Town of Northfield, NH
Board of Selectmen
21 Summer Street, Northfield NH 03276

SUBJECT: Feasibility Study

DATE ISSUED: 5/7/24

PURPOSE: To accept one of the proposed feasibility studies attached

OVERVIEW: We have received two RFP's to conduct the feasibility study on town-owned buildings, both being very close in pricing. The CIP Committee has taken some time to review these and all recommend Turner Group. The majority of them feel they are local, and have done more NH projects and towns of our size. The references have come back very positive in both companies.

OBJECTIVE: Award the bid with a $5,000 cap above the initial bid due to possible additional requests, such as looking at the Transfer Station to accept solid waste.

.

_____ _____

(Date) *Jason Durgin, Chair*

_____

Ross Cunningham

_____

Scott McGuffin

27 Locke Road Concord, NH 03301 **t:** 603.228.1122 **hlturner.com**

May 1, 2024, sent via email: sgiovannucci@northfieldnh.gov

Ms. Stephanie Giovannucci, Town Administrator
21 Summer Street
Northfield, New Hampshire 03276

SUBJECT: Request for Proposal – Facilities Condition Assessment
Town of Northfield, NH
Newmarket, NH

Dear Ms. Giovannucci:

On behalf of The H.L. Turner Group Inc. (TTG), we are pleased to present this proposal to provide facility condition assessments for the Town of Northfield, NH. We understand the project consists of a review of the Town Hall, Police Station, Highway Garage, and outbuildings as well as the Transfer Station. With extensive experience serving municipalities throughout New England, including space planning and assessments for New Hampshire towns like Concord, Merrimack, Jaffery, Exeter, and Bedford, TTG is uniquely qualified to deliver a comprehensive assessment for your facilities.

The Turner Group (TTG) is a full service architectural and engineering firm headquartered in Concord, NH. All work for this project will be completed by personnel located in our Concord office. We know that there are several qualified firms that can provide the services outlined in your RFP. However, our team has experience in comprehensive facility assessments that will be vital in determining future project priorities. We have put together a submission that profiles our abilities, highlights our specific experience, and will demonstrate our suitability for the project. Dedicated to this project will be a project manager, William Hickey, who will be your main point of contact, and a staff of architects and engineers from all key disciplines.

Throughout the process, our team will keep in mind that the Town of Northfield is investing significant time and energy in this study, and we will focus on the priorities that will result in a successful project. Investing in a facility assessment from TTG is not just about identifying immediate issues; it's about safeguarding the long-term value and performance of your property. By addressing potential problems early on and providing recommendations for preventive maintenance and upgrades, we help you minimize future risks and maximize the lifespan of your facility.

By choosing TTG for your facility assessment needs, you're not just investing in a one-time inspection; you're investing in a trusted partner who is committed to ensuring the ongoing health, safety, and performance of your facility for years to come.

Thank you for the opportunity to submit our qualifications and proposal for the Town of Northfield Facilities Condition Assessment. We look forward to meeting with you to review our capabilities and answer any questions that you may have. Please feel free to contact me at 603/228-1122, or by email at bhickey@ttgae.com.

Sincerely,

THE H.L. TURNER GROUP INC.

William D. Hickey
President

Project Approach, Schedule, and Fee, dated 5/1/2024
Company Profile, Experience , References, and Appendix, dated 5/1/2024

Town of Northfield, NH, Facilities Assessment

Project Approach

Our approach to the project for the Town of Northfield is one that we have utilized successfully on numerous other facility assessments. Unlike traditional home inspection services, which often follow a standard checklist, our approach is tailored to the unique needs and challenges pertaining to your facilities. We understand that every building is different, and our assessments are customized to address specific concerns and priorities, ensuring that no detail is overlooked.

Our team of design professionals are well-versed in commercial buildings, building codes, regulations, and industry standards, ensuring that your facility assessment is conducted in compliance with all relevant guidelines. Whether it's ensuring ADA accessibility or identifying potential environmental hazards, we have the expertise to navigate complex regulatory requirements and provide you with peace of mind.

The Turner Group will provide services for your facility assessment project, encompassing project management, architectural design, and a comprehensive range of engineering expertise including civil, structural, mechanical, plumbing, and fire protection. Joining our team is Dubois & King, who will contribute their specialized knowledge in electrical, life safety, and tele/data engineering.

We believe in collaboration and open communication throughout the assessment process. Our team works closely with you to understand your schedule needs to minimize disruptions, your goals, address your concerns, and provide actionable recommendations that align with your budget and timeline. We see ourselves as partners in your facility management journey, dedicated to helping you achieve your objectives efficiently and cost-effectively.

Prior to beginning our field work, we will meet with the town administration, facilities staff, and other building staff to review any existing documentation that is available on the facilities. It will be especially important during our site visit to have a facilities staff member available to answer any questions that we may have. Talking with facilities staff from each of the buildings will allow us to gain valuable insight into concerns, issues, recently completed projects, etc.

We will take notes and gather any information that is available and share the information with the team members. Any information that can be shared prior to the start of the field work is valuable. Information that is helpful includes but is not limited to: building and site plans, equipment cut sheets, utility invoices, and services records. Information gathered will be electronically scanned and organized into project files.

Our team is a group of professionals that has worked together and completed numerous facilities assessments. Each team member will be responsible for reviewing the area that corresponds to their expertise, while also observing other areas to eliminate any gaps or oversights. If there is a question, the team members will communicate while on site ensuring the issue is understood. We will also meet as a team throughout the day to ensure everyone is on task and review any questions that may have arisen during the day.

The team will use non-destructive means of evaluation. To assist with the non-destructive evaluation, we have tools such as an infra-red camera and borescope which allows us to "see" potential hidden issues that are not readily visible. While on site, each of the team members will document the existing conditions using notes and photographs. Items will be evaluated for age, condition, life expectancy, and whether items need to be repaired, upgraded, or replaced. This information will allow each team member to write the text portions of their report, fill in the matrix and label certain photographs that will be included in the final report.

For each of the facilities, our team will assemble a report that will describe the facility including a text description, matrix, and photographs. The report will identify and prioritize specific items that are recommended to be undertaken to keep the facilities in good working condition. Each item that is identified as in need of repair, upgrade, or improvement will have a cost associated with that item. The matrix for repairs/replacements will be set up. We have numerous different options for information shown that we can review with the Town and customize to meet the Town's needs. We will also note which items are a life safety issue and a maintenance issue. A draft report, both printed and electronic, will be provided to the district for review and comment. Once all comments are received, a final report will be provided in both printed and electronic format. Representatives from The Turner Group will be available to provide presentations to the district as required.

We will evaluate the age, condition, and remaining life expectancy of the buildings and sites, as well as identify systems that need repair, upgrade, or replacement. We will verify compliance with existing codes, identify future needs, and create a cost breakdown of all necessary replacements and improvements. Areas for evaluation include but are not limited to:

- Foundation
- Basement
- Roofing: construction, coverings, openings
- Floor construction
- Exterior enclosure: exterior walls, windows, doors
- Interior construction: partitions, interior doors, fittings
- Stair construction and finishes
- Interior finishes: wall, floor, ceiling finishes
- Plumbing: fixtures, domestic water distribution, sanitary waste, rainwater collection

- HVAC: energy supply, heat/cooling generating systems, distribution systems, terminal and package units, controls and instrumentation, systems testing and balancing.
- Fire protection: sprinklers, standpipes, fire protection specialties.
- Electrical: electrical service and distribution, lighting and branch wiring, communications, and security
- Site features: roadways, parking lots, pedestrian paving, site development, landscaping
- Mechanical utilities: water supply, sanitary sewer, storm sewer, heating/cooling distribution, fuel distribution
- Electrical utilities: electrical distribution, site lighting and site communications
- Security
- ADA compliance
- Elevators

You will find a copy of a sample report from another assessment in the Appendix. We will customize the report to Newmarket's requirements.

SCHEDULE

We will work with the Town of Northfield to develop a project schedule that is acceptable to all involved. Based on our current workload, we would expect to begin work in late May of 2024 and complete the reports prior to the end of August 2024. As noted above, we are happy to discuss other schedules with the Town.

FEE

Our fee for the facility assessments is as follows.

Town Hall ……	$ 6,375
Police Station ……	$ 5,355
Highway Garage and Outbuildings ……	$ 8,500
Transfer Station …….	$ 2,975
TOTAL …….	**$ 23,205**

Please note that the total fee listed for the scope of work shown assumes that the entire project will be completed as part of this proposal. If the project is to be broken into separate tasks, or not all the tasks shown are completed as part of this proposal, the individual task fees may need to be adjusted to complete the necessary work.

If this fee is acceptable, we will provide a formal proposal or AIA contract for signature.

ITEMS NOT INCLUDED

1. Fees for submissions, applications, permits, etc. to regulatory agencies.
2. Any item not specifically identified in this proposal.
3. More than one round of changes to the document submission because of the meetings identified in this proposal.
4. More meetings/site visits than those identified in this proposal.
5. Geotechnical engineering.
6. Certified site survey.
7. The evaluation and/or characterizations of hazardous materials.
8. Forensic and/or select removal of existing building materials.

CLIENT/CUSTOMER RESPONSIBILITIES

A. To provide one point of contact as the Owner's Project Manager for the implementation of this project.
B. Make timely decisions during the design process to keep the project on schedule.
C. To make timely payments.
D. To provide existing project information, existing drawings for the building and site, site survey studies, reports, etc. pertinent to our efforts.

REQUEST FOR PROPOSAL (RFP)
Facilities Condition Assessment
Northfield, NH

May 1, 2024

TURNER GROUP

The H.L. Turner Group Inc. | 27 Locke Road, Concord, NH 03301 | 603.228.1122 | hlturner.com

Table of Contents

TURNER GROUP

Company Profile

A dynamic team of professionals advancing the technology, art, and science of the built environment.

Integrity, Respect, and Dedication to Excellence

TURNER GROUP

Company Profile

ESTABLISHED

1990

PROFESSIONAL STAFF

15 Licensed Professionals

3 LEED Professionals

15 Technical Support Staff

5 Administrative Staff

LOCATION

Concord, NH

Principal Officers

William D. Hickey, President

Doug Proctor, AIA, Senior Vice President

Rick Wolf, President Infrastructure Division

Tom Betteridge, VP Mechanical Engineering

Heidi Nadeau, Principal

OUR CLIENTS

We have been serving our clients for over 30 years and are committed to providing the highest level of service, and to uphold our values of integrity, respect, dedication, balance, and compassion.

OUR VISION is to improve society and lives through a proactive and integrated focus on the built environment with a mission to support our client's goals with innovative thinking and practical solutions to create safe and sustainable environments; to support our community's needs and potential with expertise and value; and to support our team's success through an open and inclusive workplace fostering personal and professional development.

OUR TEAM

The future of the built environment starts here. Our experts provide a fully integrated approach to our clients needs, offering a wide range of services that can help you achieve your goals.

| Architecture
- Conceptual Design
- Construction Documents
- Construction Administration
- Facility Assessments

| Engineering
- Civil
- Structural
- Mechanical/ Plumbing
- Roadway/Bridge Design
- Hydro/Dam Design

| Building Science

| Energy Auditing

| Sustainable Design

| Environmental Engineering

TRUST

is the foundation of our business relationships. We earn the trust of our clients by providing honest, transparent, and reliable service and working closely with them to understand their needs and goals.

hlturner.com

Creating Safe and Sustainable Environments

TURNER GROUP

TYPES OF PROJECTS

- Commercial
- Corporate
- Dams
- Schools (Public & Private)
- Higher Education
- Financial Institutions
- Hazard Mitigation
- Healthcare
- Hospitality
- Building Restoration & Preservation
- Abatement & Demolition
- Hydroelectric Power Stations
- Industrial & Manufacturing
- Municipal & Government
- Civil Site Design
- Land Development Permitting
- Roadways & Bridges
- Wastewater Areas

WHY CHOOSE US

Our expertise, leadership, and focus on high-performance architecture, engineering, and building science is an innovative approach to design integrating exceptional air quality, efficient design, low-impact development, daylighting, and acoustics.

Our commitment to providing our clients with the best possible service by working closely to understand the needs and goals of every project.

Our holistic approach to every project, considering all aspects of the building's design from the start of our relationship.

Integrity, honesty, and trust. We always put the needs of our clients first.

Respect for our clients, our employees, and the environment. We believe that everyone deserves to be treated with dignity and respect.

Dedication is what drives us to achieve excellence. We are committed to our clients and have always designed for exceptional energy efficiency and responsible environmental impact.

Balance is essential to our success. We strive to promote balance between our professional and personal development and is at the core of everything we do.

COMPASSION

We care about the people we work with and the communities we serve. We believe that everyone deserves a safe, healthy, and comfortable place to live and work.

hlturner.com


TURNER
GROUP
Project Experience & References

TOWN OF SALEM
Facility Assessment
Salem, NH

Owner's Representative:

Roy Sorenson
Director of Salem Municipal Services
rsorenson@ci.salem.nh.us

The H.L. Turner Group Inc. provided the Town of Salem with a facility assessment of the Salem Town Offices in order to identify any existing deficiencies the Town should plan to address. We provided a full report with a summary of our findings, which included recommendations and prioritization of projects that should be undertaken immediately, within a 5-year period, or within a 10-12 year period, as well as an opinion of costs for each project. The report is intended for use by the Town as a tool for budget planning for the allocation or resources on a priority basis.

The building facilities assessment addressed all architectural features, electrical, mechanical, and site and drainage issues. The purpose of this facility audit is to report conditions that are in need of repairs and upgrades, conditions that do not comply with current building and safety codes, and confirm that the facility operates as designed structurally, mechanically, and electrically.

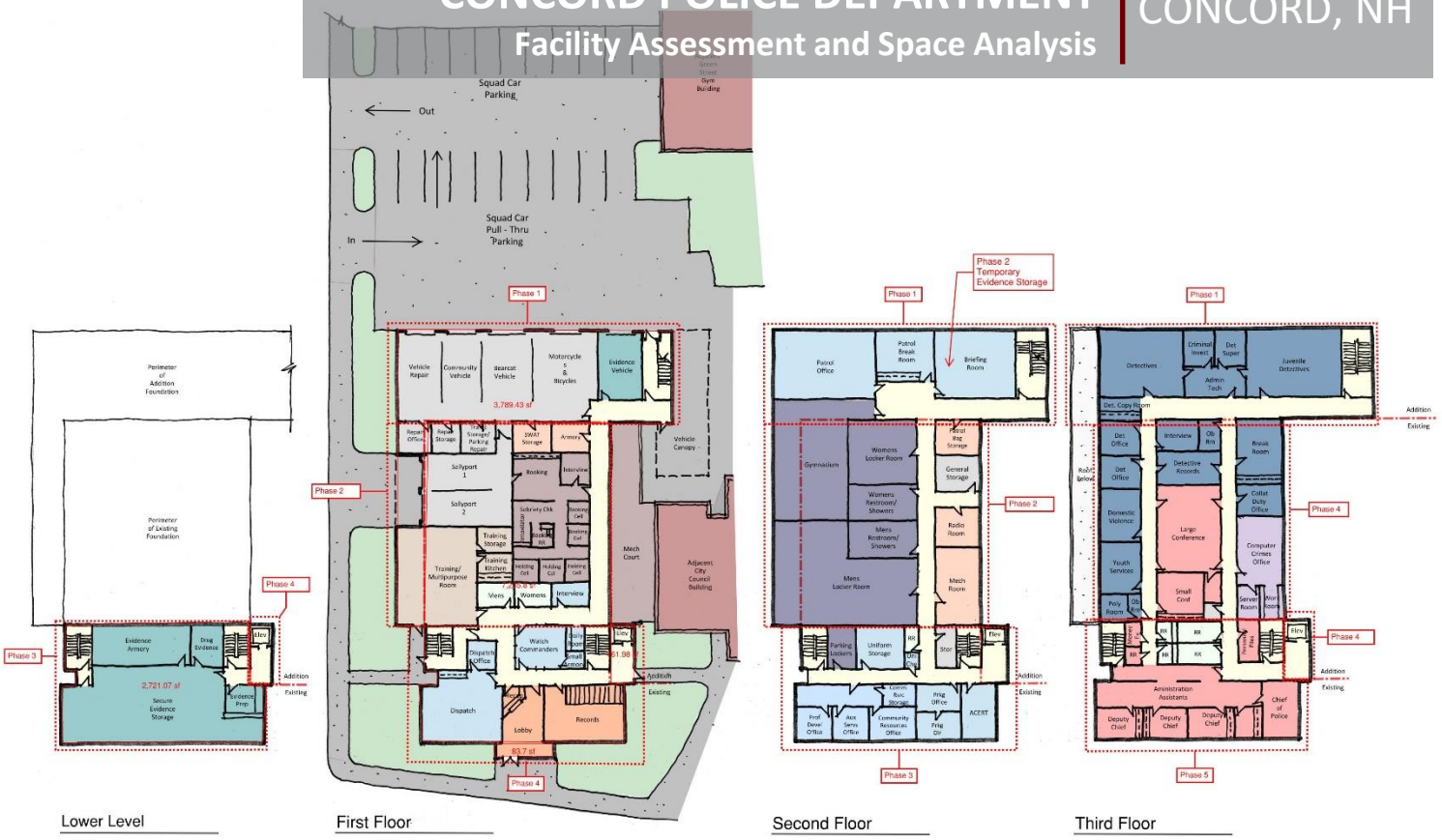
Points of Interest

- Architectural & Engineering Services
- Facility Assessment
- Recommendations
- Opinions of Cost

CONCORD POLICE DEPARTMENT

Facility Assessment and Space Analysis

CONCORD, NH



The H.L. Turner Group Inc. (TTG) was retained in the fall of 2020 to perform a full existing space and facility assessment review of the existing Concord Police Department facility and how it compares to CALEA standards. A full space program was developed from an interview process with the department.

