City of Evanston™

Evanston Service Center

Master Plan

GREELEY AND HANSEN
A TYLin Company

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EXECUTIVE SUMMARY

The Master Plan for the Evanston Service Center is the culmination of a condition assessment and analysis of the facility's buildings, site, and operations; and serves as a framework to address existing deficiencies, evolving service needs, ADA requirements, and advancement of the City's Climate Action and Resilience Plan (CARP) goals. The recommended improvements are presented as a series of prioritized initiatives strategically implemented over twenty years.

MASTER PLANNING PROCESS

The master planning process initiated with an analysis and evaluation of the facility's existing operations, buildings, and site. Areas of focus were operational and physical conditions, operational storage needs, and ADA compliance. An analysis was performed to evaluate the long-term value of improvements. Identified deficiencies, evolving service and modernization needs, and strategies for improvement were documented in the Building, Site, and Operational Evaluation/Analysis Report included as Appendix A and summarized in Section II.

The next phase of the analysis included an evaluation of the City's CARP and net-zero emissions study to create strategies to implement the goals of this program at the Service Center complex. The evaluation considered the Service Center buildings and site as well as the anticipated migration of the City's fleet operations to electric vehicles. A life cycle analysis was performed to evaluate the strategies identified. The CARP integration strategies were documented in the Assessment of CARP Goals and Strategy Report included as Appendix B and summarized in Section III.

During the process, an additional focus and schematic design was completed for the following improvement strategies: storage optimization at the Service Center, a new storage facility at James Park in Evanston, and the reconstruction of the Fuel Island. The storage optimization strategies for the Service Center have been included in Section IV. The strategies are also integrated into several of the initiatives in this Plan. The analysis of a new storage building located in James Park is included in Section V. After reviewing the new storage facility option at James Park, the City made the decision not to pursue this alternative and instead maintain storage at the existing Recycling Center. A detailed assessment and schematics of the reconstruction of the fuel island in the northwest courtyard was documented in the Consolidated Fuel Island - Technical Memo included as Appendix C. The Fuel Island improvements are also included in a Fuel Island Initiative in this Plan.

The analysis and identified strategies set the groundwork for a collaborative decision-making process to select initiatives for inclusion in the Master Plan. Metrics for decision making included stakeholder feedback and priority, ADA and life safety requirements, physical and operational deficiencies, storage optimization needs, and advancement of CARP goals.

RECOMMENDED INITIATIVES

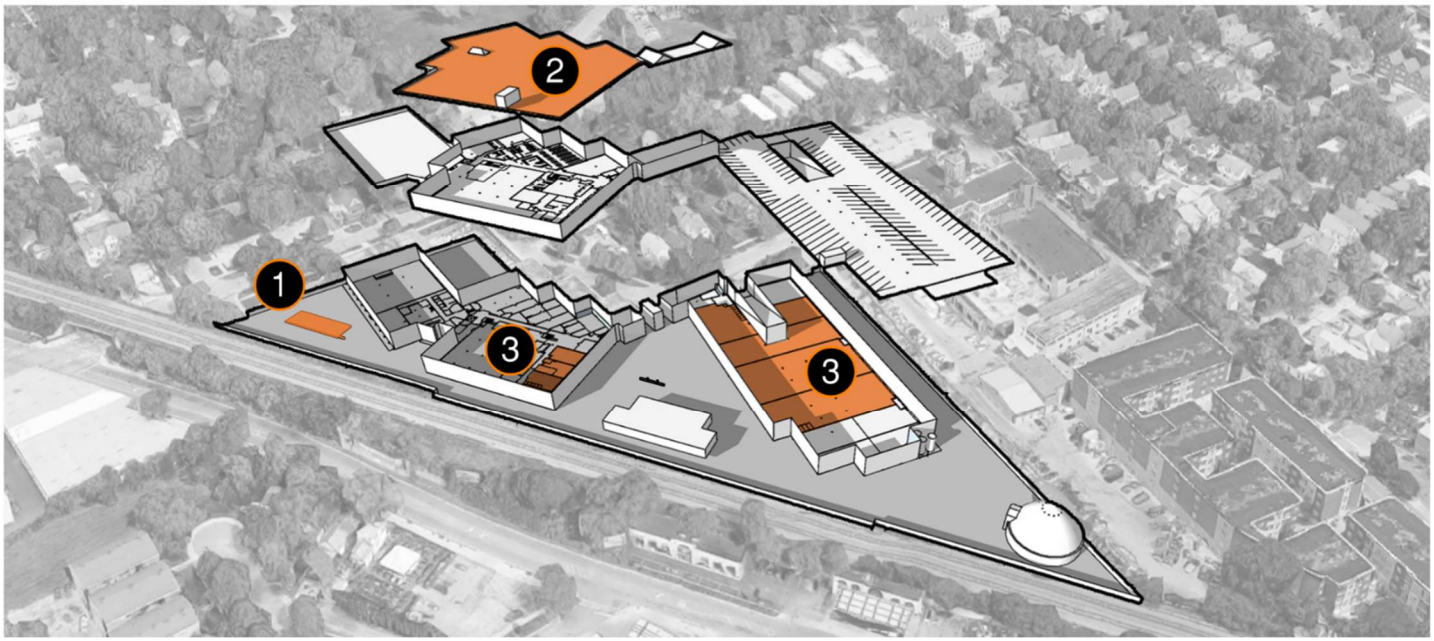
The master plan identifies and prioritizes required improvements for the facility to address both current and anticipated needs for the next 10 years. The Building, Site, and Operational Evaluation/Analysis Report; the Assessment of CARP Goals and Strategy Report; and continual conversations with the City, identified over a hundred separate improvements that were considered for implementation. Identified improvements, that were collectively determined to be appropriate solutions, were packaged into nineteen separate initiatives. Each initiative includes a description of the proposed scope of work, identified connections and dependency to the scope of other initiatives, an estimate of the planning cost, a timetable for implementation, and the reasons the work is recommended.

