Agenda

1. Review discussion from kickoff meeting
2. Recap Project Goals/Work Completed to date
3. Presentation ~ Existing Conditions & Programming
   • Process, List of Buildings Studies, Summary of findings by building
4. Solicit Feedback
5. Demographic Update
6. Possible Next Steps
   • Communications Plan, Options Planning, Order of Magnitude Costs, Draft of Conditions Assessment, Schedule
Statement of the Project Goals

The overall objective of the Municipal Facilities Master Plan is to assess the current use and space needs of public facilities and establish a priority, schedule, and budget for replacement, consolidation, or improvement that will create a framework for the Town’s Capital Plan and debt service in accordance with the Debt Management Policy. The evaluations and conclusion to the study will create a comprehensive master plan for public buildings that will serve the Town’s needs for the coming ten (10) years.
WORK COMPLETED TO DATE

Town & Public Safety

- **Completed**: Conducted building & site walkthroughs ~ 2/23/2021 and held programming sessions ~ 3/2/2021
- **To do**: Complete DRAFT assessment report, possibly conduct additional program review with Park & Rec, Senior Center and Annex space

Schools

- **To do**: Revisit schools for site & exterior items, Complete DRAFT assessment report.
Our Process

Analysis of Existing Conditions & identification of Programmatic Needs

EXISTING CONDITIONS INVENTORY & ANALYSIS

Our Process

Program Discussions

The School

<table>
<thead>
<tr>
<th>Type</th>
<th>Elementary School</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enrollment (2022)</td>
<td>500</td>
</tr>
<tr>
<td>Staff (approx.)</td>
<td>50</td>
</tr>
<tr>
<td>Existing (Year projected)</td>
<td>2022</td>
</tr>
<tr>
<td>Net enrollment change</td>
<td>-5.2%</td>
</tr>
<tr>
<td>Location (in miles)</td>
<td>5 miles</td>
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</table>

The Facility

<table>
<thead>
<tr>
<th>Total Building Area (SF)</th>
<th>75,000</th>
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</thead>
<tbody>
<tr>
<td>Existing Area (SF)</td>
<td>65,000</td>
</tr>
<tr>
<td>New Area (SF)</td>
<td>10,000</td>
</tr>
<tr>
<td>Heating Systems</td>
<td>1 HVAC</td>
</tr>
<tr>
<td>Roof Types</td>
<td>Flat</td>
</tr>
<tr>
<td>Site Access</td>
<td>Internal</td>
</tr>
<tr>
<td>Learning Environment</td>
<td>Classroom</td>
</tr>
<tr>
<td>CIP Status</td>
<td>Under Construction</td>
</tr>
<tr>
<td>Fire Alarm</td>
<td>Yes</td>
</tr>
<tr>
<td>General Codes</td>
<td>ADA, ASHRAE 70, NFPA</td>
</tr>
<tr>
<td>ADA Compliance</td>
<td>Yes</td>
</tr>
</tbody>
</table>

PROGRAMMING

SUFFIELD HIGH SCHOOL

1. Administrative Spaces
   a. Reception
   b. Administrative Support
   c. Principal's Office
   d. Counselor's Office
   e. Guidance Counselor's Office
   f. Security Office
   g. Parent/Student Room
   h. Conference Room
   i. Music/Media Room
   j. Art/Guidance Room
   k. Library/Reading Room
   l. Cafeteria
   m. Book Area

2. Instructional Areas
   a. Number of Classes/Grade Levels

3. Instructional Support Areas
   a. Teacher Prep/Room
   b. Staffroom
   c. Staffroom/Office
   d. Administrative Office
   e. Small Group Room

4. Special Education Spaces
   a. Therapy/Resource Rooms
   b. Gifted/Talented Room
   c. Math Innovation Lab
   d. English Language Learner Program
   e. Social Emotional Learning
   f. Special Needs Office
   g. Learning Center

5. Media Center
   a. Reading Room/Circulation
   b. MultiMedia/Production Room
   c. Conference Room
   d. Media Specialist Office
   e. Art/Recording Studio
BUILDING LIST

Town & Public Safety

- FD Station #1 (HQ)
- FD Station #2
- FD Station #3
- FD Station #4
- Police Department
- Town Hall Annex
- Senior Center

Schools

- A. Ward Spaulding School
- McAlister Intermediate School
- Suffield Middle School
- Suffield High School
FD STATION #1
INITIAL FINDINGS
FD STATION #1 ~ EXISTING CONDITIONS

Address: 73 Mountain Road
Building Area/Site: 4,200 sf / 3.49 acres
Age/Construction: 1962(59)

1962 Original Construction
2020 Additional Paving Added
FD STATION #1 ~ EXISTING CONDITIONS

Site
1. Recent expansion to paved site area
2. Differential settlement and cracking in existing concrete sidewalks
3. Apparatus Bay apron is in good condition

Architectural Exterior
1. Masonry restoration required at chimney
2. Minor rot repair and repainting at wood trim work, railings, and louvers
3. Minor downspout repairs/replacement of downspout clips

<table>
<thead>
<tr>
<th>Address</th>
<th>73 Mountain Road</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building Area/Site</td>
<td>4,200 sf / 3.49 acres</td>
</tr>
<tr>
<td>Age/Construction</td>
<td>1962(61)</td>
</tr>
</tbody>
</table>
FD STATION #1 ~ EXISTING CONDITIONS

Architectural Interior
1. Vinyl asbestos tile present in the building
2. Wood fiber tile ceilings present throughout

Code ~ Accessibility/Life Safety
1. No accessible entrances
2. Non-accessible plumbing fixtures
3. Step at transition between apparatus bay and other program areas

Building Systems
1. All MEP Systems are old and past their useful life.
2. Needs full replacement of all systems

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</tr>
</thead>
<tbody>
<tr>
<td>Building Area/Site</td>
<td>4,200 sf / 3.49 acres</td>
</tr>
<tr>
<td>Age/Construction</td>
<td>1962(61)</td>
</tr>
</tbody>
</table>
1. No Public Lobby, Entry or restrooms
2. Insufficient Training Room, currently use Substation #2 for Training needs
3. Insufficient Administrative offices
4. Insufficient bunk and living quarters
5. Fitness equipment is currently in basement
6. Insufficient Apparatus Space and lacking physical training elements
7. Insufficient bay storage, decontamination, SCBA per NFPA standards
8. Lack of hot/cold transition zones
9. No segregated turnout gear storage

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<td>4,200 sf / 3.49 acres</td>
</tr>
<tr>
<td>Age/Construction</td>
<td>1962(61)</td>
</tr>
<tr>
<td>System</td>
<td>Equipment Life Expectancy</td>
</tr>
<tr>
<td>-------------------------</td>
<td>----------------------------</td>
</tr>
<tr>
<td>Fire Protection System</td>
<td>40 Years</td>
</tr>
<tr>
<td>Plumbing Water Heater</td>
<td>25 Years</td>
</tr>
<tr>
<td>Plumbing Piping &amp; Fixtures</td>
<td>40 Years</td>
</tr>
<tr>
<td>Mechanical Boiler Plant</td>
<td>30 Years</td>
</tr>
<tr>
<td>Mechanical Piping &amp; Equipment</td>
<td>40 Years</td>
</tr>
<tr>
<td>Mechanical Air Conditioning</td>
<td>25 Years</td>
</tr>
<tr>
<td>Mechanical Controls</td>
<td>20 Years</td>
</tr>
<tr>
<td>Electrical Service &amp; Distribution</td>
<td>40 Years</td>
</tr>
<tr>
<td>Electrical Lighting</td>
<td>30 Years</td>
</tr>
<tr>
<td>Electrical Generator</td>
<td>40 Years</td>
</tr>
<tr>
<td>Fire Alarm</td>
<td>20 Years</td>
</tr>
</tbody>
</table>
FD STATION #2
INITIAL FINDINGS
FD STATION #2 ~ EXISTING CONDITIONS

Address: 9 Ratley Road
Building Area/Site: 3,906 sf / 6.89
Age/Construction: 2004 (17)

2004 Original Construction
FD STATION #2 ~ EXISTING CONDITIONS

Site

1. Newer station, well built, good apparatus space, in relatively good condition
2. Some ponding at transition between sidewalk and drive
3. Minor rusting at bottom of bollards

Architectural Exterior

1. Ice dams present at time of walkthrough, persistent issue for some time. May cause damage elsewhere if not properly addressed.
2. Exterior materials are in good condition.