A new building space adjacency study was provided and available site options within the city were reviewed. An option to add on, renovate, and reorganize the existing police station was also developed to outline the cost and schedule to the City council to determine the viability of the option.

Reference:
Brad Osgood
Chief of Police
Concord, NH
(603) 225-8600
bosgood@concordpolice.com

Points of Interest

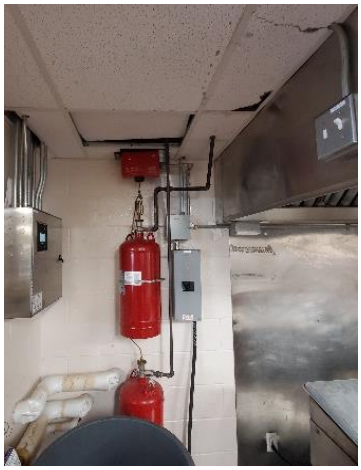
- Facility Assessment
- Site Assessment
- Space Programming
- Site Options Review
- Conceptual Site and Space Planning
- Conceptual Construction & Project Budget
- City Council Presentation Support

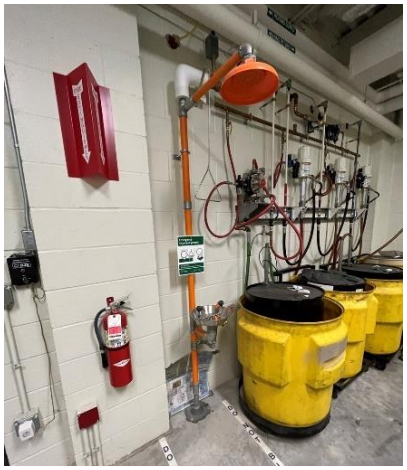
New Hampshire Army National Guard

Building Assessments

The H.L. Turner Group (TTG) was retained by the New Hampshire Army National Guard (NHARNG) to perform building assessments on their facilities throughout New Hampshire. The first phase of the project included 28 buildings in 7 locations. The total area of building assessed was 194,233 square feet. Phase I was completed in 2022. Phase II includes assessment of 371,187 square feet of buildings in three locations. Buildings assessed were constructed as early at the 1950's and as recent as 2017. Buildings included.

The assessments included the building envelope, building structure, interior finishes, accessibility, mechanical, electrical, plumbing and fire protection. Each of the items were visually assessed during a site visit and then the inventory and condition of each item was entered into the Army BUILDER SMS program. The condition for each item was one of nine predefined ratings.





Town of Merrimack
Municipal Facility Assessments

Merrimack, NH

In order to plan for the future, the Town of Merrimack, NH selected The H.L. Turner Group Inc. (TTG) to complete a facilities assessment of over a dozen Town-owned buildings. The facilities included the Town Hall, police station, fire stations, DPW garage, engineering office, library, park and recreation facilities, wastewater treatment plant, transfer and recycling center, and community centers.

The facilities audit consisted of a site visit to each of the buildings and interviews with the Town's administration, department heads, and staff. For each of the buildings, we completed a written summary of the existing conditions, a spreadsheet with an opinion of cost for any repairs and/or upgrades to existing conditions, along with a timeframe for completing those repairs, as well as photos of both the interior and exterior of the buildings.

A thorough assessment of each facility included a review of architectural and code compliance, security, structural systems, mechanical, plumbing, fire protection, and electrical systems.

Points of Interest

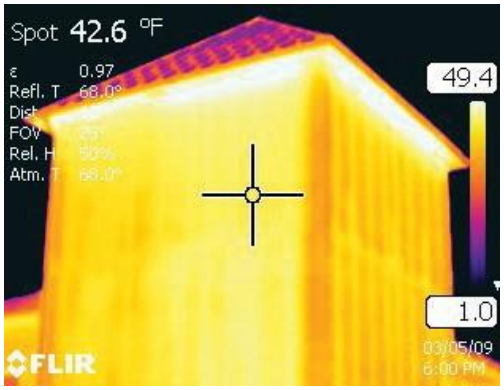
- Municipal Buildings
- Architectural
- Structural
- Mechanical
- Plumbing
- Fire Protection
- Electrical
- Prioritized List of Facilities Needs & Repairs
- Opinion of Cost

Reference:

Mr. Paul Micali
Town Manager
603/424-7075
pmicali@ci.merrimack.nh.us

Town of Hooksett
Safety Complex Building Forensics

Hooksett, NH



Owner's Representative:
Mr. Harold Murray
Hooksett Fire Department
(603) 623-7272

Points of Interest

- Investigation
- Proposed Solutions
- Remediation Options
- Construction Management

The H.L. Turner Group Inc. (TTG) was retained to address multiple building component failures at the James H. Oliver Safety Center. The complex was experiencing excessive cold air infiltration causing freezing of heating and fire protection piping, moisture infiltration, a failed storm drainage conveyance system, structural system failures, insect infiltration, and degrading building materials since its construction in 1996.

TTG's building scientists analyzed the root cause of the problems, developed innovative solutions, and achieved public agency approval to retain a qualified Construction Management Firm (CM). The remediation work will produce a high performance building assembly that is projected to exceed minimum energy performance standards by 30% and shall provide the Town with a rapid Return on Investment (ROI).

References

Allenstown, NH SAU #53
Ms. Shannon Kruger
Principal
603-485-9574
skruger@sau53.org

Barnstead, NH SAU #86
Mr. Tim Broadrick
Superintendent
603-875-7890
tbroadrick@pmsau.org

Town of Bow, NH
Mr. David Stack
Town Manager
603-228-1187
townmgr@bow-nh.gov

City of Concord, NH
Jay C. Burgess
Public Properties Facilities Superintendent
603-230-3852
jburgess@concordnh.gov

NH Army National Guard
Major Logan Kenney, PE
Director of Construction and Facilities Management
603-715-3551
logan.t.kenney.mil@army.mil

NH Distributors
Mr. Tom Painchaud
Director of Operations
603-224-9991
tpainchaud@nhdist.com

Town of Sanbornton, NH
Trish Stafford
Town Administrator
(603) 729-8090
townadministrator@sanborntonnh.org

UNH/USNH
Jeremiah Johnson
Associate University Architect
603-862-5440
Jeremiah.johnson1@unh.edu

TURNER GROUP

Team Qualifications

WILLIAM D. HICKEY

Principal | President

bhickey@ttgae.com | (603) 228-1122 | hlturner.com

EXPERTISE

- Building Design Solutions
- Structural Design
- Quality Control
- Project Documents
- Building Assessment
- Project Management

EXPERIENCE

General: 36 years
Project: 36 years

EDUCATION

New Hampshire Technical Institute
Architectural Engineering Technology, AS
1987

Goldman Sachs 10,000 Small Business NH Cohort 4 Scholar | 2021

CERTIFICATIONS & MEMBERSHIPS

- OSHA 10-Hour Card
- Associated Builders and Contractors NH/VT - Board Member
- Associated Builders and Contractors NH/VT - Course Instructor
- Plan NH - Board Member
- New Hampshire Technical Institute - Architectural Engineering Technology Advisory Board
- New Hampshire Technical Institute - Adjunct Professor
- Chair, Town of Bow Business Development Commission

The H.L. Turner Group Inc.
27 Locke Road
Concord, NH 03301

PROFESSIONAL EXPERIENCE

Mr. Hickey joined the structural engineering department at The H.L. Turner Group Inc. (TTG) in 1987. Since then, he has taken on the leadership role of president. As a principal, Mr. Hickey is actively involved with the day-to-day management and operations of the firm. He also assists with marketing, client relations, and business development activities.

Mr. Hickey's design background includes all aspects of structural engineering, from preliminary design and drafting to final design and contract documents. His projects have varied in scope from small residential/commercial evaluations to large-scale industrial developments. His designs have involved a variety of materials, including masonry, concrete, shotcrete, steel, and wood. As one of TTG's most sought-after project managers, Bill has managed projects valued from $10,000 to more than $10 million for public and private clients.

EXPERIENCE

Municipal:

Belmont Police Station, *Belmont, NH*
Structural design for the new 8,000 square-foot, two-story building. The structure included a cast-in-place foundation, steel frame, and wood roof trusses.

Concord Fire Department Headquarters, *Concord, NH*
Provided structural design services for $2 million award-winning historic restoration of the former 1894 Concord Water Works buildings and site into the Concord fire headquarters, training facility and fire administration offices.

Town of Hooksett Public Safety Complex, *Hooksett, NH*
Project manager for assessment of the existing safety complex in preparation for a complete envelope upgrade.

Bow Public Safety Building, *Bow, NH*
Provided the Town of Bow with structural engineering design and project management services for the proposed new 30,000 square-foot safety building.

Sanbornton Police Station, *Sanbornton, NH*
Structural design for the renovation of the existing 3,000 square-foot building.

Sanbornton Town Hall, *Sanbornton, NH*
Structural design for the new 3,000 square-foot, one-story building. The structure included a cast-in-place foundation, wood framing, and wood roof trusses.

Merrimack DPW, *Merrimack, NH*
Project management for a new 14,000 square-foot highway maintenance facility including a 5,000 square-foot, wood-framed office building with an attached 9,000 square-foot, metal-framed municipal repair garage.

Dover Ice Arena, *Dover, NH*
Project manager and structural design for renovation of the existing 25,000 square-foot skating rink as well as an addition of 37,000 square feet of a new skating rink, locker room facilities, and mechanical equipment.

New Hampton Salt Shed, *New Hampton, NH*
Structural design and project management services for the renovation of this 9,600 square-foot structure.

Douglas N. Everett Arena, *Concord, NH*
Provided project management and oversight of the removal and replacement of the slab and cooling systems.

Grafton County Maintenance Building, *North Haverhill, NH*
Provided project management, structural engineering, and construction administration for the new 7,000 square-foot design/build project.

Methuen City Hall, *Methuen, MA*
Project manager for the facility assessment of the City Hall building. The assessment included identification of deficiencies with regard to the building's roof, façade, windows, doors, interior finishes, major mechanical systems, and a site assessment.

Commercial:

New Hampshire Distributors Warehouse Addition, *Concord, NH*
Structural design of a new 18,000 square-foot warehouse addition.

Coastal Forest Products Distribution Warehouse, *Bow, NH*
Structural engineering for the sustainable design of a new 200,000 square-foot distribution warehouse, as well as a 12,000 square-foot office.

Sanel Auto Parts / NAPA - *New Hampshire & Vermont*
Design of new buildings and renovation projects on facilities throughout New Hampshire and Vermont.

F.W. Webb Facilities, *Various Locations Throughout New England & New York*
Project management and structural design services for new warehouse/distribution facilities ranging from 40,000 to 120,000 square feet in size.

Methuen Construction, *Plaistow, NH*
Structural design and project management services for the renovation of an existing 180,000 square-foot manufacturing/warehouse facility, as well as an addition to the new headquarters building.

WATTS Foundry Building, *Franklin, NH*
Assistant project manager and full design services within Environmental Protection Agency (EPA) requirements for this new 30,000 square-foot, lead-free foundry.

97 Storrs Street, *Concord, NH*
Project manager for design of a 51,000 square-foot, six-story, mixed-use building in downtown Concord, NH. The design includes a parking garage and coffee shop on the lower-level, a restaurant, and retail space on the first floor, and four stories of residential living on the upper floors. The top floor includes an open-air deck for use by the building residents. The structural components include cast-in-place concrete foundations on the lower-level with a structural steel frame for the upper floors.

DOUGLAS PROCTOR, AIA, NCARB, LEED© BD+C

Principal/Senior Vice President/Senior Architect

dproctor@ttgae.com | (603) 228-1122 | hlturner.com

EXPERTISE

- Master Planning
- Conceptual Design
- Construction Documents
- Construction Administration
- Project Management

EXPERIENCE

General: 35 years
Project: 35 years

EDUCATION

Drexel University
Architecture, BA
1993

PROFESSIONAL REGISTRATION

Connecticut ..... #ARI.0013434
Delaware ..... #S5-0005994
Maine..... #ARC4343
Maryland ..... #18152
New Hampshire.... #04034
New Jersey ..... #AI-02063500
North Carolina ..... #13725
Pennsylvania ..... #RA407314

AFFILIATIONS

American Institue of Architects (AIA)
Construction Specification Institute
Green Business Certification
International Code Council
National Council of Architects Board (NCARB)
National Fire Protection Association
US Green Building Council

The H.L. Turner Group Inc.
27 Locke Road
Concord, NH 03301

PROFESSIONAL EXPERIENCE

Mr. Proctor is involved in all project development phases and has extensive educational experience, having designed or renovated more than a dozen school projects. His work focuses on developing and managing educational, institutional, and healthcare projects. His innovative solutions to complex projects brings a unique design approach to TTG's ventures. He also brings a sharp eye for project development phases, ranging from master planning and conceptual design to construction documentation and administration. Additionally, Mr. Proctor is an experienced project manager and has worked on assisted living, childcare and institutional facilities, religious organizations, and multi-family housing.

Mr. Proctor has received design awards, including an AIA New Hampshire Award for the Holderness School Ice Rink and Merrimack Lodge, as well as AIA Delaware Award for the design of the Grace United Methodist Church. He also received the Michael Pearson Thesis Prize and graduated Cum Laude from Drexel University in Philadelphia, Pennsylvania.

EXPERIENCE

Municipal:

Sanbornton Town Offices, *Sanbornton, NH*
Principal architect of the new 2,800 square-foot municipal offices. Provided conceptual design for a warrant article and successful vote.

Sanbornton Police Department, *Sanbornton, NH*
Principal architect of a new 2,800 square-foot town police station. Provided conceptual design for a warrant article and successful vote.

Belmont Police Station, *Belmont, NH*
Principal architect of a new 8,000 square-foot town police station.

Concord Police Department, *Concord, NH*
Spatial and facility assessment study and conceptual design options for new and renovation options for the city police station.

Merrimack Lodge, *Concord, NH*
Principal architect for the new public meeting facility and winter skating house for the City of Concord. Received NH AIA Design Award.

Concord Community Center, *Concord, NH*
Project architect for the City of Concord Community Center. The project involved the renovation of an existing school building as well as an addition.

Merrimack Department of Public Works, *Merrimack, NH*
Design architect for the new public works building.

Baker Free Library, *Bow, NH*
Provided architecture services for designing and constructing a 7,000 square-foot, lower-level renovation of the library to double meeting and stack capacity.

New Hampshire Department of Transportation Maintenance Facility & Shed, *Derry, NH*
Project architect of a new 12,000 square-foot maintenance facility to replace an undersized, outdated, existing facility. The site also included accommodation for a new 11,000 square-foot salt storage shed, constructed under a separate contract.

Commercial:

New Hampshire Higher Education Loan Corporation, *Concord, NH*
Principal architect for a space planning study of a 50,000 square-foot secure financial office complex.

Methuen Construction Headquarters, *Plaistow, NH*
Principal architect for the renovation of a 175,000 square-foot industrial fabrication facility with a 50,000 square-foot new office addition.

Educational:

Allenstown School, *Allenstown, NH*
Principal architect of a new 90,000 square-foot K-8 grade school receiving NH School Building Aid.

Barnstead Elementary School, *Barnstead, NH*
Principal architect for facility and educational assessment of the existing school. Developed conceptual options for renovations and additions to submit to NHDOE for NH School Building Aid.

Allenstown Schools, *Allenstown, NH*
Principal architect of a three-school option study for the development of a renovation or new school option for the Allenstown K-8 school program. Provided conceptual design for a warrant article, successful vote, and acquired NH School Building Aid.

Hopkinton Schools, *Hopkinton, NH*
Principal architect for three Hopkinton school renovations and one new school addition. Projects included a classroom and office addition to the Harold Martin Elementary School with accessibility and finish renovations to the existing building. Accessibility and finish renovations were made to the Maple Street School while accessibility, life safety, laboratory, and finish renovations were performed at the Hopkinton Middle High School.

Auburn Village School, *Auburn, NH*
Principal architect for the addition and renovation of the Auburn Village K-8 School. Design services included site reorganization, complete renovation, and a 40,000 square-foot addition to the existing school. The developed plans included reconfiguration of the existing classrooms, relocation of the main entry, increased size and capacity of the cafeteria and kitchen, enhanced security precautions, and a better indoor air quality system. In addition, TTG provided support to the district and town before the warrant article vote.

Hampton Academy, *Hampton, NH*
Principal architect for the addition and renovation of Hampton Academy. Design services included site reorganization, a 70,000 square-foot renovation, and 60,000 square-foot addition to the existing school for town warrant article. The plans reorganized an urban site to provide program space, solved security issues, improved vehicular circulation, organized student circulation, provided better indoor air quality, and improved classroom access to power. The addition replaced a substandard wing of the school with new classroom space, STEM spaces, a gymnasium, and an auditorium.