IMPLEMENTATION

The recommended initiatives were ranked based on stakeholder feedback and priority, ADA and life safety compliance, physical and operational deficiencies, storage optimization needs, and capacity to advance CARP goals. The ranking informed the proposed order and schedule of implementation over the next ten years. The proposed schedule of implementation was segmented into five two-year periods to space out capital projects, account for interdependencies in related work, and minimize the disruption to operations. The following diagrams are a summary of the initiatives and a depiction of the scope in each two-year time frame.

PERIOD 1: 0-2 YEARS

COST: $4,037,000



1 Consolidated Fuel Island Initiative — COST: $1,975,000

The Consolidated Fuel Island Initiative includes the demolition of the North Fuel Island and four existing 10,000-gallon below ground fuel tanks, and the construction of a new 50-foot-long fuel Island with two 15,000-gallon fuel tanks, four new dual hose dispensers, a tank gauging system, a fuel master system, and a 60'L x 30'W x 16'H canopy. In addition, this initiative includes the addition of a 30-kW generator, a 125-amp Automatic Transfer Switch, a 125-amp panelboard, recircuiting connections, conduits and feeders and the eventual removal of the existing South Fuel Island. Demolition of the South Fuel Island is not proposed in this this period.

2 Roof Repairs Initiative — COST: $1,937,000

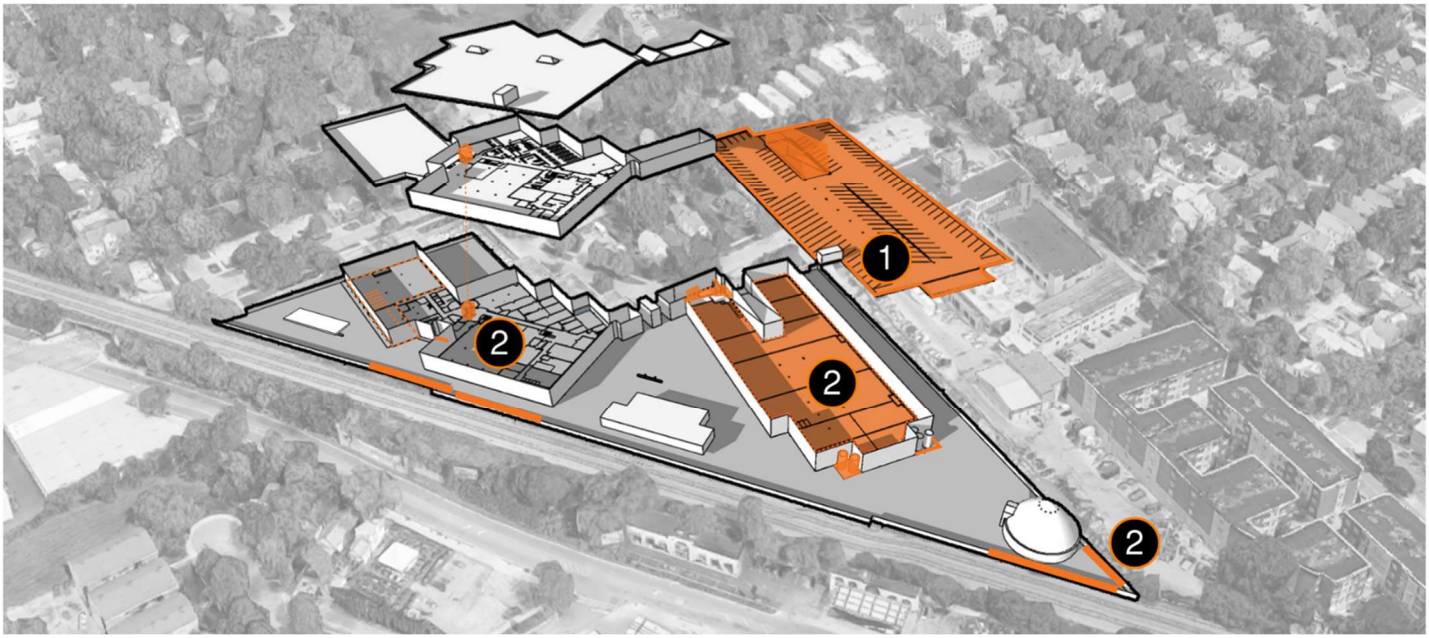
The Roof Repairs Initiative includes complete reroofing of the existing coal tar roofs on Building A, Building B, and Building C, as well as the Standing Seem Roof on Building C. Additionally, this Initiative includes replacing the roof drains on these roofs. This initiative also includes the coal tar roofing of Building D Stair Tower and storage bins. Reroofing Building F is described in this Initiative but is not part of the recommended scope. Repairs to roofs A, C, and D are not proposed in this this period.

3 Fleet Electrification Charging Initiative — COST: $125,000

The Fleet Electrification Charging Initiative includes a phased approach to installing electric vehicle charging stations in the Building A mechanics garage and vehicle repair shop, the Building B ready rooms, in the Building D vehicle bays, on the Building D rooftop parking area, and in the Northeast Yard. Upgrades to the Service Center electrical infrastructure are required to implement this Initiative and are covered in the Facility Electrification (Electrical) Initiative. Phase 2 and the chargers for future staff parking are not proposed in this this period. Only Phase 1 is proposed in this period.

