

C.5112.002
September 1, 2023

Jay Wilkinson, Chairperson
Town of Charlton Planning Board
758 Charlton Road
Charlton, NY 12019

Re: **The Charlton School – Phase 1A Campus Improvements
Application for Site Plan Approval**

Dear Chairman Wilkinson:

On behalf of The Charlton School, Tighe & Bond, whose services in New York are provided by T&B Engineering and Landscape Architecture, P.C. (Tighe & Bond), is providing the Town of Charlton Planning Board a complete preliminary Site Plan and Stormwater Pollution Prevention Plan submission for review of The Charlton School's Phase 1A proposed improvements.

The following items were discussed at the last Planning Board meeting and have been addressed in the submission documents.

Emergency Service Access: The project was discussed with the fire chief and building inspector regarding the emergency vehicle access to the proposed dormitory and maintenance buildings. They were satisfied with the emergency vehicle access shown on the plans and therefore the proposed future driveway behind the dormitory buildings will not be constructed during this phase. An emergency vehicle turning movement plan has been included in the plan set.

Water Use and Fire Protection: A summary of the existing and proposed water usage has been included. Over the last four years the school has used an average of 3,225 gpd. The proposed estimated water usage is 5,490 gpd. Proposed water lines and fire hydrants are shown on the utility plan. The dormitory buildings will have sprinklers; the maintenance building will not have sprinklers. A water storage tank is not required to be installed for fire protection. The hydrant flow test results have been included as an attachment to this letter.

Architectural Plans: Building height dimensions have been added to the building elevations.

Landscape Plans: The landscape plans have been revised to include the existing, removed and proposed trees and a planting schedule has been added. A photometric plan has been provided and light fixtures have been specified. In addition, snow storage areas are shown on the landscape plans.

Stormwater Pollution Prevention Plan: Because the site will result in the disturbance of more than one acre of land, site development activities are subject to the requirements of the SPDES General Permit for Construction. The subject site is considered a redevelopment site, and with the exception of the new Maintenance Garage, proposed improvements will occur within the developed portion of the campus. Chapter 9 provisions of the New York State Stormwater Management Design Manual have been met in the Stormwater Pollution Prevention Plan (SWPPP).



We respectfully request to be placed on the agenda for the September 18, 2023 Planning Board meeting for review. If you have any questions or require additional information about this application, please do not hesitate to contact me at bnelson@tighebond.com or 845-516-5803.

Very truly yours,

T&B Engineering and Landscape Architecture, P.C.



Brandee Nelson, PE, LEED AP
Vice President



Christopher Rokos, PE
Senior Engineer

Enclosures

Preliminary Plan Set, dated September 1, 2023
Preliminary SWPPP, dated September 1, 2023
Summary of existing and proposed water usage
Fire flow test results, dated June 8, 2023

Copy: Alex Capo, Charlton School
Peter Urban, Balzer & Tuck Architecture
Charlie Baker, Environmental Design Partnership

J:\C\C5112 The Charlton School\Permitting\Town of Charlton\September PB meeting submission\Charlton SPR Submission Letter_2023-8-24.docx



Project Name: **The Charlton School**

Project Number: **C5112-002**

Project Location: **Burnt Hills, NY**

Description: **Water Usage Calculations**

Prepared By: **CJR**

Date: **September 1, 2023**

Page: **1**

Existing Water Usage

	Gallons per year	Weekdays	(GPD)
2019-2020 School year	918240	261	3518

	Gallons per year	Weekdays	(GPD)
2020-2021 School year	1056890	261	4049

	Gallons per year	Weekdays	(GPD)
2021-2022 School year	669370	261	2565

	Gallons per year	Weekdays	(GPD)
2022-2023 School year	721800	261	2766

Proposed Water Usage

Use	Unit	GPD/Unit	# Units	(GPD)
School Boarding	Per Student	110	36	3960
School Day	Per Student	15	15	225
Employee	Per Employee	15	85	1275