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<tr>
<th>Address</th>
<th>9 Ratley Road</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building Area/Site</td>
<td>3,906 sf / 6.89</td>
</tr>
<tr>
<td>Age/Construction</td>
<td>2004 (17)</td>
</tr>
</tbody>
</table>
**FD STATION #2 ~ EXISTING CONDITIONS**

### Architectural Interior

1. Signs of moisture infiltration, possibly from ice dam
2. Ceiling tiles sagging throughout, possibly due to humidity issue
3. Currently used for department training

### Code ~ Accessibility/Life Safety

1. Kitchen sink is non-accessible
2. Step at transition between apparatus bay and other program areas

### Building Systems

1. Building is newer. All systems in good working condition.
2. Building is 15 years old and will need more maintenance in the next 5 – 10 years.

### Address

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<tr>
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</tr>
<tr>
<td>Age/Construction</td>
<td>2004 (17)</td>
</tr>
<tr>
<td>System</td>
<td>Equipment Life Expectancy</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>----------------------------</td>
</tr>
<tr>
<td>Fire Protection System</td>
<td>40 Years</td>
</tr>
<tr>
<td>Plumbing Water Heater</td>
<td>25 Years</td>
</tr>
<tr>
<td>Plumbing Piping &amp; Fixtures</td>
<td>40 Years</td>
</tr>
<tr>
<td>Mechanical Furnace</td>
<td>25 Years</td>
</tr>
<tr>
<td>Mechanical Equipment</td>
<td>25 Years</td>
</tr>
<tr>
<td>Mechanical Air Conditioning</td>
<td>25 Years</td>
</tr>
<tr>
<td>Mechanical Controls</td>
<td>20 Years</td>
</tr>
<tr>
<td>Electrical Service &amp; Distribution</td>
<td>40 Years</td>
</tr>
<tr>
<td>Electrical Lighting</td>
<td>30 Years</td>
</tr>
<tr>
<td>Electrical Generator</td>
<td>40 Years</td>
</tr>
<tr>
<td>Fire Alarm</td>
<td>20 Years</td>
</tr>
</tbody>
</table>
FD STATION #3
INITIAL FINDINGS
FD STATION #3 ~ EXISTING CONDITIONS

1985 Original Construction

<table>
<thead>
<tr>
<th>Address</th>
<th>3 Copperhill Road</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building Area/Site</td>
<td>3,256 sf / 1.08 acres</td>
</tr>
<tr>
<td>Age/Construction</td>
<td>1985 (36)</td>
</tr>
</tbody>
</table>
FD STATION #3 ~ EXISTING CONDITIONS

Site
1. Poor site drainage causing hazardous conditions with ice, grading revisions
2. Minor cracking at apparatus bay apron
3. Anecdotal reference to storm water infiltrating tight tank

Architectural Exterior
1. Older building but in relatively good condition for its age
2. Some signs of ice damming present
3. Minor staining on brick from water shed
4. Recommend preventative maintenance to extend useful life (caulking, sealants, etc.)

Address
3 Copperhill Road

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</tr>
</thead>
<tbody>
<tr>
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<td>3,256 sf / 1.08 acres</td>
</tr>
<tr>
<td>Age/Construction</td>
<td>1985 (36)</td>
</tr>
</tbody>
</table>
Architectural Interior

1. Suspected mold on apparatus bay ceiling, possible condensation buildup

2. Possible accumulation of exhaust from vehicles settling on radiant heater resulting in wall staining, lack of hot/cold transition zone

Code ~ Accessibility/Life Safety

1. Step at transition between apparatus bay and other program areas

2. Lack of pipe insulation below lavatory

3. Non-compliant grab bar at toilet

4. Non-accessible shower

5. Non-accessible sink at kitchenette

<table>
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<tr>
<td>Age/Construction</td>
<td>1985 (36)</td>
</tr>
</tbody>
</table>
FD STATION #3 ~ EXISTING CONDITIONS

Structural

1. Minor cracking on interior side of exterior CMU walls

Building Systems

1. MEP systems are in acceptable working condition.
2. Nearing the end of their useful life.
3. Will need replacement in about 5 – 10 years.

<table>
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<tr>
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<th>3 Copperhill Road</th>
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</thead>
<tbody>
<tr>
<td>Building Area/Site</td>
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</tr>
<tr>
<td>Age/Construction</td>
<td>1985 (36)</td>
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</table>
### FIRE STATION #3 ~ BENCHMARKING

<table>
<thead>
<tr>
<th>System</th>
<th>Equipment Life Expectancy</th>
<th>Equipment Age</th>
<th>Usefull Life Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire Protection System</td>
<td>40 Years</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Plumbing Water Heater</td>
<td>25 Years</td>
<td>2 Years</td>
<td>8%</td>
</tr>
<tr>
<td>Plumbing Piping &amp; Fixtures</td>
<td>40 Years</td>
<td>35 Years</td>
<td>87%</td>
</tr>
<tr>
<td>Mechanical Boiler Plant</td>
<td>30 Years</td>
<td>35 Years</td>
<td>116%</td>
</tr>
<tr>
<td>Mechanical Piping &amp; Equipment</td>
<td>40 Years</td>
<td>35 Years</td>
<td>85%</td>
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<tr>
<td>Mechanical Air Conditioning</td>
<td>25 Years</td>
<td>35 Years</td>
<td>140%</td>
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<tr>
<td>Mechanical Controls</td>
<td>20 Years</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Electrical Service &amp; Distribution</td>
<td>40 Years</td>
<td>35 Years</td>
<td>87%</td>
</tr>
<tr>
<td>Electrical Lighting</td>
<td>30 Years</td>
<td>35 Years</td>
<td>116%</td>
</tr>
<tr>
<td>Electrical Generator</td>
<td>40 Years</td>
<td>15 Years</td>
<td>38%</td>
</tr>
<tr>
<td>Fire Alarm</td>
<td>20 Years</td>
<td>35 Years</td>
<td>175%</td>
</tr>
</tbody>
</table>

Fire Station #3
Code Minimum Fire Station = 63.5 EUI

EUI 56.9 kBtu/ft²/yr

0 63.5 56.9
FD STATION #4
INITIAL FINDINGS
**FD STATION #4 ~ EXISTING CONDITIONS**

**Address**
776 Thompsonville Road

**Building Area/Site**
2,702 sf / 3.46 acres

**Age/Construction**
1975 (46)

1975 Original Construction
FD STATION #4 ~ EXISTING CONDITIONS

Site
1. Minor cracking in asphalt
2. Lack of tie-in or splash block at downspout causing soil erosion

Architectural Exterior
1. In good condition relative to its age.
2. Minor cracking at foundation/sidewalk
3. Improper fit of window air conditioning unit and staining of adjacent brick wall.

Address
776 Thompsonville Road

<table>
<thead>
<tr>
<th>Building Area/Site</th>
<th>2,702 sf / 3.46 acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age/Construction</td>
<td>1975 (46)</td>
</tr>
</tbody>
</table>
FD STATION #4 ~ EXISTING CONDITIONS

Architectural Interior
1. Finishes in fair condition considering age of building
2. Angle beginning to rust at apparatus bay doors

Code ~ Accessibility/Life Safety
1. Non-accessible toilet facilities
2. Non-accessible kitchenette

Building Systems
1. MEP systems are at the end of their useful life.
2. Should think about replacement in near future 2-3 Years.

