COMMONWEALTH OF MASSACHUSETTS
HOUSING APPEALS COMMITTEE

WASHINGTON GREEN DEVELOPMENT, LLC

v.

GROTON BOARD OF APPEALS

No. 04-09

DECISION

September 20, 2005

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COMMONWEALTH OF MASSACHUSETTS
HOUSING APPEALS COMMITTEE

WASHINGTON GREEN DEVELOPMENT, LLC, Appellant	)	
v.	)	No. 04-09
GROTON BOARD OF APPEALS, Appellee	)	

DECISION

I. PROCEDURAL HISTORY

In June 2003, Washington Green Development, LLC submitted an application to the Groton Zoning Board of Appeals for a Comprehensive Permit pursuant to G.L. c. 40B, §§ 20-23 to build 44 condominium units of mixed-income affordable housing off Lowell Road (Route 40) in Groton. Exh. 1. The proposal is for two- and three-unit buildings. See Exh. 3. The housing is to be financed under the Massachusetts Housing Finance Agency's Housing Starts Program. After due notice and public hearings, the Board unanimously denied the permit, filing its decision with the Groton Town Clerk on March 29, 2004. From this decision the developer appealed to the Housing Appeals Committee.

The Groton Electric Light Department (GELD), which owns land abutting the site, moved to intervene. GELD is a department of the town of Groton. Exh. 36 (p. 2); also see

Canner v. Town of Groton, 402 Mass. 804, 806, 525 N.E.2d 648, 649 (1988). GELD was denied the status of a full intervener, but pursuant to 760 CMR 30.04(4) was permitted to participate in the hearing as an interested person, presenting witnesses and documentary evidence, cross-examining witnesses, and filing a post-hearing brief. Ruling on Motion to Intervene (Jul. 12, 2004).

The Committee conducted its *de novo* hearing by receiving prefiled testimony from eight witnesses, conducting a site visit, and holding four days of hearings to permit cross-examination.[1] Following the presentation of evidence, counsel submitted post-hearing briefs.

II. FACTUAL OVERVIEW

The developer proposes to construct 44 two-bedroom condominium housing units, primarily in three-unit buildings, on an irregularly shaped, thirteen-acre site. Exh. 10, 22, 32-C. The buildings will be located along an access road that enters the site in a location where there is about 170 feet of frontage on the south side of Lowell Road. Exh. 10, 32-C. Lowell Road is a busy, two-lane, state highway. Exh. 8. The roadway extends about 800 feet into the site, and ends in a looped *cul-de-sac*. Exh. 10, 32 (p. 3), 32-C. To the east of the site on Lowell Road are two houses on large lots. Exh. 10, 32-C. To the west of the roadway is a power transfer station (commonly called a "substation") owned and operated by the GELD. Exh. 10, 32-C. Most of the condominium units will be located to the side of and behind the substation and also behind the existing houses. Exh. 10, 32-C. On the western portion of the

1. The Committee issued a joint Pre-Hearing Order, agreed to by the parties. In it, the parties stipulated that the developer satisfies the three jurisdictional requirements found in 760 CMR 31.01(1). Pre-Hearing Order (Dec. 28, 2004), §§ II-3 to II-5. The Board also stipulated that Groton has not met any of the statutory minima defined in G.L. c. 40B, § 20 (e.g., that 10% of its housing stock be subsidized housing; see 760 CMR 31.04), thus foreclosing the defense that its decision is consistent with local needs as a matter of law pursuant to that section. Pre-Hearing Order, § II-2.

site, including both the area to the west of the substation and an area toward the rear of the site, are high voltage electrical transmission lines, permitted by easement. See Exh. 10, 32 (p. 3), 32-C. At the rear of the site to the east are wetlands. Exh. 10, 32-C.

III. ISSUES

When the Board has denied a comprehensive permit, the ultimate question before the Committee is whether the decision of the Board is consistent with local needs. Under the Committee's regulations, the developer may establish a *prima facie* case by showing that its proposal complies with state and federal requirements or other generally recognized design standards. 760 CMR 31.06(2). The burden then shifts to the Board to prove first, that there is a valid health, safety, environmental, or other local concern that supports the denial, and second, that such concern outweighs the regional need for housing. 760 CMR 31.06(6); also see *Hanover v. Housing Appeals Committee*, 363 Mass. 339, 365, 294 N.E.2d 393, 412 (1973); *Hamilton Housing Authority v. Hamilton*, No. 86-21, slip op. at 11 (Mass. Housing Appeals Committee Dec. 15, 1988).

Many issues of possible local concern are raised in the Pre-Hearing Order.[2] First, the Board maintains that the proximity of the proposed housing to the substation raises health and safety concerns. See Pre-Hearing Order, § IV-5(a) to 5(c). Second, the Board is concerned about traffic safety at the entrance on Lowell Road. See Pre-Hearing Order, § IV-5(d), 5(f). Third, the Board raises concerns about secondary access for emergency vehicles. See Pre-Hearing Order, § IV-5(e). Fourth, the Board argues that the development's septic

2. The Pre-Hearing Order also alleges inconsistency with the town's master plan. See Pre-Hearing Order, § IV-5(j). Evidence was not introduced on this issue, nor was it briefed, and it is therefore waived. See *Cameron v. Carelli*, 39 Mass. App. Ct. 81, 85, 653 N.E.2d 595, 598 (1995).

systems will threaten water quality in the wetlands and two "potential" well sites. See Pre-Hearing Order, § IV-5(g), 5(h). And finally, the Board is also concerned that the stormwater management system is inadequate. See Pre-Hearing Order, § IV-5(i).