PERIOD 2: 3-4 YEARS

COST: $3,312,000



1 Building D Initiative — COST: $1,112,000

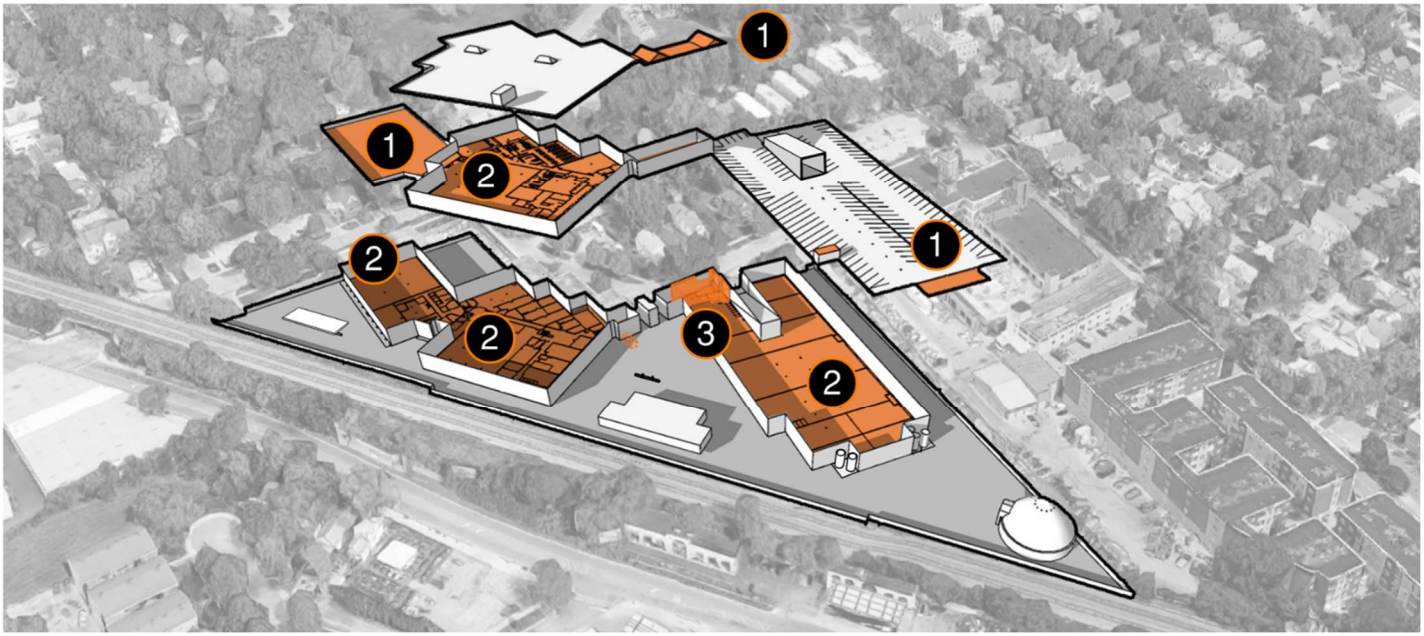
The Building D Initiative includes near-term recommended repairs and improvements and future repairs and improvements. The near-term repairs include the structural repairs indicated in the WJE report, monitoring the movement of the walls, a secondary roof in the electrical and generator rooms, replacement of the ramp roll up doors, a new roof over the ramp, an improved drainage system at the ramp, under slab waste drain replacement, ADA compliance, doubling the salt brine capacity, and light pole replacement. The future recommended repairs and improvements include the replacement of 10% of the structural topping, replacement of the expansion joints, and implementing the repairs resulting from the structural monitoring. Future repairs and improvements are not proposed in this this period.

2 Facility Equipment Initiative — COST: $2,200,000

The Facility Equipment Initiative includes replacement of the Building B west loading dock leveler plate, replacement of five vehicle lifts, four new fume extraction arms in Building A, refurbishing the freight elevator, replacement of select sections of the 4" under-slab waste line in Building A, 44 sections of new plow racks with a plow rack enclosures, and a new fire alarm system.

PERIOD 3: 5-6 YEARS

COST: $3,489,000



1 Roof Repairs Initiative — COST: $1,324,000

The Roof Repairs Initiative includes complete reroofing of the existing coal tar roofs on Building A, Building B, and Building C, as well as the Standing Seem Roof on Building C. Additionally, this Initiative includes replacing the roof drains on these roofs. This initiative also includes the coal tar roofing of Building D Stair Tower and storage bins. Reroofing Building F is described in this Initiative but is not part of the recommended scope. Repairs to roof B are proposed in a previous period. Only repairs to roofs A, C, and D are proposed in this this period.