TOM BETTERIDGE, PE, CPD

Vice President | Mechanical Engineer | Turner Building Science & Design, LLC

tbetteridge@tbsdne.com | (603) 228-1122 | turnerbuildingscience.com

EXPERTISE

- HVAC Systems
- Plumbing Systems
- Hydronic Systems
- Steam Systems
- Central Plants

EXPERIENCE

General: 14 years

EDUCATION

Messiah College
Mechanical Concentration, BS
2007

PROFESSIONAL DEVELOPMENT

Certified Plumbing Design (CPD)
#86094
ASPE CPD Certification
American Society Plumbing Engineer (ASPE)

PROFESSIONAL REGISTRATION

NCEES .....#13-598-69

Professional Engineer:
New Hampshire:..#13988
Massachusetts:...#420866
Connecticut: .....#32832
Illinois: .....#062072064
Indiana: .....#PE11600416
Maine:.....#PE15936
New York: .....#098727
Ohio:.....#82195
Rhode Island: .....#12522
Vermont:.....#018.0134403

TURNER GROUP

The H.L. Turner Group Inc.
27 Locke Road
Concord, NH 03301

PROFESSIONAL EXPERIENCE

Mr. Betteridge has 15 years of experience designing mechanical systems for a wide array of clients and industries. He is skilled in designing a vast range of mechanical and plumbing systems for commercial building renovations up to 600,000 square-foot manufacturing facilities. He has designed mechanical systems for educational buildings, office buildings, municipal buildings, healthcare facilities, commercial buildings, pharmaceutical facilities, and industrial facilities, all of which utilize a wide range of mechanical and plumbing systems, such as central steam plants, central chiller plants, domestic and process hot water plants, hydronic boiler plants, compressed air plants, and specialized HVAC systems.

Mr. Betteridge enjoys working collaboratively with project owners, stakeholders, design teams, constructors, and local authorities to ensure every project is successful and in alignment with expectations and requirements.

EXPERIENCE

Hopkinton School Renovations, *Hopkinton, NH*
HVAC and plumbing systems design for three Hopkinton school renovations and one new school addition. The school addition utilized displacement air technology to provide higher-quality indoor air quality to the students and teachers. The designed systems did not need modifications to meet the ASHRAE COVID-19 design recommendations.

Bow Elementary School, *Bow, NH*
Evaluated the existing HVAC systems to determine the best replacement options. Designed direct replacement equipment with energy recovery, Merv 14 filtration, and other components to increase the indoor air quality for the school.

Ellis School, *Fremont, NH*
Evaluated the existing central air handling unit, condensing unit, and air distribution system and designed replacement options to meet the town's needs, while maintaining balance, energy, and initial project costs.

Science Building, Saint Anselm College, *Bedford, NH*
Whole building airtightness testing and leakage investigation, including the use of infrared cameras and building depressurization and pressurization to find building envelope failures. Holistic evaluation of the building controls system and how the HVAC system affects the building envelope.

FW Webb Sites, Green Leaf Construction, *Various Locations*
Mechanical design and construction administration for sales, office, and warehouse spaces at six different locations totaling over 350,000 square feet of space.

NH Army National Guard, *Concord, NH*
Renovation of existing building spaces to better serve the National Guard's needs, including modifications to the building's heating and restroom facilities.

Pharmaceutical Cleanroom, Private Client, *Private Location*
Design of over 60,000 CFM of replacement HVAC equipment and associated chillers and humidifiers, serving an ISO & cleanroom. The project included a phased approach to limit construction and the cleanroom being offline from production.

Various Cleanroom Construction, Private Clients, *Various Locations*
Design of mechanical systems to meet the client's ISO air classifications and environmental controls including contamination control and mitigation.

Egress Evaluation and Report, Kitchen and HVAC Evaluation, *Private Federal Contractor, NH*
Through collaboration with the architectural team, egress paths were established minimizing the modifications to the existing mechanical systems. Kitchen modification drawings developed as a result of the existing system evaluation.

Mechanical System and Ventilation System Controls, *Private Client, Private Location*
HVAC system airflow measurements and evaluation. The use of theatrical smoke to visually see the airflow patterns within the facility and developed system modifications to eliminate the pooling of NOx gases within the facility.

Private Clients, *Various Locations in NH*
Indoor Air Quality assessments and guidance at various locations around NH to provide an increased level of safety to building occupants during the COVID-19 pandemic.

Whitaker Place, Penacook Assisted Living Facility, *Penacook, NH*
Provided construction administration services for the addition and renovation of Whitaker Place.

DOUGLAS V. BRODEUR, PE

Senior Civil Engineer

dbrodeur@ttgae.com | (603) 228-1122 | hlturner.com

EXPERTISE

- Land Development Design & Engineering
- Land Use Regulations/ Permitting
- Construction Oversight & Contract Administration
- Interdisciplinary Coordination
- Utility Design

EXPERIENCE

General: 23 years
Project: 23 years

EDUCATION

University of New Hampshire
Civil Engineering, BS

PROFESSIONAL REGISTRATION

- Massachusetts..... PE #56168
- New Hampshire..... PE #12986
- NHDES SDS 1619 (Septic)
- SIT 605
- NCEES Record ID 21-654-50

AFFILIATIONS

- ASCE: American Society of Civil Engineers
- NSPE: National Society of Professional Engineers
- NCEES: National Council of Examiners for Engineering & Surveying
- GSOWA: Granite State On-site Wasterwater Association
- F&MA
- American Red Cross

The H.L. Turner Group Inc.
27 Locke Road
Concord, NH 03301

PROFESSIONAL EXPERIENCE

Mr. Brodeur has over 20 years of experience as a civil engineer and project manager. He is skilled in project management permitting, civil/site design, hydrologic and hydraulic studies of water sheds, and construction management and oversight. He's worked on a variety of projects including commercial and industrial site plans, residential apartment complexes and subdivisions, retail outlet malls, roadways, natural gas pipelines and flood remediation studies.

EXPERIENCE

Lower Bay Road, *Sanbornton, NH*
Chief engineer assigned to a 1.1-mile full road redesign, funded by the NHDOT state aid highway program, which was originally a state class II right-of-way and accepted as a class IV rural highway by the Town of Sanbornton upon completion. Responsibilities included landowner negotiation and acquisition of temporary and permanent easements, drafting the planning and engineering report per NHDOT requirements, project drawings and specifications, permitting including NHDES Wetlands Dredge and Fill and Comprehensive Shoreland Protection approvals, preparation of bidding documents, assisting the town with contractor selection, and oversight of construction work for quality and budget management.

Amherst Subaru, *Amherst, NH*
Engineering manager tasked with all design, permitting, and construction specifications for a 30,000-square-foot Subaru dealership building. The site consisted of over 5 acres of vehicle storage/parking, with 70% impervious coverage in a glacial sand outwash plain. Midway through design and permitting the site testing identified poly fluoroalkyl substances (PFAS) contamination complicating the process and causing a necessary redesign and permitting of the entire stormwater management system, which was based on surface and subsurface infiltration systems.

Merrimack Premium Outlets, *Merrimack, NH*
Design engineer assigned to prepare plans and specifications for a 12-building, 560,000-square-foot retail outlet mall. Permitting work included preparation of documents for NHDES Alteration of Terrain, Wetlands Dredge & Fill, Approval for Construction of a Dam, and Sewer Connection approvals. Design work encompassed hydrologic and hydraulic computations, stormwater management reports, grading, and roadway analysis, storm sewer, sanitary sewer, and other utility designs.

Goffstown Kindergarten, *Goffstown, NH*
Project manager in charge of the design and permitting of the 'Glen Lake' school site plans, in the last community in the United States to not have a public kindergarten. The original location for the school [Tibbetts Hill Site] was abandoned due to it being mired in lawsuits, additionally, the project was politically controversial in the community with a well-organized opposition group. Work included the vetting of the site, conceptual development, permitting documents (including NHDES Alteration of Terrain, Wetlands Dredge & Fill, and Septic Construction Approval), presentations and courtesy approvals of both Select Board and Planning Board, and full design plan and specification development for construction in concert with the project architect.

Years of Experience: 13

Shawn Proulx, PE

Senior Electrical Engineer

Education: B.S., Electrical Engineering, University of Massachusetts, Lowell, 2009

Registrations: Professional Engineer: NH 16430, VT 34688, ME 17549, MA 51181

Mr. Proulx has 13 years of electrical engineering experience working on various projects, including for higher education, retail, multi-family/high-rise, federal, office, medical, wastewater, manufacturing, and assisted living facilities.

Hetzel Hall, University of New Hampshire, Durham, NH. Electrical Engineer of Record for the design and construction of renovations to a historic four-story building. The project redesigns and extensively renovates the interior of this brick residence hall. The existing HVAC system is from a campus centralized plant and close coordination with ownership was required. The large electrical switchgear was designed and ordered at the beginning of the project to accelerate the schedule based on supply chain issues at the time of design. Responsible to provide senior-level engineering and review of electrical deliverables.

Oyster River Middle School, Durham, NH. Electrical Engineer of Record for the design and construction of a four-story, state-of-the-art middle school. Oyster River Middle School is the first energy net-positive school in the State of New Hampshire. The project consisted of one four-story school building, new turf soccer field, and two large solar arrays (one covering the roof of the school and another mounted atop a vehicle canopy). Responsible to provide senior-level engineering and review of electrical deliverables.

Trottier Hall, Rivier University, Nashua, NH. Electrical Engineer of Record for the design and construction of an existing facility to provide a new Health Science nursing program at the University. This building was converted from existing outdated science classrooms to nursing simulation labs to house the latest technology for learning. The project was heavily populated with the newest AI (Artificial Intelligence) technology for hands-on teaching/learning. Responsible to provide senior-level engineering and review of electrical deliverables.

Science Center, Rivier University, Nashua, NH. Electrical Project Manager for the design and construction of a two-story state-of-the-art science center. Worked directly with architects, school administration, construction manager and electrical contractor to design and coordinate design that was a focal point for the college campus. The project was heavily populated with the newest audio/visual technology for remote teaching and documentation. Responsible to provide senior-level engineering and review of electrical deliverables.

MEP FMS Building, NHARNG, Littleton, NH. Lead Electrical Engineer for a 27,000-SF field maintenance shop for military vehicles. Responsible for sizing electrical service and the generator; design of power and telecommunication systems, lighting, fire alarm, public address, and site utilities; and coordination with utilities, the architect, and the owner. Designed systems to comply with LEED Silver requirements.

Armory Sustainment Project, VTARNG, Newport, VT. Lead Electrical Engineer to design a new electrical service upgrade, power distribution system, and electrical connections to new electric boiler equipment in the 20,000-SF facility. The project replaced telecommunications and data infrastructure. Coordinated with utilities, the architect, and the owner.

MEP Readiness Center, VTARNG, Bennington, VT. Lead Electrical Engineer to complete the design for a 40,000-SF building consisting of military offices, a vehicle storage garage, and a general-purpose maintenance bay. Responsible for sizing the electrical service and generator; design of power distribution, telecommunication systems, and site utilities; coordination with utility, architect, and owner. Designed systems to meet LEED Silver requirements.

DuBois & King inc.

TURNER GROUP

Appendix – Sample Report

3.0 EXTERIOR WALL AND ROOF EVALUATION

OBSERVATIONS

Roofing

The roofing on the building is standing seam metal.

Exterior Walls

The exterior walls have a split face concrete masonry unit (CMU) band that extends to the top of the windows (8' at the east offices and garage, 10' at the west offices) along the exterior wall. The upper section (4') of the wall is metal panel.

The majority of the exterior walls were noted to be in good condition. There is some cracking in the CMU. The cracking typically occurs at the corner of a wall penetration.

The windows have a precast concrete sill. Some of the sills have started to deteriorate.

Framing/Structure

The building is a pre-engineered metal structure with a gable style sloping roof.

Foundation

The foundation for the building is cast in place concrete.

RECOMMENDATIONS

Roofing

The standing seam metal is in good condition.

Exterior Walls

The metal panels on the building were noted to be in good condition. There are a few areas of wall panels that have rust showing.

	B	C	D	E	F	G	H	I	J	K
1										
2	Observation	Recommendation	System Condition	Deficiency Priority	Year Installed	Remaining Useful Life (Years)	Typical Useful Life (Years)	Recommended Year for Replacement	Opinion of Cost for Replacement	Opinion of Cost for Replacement @ End of Useful Life & 3.5% Inflation
3										
4	The roofing on the building is standing seam metal.	Typical life expectancy for a standing seam metal roof is 40-50 years.	Good	7	1989	15	30-40	2035	$127,800	$214,110
5										
6	The framing is a pre-engineered metal building with steel bents, roof purlins and wall girts.	No issues noted.	Good	4	1989	3	50	n/a	$0	$0
7										
8	The upper section of the walls is a metal panel.	Some of the panels have started to rust and should be cleaned and painted.	Good	7	1989	10	30-40	2030	$4,800	$6,771
9										
10	There are cracks in the CMU wall due to expansion and contraction	Rout, clean and install sealant.	Adequate	3	1989	1	50	2021	$6,800	$7,038
11										
12	The sealant in the wall joints is failing and needs to be replaced.	Remove and replace the sealant	Fair	3	1989	1	20	2021	$7,800	$8,073
13										
14	The foundation for the building is cast in place concrete.	No issues noted.	Good	7	1989	50+	50+	n/a	$0	$0
15										
16									**$147,200**	**$235,991**
17										

Cracked CMU Above and Below the Windows

Damaged Siding at Overhead Door

TURNER GROUP

Supporting Our Client's Goals
Through Innovative Thinking
and Practical Solutions

ARCHITECTS • ENGINEERS
BUILDING SCIENTISTS

Concord, NH | 603.228.1122 | hlturner.com

TOWN OF NORTHFIELD

RFP: FACILITY CONDITION ASSESSMENT

May 1, 2024

BUREAU VERITAS | CHEYENNE IRBY
6021 UNIVERSITY BOULEVARD, SUITE 200, ELLICOTT CITY, MD 21043
P 800.733.0660 | CHEYENNE.IRBY@BVNA.COM

May 1, 2024

Town of Northfield
Attn: Stephanie Giovannucci
21 Summer Street
Northfield, NH 03276

RE: RFP: Facilities Condition Assessment

Dear Ms. Giovannucci:

Bureau Veritas Technical Assessments, LLC (Bureau Veritas) is pleased to provide the Town of Northfield with the enclosed proposal in response to the RFP: Facilities Condition Assessment. Bureau Veritas understands the requirements of the RFP and is qualified to perform the services.

Proven Experience | Facility Condition Assessments are a core service of Bureau Veritas. We have completed thousands of projects with more than 800 million square feet of space in the last five (5) years for State and Local Municipalities across the country. Bureau Veritas is a leading architectural, engineering, and environmental consulting firm specializing in facility assessments, preventive maintenance studies, and long range capital planning. Bureau Veritas positions itself as a non-biased third party representative that typically acts as an agent on behalf of the client's best interest. Our services are not influenced on any type of follow-on or design work that my occur after our initial assessment services. We remain impartial consultants who's goal is to provide the Town with the most accurate data for decision intelligence.

Highly Qualified Team | Bureau Veritas is an architecture and engineering firm focused solely on building lifecycle and capital planning studies, with more than 800 building professionals nationwide. Bureau Veritas has over 30 years of experience conducting Facility Condition Assessments. We have provided similar services for the following similar clients:

- City of Concord, NH
- City of Exeter, NH
- Town of Acton, ME
- Eversource Energy, NH
- Town of Atkinson, ME
- City of Burlington, VT
- City of Barnstable, MA
- Town of Yarmouth, MA
- Town of Weymouth, MA
- City of Albany, NY
- Town of Oak Bluffs, MA
- City of Cambridge, MA
- Town of Yardmouth, MA
- Town of Falmouth, MA
- Town of Dennis, MA
- State of Connecticut Military Department
- City of Danbury, CT
- City of Hartford, CT
- City of Providence, RI
- Town of Brookhaven, NY

Database Deliverable | In addition to an assessment report, Bureau Veritas will be delivering a database, called AssetCALC, that will include all assets within the Town. The assets can be organized by system, plan type, or uni-format. The asset data can be ranked, graded, and prioritized based on set parameters. AssetCALC will give the Town the ability to slice and dice the data in actionable ways which will allow for flexible capital planning and analysis purposes. The database will allow a greater ability to analyze the data that is not possible from a narrative report.

The following pages detail our history, similar project experience, our key personnel and team, and our approach to your unique project. Bureau Veritas is committed to working with the Town to provide the highest possible quality of service. We appreciate the opportunity to present our qualifications for this project and look forward to working with the Town. I am available at (410) 533-6988, or at Cheyenne.Irby@bureauveritas.com to further discuss our qualifications.