<table>
<thead>
<tr>
<th>Address</th>
<th>776 Thompsonville Road</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building Area/Site</td>
<td>2,702 sf / 3.46 acres</td>
</tr>
<tr>
<td>Age/Construction</td>
<td>1975 (46)</td>
</tr>
</tbody>
</table>
### Fire Station #4 - Benchmarking

<table>
<thead>
<tr>
<th>System</th>
<th>Equipment Life Expectancy</th>
<th>Equipment Age</th>
<th>Useful Life Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire Protection System</td>
<td>40 Years</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Plumbing Water Heater</td>
<td>25 Years</td>
<td>5 Years</td>
<td>20%</td>
</tr>
<tr>
<td>Plumbing Piping &amp; Fixtures</td>
<td>40 Years</td>
<td>45 Years</td>
<td>113%</td>
</tr>
<tr>
<td>Mechanical Boiler Plant</td>
<td>30 Years</td>
<td>25 Years</td>
<td>83%</td>
</tr>
<tr>
<td>Mechanical Piping &amp; Equipment</td>
<td>40 Years</td>
<td>45 Years</td>
<td>113%</td>
</tr>
<tr>
<td>Mechanical Air Conditioning</td>
<td>25 Years</td>
<td>45 Years</td>
<td>180%</td>
</tr>
<tr>
<td>Mechanical Controls</td>
<td>20 Years</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Electrical Service &amp; Distribution</td>
<td>40 Years</td>
<td>45 Years</td>
<td>113%</td>
</tr>
<tr>
<td>Electrical Lighting</td>
<td>30 Years</td>
<td>45 Years</td>
<td>150%</td>
</tr>
<tr>
<td>Electrical Generator</td>
<td>40 Years</td>
<td>45 Years</td>
<td>113%</td>
</tr>
<tr>
<td>Fire Alarm</td>
<td>20 Years</td>
<td>45 Years</td>
<td>225%</td>
</tr>
</tbody>
</table>
Common Observations throughout

1. Lack of storage space throughout all substations
2. Lack of hot/cold transition zone in all stations
3. All substations are suitable for on-call operations
4. Apparatus space is adequate for substations
POLICE DEPARTMENT

INITIAL FINDINGS
POLICE DEPARTMENT ~ EXISTING CONDITIONS

Address: 911 Mountain Road
Building Area/Site: 8,955 sf / 2.69 acres
Age/Construction: 1988 (33)

1988 Original Construction
POLICE DEPARTMENT ~ EXISTING CONDITIONS

Site
1. Minor cracking at sidewalk control joints
2. Rust present at downspout boots
3. New paving and fence
4. Recommend preventative maintenance program to extend useful life.

Architectural Exterior
1. In good condition relative to its age well maintained and built.
2. Minor snow build up and possible damming at roof valleys
3. Exterior materials have been well maintained
4. Snow melt on roof uneven due to super heating of garage spaces

<table>
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<tr>
<td>Building Area/Site</td>
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<tr>
<td>Age/Construction</td>
<td>1988 (33)</td>
</tr>
</tbody>
</table>
POLICE DEPARTMENT ~ EXISTING CONDITIONS

Architectural Interior
1. Drywall cracking present at window lintels
2. Discoloration of ceiling tiles due to age.
3. Relatively minor cracking at multiple interior CMU walls, non structural issue.

Code ~ Accessibility/Life Safety
1. Non-accessible sink at kitchenette
2. Non-accessible toilet facilities throughout
3. Step down into showers
4. Step down into Sally Port

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<tr>
<td>Age/Construction</td>
<td>1988 (33)</td>
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</tbody>
</table>
Building Systems

1. MEP Systems all old and need to be upgraded.
2. Garage spaces overheating, temperature control issue?
3. Almost all systems original to building. 33 years old
4. No automatic sprinkler system within building.
5. Only 1 boiler. No redundancy. If boiler was to go down for repair or maintenance. No heat.

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<tr>
<td>Age/Construction</td>
<td>1988 (33)</td>
</tr>
</tbody>
</table>
1. Undersized training space with access control vulnerabilities at training/lobby doors
2. Insufficient evidentiary storage
3. Dispatch restroom/break space to comply with NFPA 1221 Standards
4. Patrol offices repurposed to support Embedded Social Services
5. Patrol storage displaced by Communications Equipment
6. Insufficient Administrative Offices
7. Staff facilities; locker size and quantity, Arms Cleaning, Fitness facilities
8. Prisoner Processing workflow; no padded cell, no ambulance access in Sally Port
9. Vehicle Maintenance Bay desired

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</table>
## System

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<th>Equipment Age</th>
<th>Useful Life Percentage</th>
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<tbody>
<tr>
<td>Fire Protection System</td>
<td>40 Years</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Plumbing Water Heater</td>
<td>25 Years</td>
<td>15 Years</td>
<td>60%</td>
</tr>
<tr>
<td>Plumbing Piping &amp; Fixtures</td>
<td>40 Years</td>
<td>33 Years</td>
<td>83%</td>
</tr>
<tr>
<td>Mechanical Boiler Plant</td>
<td>30 Years</td>
<td>15 Years</td>
<td>50%</td>
</tr>
<tr>
<td>Mechanical Piping &amp; Equipment</td>
<td>40 Years</td>
<td>33 Years</td>
<td>83%</td>
</tr>
<tr>
<td>Mechanical Air Conditioning</td>
<td>25 Years</td>
<td>33 Years</td>
<td>132%</td>
</tr>
<tr>
<td>Mechanical Controls</td>
<td>20 Years</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Electrical Service &amp; Distribution</td>
<td>40 Years</td>
<td>33 Years</td>
<td>83%</td>
</tr>
<tr>
<td>Electrical Lighting</td>
<td>30 Years</td>
<td>33 Years</td>
<td>110%</td>
</tr>
<tr>
<td>Electrical Generator</td>
<td>40 Years</td>
<td>20 Years</td>
<td>50%</td>
</tr>
<tr>
<td>Fire Alarm</td>
<td>20 Years</td>
<td>33 Years</td>
<td>165%</td>
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</tbody>
</table>
**TOWN HALL ANNEX ~ EXISTING CONDITIONS**

**Address:** 97 Mountain Road

**Building Area/Site:** 2,060 sf / 1.62 acres

**Age/Construction:** 1976 (45)

1976 Original Construction
TOWN HALL ANNEX ~ EXISTING CONDITIONS

Site
1. Pavement cracking throughout parking lot
2. Cracking and deterioration at garage door aprons
3. Storm water ponding at exterior wall

Architectural Exterior
1. Appears to be pre-engineered structure with conventional wall framing
2. General cleaning of exterior masonry and foundation walls needed
3. Missing trim at joint between brick and siding
4. Corrosion of exterior hollow metal door
5. Damage to corner trim, trim between garage doors, and siding near grade
6. Re-caulk windows and clean up excess

Address
<table>
<thead>
<tr>
<th></th>
<th>97 Mountain Road</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building Area/Site</td>
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<tr>
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<td>1976 (45)</td>
</tr>
</tbody>
</table>
TOWN HALL ANNEX ~ EXISTING CONDITIONS

Architectural Interior
1. Ripped insulation lining throughout garage
2. Moisture infiltration at exterior garage doors
3. Concrete slab chipping along control joint
4. Minor cracking in VCT

Code ~ Accessibility/Life Safety
1. Toilet facilities missing grab bar

Building Systems
1. No automatic sprinkler system within building.
2. Mechanical systems is small furnaces. OK Condition.
3. Electrical Older. OK Condition.
4. Plumbing Older. OK Condition.