TOTAL 5,460

Field Memorandum No. 1

To: Anthony Flynn, Huston Engineering
From: Chris Rokos, PE and Amanda Isak, Tighe & Bond
Date: June 1, 2023
Re: Charlton School Hydrant Flow Testing

The hydrant flow testing at the Charlton School was performed on June 1, 2023. Amanda Isak of Tighe & Bond and Chris F. of the Charlton Maintenance Department performed the test. The water service is owned and maintained by the Charlton School. A flow of about 530 gpm was achieved through the flowing hydrant. Pressure of the residual hydrant dropped from 85 PSI static pressure to 33 PSI residual pressure. Using these values, the available fire flow at 20 PSI is approximately 600 gpm. The attached sketch indicates the valve sizes observed in the field and the size of the water lines as reported by Chris F.

We were able to access the meter vault at the time of the hydrant flow testing to assess operation of the combined fire line and domestic line meter. The reading on the bypass meter (domestic line) before and after the test was approximately 32,682,290 gal and 32,682,550 gal, respectively. The reading on the main meter (fire line) before and after the test was approximately 200,000 gal and 203,000 gal, respectively. This data confirms that the fire line meter was activated during the fire flow test.

Attachments:

Hydrant Flow Test Results Summary
Hydrant Flow Test Site Sketch

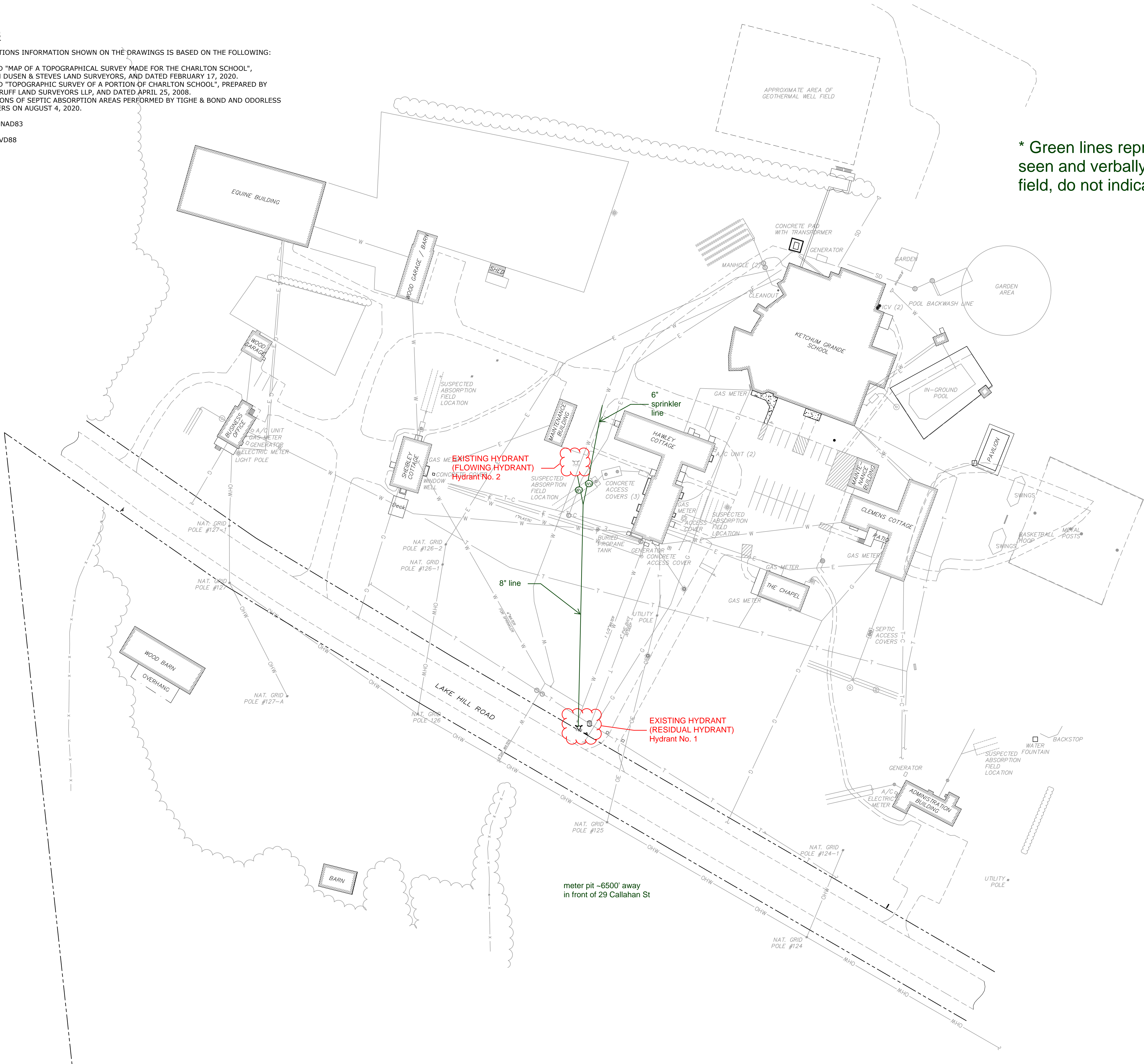
Charlton School Hydrant Flow Testing Results Summary
June 1, 2023



