

**Darien Public Schools
Capital Projects 2018-19, Priority 1**

The following descriptions and review of Priority 1 projects are broken down following this template of guidelines:

1. Problem/opportunity being address
2. Project goal
3. Options investigated to address the problem
 - a. Potential costs/benefits/negatives
4. Option selected and reasoning
5. Project plan
 - a. Estimated cost, start date, completion date, risks, other pertinent details
6. Project benefits
 - a. Hard and soft, how will benefits be measured, any paybacks

Darien High School

Replace Turf Baseball Field: \$575,000

1. The Varsity Baseball Field is nearing the end of its' useful life.
2. The goal is to replace the existing field with new artificial turf that is conducive to Baseball and Field Hockey.
3. The only other option would be to remove the field from service.
4. The option of installing new artificial turf was selected because the subsurface of the field is in great condition and we can recycle the existing turf and infill. It is not prudent to take no action.
5. Ideally, this work will be done in late June through early August. This would be the time when fall sports practices haven't started.
6. The benefit of this project is that it would ensure the fall Baseball and Field Hockey programs have the field available at the beginning of their season.

Replace Oil Burners with Natural Gas Units: - \$65,000

1. The Town is in contract with Eversource to have a gas main installed to the High School. As part of the installation agreement, when the gas main is completed the High School will switch from oil to gas for heat and hot water. The budget estimate and funding that was approved last year is not enough money to pay for all the required piping.
2. The goal is to have the boilers and hot water heaters converted to natural gas when the deadline for the changeover occurs.
3. The options looked at were to change just the burners, or change the complete boiler/burner units.

4. There was no reason to change the boilers out. These units are designed to run for 25-30 years and they are only 13 years old and in excellent condition.
5. The estimated cost was originally based on information supplied by the equipment manufacturer. The start date was to have been July 1, 2017. There is no firm date as of now. There is no real risk, we have three boilers and can operate one on oil while the other 2 are changed over to gas.
6. The Town and Eversource have established a payback as part of their contract. According to the document, the payback will be 3.5 years.

Middlesex Middle School

Install Gas Meter Piping through Cafeteria Ceiling: - \$35,000

1. This is the same opportunity being presented by Eversource to the High School.
2. The goal is to make MMS ready to run on natural gas instead of oil.
3. The other option would be to route the gas main either over the roof of the cafeteria, or install piping underground.
4. We selected this option because the piping will not be exposed to the elements, will last longer and is the least expensive.
5. The plan is to run all the piping from the gas meter, through the cafeteria ceiling and into the boiler room. There is no real risk, we can convert when ready, and run on oil until then.
6. The benefit is outlined in the estimated payback developed by the Town and Eversource. According to the document, the payback should be 2 years.

Install new carpet in Main Office, Library and Music Rooms: - \$45,000

1. The carpeting in these areas is old and worn out. Several areas have received major repairs over the last several years.
2. Project goal is to remove and install new carpeting.
3. There were no other options looked at to take care of this issue.
4. The option selected is the only way to correctly eliminate this problem.
5. This work will be done during the summer and each space should be completed in 5-7 working days.
6. The project benefit is safety from trip hazards and improved appearance.

Hindley Elementary School

Renovate Rooms 101,107,108: cabinets, cubbies, ceilings, paint - \$75,000

1. The cubbies and cabinets are from 1976. They are in poor condition. There is no acoustic ceiling in these spaces.
2. Goal is to install new cubbies and cabinets, an acoustic drop ceiling and new energy efficient LED lights.