2 Facility Electrification (Electrical) Initiative — COST: $1,601,000

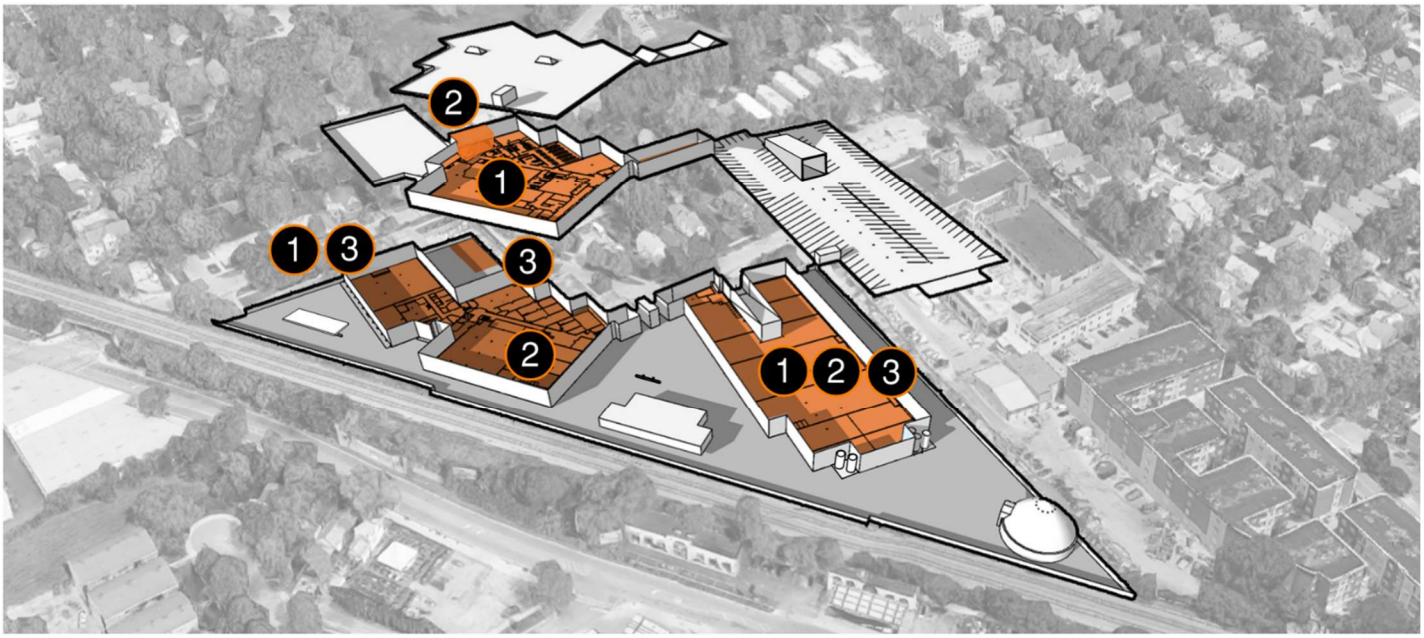
The Facility Electrification (Electrical) Initiative includes replacement of the existing 2000A switchgear in kind, a new 2000A Switchgear and distribution panel boards, replacement of twenty-five related panel boards, replacing MCCs with DDC BAS, and replacement of distribution panel boards and associated feeders.

3 New Permanent Generator Initiative — COST: $564,000

The New Permanent Generator Initiative includes providing a new permanent 750 kW Generator located in Building D.

PERIOD 4: 7-8 YEARS

COST: $4,061,000



1 Facility Electrification (HVAC) Initiative — COST: $3,138,000

The Facility Electrification (HVAC) Initiative includes replacing AHUs with twenty Electric Heat Pumps and fifty Resistive Heaters and providing new ductwork, diffusers, and associated AHU piping. In addition, this initiative includes replacing 482 SF of louvers.

2 Domestic Water Initiative — COST: $240,000

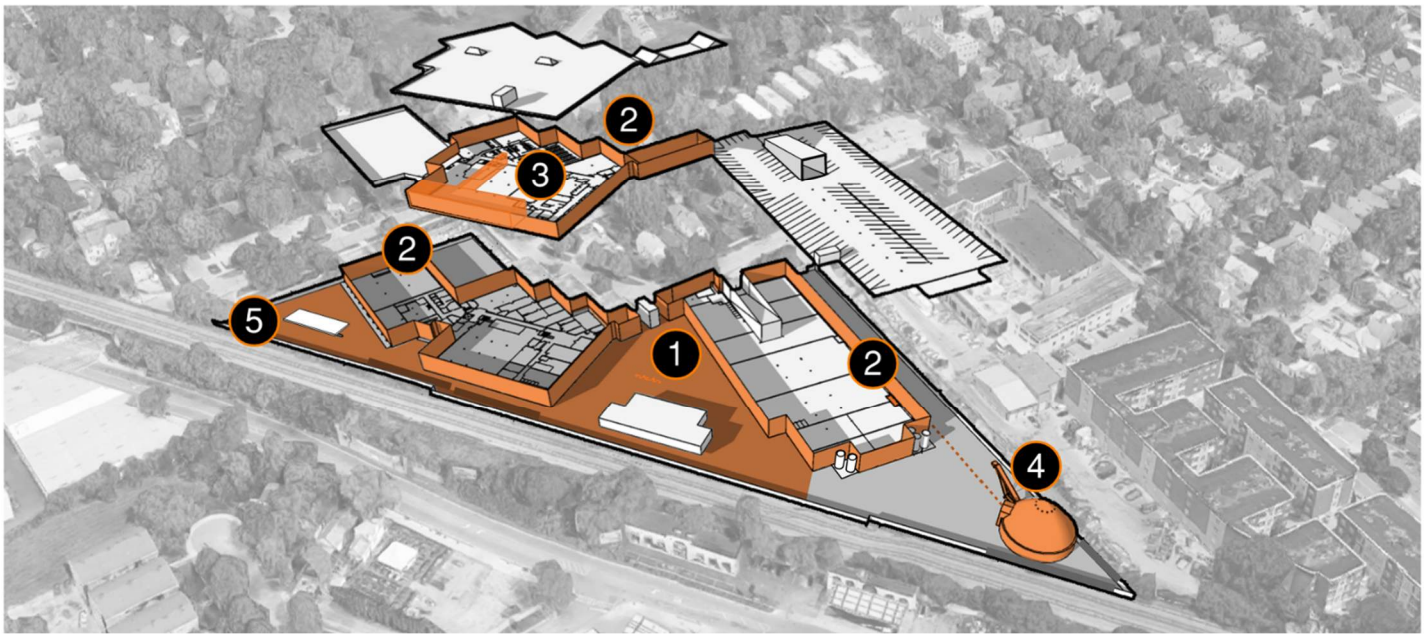
The Domestic Water Initiative includes replacement of a domestic hot water heater with electric, replacement of ten domestic hot water heaters around the facility with electric instant water heaters and providing insulation on uninsulated domestic water piping.

