

TOWN
OF
HANOVER
MASSACHUSETTS

REPORT
OF
MUNICIPAL
FIRE PROTECTION

BY
MUNICIPAL DESIGN INC.

1993

— Municipal Design Inc. —

44 Adams Street • Braintree, MA 02184 • 617/849-0719 • Fax 617/849-9234

James J. Sullivan
President

John R. Anderson
Executive Vice President

February 24, 1993

Chief Stephen R. Tucker
Hanover Fire Department
32 Center Street
Hanover, MA 02339

RE: Municipal Fire Protection Report for the Town of Hanover

Dear Chief Tucker:

Under separate cover, we have enclosed ten (10) copies of our final report for The Town of Hanover Fire Department Municipal Fire Protection.

This report follows very closely to our discussions and it provides a good response to your requests and our contract.

If there are any questions or any additional information we can supply, please let us know.

Very truly yours,



James J. Sullivan, President
MUNICIPAL DESIGN INC.

JJS:bms
Enclosures
\\Hanover - Chief Tucker

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TOWN OF HANOVER, MASSACHUSETTS REPORT

MUNICIPAL FIRE PROTECTION

FEBRUARY, 1993

SUMMARY

The Hanover Fire Department has six (6) fire stations located essentially in the old village areas that once comprised the population centers of the town. With the exception of Station #4 (Hanover Center) these buildings garage fire apparatus and provide very modest to almost nonexistent facilities for the assigned "call" members of the fire department.

Because of the very limited number of "full paid" personnel on duty, the town relies upon the response of the "off duty" paid members and the response of a "call force" to provide emergency services. However, the response of the call force during the day time is reported to be unreliable. There is also concern about the continued interest of residents of the community in becoming members and maintaining membership in a call force especially since membership now requires such a great deal of time in acquiring and maintaining a high level of competence.

While our analysis was not directed toward the personnel needs of the fire department, we would recommend that as the town grows in density and further develops that additional full paid career personnel are needed to

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even maintain the present level of protection and should be assigned to Station #4. The response from this station would provide a nucleus of "full paid" personnel available to immediately respond to all of the areas.

Since it appears the possibility of hiring additional full paid employees is remote, every reasonable effort should be made to enhance membership in the call force and to improve its response to emergency calls.

After reviewing the structural land use and frequency of response data, together with projected growth and development information, it is our opinion that the present six (6) fire stations are not needed to provide reasonably good distribution of apparatus within the town. Presently areas of coverage extending from the stations overlap, extend beyond town boundaries, and cover wetlands and other sections that will not be developed.

We recommend that ultimately the town provide three (3) fire stations, one of which is the existing Central Fire Station at Hanover Center.

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The second recommended station should be located approximately at the intersection of King Street and Circuit Streets. This station would represent combining present Fire Station #3, located at Circuit Street and rented Fire Station #6, located at 188 King Street. Existing companies #3 and #6 would then operate from the recommended station. The site of existing Station #3 should be retained by the town and combined with the adjacent town owned property.

The third recommended station site is somewhat south of the intersection of Webster and Main Streets. This site represents the relocation of present Fire Station #1. The existing building cannot house modern fire apparatus without costly structural changes. While the building outwardly appears to be in good condition, it is not designed to provide extended service to the call company and future requirements of the town. Rather than attempt to upgrade the existing structure on a limited site, in the long view, we believe it would be more desirable to replace the structure.

The existing structure could then be sold for conversion to an occupancy permitted by the town, quite possibly a dwelling at its then estimated assessed value.

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The proposed stations would be designed to adequately provide for the instruction, training, meeting needs of the call force and assigned fire apparatus. They would also contain provision for expansion and modification to provide temporary housing of call members during emergency situations and for future assigned full paid personnel.

Since call members provide such a valuable service to the town at such a nominal cost, these facilities should be provided not only on the basis of need but also to enhance membership in the call department.

Estimated costs for the design and construction for each of the fire stations, exclusive of land acquisition and development costs, is estimated to be \$500,000.00 to \$600,000.00. A tentative plan and land use sketches are provided in the report.

