



1. K-12 Main Building
2. Bus Garage

FIVE-YEAR CAPITAL FACILITIES PLAN

Willsboro Central
School District

August 2016

CSArch Proj. # 119-1501

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A. INTRODUCTION

The Willsboro Central School District Board of Education has directed **CSArch** to prepare a Five-Year Capital Facilities Plan to evaluate the existing conditions of the District's school building and grounds and identify future needs. The Executive Summary includes a brief narrative on the general condition of the facility and the goals of the District.

The Willsboro Central School District is a small rural school district comprised of a K-12 building with a current population of 275 students. The school is located in the Town of Willsboro and the District is bordered to the east by Lake Champlain.

B. PROJECT TEAM

This Five-Year Capital Facilities Plan was prepared by Bryan Manning of CSArch in conjunction with Steve Broadwell, Superintendent and Joe Walsh, Director of Maintenance.

Architect

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C. RESOURCES

This report, as required by the New York State Education Department, is based upon observations made during walk-through surveys and meetings conducted by the project team lead by **CSArch** during the summer of 2015. No in-depth investigation or destructive testing has taken place. Other resources used include record drawings and reports created for the previous capital projects. This report addresses the physical condition of each facility and does not assess the programmatic or educational strengths or weaknesses of the facility.

References to code compliance refer to the latest edition of the State Education Department's Manual of Planning Standards (MPS), the Building Code of New York State (BCNYS) and the Americans with Disabilities Act (ADA/ANSI).

D. DISTRICT GOALS

SUMMARY

Recommendations and priorities have been organized so that appropriate improvements to the existing facility in the areas of health and life safety, code compliance, energy conservation and system upgrades have received the highest priorities.

E. GENERAL CONDITION OF DISTRICT FACILITIES

WILLSBORO K-12

- 88,210 square foot, two-story masonry and steel frame building.
 - Built new in 2001.
- The school currently houses grades K-12.

BUS GARAGE

- 8,320 square feet, one story masonry and wood building.
 - Built in 1940.
 - In unsatisfactory condition.

F. RECOMMENDED FACILITY IMPROVEMENTS

The following is a brief outline of recommended facility improvements.

1. BUS GARAGE

- The District plans to vacate the existing Bus Garage in the near future. Therefore, no recommendations are made concerning this facility.

2. K-12 SCHOOL

The K-12 school was built in 2001 and, therefore, does not have significant infrastructure needs. There are, however, several energy measures that are recommended.

- Lighting upgrades:
 - The existing lights consist of 32-watt T-8 lamps. Gym lights utilize metal halide fixtures. Parking lot lighting is high pressure sodium.
 - Occupancy sensors are malfunctioning.
 - Replacement of inefficient lights and occupancy sensors would save the District significant money on energy.
- Boiler Upgrade:
 - The facility has three (3) 16-year-old boilers that provide redundancy. The installation of one propane fixed condensing boiler that could heat the entire building would save energy.
- Domestic Water Improvements:
 - The building has two (2) domestic water heaters that are 16 years old. Replacement of one (1) domestic water heater with a new propane fixed unit will ensure service and save energy.

- Transformer Upgrade:
 - The facility has five (5) existing transformers that are running at less than peak efficiency and create excess heat. Replacement with one (1) high efficiency transformer will save the District money spent on energy.
- Entry Door Weather Stripping:
 - Many exterior doors have gaps that allow cold air in during the winter. It is recommended that weather stripping and sweeps be installed on select doors.
- Roof / Wall Interface Sealing:
 - The fiberglass batt insulation used to seal the roof / wall interface is no longer effective. It is recommended to remove the batts and use spray foam insulation in those areas.
- Reseal Rooftop Exhaust Fans:
 - There is an unsealed gap between the duct and the curb at exhaust fan locations. This joist should be sealed with caulk.
- Seal Misaligned Unit Vent Intakes:
 - The original installation of the unit vent grills allows cold air to pass around the edges of the unit vent. Provide rigid insulation and sheet metal enclosures to prevent heat loss.
- Caulk Window Frames:
 - The 16-year old caulk is failing in some places. It is recommended that the caulk be raked and replaced.
- Provide Plug Load Central System:
 - Installation of 14 metered plug load controllers will provide electrical efficiencies by metering and controlling the loads better.
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- Walk-in Freezer Improvements:
 - Provide a controller to limit the fan speed on the condenser when not in use.
- Building Automation System and Unit Ventilator Improvements:
 - Provide additional Siemens central points in the DDC system. Adjust the unit ventilators to run more efficiently.