Sincerely,

Cheyenne Irby
Associate Vice President

BUREAU VERITAS
6021 UNIVERSITY BOULEVARD, SUITE 200, ELLICOTT CITY, MD 21043
P 800.733.0660 | WWW.BVNA.COM

TABLE OF CONTENTS

1. EXECUTIVE SUMMARY & FIRM OVERVIEW

INTRODUCTION

Bureau Veritas Technical Assessments LLC (BVTA) has over 30 years of experience providing assessment services to clients from a wide variety of industries and economic sectors. Our institutional focus on facility assessments, impartiality, national reach with local advantages, and technical and procedural innovations make us a nationwide leader in facility assessment services and a first choice service provider for clients across the United States.

Facility Assessment Focus

Focusing only on facility-related assessment services has allowed BVTA to calibrate our process to give clients the exact information needed to capital plan, create preventive maintenance procedures, identify immediate and reserve needs, and prioritize needs and deficiencies. We are experts in understanding what is required to assess and create a plan for maintaining a facility into the future.

Client Representative

As a neutral third-party providing impartial engineering judgments detached from any follow-on work or services, we offer technical assessment services focused on providing our clients with the most accurate information for making critical decisions regarding the future and life cycle of their buildings. Our impartiality sets us apart from many design, planning, and construction firms.

International Firm with a National and Local Footprint

BVTA is a national, US-based building and infrastructure division of international firm Bureau Veritas, which has over 8,000 registered engineers and architects, certified energy managers, project managers, and assessors throughout North America. This vast source of technical expertise allows for consistent, efficient, and accurate services provided to our clients, and frequently obviates the need to sub-contract. Bureau Veritas' thousands of technical staff and dozens of regional offices provide us the ability to be local to almost any city in the country.

Technical and Process Innovations

- **Proprietary Database Solution**—BVTA's assessment reports are accompanied by a live database called AssetCALC™ housing all information collected during the assessment.
- **Digital Data Collection**—During field assessments, all data are collected efficiently on iPads. Asset data such as location, age, location, condition, serial number, and photo can be associated with a reference page allowing for easy viewing and quality assurance.
- **Benchmarking**—Using Facility Condition Index (FCI) scores, we compare the needs of all facilities within a portfolio against each other, to more accurately evaluate facility needs and prioritize capital projects.
- **Breakout Needs by Plan Type**—During our assessment, facilities are broken down into their component parts: windows, roof, boiler, etc. Age and condition of each component is established as well as a reserve term, and each component receives a plan type categorization to allow a finer level of prioritization.
- **Accurate Cost Estimating**—We use multiple instructional sources for accurate cost estimating as well as localized personal experience based on region and building type. Our Project Management division deals with cost estimating daily, and costs are maintained in our AssetCALC™ database and routinely updated.
- **Quality Assurance and Quality Control**—All assessment data are processed through multiple levels of senior engineers and digital sources. After upload to the database, another layer of quality control is completed at a universal level across all collected assets. A senior engineer then reviews all data for quality control before release to the client.

PROJECT UNDERSTANDING

We understand that a key factor to performing FCAs is the evaluation of physical needs and accurate forecasting for capital repair and replacement budgets. Pre-emptive measures to manage maintenance budgets and programs are essential in ensuring the elimination of potential issues, which can range from deferred maintenance, or premature replacement of building systems that can prove costly.

The properties to be assessed include:

- Town Hall
- Police Station
- Highway Garage and outbuildings
- Transfer Station

BVTA'S QUALIFICATIONS

Facility Condition Assessments (FCA) are one of BVTA's core services. We've been performing FCAs for over 30 years, with over 700 million square feet assessed in the last five years.

Our proposed project team includes Registered Architects, Professional Engineers, and building condition experts with an average of 20 years of relevant experience providing facility assessments. These professionals develop and write the assessment report and coordinate logistics and document collection for each assessment. Bureau Veritas also has an internal information technology group that supports the development of field data collection programs and client database applications.

BVTA'S APPROACH

Our approach will be to follow ASTM E2018-08 Standard Guide for Property Condition Assessments along with the documentation provided by the Town. Our project plan details three distinct phases of the project:

- **Data gathering phase**—BVTA's technical staff will review the documentation, drawings, and any past condition reports or engineering analyses provided by the Town.
- **Site phase**—BVTA will upload the data to our iPad-based assessment software. Where new assets are discovered, the new asset information will be collected while at the facility. The Assessment Team will conduct a walk-through survey of the facility and site to observe systems and components, identify physical deficiencies, and formulate recommendations to remedy the physical deficiencies.
- **Report phase**—BVTA will provide a complete Facility Condition Assessment (FCA) report for each facility. BVTA will rate the condition of each asset. Reports will reflect a 30-year capital plan based on BVTA's building system evaluation. The FCA will also include cost estimates for repair and replacement of materials and systems. Our data can be outputted in a format that is compatible with the Town reporting requirements. BVTA will provide draft reports electronically via Adobe Acrobat PDF.

All data collected on this project will utilize the AssetCALC™ platform. AssetCALC™—a proprietary system developed, licensed, maintained, and supported solely by BVTA—unites BVTA's experienced field data collection methods with advanced planning and reporting tools, construction cost library, location mapping features, digital photo management, and document storage. AssetCALC™ data can be exported to an Excel, XML, or an ODBC database format compatible for upload into most CMMS or work-order systems.

BVTA will deliver to the Town a live asset management plan that can be maintained and kept up-to-date by the Town staff, to whom we will provide training. The data from the FCA can be exported to Excel or ODBC Database for data migration to most CMMS or work-order systems.

BVTA's proposal fully complies with the requirements as defined in this RFP, and we do not have exceptions to note. We look forward to working with the Town to achieve its goals for this project.

Company Overview

Profile

Bureau Veritas Technical Assessments LLC ("Bureau Veritas" or "BVTA") is a professional services consulting firm providing comprehensive architectural, engineering, energy, and environmental solutions. Our team includes over 800 building professionals nationwide, including Registered Architects, Professional Engineers, Certified Energy Managers, Project Managers, Environmental Professionals, Building Systems Consultants, and Code Compliance Experts.

Annually, Bureau Veritas conducts thousands of assessments for Multifamily, Commercial, Industrial, Government, and Educational clients. Having successfully completed billions of square feet of building assessments, we have developed a proven and efficient methodology for the performance of field assessments and data collection.

Bureau Veritas' recommendations are based on knowledge of property conditions, life-cycle analysis, regulations, and client objectives. Bureau Veritas' subject matter expertise and understanding of buildings, parks, and property sites forms the foundation on which we team with clients to create and implement facility and portfolio management solutions.

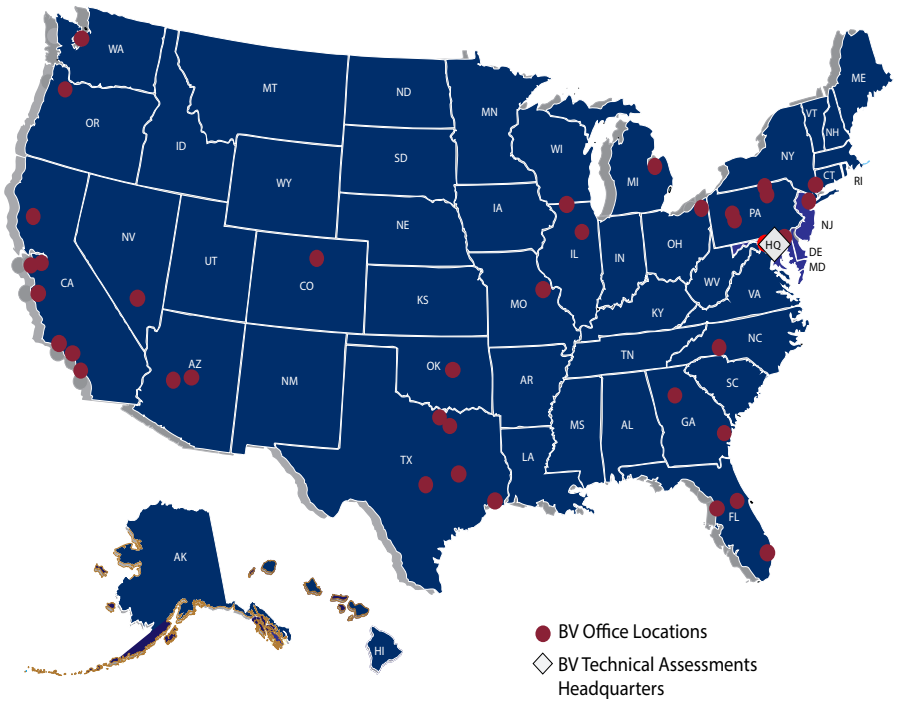
ASSET MANAGEMENT SERVICES

- Facility Condition Assessments
- Capital Planning Reports
- Accessibility Compliance
- Equipment and Asset Inventory
- Barcoding, QR Coding, and Tagging
- CMMS Consulting
- Preventive Maintenance Plans
- Space Analysis Studies
- Energy Audits and Modeling
- Commissioning (Cx and Rx)
- Construction Monitoring
- Project Management
- Plan and Document Review

What We Do

Company Information

Name of Company:	Bureau Veritas Technical Assessments LLC
Year Founded:	1828
Headquarters Address:	1 Distribution Center Circle #1 Littleton, MA 01460
Primary Contact:	Cheyenne Irby Executive Vice President
Telephone:	**(410) 533-6988**
Email:	**Cheyenne.Irby @bureauveritas.com**
Website:	bvna.com



2. PROJCET APPROACH AND METHODOLOGY

Project Understanding

BV understands that the Building/Facility Condition Assessment (FCA) project with the Town of Northfield ("the Town") will:

- Include a comprehensive assessment of all sites, buildings, building systems, and infrastructure.
- Follow ASTM E2018-15 Standard Guide for Property Condition Assessments, as applicable.
- Determine the present condition and estimated life expectancy of various building systems and components.
- Identify and document present condition of all physical assets including grounds, facilities, and infrastructure.
- Recommend corrections for all deficiencies and provide cost estimates for corrections.
- Prioritize and categorize deficient conditions, associated corrective actions, and information concerning building systems and deficiency categories.
- Establish anticipated renewal and replacement costs for the various systems and components.
- Result in strategic plan for capital repairs, lifecycle component replacement, and building modernization.
- Calculate the Current Replacement Value (CRV) and Facility Condition Index (FCI) for each facility.
- Collect Equipment Inventory and nameplate data for Client properties.
- Create a Preventive Maintenance Plan to will define protocols of regular up-keep for assets.
- OPTION: Establish a protocol for FCA data to migrate/ transfer to a CMMS/IWMS system.

We understand that a key factor to performing FCAs is the evaluation of physical needs and accurate forecasting for capital repair and replacement budgets. Pre-emptive measures to manage maintenance budgets and programs are essential in ensuring the elimination of potential issues, which can range from deferred maintenance, or premature replacement of building systems that can prove costly.

Data Gathering and Interview

Our project plan details three distinct phases of the project. During each phase, we will require coordination and support from the Town's facility management.

Data Gathering Phase – BV will need the support of staff who can provide us access to drawings and records. The following is a typical list of exhibits requested.

- Inspection reports (sewer, boiler, chiller, etc)
- Building systems Maintenance Records
- Maintenance policy documentation
- Owner elected repair list (if available)
- Original building plans (can be viewed on-site)
- Capital expenditure schedules (prior or planned)
- Fire protection / life safety plans
- Rehabilitation budget and scope (draft or final)
- Certificates of occupancy / facility license
- Prior assessments
- Site plan / floor plans
- Accessibility transition plans / studies
- CMMS / IWMS data set

In addition to the drawings and records, we will supply a pre-survey questionnaire for each facility or site. Our expectation is that someone with knowledge of maintenance and operations of the facility will complete this survey and be prepared to discuss it with us while on-site.

Site Phase – BV will need support in the form of escorts while in the facilities to help us access mechanical areas, to discuss with us any known issues in the facility, and to answer other technical questions.

Report Review Stage – BV will provide a complete deliverable for each building.

BV will become familiar with the Town's existing Project Directory - property list and contact directory for each location. We will contact or interview the facilities contacts as part of tour process to determine current use requirements and priority of properties based on agency goals.

Working with the Town, we will develop procedures to gain Facility Access. Our visits will be coordinated and pre-approved by the Town prior to the visit. We will work with the Town to establish a protocol that will ensure that our activities will have minimal disruption to the operation of each facility and will maintain a safe work environment.

Technical Approach

Prior to assessments beginning, BV will conduct a Kick-Off Meeting to review requirements and to consolidate exhibits such as drawings and prior completed reports.

During the term of the project, BV will conduct regular Progress Meetings to maintain open communication with the entire project team and the Town. BV will lead with an agenda that includes a focus on work plan, schedule, and project needs. This will permit the opportunity to proactively address challenges encountered, so that course adjustments may be made. Each meeting will conclude with task assignments, schedules, and goals to be met.

BV will provide the Town with a written status report that tracks and monitors the progress of the assessments against the schedule submitted.

BV has allocated time for regular teleconference meetings and the following in-person meetings: Kick-Off Meeting, Pilot Review Meeting, and a Final Findings Presentation meeting. Any additional in-person meetings will be on a time and expense basis.

FIELD ASSESSMENTS

The Assessment Team will conduct a walk-through survey of the facility and site to observe systems and components, identify physical deficiencies, and formulate recommendations to remedy the physical deficiencies.

As a part of the walk-through survey, the Team will survey 100% of each facility. BV will survey the exterior and grounds, including the building exterior, roofs, sidewalk/pavement, and recreational/other areas as applicable. They will interview the building maintenance staff about the property's historical repairs and replacements and their costs, level of preventive maintenance exercised, pending repairs and improvements, and frequency of repairs and replacements. The Assessment Team will develop opinions based on their site assessment, interviews with the Town's building maintenance staff, and interviews with relevant maintenance contractors, municipal authorities, and experience gained on similar properties previously evaluated.

The Team may also question others who are knowledgeable of the property's physical condition and operation or knowledgeable of similar systems to gain comparative information to use in evaluation of the subject property.

The Assessment Team will review documents and information provided by the Town's maintenance staff that could aid the knowledge of the property's physical improvements, extent and type of use, and/or assist in identifying material discrepancies between reported information and observed conditions.
The facility condition assessment will will include the Town identified assets and will focus on the following facility and site systems and components:

Site + Infrastructure

- Topography: Observe general topography and note any unusual or problematic features or conditions observed or reported.
- Paving, Curbing, and Parking: Identify material types of paving and curbing systems at the property.
- Flatwork: Identify material flatwork at the property (sidewalks, plazas, patios, etc.).
- Landscaping and Appurtenances: Identify material landscaping features, material types of landscaping (fences, retaining walls), and site appurtenances (irrigation systems, fountains, lighting, signage, ponds).
- Utilities: Identify type of material utilities provided to the property (water, electricity, natural gas); and assess condition, physical deficiencies, life cycle repair, and replacement issues.

Recreational Facilities:

- Identify any material on-site recreational facilities such as athletic fields, swimming pools, spas, tennis or basketball courts, jogging or bicycle paths, etc. Observe the general conditions and note any reported physical deficiencies or any unusual items or conditions observed or reported.

Tunnel Systems

- The BV team will visually evaluate the condition of underground tunnel systems including the integrity of the concrete box, mounts, piping, ventilation, lighting, electrical distribution, wiring trays, and insulation. BV will report on corrosion of reinforcement and/or degradation of concrete and out structural review will include noting any cracked segments or other visible seismic issues.
- In the event of failure mechanisms observed, ranging from soil/rock failure to the concrete lining material failure, BV may suggest additional testing that may include structural stability testing and soils testing that will help develop rehabilitation or replacement strategy for tunnel assets.

Structural Frame + Building Envelope

- Identify material elements of the structural frame and exterior walls, including the foundation system, floor framing system, roof framing system, facade or curtain-wall system, glazing system, exterior sealant, doors, commercial overhead doors, sliders, windows, and stairways, etc.
- Observe general conditions and note any physical deficiencies identified or unusual items or conditions observed. Observations may be subject to grade, and rooftop vantage points.
- Visually inspect observable areas for cracking and moisture infiltration as well as areas of apparent foundation settlement and displacement.
- In the event more information or exploratory testing is required, in order to provide remedial measures, the report may include recommendation for additional investigative testing (Tier 1 or Tier 2).

Wall Evaluation

- Photograph elevations and details both from internal and external vantage points, as well as from adjacent structures where possible.
- Observe representative operable and fixed panels on all facades, operating a representative sample of units to assess hardware and visually inspect exterior conditions and condition of waterproofing seals.
- Assess curtain wall condition to determine water infiltration, damage, caulk degradation, metal panel degradation, stone degradation and anchoring, and other related curtain wall issues.

Curtain Wall – As Required

- Review curtain wall condition and a sampling of fixed panels on facades to assess hardware and visually review exterior conditions and the condition of waterproofing seals, where accessible without the use of lifts, ladders, scaffolding, suspension devices, or the like; may include observations from internal and external vantage points, as well as adjacent structures. Observations are limited to grade and may include accessible balconies or rooftop vantage points.
- Review provided drawings and records of repair, replacement, and maintenance of framing and glazing.

