enclosed a copy of the drainage improvement plan for your review. If you have any questions please do not hesitate to give me a call.

If you have any questions regarding this proposal and request, please do not hesitate to give me a call.

Sincerely,

**MICHAEL J. MAZZUCCO, P.C.**



Michael J. Mazzucco, P.E.  
President

cc: P. Ellsworth, P.E.  
J. Blansfield



# CITY OF DANBURY

155 DEER HILL AVENUE  
DANBURY, CONNECTICUT 06810

ENGINEERING DEPARTMENT  
(203) 797-4641  
FAX (203) 796-1586

WILLIAM J. BUCKLEY, JR., P.E.  
DIRECTOR OF PUBLIC WORKS / CITY ENGINEER

July 29, 2004

Mr. Dennis Elpern  
Planning Director  
City of Danbury  
155 Deer Hill Avenue  
Danbury, CT 06810

Dear Mr. Elpern:

**The Estates at Middle River**  
47-51 Middle River Road  
Planning Code No. SUB 04-01  
Assessor's Lot No. E12001

This office has reviewed the set of plans dated March 3, 2004 and the drainage calculations dated April 2004 submitted to us on May 19, 2004.

We offer the following comments:

- A. We assume that the City Health Department will review the plan with regards to the existing and proposed septic systems located on the site. Are we correct to assume that the engineer has verified that there are no existing septic systems located adjacent to the proposed detention basins (house #53, etc.)?
- B. We assume that the City Health Department will review the plan with regards to the existing and proposed wells located on the site and on adjacent parcels of land.
- C. No City water system exists along the frontage of Middle River Road for this site. We assume that the Fire Department has reviewed the plans with respect to access and fire protection.
- D. Storm Drainage
  - 1. Has the engineer submitted the proper requests to obtain the required permits and approvals for the proposed "vegetated strip" to be located on City property? Common Council approval will be required for the City to accept the proposed storm drainage in Middle River Road and to grant an easement in City land. State of Connecticut Department of Health approval of the proposed change in use of Water Department watershed land is required. Copies of the correspondence are to be submitted to the Planning Department for our files. How will the plan for the proposed runoff from the site be affected, if permission to construct this feature is not obtained? A note is to be added to the plans stating that, prior to construction, the proposed vegetative strip is to be approved by the Public Utilities Department, Common Council and State of Connecticut Department of Health.
  - 2. Drainage Calculations

- a. The calculations and backup information (i.e. drainage area map,  $T_c$  calculations, pipe sizing calculations, etc.) used to design the storm drainage system in Middle River Road are to be submitted for our information and review.
  - b. How was the design discharge rate from detention basin #2 determined? The engineer is to submit the calculations and backup information to support the answer.
3. Detention System/Conveyance System
- a. The on-site detention system (two basins) is to be installed under the supervision of the engineer who is to certify in writing to the City, after its completion, that the system was installed in accordance with the approved plan. We recommend that no certificates of occupancy for homes in this subdivision be issued until this certification is submitted.
  - b. We remind the property owner that the on site detention system will remain private and regular maintenance is crucial for the system to function as intended. A condition of approval should be that the homeowner's association assumes the responsibility for the future maintenance of the on-site detention system. This homeowner's association is also to assume the responsibility for the maintenance of the downstream "vegetated strip" being constructed to serve this project.
  - c. The proposed detention basins are to be clearly identified (i.e. #1, #2) on the plans.
  - d. It appears that deep hole tests and percolation tests were conducted at the proposed locations for the on-site detention basins. The results of these tests are to be submitted for our review. Will detained stormwater infiltrate into the ground in the proposed basins? If yes, can the proposed on-site detention system be designed to prevent any runoff from leaving the site for the 25-year design storm?
  - e. Is protective fencing proposed and/or warranted around the proposed detention basins (especially since they are near an existing dwelling)? If yes, it should be shown on the plans.
  - f. Is a DEP dam permit warranted/required for the proposed detention basins?
  - g. The two proposed detention basins will block any possibility of the owners of Lots 1, 2 and 3 constructing their own driveway to Middle River Road on their own property. Is this consistent with the intent of the Subdivision Regulations requirements for driveways and accessways?
4. The engineer is to submit the design calculations for the proposed vegetated strip located on City property for our review. How will access be provided to this area for future maintenance? An easement with related mapping and legal documents will be needed.
5. Are rights to drain proposed and/or warranted from the adjacent property owners along the eastern portion of the site where the proposed increase in runoff for the proposed developed condition bypasses the on-site detention system.
6. A profile is to be provided for the drainage proposed to be installed in Middle River Road. The Public Works Department will not support the City's provision of materials or labor to install the proposed Middle River Road drainage system.
7. A detail of the proposed 6-inch underdrains is to be shown on the plans.
8. A detail of the proposed grass-lined swale between the detention basins is to be included in the plans. What is the peak flow that the swale will be designed to convey?
9. Discharges are to be properly stabilized. The dimensions of all proposed riprap aprons are to be noted on the plans.
10. Minimal runoff is to be directed onto Middle River Road. Are additional catch basins warranted at the entrance to the site on Middle River Road?

