

NON-UTILITY CAPITAL IMPROVEMENT PROGRAM 2025-2029 PROJECT DESCRIPTION

Last revised 8/28/2024

I. PUBLIC SAFETY

1. Ambulance Replacement

The recommended plan is to replace 1 ambulance each year to maintain a fully operational fleet of 8 ALS ambulances, minimizing breakdowns and expenses incurred from heavy usage and high mileage. The Mechanical Bureau will determine which ambulance will need to be replaced regardless of age based on warranty information, mechanical maintenance records, and visual inspections of the fleet at the time of replacement. Ambulances will be outfitted with all equipment necessary to meet PA Department of Health guidelines for an ALS service.

2. Fire Apparatus Replacement

In 2026, Engine #4 a 1998 model will be replaced, due to age and part availability. The recommended plan is to replace an apparatus every 2 years to maintain a fully operational fleet, minimizing breakdowns, and expenses incurred from usage and high mileage. In 2028, Ladder #2 at Memorial Fire Station would be earmarked for replacement. The current ladder truck was purchased in 2016. At present it is taking 3 to 4 years once a truck is ordered to be built and delivered. The Fire Department works with the Public Works' Mechanical Bureau to determine which apparatus would be replaced next regardless of age based on strategic use, warranty information, mechanical maintenance records and visual inspections of the fleet at the time of replacement.

3. Police Vehicle Replacement

The recommended plan is to replace 5-7 police vehicles each year to maintain a fully operational fleet, minimizing breakdowns and expenses incurred from heavy usage and high mileage. The Department replaced 1 motorcycle and 5 vehicles in 2024. The Mechanical Bureau determines which vehicles are to be replaced regardless of age based on warranty information, mechanical maintenance records, and visual inspections of the fleet at the time of replacement.

4. Public Safety Cameras

The cameras and server/storage hardware for the City's camera system are aging. Some have now reached end of life and are no longer supported. This project will identify and replace inoperable or obsolete cameras and the obsolete server/storage hardware that runs the camera system and stores all of the video. IT applies for Grow NorCo grants from Northampton County, with matching funds from the City, for the replacements.

5. Police Armored Rescue Vehicle Replacement

This vehicle would replace Unit 498, a 2008 Lenco Bearcat, that is utilized for emergency response to barricaded suspects, active shooter scenarios, response and rescue, and high-risk warrants. This type of vehicle has proved to be an invaluable asset that has allowed officers to perform rescue actions that would not have been possible without such equipment which included rescuing citizens who were pinned down by a gunman who was actively firing on first responders.

II. PUBLIC WORKS

A. TRAFFIC

1. Isolated Intersections

Install new or upgrade existing signals at various locations. Each intersection costs between \$250,000 to \$275,000. Currently proposed potential new signal locations include East Boulevard & Linden Street, Butztown Road & Easton Avenue, Linden Street & Elmhurst Avenue, and Third Avenue & Union Boulevard. Currently needed upgrade locations include Linden & Goepp Streets, Club Ave & Union Blvd, New & Market Streets, North & Main Streets, Center & Church Streets, Center & Market Streets and Walnut & New Streets, Pennsylvania Avenue & Union Blvd, Pennsylvania Avenue & Eaton Avenue, and Eaton Avenue & Union Blvd etc. Construction at Linden & Goepp Streets was completed in 2024 and construction for Club Ave & Union Blvd is anticipated in the Spring of 2025. Design for the intersections of Pennsylvania Avenue & Union Blvd and Pennsylvania Avenue & Eaton Avenue will be completed in the first quarter of 2025 with construction to follow in late 2025 or spring 2026.

2. Traffic Safety Improvements

Replacement of outdated traffic controllers and traffic signal cabinets at various locations for our 128 signalized intersections and flashers. Purchase of uninterrupted power supply units (UPS), radio communication/interconnect equipment, and video detection cameras and equipment to replace damaged or broken in-roadway traffic loop detection is also budgeted under this item.

B. STREETS

1. Public Works Engineering Costs for CDBG Eligible Street Projects

Design costs/fees for street reconstruction projects.