Roofing (Non-Invasive Visual)

- Identify material roof systems (roof type, reported age, slope, drainage) and any unusual roofing conditions or rooftop equipment.
- Observe general conditions of the roof system (membranes, attachment methods, flashings, counter flashings, pitch pans, gravel stops, parapets, miscellaneous appurtenances, insulation).
- Observe for evidence of material repairs, significant ponding, or evidence of material roof leaks. Note if a roof warranty is in effect. Note any physical deficiencies identified or unusual items observed or reported.
- Identify material rooftop equipment or accessories (antennas, lightning protection, HVAC equipment, solar equipment). Include any material problems reported.
- BV understands that the Town will provide OSHA compliant ladders, lifts and/or scaffolding (depending on roof type) so that the Project Manager may safely access roof areas. If requested, BV can provide a quote for lift and/or ladder access as needed. Observations will be limited to readily accessible areas.

Plumbing

- Identify material plumbing systems at the property including domestic water supply, sanitary sewer, or any special or unusual plumbing systems (such as water features, fuel systems, gas systems, etc.).
- Identify type and condition of restroom fixtures, drinking fountains and/or other plumbing equipment.
- Observe general conditions and note any physical deficiencies identified or unusual items or conditions observed. Include any reported material system inadequacies.

Heating

- Identify material heat generating systems at the property.
- Observe general conditions, identify reported age of the equipment, note past material component replacements/upgrades, note apparent level of maintenance, and identify if a maintenance contract is in place. If heating equipment is not operational at the time of the walk-through survey, provide an opinion of the condition to the extent reasonably possible.
- Identify and observe any special or unusual heating systems or equipment present (fireplaces, solar heat, etc.) and note any reported material problems or inadequacies.

Air-Conditioning + Ventilation

- Identify the material air-conditioning and ventilation systems at the property. Include material equipment such as cooling towers, chillers (type of refrigerant used), package units, split systems, air handlers, thermal storage equipment, etc.
- Identify material distribution systems (supply and return, make-up air, exhaust) at the property.
- Observe general conditions, identify equipment reported age, note past material component upgrades/ replacements and apparent level of maintenance, and identify if a maintenance contract is in place (contractor name). If AC and ventilation systems are not operational at the time of the walk-through survey, provide an opinion of the condition to the extent reasonably possible.
- Observe general conditions and note any physical deficiencies identified or unusual items or conditions observed. Additionally, include any material reported system inadequacies or operating deficiencies.
- Identify and observe any special or unusual air-conditioning and ventilation systems or equipment (cold storage systems, special computer cooling equipment, etc.) and note any material reported problems or system inadequacies.

Electrical

- Identify the electrical service provided and distribution system at the property.
- Include material switchgear disconnects, circuit breakers, transformers, meters, emergency generators, general lighting systems, and other such equipment or systems.
- Observe general electrical items (distribution panels, type of wiring, energy management systems, emergency power, lightning protection).
- Observe general conditions and note any physical deficiencies identified or unusual items or conditions observed. Also, note the presence of any special or unusual electrical equipment, systems, or devices at the property, and include reported material problems or system inadequacies.

Life Safety + Fire Protection

- Identify material life safety/fire protection systems at the property, including sprinklers and stand pipes (wet or dry), fire hydrants, fire alarm systems, water storage, smoke detectors, fire extinguishers, emergency lighting, stairwell pressurization, smoke evacuation, etc.
- Observe general conditions and note any material physical deficiencies identified or unusual items or conditions observed or reported including any reported system inadequacies.

Elevators + Vertical Transportation

- Identify vertical transportation systems at the property. Include the equipment manufacturer, equipment type, location, number, capacity, etc.
- Observe elevator cabs, finishes, call and communication equipment, etc.
- Identify the company that provides elevator/ escalator maintenance at the property. Observe general conditions and note any physical deficiencies identified or unusual items or conditions observed or reported including any reported material system inadequacies.
- Out of Scope Issues: Performing any calculations, examination of operating system components such as cables, controller, motors, etc.; entering elevator/ escalator pits or shafts.

Interior Elements

- Identify offices, special use areas, and building standard finishes, including flooring, ceilings, walls, etc. Furnishings and fixed components will be reviewed and included in the cost estimate tables for replacements. BV will identify material building amenities or special features.
- Observe general conditions and note any physical deficiencies identified or unusual items or conditions observed or reported.

Food Service Spaces and Equipment

- Assess all food service equipment and spaces (kitchen, cafeteria, dining, serving areas). Food service equipment (fixed equipment) will be evaluated for adherence to life/ safety code and ventilation requirements as well for condition and capital replacement.

Special Systems and Equipment

- Include all special systems and equipment, such as Emergency Medical Systems (EMC), chillers, radio towers, equipment lifts, chair lifts, chemical storage or treatment areas, storage tanks, dumbwaiters, vaults, public address systems, and telephone systems.

Limited Accessibility Compliance

- Provide a general statement of the building's likely compliance to the Americans with Disabilities Act to help identify whether the Town may be exposed to issues and there is the need for further review.

Suspected Fungal Growth

- Perform a limited assessment of accessible areas for suspected fungal growth. If the presence of mold, conditions conducive to mold growth, and/or evidence of moisture. elevated relative humidity, water intrusion, and mildew-like odors is discovered, affected areas will be photographed and recommendations for any additional moisture intrusion studies will be made.

Environmental Features

- Review environmental features of the property, to include appearance, cleanliness, acoustics, ventilation, and humidity.

Lead-based Paint

- Review existing testing data and other documentation regarding lead-based paint available on site (included in the cost of the FCA); evaluate physical condition and develop cost estimates for remediation of paint necessitated by pending renovations.
- Able to provide a licensed lead-based paint inspector to conduct testing using an x-ray fluorescence analyzer at the Project as an additional service. The instrument is completely non-destructive and yields instantaneous results.

Asbestos

- Review existing testing data and other documentation regarding asbestos available onsite (included in the cost of the FCA); evaluate physical condition and develop cost estimates for remediation of asbestos likely to be disturbed by renovations.

- If asbestos testing is requested, BV will provide a licensed asbestos inspector to collect samples of suspect asbestos-containing materials at the Project as an additional service. Scope of this sampling will be determined after review of existing data, costs will be based on daily rate plus the cost of analysis.

Energy Conservation Analysis

- Consider energy conservation savings when making repair or replace recommendations and include these projects in the project prioritization.
- Able to provide an Energy Audit (ASHRAE Level I, II, or III) or Benchmarking (EnergyStar) services as an additional service.

Ranking and Classification

Based upon our observations, research and judgment, along with consulting commonly accepted empirical Expected Useful Life (EUL) tables; BV will render our opinion as to when a system or component will most probably necessitate replacement.

Accurate historical replacement records provided by the facility manager are typically the best source for this data. Exposure to the weather elements, initial system quality and installation, extent of use, the quality and amount of preventive maintenance exercised are all factors that impact the effective age of a system or component. As a result, a system or component may have an effective age that is greater or less than its actual age. The Remaining Useful Life (RUL) of a component or system equals the EUL less its effective age.

BV can rate the condition of each facility with the below rating system, or another Town-specified scale:

5 **Excellent -** No visible defects, new or near new condition, may still be under warranty if applicable

4 **Good -** Good condition, but no longer new, may be slightly defective or deteriorated, but is overall functional

3 **Adequate -** Moderately deteriorated or defective, but has not exceeded useful life

2 **Marginal -** Defective or deteriorated in need of replacement; exceeded useful life

1 **Poor -** Critically damaged or in need of immediate repair; well past useful life

BV can also include alternative categories to rank and weight priorities as required by the Town, such as functional deficiencies, aesthetics, time-based urgencies, and other mission critical factors. The analysis will include all cost observations ranked by Priority Classes.

The five classes below are typical but can be altered to meet your specifications and needs:

DEFICIENCY CATEGORIES/PLAN TYPES

Each deficiency identified in the Assessment shall be classified in the following manner (or other Town defined categories):

Category 1- Scheduled Maintenance: Maintenance that is planned and performed on a routine basis to maintain and preserve the condition.

Category 2 - Deferred Maintenance: Maintenance that was not performed when it was scheduled or is past its useful life resulting in immediate repair or replacement.

Category 3 - Capital Renewal: Planned replacement of building systems that have reached the end of their useful life.

Category 4 - Energy and Sustainability: When the repair or replacement of equipment or systems are recommended to improve energy and sustainability performance.

Category 5 - Security: When a system requires replacement due to a security risk or requirement.

Uniformat Categories

The deficiencies observed will be classified into categories such as those below using the Uniformat System (up to Level 4):

Level 2

A10 Foundations
A20 Basement Construction
B10 Superstructure
B20 Exterior Enclosure
B30 Roofing
C10 Interior Construction
C20 Stair
C30 Interior Finishes
D10 Conveying
D20 Plumbing
D30 HVAC
D40 Fire Protection
D50 Electrical
E10 Equipment
E20 Furnishings
F10 Special Construction
F20 Selective Building Demolition

Cost Estimating

BV's cost estimating database is comprised of RS Means data and further customized with proprietary cost tables developed by BV, based on historical and localized actual costs. BV maintains and updates our Uniformat-based cost estimating system with information received from the field. Through construction monitoring work, we have current cost data from hundreds of in-progress construction and rehabilitation projects. This data allows us to calculate costs based on local conditions to maintain a cost database that is typically more current than RS Means' models.

Each report will include a Capital Needs Analysis including an estimated cost for each system or component repair or replacement anticipated during the evaluation term. The report will provide options for repair of the deficiency, and the capital needs analysis will be presented as an Excel-based cost table that includes a summary of the description of each component, the age and estimated remaining useful life, the anticipated year of repair or replacement, quantity, unit cost and total cost for the repair of each line item.

A consolidated Capital Needs Analysis will be presented that includes all anticipated capital needs for all buildings. The cost estimate for capital deficiencies will be based on the estimate for maintenance and repair, but may at Town's option, also include project management costs, construction fees, and design fees. Project management costs, construction fees, and design fees will be derived using actual costs from previous projects. After determining these costs, we will confirm these costs with your staff.

Report Deliverables

BV will provide an in-depth report including a description of each of the building components and systems as described in the approach sections above. Each report is organized by building system and include digital photos of major systems and components and of all deficiencies identified. Reports will include current and anticipated repairs and deficiencies, recommended repair and component life-cycle replacements, and applicable options for repair or maintenance of building components.

BV will provide the following reports depending on the size of the buildings or site:

Building Condition Report – Standard: Each report will be generally organized by building system and will include an analysis of all building systems and components. Each report will include color digital photos of all major systems and components and will include photos of all deficiencies identified. These deficiencies will be summarized in a capital needs analysis table included throughout each report.

Facility Condition Index

A Facility Condition Index will be calculated for each building. This index will be a function of required repairs compared to building replacement costs. The Facility Condition Index will be generated from the data collection/capital planning database and will be updated as components age or are replaced.

Capital Plan

Reports will reflect a 5, 10, or 20-year capital plan based on BV's 20-year building system evaluation. The analysis will include a cost table sorted by building and system and ranked by priority for repair. Tables will allow for the customization of reporting and a year-by-year capital needs analysis. The report will include:

- An Executive Summary with graphic presentation of results to provide a quick, user-friendly summary of the property's observed condition and estimated costs assigned by category. These estimated costs shall be cross-referenced to report sections where an elaboration of cost issues will be presented.

- Components observed that are exhibiting deferred maintenance issues and estimates for immediate and capital repair costs based on observed conditions, available maintenance history and industry-standard useful life estimates. If applicable, this analysis will include the review of any available documents pertaining to capital improvements completed within the last five-year periods, or currently under contract. BV shall also inquire about available maintenance records and procedures and interview current available on-site maintenance staff.
- Recommended schedule for replacement or repairs (schedule of priorities).
- Digital photographs for the buildings including photos of deficiencies.
- General description of the property and improvements and comment generally on observed conditions.
- Critical repairs and life safety issues separately from repairs anticipated over the term of the analysis.
- Facility Condition Index (FCI) number for the building.

BV will submit draft reports electronically via PDF format and once approved and finalized, a program summary report is provided to include a roll-up of all prioritized capital needs across all facilities. All electronic copies of the report will include all text, deficiency tables, digital photos, and supporting documentation and report appendices.

Program-wide Report
In addition to each building report, BV will develop a program-wide report that includes a ranked system-wide Capital Plan for all facilities with programmatic conclusions and recommendations. The report includes a brief narrative description of each facility/building component and system, and discusses the current and anticipated repairs and deficiencies of all buildings assessed. The report analyses will include tables sorted by building system and ranked by priority for repair. The format of the tables will allow for the several perspectives of reporting by FCI, building, system, or priority for repair, and a year-by-year analysis of capital needs.

Equipment and Asset Inventory

During the assessment, each field team will be responsible for collection and storing the inventory and condition assessment data in an electronic format that is readily transferable to the Town's CMMS system.

BV will collect information on the major pieces of facility equipment. Specifically, the data collection will include Town-defintied assets, and also focus on the following components:

- **HVAC (level of detail for which Preventive Maintenance would be performed)**
  - Heating System
- **Identify boilers, furnaces, unit heaters and major labeled equipment**
  - Ventilation System
    - Identify the major labeled equipment; exhaust hoods, fans
  - Air Conditioning System
    - Identify the material air-conditioning components, including cooling towers, compressors, chillers, package units, roof top units, split systems and major labeled equipment. Excluded are window units, terminal units, VAV boxes, and thermostatic controls
- **Electrical**
  - Major panels only-for identification to track maintenance
  - Transformers
  - Switchgear
- **Equipment**
  - Building Automation System
- **Plumbing**
  - Pumps external to HVAC systems
  - Domestic Hot Water heaters over 80 gallons
  - Other major labeled equipment
- **Commercial Kitchen - major equipment (above approximately $2000 value)**
  - Walk-in freezer and refrigerator equipment
  - Ovens, stoves, broilers, grills
  - Reach-in refrigerators and freezers
  - Dishwashers
  - Fryers
- **Life Safety/Security**
  - High Level (system level) only-for identification to track maintenance
    - Alarm Panels
    - Emergency generators
    - Exhaust hood fire suppression
- **Vertical Transportation**

Where appropriate, the following data will be collected for each component:

- Location data
- Model
- Serial Number
- Manufacturer
- Manufactured Date

OPTION: Barcoding / QR Coding

For the above referenced equipment, BV will apply a durable barcode / QR code/asset tag with a unique number for use as an identifier in the CMMS system. We will use labels supplied by the Town or a vinyl tag for indoor applications, and a durable foil tag for outdoor use. Barcode / QR code numbers will be recorded in the database and all future work orders etc., and can be tied back in to a single piece of equipment or system.

The cost of Barcoding / QR coding assumes that we will tag equipment during the FCA process.

OPTION: CMMS Integration

BVTA will collect and store all information in our SQL database. Our database allows us to routinely update and run reports for the Town after the initial assessment is complete. This system also allows us to export the Town's FCA data into existing or future CMMS work order platforms. BVTA has experience with more than 50 CMMS platforms including: CityWorks, Lucity, Dude Solutions, Archibus, Maximo, TMA, Corrigo, Cartegraph and many more.

Preventive Maintenance Plan

BV will prepare a preventive maintenance plan for each facility based on GSA Standard, Corp of Civil Engineers Standards, Industry Standards and original Equipment Manufacturers' recommendations.

The intent of the preventive maintenance plan will be to identify required procedures and inspections required to maintain and extend the useful life of existing equipment. BV will consult with the Client to develop equipment naming conventions and to discuss options where appropriate.

The PMP will be delivered in a database or spreadsheet format and is intended to be uploaded to a CMMS or work order management system. If the data is not being uploaded into a CMMS or work order management system, BV will provide all PM schedules in a report format. The following is meant to establish details of the deliverable that BV will provide in the Preventive Maintenance Plan:

- Inventory data collection, tagging of equipment and naming conventions will be established during the data collection phase of the project.
- The inventory will obtain major component level detail.
- The deliverable for this phase of the project will include a narrative introduction, a table for each building with equipment, recommended preventive maintenance routines, frequencies and time requirements.
- BV will develop an export of the data customized for upload into the selected Maintenance Management software system.
- The preventive maintenance plan will be prepared following completion of field data collection and final entries into the client's database.
- It is important that room numbers and locations of equipment appear on work orders so technicians can easily locate equipment. During the field data collection phase BV will determine facility buildings, locations, and area naming convention to be used, and will establish room and facility numbers consistent with any existing Client conventions. Where no numbering exists, BV will recommend best practices.
- During data collection phase BV will determine Equipment nomenclature to be used (Air Handling Unit (AHU), Unit Ventilator (UV) etc.), as directed by the client.
- During the data collection and equipment inventory stage, BV will determine equipment schemes (Groups, Classifications, and Types) to be used. Conduct a meeting with the client to review individual equipment maintenance schedules (by wing, equipment type, etc).
- During data collection phase BV will gather and record equipment locations and types through visual, on-site, walkthrough and referencing facility documentation obtained from the Owner (excludes equipment in concealed spaces, crawl spaces or other inaccessible areas).
- Develop maintenance procedures referencing manufactures' printed recommendations and/or industry standards for facility equipment.
- Maintenance procedures will include:
  - Safety Points
  - Start Up Procedures
  - Appropriate tools required
  - Time to complete maintenance
  - Industry standards time to complete each maintenance work order
  - Life expectance of equipment
  - Step-by-step procedure to complete maintenance work order.

