

Board of Education Capital Plan FY21-FY26

PROJECT TITLE: Tolland High School Roof Replacement

DATE SUBMITTED: 10/3/2019

DEPARTMENT PROJECT INFORMATION

Department:

Department Contact: **Peter Sztaba**

Fiscal Year(s)

Requested: **FY2021** **FY2022** **FY2023** **FY2024** **FY2025** **FY2026**

Department

Priority: **Critical** **High** **Medium** **Low**

Type of Project:

Vehicle **Equipment** **Technology** **Facility** **Other**

PROJECT DESCRIPTION

The Tolland High School has a TPO/EPDM style roof that is set to have its warranty expire in 2026. The roof is 178,646 square feet. Currently the BOE conducts regular routine maintenance to preserve the integrity of the roof system, but its replacement should be planned for starting in 2026 or within a few years after. The anticipated cost to replace the roof in 2026 dollars is \$5,500,000.00.

PROJECT NEED

Impact on Department if Recommended or Not Recommended:

Water leaks, indoor air quality, insurance claims, building safety, accelerated depreciation of building, program interruptions

Cost to Maintain:

Normal roof maintenance, drain cleaning, inspections, penetration sealing, repair tears in fabric

Describe all Benefits and/or Savings:

Reduced liability, lower repair costs, less interruptions

PROJECT BUDGET AND FUNDING SOURCES

Project Cost Summary, Recommended Financing Sources, & Operating Budget Impact

Project Cost Elements	FY 2021	FY 2022	FY 2023	FY 2024	FY2025	FY2026	TOTAL
Feasibility Study							
Design - Engineering							
Site Acquisition							
Site Improvements							
Construction						\$5,500,000.00	
Inspection Services							
Equipment & Furnishings							
Vehicle Purchase							
Other							
Contingency							

TOTALS

Financing Sources

Lease-Purchase							
Water Enterprise Funds							
Sewer Enterprise Funds							
Solid Waste Enterprise Funds							
Storm Water Enterprise Funds							
State / Federal Grants						\$2,475,000 DAS Construction Grant	
Sale of Surplus Property							
CPA							
Other (specify)						\$3,025,000.00 General Fund(Assuming 45% reimbursement rate)	
City Appropriation							

TOTALS

\$5,500,000.00

**Tolland High School
1 Eagle Hill Road
Tolland, CT**

Roof Inspection Date

8/11/2019

Roof Identification / Square footage

Most roof areas consists of a Carlisle fully adhered EPDM roof system

There are five pitched areas that consist of TPO roofs, one canopy roof consisting of a ballasted EPDM

Total sq. footage of all roof areas - 178,646

Estimated Installation Date

August 2006

Leak History

No leaks were reported

Drainage/Slope

The existing is 1/4" inch on the low slope areas

Roof Defects/Deficiencies

- Some of the pitch boxes need to be filled with sealant.
- Some of the walkway pads have become un-attached
- Debris gathering along the drains.

Overall Roof Condition/Rating

We use a rating system based on the following:

- Roofs rated “Green”. These roofs are in good to excellent condition and have 7+ years of additional service life if properly maintained. The roofs need little or no work at this time.
- Roofs rated “Amber”. These roofs are in fair condition and have approximately 4 to 6 years of service life remaining if routine preventive maintenance and repairs are performed.
- Roofs rated “Red”. These roofs are in poor condition and are at the end of their service life. A maximum of 1 to 3 years of service life may be remaining. Significant repairs are necessary to keep the roofs watertight.

Roof Area	Rating
All Areas	Amber

Recommendations and Budgets

Maintenance and Repairs Recommendations

- 1) Re-secure walkway pads where needed
- 2) Fill all pitch boxes as required
- 3) Clear out debris from drains and scuppers
- 4) Walk the entire roof probe all seams repair as required

Budget \$12,500-Operations/Maint

Replacement of all the low slope roofs include the following:

- 1) Complete tear off of the existing roof down to the structural decking.
- 2) Install scuppers and proper drainage as required
- 3) Installation of new tapered insulation 1/2" pitch required
- 4) Installation of a new modified roof system with a 20 year warranty
- 5) New all metal flashings as required
- 6) Provide long-term warranty.