3 Fleet Electrification Charging Initiative — COST: $683,000

The Fleet Electrification Charging Initiative includes a phased approach to installing electric vehicle charging stations in the Building A mechanics garage and vehicle repair shop, the Building B ready rooms, in the Building D vehicle bays, on the Building D rooftop parking area, and in the Northeast Yard. Upgrades to the Service Center electrical infrastructure are required to implement this Initiative and are covered in the Facility Electrification (Electrical) Initiative. Phase 1 is proposed in a previous period. The chargers for future staff parking are proposed in a future period. Only Phase 2 is proposed in this this period.

PERIOD 5: 9-10 YEARS

COST: $3,247,000



1 Consolidated Fuel Island Initiative — COST: $259,000

The Consolidated Fuel Island Initiative includes the demolition of the North Fuel Island and four existing 10,000-gallon below ground fuel tanks, and the construction of a new 50-foot-long fuel Island with two 15,000-gallon fuel tanks, four new dual hose dispensers, a tank gauging system, a fuel master system, and a 60'L x 30'W x 16'H canopy. In addition, this initiative includes the addition of a 30-kW generator, a 125-amp Automatic Transfer Switch, a 125-amp panelboard, recircuiting connections, conduits and feeders and the eventual removal of the existing South Fuel Island. Consolidation of the fuel island is proposed in a previous period. Only demolition of the South Fuel Island is proposed in this this period.

2 Facility Envelope Improvements Initiative — COST: $1,951,000

The Domestic Water Initiative includes replacement of a domestic hot water heater with electric, replacement of ten domestic hot water heaters around the facility with electric instant water heaters and providing insulation on uninsulated domestic water piping.

3 New Office Space Initiative — COST: $494,000

The New Office Space Initiative includes 2,100 SF for seven new offices on the second floor of Building B in the current warehouse space and an additional 1,000 SF of corridors to provide proper egress to the new offices.

4 Salt Dome Upgrades Initiative — COST: $63,000

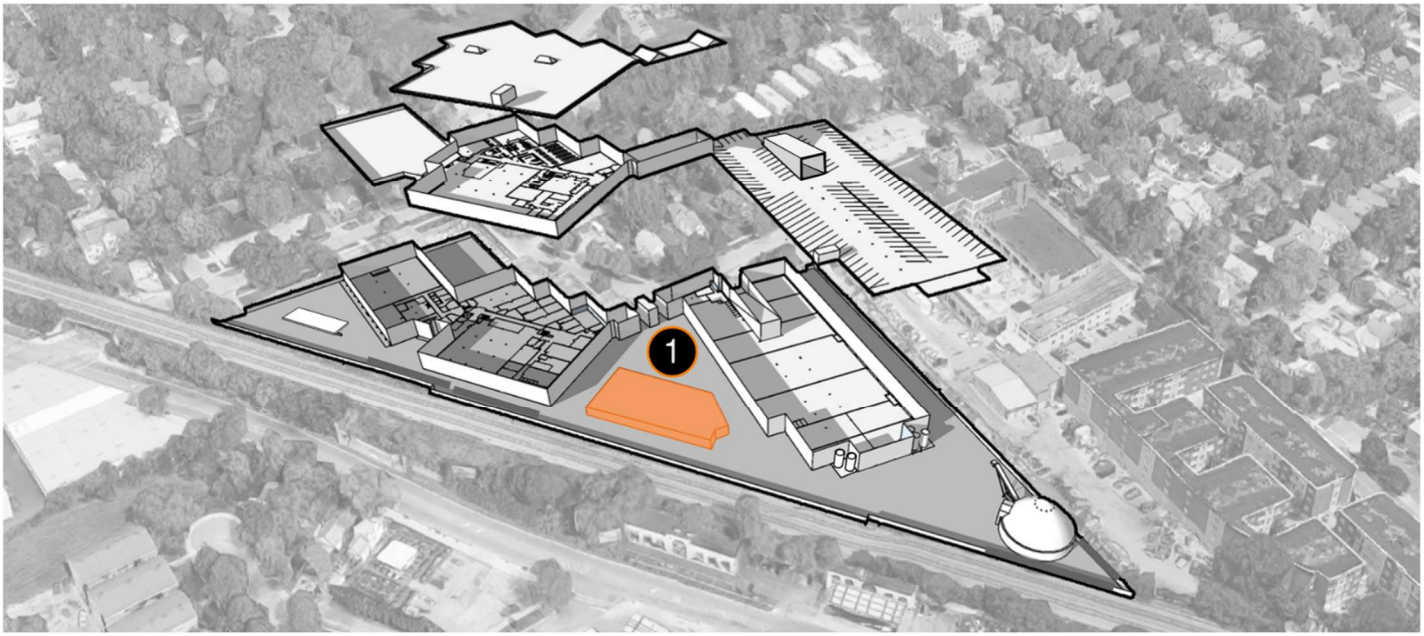
The Salt Dome Upgrades Initiative includes retrofitting the existing salt dome with a new high speed roll up door, providing a salt conveyor, and routing additional conduits.

