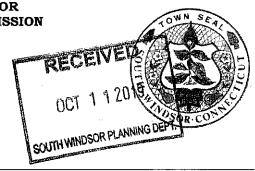
TOWN OF SOUTH WINDSOR PLANNING & ZONING COMMISSION

APPLICATION FORM

Application Number: 19-516 Official Receipt Date: 10-15-19 Munis Application #: 2019 0 233



APPLICANT:	South Windsor Boar	rd of Education	SOUTH MINDOON
PROJECT NAME:	Eli Terry Elementar	y School	
COMPLETE LOCATION	ON OF PROPERTY:	569 Griffin Road	
OWNER OF RECORI	O ON LAND RECORDS	:Town of South Windsor	
		nue, South Windsor, CT 060	
GIS PIN # 390005	569	ZONE <u>A-20</u>	
NAME, ADDRESS, T	ELEPHONE & EMAIL /	ADDRESS OF PERSON TO WH	OM INQUIRIES SHOULD BE DIRECTED
Henry Thomas, R	LA; The LRC Group,	160 West Street, Suite E, C	romwell, CT 06416
860-635-2877; ht	homas@lrcconsult.co	om	Estimated presentation time: 15 min.
THIS APPLICATION I	S FOR: (Check all tha		
	`	(Public Hearing and Certificat	te of Mailing Required)
		(Public Hearing and Certifica	
_	iivisioii/ Resubuivisioii		te of Maining Kequiled)
Subdivision	11/ 11 / 15 / 1	☐ Minor ☐ Major	
·	ublic Hearing Required)	
Conditional Subd		•	
·=		(Public Hearing and Certificat	- ·
Site Plan of Devel	lopment 🗌 New	Modification Buildin	g(s) Sq Ft Addition of 3,143 s.f. to 69,319 s.f. approved
☐ General Plan of D)evelopment		oa,31a s.i. approved
☐ Earth Filling (Sec	:. 7.6) and/or Earth Re	moval (Sec. 7.16) (Public Hear	ing and Certificate of Mailing Required)
Regulation Amen	dment 🗌 Zoning 🔲	Subdivision - Attach proposed	amendment (Public Hearing Required)
☐ Temporary and C	onditional Permit (Pub	lic Hearing Required) for	
Temporary and C	onditional Permit Rene	ewal for	
☐ Detached In Law	Apartment or Acces	ssory Apartment (Public Hearin	ng and Certificate of Mailing Required)
X Other (explain in	detail) Request for Ad	ministrative Approval of Modific	ed Site Plan for 2 additional classrooms.
PLEASE NOTE: An	Application Pending	Sign is required to be poster	d on the property for <u>all</u> applications
	to being heard by the		
Signature of Applicar		Signature of Propert	*
	air, Board of Education		Town Manager, Town of South Windsor
Print Name of Applica	ant	Print Name of Prope	erty Owner Revised 1/9/2017

Engineering Summary Report Additional Classrooms

For The

Proposed Eli Terry Elementary School

Located at

569 Griffin Road South Windsor, CT

Submittal to the:

Town of South Windsor, CT

Date:

September 18, 2018

Revised October 14, 2019

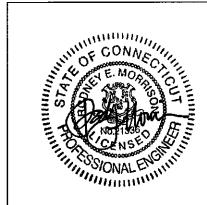
Prepared By:



LRC Engineering & Surveying, D.P.C. Land Resource Consultants, Inc. LRC Engineering & Surveying, P.C. LRC Environmental Services, Inc. LRC Engineering and Surveying, LLC

160 West Street, Suite E Cromwell, CT 06416 Tel: (860) 635-2877 Fax: (860) 635-4226

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Planning • Civil Engineering • Environmental Services • Land Surveying • Landscape Architecture

Proposed Additional Classrooms for the Eli Terry Elementary School

Engineering Summary Report

Table of Contents

Topic	Page	
Introduction	2	
Existing Site Conditions	2	
Proposed Improvements	2	
Method of Analysis	2	
Runoff Summary	3	
Conclusions	4	

Introduction

This summary report has been prepared to review the site engineering and stormwater drainage design for the Proposed Classroom Addition to the New Eli Terry Elementary School located on the south side of Griffin Road and the north side of Graham Road. The Engineering Summary Report was prepared in accordance with the Town of South Windsor Regulations.

Existing Site Conditions

Please refer to the Engineering Summary Report revised August 16, 2018 for a description of the existing conditions.

Proposed Improvements

The proposed 66,924 square foot school building is under construction. To meet demand and anticipated growth, addition classrooms are proposed on the northeast side of the school.

Improvements associated with the construction of additional classrooms is an increase in building roof area by 3,381 square feet. Roof area drainage is proposed and will consist of collection pipes and two yard drains connected to the drainage system on the east side of the school. No other site improvements are proposed.

The building addition increases the impervious surface on the property. The drainage improvements as designed for the new school will attenuate the increase in runoff from the roof area of the building addition. See the Detailed Runoff Summary below.

Method of Analysis

The HydroCAD Stormwater Modeling System computer program by Applied Microcomputer Systems was used to analyze and design the storm sewer system. HydroCAD uses the TR-55 curve number method to estimate the quantity and peak rates of runoff produced by each subcatchment; the resulting flows are routed through the different storm system elements to the system's Outlet Points, typically where the stormwater flows leave the subject property. Storm events were analyzed with Type III, 24-hour rainfall values and curve number/cover types as selected from the SCS TR-55 Manual. Also, the minimum of Time of Concentration used was 0.083 hours (5 Minutes) as selected from the SCS TR-55 Manual. Runoff rates chosen from the NOAA Atlas 14, Volume 10, Version 2 located in Windsor, CT are listed below:

Design Rainfall Amounts:

2 year	3.14 in.
5 year	4.13 in.
10 year	4.96 in.
25 year	6.09 in.
50 year	6.69 in.
100 year	7.84 in.

Detailed Runoff Summary

Flow Rate Attenuation

Analysis Point #1				
Storm:	Pre (cfs)	Post (cfs)	Building Addition (cfs)	Change (cfs)
2 year	12.21	11.42	11.65	-0.56
5 year	18.97	17.57	17.86	-1.11
10 year	24.87	22.92	23.27	-1.60
25 year	33.18	30.35	30.79	-2.39
50 year	39.73	36.13	36.63	-3.10
100 year	46.48	42.01	42.57	-3.91

	Analys	sis Point #2		
Storm:	Pre (cfs)	Post (cfs)	Building Addition (cfs)	Change (cfs)
2 year	15.85	15.53	15.76	-0.09
5 year	24.54	23.75	24.05	-0.49
10 year	32.14	30.85	31.21	-0.93
25 year	42.72	40.72	41.17	-1.55
50 year	50.97	48.20	48.91	-2.06
100 year	59.36	56.29	56.81	-2.56

	Analys	sis Point#3		
Storm:	Pre (cfs)	Post (cfs)	Building Addition (cfs)	Change (cfs)
2 year	19.08	17.63	17.71	-1.37
5 year	30.54	27.78	27.89	-2.65
10 year	40.64	36.68	36.81	-3.83
25 year	54.78	49.11	49.28	-5.50
50 year	65.83	58.82	59.01	-6.82
100 year	77.08	68.68	68.90	-8.18

Conclusions

This summary report demonstrates that with the addition of classrooms to the new elementary school, the calculated stormwater runoff at the property line is less than the pre developed condition.