2. Linden Street Two Way Conversion

Dating back to when Bethlehem Steel was in operation, Center Street was made one-way north and Linden Street one-way south between approximately Elizabeth Avenue and the Fahy Bridge (New Street). This was to facilitate traffic to and from the Steel Company during peak hours. Since the closure of Bethlehem Steel, the roadway have been left in their one-way configurations and the City will explore the conversion back to two-way traffic with the driving forces being economic impact and traffic calming/accident reductions. A full traffic impact analysis for Linden Street was conducted to analyze the proposed modifications and recommend timing changes to the signals and/or the installation of additional signals, etc. to support the conversion. The Linden Street conversion work is estimated to cost approximately \$2M if completed in 2025. Preliminary engineering and permitting is expected to be started in late 2024 with final design and construction to take place by the end of 2025.

3. Center Street Two Way Conversion

Dating back to when Bethlehem Steel was in operation, Center Street was made one-way north and Linden Street one-way south between approximately Elizabeth Avenue and the Fahy Bridge (New Street). This was to facilitate traffic to and from the Steel Company during peak hours. Since the closure of Bethlehem Steel, the roadways have been left in their one-way configurations and the City will explore the conversion back to two-way traffic with the driving forces being economic impact and traffic calming/accident reductions. The project is currently on the long-range plan, the City will be looking for opportunities to move up the project, has applied for grants, and will

continue to apply for additional grants until the project can be fully funded.

4. **Street Overlay Program**

Overlay various streets throughout the City in accordance with our road management program. Proper upkeep/maintenance of the City's 260 miles plus of roadway require well over \$2,500,000 in annual expenditures and we are currently still significantly backlogged with this work.

5. **Heavy Duty Tandem Dump Truck**

This is to replace Unit #161, a 2005 GMC dump truck which is in poor condition and needs to be replaced. The truck was ordered in 2022, but has not been received due to supply chain issues which delayed the delivery till the end of 2025. Therefore, we had to switch vendor and upgrade the truck for more efficient use. Truck was anticipated to be delivered in the first quarter of 2024, but now delivery is anticipated in the second quarter of 2025. This unit is used for plowing, pulling leaf loaders, clean up, and assist in the streets paving operation.

6. **Three (3) Heavy Duty Large Dump Trucks (Tri-axle)**

The replacements of Unit #170, a 2002 GMC Dump Truck, and Unit #160, a 2008 Mack Tandem Dump Truck were ordered in 2024. Only chassis were delivered, but still waiting for the body. Trucks are anticipated to be completed and delivered by early 2025. The plan is to replace Unit #162, a 2010 International Dump Truck in 2026. These trucks are in poor condition and need to be replaced. One truck was ordered in 2022, but has not been received due to supply chain issues which delayed the delivery till the end of 2025. Therefore, we had to switch vendor and upgrade the truck for more efficient use. These trucks are used for plowing, pulling leaf loaders, clean-up, and assist in the streets paving operation.

7. **Tymco 500X Street Sweeper**

This is to replace Unit #708, a 2011 Pelican Sweeper in 2026. This sweeper will support complying with the MS4 requirements.

8. **Dodge 5500 Small Dump Truck**

This is to replace Unit #164, a 2009 International that is used for cleanup and plow operations.

9. **Plow Pick-up Truck**

This is to replace Unit #082 a 2005 Chevrolet 3500 in 2027, and Unit #180 a 2017 Ford F-350 in 2029. Which are primarily used for Plowing and Brine operations.

10. **Milling Machine**

This is to replace Unit #752, a 2012 Wirtgen Milling machine. The new Milling machine will allow for more precise and efficient road surface preparation. New technology improves efficiency in preparation and leveling of roadway surface. Our 2012 Milling machine will be used for a trade for the replacement unit in 2027.

11. **Trailer Mounted Leaf Collector- DCL800TM**

The plan is to purchase this trailer using the 2024 PA DEP 902 Recycling Grant. The cost is approximately \$150,000. The grant would reimburse the City 90% of the purchasing cost for a net output of \$15,000. The Mechanical Bureau will determine which unit will be replaced at the time of delivery. Grant approval won't be announced until late 2024. If our application is not successful, we will remove this unit from the 2025 NUCI.

12. **Asphalt Paver- P385C**

This will replace our smaller 2016 1000G LeeBoy paver. The P385C will have the latest upgrades for grade and slope control and will have a wider paving screed for increased productivity. This purchase is currently planned for 2028.

13. **Flusher Truck**

This is to replace Unit #152 a 1992 Volvo Flusher, which is in poor condition and became difficult to find part for it due to age. This truck is used for flushing streets and parking lots, paving operations, and filling street water barricades.