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</table>
1. Need to identify possible future uses and/or discarded
2. Potential for centralized storage location to serve town needs
3. Could be removed to make room for higher priorities to possibly create “campus”

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<tr>
<td>System</td>
<td>Equipment Life Expectancy</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td>Fire Protection System</td>
<td>40 Years</td>
</tr>
<tr>
<td>Plumbing Water Heater</td>
<td>25 Years</td>
</tr>
<tr>
<td>Plumbing Piping &amp; Fixtures</td>
<td>40 Years</td>
</tr>
<tr>
<td>Mechanical Furnace</td>
<td>40 Years</td>
</tr>
<tr>
<td>Mechanical Equipment</td>
<td>40 Years</td>
</tr>
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<td>40 Years</td>
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<tr>
<td>Fire Alarm</td>
<td>20 Years</td>
</tr>
</tbody>
</table>
SENIOR CENTER
INITIAL FINDINGS
### Existing Conditions

**Address**
145 Bridge Street

**Building Area/Site**
11,702 sf / 3.27 acres

**Age/Construction**
1950 (71)

**Notes**
- Chapel possibly older
- 1950? Original Construction
- 2009 Converted to Senior Center
Site

1. Cracking in pavement throughout
2. Uneven brick patio in courtyard

Architectural Exterior

2. Lack of gutters at large hip roof and main entrance
3. Brick staining at windows
4. Exterior wood windows may need replacement within 5-10 years
5. General brick cleaning needed
6. Lack of gutter causing ice building up at exterior wall

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<tr>
<td>Age/Construction</td>
<td>1950 (71)</td>
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</table>
Architectural Interior

1. Hollow metal doors rubbing on frames, causing paint damage

2. Movement of VCT flooring near exterior door threshold causing separation

3. Lack of weatherstripping at chapel exterior door causing air infiltration

Code ~ Accessibility/Life Safety

1. Youth Services and Parks & Rec do not have accessible entrances from exterior

2. Non-accessible sink at Youth Services

3. Damaged VCT at Youth Services

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<tr>
<td>Age/Construction</td>
<td>1950 (71)</td>
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</tbody>
</table>
SENIOR CENTER ~ EXISTING CONDITIONS

Building Systems

1. No Automatic Sprinkler System.
2. Renovated recently.
3. Most MEP in good condition.
4. Will start to need more maintenance in the next 5 – 10 years.
5. Perimeter radiant heating units leaking, causing damage to flooring

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<tr>
<td>Age/Construction</td>
<td>1950 (71)</td>
</tr>
</tbody>
</table>
1. Youth Services current location remote from schools, must cross main road. Possible connection to Bridge Street property?

2. Youth Services offices co-mingled with activity space

3. Parks and Recreation prefer proximity to play fields and gymnasium resources

4. Parks and recreation prefers sound isolation between offices (walls do not extend to ceiling)

5. Senior Center has adequate space to meet current programming needs

6. Youth Services and Parks & Rec do not have accessible entrances from exterior

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<tr>
<td>System</td>
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</tr>
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</tr>
<tr>
<td>Fire Protection System</td>
<td>40 Years</td>
</tr>
<tr>
<td>Plumbing Water Heater</td>
<td>25 Years</td>
</tr>
<tr>
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<td>40 Years</td>
</tr>
<tr>
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<td>30 Years</td>
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</tr>
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</tr>
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<td>Electrical Generator</td>
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</tr>
<tr>
<td>Fire Alarm</td>
<td>20 Years</td>
</tr>
</tbody>
</table>
A. WARD SPAULDING SCHOOL
INITIAL FINDINGS
A. WARD SPAULDING SCHOOL ~ EXISTING CONDITIONS

Grade Level | PK-2
---|---
Building Area/Site | 71,406 sf / 19.5 acres
Age/Construction | 1954 (67), 1961 (60), 1985 (36), 1988 (33)

1954 Original Construction
1961 Addition
1985 Modular
1988 Addition
2004 Code and MEP Improvements
A. WARD SPAULDING SCHOOL ~ EXISTING CONDITIONS

Site

1. Insufficient parking for events, parking immediately adjacent to building a safety concern.
2. Parent/Bus repaved 2020, remaining parking in fair condition. Remaining parking in need of replacement. Curb and sidewalks are in fair to poor condition overall with some portions recently replaced.
3. Poor definition of school boundary, remote/unprotected playground and playscapes

Architectural Exterior

1. Masonry in need of repointing/repair, efflorescence on portions of building
2. Remaining original exterior door, frames, soffits and trim in poor condition
3. Modular addition in poor condition

<table>
<thead>
<tr>
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<th>PK-2</th>
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<tr>
<td>Building Area/Site</td>
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<tr>
<td>Age/Construction</td>
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</tr>
</tbody>
</table>
A. WARD SPAULDING SCHOOL ~ EXISTING CONDITIONS

Architectural Interior

1. Overall, well built, durable and well maintained, recent upgrades to PK classrooms, corridor floors, gym/Aud. floors.
2. Several components are past useful life ~ flooring, millwork, some toilet facilities, ceilings, doors, some hardware
3. Modular construction clearly past useful life

Code ~ Accessibility/Life Safety

1. Several accessibility compliance issues related to floor clearances and reach at entranceways, sinks, and millwork

Structural

1. Original masonry bearing, steel roof joist, truss & wood plank gym/Aud. In fair to good condition.
2. Addition(s) steel frame superstructure masonry infill.

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<tr>
<td>Age/Construction</td>
<td>1954 (67), 1961 (60), 1985 (36), 1988 (33)</td>
</tr>
</tbody>
</table>
Building Systems

1. No automatic sprinkler system within building.
2. Unit Vents are needing lots of repairs. Will all need to be replaced.
3. Unit Vents are not ventilation properly and need to be repaired.
4. Controls do not work. Town said will be replaced during the Summer of '21.
5. Electrical Lighting and Power Distribution are at the end or past their useful life.
6. Boiler plant needs to be replaced. At the end of its useful life.

<table>
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<tr>
<td>Age/Construction</td>
<td>1954 (67), 1961(60), 1985 (36), 1988 (33)</td>
</tr>
</tbody>
</table>
Programmatic Observations

1. Poor visibility and adjacency of Administrative office to Main Entry
2. Classrooms are good size, meet educational needs, ideally setup in neighborhoods
3. Enjoy connection of some CRs to exterior
4. Limited specialized education, intervention, testing areas, poorly located, waste time due to travel, de-escalation a concern, ideally adjacent to classrooms pods
5. Poor flow to specials (music, art, STEM, media center) results in more travel less educational time, should be centralized
6. Modular use ongoing concern, poor conditions
7. Site security, parking, & boundary ongoing concern
8. Limited to no outdoor classrooms, play area exposed

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</table>
A. WARD SPAULDING SCHOOL ~ PROGRAMMING

What's Existing

- Admin removed from Main Entrance, have to be escorted
- Specials are disjointed, too far away
- Auditorium only used a few times per year
- Summer program is growing, Before & After uses Cafeteria – no dedicated entry
- Special Education too far from Sensory Rooms, program needs more space

What's Desired

- Admin relocated close to Main Entry
- Improved flow to Specials, bring to Main Hall
- Convert Auditorium to Learning Lab
- Dedicated amenity space for Summer Program and Before & After care
- Improved flow to Special Education and Sensory Rooms
A. WARD SPAULDING SCHOOL ~ BENCHMARKING

### A Ward Spaulding Elementary School

<table>
<thead>
<tr>
<th>Item Description</th>
<th>2021-22 Enrollment (High)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade Level</td>
<td>PK</td>
</tr>
<tr>
<td>Student Pop. (6/2020)</td>
<td>50</td>
</tr>
<tr>
<td>Subtotal</td>
<td>493</td>
</tr>
</tbody>
</table>

### Current Space Standard

<table>
<thead>
<tr>
<th>SF/Student (Max.)</th>
<th>SF/Grade Level (Max.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>120</td>
<td>6,000</td>
</tr>
<tr>
<td>120</td>
<td>18,000</td>
</tr>
<tr>
<td>120</td>
<td>18,029</td>
</tr>
<tr>
<td>120</td>
<td>17,568</td>
</tr>
</tbody>
</table>

#### State of CT ~ Max Allowable Area Analysis

1. Take highest student enrollment from 8-year projection (2021-22 High Projections from MMI/SLR Updated April 2021)

2. Multiply by max allowable as per state standard Space Specifications by grade level & total size of school

3. Review for applicable allowances (older building inefficiencies)

Max Allowable ~ 58,597 GSF vs. Existing ~ 71,406 GSF

Existing is **16.5%** larger than max
Cafeteria
CT State Standard ~ SF area is based upon 3 lunch periods at 17.5 sf per student

2,875 gsf
CT State Standard

2,966 gsf
Existing Cafeteria

Media Center
CT State Standard ~ SF area is based upon 10% of student population x 35 sf per student

1,750 gsf
CT State Standard

1,834 gsf
Existing Media Center
The importance of Efficiency in a Building

Yellow Outline
Area ~ 71,406 SF

Blue Area
Grade Level ~ 16,575 SF
Basement ~ 2,223 SF
+ Chases, wall thickness, etc (3.5%)…

Blue Area (19,456 SF) 27.2%
Yellow Outline (71,406 SF)

Typical Efficiency Factor ~ 25-30%

Meets Expectations
Understanding the impact of your Building

"The gift of time"

Distance of Classroom to Media Center and/or Specialized Education Area...
Approximately 630 feet!