FOLLOWS

Five Year Facility Capital Plan Worksheet

Willsboro Central School District

August 2016

Source Descriptions:

- "BCS" A condition of the building that was included in the 2015 BCS report
- "BCS Rec" An item that was observed but not a condition of the building
- "District" A request of the district

BCS #	Scope of Work	Health and Safety	Source	Item Cost	Priority	Plan Year	Year 1 2016	Year 2 2017	Year 3 2018	Year 4 2019	Year 5 2020
K-12 Main Building											
43	Drain on north side freezes.	No	BCS			3	-	-	\$0	-	-
50	Repair fence at pond.	No	BCS			2	-	-	-	-	-
58	Consession / press box 2 story block construction.	No	BCS			2	-	-	-	-	-
61	Replace caulk joints, repoint around gym, repair sills, replace flashing around gym and seal exterior walls.	es	BCS	\$200,000		2	-	-	\$200,000	-	-
64	Replace weather stripping, replace some hardware.	No	BCS	\$20,000		2	-	-	\$20,000	-	-
68	Replace flashing at gymnasium, roof drains freeze, add secondary drains.	Yes	BCS	\$220,000		2	-	-	\$220,000	-	-
70	Add acoustic panels in café.	No	BCS	\$40,000		2	-	-	\$40,000	-	-
71	Replace carpet in admin and media center.	No	BCS	\$60,000		3	-	-	\$60,000	-	-
81	T-8's ballasts starting to fail.	No	BCS	\$440,000		2	-	-	\$440,000	-	-
84	Replace water coolers (s).	Yes	BCS	\$10,000		2	-	-	\$10,000	-	-
85	Clogs in lines - wrong slope - High School, Elementary wing, maintenance.	Yes	BCS			2	-	-	\$0	-	-
86	#1, 2014, #2, leaking - performance contract wil replace.	yes	BCS			3	-	-	\$0	-	-
91	Interior classroom unit done.								\$0		
92	Air movement from RTU at specials is not enough. UVs not sealed correctly - air cap under sills EPC will resolve.	Yes	BCS	\$40,000		3	-	-	\$40,000	-	-
96	Obsolete head end.	Yes	BCS				-	-	\$0	-	-
98	Ansel at hood.		BCS				-	-	\$0	-	-
99	Battery charged 2014.		BCS								
K-12 Main Building Totals							\$0	\$0	\$1,030,000	\$0	\$0

BCS #	Scope of Work	Health and Safety	Source	Item Cost	Priority	Plan Year	Year 1 2016	Year 2 2017	Year 3 2018	Year 4 2019	Year 5 2020
Bus Garage											
53		No	BCS	\$200,000		3	-	-	\$200,000	-	-
60	Replace slab on grade - repair bays.	Yes	BCS	\$45,000		3	-	-	\$45,000	-	-
61	Deteriorated wood.	Yes	BCS	\$35,000		3	-	-	\$35,000	-	-
63	Rebuild / repoint parapets.	Yes	BCS	\$35,000		3	-	-	\$35,000	-	-
64	Replace main door.	No	BCS	\$3,000		3	-	-	\$3,000	-	-
67	Replace windows.	No	BCS	\$40,000		3	-	-	\$40,000	-	-
68	Replace fascia, address ice dam on east side	Yes	BCS	\$35,000		3	-	-	\$35,000	-	-
73	Cracks in bay; covered in 60.	No	BCS			3	-	-	\$0	-	-
77	Replace basement drainage piping	Yes	BCS	\$8,000		3	-	-	\$8,000	-	-
87	Beyond useful life, ADA.	No	BCS	\$10,000		2	-	-	\$10,000	-	-
BUS GARAGE TOTALS							\$0	\$0	\$411,000	\$0	\$0