The preventive maintenance plan will include the establishment of Key performance indicators or effective maintenance including:

Planning and Scheduling

- Percent of planned work
- Schedule compliance

Work Category

- Percent of Corrective Maintenance
- Percent of Preventive Maintenance
- Percent of predictive maintenance (condition monitoring)

Work Type

- Percent of routine maintenance
- Percent of turnaround maintenance

AssetCALC™ - Assessment Software and Database Deliverable

Bureau Veritas proposes utilizing AssetCALC™ as its platform for all data collected on this project. AssetCALC™ is a cloud platform developed, licensed, maintained, and supported solely by Bureau Veritas for our clients. The use of this software is at your option and there are no licensing fees for this software.

AssetCALC™ is a web-based SQL database platform that enables users to:

- query, edit, and analyze their facility condition data
- plan immediate and short-term repairs
- budget capital expenditures throughout the lifecycle of a building or an entire portfolio

The system unites Bureau Veritas' experienced field data collection methods with advanced planning and reporting tools, construction cost libraries, location mapping (GIS) features, digital photo management, and document storage.

DATA DEVELOPMENT

AssetCALC™ includes a configurable facility hierarchy and asset data architecture - this will include all of your assets grouped based on site location, asset group, and function.

Data can be exported to an Excel, XML, or an ODBC database format compatible for upload into your CMMS, EAM, or work-order systems.

FEATURES INCLUDE:

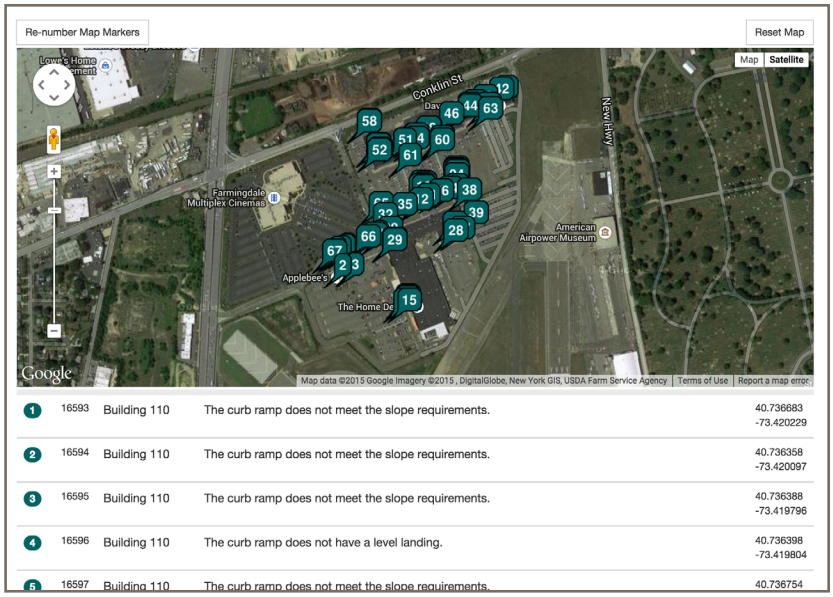
- Facility Condition Assessment access:
  - Component/system descriptions
  - Locations
  - Conditions and EUL/RUL
  - Repair and replace recommendations
  - Digital photos
  - Search and Sorting Functionality
- Prioritization of maintenance projects
- UniFormat II Cost Database
- Project Budgets and Capital Plans
- Unlimited concurrent user licensing
- Secure IT platform and back-ups
- Client is the owner of data collected and residing in the database
- Online User Training and Documentation

REPORTING

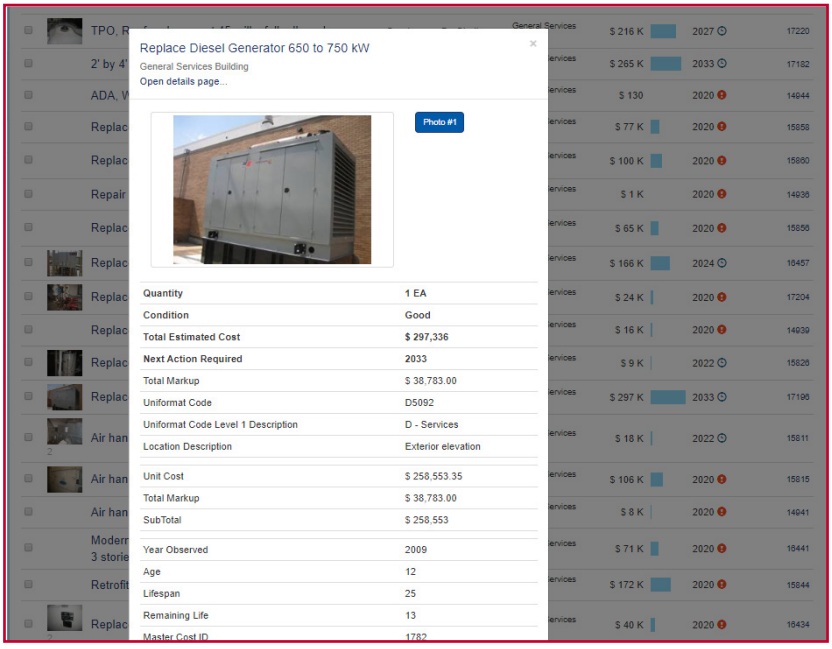
AssetCALC™ includes more than a dozen standard options for data summaries and reports:

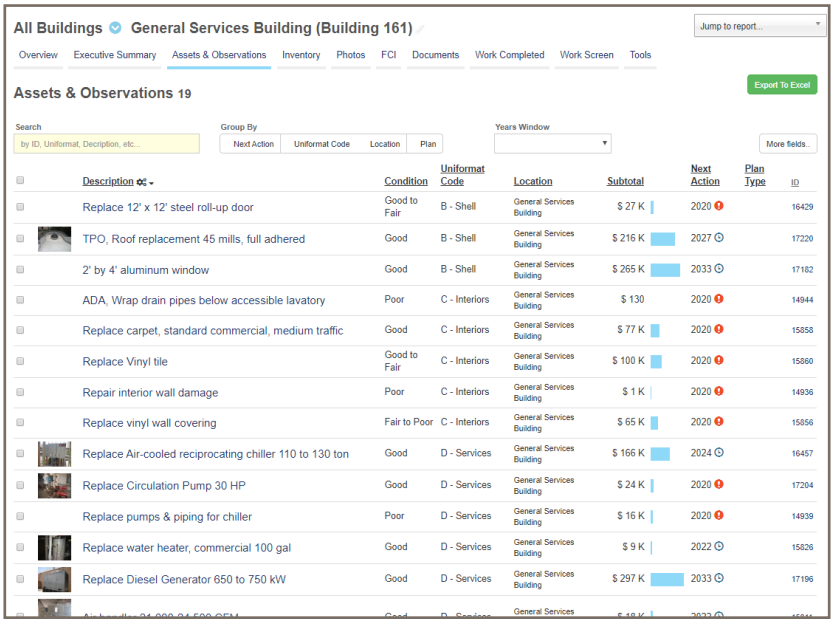
- Facility Condition Index (FCI) Reports
- Rank and Prioritize Capital Improvement Projects
- Deferred Maintenance Backlog
- Facility Queries (by building, priority, system, or dollar deficiency amount)
- Capital Budget Planning
- Year-by-Year Capital Needs Analysis
- 5, 10, or 20-Year Replacement Reserve Reports
- Custom 3rd party form automation available

Screen Shots - Screen shots of the AssetCALC™ Database and a live demo are available upon request.



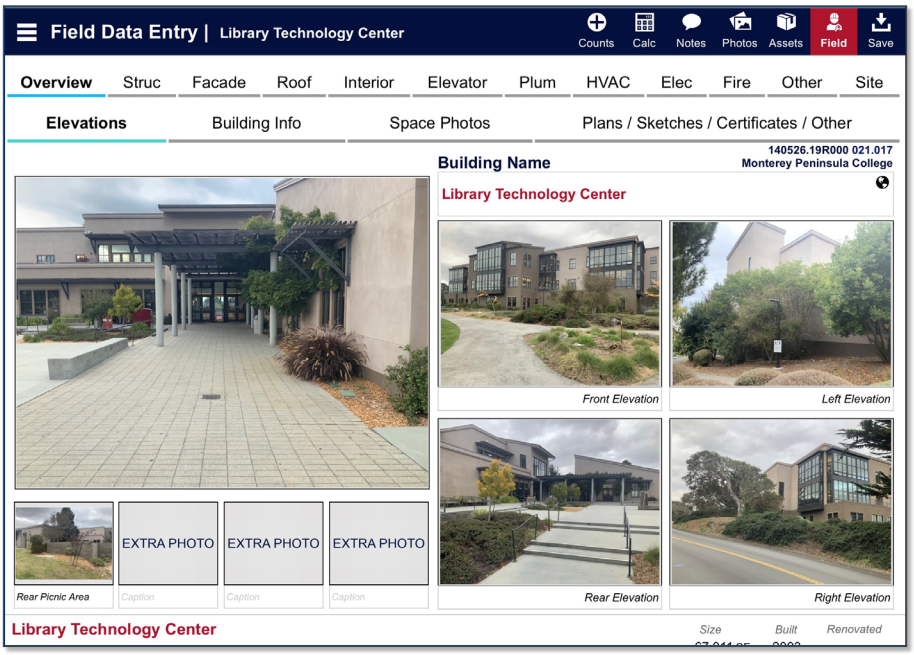
1	16593	Building 110	The curb ramp does not meet the slope requirements.	40.736683 -73.420229
2	16594	Building 110	The curb ramp does not meet the slope requirements.	40.736358 -73.420097
3	16595	Building 110	The curb ramp does not meet the slope requirements.	40.736388 -73.419796
4	16596	Building 110	The curb ramp does not have a level landing.	40.736398 -73.419804
5	16597	Building 110	The curb ramp does not meet the slope requirements.	40.736754





Description	Condition	Uniformat Code	Location	Subtotal	Next Action	Plan Type	ID
Replace 12' x 12' steel roll-up door	Good to Fair	B - Shell	General Services Building	$ 27 K	2020		16429
TPO, Roof replacement 45 mills, full adhered	Good	B - Shell	General Services Building	$ 216 K	2027		17220
2' by 4' aluminum window	Good	B - Shell	General Services Building	$ 265 K	2033		17182
ADA, Wrap drain pipes below accessible lavatory	Poor	C - Interiors	General Services Building	$ 130	2020		14944
Replace carpet, standard commercial, medium traffic	Good	C - Interiors	General Services Building	$ 77 K	2020		15858
Replace Vinyl tile	Good to Fair	C - Interiors	General Services Building	$ 100 K	2020		15860
Repair interior wall damage	Poor	C - Interiors	General Services Building	$ 1 K	2020		14936
Replace vinyl wall covering	Fair to Poor	C - Interiors	General Services Building	$ 65 K	2020		15856
Replace Air-cooled reciprocating chiller 110 to 130 ton	Good	D - Services	General Services Building	$ 166 K	2024		16457
Replace Circulation Pump 30 HP	Good	D - Services	General Services Building	$ 24 K	2020		17204
Replace pumps & piping for chiller	Poor	D - Services	General Services Building	$ 16 K	2020		14939
Replace water heater, commercial 100 gal	Good	D - Services	General Services Building	$ 9 K	2022		15826
Replace Diesel Generator 650 to 750 kW	Good	D - Services	General Services Building	$ 297 K	2033		17196

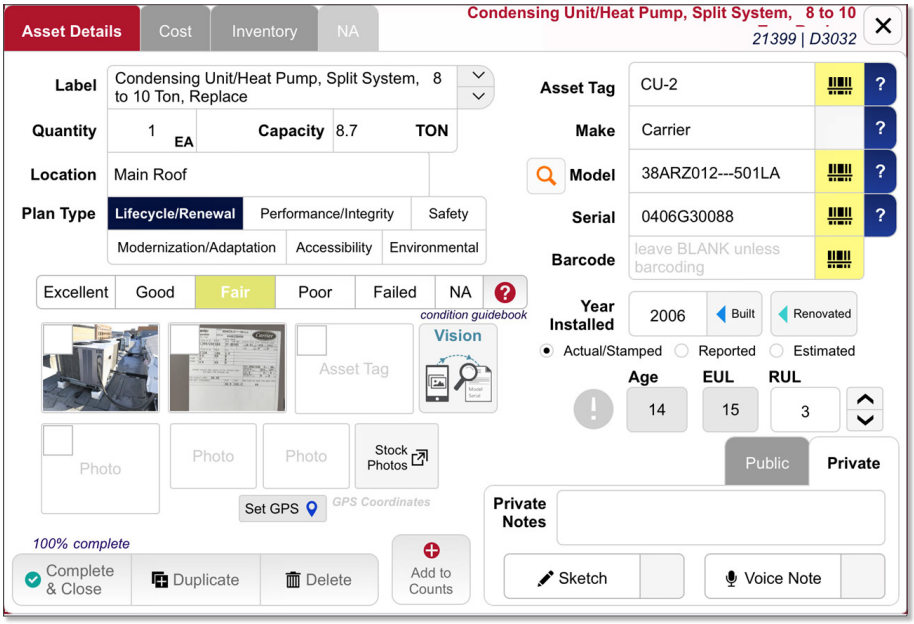
Mobile Data Collection



BVTA uses AssetCALC Go, or **ACgo**, for mobile data collection. Using handheld tablets, BVTA's field teams are able to collect assessment data efficiently and consistently in ACgo. ACgo saves our teams hours of data entry time not only by allowing for digital data collection, but by providing for the collected data to be quickly imported into AssetCALC™, BVTA's database platform. Assets are logged by plan type and condition using pre-set options to maintain consistency across multiple sites, assessments, and team members. Details such as GPS coordinates, barcode, serial number, make, model, year installed, and cost can be entered for each asset.

ACgo's features include:

- Creates assets for AssetCALC™
- Links photos to assets
- Barcodes assets (when applicable)
- Creates photolog for report
- Up-to-date Cost Library
- Calculates EUL and RUL
- Eases data entry for repetitive inventory tasks
- Allows for quick and consistent note-taking
- Utilizes digital Pre-Survey Questionnaires
- Pushes data into AssetCALC™
- Performs first level of QA



3. QUALIFICATIONS OF KEY PERSONNEL

Team Organization and Structure

Bureau Veritas' Team includes Registered Architects and Professional Engineers and with an average of over 20 years of relevant experience. These professionals develop and write the assessment report and coordinate logistics and document collection for each assessment. BV also has an internal information technology group that supports the development of field data collection programs and client database applications. Bureau Veritas is not engaged in any activity that would pose a conflict of interest to this project.

Cheyenne Irby| Project Executive
Mr. Irby will oversee all contractual aspects of the project and be available to meet with the Town for the duration of the project on an as-needed basis. He will have primary responsibility for defining the scope of engagement, and will meet regularly with BV's Program Manager and Assessment Team to assure that the Town's needs are being met, and that the project is adequately staffed, running smoothly, and on schedule.

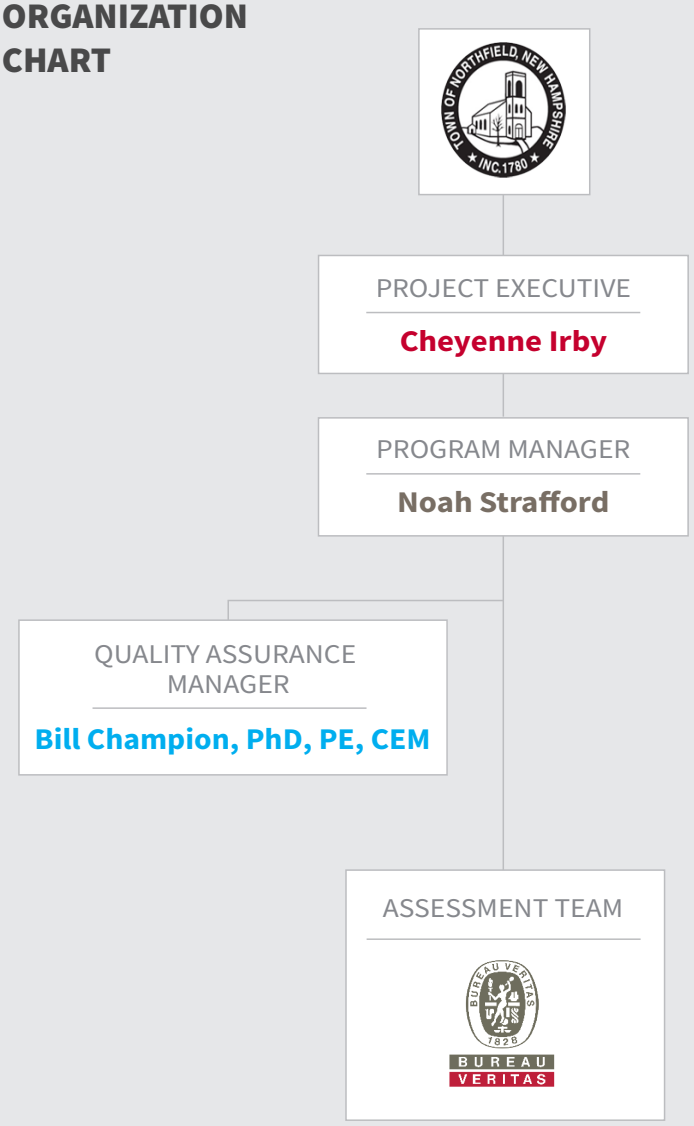
Noah Strafford | Program Manager
The Town will have a primary point of contact in Mr. Strafford throughout the duration of the project. Mr. Strafford will be responsible for the overall team performance and delivery of the overall project. He will work with the Assessment Team and the Town to assure project success. He will conference with the Town on an agreed-upon basis, and will be responsible for delivering assessment results, and for working with Northfield Staff to develop the implementation plan based on the results.