A. The Substation

The GELD substation is located on a two-acre parcel of land that has about 200 feet of frontage on Lowell Road and is about 400 feet deep. Exh. 32-B (sheet 3). It is surrounded on three sides by land owned by the developer, though housing is proposed only to the east and behind it since along the western boundary is a 120-feet-wide easement for high-voltage transmission lines owned by the National Grid/New England Power Company. Exh. 32-B (sheet 3), 37-C (photos 1, 2). The back half of the substation lot is an area enclosed by an eight-foot high chain-link fence, which is topped with barbed wire and signed "Danger, High Voltage, Keep Away;" the fence is about 20 feet from the boundary of the property and the enclosed area is approximately three quarters of an acre. Exh. 32-B (sheet 3), 37 (p. 4), 37-C (photos 29, 30, 36). Within that area are two large electrical transformers that reduce voltage from 69,000 volts to 13,800 volts. Exh. 36 (p. 1), 37 (p. 4), 37-C (photos 3-36).

More than half of the proposed housing units are within 150 feet of the enclosure; and all of them are within 300 feet. Exh. 32-C (sheet 5).

The Board argues that electric and magnetic fields (EMF) and noise caused by the substation will be detrimental to the occupants of the development, and that the substation will be an attractive nuisance to residents, both endangering them and increasing the risk of damage to electrical equipment. See Pre-Hearing Order, § IV-5(a) to 5(c). With regard to EMF and noise, the developer established its *prima facie* case by introducing extensive

expert testimony that the siting of the housing is consistent with generally accepted standards, and therefore the burden is upon the Board, with assistance from GELD, to prove a local concern that outweighs the need for housing. Exh. 33, 31. There are no codes or specific standards that regulate the proximity of housing to substations, and for that reason, the parties agreed that it was inappropriate to ask the developer to establish a *prima facie* case with regard to attractive nuisance issues.[3] See Pre-Hearing Order, §§ IV-3(b), IV-5(b). Thus, similarly, the burden is upon the Board (and GELD) to prove a local concern related to nuisance and related matters. Pre-Hearing Order, § IV-5(b), (c).

1. Nuisance – The greatest concern with regard to the substation is that it may be an attractive nuisance to nearby residents, particularly children. It is undeniable that the high voltage transformers within the substation are dangerous. But whether the degree of risk is sufficient to preclude the construction of condominium housing on the adjoining lot is a different question.

Both the manager of GELD and a highly qualified "forensic engineer" and substation safety expert testified on behalf of GELD, explaining the risks associated with substations. Exh. 36, 37 (p. 2). The exposed high-voltage electrical elements within the substation enclosure can burn or kill instantaneously.[4] Tr. IV, 43-44; Exh. 36 (p. 6). Any unauthorized entry into a substation creates a very high risk of catastrophic injury since even adults are unfamiliar with the equipment. Tr. IV, 43-44. Thus, a substation such as this cannot be designed for safe public access; rather, GELD must rely on limiting access to the enclosure.

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3. If the housing were pre-existing, construction of a new substation would have to comply with standards under the National Electric Safety Code.

4. For the sake of argument, we accept the contention of the Board and GELD that the danger of damage to equipment and of a townwide power outage resulting from vandalism is "[n]o less important," but we see the risks as sufficiently similar to those of personal injury that we need not discuss them in detail. See Exh. 36 (p. 7).

Exh. 37 (p. 5). Children, are particularly at risk since they frequently cannot appreciate the danger involved and may be enticed into the enclosure by the unusual equipment itself or to retrieve a ball or a kite. Exh. 36 (p. 5), 37 (p. 5). In addition, it may be possible "to contact energized circuits with conducting objects, such as metal pipes, chains, and tape measures." Exh. 37 (p. 7). All of this is indisputable.

GELD's expert went on to testify that the GELD substation is typical of "open-air fenced rural substations," and distinguished it from completely enclosed substations that have "evolved" as a safer alternative in urban areas. Exh. 37 (p. 10-11). He then concluded, "My experience has shown that the sub-transmission substation, like the GELD substation, will become an attractive nuisance if the estimated 100 children can be expected to reside in the adjacent development.[5] There is no guarantee that access can be prevented given the number of children and proximity of the substation to the proposed development.... Based on my professional experience and training and to a reasonable degree of engineering and scientific certainty it is my opinion that the proposed development... presents an increased risk of injury and death...." Exh. 37 (p. 12-13).