14. **East Broad Street Active Transportation Plan**

This project is part of the 2021 Broad Street Active Transportation Plan. Specifically, this project will include further development of the median in the downtown core area by extending the current median eastward to Penn Street and pedestrian safety upgrades to the intersections of Maple, Elm, and High Street at Broad St. The project will also include street trees and lighting along with complete ADA curb ramp upgrades. Engineering, design, and construction will be coordinated with available expenditure of Safe Streets 4 All funds for the W. Broad Street Corridor Improvements.

15. **West Broad Street Corridor Improvements**

This project is part of the 2021 Broad Street Active Transportation Plan and consists of preliminary design, final design, permitting, and implementation/construction of safe streets improvements for the W. Broad Street corridor from Main Street to the city line (Hanover Avenue). The improvements will include but are not limited to bump-outs at intersections, bike lanes, introduction of turning lanes, decorative and line painted crosswalks, traffic signal upgrades, pedestrian refuge islands, ADA improvements, stormwater management, special signage, and other related streetscapes improvements. The majority of the funding for this project is federal funding, specifically Safe Streets and Roads for All (SS4A). The SS4A agreement was executed in the 3rd/4th quarter of 2024, followed by bidding and award for design services. Preliminary and final design is anticipated to be completed by the end of 2025 to mid 2026 with construction to start Spring of 2026.

C. **STORM SEWERS**

1. **Stefko Drainage Swale**

This project was originally designed to upgrade the existing drainage channel between Broad Street and Lehigh River to eliminate flooding at the former Bethlehem Steel Power Plant and to reclaim existing city owned property for future use. Due to changed conditions, this project has been reevaluated to principally include a possible culvert under Lehigh Canal and selected improvements along the swale to reduce erosion and sediment transport to the river. A Growing Greener grant was received in 2013 for design and was completed in 2016. The Project will be completed in two phases in 2026 and 2027.

2. **East Boulevard Detention Basin**

Improvements to two detention basins on East Boulevard in the City of Bethlehem leading into Bethlehem Township's storm sewer system. The City has partnered with Bethlehem Township to investigate and complete a detailed H&H analysis to identify potential issues with the existing system, and to define the final scope of work of necessary improvements. Design was completed in 2024 and construction is anticipated to start in 2025.

3. **Johnston Drive Swale Restoration/Improvements**
Improvement of an open swale south of Johnston Drive from East Boulevard, under Shakespeare Road, to the City of Bethlehem and Bethlehem Township border. This project has been removed from the above project for future improvements due to cost and safety.
4. **Easton Avenue to Stefko Boulevard Storm Sewer System Upgrades - Various Locations (Phase I and II)**
This project is to replace and upgrade the storm sewer from Easton Avenue, down Barbara Street, Sycamore Street, Walters Street, Minsi Trail Street, and Wallace Street, to Stefko Boulevard and Pembroke Road. The flow then discharges into the Stefko Swale and ultimately into the Lehigh River. In heavy storms, there have been drainage issues along this run. Phase I would be the addition of a second pipe in the lower end of the system from Washington Avenue to Stefko Boulevard. Phase II would be collection system improvements to the system from Easton Avenue to Washington Avenue. Estimated costs are very preliminary as they are not yet based on a detailed analysis and preliminary design. Evaluation and design are anticipated to be in 2025 and construction in 2026 and 2027.
5. **Miscellaneous Drainage Structures**
These funds are used to make repairs to catch basins, headwalls, culverts, pipes, etc. throughout the City's extensive storm sewer system.
6. **Stormwater Pollution and Flood Prevention Program**
This is for small scale pollution reduction projects/improvements identified during the course of each year. Projects may include stormwater pollutant reduction which consists of detention basin restoration and water quality improvement as well as stream bank restoration and other BMP installations. Also includes cost for updating the PRP reports.
7. **378 Swale Improvements (Phase I)**
The purpose of this project is to redesign the 378 swale to prevent flooding, minimize erosion, and maintain adequate stormwater discharge. The existing concrete swale is deteriorating at various segments. The proposed improvements may include replacing sections of the concrete lined swale with vegetated sections, and reconstructing segments of the swale to improve drainage flow, prevent future damage to roads and adjacent utilities, and improve water quality and reduce sedimentations. An H&H evaluation and preliminary design will be completed to define the final scope, and the construction will be done in phases.
8. **Bridle Path**
This project is to regrade the swale and alter the outfall on Bridle Path to eliminate erosion and ponding that occurs. Design started in the fall of 2024. This project is anticipated to be bid for construction and be completed in 2025.
9. **Monocacy Street Drainage**
This project is to address the erosion and hillside washout near the outfall on Monocacy Street. The City is working with the Monocacy Creek Watershed Association in gathering information to identify/scope a solution. Additional investigations and a detailed H&H analysis will be performed to identify potential issues of the existing condition to define the final scope of work.

