

SITE ASSESSMENT MEMORANDUM



Re: Wayland Free Public Library Feasibility

SCI File #16075.00

To: Christopher D. Blessen, AIA, LEED AP, TAPPE Architects

From: Andrew Truman, PE

December 12, 2016

Overview (Assessment)

This memorandum details our preliminary findings and research of the final selected site for the new library. Our research has included reviewing the Wayland GIS MAS GIS (Oliver), files and all additional information provided by the Town and Tappe Architects. Our stormwater management notes are based on our review of the sites, experience in Wayland, knowledge of the Wayland wetland/ zoning bylaws, and wetland protect act and would need to be verified at the schematic level by an actual site survey. The following are preliminary findings and research for 195 Main Street in Wayland, MA in order to evaluate the potential for expansion/ of the Public Library program.

195 Main Street

This site is currently owned by the Town and is used as a DPW Highway facility. The site is adequately sized to accommodate a building that should meet the Wayland Public Library needs and associated parking.

The major limitations of the site are that it is within the Zone II Aquifer Protected District and that a small portion of the site is within the wetland buffer zone from the wetland located across the street. The site should be investigated for potential soil contaminations as a result of being a DPW Site. Any contamination would have to be remediated in order to redevelop this site. The site also sits on top of a portion of an old landfill (the extents and contents of which are unknown). Extensive subsurface investigation should be conducted prior to commencing any design on this site.

Domestic Water & Fire Protection: Wayland GIS shows a water main/ fire protection line with a fire hydrant located in Main Street. The hydrant is located in front of 217 Main Street. The new building will require new domestic and fire protection lines which would feed from this existing lines. Probable sizes and locations for these connections have been shown on the sit plan.

Stormwater Management: The majority of the site is paved thus there would be no need for a stormwater detention system; However since the site is located with a Zone II recharge to the aquifer would be preferred. The current design proposed the use of proposes pavement which would be subtitle given the soil types and would result in recharge to the aquifer. There are drainage lines in Main Street as well within the access road to the school and any roof drainage system would connect to these. The development will require an improvement in water quality which would be done through the use of Best Management Practices, and in accordance with DEP's Stormwater Management Policy.

Samiotes Consultants, Inc.
Civil Engineers + Land Surveyors

20 A Street
Framingham, MA 01701-4102

T 508.877.6688
F 508.877.8349

www.samiotes.com

Sanitary: The existing septic will need to be replaced; a fully compliant system on the site is likely assuming, 4' of naturally occurring perc-able soil is present. The soils on the site have high percolation rates based on preliminary boring but a percolation test will be need to confirm the soil infiltration rates. A pressure dosed system would be needed under Title V regulations because of the anticipated sewer flows from the building. The probable location and layout of the system has been shown on the site plan.

Electrical, Cable, Telephone: These utilities appear to be available via the overhead lines in Main Street. An MEP should evaluate whether the proposed building could be fed directly or a transformer would be required.

Topography: This site is relatively flat throughout the lot, which should not pose difficulty in setting finished floor elevations, positive slope for drainage away from proposed buildings, and ADA/MAAB compliant access on the site, and to the building.

Wetlands: The site should be evaluated by a wetlands scientist, however there appears to be wetlands on the lot across the street which may have a buffer zone that extends onto the site, but appears to be possible to stay out of the buffer

Soil: The majority of site is 654-Udorthents which is typically soil group D (poor infiltration). The soils may also be contaminated from either the landfill or because of the previous use of the building

Zoning: R20

Requirement	Subdistrict 20,000	Existing
Minimum Lot area (sf)	20,000	205,340 sf
Maximum Lot Coverage	20%	60%
Minimum Frontage	120	179.14'
Front Setback (ft)	30	65±
Front setback from right-of-way centerline (ft)	55	≥55
Rear Setback (ft)	30	335±
Side setback (ft)	15	20±
Maximum Height (ft)	35	N/A
Maximum Height (stories)	2.5	N/A

The site is located in Aquifer Protection District limiting the amount of impervious coverage allowed to 15% of the total lot with approval, but in no case greater than 30%

If you have any questions or comments regarding this memo, please call or email me at atruman@samiotes.com at 508-877-6688 ext 11 or Michelle Kayserman at mkayserman@samiotes.com (ext. 16).