3. Options investigated were to try and repair/renovate the existing cubbies and cabinets and retrofit the existing lights.
4. The time and money spent to update 42-year-old cabinets and fixtures isn't worth the effort. Replacing is the best option for long term use.
5. This project will be designed and bid out; hopefully in conjunction with the window replacement program.
6. The benefit will be a better learning environment

Window Replacement Program, Original Building: - \$167,649

1. The windows in the original building were not replaced when the 1996 addition was built. These windows are not original to the building, but are at least 40 years old. Many are inoperable and parts are not available.
2. The goal is to retrofit new, energy efficient windows into the existing window frames.
3. Options investigated were to try and repair the existing, remove the complete windows and frames and replace, or remove the sash and hardware and replace with new.
4. The window frames are in good condition, there was no need to go through the expense of replacing them. The retrofit option will retain the look of the building while improving the interior environment.
5. The architect has been working on this project, and has a basic specification completed. This work is scheduled to run over the next few summers, being completed in 2019. Most of the work will be done during the summer.
6. The benefits will be windows that work correctly, are draft free and have screens so they can be opened in the spring and fall without worrying about flying insects.

Upgrade original building pneumatic controls to digital: - \$150,000

1. The temperature controls for the original building do not work accurately.
2. The goal is to upgrade the controls to match the digital controls and valves that we have been installing in the other buildings.
3. The options investigated were to try repairing what we currently have, or installing a different digital system.
4. This option was selected due to the success we have had at other locations when installing the Alerton system.
5. We can install this system in the summer, similar to what we have done at Royle and Ox Ridge.
6. The benefits for this project will be greater comfort and control of the temperature in the building.

Replace sump pump: - \$46,464

1. The sump in the boiler room is original to the building. It is broken and there are no repair parts available.
2. The goal is to install a new pump with a similar capacity to the original.

3. The options investigated were to try and repair the original pump. The parts are not available.
4. The option selected was the only choice, there is a high water table here and a pump is needed to keep the boiler room from flooding.
5. The school architect is designing the new pump installation and we hope to do the work either next summer or early fall.
6. The benefit is a dry boiler room, and the heating equipment will not be subject to damage.

Holmes Elementary School

Replace Skylight: - \$124,592

1. The problem is that this skylight, in the gym, does not operate as intended. It leaks and is covered with a tarp. The glass is not insulated.
2. The goal is to install a new insulated skylight which retains the appearance of the original building.
3. The options investigated were to try and repair the existing skylight by replacing all the glass in the frame, or installing a new unit.
4. We selected this option of a new skylight because there is no practical way to upgrade and repair the existing unit.
5. The plan would be to replace the skylight as part of the roofing plan, which would take place during the summer of 2019.
6. There are no risks involved, we would hope to complete before school starts in August of 2019.
7. The benefits would be improved energy efficiency and natural light into the gym from the exterior.

Areaway into basement needs new bulkhead and egress ladder: - \$13,192

1. The existing Bilco door leading to the boiler room is rusting out, and difficult to open. There is no egress ladder from the boiler room up to the outside.
2. The goal is to replace the Bilco door and install a metal ladder from the boiler room to the exterior.
3. There aren't any alternatives for this project.
4. We selected this option because it is the only way to accomplish the work.
5. The plan would be to perform all the requests for pricing in the spring, and perform the work in the summer of 2018.
6. The benefit would be increased safety for people working in the boiler room. There are no paybacks for this type of work.

Replace roof shingles and EDPM roof: - \$879,471

1. The roof shingles and EDPM roof are over 20 years old, which is the expected life of these types of materials.
2. The goal would be to replace the roof at the same time that the gym skylight is replaced.
3. The only part optional on this type of project is how much insulation you can add to the roof after the old roof is stripped off.
4. It was decided to budget for a complete removal of the roofing, flashing and shingles, and install tapered insulation on the flat roof and insulating boards on the pitched roof.
5. This work, and the skylight, would be done during the summer of 2019.
6. This roof doesn't have active leaks right now, but it can be expected to develop leaks in the next few years if action is not taken. There is no payback for this type of project.

New Backflow preventer: - \$45,732

1. The problem is that there is no backflow preventer on the domestic water line.
2. The goal is to install the backflow preventer to help insure safe domestic drinking water.
3. The only option is to not install this unit.
4. Both the State Department of Health and our water provider require backflow preventers on new water services. They have asked customers with older services to bring their water systems into compliance.
5. The cost was estimated by an engineer working with the state DOH and Aquarian Water to come up with a scope of work. We hope to tie this project in with the other water meters and sump pump replacements and bid the work out this summer.
6. The benefit is a safer drinking water system. There is no payback for this type of work.