5 Repaved Surfaces Initiative — COST: $480,000

The Repaved Surfaces Initiative includes repaving the Service Center yard with new asphalt. Areas identified as being in need of resurfacing include the Northwest Yard, the Northeast Yard, the Central Courtyard, the South Yard, the paving west of Building B connecting the Northwest Yard to the Central Courtyard, the pavement to the East of Building D, and the pavement at the entrances. Repaving surfaces in the Northeast Yard, South Yard, the area East of Building D, and the entrances are not proposed in this this period.

PERIOD 6: 11-12 YEARS

COST: $3,027,000



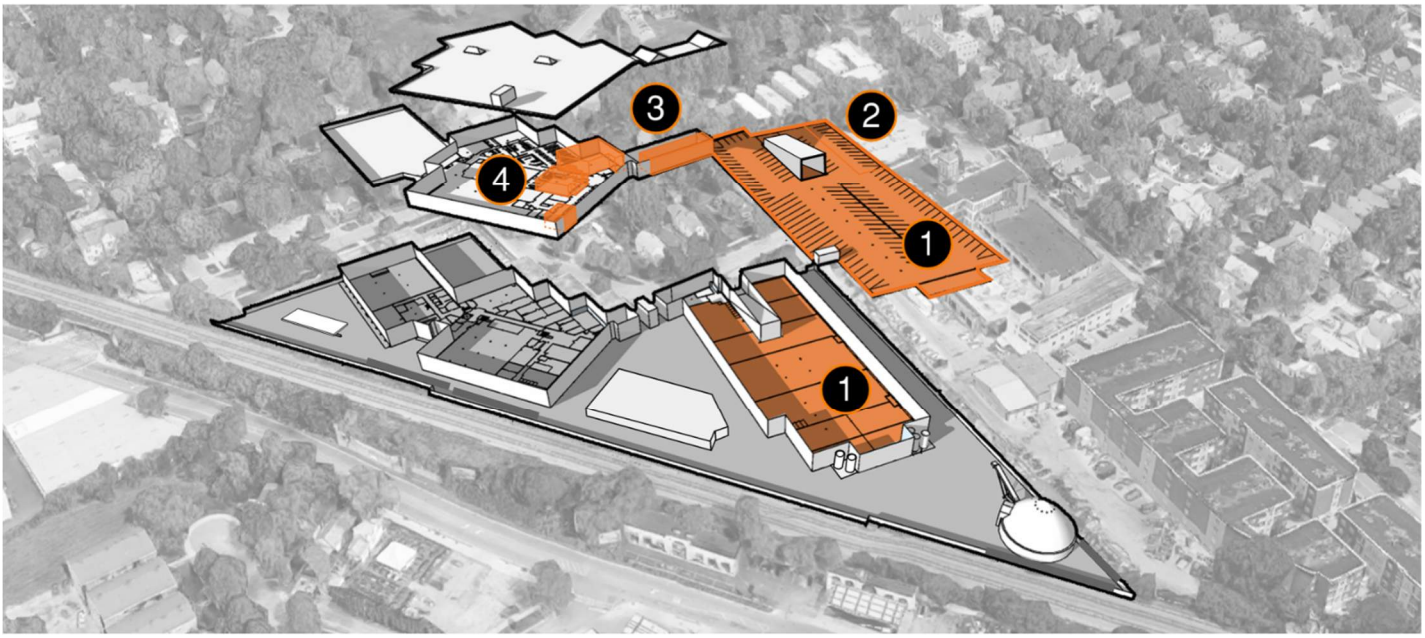
1 Building F Initiative

COST: $3,027,000

The Building F Initiative includes demolishing Building F and constructing a new 7,000 SF Building F. The new structure will better protect the materials being stored from the elements and will include a new drive-through vehicle wash. The new structure is proposed to include lighting and outlets in the storage bays, overhead coiling doors, a drive through vehicle wash, a rainwater harvesting system, and water capture and recycling system.

PERIOD 7: 13-14 YEARS

COST: $3,153,00



1 Building D Initiative — COST: $1,002,000

The Building D Initiative includes near-term recommended repairs and improvements and future repairs and improvements. The near-term repairs include the structural repairs indicated in the WJE report, monitoring the movement of the walls, a secondary roof in the electrical and generator rooms, replacement of the ramp roll up doors, a new roof over the ramp, an improved drainage system at the ramp, under slab waste drain replacement, ADA compliance, doubling the salt brine capacity, light pole replacement. The future recommended repairs and improvements include the replacement of 10% of the structural topping, replacement of the expansion joints, and implementing the repairs resulting from the structural monitoring. Near term repairs and improvements are proposed in a previous period. Only future repairs and improvements are proposed in this this period.

2 Fleet Electrification Charging Initiative — COST: $357,000

The Fleet Electrification Charging Initiative includes a phased approach to installing electric vehicle charging stations in the Building A mechanics garage and vehicle repair shop, the Building B ready rooms, in the Building D vehicle bays, on the Building D rooftop parking area, and in the Northeast Yard. Upgrades to the Service Center electrical infrastructure are required to implement this Initiative and are covered in the Facility Electrification (Electrical) Initiative. Phase 1 and Phase 2 are proposed in previous periods. Only the chargers for future staff parking are proposed in this this period.