Dr. Bill Champion, PhD, PE, CEM | Quality Assurance Manager
Dr. Champion will oversee the project, assuring technical, process, and content quality. He will have direct management responsibility for all technical personnel, which will allow for quick and effective implementation of quality assurance measures both at inception and throughout the duration of the project.

Assessment Team
The Assessment Team is comprised of professional engineers having direct experience in conducting Facility Condition Assessments. They will observe and describe building systems and components, identify physical deficiencies, and formulate recommendations to remedy the deficiencies.

Resumes
Full resumes for these professionals are included on the following pages.

PROJECT ORGANIZATION CHART



CHEYENNE IRBY

PROJECT EXECUTIVE

Mr. Irby is a trained Architect with experience in the K-12, higher education, government, and retail industries, as well as facilities with specialty programing. He has experience with consulting and implementing facility services such as operational management, capital planning, feasibility studies, facility management, and asset management. Mr. Irby has a background of working with Preservation Societies in relation to Historical Structures.

PROJECT EXPERIENCE:

YEARS OF EXPERIENCE: 15

Town of Wakefield, MA
Facility Condition Assessment

City of New Haven, MA
Facility Condition Assessment

City of Danbury, CT
Facility Condition Assessment w/ Inventory

Town of Weymouth, MA
Facility Condition Assessment w/ Inventory

Town of Westerly, RI
Facility Condition Assessment w/ Inventory

City of Providence, RI
Facility Condition Assessment w/ Inventory

City of Burlington, VT
Facility Condition Assessment

Delaware County, PA
Facility Condition Assessments

City of Frederick, MD
Energy Audit

DC Department of General Services, DC
Facility Condition Assessment

Chesterfield County, VA
Facility Condition Assessment

Education
Master of Business, University of Maryland
Master of Science, Real Estate Development &
Architecture, University of Maryland
Bachelor of Science, Architecture, University of Maryland

NOAH STRAFFORD

PROGRAM MANAGER

Mr. Strafford is a “hands-on” executive with demonstrated competence in software design and enhancement; understanding markets and advising strategy; organizational development and managing change; and maximizing resources. He has experience with facility condition assessments for similar government, healthcare, higher education and municipal projects. As Program Manager, he is responsible for delivering results and is the main point of contact for the Client throughout the project.

PROJECT EXPERIENCE:

YEARS OF EXPERIENCE: 7

New Bedford Housing Authority, MA
Green Physical Needs Assessment

Town of New Bedford, MA
Facility Condition Assessment

Round Lake Area Schools, IL
Facility Condition Assessment

City of Lake Forest, IL
Facility Condition Assessment

City of La Crosse, WI
Facility Condition Assessment

Dayton Metropolitan Housing Authority, OH
Green Physical Needs Assessments and RAD

Montgomery Housing Authority, AL
Physical Needs Assessment, Energy Audit

Philadelphia Housing Authority, PA
Physical Needs Assessment

Newark Housing Authority, NJ
Capital Needs Assessment

Rochester Housing Authority, NY
Physical Needs Assessment

Richmond Housing Authority, VA
Physical Needs Assessment

New Albany, IN
RAD Physical Condition Assessment

Education
BS, Mechanical Engineering, University of North Carolina at Charlotte

BILL CHAMPION, PHD, PE, CEM

QUALITY ASSURANCE / QUALITY CONTROL

Mr. Champion is a Professional Mechanical Engineer, and certified Energy Manager with 25 years of experience in the government, retail, industrial, higher education, and K-12 Education industries. As Quality Assurance Manager, he is responsible for technical review of deliverables. He has extensive experience with projects of similar scope for government clients.

PROJECT EXPERIENCE:

YEARS OF EXPERIENCE: 30

City of Cambridge, MA
Facility Condition Assessment & Asset Inventory

City of Somerville, MA
Facility Condition Assessment

City of Schenectady, NY
Facility Condition Assessment

PSEG - Public Service Enterprise Group, NJ, NY, CT
Facility Condition Assessment and Energy Audits

State of Vermont, VT
Facility Condition Assessment

Montgomery County, MD
Facility Condition Assessment and Energy Audit

City of Columbus, OH
Facility Condition Assessment

Chesterfield County, VA
Facility Condition Assessment

City of Manassas, VA
Facility Condition Assessment

City of Wauwatosa, WI
Building Condition Assessment

Education
Doctor of Philosophy, Civil Engineering, Univ of MD
MBA, University of Rochester
MS, Mechanical Engineering, State University of NY
BS, Mechanical Engineering, State University of NY

Registration
PE | MD #40120; NY #08786;
DC #PE906172
Certified Energy Manager #16649

JUSTIN DUNN
ASSESSMENT TEAM

PROJECT EXPERIENCE:

City of Providence, RI
Facility Condition Assessment

Vermont Buildings & General Services, VT
Facility Condition Assessment

State of Rhode Island, RI
Facility Condition Assessment

County of Chester, PA
Facility Condition Assessment

Eversource - CT, MA, NH
Facility Condition Assessment

YEARS OF EXPERIENCE: 8

Education
Bachelor of Arts, Government, Colby College

MARY ENDSLEY, RA
ASSESSMENT TEAM

PROJECT EXPERIENCE:

State of Rhode Island, RI
Facility Condition Assessment

Town of Wrentham, MA
Facility Condition Assessment

Town of Hull, MA
Facility Condition Assessment

City of Mansfield, CT
Facility Condition Assessment w/ Inventory

City of Bourne, MA
Facility Condition Assessment

YEARS OF EXPERIENCE: 23

Education
Bachelor of Architecture, NY Institute of Technology

Registration
Registered Architect | NY | 029419-1

DAVID HARRELL, PE, CEM
ASSESSMENT TEAM

PROJECT EXPERIENCE:

YEARS OF EXPERIENCE: 22

City of New Bedford, MA
Facility Condition Assessment w/ Inventory

Town of Wakefield, MA
Facility Condition Assessment w/ Inventory

City of Danbury, CT
Facility Condition Assessment w/ Inventory

State of Rhode Island, RI
Facility Condition Assessment

Chesterfield County, VA
Facility Condition Assessment

Education
Master of Engineering, University of Maryland Bachelor of Science, Engineering, University of South Carolina

Registration
Professional Engineer | MD | 4804056
Certified Energy Manager | 16649

LIA KNOWER
ASSESSMENT TEAM LEAD

PROJECT EXPERIENCE:

YEARS OF EXPERIENCE: 20

Rhode Island Department of Education
Facility Condition Assessment

Dennis-Yarmouth Regional School District, MA
Facility Condition Assessment, Inventory

Acton-Boxborough Regional School District, MA
Facility Condition Assessment, Inventory

Plymouth Public Schools, MA
Facility Condition Assessment

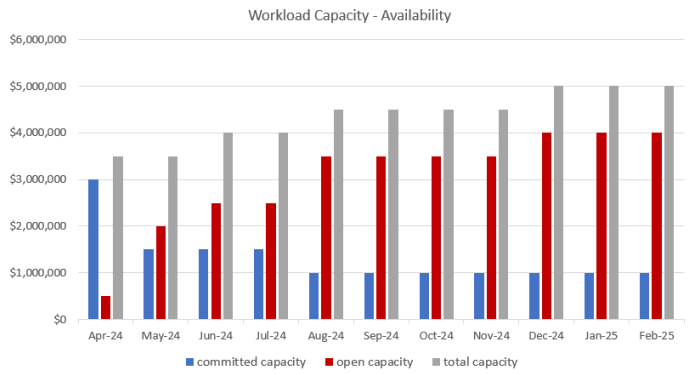
Methacton School District, PA
Facility Condition Assessment

Education
MS, Transportation Technology and Policy, University of California, Davis
BA, English, University of Massachusetts, Amherst

Availability and Capacity

Bureau Veritas has maintained itself as a viable, professional assessment services corporation. BVTA is fully staffed to manage any size project load, including simultaneous multiple site projects. Our field staff can provide a commitment of time suitable to the needs of the proposed Town of Northfield program. The proposed project would be a significant one for BVTA, and we have the in-house resources to fully staff this project without program disruption or cost impact.

Bureau Veritas has 800 staff and a dedicated Asset Management team. The regional team usually has approximately three to five concurrent assessment projects engaged that range from 400,000 SF to 1,000,000 SF. For example, currently we have three School Districts, one University, and three Municipal projects concurrently in progress. BVTA has a very scalable staff and can provide resources from one team to over ten teams on a project.



Availability and location of all key personnel is included in the chart below.

Project Personnel

Key Personnel	Project Role	Years of Experience	Certification / Registration	Availability to Project	FCA Experience
Cheyenne Irby	Project Executive	15	-	20%	●
Noah Strafford	Program Manager	7	-	80%	●
Bill Champion	QA/QC	30+	PhD, PE, CEM	30%	●
Justin Dunn	Assessment Team	8	-	100%	●
Mary Endsley	Assessment Team	23	RA	100%	●
David Harrell	Assessment Team	12	PE, CEM	100%	●
Lia Knower	Assessment Team	20	-	100%	●

4. RELEVANT EXPERIENCE

Bureau Veritas has a wealth of experience providing facility condition assessment services for federal, state, and local governmental agencies. Bureau Veritas performs all facility condition assessment services in-house, and has completed thousands of projects similar to the scope that the Town is requiring for this project.

The following is a list of projects Bureau Veritas has conducted with similar scope and complexity to the Town's proposed project. The projects listed are a small sampling of experience; BV conducts over 3,000 similar assessments in a year and can provide an expanded list if requested.

Client Name	State	Services	Completion
Town of Oak Bluffs	MA	Facility Condition Assessment, Inventory	Just Awarded
Town of Berlin	MA	Facility Condition Assessment, Inventory	Just Awarded
State of Connecticut Military Department	CT	Facility Condition Assessment	Ongoing
State of Vermont	VT	Facility Condition Assessment	Ongoing
City of Burlington	VT	Facility Condition Assessment, Sidewalk Assessment	Ongoing
Delaware County	PA	Facility Condition Assessment & Energy Audit	Ongoing
City of Phoenix	AZ	Facility Condition Assessment	Ongoing
Arlington County	VA	Facility Condition Assessment, Sidewalk Assessment	2022
State of Delaware	DE	Facility Condition Assessment	2022
Barnstable Public Schools	MA	Facility Condition Assessment	2022
Town of Barnstable	MA	Facility Condition Assessment	2021
Town of New Bedford	MA	Facility Condition Assessment	2021
City of Ferndale	MI	Facility Condition Assessment	2021
Chester County	PA	Facility Condition Assessment & Inventory	2021
City of Detroit	MI	Facility Condition Assessment & Energy Audit	2021
Chesterfield County	VA	Facility Condition Assessment	2020
City of Orange City	FL	Facility Condition Assessment	2020
City of Manassas	VA	Facility Condition Assessment & Inventory	2020
Mecklenburg County	NC	Facility Condition Assessment & Inventory	2020
City of Cambridge	MA	Facility Condition Assessment	2020
Town of Ipwich	MA	Facility Condition Assessment	2019
Town of Weymouth	MA	Facility Condition Assessment	2019
Town of Braintree	MA	Facility Condition Assessment	2019
Town of Franklin	MA	Facility Condition Assessment	2019
Fort Worth Libraries	TX	Facilities Master Plan	2019
Montgomery County	MD	Facility Condition Assessment & Inventory	2019

PROJECT PROFILE

TOWN OF EXETER, NEW HAMPSHIRE

FACILITY CONDITION ASSESSMENT

Bureau Veritas Technical Assessments LLC (BVTA) assessed the condition of public buildings, sites, and park facilties for the Town of Exeter, NH. We identified capital needs, present/future maintenance, and repair work with associated costs. We worked with the Town to determine a protocol to access available drawings/reports to review available construction/ maintenance documents (as-built drawings, specifications, maintenance logs). We collected base data on each building, confirmed square footage, generated an associated facility condition index and stored data in a facility condition assessment information system. We also conducted management review presentations for each department and provided software training.

Our team organized the property assessment schedule and coordinated with building groups to perform assessments efficiently without disrupting facility activities including complete visual inspections of facility components (exterior systems, interior finishes, fire/life systems, accessibility issues, MEP systems). We described facility deficiencies, provided corrective action for each deficiency, and established prioritization standards to characterize deficiencies.

BVTA delivered an asset management database which included square footage delineations, immediate/ short-term repairs and 20-year capital estimates, and digital full color photographs of each property. The database provided a property description and improvements and comments on observed conditions. We provided assessment results in electronic and hard copy format.

LOCATION

Exeter, NH

SERVICE

Facility Condition Assessment

SIZE

14 Buildings
120,000 SF

FACILITY TYPE

Town Hall
Town Offices
Libraries
Public Safety Complex
Senior Community Centers
Parks & Rec
Historical Society

REFERENCE

David Sharples
Town of Exeter
10 Front St
Exeter, NH 03833-2737
(603) 778-0591
dsharples@exeternh.gov

PROJECT PROFILE

VERMONT DEPARTMENT OF BUILDINGS AND GENERAL SERVICES

FACILITY CONDITION ASSESSMENT, ENERGY AUDIT

Bureau Veritas Technical Assessments LLC (BVTA) was selected in 2013 on this 5-year contract to perform Facility Condition Assessments for the State of Vermont. The work included facility condition assessments and Level II Energy Audits on all State-owned buildings (excluding Waterbury State Office Complex); a total of 285 buildings with 3,590,000 gross square feet, and a replacement value of $785,000,000; all correctional facilities, a total of 690,000 gross square feet, and an update to the Vermont Veterans' Home Report of 2006 in phases over 4 years.

Our team organized the property assessment schedule and coordinated with the State regional team to perform assessments efficiently without disrupting facility activities. The assessments included complete visual inspections of facility components (exterior systems, interior finishes, fire/life safety systems, accessibility issues, MEP Systems, and security systems). We described facility deficiencies, provided corrective action for each deficiency, and established prioritization standards to characterize deficiencies. We also performed a Level II energy audit for each facility, and made recommendations for Energy Conservation Measures (ECMs).

BVTA's database included immediate/short term repairs, a 20-year capital plan with cost estimates, digital full color photographs of each property, and the Facility Condition Index (FCI) for each facility.

BVTA was again awarded a statewide contract to perform energy audits on 351 facilities, a total of 3.4 million square feet, in 2021 as well as another round of FCAs starting in 2023.

LOCATION

Vermont

SERVICE

Facility Condition Assessment
Energy Audit
Software Database Solution

SIZE

3.6 MM SF
285 Facilities

FACILITY TYPE

Fire Stations
Police Stations & Operations
Courthouses
Correctional Facilities
Museums
Agricultural Facilities
Administrative Offices
Warehouses & Garages
Hospitals

REFERENCE

Joe Aja
State of Vermont
2 Governor Aiken Avenue
Montpelier, VT 05633-5801
(802) 828-5694
joe.aja@vermont.gov

BUREAU VERITAS

PROJECT PROFILE

RHODE ISLAND DEPARTMENT OF ADMINISTRATION

CMMS IMPLEMENTATION / FACILITY CONDITION ASSESSMENT

Bureau Veritas Technical Assessments LLC (BVTA)* was contracted to provide professional architectural and engineering services for all state-owned facilities and land throughout the State of Rhode Island. The portfolio consists of over 18 million GSF of state-owned facilities; 5 million of which included Rhode Island's Higher Education and Community College Facilities. The goal of the study for the State included:.

The goal of the study for the State included:

- Survey all state-owned properties and collect data on all maintainable asset for the implementation of a state-wide CMMS. The intended capabilities of the CMMS included asset inventory, preventive maintenance and capital planning
- Facilitate the development of CMMS/CAFM business rules including asset naming conventions, asset classification and sub-classification hierarchy, location and sub-location hierarchy
- Develop preventive maintenance standards for each classification / sub-classification of asset to meet manufacturer requirements and compliance with health, safety and environmental regulations
- Compile an inventory of state-owned properties, including all buildings
- Deliver a database capable of managing all data related to long range facilities planning;
- Complete a space inventory and analysis of use by agency;
- Make recommendations for long term funding on demolition or disposition of properties

Our services included CMMS implementation, immediate and long-term facility needs planning; infrastructure and facility analysis; development of project priority and sequencing plans; existing condition review; systems life cycle analysis; infrastructure cost modeling; inventory of state-owned land; and development recommendations for improvement/replacement of building systems.

*Bureau Veritas Technical Assessments LLC was formerly known as EMG.