In considering the expert's conclusion, we note first it is nearly tautological to point out that there will be increased risk if homes are built on what is now a vacant site. More significant is that the expert did not testify that the risk here is unacceptable. Based upon the testimony quoted above and the overall nature of his testimony in total, it is clear that this expert has a strong, honest preference that condominium housing not be built near the GELD

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5. The estimate of 100 children was provided by the manager of GELD. Exh. 36 (p. 5). But she was not familiar with studies conducted on this issue, and she acknowledged that her figure was speculative. Tr. II, 87-88, 106. It appears quite unlikely that so many children would live in 44 two-bedroom condominium units. If the number is inaccurate, it casts further doubt on the expert's conclusion.

substation. It appears likely that if a new substation were being built here, he would recommend that it be enclosed.[6] See Tr. IV, 39. But we are struck by his failure to state unequivocally that the risk is unacceptable. This implication of this failure is reinforced by a number of other facts.

First, we note that the expert's prefiled testimony only distinguishes between urban and rural substations. Since only about half of the land here is available for development, the true density of the proposed housing is about 8 or fewer units per acre. This is clearly neither urban nor rural density, and a discussion that includes only those circumstances without specifically describing suburban situations is of limited value.

Second, the expert testified on cross-examination that even in urban areas, he was aware of substations that were fenced rather than enclosed in buildings. Tr. IV, 19. We find this testimony more credible that the conflicting, earlier testimony that he was not aware of any fenced substation with the same surrounding residential density as the proposed housing. See Tr. IV, 17.

Third, there is no evidence of the actual frequency of children or adults being injured in substations. GELD's expert testified that he did not know when the last time was that there was a substation accident involving a child in Massachusetts.[7] Tr. IV, 21. He did explain, however, that "[i]t is not a high frequency situation," and thus one that does not lend itself to statistically valid numerical analysis. Tr. IV, 29. Though the expert testified that GELD would be at a great disadvantage if it were sued as the result of an injury, and also that he had been "involved with numerous electrical contact cases," the last lawsuit he could

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6. There was in implication in hearsay testimony from the GELD manager that that this would be required by the National Electric Safety Code. Tr. II, 108-109.

recall in Massachusetts was about 40 years ago, and involved a telephone technician rather than a child. Tr. IV, 30; Exh. 37 (p. 9).

In addition, in considering the overall circumstances, we note that the entire area around the substation is zoned residential and that there are other houses in the area.[8] Exh. 29; Tr. II, 90; IV, 13. Certainly, the proposed housing is much closer than existing houses are, but there is potential danger for any child who wanders away from his home toward the substation. Children in the new development cannot approach the substation directly due to an imposing sound wall that will be constructed between it and their houses (see below). The most likely avenue of approach is via the existing roadway under the transmission lines, and this is a route that may well be equally available to children, particularly adolescents, living farther away.

Finally, there is no evidence that GELD has given serious consideration to practical, relatively inexpensive methods of improving security at the substation. The most obvious

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7. The expert's place of business is in Maryland, and he did testify to accidents involving children in other parts of the country. See Tr. IV, 47-48. He provided no nationwide statistics, however.

8. GELD quite properly draws our attention to our decision in *Hamlet Dev. Corp. v. Hopedale*, No 90-03 (Mass. Housing Appeals Committee, Jan. 23, 1992). That case established the propriety of examining a safety issue such as the one we face here, even though it is not regulated locally. *Id.*, slip op. at 6-15. We upheld the denial of a comprehensive permit based upon an analysis of "the purely factually characteristics of [the] site and the airport adjacent to it." *Id.*, slip op. at 24. But the facts in the two cases are entirely different, and thus it is not surprising that our factual analyses reach different conclusions. This is true as well of the case of *Forty-Eight Co. v. Westfield*, No. 75-06 (Mass. Housing Appeals Committee, Aug. 23, 1976), in which we upheld the denial of a permit at a location where propane gas was stored in railroad tanker cars. Although we ultimately believe that each case of this sort requires its own factual analysis, our decision in *Lee Housing Authority v. Lee*, No. 89-08 (Mass. Housing Appeals Committee Dec. 18, 1989), *aff'd*, No. 90-00021 (Berkshire Super. Ct. Jun. 29, 1990), is slightly more helpful in that it provides a basic analytic framework. There, in finding for the developer, we acknowledged that a quarry posed a hazard to the public, but noted that there were many quarries in town, and that residents had long adjusted to them. Similarly, in the case at hand, parents will adjust to the risk of the substation as they do to the risk of the highway, by instructing their children. The substation risk is unlike the risk of an airplane crash or a tanker car explosion, which are entirely beyond their control. Also see *Capital Site Management Assoc. Ltd.*

possibility would be to construct a second fence outside of the existing fence as both a barrier and a deterrent. See Tr. IV, 15.

We conclude that the Board has not met its burden of proving that the danger inherent in the substation outweighs the regional need for affordable housing.

2. Noise – A second issue raised they the Board and GELD is that residents of the proposed development may be disturbed by the hum of the substation's transformers. In the absence of local regulations regarding noise, we have ruled in the past that when the Board alleges that noise concerns are so great as to raise questions of health and safety, we will be guided by standards set by U.S. Department of Housing and Urban Development (HUD). *Farmview Affordable Homes, LLC v. Sandwich*, slip op. at 9-10 (Mass. Housing Appeals Committee Feb. 1, 2005); *Northern Middlesex Housing Authority v. Billerica,* No. 89-48, slip op. at 18 (Mass. Housing Appeals Committee Dec. 3, 1992). Based upon day–night average sound levels (DNL), HUD regulations establish three noise level zones: (1) an acceptable zone, which is defined as having an exterior noise of 65 dB (decibels) or less; (2) a normally unacceptable zone, defined as having an exterior noise level exceeding 65 dB, but not exceeding 75 dB, where mitigation measures would be required; and (3) an unacceptable zone exceeding 75 dB. See *Farmview Affordable Homes, LLC v. Sandwich*, slip op. at 13 (Mass. Housing Appeals Committee Feb. 1, 2005). The developer's expert acoustical engineer referred to more conservative guidelines, that is, the U.S. Environmental Protection Agency's (EPA's) determination that levels below 55 dB present no risk to the general population. Exh. 31. (p. 5).