Average speed of a 5-year-old ~ 50 ft every 20-25 seconds

About a 5 min. walk! Or... 10 minutes away from the classroom with each trip.

630 ft!
(or a 10-minute round trip!)
## A. WARD SPAULDING SCHOOL ~ BENCHMARKING

<table>
<thead>
<tr>
<th>System</th>
<th>Equipment Life Expectancy</th>
<th>Equipment Age</th>
<th>Useful Life Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire Protection System</td>
<td>40 Years</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Plumbing Water Heater</td>
<td>25 Years</td>
<td>20 Years</td>
<td>80%</td>
</tr>
<tr>
<td>Plumbing Piping &amp; Fixtures</td>
<td>40 Years</td>
<td>50 Years</td>
<td>125%</td>
</tr>
<tr>
<td>Mechanical Boiler Plant</td>
<td>40 Years</td>
<td>40 Years</td>
<td>100%</td>
</tr>
<tr>
<td>Mechanical Piping &amp; Equipment</td>
<td>40 Years</td>
<td>50 Years</td>
<td>125%</td>
</tr>
<tr>
<td>Mechanical Air Conditioning</td>
<td>25 Years</td>
<td>10 Years</td>
<td>40%</td>
</tr>
<tr>
<td>Mechanical Controls</td>
<td>20 Years</td>
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<td></td>
</tr>
<tr>
<td>Electrical Service &amp; Distribution</td>
<td>40 Years</td>
<td>30 Years</td>
<td>75%</td>
</tr>
<tr>
<td>Electrical Lighting</td>
<td>30 Years</td>
<td>30 Years</td>
<td>100%</td>
</tr>
<tr>
<td>Electrical Generator</td>
<td>40 Years</td>
<td>30 Years</td>
<td>75%</td>
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<tr>
<td>Fire Alarm</td>
<td>20 Years</td>
<td>20 Years</td>
<td>100%</td>
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</tbody>
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![Spaulding School Benchmarking Image](chart.png)

Spaulding School

Code Minimum School = 48.5 EUI

EUI = 64.3

kBtu/ft²/yr
McALISTER INTERMEDIATE SCHOOL
INITIAL FINDINGS
McALISTER INTERMEDIATE ~ EXISTING CONDITIONS

**1939 Original**

**1956 Addition**

**1987 Addition**

**1972 Modifications and Updates**
*(High School to Middle School)*

**2001 Code Alterations**
*(Middle School to Intermediate School)*

**1992 Elevator Addition & Chair Lift @ Stage**

**1988 & 1990 Code & Building Upgrades**

**1994 Modular Building**

**1956 Addition**

**Grade Level**

| 3-5 |

**Building Area/Site**

72,263 sf / 32.4 acres (shared)

**Age/Construction**

1939 (82), 1956 (65), 1987 (34), 1994 (27)
**Site**

1. Site traffic, parking and perimeter security major concerns for site (pedestrian and vehicular safety), no defined receiving area.

2. Play areas exposed, no definition of school boundary. Do not meet accessibility codes.

3. Parking/pavement directly adjacent to building, pavement in fair to poor condition overall.

**Architectural Exterior**

1. Roof replaced in sections, 1956 portion to be replaced to match. Masonry repointed and chimney repairs.

2. Many non or poorly functioning windows and exterior doors, persistent concerns/repairs (2001) and flashing/water infiltration issues.

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<tr>
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</tbody>
</table>
Architectural Interior

1. Overall, well built, durable original construction and well maintained. Many important investments & preventative maintenance (roofs, A/C, isolated room renovations)

2. Many components (finishes, millwork, lockers) of original construction are past useful life and/or non accessible (ADA @ toilet rooms, ramp, doorways)

3. Inconsistent construction of various room modifications over the years. Ventilation concerns in portions of buildings related to construction of additions and encapsulation

4. Gym condition poor, bleachers to be removed currently a safety concern.

5. Lockers original poor condition throughout

6. Inadequate separation of specials areas.

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Code ~ Accessibility/Life Safety

1. Many toilet facilities are non accessible, in very poor condition, and/or nonfunctioning.
2. Inaccessible in-classroom millwork and sinks.
3. No functioning accessibility to the stage
4. Various accessibility concerns related to door entryways and proper floor clearance

Structural

1. Original building and 1956 addition wall bearing, steel joist, wood plank flooring (original) concrete deck (1956).
2. Floor to floor noise transfer and acoustical concerns in original portion of the building.

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Building Systems

1. Fresh air relies on window ventilation, limited to no mechanical ventilation
2. No automatic sprinkler system within building
3. No Building Management System in the school
4. Plumbing fixtures are old and are failing, many are non-compliant with code
5. Unit ventilation in majority of spaces do not meet current codes, difficult to control/maintain/repair, staffing/student comfort concerns
6. Issues with technology including paging and clocks. Need to be replaced.
7. Electrical power distribution and lighting are at the end or past their useful life.

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Programmatic Observations

1. Classrooms are good size, meet educational needs, although limited flexibility for grade level “pods”, considering mixed grade pods
2. Good location for Admin Suite, Specials Classrooms (Music, Art, STEM), need appropriately size space
3. Noise/Acoustical transmission from 2nd floor
4. Lack of general classroom space on 1st floor
5. Poor location and setup for Media Center, should be the “heart” center of school
6. One cafeteria proves to be difficult scheduling
7. Limited space for conference/small group, specialized education, teacher prep, large group
8. Site security, parking, & boundary ongoing concern, limited opportunity for outdoor classrooms

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What's Existing

- Lack of Classroom space on 1st Floor
- Media Center at the back of the building
- Cafeteria as a band room isn't working & music program needs gathering space
- Currently no Sensory Rooms & OTPT does not have dedicated space
- Music, Art, STEM all together, but Spanish is separate

What's Desired

- More 1st Floor Classroom space and the flexibility to represent all 3 Grades on each floor
- Media Center at the heart of the school
- Room to grow the Music program
- Bring in Sensory Rooms and OTPT
- Create a "Specials Core"
# McALISTER INTERMEDIATE ~ AREA ANALYSIS

## State of CT ~ Max Allowable Area Analysis

1. Take highest student enrollment from 8-year projection (2023-24 High Projections from MMI/SLR Updated April 2021)

2. Multiply by max allowable as per state standard Space Specifications by grade level & total size of school

3. Review for applicable allowances (older building inefficiencies) Original 1939 adds 25% to area.

## Max Allowable ~ 73,670 GSF vs. Existing ~ 73,764 GSF

Existing almost identical to Max. Allow

### Suffield Intermediate School

<table>
<thead>
<tr>
<th>Item Description</th>
<th>2024-25 Enrollment (High)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade Level</td>
<td>3</td>
</tr>
<tr>
<td>Student Pop.</td>
<td>161</td>
</tr>
<tr>
<td>Subtotal</td>
<td>453</td>
</tr>
</tbody>
</table>

### Current Space Standard

| SF/Student (Max.) | 120 | 120 | 152 |
| SF/Grade Level (Max.) | 19,320 | 17,880 | 21,736 |

### State Standard Space Specifications Grades

<table>
<thead>
<tr>
<th>Projected Enrollment</th>
<th>Pre-K and K</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
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<tbody>
<tr>
<td>0 - 350</td>
<td>124</td>
<td>124</td>
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<td>156</td>
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<td>351 - 750</td>
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<td>152</td>
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<td>176</td>
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<tr>
<td>Over 1500</td>
<td>112</td>
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<td>142</td>
<td>164</td>
<td>164</td>
<td>164</td>
<td>178</td>
</tr>
</tbody>
</table>

Sec. 10-287c-15. Standards (Reference: Section 10-283a)

(s) State standard space specifications. The standard space specifications identified in this section shall apply to all school building project grants except code and building regulations, furniture, furnishings, site improvements, site improvements, heating, ventilating, refrigeration, public address, public telephone, public address, and administrative facilities. For any building constructed prior to 1950, the standard space specifications identified in this section shall be increased by twenty-five per cent.
**Media Center**

CT State Standard ~ SF area is based upon 10% of student population x 35 sf per student

- **1,585 gsf**
  - CT State Standard
- **1,747 gsf**
  - Existing Media Center

**Cafeteria**

CT State Standard ~ SF area is based upon 3 lunch periods at 17.5 sf per student

- **2,642 gsf**
  - CT State Standard
- **2,500 gsf**
  - Existing Cafeteria
The importance of Efficiency in a Building

Yellow Outline
Area ~ 73,764 SF

Blue Area
Baseline ~ 2,548 SF
Grade Level ~ 12,833 SF
Upper Level ~ 9,016 SF
+ Chases, wall thickness, etc (3.5%)...