10. East Market Street Drainage

This project is to design and install a stormwater system on East Market Street between Jennings Street and the City boundary to prevent erosion and flooding in the area. Additional investigations and a detailed H&H analysis will be performed to identify potential issues with the existing system to define the final scope of work.

11. Yellis Tract Drainage

This project is a continuous improvement of the stormwater system on Johnston Drive between Barrymore Ave and Red Fern Lane. There is a swale that continues to Yellis Tract and discharges into the Monocacy. This swale needs to be regraded and rehabilitated to better improve flooding in the area. Additional investigations and a detailed H&H analysis will be performed to identify potential issues with the existing swale to define the final scope of work.

12. Corrugated Metal Pipe Study and Replacement Program

The city's Stormwater system contains numerous corrugated pipes of different sizes and shapes. Recently, these pipes have started to fail, and the rate of failure appears to be increasing over the years. This study will consist of locating, video inspecting, and rating all identified pipes. The most deficient sections will be replaced first.

13. Seidersville Rd. Culverts

This project is to replace two culverts on Seidersville Rd. The East culvert, featuring twin HDPE pipes, suffers from compromised flow between the pipes and frequent blockages, leading to water spilling over the roadway. The West culvert adequate conveyance capacity is questionable. These culverts will be designed to properly handle the design flow and prevent frequent overtopping of the road.

D. FACILITIES

1. Facilities Capital Improvements

Funding is to support small capital improvements identified by the comprehensive facilities evaluation, other previously identified improvements, and unexpected necessary capital improvements to all City facilities. Currently identified improvements include HVAC replacement at the Ice House, and replacement of air handlers, heat exchangers, pumps, pneumatic controls, air filters, condensers and pumps at various facilities, exterior improvements, railings, new windows on ground floor for the Police Department, HVAC component replacements, replacement of pavers on the plaza, and upgrade of the City Hall elevators (parts are no longer available for existing elevators). In addition, funding is included for improvements/renovations at the City's Fire Houses focusing on functional concerns of the facilities and energy efficiency improvements. Work includes replacing/upgrading heating/cooling/ventilation systems, paving, replacement of doors/windows, pool improvements, and other facility interior/exterior improvements and renovations. Safety concerns and code issues identified by Public Works, Safety Committee, Fire Department, and Inspections will also be addressed. Projects may also include roof renovations/replacement, exhaust/air systems to improve air quality, emergency lighting, renovation/replacement of unsafe structures, purchase of special equipment as deemed necessary to handle safety/code requirements, and other unforeseen repairs/improvements to facilities/equipment to extend the life of capital assets. Funding this line item also includes evaluation and improvements to the Police Department space.

2. **City Emergency Services Facility**

This project is the construction of a pole building which would be attached to BFD Company #5 on Easton Avenue. This building would be a storage area for Police, Fire, EMS, Emergency Management supplies, equipment and vehicles. The building would be an “emergency service facility” that would be utilized by all City Emergency Services. Currently, these vehicles are spread all over the City, indoor and outdoor at all times of the year. Having these vehicles in one central location, in a secure indoor facility is instrumental on the wear and tear of the technical equipment in them and also on the life duration of each unit. Attaching the pole building next to a fire station enables a 24-hour security presence. The building would also include an elevated area which would be a joint Fire, Police, EMS and EM training area. This would be a simple classroom style room with two small offices for Fire and Police Specialized Units, i.e.: ERT and EOD Units. With the construction of this building, the City’s Emergency Services; Police, Fire, EMS and EM, would be able to consolidate, secure and protect the specialized equipment they utilize in the City. Several vehicles have to stay plugged into a power source when not in use.

3. **City Hall Plaza Drainage Pipe Replacement**

The drain pipes for the plaza run through the garage and is galvanized steel. The pipes are corroding, frequently clog, and gather calcium deposits which causes backups in the plaza drains and likely contributes to or causes the existing leaks in the facility. The piping is jetted annually, but the problems persist. The drain piping in the garage will be replaced with larger diameter PVC pipe which will not collect future calcium deposits as readily as the galvanized steel. In addition, some of the existing piping has asbestos insulation that will be abated. This project is anticipated to be completed in 2025.