Partnership v. Wellesley, No. 89-15, slip op. at 45-46 (Mass. Housing Appeals Committee Sep. 24, 1992).

The developer's expert visited the site and conducted a thorough sound survey. Exh. 31 (pp. 3-4). Because parts of the site are shielded from sound by a hill, the measurements that he took varied considerably, from 28 dB to a high of 44 dB. Exh. 31 (p. 3). He calculated the "worst case" impacts for the highest window of the proposed development that faces the substation as being 46 dB, resulting in a DNL of 50 dB, which he testified is the level in a "quiet residential neighborhood." Exh. 31 (pp. 3-4); Tr. II, 68-70, 74, 78. Despite these relatively low levels, to address concerns raised by the Board, the developer initially proposed to build an approximately fourteen-foot-high, 200-foot long sound barrier wall to shield the housing, and now has extended the design to 500 feet.[9] Exh. 10, 31-B (p.3). This will reduce the sound levels at residents' windows to 35 dB or less. Exh. 31 (p. 4). The expert's analysis was thorough, and his testimony was convincing on cross-examination. See Tr. II, 42-72.

The Board presented testimony from its substation safety expert, who also testified with regard to nuisance issues, above. Though he was generally knowledgeable about noise emitted by transformers, he did not conduct his own study, nor were his briefly stated concerns about the occasional "buzzing" of high voltage corona, circuit breaker operation noise, and "miscellaneous noise associate with truck and cranes" sufficient to cast doubt on the conclusions of the developer's expert. See Exh. 37 (pp. 11-12). Neither do we find compelling the Board's argument that additional transformers may be added to the substation at some time in the future. This is speculative, and, as discussed previously, shielding could be provided when they are installed. Further, there is evidence that quieter transformers could be used. Tr. IV, 34-35.

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9. A more effective means of reducing the noise would be to install barriers immediately adjacent to the transformers, though GELD has declined to do so. Exh. 31 (p. 4).

We accept the conclusion of the developer's expert that noise from the transformers "poses no risk to public health and welfare." Exh. 31 (p. 5). We find that the noise levels are well within acceptable limits, and they do not constitute a local concern that supports denial of a comprehensive permit.

3. EMF – No negative effects from electric and magnetic fields (EMF) have been proven in this case. Neither the Board nor GELD presented testimony from an expert in the field.[10] As with transformer noise, the Board relied on GELD to brief this issue, and GELD in turn relied entirely on the testimony of the developer's expert. GELD's Brief, pp. 20-22. The developer's expert is a public health professional who specializes in risk assessment. Exh. 33 (p.1). He has a master's degrees in human physiology and physics and a doctorate in physics, and he has lectured and published extensively on topics including the health effects of EMF. Exh. 33-A.

The developer's expert visited the site, and measured EMF levels. Exh. 33 (p. 4). Within the site, electric filed measurements ranged from 1 to 3 V/m (volts per meter), and at the property line of the substation they ranged from 10 to 40 V/m. Exh. 33 (p. 4). Magnetic fields on site averaged 2.8 mG (milligauss), and the maximum measurement, at the property line of the substation, was 5.2 mG. Exh. 33 (p. 4). For comparison, levels measured on Lowell Road under the transmission lines were between 2,800 and 3,400 V/m and an average of 43.3 mG. Exh. 33 (p. 4). Natural atmospheric static electric fields range from 10 V/m into the 100s of V/m. Exh. 33 (p. 5). The earth's magnetic field in New England is

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10. The manager of GELD expressed general opinions with regard to EMF. See Exh. 7, 36 (pp. 7-8). She acknowledged, however, that she has had no training in EMF analysis. Tr. II, 100. None of the testimony of GELD's expert engineer addressed EMF, although in a single sentence he gratuitously asserted that if a resident were to contract a rare form of cancer, a lawsuit based upon EMF would be highly likely. Exh. 37 (p. 13).

approximately 500 mG, and home appliances can produce fields as high as 100 mG at close distances. Exh. 33 (p. 4). The expert noted that the levels of EMF measured at the site were "comparable to, and generally lower than, EMF commonly encountered in everyday life." Exh. 33 (p. 4).

None of the expert's analysis was undermined on cross-examination. For example, he acknowledged that the electrical load at the substation on the day of his measurements was only about 60 percent of the maximum load encountered on the day of the year with the heaviest electricity usage, and that EMF varies in proportion to the load. Tr. I, 45-48. But he testified that he had taken peak loads into consideration, and that the increases that they represent did not affect his conclusions in any way. Tr. I, 79-80.

