

UTILITY ANALYSIS GAS SERVICE



MEMO

То:	Vladimir Lyubetsky/ DRA Architects
From:	Gilbert Castera
Date:	06/04/2021
RE:	Northeast Metropolitan Regional Technical High School Gas Service Approach
Project #:	60-20-409

The existing building does not have a gas service. The design intent for the project is that a new gas service will be provided, originating from Hemlock Road and be fed from an existing buried gas line. The line was installed by the Wakefield Municipal Gas Light Department in anticipation that the school would utilize this gas service in the future.

Refer to the attached gas load letter created to get the coordination process started with the gas company. Refer as well to attached gas company response letter which verifies that gas service will be available for the project.

cc: KJC; SPS; RDR - Bala

November 25, 2020



Mr. Jimmy Brown Wakefield Municipal Gas & Light Department (WMGLD) 480 North Avenue Wakefield, MA 01880

Re: Northeast Metrotech Regional High School Gas Service Availability Bala Project No. 60-20-409

Dear Mr. Brown:

As a follow up to our phone conversations within the last week, this is written to submit the gas loads for the proposed building to replace the existing high school and to request that it be verified that a new gas service can be extended to the building site.

Note that out office has been hired by Drummey, Rosane, Anderson Inc. of Waltham, MA to design the HVAC, electrical, plumbing and fire protection systems for the new high school.

The anticipated preliminary gas loads for the project are as follows:

Heating Boilers	9,000 CFH
Domestic Hot Water Heating	3,000
Estimated Cooking Loads	1,000
Estimated Culinary Classroom Loads	500
Estimated Culinary Restaurant Load	750
Science Classroom Bunsen Burner Loads	700
Emergency Generator (600kW)	6,000*
Preliminary/Anticipated Total Connected Load	20,950 CFH

*This load will be excluded from this total load if gas is determined to be an interruptible source by the Authority Having Jurisdiction.

At this time, we would like to request that the gas company provide verification of the following:

- 1. Verification that the gas company will be able to extend a new gas service for this very important high school project.
- 2. Verification that the proposed gas service routing indicated on the attached site plan is feasible or would the gas company propose an alternate routing for consideration by the project design team?

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- 3. Will there be a cost associated with extending the proposed gas service to the project site? Based on this preliminary gas service pipe routing can a preliminary range for the installation cost be identified?
- 4. Will the preliminary total connected gas load be available to be supplied to the proposed building?

We request that the gas company provide us with their input regarding the above inquiry prior to December 7th of 2020, if possible.

Sincerely,

BALA CONSULTING ENGINEERS, INC.

Gilbert Castera, Jr., P.E., LEED AP, CIPE Senior Associate, Senior Plumbing & Fire Protection Engineer

Cc: Raven Fournier – WMGLD Vladimir Lubetsky – DRA KJC, KJA, Bala WMGLD 480 North Avenue Wakefield, MA 01880 Tel. (781) 246-6363 Fax (781) 246-0419



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Peter D. Dion, General Manager

December 7, 2020

Gilbert Castera, Jr. Bala Consulting Engineers 522 Temple Place Boston, MA 02111

RE: Northeast Metrotech Regional High School Gas Service Availability Bala Project No. 60-20-409

Dear Gilbert,

We have reviewed your letter of requested service and the responses to your stated questions can be found below:

1. Verification that the gas company will be able to extend a new gas service for this very important high school project.

Yes, extension of the gas main and a subsequent service is possible for purpose of this project.

2. Verification that the proposed gas service routing indicated on the attached site plan is feasible or would the gas company propose an alternate routing for consideration by the project design team?

Yes, the proposed route is feasible but WMGLD will confirm final route once a contractor is selected and the project is discussed with them.

3. Will there be a cost associated with extending the proposed gas service to the project site? Based on this preliminary gas service pipe routing can a preliminary range for the installation cost be identified?

Yes, there will be costs associated with the new main/service as well as a cost for metering and regulation and associated labor.

The approximate cost for metering and regulation is \$15,000-\$20,000.

The cost to extend the main would be approximately \$230,000 depending on bids received from contractors. We can recommend that you have your contractors do the excavation as it would lower our cost to labor and materials which would be roughly \$30,000. Your contractor must be qualified in gas work and approved by WMGLD prior to start of work. It is always an option to have us do the complete package at approximately \$250,000 but that decision will be up to you and the cost will also be variable depending on bids received as well as changes in material price.

4. Will the preliminary total connected gas load be available to be supplied to the proposed building?

Yes, the preliminary total connected load of 20,950 CFH will be available to be supplied to the building.

If you have any further questions, please feel free to contact us.

Sincerely,

fimmy Brown

Jimmy Brown Gas Superintendent

Cc: Raven Fournier – WMGLD Vladimir Lubetsky – DRA KJC, KJA, Bala