Ox Ridge School:

Replace Main Distribution Panel with new, including new service, primary/secondary feeder work and transformer: - \$293,157

1. The problem is that this panel is obsolete and repair parts are no longer available.
2. The goal would be to upgrade this with a panel that could be used no matter what the future plans were for Ox Ridge School.
3. There are no options for this work.
4. We have selected a plan which lets us address this problem and provides flexibility for the future.
5. The project could be completed in under 2 weeks, from start to finish. We would have to time this work during a vacancy between the Day Camp and the school year.
6. The benefit would be a safer electrical service running into the building. There is no payback for this type of work.

Royle Elementary School

Replace Boiler Room Sump Pump: - \$51,302

1. This is the same as the sump pump replacement at Hindley.

Add Backflow Preventers on Water Mains - \$109,931

1. This is the same as the work at Holmes School, except there are 2 water mains at Royle

Window Screens for Occupied Areas: - \$45,000

1. The problem is that none of the windows in the 1996 addition have screens, some of the windows in the original building are missing the screens. On warm days the staff is reluctant to open the windows due to the insects that enter the classrooms.
2. Goal is to provide screens for all the windows.
3. The options available were removable or fixed screens.
4. We chose fixed screens that can be removed for cleaning as opposed to screens that you install each time you open the window. Less chance of damage, and window can be opened a variety of heights.
5. The plan would be to purchase from a company that would make up the screens, we would handle the installation.
6. Benefit would be better ventilation, especially on the top floor.

Upgrade Corridor Lighting: - \$51,302

1. The corridor lighting in the 1958 addition is barely adequate and in poor condition. We upgraded the lights adjacent to this hallway when we did the generator installation.
2. Goal is to improve lighting levels and appearance, and to change out the existing ceiling tiles.
3. The option investigated was to change only the lights, or to change the lights and ceiling and increase the number of fixtures.
4. We can increase the number of fixtures and still decrease our electrical use due to new LED technology. We have to change the ceiling tile grid to match up with the new fixtures. We will install new, reflective tiles at the same time.
5. We would start this work during the summer. The camp use or summer cleaning won't be affected. This work will take 2 weeks from start to finish.
6. There will be a drop in electrical usage, the appearance of the area will be brighter and cleaner looking. Not really a payback due to the number of fixtures being changed.

Tokeneke School:

Correct Boiler Room Piping: - \$85,000

1. This problem was discovered during the retro commissioning. Last year we added a circulating pump so that both boilers would work. The goal with this piping is to allow the boilers to be able to operate automatically. Now we have to manually shut off and open certain valves to switch from one boiler to the other.
2. Goal is to allow for a fully automatic lead-lag system.

3. The only other option is to leave things as they are, which puts you at risk for a building freeze up.
4. We chose this option because we believe this is what the engineers originally intended, but never achieved.
5. The plan would be to bid this out so the work could be done when the heating season is over. The work would be completed over the summer
6. The benefit will be extending the useful life of each boiler. Right now, one boiler has been doing most of the work for the past 8 years. There is no payback on this type of project.

Central Office

Nothing is being requested this year

District-Wide

Replace 93-DAR, a 2003 S-10 Pick Up - \$48,500

1. The problem is that this truck is not meant for regular commercial work. It is a small truck and it has a tiny plow we don't install any longer. Truck is currently used by our painter.
2. Replace with a full-sized vehicle that has a utility body and snow plow.
3. There aren't any viable options. Truck will be 15 years old, it has over 125,000 miles on it.
4. This is a continuation of our vehicle replacement program.
5. Plan is to order a vehicle off the state bid once the funding is allocated. We would like to have this vehicle in time for the start of the winter of 2018-19.
6. Benefit will be reliable safe vehicle for a member of the maintenance department.