We accept the findings of the developer's expert that EMF levels in locations where housing will be built "are below everyday ambient levels, and the available scientific consensus predicts that these EMF level cannot be expected to affect the health of people living in the homes…." Exh. 33 (p. 7). We conclude that the EMF levels do not constitute a local concern that supports denial of a comprehensive permit.

B. Traffic Safety

Because of a curve in Lowell Road to the west of the proposed entrance roadway, vehicular sight distance is less than ideal. The developer contends that despite the curve, sight distance is adequate, while the Board argues that there is a safety hazard sufficient to justify denial of the comprehensive permit. Traffic experts for both the developer and Board

evaluated sight distance in relation to standards established by the American Association of State Highway and Transportation Officials (AASHTO).[11]

We find that the actual sight distance currently available along Lowell Road is 300 feet. This is uncontested since it was presented by the developer's expert and accepted by the Board's expert.[12] Exh. 34 (p. 4-5). More difficult is determining whether this is adequate stopping sight distance. In calculating the needed stopping sight distance, the experts disagreed in their assumptions. The speed limit on Lowell Road is 40 mph, but the measured 85th percentile speed of vehicles is 45 mph. Exh. 30 (p. 3); 30-B (p. 1, 2); Exh. 34 (pp. 3-4). The developer's expert used 40 mph in his calculations, while the Board's expert used 45 mph. As a result, the developer's expert calculated that the needed stopping sight distance is 288 feet, and thus concluded that "the Project will not result in a safety hazard...." Exh. 30 (p.4). The Board's expert calculated the needed distance as 349 feet, and reached the opposite conclusion. Exh. 34 (p.5).

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11. There are a number of types of sight distance, two of which were addressed in the hearing. Stopping sight distance is the distance required for an oncoming car traveling along Lowell Road to react and stop when an obstacle appears in the roadway at the intersection. Exh. 30-B (p. 4); Tr. II, 16-17. Intersection sight distance is the distance at which a driver exiting from the development should be able to see oncoming traffic on Lowell Road. Exh. 30-B (p. 4-5); Tr. II, 16-17. Ideally, intersection sight distance should greater than stopping sight distance, but in any case it should it should be no less. Exh. 30-B (p. 5). Both parties acknowledge that stopping sight distance is the critical measurement, and we need address only that. This is consistent with our past practice. *Spencer Livingstone Assoc. Ltd. Partnership v. Medfield*, No. 90-01, slip op. at 8 (Mass. Housing Appeals Committee Jun. 12, 1991); *Capital Site Management Assoc. Ltd. Partnership v. Wellesley*, No. 89-15, slip op. at 41 (Mass. Housing Appeals Committee Sep. 24, 1992).

12. This figure appears correct even though there is some confusion surrounding it. The developer's expert could not remember whether he measured it in the field or calculated it from plans. Tr. II, 21. On cross-examination, he initially seemed to claim that the available stopping sight distance was 420 feet. Tr. II, 21. But this was probably simply because he was referring to the table that is attached to his prefiled testimony, which appears to have transposed the stopping sight distance and intersection sight distance figures. See Exh. 30-B ("Exhibit 1"); cf. Tr. II 30, 40. In addition, the prefiled testimony of the Board's expert contained a rather ambiguous, unsubstantiated indication that the available "sight line" might be only 260 feet. Exh.34 (p. 6); also see Tr. II, 30.

As will be seen, we agree with the Board's expert that the proper speed to be used in calculating the stopping sight distance is the higher, 85th percentile speed. But the fact that the actual, available sight distance is 49 feet less than the recommended AASHTO standard does not automatically mean that the intersection is unsafe, nor, particularly, so unsafe as to outweigh the regional need for affordable housing. "[T]he AASHTO guidelines are for new roadways or major reconstruction, and do not necessarily reflect conditions on existing, local, residential streets..." *Spencer Livingstone Assoc. Ltd. Partnership v. Medfield*, No. 90-01, slip op. at 7 (Mass. Housing Appeals Committee Jun. 12, 1991). "The [AASHTO] sight distance measurements... [are] guidelines or recommendations, not requirements, for traffic safety." *Ledges of Peabody Apts. Assoc. Ltd. Partnership v. Peabody*, No. 86-07, slip op. at 11 (Mass. Housing Appeals Committee Apr. 8, 1987). They are not to be applied rigidly, but rather are intended to inform the professional judgment of designers of roadways, and as is frequently the case with such standards, they are subject to different interpretation by different experts. Thus, it is sometimes the case that because of other factors—such as the nature of the traffic along the road or of development on abutting land—an intersection may not be hazardous even though the numerical standards cannot be satisfied. See Tr. II, 38-41; Exh. 38 (p. 2).

In this case, however, the testimony of the developer's expert contains a number of inconsistencies and questionable conclusions. Most important, he acknowledged on cross-examination that the accepted AASHTO methodology for calculating the stopping sight distance is to use the 85th percentile speed. Tr. II, 19, 24. But when asked why he chose to use the lower 40 mph speed limit, he testified, "[At] the 40 mile per hour limit, there was sufficient sight distance at the driveway. Both intersection and stopping sight distance. It did

not meet the AASTO standards for the 45 mile per hour, which was the design speed. So I clearly referred to the posted speed limit in the report…." Tr. II, 18. This testimony undercuts his credibility sufficiently that we will not accept his testimony on any contested matter related to sight distance.[13] Instead, we accept the testimony of the Board's traffic engineer, and find that if the entrance roadway for the proposed housing were constructed with no changes to the existing sight lines, the lack of stopping sight distance would represent public safety hazard. Exh. 34 (p. 5).