Blue Area (25,250 SF) > 34.2%
Yellow Outline (73,764 SF)

Typical Efficiency Factor ~ 25-30%
Loss of Education Space is 2,800 – 6,500 sf
Understanding the impact of your Building

1. Classroom type and size varies + distribution makes it difficult to arrange by grade level, exploring alternative arrangements

2. Benefit of specials grouped together however ideally location should be centralized

3. Poor distribution of specialty support spaces, ideally located within “classroom neighborhood”
<table>
<thead>
<tr>
<th>System</th>
<th>Equipment Life Expectancy</th>
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<th>Useful Life Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire Protection System</td>
<td>40 Years</td>
<td>N/A</td>
<td></td>
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<tr>
<td>Plumbing Water Heater</td>
<td>25 Years</td>
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<td>40%</td>
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<td>125%</td>
</tr>
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<td>20 Years</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
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<td>40 Years</td>
<td>25 Years</td>
<td>63%</td>
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<tr>
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<td>30 Years</td>
<td>40 Years</td>
<td>133%</td>
</tr>
<tr>
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<td>40 Years</td>
<td>25 Years</td>
<td>62%</td>
</tr>
<tr>
<td>Fire Alarm</td>
<td>20 Years</td>
<td>20 Years</td>
<td>100%</td>
</tr>
</tbody>
</table>
SUFFIELD MIDDLE SCHOOL
INITIAL FINDINGS
SUFFIELD MIDDLE SCHOOL ~ EXISTING CONDITIONS

1964 Original Construction

1965 Vo-Ag

1972 Additions & Alterations

2002 Conversion from High School to Middle School

* Property Card has 286,843 sf

<table>
<thead>
<tr>
<th>Grade Level</th>
<th>6-8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building Area/Site</td>
<td>128,489 sf / 32.4 acres (shared)</td>
</tr>
<tr>
<td>Age/Construction</td>
<td>1964, 1965 (Vo-Ag), 1972, 2002</td>
</tr>
</tbody>
</table>
Site

1. Site conditions are in fair to poor condition ~ sidewalks, curbs, paving, drainage issues,
2. Site traffic flow, parking, security major concerns. Unsecured perimeter access & parking a security concern.
3. Fields are remote from building with limited outdoor opportunities for education. Areas of poor drainage on west/southwest side of site.

Architectural Exterior

1. Consistent roof leaks, roof replaced in phases by different contractors, various warranties, other envelope concerns ~ pointing of masonry, doors, etc.
2. Majority of building contain brick veneer in fair to good condition with areas of isolated spalling at base of wall/ exposed concrete foundation wall. Existing lintels are in fair to poor condition.

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SUFFIELD MIDDLE SCHOOL ~ EXISTING CONDITIONS

Architectural Interior

1. Overall, well maintained, original building well built, but many areas poorly constructed.

2. Observed significant inefficiencies due to additions/renovations over time.

3. Noise/Acoustical concerns in 70’s additions renovations due to “modular” wall construction.

4. Various additions eliminated natural daylight to educational space creating poor conditions for educating students.

5. Overall condition of finishes are generally in poor condition. However yearly improvements have been made to isolated areas, science labs, finishes in media center, tech education planned.

6. Majority of toilet cores are in poor condition due to age and use. In some instances, are not used/obsolete

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</tbody>
</table>
Code ~ Accessibility/Life Safety

1. While 2002 upgrades addressed some code issues, some accessibility compliance issues remain related to floor & push/pull clearances and reach requirements.

2. Egress stairwells appear to meet current codes for both guard and handrail requirements.

Structural

1. Structural system of original building steel frame superstructure with brick/block infill. Traditional slab on grade with concrete infill metal desk slab for second floor.

2. No observed structural conditions with building.

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</tbody>
</table>
Building Systems

1. Many renovations and varying vintages of systems. Some newer, some original.

2. No central domestic Hot Water Plant. Lots of distributed water heaters. Leads to more maintenance and repairs.

3. Electrical systems has many vintages. While service is newer it back feeds original vintage systems.

4. Most major mechanical systems past or at the end of their useful life.

5. No natural ventilation/windows to many classrooms/educational spaces.

6. Overall MEP systems need a complete overhaul.

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</table>
Programming Discussions

1. Classrooms are decent size throughout school although many of the specialized classrooms are not sized nor do the function correctly (ex. World language)

2. Flow of the overall building a concern, tough to implement team model, share spaces, promote collaboration ~ important for this demographic.

3. Specialized teaching rooms & core facilities biggest concern – band, cafeteria acoustics & queuing, media center, family & consumer science outdated, limited space for tech ed., many poorly located

4. Lack of efficiency in the layout affects quality of education, time in class, and programs offered.

5. Currently circulate through classroom to attend special education classes, would like to centralize and share, save on time & reinvest into student

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</tbody>
</table>
**What's Existing**

- Linear flow
- Divided Admin area
- Media Center not the heart of the school
- Specials are too far away from each other and general classrooms
- Special Education is too spread out and doesn't work

**What's Desired**

- Improved flow
- Consolidated Admin area
- Media Center surrounded by neighborhoods
- Neighborhoods surrounded by Specials
- Special Education accessible to all
SUFFIELD MIDDLE SCHOOL ~ BENCHMARKING

State of CT ~ Max Allowable Area Analysis

1. Take highest student enrollment from 8-year projection (2027-28 High Projections from MMI/SLR Updated April 2021)

2. Multiply by max allowable as per state standard Space Specifications by grade level & total size of school

3. Review for applicable allowances (older building inefficiencies)

Max Allowable ~ 78,128 GSF vs. Existing ~ 128,489 GSF*

Existing building is nearly 40% larger than the Maximum Allowable!
**SUFFIELD MIDDLE SCHOOL ~ BENCHMARKING**

**Media Center**

CT State Standard ~ SF area is based upon 10% of student population x 35 sf per student

- **1,631 gsf**
  - CT State Standard
- **4,734 gsf**
  - Existing Media Center

**Cafeteria**

CT State Standard ~ SF area is based upon 3 lunch periods at 17.5 sf per student

- **2,718 gsf**
  - CT State Standard
- **3,318 gsf**
  - Existing Cafeteria
The importance of Efficiency in a Building

Yellow Outline
Area ~ 128,489 SF

Blue Area
Grade Level ~ 36,134 SF
Upper Level ~ 4,437 SF
+ Chases, wall thickness, etc (3.5%)...