Budget \$5,500,000 (Budget in **2026 dollars** when replacement may be required)

TOLLAND HIGH SCHOOL

1 EAGLE HILL ROAD
TOLLAND, CT



TOLLAND HIGH SCHOOL
1 EAGLE HILL ROAD
TOLLAND, CT

SCALE : NTS

DWG # 1 OF 2

KEY DRAWING

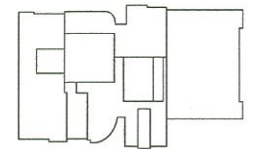


TABLE OF CONTENTS

LEGEND

PAGE #	DRAWING NUMBER	AREA	WALL TYPE	SYMBOL TYPE
PAGE 1	1 - TITLE PAGE		□ FLAT ROOF	☒ CURB (HVAC)
PAGE 2	2-ALL ROOFS	178,646 sq. ft.		☒ CURB
				○ STACK

DRAWING # : 1-TITLE PAGE

DATE : 07-31-15

DRAWN BY : DMR

REVISION #1 -

REVISION #2 -

REVISION #3 -

The dimensions and square footage on these drawings are calculated to be within 3-7% of the actual field dimensions. These dimensions are for estimation purposes only and should not be used bidding purposes. Actual dimensions and penetrations can only be determined by measuring the physical structure in the field using proper measuring tools.



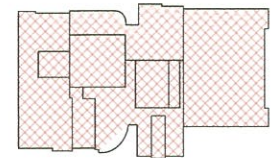
SR PRODUCTS™
CUSTOMER SATISFACTION SINCE 1900
1380 E. HIGHLAND ROAD
MACEDONIA, OH 44056
440.248.0220