4. **Superior Boiler Replacement**

City Hall was originally served by two Superior Boilers. A third boiler a Lochinvar Boiler was installed in 2013 (Boiler #3). Superior Boiler #2 no longer functions and Superior Boiler #1 is original to the building as well and has exceeded its useful life. If Boiler #1 breaks down, we would be functioning on Boiler #3 with no back up. The new boiler, to replace boiler #2, will be a new gas fired boiler similar to the Lochinvar. Bids were received in the fall of 2024 and is anticipated to be completed in the first quarter of 2025.

5. **Domestic Water Tank Replacements**

This project is for the replacement of two large domestic water tanks with hot water heat exchangers. These tanks are original to the City Hall Complex and are insulated with asbestos. The circulating pumps, controls, and heat exchangers are all beyond their expected life and in need of replacement. The asbestos will be abated and the tanks replaced with smaller, gas fired, condensing water heaters. Asbestos abatement was completed in 2024, the replacement of the tanks will be completed in the first quarter of 2025.

6. **Administration Building 2nd Floor Window Replacement**

The fixed windows on the 2nd floor are older and have deteriorated glazing putty and fogged panes. Minor corrosion is evident on both the interior and exterior of the frames. The majority of the windows in the building have been recently replaced.

7. **Underground Storage Tank Closures**

The Serenity Garden at the City Hall Complex contains two 10,000-gallon, single wall, heating oil tanks. The tanks previously provided oil to Superior Boiler #1 and currently provide overflow oil to the diesel emergency generator. Superior boiler #1 is sourced

with gas and a new tank is planned in the vicinity of the dog kennel to supply diesel for the emergency generator. The tanks are oversized and should be removed or abandoned in place prior to developing any leaks.

8. **Ceiling Tile Replacement**

The ceiling tile in most of City Hall are from the original construction, predominantly not in good condition and are in need of replacement. In addition, the lighting fixtures are original and in need of upgrade and replacement.

9. **City Hall Chiller Replacement**

In 2020, one of the original chillers was replaced at City Hall with a new Smart Chiller that is high efficiency and uses 50% less electricity along with having redundant motors for increased reliability. This item is to replace the other chiller (backup) at City Hall that is almost 25 years old. We will again use the high efficiency chiller.

10. **Mechanical Room Water Pump Replacements**

The main mechanical room contains pumps which serve the hot water, chilled water and dual temperature systems throughout the City Hall and Library complex. Condenser water pumps are also located there. Most of the original pumps have already been replaced, although six have not. Four of the original pumps serve as spares, but the perimeter pumps are older. Provide new piping trim, starters, disconnect switches and controls. Reuse the existing concrete pads, piping rough-ins to mains and electrical feeders.

E. **GROUNDS**

1. **Grounds Capital Improvements**

Funding in this item is to cover smaller capital project needs already identified such as improvements and renovations to athletic fields (grading, aerating, topsoil, and backstops), tennis court resurfacing, landscaping, tree removal/replacements, parking lot improvements, sidewalk replacements, pathway improvements, parks buildings, pool improvements, and equipment. Funds may also be used to cover our construction bids that come in high on other projects.

2. **Heavy Duty Medium Dump Truck (Single Axle)**

This unit will be equipped with a plow package and salt spreader for snow operations, pulling leaf loaders, and hauling materials. This unit was ordered in 2022 but has not been received due to supply chain issues which delayed the delivery till the end of 2025. Therefore, we had to switch vendor which led to cost savings of approximately \$30,000. Truck was anticipated to be delivered in 2024. Only chassis were delivered, but still waiting for the body. Truck is anticipated to be completed and delivered by early 2025.

3. **Friendship Park Improvements**

This project is to renovate and upgrade Friendship Park by among other work removing excess asphalt paving, eliminating vehicle parking areas in the park, adding a splash park, shade area, and improving the landscaping. The current preliminary estimate for the improvements is approximately \$1,500,000 with \$200,000 currently funded and the remaining funds are being pursued via grants. Design started in 2023 and construction is anticipated to be completed at the end of 2025.

4. **Rose Garden Improvements**

Phase I improvements were completed in 2021, and various other upgrades to the Rose Garden including light replacement, additional walkways, benches, picnic tables, etc. were scoped/designed in 2024 and construction will be completed in 2025.

