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GENERAL DESCRIPTION

The Northeast Metropolitan Regional Vocational High School (NEMT) is located on Hemlock Road in Wakefield, MA. The campus is located along the eastern edge of Wakefield, with the Breakheart Reservation to the east, north and south, Wakefield High School to the west and some residential properties and the Mill River to the north. The developed portion of the site is approximately 26 acres. Elevations in the developed portion of the site range from approximately elevation 113' at the football field to approximately elevation 55' at the softball field. Exposed ledge is visible throughout the site.

Site Utilities

Storm Drainage

There were no roof-leaders/down-spouts visible. The building appears to have a flat roof that is drained with internal roof drains. Grades generally slope away from the building except for the area to the left of the loading dock. At this location grades slope down to a lower door and the area is drained by a catchbasin adjacent to the building. For a site of this size there is relatively few drainage structures. The majority of the site drainage is done by grading away from the building. There are no visible stormwater quality or quantity controls on site. The use of grading for large pavement areas has resulted in rutting and erosion of landscaped areas and pavement failure. Comparison of photos taken in 2015 and 2020 indicate that in that time the pavement has deteriorated significantly along its edges.

There is a brook to the east of the developed portion of the site. When the school was constructed a portion of this brook was buried in a 48-inch culvert so that the southeast portions of the site could be developed over it. The on-site closed drainage system discharges to the culvert. Previous discussion with school facilities personnel indicated no flooding issues have been observed.

Sewer

The building is served by town sewer. Construction documents indicate that an 8-inch sewer main serves the site. The main starts in the southeast corner of the site and runs north to the practice/softball field where it turns northwest before heading offsite and connecting through an easement over some residential properties and ties into the Town of Wakefield sewer main in Riley Street. Two 4-inch and two 6-inch sewer services serve the building. One of the 4-inch services is indicated as acid waste. The construction documents do not indicate, and there was no visible evidence of an external grease trap. The construction documents indicate the sewer main material as "A.C.P." The plumbing legend did not indicate A.C.P., but in projects of this age, asbestos cement pipe was often used.

Due to the age of the system a program of pipe cleaning and video inspection is recommended to understand the condition of the piping. Portions of the piping that are to remain in use, if found to be

deteriorating, might be able to be rehabilitated in place through slip-lining or other non-invasive construction techniques. The capacity of the sewer main would be sufficient for any future school needs.

Water

The water service for Northeast Metro Tech is an 8-inch pipe from the 12-inch municipal main in Farm Street. The 8-inch cold water supply runs along the campus access drive, runs around the building and enters the building at two (2) locations, one at the eastern face and one at the rear (northern) of the school. Four fire hydrants were observed on site.

Based on previous conversations with staff on campus, the current water service is below the capacity and needs of the school and require upgrades and a larger service. Plans were developed in 1994 to provide a second water connection by installing a new 16-inch water line from the site to the Town of Wakefield water system. The new line would have left the site through the northwest, traveling under the softball field and Mill River, through an easement to Wiley Street with a final connection on Water Street.

Natural Gas

The school is not served by natural gas. There are propane tanks located in three locations around the building to serve the school's gas needs. There were plans developed in 1994 to bring gas (along with an additional water service) to the site. The new gas service would parallel the water service detailed in the previous section.

Electrical

There was no electrical transformer located on the site. It appears that the electrical service for the building is underground and comes from a pole on the east side of the site near the cafeteria loading dock.

Preliminary Permitting Considerations

Wetlands

The Massachusetts Wetlands Protection Act grants local Conservation Commission jurisdiction over work within 100' of a wetland resource (within 200' of a river). There are wetlands located along the east side of the site associated with the brook, the brook might be classified as a river, depending on its drainage basin and other factors. There are also wetlands to the north of the site (beyond the softball/practice field) that are associated with the Mill River.

Flood Plain

Based on the Flood Insurance Rate Map (FIRM), Community Panel Number 25017C0431E dated June 4, 2010 the existing school site is not within any mapped Flood Hazard Area (100-year flood). There are areas of Flood Hazard Areas associated with the Mill River, those areas are immediately adjacent to the Mill River and appear to not extend onto school property.