Blue Area (41,991 SF) 32.6%
Yellow Outline (128,489 SF)

Typical Efficiency Factor ~ 25-30%
Loss of Education Space is 3,340 – 9,765 sf
Understanding the impact of your Building

1. Clearly oversized for current population

2. Suffers from severe inefficiency and multiple change in use.

3. The benefits and challenges of maintaining and operating an oversized school should be considered:
   a. Associated operational costs
   b. Loss of the benefit of oversize core spaces (Example Gymnasium)
   c. Challenges when reimaging space for a different use (Special Education located in original “shop” classes – or - Housing IT in the original VO-AG Building)
Understanding the impact of your Building

1. Clearly oversized for current population

2. Suffers from severe inefficiency and multiple change in use.

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<tr>
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<td>40 Years</td>
<td>30 Years</td>
<td>75%</td>
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<tr>
<td>Fire Alarm</td>
<td>20 Years</td>
<td>25 Years</td>
<td>125%</td>
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</table>
2002 Original Construction

<table>
<thead>
<tr>
<th>Grade Level</th>
<th>9-12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building Area/Site</td>
<td>204,016 sf / 60.48 acres</td>
</tr>
<tr>
<td>Age/Construction</td>
<td>2002 (19)</td>
</tr>
</tbody>
</table>
SUFFIELD HIGH SCHOOL ~ EXISTING CONDITIONS

Site

1. Site circulation concerns – separation of bus, parent, and student. Intersecting routes create confusion at arrival/dismissal.

2. Pavement in fair condition overall. Sidewalks are in fair condition with several areas deteriorating, cracking, spalling.

3. Differential settlement at bollards ~ a representative indication of poor soils and/or moisture migration.

4. Site walls show efflorescence/water infiltration.

Architectural Exterior


2. Under-utilized Courtyard Space. Gaps in perimeter roof flashing exposing building to loss of energy and wildlife.

3. Original roof designed with 15-year warranty, 4 years out of warranty.

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</table>
Architectural Interior

1. Overall, well maintained, some areas of questionable quality of original construction, overall building has worn faster than anticipated (accelerated wear and tear on finishes)

2. Visual indications of various slab cracking throughout building with possible water/vapor infiltration. Persistent issue causing finishes/glue to bubble due to moisture.

3. Curious curling ceiling tiles leads team to be concerned about the HVAC balancing of the school.

4. Obsolete program functions have been transformed into new uses on a yearly/on-going basis

5. Original doors, hardware, finishes are beginning to show signs of age and deterioration.

6. Fairly significant deterioration of furniture in areas, in some cases it is mismatched.

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</table>
Building Systems

1. Major Air Handling units 20 years old but failing at a high rate.

2. Electrical distribution is challenging and is difficult to troubleshoot. Additionally nothing is labeled.

3. Plumbing Flush Valves for Water Closets and Urinals and Faucets were installed as sensor faucets. Faucets failing at a high rate. Need to be replaced throughout.

4. Controls throughout are an issue. Town is currently fixing this.

5. Overall ALL MEP systems are starting to get to the age where they will need some major maintenance. If maintenance is delayed then the repair costs will be greater.

6. Concern related to water treatment & affects on systems

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</tbody>
</table>
1. Would like to integrate more collaborative spaces, working toward this @ media center

2. Ideally reinvent antiquated program space (dark room area, computer, material lab)

3. Investigate possibility of new classroom furniture to promote collaboration, flexibility, adaptable space ~ less “owning” of room

4. Integrate idea of a campus setting, more progressive approach to program layout

5. Rethink utilizing areas in multiple ways (ex. Of auditorium for “lecture hall” setting

6. Distribute specialized & social emotional / wellness to be more integrated into daily routine, “be there”

7. Create Innovation Hub (Manufacturing), Career Center, Education & Health Service – Career & College Ready

Grade Level | 9-12
---|---
Building Area/Site | 204,016 sf / 60.48 acres
Age/Construction | 2002 (19)
SUFFIELD HIGH SCHOOL ~ PROGRAMMING

What's Existing

- Labs not accessible while classes are taking place
- Media Center doesn’t have an identity
- No alternative fitness/holistic health space
- Fitness room too small to train athletes, currently travel to S.M.S. for their Gym
- Integrate real-world collaboration, preparing students for careers of the future

What's Desired

- Dedicated Labs outside the Classroom
- Reinvent Media Center
- Create Mindfulness Space
- Second Gym & Larger Fitness/Training
- Bring Counselors closer to the students
- Create Innovation Center
- Program to support “Career Ready” model
## System

<table>
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</tr>
<tr>
<td>Electrical Lighting</td>
<td>30 Years</td>
<td>2 Years</td>
<td>7%</td>
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<tr>
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<td>50%</td>
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<td>20 Years</td>
<td>100%</td>
</tr>
</tbody>
</table>
Feedback, Comments and Questions
NEXT STEPS

1. Communications Plan
2. Options Planning
3. Order of Magnitude Costs
4. DRAFT existing conditions report
5. Update to Schedule
COMMUNICATIONS PLAN

1. Website Creation, Email
2. Surveys
3. Building Tours
4. Public Forum on Existing Conditions
5. Publish Informational Fliers
6. Board Outreach - Updates
7. Post Information and Public Meetings
1. KICKOFF MEETING
2. EXISTING CONDITIONS WALKTHROUGHs
3. PROGRAMMING SESSIONS & NEEDS ASSESSMENT
4. REVIEW FINDINGS ~ CONDITIONS & NEEDS
5. PRIORITIZE ~ FINDINGS & RECOMMENDATIONS
6. DEVELOP PLANNING OPTIONS FOR COMMUNITY
7. REVIEW AND DISCUSS PLANNING OPTIONS
8. REFINE OPTIONS
9. SELECTION OF PREFERRED OPTION
10. FINALIZE CONCEPTS, SCOPE, SCHEDULE, AND COSTS

COMMUNITY INTERACTION
- Regular Facilities Master Plan Committee
- Public Forum No.1 ~ Existing Conditions & Programmatic Needs
- Public Forum No.2 ~ Review Master Planning Options
- Public Forum No.3 ~ Presentation of Proposed Master Plan
- Town Meeting Presentation
- Other Meetings ~ Review meetings with OSCG&R

Meeting Attachment ~ 1-21-2021
CHALLENGES & OPPORTUNITIES

• Understand how others work
• Identify synergies and opportunities for collaboration
• Build consensus for shared amenities and support
• Identify where emotions may be
• Include cross-section of the community
• Strategically repurpose
FIRE DEPARTMENT CONSIDERATIONS

- Responder health and wellness
- Gender/bunk equity
- Volunteer staffing/ full-time, transition over time
POLICE DEPARTMENT CONSIDERATIONS

- Officer health and wellness
- Gender equity
- Flexibility & adaptability
## State School Reimbursement

Moderate increase in next few years

## SPS NESDEC Enrollment Projections

Slight to moderate decrease over 10 years

### Enrollment Projections By Grade

<table>
<thead>
<tr>
<th>Birth Year</th>
<th>Births</th>
<th>School Year</th>
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<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>UNGR</th>
<th>K-12</th>
<th>PK-12</th>
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<td>84</td>
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<td>153</td>
<td>177</td>
<td>149</td>
<td>166</td>
<td>148</td>
<td>0</td>
</tr>
</tbody>
</table>

Note: Ungraded students (UNGR) are high school students whose anticipated years of graduation are unknown, or students with special needs - UNGR not included in Grade Combinations for 7-12, 9-12, etc.
McAlister Intermediate School
Area Analysis

Orange Outline
Total Gross Floor Area ~ 72,263 GSF

Blue Area
Total Gross Floor Area ~ 21,278 GSF

Blue Area (24,100 SF)
~34% Efficient

Total Building (72,263 SF)

Typical Efficiency Factor ~ 25-30%

Loss of Education Space
is 2,800 – 6,500 sf
MAXIMIZING REIMBURSEMENT

Renovate As New

“Renovation Status- maximum demolition of existing structure: The OSCG&R has revised its policy regarding maximum allowable demolition of an existing school building for renovation status. Effective 7/1/18, districts can demolish whatever portion or percentage of the existing building they want, but at least 55% of the total project at time of completion must be original construction.”

Give Consideration to...