			Flowing Hydrant					Residual Hydrant			
					Static Pressure	Flow	Avaiable Fire			Static Pressure	Residual Pressure
Test No.	Time	Street	Location	Hydrant No.	(psi)	(gpm)	Flow @ 20 psi	Location	Hydrant No.	(psi)	(psi)
1	10:00 AM	Lake Hill Road	Charlton School - Maintenance/ Hawley Cottage	2	77.9	530	598	Charlton School - Lake Hill Road	1	85	33

BASE MAP NOTES

1. THE EXISTING CONDITIONS INFORMATION SHOWN ON THE DRAWINGS IS BASED ON THE FOLLOWING:
- DRAWINGS TITLED "MAP OF A TOPOGRAPHICAL SURVEY MADE FOR THE CHARLTON SCHOOL", PREPARED BY VAN DUSEN & STEVES LAND SURVEYORS, AND DATED FEBRUARY 17, 2020.
 - DRAWINGS TITLED "TOPOGRAPHIC SURVEY OF A PORTION OF CHARLTON SCHOOL", PREPARED BY AUSFELD & WALDRUFF LAND SURVEYORS LLP, AND DATED APRIL 25, 2008.
 - FIELD OBSERVATIONS OF SEPTIC ABSORPTION AREAS PERFORMED BY TIGHE & BOND AND ODORLESS SANITARY CLEANERS ON AUGUST 4, 2020.
2. HORIZONTAL DATUM: NAD83
3. VERTICAL DATUM: NAVD88



* Green lines represent what was seen and verbally described in the field, do not indicate exact locations

DRAFT PLAN
NOT FOR
CONSTRUCTION

Master Plan
Infrastructure
Improvement
Evaluation

The Charlton
School

Charlton, NY

SERVICES PROVIDED IN NEW YORK
BY T&B ENGINEERING AND
LANDSCAPE ARCHITECTURE, P.C.
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OF SECTION 7209 OF THE NEW YORK STATE EDUCATION LAW.

MARK	DATE	DESCRIPTION
PROJECT NO:	C5112-001	
DATE:	10/16/2020	
FILE:	C5112-001 Sanitary Layout.dwg	
DRAWN BY:	JDG	
CHECKED BY:	BKN	
APPROVED BY:	---	

EXISTING CONDITIONS
PLAN

SCALE: 1" = 50'

SKETCH
SHEET 1 OF 3