This is not the end of the matter, however, since it is clear from the evidence that adequate sight distance can be achieved by simple regrading and clearing of vegetation along the inside of the curve. Exh. 30 (p. 4), 23, 34 (pp. 5-7). Both the area on the inside of the curve that is within the right of way and an adjacent, long, thin, triangular piece of land would have to be cleared. Tr. II, 32-38. This second area, which is not within the right of way, measures about 10 feet by 90 feet. Tr. II, 38; Exh. 23, 34 (pp. 5-6) There are few, if any, practical drawbacks to such a solution. In fact, this solution was apparently first proposed by the town's consulting engineer. Exh. 23. Later, both the Board's expert and the developer's expert agreed that it was feasible. Exh. 30 (p. 4), 38, Exh. 34 (pp. 6,7). Further, such changes would not only make the entrance to the proposed development safe, but they would also improve conditions where trucks enter and exit from the GELD substation property, which is also on the curve in the highway. Exh. 38 (pp. 2-3), 30 (p.4); also see Exh. 32-C.

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13. The testimony of the Board's expert was quite limited, however, and therefore we will accept the testimony of the developer's expert on uncontroversial matters that he presented in more detail if they were not contested by the Board.

To clear the 10-by-90-foot sliver of land at the front of the GELD property requires GELD's permission, which should presumably be formalized in an easement. GELD is unwilling to grant such an easement voluntarily, and it appears that conveyance of an easement requires authorization of Town Meeting. G.L. c. 40, § 15A. The developer requests that we order the town to grant the necessary easement, but first we must answer the question of whether we have the power to do, a question which is not trivial.

The simplest part of the question is the need for authorization by Town Meeting. This has already been answered by the Supreme Judicial Court in *Board of Appeals of Maynard v. Housing Appeals Committee*, 370 Mass. 64, 345 N.E.2d 382 (1976).[14] In that case, the developer agreed to construct 2,000 feet of public sewer at its own expense. The board of appeals argued that this required a vote of town meeting, which could not be obtained. The Court stated that this argument was frivolous, and ruled that if such a vote could not be obtained, the Housing Appeals Committee could dispense with it. *Maynard, supra*, 370 Mass. at 68-69, 345 N.E.2d at 385-386.

Of greater concern is the nature of the relief requested. The provision of public utilities, which was at issue in *Maynard*, is clearly the sort of government function that the Comprehensive Permit Law is intended to regulate. It relates to both the health and safety of residents and to municipal services and infrastructure. See G.L. c. 40B, § 20; 760 CMR 31.06(8). In the case before us, the conveyance of an easement clearly relates to public

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14. It is of even less concern that the property is owned by GELD, rather than some other part of Groton town government. As discussed previously, GELD is a department of the town, and thus is a local board or official subject to the Comprehensive Permit Law. G.L. c. 40B, § 20; 760 CMR 30.02; *Dennis Housing Corp. v. Zoning Board of Appeals of Dennis*, 439 Mass. 71, 785 N.E.2d 682 (2003).

safety, but it is not the sort of governmental action that is normally associated with the comprehensive permit process.

The statute itself, however, addresses this concern. First, the definitions section of Chapter 40B refers explicitly to "[r]equirements or regulations" which may or may not be consistent with local needs. G.L. c. 40B, § 20. And while neither GELD nor the town has any formal requirement or regulation prohibiting the grant of an easement here, section 21 of the law further clarifies the breadth of the statutory grant of authority, giving the local board (and by extension this Committee) "the same power to issue permits or approvals as any local board of official…." G.L. c. 40B, § 21. This power should be construed broadly to remove any obstacles that local officials place in the way of appropriate affordable housing development. "All… local 'requirements and regulations' will be applicable if they are 'consistent with local needs'; if they are not, they must be modified or ignored." *Board of Appeals of Hanover v. Housing Appeals Committee*, 363 Mass. 339, 354, 294 N.E.2d 393, 406 (1973); also see *Mahoney v. Board of Appeals of Winchester*, 366 Mass. 228, 233; 316 N.E.2d 606, 609 (1974). If any question remains as to whether these words—"requirement," "regulation," "permits," and "approvals"—are to be construed broadly, we note that in *Maynard, supra*, the Court indicated that the vote of town meeting itself could be considered a requirement of regulation: it concluded its decision saying, "If the vote cannot be obtained, HAC can dispense with it *as a requirement or regulation* not consistent with local needs" (emphasis added).

Though this Committee has the power to order approval of an easement, the question remains as to whether it is justified under the facts presented. Certainly, it is not difficult to imagine facts under which an easement would substaintially impair or limit the town's

current or future use of its property, and for that reason should not be ordered. But here we need address only the narrow question of whether the town's opposition to the granting of this particular easement to permit clearing of the sight lines consistent is with local needs. The town has not drawn our attention to, nor do we see from all the evidence presented to us, any harm that can possibly be done by slight regrading and removing of vegetation along a strip of land that is approximately ten feet wide at its widest point. We find that such changes do not raise a sufficient local concern to outweigh the regional need for affordable housing. We therefore conclude that GELD's refusal to grant an easement is not consistent with local needs, and we will order it. See section IV-2(d), below.