11. Are additional catch basins proposed and/or warranted for the cul-de-sac portion of the driveway to prevent icing conditions?
12. The City will own and maintain only those portions of the storm drainage system located within the road right-of-way. Piping out of the proposed detention basin will remain the responsibility of the homeowner's association.
13. It is our understanding that the Environmental Impact Commission has reviewed this project.
14. Was the Environmental Analysis required under Section 7.C.4 of the Zoning Regulations provided?

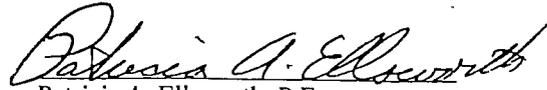
E. Grading

1. Any retaining walls over three (3') feet in height are to be constructed under the supervision of a State of Connecticut licensed professional engineer or architect. No wood retaining walls over three (3') feet in height are permitted.
2. Care is to be taken to properly grade the site, particularly the driveways, in order to avoid directing runoff toward to the buildings, to avoid ponding and to provide adequate drainage patterns.
3. If ledge is encountered on-site and is to be left, the stability of the ledge is to be verified by a qualified State of Connecticut licensed professional engineer or soils scientist.

F. Roads and Sidewalks

1. The proposal to serve four dwellings via a private driveway/roadway 16-feet in width with a 40-foot wide driveway opening is unacceptable to the Public Works Department. Based on past history of similar situations elsewhere around the City, the Public Works Department would expect to be contacted soon after the subdivision is developed by property owners who feel that the "driveway" is really a road and should be maintained by the City. The Public Works Department recommends that if four lots are to be served, a road conforming to City Subdivision Regulations requirements be constructed. Is the intent of Chapter 4, Section B.11 of the Subdivision Regulations that a driveway serving four lots is permitted?
2. If the Planning Commission determines that this private driveway/roadway meets the requirements of the Subdivision Regulations:
  - a. A maintenance agreement for the driveway/roadway is to be developed and incorporated into the homeowner's association agreement responsibilities.
  - b. Notes are to be added to the subdivision map to be filed in the Danbury Land Records and on the site plan stating that the driveway/roadway is private and that no City maintenance will be provided in the future.
  - c. The driveway opening that is proposed to be 40-feet wide is to be narrowed.
3. A note is to be added to the plans stating that all work within the City road right-of-way is to be approved by and completed to the satisfaction of the City Highway Department. Permanent pavement repairs (overlays) will be required for Middle River Road and shall be determined in the field by the Highway Department.
4. If any trees within the City's road right-of-way will be affected by the proposed clearing and grading on Middle River Road to obtain minimum sight distances at the proposed entrance to the site, the Forestry Division of the City Public Works Department is to be contacted and approval obtained.
5. The proposed slope of the driveway from the entrance of the site on Middle River Road to the cul-de-sac at the end is to be noted on the plans.
6. Site distances should be provided for the driveway to the existing dwelling (#47 Middle River Road).

Very truly yours,



Patricia A. Ellsworth, P.E.  
Assistant City Engineer

PAE/bcm

C: William J. Buckley, Jr., P.E.  
Mario Ricoszi, P.E.  
Francis Lollie  
Duke Hart  
William Campbell  
Scott LeRoy  
Barry Rickert  
James Blansfield  
Michael J. Mazzucco, P.E. ✓