3 Revised Parking Division Space Initiative — COST: $240,000

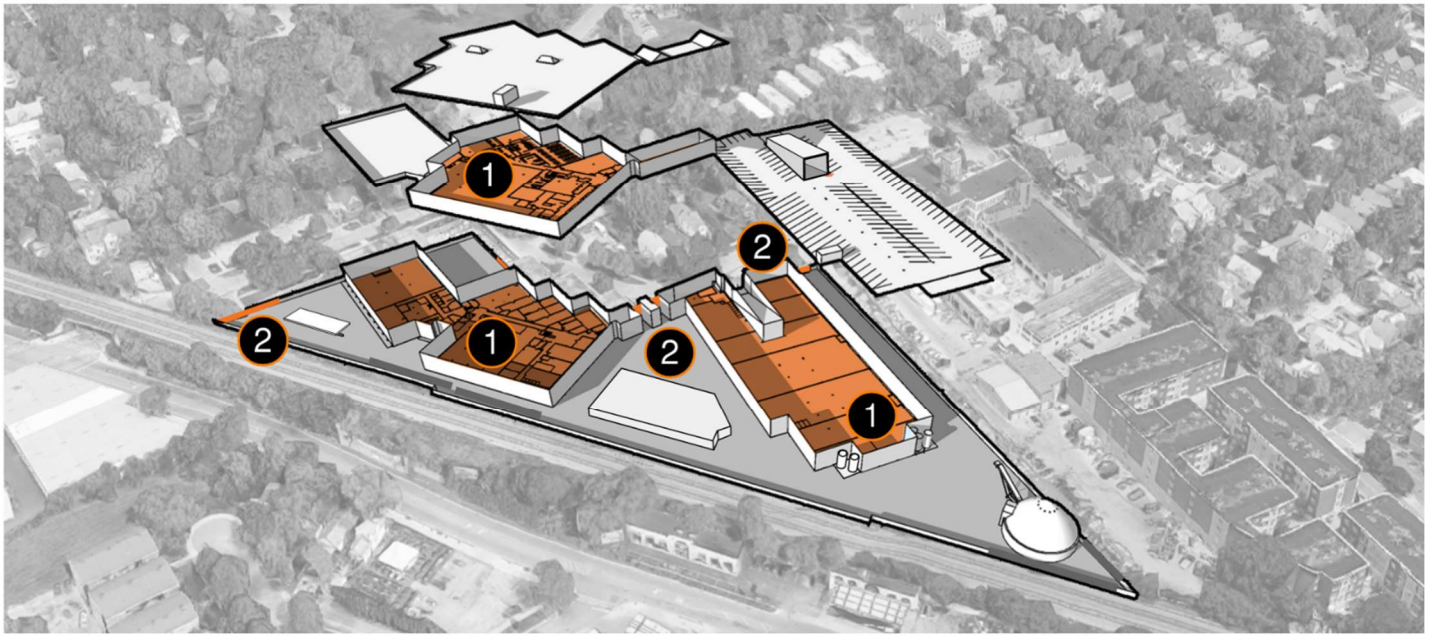
The Revised Parking Division Space Initiative includes renovation and reconfiguration of the Parking Division Space in Building C, eliminating the toilet rooms and kitchenettes. Additionally, the scope of this initiative includes new doors, new windows, replacement of lighting fixtures, and new finishes.

4 Update Finishes and Furnishings Initiative — COST: $1,554,000

The Update Finishes and Furnishings Initiative includes renovating a number of personal Spaces in Building B on the second floor, including the Break Room, the Meeting Room, and the Conference Room. Renovations include updated finishes, lighting, and furnishings. This initiative also includes interior masonry tuckpointing, a new passenger elevator, and approximately 105 items identified in the ADA Transition Plan assessment.

PERIOD 8: 15-16 YEARS

COST: $1,091,000



1 Lighting Efficiency Improvement Initiative — COST: $738,000

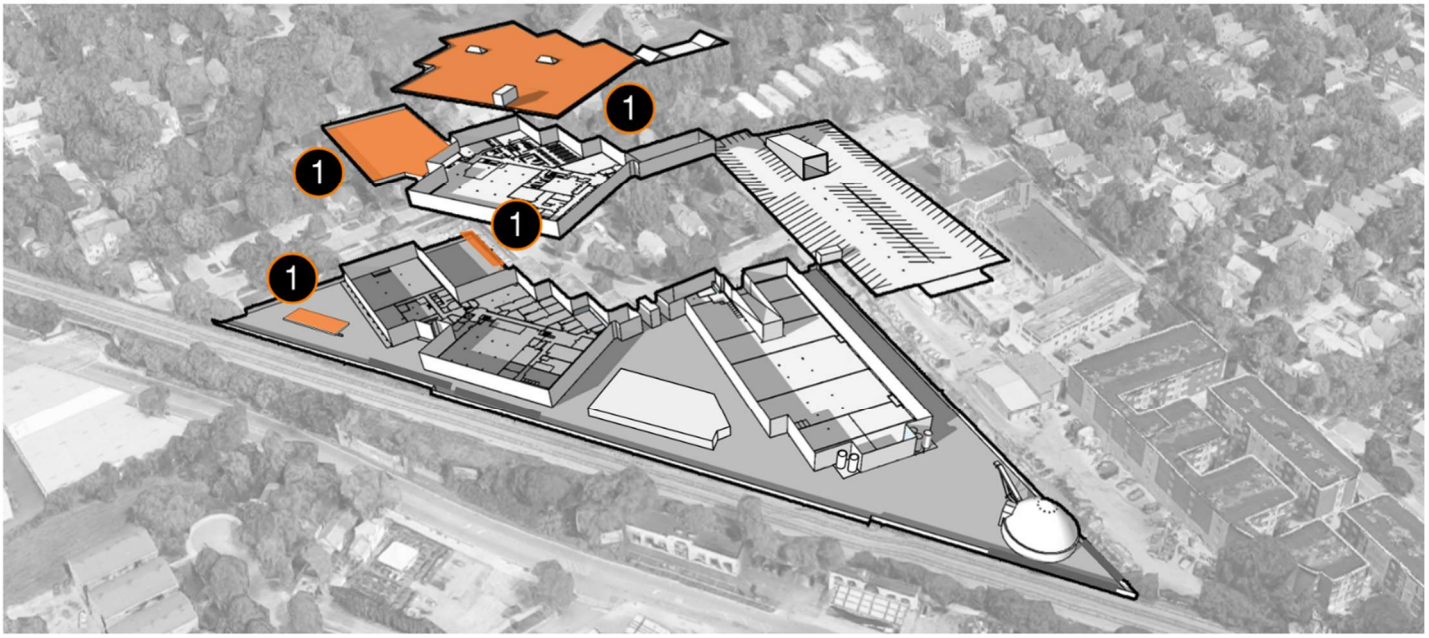
The Lighting Efficiency Improvement Initiative includes upgrading the outdated lighting fixtures to energy efficient LED models and a new upgraded lighting power distribution system and control system for the facility.