C. Emergency Access

Groton subdivision regulations limit single-access roadways to not more than 1000 feet in length, and permit only ten lots (each presumably supporting only one single-family house) on such roadways. Exh. 13 (Art. IV, 346-10(E)(1)). While this development is within the 1,000-foot limitation, there is a legitimate local safety concern because of the large number of housing units it serves. See Exh. 32 (p. 3); also see *Lexington Woods v. Waltham* No. 02-36, slip op. at 15-20 (Mass. Housing Appeals Committee Feb. 1, 2005); *Cirsan v. Woburn* No. 01-22, slip op. at 10-11 (Mass. Housing Appeals Committee June 11, 2003). In addressing this safety concern, the developer's expert testified that the number of units is sufficiently small that a single-access roadway is safe. Exh. 32 (p. 3), 39 (¶ 10). This may, in fact, be true since the road is not steep and winding, as was the case in *Lexington Woods*. But we need not reach this issue since the developer has taken the wiser course, and has satisfactorily addressed the concern by also proposing to provide secondary access by

improving an existing dirt road that is in use by utility vehicles under the electrical transmission lines.[15] We will ensure by condition that this is done. See Section IV-2(b), below.

D. Septic Systems

Parts of some of the development's septic systems will intrude as much as 21 feet into the 100-foot buffer that surrounds the large wetlands system behind the site. Exh. 32-C. This violates the Groton wetlands bylaw. Exh. 42. In addition, the systems will not comply with all local public health regulations that exceed Title 5 requirements (greater depth of undisturbed soil above groundwater or bedrock and separate reserve areas in case of leaching field failure). Exh.32 (p. 4). The Board alleges that as a result the wetlands will be harmed. It also argues that the septic systems will adversely effect two potential municipal well sites.

The developer's civil engineer testified not only that the septic systems will comply with Title 5 of the State Environmental Code, 310 CMR 15.000, but also both that water quality in the wetlands will not be threatened, and that the development is only within the Zone III of the potential well sites, an area within which no state requirements are imposed. Exh. 32 (pp. 4-7). This testimony establishes a *prima facie* case pursuant to 760 CMR

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15. Several improvements are necessary so that the existing road can function as secondary access, and even the Board's expert acknowledged that these were likely to be feasible. Tr. III, 10. Condominium units at the end of the cul-de-sac must be separated by sufficient space to permit emergency vehicles to drive through, the ground between those buildings must be stabilized in order to support the weight of the vehicles, and a portion of the roadway must be regraded. See Exh. 32 (p. 3), 35 (¶ 10), 39 (¶. 10). It must also be plowed during the winter. At the end of this roadway closest to Lowell Road, GELD has pointed out that the gravel roadway must cross approximately fifteen feet of its property to reach its parking lot. See Exh. 32-B (sheet 9). If GELD, as a municipal utility owned by the town of Groton, is unwilling to do this voluntarily, it can be ordered to do so by the Board or this Committee. See section III-B, above.

31.06(2), shifting the burden to the Board to prove that both the existence of a local concern and that that concerns outweighs the regional need for housing. 760 CMR 31.06(6).

With regard to well protection, Groton has a Water Resources Protection Overlay District, which imposes stricter requirements than Title 5, and with which the developer acknowledges it will not comply. That is, Title 5 contains a design capacity standard of 110 gallons per 10,000 square feet of land area in the Zone II area surrounding a public well. Exh. 32 (p. 6). Groton goes further, and applies that same standard in Zone III, the area farther from the well. Exh. 35 (¶ 11). The testimony of the Board's expert civil engineer with regard to wells consisted of a single paragraph of prefiled testimony. Exh. 35 (¶ 11). There is no evidence as to exactly where the potential well sites are.[16] The expert testified that "waiver from this standard *could* adversely impact drinking water supply…" and that "there is an increase in the *possibility* of contamination…" (emphasis added). *Id.* Such very limited testimony, with no detailed analysis of the size of the zones, existing sources of possible contamination, the load that would be created by the proposed septic systems, and other factors, is far too speculative to meet the Board's burden that the public wells are in jeopardy and that they are in jeopardy to a degree that outweighs the regional need for housing.[17]

With regard to the local public health regulations for septic systems that exceed Title 5 requirements, no prefiled testimony was submitted by the Board, and the only testimony

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16. The developer's expert testified that he was not aware of their location, and the Board chose not to clarify this in responsive prefiled testimony. See Exh. 32 (p.6).

17. The thinness of the analysis provided by the Board's expert can perhaps be excused since she apparently was not familiar with, and could not be expected to be familiar with, the highly technical burdens of proof established by the Comprehensive Permit Law and our regulations. Rather than present proof to sustain the Board's burden, her "conclusion" was that "the proposed Project has not demonstrated that the Project complies with applicable local… standards and does not demonstrate that there will be no adverse impacts…." Exh. 35 (¶ 13).

from its civil engineer was a very brief description of the local requirements on redirect examination. Tr. III, 20-23. She did not testify at all about harm to the wetlands. See Exh. 35. Clearly, the Board has not established that there are legitimate local concerns with regard to the proposed development that outweigh the regional need for housing.