Existing Station #2 is a wood frame building erected about 1900. The wood apparatus floor was reinforced several years ago with timbers and columns. However, the floor and supports do not provide any system to resist lateral forces imposed by apparatus entering or leaving the station. Therefore, the floor is in danger of collapse and should be

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replaced immediately if it is continued to be used to support fire apparatus. Other structural and sanitary conditions are also deficient and present code requirements may impose further changes within the structure and are described within the report.

Station #2 is situated very close to the Easterly and Southeasterly town line and, therefore, would not be considered as providing efficient coverage within the town. However, during the night time, the response from the Central Station to fire emergencies relies upon the response of the call members.

Within the area served by Station #2 is the Cardinal Cushing and St. Colletta's facilities for housing exceptional people consisting of wood frame and brick ordinary structures without automatic fire sprinklers, unsprinklered multi-story housing for the elderly and historical buildings and churches.

The response of the call force assigned to Station #2 would take about the same time as the response of the call force to Station #4. The closing of Station #2 would then increase the response time to fire emergencies

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during the night time and weekends to these high potential areas by 3 to 4 minutes.

Given the nature of the occupancy of these buildings and the area served, we would not recommend the closing of Station #2 until such time as the full paid force at the Headquarters Station is increased so that the night and weekend "on duty" force is at least equal to the present weekday "on duty" force.

In order to continue the occupancy of Station #2 certain structural, sanitary and other modifications must be made to the building. We have provided cost estimates for these modifications which are shown in the cost estimate portion of the report. However, once the structure is "opened up" for complete inspection, it is possible additional expense may be necessary to correct any unseen structural faults or other, "updating" of the structure to present day code requirements.

Since the fire department estimates the response of call Company #2 will continue as in the past, at least for the next ten year period and the likelihood of hiring additional fire paid personnel during that time is remote, it then would be feasible to continue the use of Station #2 at least for this period.

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It may be that funds expended for the building modifications of Station #2 could be recovered at some time in the future by sale of the building since it is located in a business zone. Providing the town accepts a change in occupancy, it is possible for the town to recover at least its assessed value at the time of sale.

Station #5 is located in the Southerly extremity of Hanover in an area of single family well separated dwellings. Much of the effective area that this station covers is either out of town or within the effective response areas of other Hanover Fire Stations. The building has severe structural deficiencies. The apparatus floor has the same deficiencies as cited in Station #2. In addition, the structure is unstable. (Structural details are contained within the report.). The site consists of a non-standard size lot situated in an area zoned for single family dwellings. It would be unlikely that the town would allow any change in occupancy for this building; therefore, its sale value is considered nominal.

In order to continue to use this site, the present building would need to be replaced and it would be very difficult to recommend the construction of a new single bay fire station in this location.

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There is space at the Central Fire Station (Station #4) to house both the apparatus and call members presently assigned to Station #5. Further many of the members of Company #5 reside in the vicinity of Station #4 and could respond almost as easily to Station #4 as to Station #5.

However, the closing of Station #5 would result in a delay of perhaps 1-2 minutes in the response of the call force to certain sections but these areas would remain within the 4-5 minute response considered as reasonable for the type of area served.

If the station is closed, with some drastic changes in structure, perhaps the building could be used for a town natural science center being located so conveniently to a large conservation area.

With the construction of two recommended stations and existing Station #4, there will continue to be a slight deficiency in the 3 minute response to some of the business and commercial areas along Route 53.

Since these areas are located on the Easterly extremity of the town, erecting a fire station in this area, in our opinion, would not be

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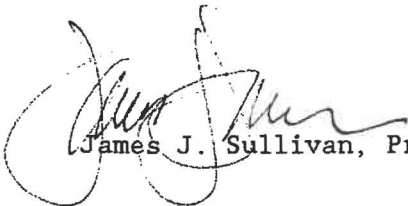
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feasible as much of the 3 minute response pattern from any fire station in this area would extend outside of town and the station would be remotely located from most other areas of the town.

We would like to express our thanks to Stephen Tucker, Chief of the Hanover Fire Department for his splendid cooperation and assistance in obtaining the information presented in this report, to Lorrimer Armstrong, Jr. of the Hanover Fire Department for providing graphical and statistical information, to Philip Plageman, Town Planner and to David H. Bonney, Town Building Inspector for their assistance.

Very truly yours,



James J. Sullivan, President