2 Site Security Initiative — COST: $353,000

The Site Security Initiative includes refurbishing the four ornamental gates at the vehicle entrance under Building C and the ornamental gate to the west of Building D. The two vehicle gates at the main vehicle entrance and the gate to the west of Building D will also be provided with automatic gate operators. In addition, the Northeast Yard and the Northwest Yard automatic chain link gates will be removed and provided with automatic ornamental gates.

PERIOD 9: 17-18 YEARS

COST: $1,451,000



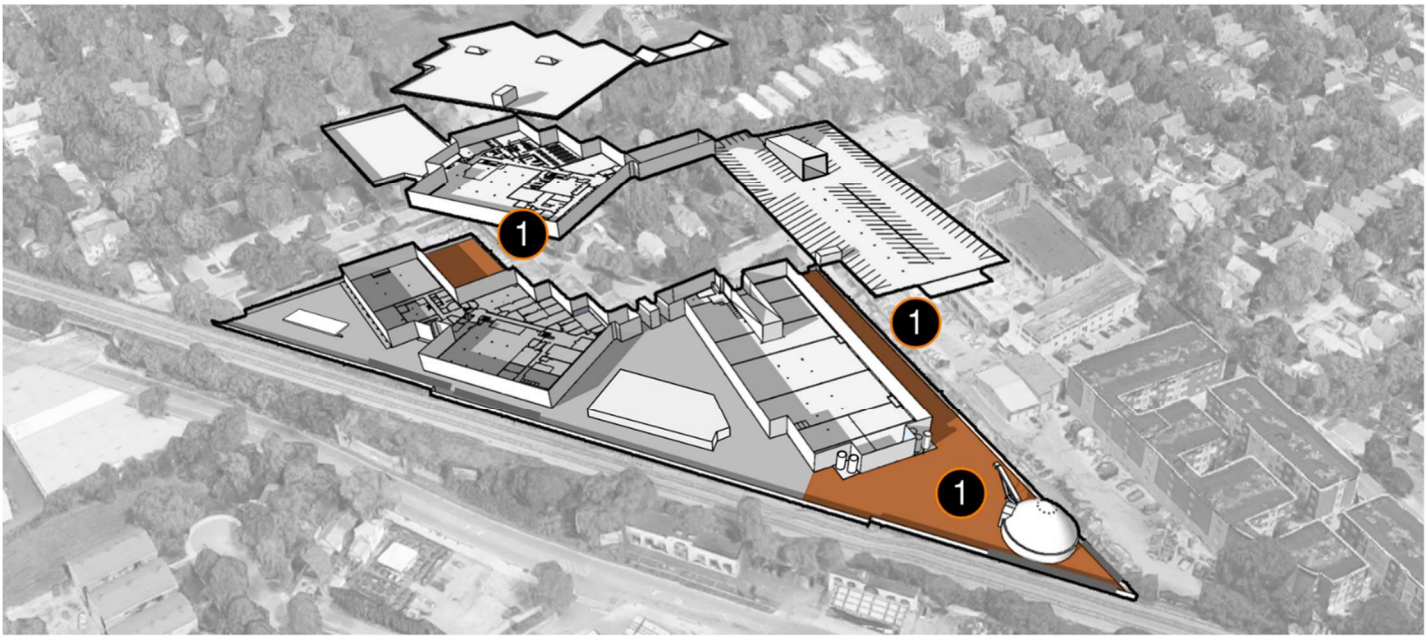
1 Solar Panel Initiative

COST: $1,451,000

The Solar Panel Initiative includes the installation of 9,914 SF solar panels on the roof of Building A, 11,378 SF of solar panels on the roof of Building B, 1,600 SF of solar panels mounted atop canopies in the Northeast Yard, and 1,800 SF of solar panels on the new fuel island canopy.

PERIOD 10: 19-20 YEARS

COST: $437,000



1 Repaved Surfaces Initiative

COST: $437,000

The Repaved Surfaces Initiative includes repaving the Service Center yard with new asphalt. Areas identified as being in need of resurfacing include the Northwest Yard, the Northeast Yard, the Central Courtyard, the South Yard, the paving west of Building B connecting the Northwest Yard to the Central Courtyard, the pavement to the East of Building D, and the pavement at the entrances. Repaving surfaces in the Northwest Yard, the area west of Building B, and the Central Courtyard are proposed in a previous period.