E. Stormwater Management

As the Board acknowledges in its brief, both "[the developer's engineer and] the Board's expert witness agreed that the [Department of Environmental Protection's (DEP's)] Stormwater Management Policy is the applicable state standard for safe disposal of stormwater." Board's Brief, p. 3. Further, the developer's expert testified that the stormwater management system will be built to conform to that standard. Exh. 32, p. 6; Tr. I, 117. There is no evidence that Groton has local stormwater regulations. The Board's civil engineer's testimony is simply that the information provided by the developer is not complete, and the developer acknowledges "the preliminary nature of the plans." Exh. 35 (¶ 12), 39 (¶ 12); Tr. III, 19; also see Tr. I, 117-119. Arguably, no information at all concerning stormwater needed to be provided since compliance with the state guidelines will be reviewed under state Wetlands Protection Act procedures, and are thus not within our jurisdiction. But in any case, even under our statute, preliminary plans are sufficient at this stage, and it is not significant that there are not yet plans that demonstrate compliance with the standards in every detail. 760 CMR 31.02(2). Although the protections under the Wetlands Protection Act should suffice, we will nevertheless require compliance with state law by condition. See Section IV-2(c), below.

IV. CONCLUSION

Based upon review of the entire record and upon the findings of fact and discussion above, the Housing Appeals Committee concludes that the decision of the Groton Board of Appeals is not consistent with local needs. The decision of the Board is vacated and the Board is directed to issue a comprehensive permit as provided in the text of this decision and the conditions below.

1. The comprehensive permit shall conform to the application submitted to the Board except as provided in this decision.

2. The comprehensive permit shall be subject to the following conditions:

(a) The development shall be constructed as shown on drawings by Dresser, Williams & Way, Inc., 8/25/03 [11 sheets](Exh. 32-B), 2/25/04 [septic field plan](Exh. 32-C), and 2/25/04 (Sound Wall Plan)(Exh. 10); by WeinMayr Associates, Inc., 10/29/03, rev. 1/29/04 (Landscape Plan)(Exh. 2); and architectural drawings by Gavin & Sullivan Architects, 1/28/04, 1/29/04, 2/20/03 (Exh. 22).

(b) Secondary, emergency access shall be provided using the existing roadway under the electric transmission lines. The developer shall make necessary improvements to this roadway, which shall include regrading of vertical curves so that they are not obstacles to emergency vehicles. The developer

shall also relocate one or more buildings at the end of the cul-de-sac to provide clearance so that the secondary roadway can intersect with the cul-de-sac. Where necessary, throughout its length, including between the condominium buildings, the roadway shall be stabilized to support the weight of emergency vehicles. The developer shall pay for any improvements necessary at the front of the roadway on GELD property. The developer and ultimately the condominium association shall be responsible for plowing snow on any portions of the roadway which are not plowed.

(c) Design and construction shall be in compliance with the state Department of Environmental Protection Stormwater Management Guidelines.

(d) GELD shall grant to the developer and its successors an easement on a small area of land as described in this decision to permit regrading and clearing of vegetation sufficient to provide approximately 350 feet of stopping sight distance to the west of the proposed development entrance. If requested by the Town, the developer shall compensate the Town for the fair market value, as established by independent appraisal, of the easement. The developer shall pay all costs of regrading and clearing and also any legal or other costs of providing such an easement. The developer and its successor, the condominium association, shall be responsible for maintenance of the easement.

3. Should the Board fail to carry out this order within thirty days, then, pursuant to G.L. c. 40B, § 23 and 760 CMR 31.09(1), this decision shall for all purposes be deemed the action of the Board.

4. Because the Housing Appeals Committee has resolved only those issues placed before it by the parties, the comprehensive permit shall be subject to the following further conditions:

(a) Construction in all particulars shall be in accordance with all presently applicable local zoning and other by-laws except those waived by this decision or in prior proceedings in this case.

(b) The subsidizing agency may impose additional requirements for site and building design so long as they do not result in less protection of local concerns than provided in the original design or by conditions imposed by the Board or this decision.

(c) If anything in this decision should seem to permit the construction or operation of housing in accordance with standards less safe than the applicable building and site plan requirements of the subsidizing agency, the standards of such agency shall control.

(d) No construction shall commence until detailed construction plans and specifications have been reviewed and have received final approval from the subsidizing agency, until such agency has granted or approved construction financing, and until subsidy funding for the project has been committed.

(e) The Board shall take whatever steps are necessary to insure that a building permit is issued to the applicant, without undue delay, upon presentation of construction plans, which conform to the comprehensive permit and the Massachusetts Uniform Building Code.

This decision may be reviewed in accordance with the provisions of G.L. c. 40B, § 22 and G.L. c. 30A by instituting an action in the Superior Court within 30 days of receipt of the decision.

Housing Appeals Committee

Date: September 20, 2005

Werner Lohe, Chairman

Joseph P. Henefield

Marion V. McEttrick

Christine Snow Samuelson

James G. Stockard, Jr.

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