- Keep/Renovate 55% of Building
- Construct 45% New
- 10% higher reimbursement rate
ENERGY SAVINGS ANALYSIS

Renovate as New – A. Ward Spaulding School (Example Only)

Average Utility Costs Per Year
- Costs: ~ $2.50 – 3.25/SF
- GSF: ~ 71,406 GSF

10 Year Projection of Energy Costs: ~ $2,143,270
Projection utilizes 4% inflation and 2% decrease efficiency compounded $2.50/SF baseline

Potential Savings with Comprehensive Renovation
- Code Baseline ($1.75/SF): ~ $642,981
- Standard Energy Savings ($1.50/SF): ~ $857,308
- High Energy Savings ($1.25/SF): ~ $1,071,635
- Net Zero ($0/SF): ~ $2,143,270
### Summary of ZNE/Deep Energy Savings Incentives

<table>
<thead>
<tr>
<th>Incentive</th>
<th>Description</th>
<th>Amount/Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction Incentive</td>
<td>Paid if the project design successfully achieves a 25 EUI or alternative target approved by The Companies</td>
<td>$3.50/sf</td>
</tr>
<tr>
<td>Post Occupancy Incentive</td>
<td>Available following the 1-year post-occupancy period if customer successfully shows the project achieved the target EUI</td>
<td>$1.00/sf</td>
</tr>
<tr>
<td>ZNE or PHI Certification Incentive</td>
<td>Paid to customers that officially certify their projects as ZNE or PHI</td>
<td>$10,000</td>
</tr>
<tr>
<td>Technical Assistance for ZNE Services</td>
<td>Up to $10,000</td>
<td></td>
</tr>
<tr>
<td>Verification Incentive</td>
<td>50% of fee up to $10,000</td>
<td></td>
</tr>
<tr>
<td><strong>Design Team Incentives</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Possible Incentive Cap</strong></td>
<td></td>
<td>$500,000</td>
</tr>
</tbody>
</table>

*Please refer to MOU document for eligibility requirements.

**If EUI is not possible due to project type or size, please contact your 'Supplier' to discuss an alternative EUI target.

**Total Customer & Design Team Incentive cap:** $500,000/project
Suffield Intermediate School
(Built 1939)

Max Allowable Area Analysis

1. Take highest student enrollment from 8-year projection.
2. Multiply by max allowable as per state standard Space Specifications by grade level & total size of school
3. Review for applicable allowances (older building inefficiencies)

Max Allowable ~ 67,490 GSF vs. Existing ~ 72,263 GSF

Existing is 6.6% larger than max
### Max Allowable Area Analysis

1. Take highest student enrollment from 8-year projection.

2. Multiply by max allowable as per state standard Space Specifications by grade level & total size of school.

3. Review for applicable allowances (older building inefficiencies).

---

**Existing is 25% larger than max**

---

**Suffield Middle School**

(Built 1955)

---

**MAXIMUM ALLOWABLE AREAS**

---

**Suffield Middle School**

(Built 1955)

---

**Max Allowable Area Analysis**

---

**Existing is 25% larger than max**

---

**Suffield Middle School**

---

**State Standard Space Specifications Grades**

---

**Max Allowable Area Analysis**

---

**Existing is 25% larger than max**
**Area Summary**

<table>
<thead>
<tr>
<th>Level</th>
<th>Area (gsf)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower level</td>
<td>2,548</td>
</tr>
<tr>
<td>Main Level</td>
<td>45,516</td>
</tr>
<tr>
<td>Upper Level</td>
<td>25,700</td>
</tr>
<tr>
<td><strong>Total Area</strong></td>
<td><strong>73,764</strong></td>
</tr>
</tbody>
</table>

**Building History**

- Original 1939
- 1956 Addition
- 1972 Modifications/Updates (High School to Middle School)
- 1987 Addition
- 1988 & 1990 Code/ Updates
- 1992 Elevator Addition/Lift
- 1994 Modular Building
- 2001 Code Alterations (Middle School to Intermediate School)
Cafeteria
1. CT State Standard ~ SF area is based upon 3 lunch periods at 17.5 sf per student
2. $\frac{493}{3} \times 17.5 \, \text{sf/student} = 2,875 \, \text{gsf}$
3. Existing Cafeteria = 1,518 + 1,448 sf = 2,966 gsf

Media Center
1. CT State Standard ~ SF area is based upon 10% of student population x 35 sf per student
2. $493 \times 10\% \times 35 \, \text{sf/student} = 1,750 \, \text{gsf}$
3. Existing Media Center = 1,834 gsf
The importance of Efficiency in a Building

Yellow Outline
Area ~ 71,406 SF

Blue Area
Grade Level ~ 16,575 SF
Basement ~ 2,223 SF

Blue Area (18,798 SF) / Building Area (71,406 SF) = 26.3%

Typical Efficiency Factor ~ 25-30%
Meets Expectations
Understanding the impact of your Building

“The gift of time”

Distance of Classroom to Media Center and/or Specialized Education Area...
Approximately 630 feet!

Average speed of a 5-year-old ~ 50 ft every 20-25 seconds

About a 5 min. walk!
Or... 10 minutes away from the classroom with each trip.
Cafeteria
Media
Gym

Overall SF vs. Max. Allowable Efficiency Plan
Utility Consumption/EUI

<table>
<thead>
<tr>
<th>Grade Level</th>
<th>3-5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building Area/Site</td>
<td>72,263 sf / 32.4 acres (shared)</td>
</tr>
<tr>
<td>Age/Construction</td>
<td>1939 (82), 1956 (65), 1987 (34), 1994 (27)</td>
</tr>
</tbody>
</table>
# Initial Findings ~ Programming

## Suffield Police & Fire

### Public Commission

**Space Needs Summary**

<table>
<thead>
<tr>
<th>New Programmed Area Name</th>
<th>Program Area</th>
<th>140.5 ft²</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>620.5 ft²</td>
</tr>
</tbody>
</table>

#### Public

- **1.01 Public Entry Area**: 500 ft²
- **1.02 Male Restroom**: 165 ft²
- **1.03 Female Restroom**: 165 ft²

**Subtotal**: 620.5 ft²

#### Administration

- **2.01 Training Room**: 1,640 ft²
- **2.02 Training Room Storage**: 144 ft²

**Subtotal**: 1,784 ft²

#### Mirco/Licensing Room

- **3.01 Chief’s Office**: 240 ft²
- **3.02 Deputy Chief’s Office**: 200 ft²
- **3.03 Fire Inspector’s Office**: 200 ft²
- **3.04 Public Education Captain’s Office**: 120 ft²
- **3.05 Safety Captain’s Office**: 150 ft²

**Subtotal**: 940 ft²

#### Firefighters/EMT Staff Facilities

- **4.01 Firefighter’s/EMT’s Day Room**: 350 ft²
- **4.02 Kitchen and Dining Area**: 475 ft²
- **4.03 Exercise - Fitness Room**: 550 ft²
- **4.04 Officer Bunk Room (s) x 2**: 300 ft²
- **4.05 Firefighter Bunkers/Bed Room (s) x 6**: 720 ft²
- **4.06 Unisex Bath/Shower (s)**: 160 ft²
- **4.07 Laundry/Housekeeping Storage**: 100 ft²

**Subtotal**: 3,800 ft²

### Site Needs Assessment

<table>
<thead>
<tr>
<th>Building Area</th>
<th>Building Footprint</th>
<th>2 story</th>
<th>11,277 ft²</th>
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</thead>
<tbody>
<tr>
<td>Visitor Parking</td>
<td>Visitors Handicapped Parking</td>
<td>1 space</td>
<td>132 ft²</td>
</tr>
<tr>
<td>Staff Parking</td>
<td>Staff Handicapped Parking</td>
<td>1 space</td>
<td>132 ft²</td>
</tr>
<tr>
<td>Cruiser Parking</td>
<td>Travel Lane Allowance</td>
<td>2 spaces</td>
<td>600 ft²</td>
</tr>
</tbody>
</table>

**Subtotal**: 14,064 ft²

### Site Utilities

- Electrical Transformers: 100 ft²
- Emergency Generator: 500 ft²
- Antenna Tower: 600 ft²
- AC Equipment: 400 ft²
- Dampers: 240 ft²
- Storm Water Retention: 3,400 ft²

**Subtotal**: 5,140 ft²

### Site Amenities

- Septic Field: 1,200 ft²

**Subtotal**: 1,200 ft²

### Site Backups and Green Space

- Green space: 15,000 ft²

**Subtotal**: 15,000 ft²