5. **Plow Pick-up Truck**

This is for one regular Plow Pick-up Truck to replace Unit #91 a 2013 GMC Sierra in 2025 which will not pass inspection, and a Quad Cab Plow pick-up truck to replace Unit #102 in 2028, which are used for plowing and daily grounds operations.

F. **RECREATION**

1. **General Pool Improvements**

Improvements/renovations to pools, bathhouses, filter systems and related buildings based on recommendations of the Park and Pool Study of 2017 and arising needs.

2. **Ice Rink**

Improvements/purchases of equipment as needed for operations and capital upgrades. Future plans also include purchase of a new Zamboni and renovation of restrooms.

3. **Ice Rink Sanitary Sewer Installation**

The Ice Rink on Illick's Mill Road is currently connected to an old septic system. This project is to run a new sanitary sewer line to Illick's Mill Road to service the Ice Rink. The old septic system will be abandoned.

4. **Tennis/Pickleball Courts at Sand Island.**

There are currently 8 Har Tru tennis courts at the Sand Island Recreational Complex. The season preparation and daily maintenance of the courts is labor intensive and requires an attendant to be on site at all times of operation. Attendance has been low and the 8 courts have rarely been utilized at capacity, whereas the requests for Pickleball courts have increased over the past few years due to the popularity of the sport worldwide. This project would transform the existing court surfaces to a hard surface, similar to all other courts in the city which require much less maintenance. In addition, the new use will include both tennis and Pickleball courts to provide versatility and meet current demands. Unlike the current situation, these courts would not need an attendant. We will continue to operate the courts as is in the meantime until it become unviable and/or funding becomes available.

5. **2025 Parks and Recreation Master Plan.**

The Parks and Recreation Master Plan will guide strategic planning of all recreational opportunities in the City including equitable and accessible options for all residents of all abilities, additional programming needs, possible future funding sources, prioritized maintenance and improvements for an accessible and connected Neighborhood Park System, and a full review of staffing needs.

G. **OTHER PROJECTS**

1. **Bridge Repairs**

The project is for maintenance and repair of ten (10) bridges the City is responsible for maintaining. Funding has been carried over to cover some larger projects. The City receives regular inspection reports through the National Bridge Inspection System (NBIS). These reports detail needed repairs including concrete repair, deck overlay, deck and bearing rehabilitation and painting. The Public Works Department annually

completes repairs that are within our expertise utilizing in-house forces. Much of the more complex work requires specialized bridge contractors. In addition, the NBIS inspections sometimes result in “Priority 1” repairs which must be addressed within a few months. Failure to make these repairs may result in further deterioration and greater future costs, as well as possible closures in extreme instances. Completed priority zero maintenance on Main St ramp and replaced the wooden deck on the bridge over Lehigh canal.

2. **Main St Ramp Improvement**

This project is to rehabilitate the Main St. Ramp, a City owned structure, connecting Route 378 to Main St. This project will be done in conjunction with the Hill to Hill Bridge rehabilitation project being done by the State, with construction anticipated to start in 2025. The project includes rehabilitation of the bridge parapets, major improvements to the superstructure and substructure of the bridge, and other ancillary work. Construction improvements on the ramp is anticipated to start towards the end of 2025/early 2026. The City is pursuing State/Federal (TASA, TIP, etc.) funding for this project.

3. **Spring St Ramp Improvement**

This project is to rehabilitate the Spring St. Ramp, a City owned structure, connecting(sidewalks) Route 378 to 2nd Avenue. This project will be done in conjunction with the Hill to Hill Bridge rehabilitation project being done by the State, with construction anticipated to start in 2025. The project includes rehabilitation of the bridge parapets, major improvements to the superstructure and substructure of the bridge, and other ancillary work. Construction improvements on the ramp is anticipated to start towards the end of 2025/early 2026. The City will be pursuing State/Federal (TASA, TIP, etc.) funding for this project.