TOLLAND HIGH SCHOOL
 1 EAGLE HILL ROAD
 TOLLAND, CT

SCALE : NTS

DWG # 2 OF 2

KEY DRAWING



DRAWING # : 2-ALL ROOFS

DATE : 07-31-15

DRAWN BY : DMR

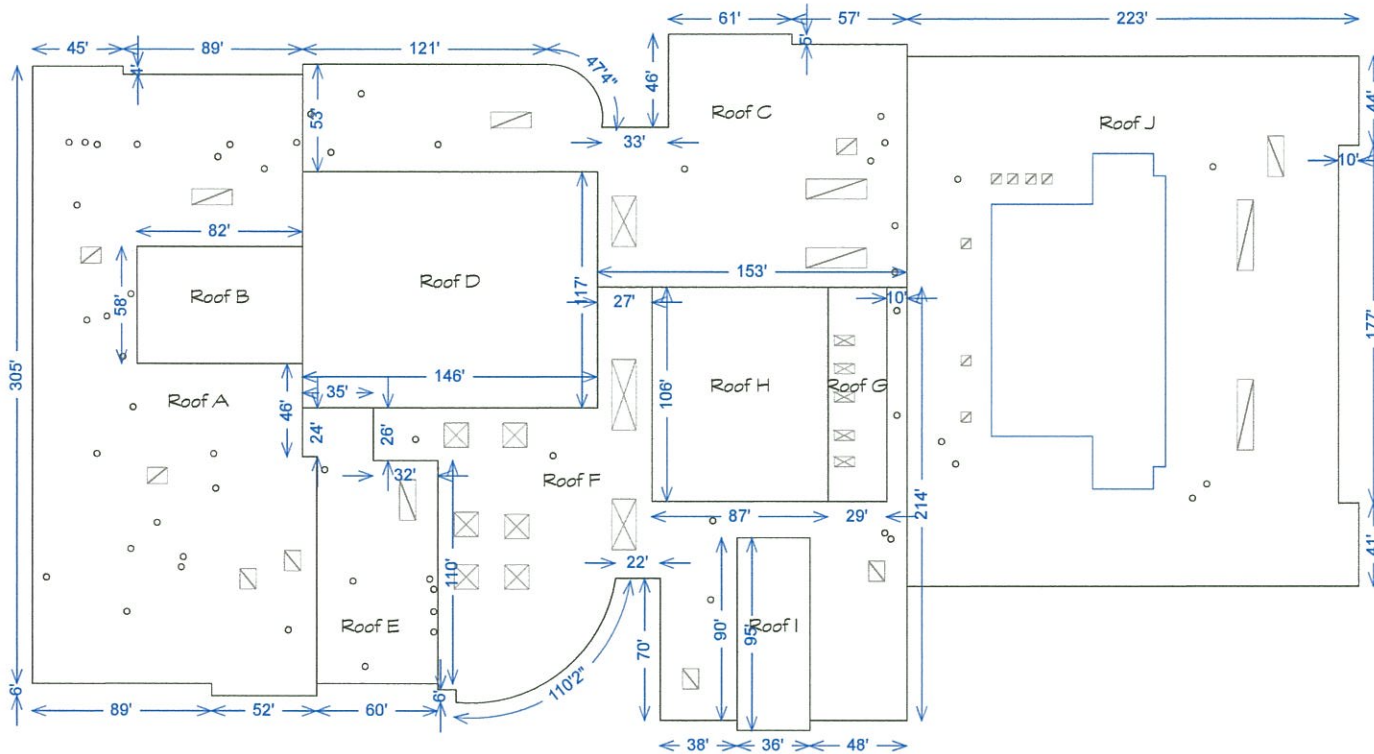
REVISION #1 -

REVISION #2 -

REVISION #3 -



SR PRODUCTS™
 CUSTOMER SATISFACTION SINCE 1900
 1380 E. HIGHLAND ROAD
 MACEDONIA, OH 44056
 440.248.0220



The dimensions and square footage on these drawings are calculated to be within 3-7% of the actual field dimensions. These dimensions are for estimation purposes only and should not be used bidding purposes. Actual dimensions can only be determined by measuring the physical structure in the field using proper measuring tools.

Takeoff Record

Name	Area	Length	Count
Group 1			
[-] [A] Roof A			
Flat Roof (Dig)	36,854.00	1068'0"	14
+ [B] Curb (HVAC)	300.00	200'0"	5
+ [C] Stack	340.00	227'0"	24
[-] [B] Roof B			
Flat Roof (Dig)	4,756.00	280'0"	4
[-] [C] Roof C			
Flat Roof (Dig)	24,899.00	900'0"	12
+ [D] Curb	111.00	74'0"	1
+ [E] Curb (HVAC)	378.00	252'0"	4
+ [F] Stack	142.00	95'0"	10
[-] [D] Roof D			
Flat Roof (Dig)	17,082.00	526'0"	4
[-] [E] Roof E			
Flat Roof (Dig)	7,496.00	406'0"	8
+ [F] Curb (HVAC)	84.00	56'0"	1
+ [G] Stack	99.00	66'0"	7
[-] [F] Roof F			
Flat Roof (Dig)	26,782.00	1441'0"	21
+ [G] Curb	684.00	456'0"	8
+ [H] Curb (HVAC)	108.00	72'0"	2
+ [I] Stack	114.00	76'0"	8
[-] [G] Roof G			
Flat Roof (Dig)	3,074.00	270'0"	4
+ [H] Curb	225.00	150'0"	5
[-] [H] Roof H			
Flat Roof (Dig)	9,222.00	386'0"	4
[-] [I] Roof I			
Flat Roof (Dig)	3,420.00	262'0"	4
[-] [J] Roof J			
Flat Roof (Dig)	45,062.00	990'0"	8
+ [K] Opening (Dig)	11,594.00	504'0"	12
+ [L] Curb (HVAC)	552.00	368'0"	10
+ [M] Stack	85.00	57'0"	6