4. **Route 378 Lighting Replacement (Phase I & II)**

The scope of this project has been significantly reduced based on a design to only light the on and off ramps per PennDOT standards. Tests have been conducted starting in late 2015 by turning off the lights that are not located at the ramps. The results were found to be acceptable. Further evaluation and design will be conducted to finalize the plan to remove the unnecessary poles, replace the ramp poles and the underground electrical in a phased approach at a reduced cost to both the city and the state. There are currently 218 light poles along Route 378. These light poles and electrical system conduits were installed in the early 1960s and have outlasted their expected lifespan. This replacement will be done in two phases. Phase I is to replace these light poles and break-a-way bases on the ramps and remove unnecessary light poles on the main lines. 107 light poles are anticipated to remain in service upon completion. Some of the pole structures are rusted and the metal has deteriorated at the bases from years of weather and salt causing them to become structurally unsound. Phase II is to replace all of the failing underground electrical system in Route 378 from the Hill to Hill Bridge to Route 22 interchange including all of the ramps and overpasses. The City owns the light poles and equally shares the maintenance and replacement costs with the State. The City has begun removing some of the lights that are not needed and we are billing Penn DOT for 50% of the costs. PennDOT allocated funding for the lighting upgrades specifically at the on and off ramps per their standards and the project is currently under design with construction anticipated in 2025.

5. **Flood Control System**

The City inherited the responsibility for maintaining the Flood Control dike, buildings, the electrical system, pumps and motors at the Flood Control Station on the South Side

on the Lehigh River from Bethlehem Steel. This account is to provide for capital expenditures for maintenance of this system. As a result of mounting needs (replacement of transformers and possibly pumps) and historical use of the pump house component of the station, the City re-evaluated the need for this component and recommended de-commissioning to the Corp of Engineers. In 2009 the Corp of Engineers and FEMA agreed that the pump component is not providing additional flood protection. Nevertheless, a re-delineation of the 100-year floodplain since abandoning the pumps is a change to the Flood Control System. The re-delineation results in minor additional shallow flooding areas, all within the former Bethlehem Steel plant, due primarily to storm sewer system capacity limitation, which exists regardless of the status of the pump stations. Although we are confident the pumping component of the Flood Control Station is no longer needed, this line item budgets for upgraded design and replacement in the event the City desires to restore the pump component of the system and restore the system to acceptable status under USACE regulations. Funds may be used for repairs to the remaining system and, in the event the pumps are permanently abandoned, funds may be used to abandon parts of the system.

6. **Monocacy Way Trail Phase II (Final)**

This project is to upgrade and extend the Monocacy Way trail from Schoenersville Road south to the D& L Trail at Sand Island. The project will include improvement of the trail from Schoenersville Rd. to Union Blvd., grade crossing enhancements at Schoenersville Road, at the intersection of Old York Road and Union Boulevard, at Spring Street and also at West Lehigh Street. The project will include trail signage as necessary. The City secured a grant from DCNR in the amount of \$441,000 which requires a 50% cost share. Design started in the 3rd quarter of 2024, and construction work is anticipated to start in Spring 2025.

7. **W 4th Street Improvement (Bethlehem Business District Sidewalk Replacement)**

Reconstruction of sidewalks in the South Side Arts District between New Street and Brodhead Avenue.

8. **South Bethlehem Greenway (Phase VII: Saucon Rail Trail Connection)**

This project includes the acquisition of the remaining Norfolk Southern rail line necessary to close the trail gap between the existing South Bethlehem Greenway and the existing Saucon Rail Trail. This is an approximate .9-mile trail gap that will allow for the connection of these two regional trails and connection from Bethlehem's south side downtown to Quakertown and beyond. This trail gap is listed as one of the top 10 trail gaps in the Lehigh Valley. Land acquisition cost as reported by planning are anticipated to be \$4.8 million and would be acquired by the end of 2024 with Federal, state, and county grants. Design and construction are estimated at approximately \$1 million and anticipated to occur in 2026 and 2027.

9. **Sun Inn Courtyard Renovations**

Several years ago, the City went through a public engagement process to rehabilitate the Sun Inn Courtyard. As a result of insufficient funds, the project was never pursued to construction. The Sun Inn Courtyard, owned by the Sun Inn Preservation Association, the City of Bethlehem and the Bethlehem Redevelopment Authority, continues to deteriorate. With the possibility of World Heritage Designation and the upcoming America 250 Celebrations, the time is right to upgrade the park. The City applied for funding through the Pennsylvania 250 program.

III. COMMUNITY & ECONOMIC DEVELOPMENT

1. Non-congregate family shelter

Capital improvements to South Bethlehem property to create a non-congregate family shelter facility that will be operated by a third-party service provider. An existing building will be renovated to achieve code compliance, update building systems, modify interior layout to accommodate 11 family shelter units, improve exterior, ensure ADA compliance, and provide new finishes.