LOCATION

Rhode Island

SERVICE

CMMS Implementation
Facility Condition Assessment
Deferred Maintenance and Long-Range Capital Plan
Space Inventory
Inventory of State-Owned Land
Database Solution

SIZE

1,739 Locations
18 MM SF

FACILITY TYPE

University/College Campuses
Office Buildings • Research Labs
Police • Courthouses • Corrections
Hospitals & Health Clinics
Group Homes • Treatment Facilities
Fire Academy • National Guard
Parks • Golf Courses • Historic Sites
• Theaters • Museumss • Piers •
Rec. Facilities • Power Plants
Highway & Transit Facilities

REFERENCE

Marco Schiappa
Rhode Island Dept. of Administration
One Capitol Hill
Providence, RI 02908
(401) 222-6200
Marco.Schiappa@DOA.RI.Gov

PROJECT PROFILE

DELAWARE OFFICE OF MANAGEMENT AND BUDGET

STATEWIDE FACILITY CONDITION ASSESSMENT

Bureau Veritas Technical Assessments LLC (BVTA) was tasked with completing a State-wide facility condition assessment of 92 buildings totaling 2.9 Million SF throughout all counties in Delaware, as well as implementing a Computer Maintenance Management Software (CMMS) Solution for the Delaware Division of Facilities Management.

The purpose of the project is to perform a detailed assessment of the facilities' condition, forecast maintenance requirements, and develop and deliver a fully populated CMMS database containing facility systems and building components. The assessment includes an evaluation of site improvements, architectural and structural systems, mechanical and plumbing systems, as well as exterior architectural elements. Additionally, BVTA created preventative maintenance schedule protocols that was used to plan and maintain serviceable building and HVAC equipment or components.

BVTA completed the bulk of the assessments within an accelerated 2-month period at the end of 2018 and proceeding into facility data analyses and report writing in early 2019. All reports and data upload to the State's CMMS system was complete in late spring. An additional round of assessments for a selection of the State Trooper Facilities were completed and delivered in the summer of 2021.

BVTA is intimately familiar with the State of Delaware's entire facility portfolio and is experienced in the logistics of organizing assessments throughout Delaware's Counties, separate Departments and Divisions. Outside of the State's CMMS solution, BVTA has continued to maintain a fully populated and up-to-date asset management and capital planning database for the OMD – Division of Facility Management. The database contains facility data and assets organized by county. Each building contains an average of 120 assets that is detailed down to Uni-Format Level 4. Building component assets are itemized from roof and site assets to individually HVAC equipment.

In 2022, The Delaware Office of Management and Budget asked BV to complete re-assessments of all the state facilities, as well as new facilities that whose maintenance responsibility were being transfered to the OMB, for the purpose of capital funding and master planning. The re-assessment built upon the data of the previous assessment allowing the state a deeper insight into their building portfolio needs; which allowed a defensible prioritization of modernization programs throughout the state.

Recently, Delaware OMB has engaged BV to conduct assessments of Delaware Department of Transportation facilities before taking control of maintenance from the Delaware DOT.

LOCATION

Delaware, Statewide

SERVICE

Facility Condition Assessment
Equipment Inventory
Preventative Maintenance
Capital Planning
CMMS Roll-out
Custom Capital Planning & Asset Management Database

SIZE

3.5 MM SF
120 Buildings

REFERENCES

Don Gerardi
Delaware Office of Management and Budget
Carvel State Office Building
820 North French Street
Wilmington, DE 19901
(302) 236-0224
don.gerardi@state.de.us

Jennifer Coverdale
Director of Facilities Managment
Delaware Office of Management and Budget (OMB)
540 S DuPont Hwy
Dover, DE 19901
(302) 744-1184
jennifer.coverdale@delaware.gov

PROJECT PROFILE

CHESTER COUNTY, PA

FACILITY CONDITION ASSESSMENT AND ENERGY AUDIT

The County of Chester engaged Bureau Veritas to conduct a property condition assessments, evaluate energy and sustainability options, and prepare a 10-year reserve schedule of County-owned buildings and structures. The County intends to use the assessment data and schedule for three primary purposes: Formulate annual capital budgets for the next ten years, Plan for conversion of fossil fuel systems to non-fossil fuel systems and Net Zero consideration for the County, and Populate the County's IBM Maximo Asset Management Software.

Our team organized the property assessment schedule and coordinated with the County to perform assessments efficiently without disrupting facility activities. The assessments included complete visual inspections of facility components (exterior systems, interior finishes, fire/life safety systems, accessibility issues, MEP Systems, and security systems). We described facility deficiencies, provided corrective action for each deficiency, and established prioritized standards to characterize deficiencies. We also performed energy audits for each facility and made recommendations for Energy Conservation Measures (ECMs).

BV provided the County with accurate data that can be used to determine need, timing, and cost of preventative or remedial action to maintain the desired level of service of its assets. Additionally, energy audit data was utilized to determine potential energy saving opportunities and create a plan for conversion to non-fossil fuel energy systems.

LOCATION

Chester County, PA

SERVICE

Facility Condition Assessment
Equipment Inventory
Energy Audit
Reserve Study
Date Population of IBM Maximo Software

SIZE

2 MM SF
162 Sites

FACILITY TYPE

Public Works & Essential Gov
Administrative Offices
Public Safety Training Garages
County Prisons and Detention
Medical Campus
Park and Rec
Communication

REFERENCE

Tony Igneczi
Deputy Director, Chester Co. Dept. of Facilities313 W. Market Street, Suite 5402
West Chester, PA 19380610-344-6020
tigneczi@chesco.org

PROJECT PROFILE

STATE OF NEW HAMPSHIRE DEPARTMENT OF ADMINISTRATIVE SERVICES

FACILITY CONDITION ASSESSMENT

As of 2024, Bureau Veritas has just been awarded a contract to assess all State-owned facilities in New Hampshire. This service is intended to the assess current value, replacement costs or deferred costs of facility contents and sites that are overseen by the State's Central Facilities Bureau. The results of this study will assist the Central Facilities Bureau in developing an all-inclusive capital plan to address current and future maintenance issues.

The assessments will include an examination and lifecycle assessment of the buildings, property, and major systems including plumbing, mechanical, electrical, roofing, seismic risk, general code compliance, and ADA compliance. BV will complete a comprehensive reserve schedule to help in the budgeting and replacement of assets as needed over the next 20 years. The project prioritized capital improvement projects, repairs, replacements, and maintenance.

Preventive Maintenance Schedules where be generated from the equipment inventory collected by Bureau Veritas during the FCA. The intent of the PM Schedules is to identify needed procedures and inspections required to maintain facilities systems in safe, reliable, and efficient condition. By leveraging BV's PM Schedule creation service, the Central Facilities Bureau will be able to incorporate regular preventive maintenance best practices for their equipment. By performing regular or routine maintenance best practices, the Central Facilities Bureau can ensure that their equipment is operating under safe and optimal conditions, thus preventing the potential for downtime and shorter life expectancy.

All data and information gathered during the assessment will be uploaded into the State's Computer Maintenance Management Software. Bureau Veritas will also be delivering all FCA data in an Asset Management & Capital Planning software called AssetCALC.

At the conclusion of the assessments BV will conduct presentation of findings to the stake holders where we will walk through results of the assessment.

LOCATION

New Hampshire, State-Wide

SERVICE

Facility Condition Assessment

SIZE

40 Buildings
2.2 MM SF

FACILITY TYPE

All State-owned facilities
State House
Offices
Maintenance
Warehouses
Research / Labs
Libraries
DMV
Archives
Public Safety
Dept of Transportation
Garages
Historic Facilites

REFERENCE

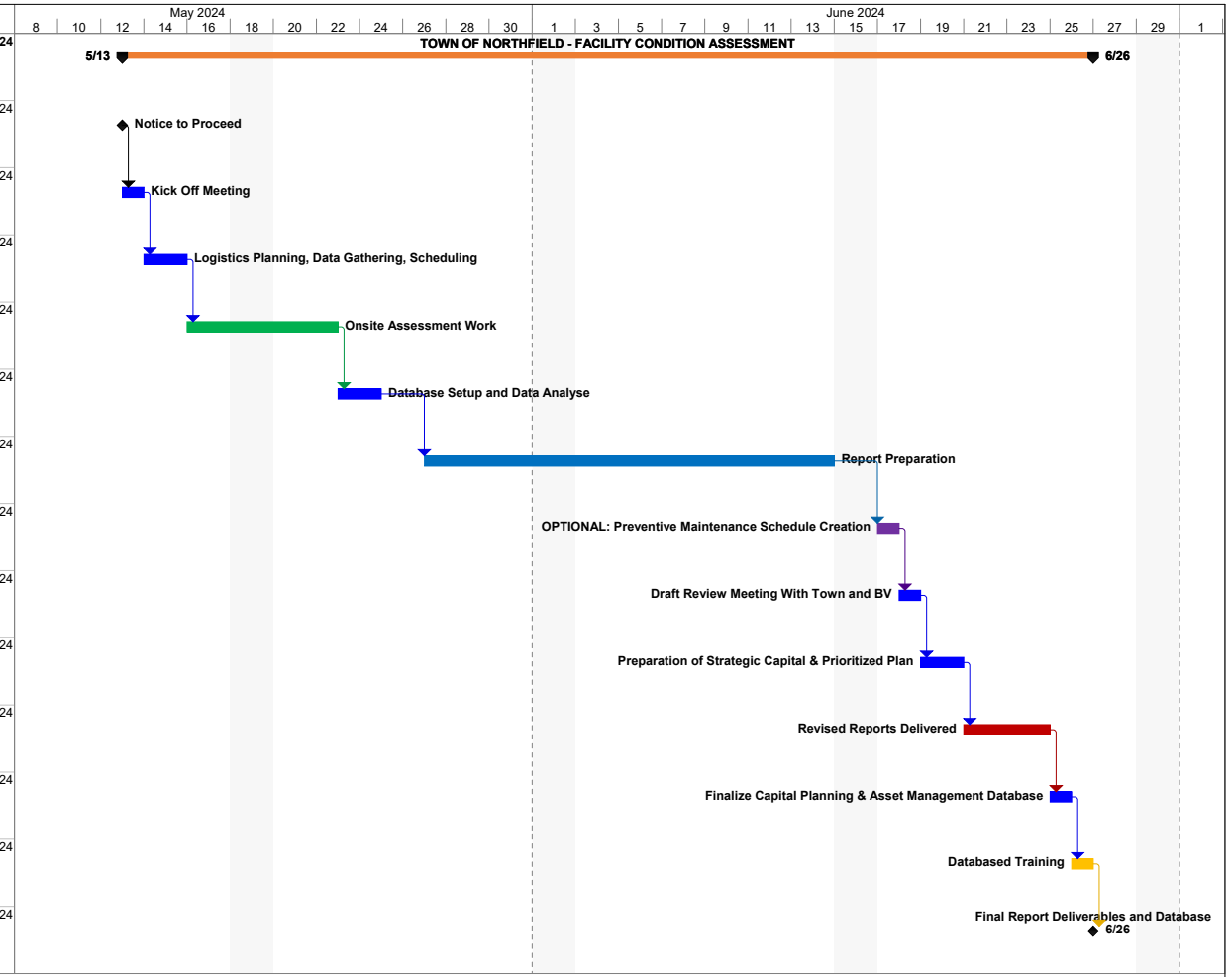
Andrea Olsson
New Hampshire Department of Administrative Services
25 Capitol Street
Concord, NH 03301
(603) 271-7272
Andrea.I.Olsson@das.nh.gov

6. PROPOSED SCHEDULE

Bureau Veritas has the capability and experience to comply with set schedules. A dedicated Program Manager, Mr. Strafford will serve as the direct point of contact for the Town during the entire project. Mr. Strafford will manage the kick-off, coordination of the field teams during the on-site assessments, and reporting process. The Town will also have access to Project Executive, Mr. Cheyenne Irby, as needed, as well as the Assessment Team throughout the duration of the project.

Bureau Veritas has a proven track record in exceeding client expectations for meeting deadlines and project schedule and is committed to the timeliness and efficiency of report deliveries. Our proposed schedule for the Building Condition Survey project for the Town of Northfield is included below. This schedule is open to negotiation with the Town.

ID	Task Name	Duration	Start	Finish
1	**TOWN OF NORTHFIELD - FACILITY CONDITION ASSESSMENT**	**33 days**	**Mon 5/13/24**	**Wed 6/26/24**
2	Notice to Proceed	0 days	Mon 5/13/24	Mon 5/13/24
3	Kick Off Meeting	1 day	Mon 5/13/24	Mon 5/13/24
4	Logistics Planning, Data Gathering, Scheduling	2 days	Tue 5/14/24	Wed 5/15/24
5	Onsite Assessment Work	5 days	Thu 5/16/24	Wed 5/22/24
6	Database Setup and Data Analyse	2 days	Thu 5/23/24	Fri 5/24/24
7	Report Preparation	15 days	Mon 5/27/24	Fri 6/14/24
8	OPTIONAL: Preventive Maintenance Schedule Creation	1 day	Mon 6/17/24	Mon 6/17/24
9	Draft Review Meeting With Town and BV	1 day	Tue 6/18/24	Tue 6/18/24
10	Preparation of Strategic Capital & Prioritized Plan	2 days	Wed 6/19/24	Thu 6/20/24
11	Revised Reports Delivered	2 days	Fri 6/21/24	Mon 6/24/24
12	Finalize Capital Planning & Asset Management Database	1 day	Tue 6/25/24	Tue 6/25/24
13	Database Training	1 day	Wed 6/26/24	Wed 6/26/24
14	Final Report Deliverables and Database	0 days	Wed 6/26/24	Wed 6/26/24



7. PROPOSED FEE

The following fees include all costs associated with travel, lodging, car rental, food, tools, equipment, and all other miscellaneous expenses applicable to the work related to this project. There is not a charge or subscription fee associated with the AssetCALC Database.

SERVICE - FACILITY CONDITION ASSESSMENT W/ INVENTORY	FEE (Fixed Price)
Facility Condition Assessment	$ 24,000.00

HOURLY RATES

Team Role	Hourly Rate ($)
Project Executive	$190.00
Program Manager	$140.00
Project Manager I (PE/RA)	$120.00
Project Manager II (PE/RA)	$130.00
Quality Control Manager	$135.00
Technical Report Reviewer	$115.00
Administrative	$80.00

BV will submit a monthly invoice inclusive of all services performed during that period. The per site fee will be established per the schedule of values provided at the program kick-off, and invoiced at the billing milestones stated below. Invoices will be payable within 30 days of receipt:

Completion of onsite assessments: *50% of per site fee*
Delivery of Draft Reports: *45% of per site fee*
Delivery of Final Reports: *5% of per site fee*

Upon receipt of each monthly invoice, the amount due per billing milestone is fully collectible. Please forward payments to: Accounting Department, Bureau Veritas Technical Assessments LLC, PO Box 74007289, Chicago, IL 60674-7289 or contact BV-invoicing@BVNA.com to pay via credit card or to receive wiring instructions. Please ensure that BV Proposal #165451.23P or invoice number is clearly identified on all payments and correspondence for proper credit.

Please submit all draft comments to BV within 60 days of draft delivery. Unless otherwise communicated, BV will consider all drafts approved for finalization after 60 days, and the remaining balance due will be invoiced.

8. OTHER INFORMATION

Financial Stability

Bureau Veritas Technical Assessments LLC is part of a larger group, Bureau Veritas SA. Please note—BVSA is a 6 billion dollar public company trading on the Euronext-Paris with over 75,000 employees and thousands of offices across the globe. This link takes you directly to our financial reports:

https://group.bureauveritas.com/investors/financial-information/financial-reports

CHANGE IN ADJUSTED ATTRIBUTABLE NET PROFIT

(€ millions)	
2021 adjusted attributable net profit	**480.8**
Organic change and scope	+35.0
Adjusted attributable net profit at constant currency	**515.8**
Currency	+18.1
2022 ADJUSTED ATTRIBUTABLE NET PROFIT	**533.9**

Adjusted earnings per share (or adjusted net profit per share) stood at €1.18 in 2022, versus €1.07 one year earlier.

5.2.8 RESULTS BY BUSINESS

CHANGE IN REVENUE BY BUSINESS

			Growth			
(€ millions)	2022	2021	Total	Organic	Scope	Currency
Marine & Offshore	418.3	375.2	+11.5%	+9.4%	-	+2.1%
Agri-Food & Commodities	1,224.8	1,065.2	+15.0%	+9.3%	(0.2)%	+5.9%
Industry	1,181.0	1,013.5	+16.5%	+11.4%	(0.6)%	+5.7%
Buildings & Infrastructure	1,664.0	1,458.4	+14.1%	+7.6%	+2.2%	+4.3%
Certification	428.3	398.2	+7.6%	+5.5%	+0.1%	+2.0%
Consumer Products Services	734.2	670.6	+9.5%	+1.0%	+3.2%	+5.3%
TOTAL GROUP	**5,650.6**	**4,981.1**	**+13.4%**	**+7.8%**	**+0.9%**	**+4.7%**

CHANGE IN ADJUSTED OPERATING PROFIT BY BUSINESS

	Adjusted operating profit			Adjusted operating margin					
(€ millions)	2022	2021	Change	2022	2021	Total change (bps)	Organic	Scope	Currency
Marine & Offshore	100.7	84.1	+19.7%	24.1%	22.4%	+166	+130	+0	+36
Agri-Food & Commodities	176.0	142.5	+23.5%	14.4%	13.4%	+98	+103	+1	(6)
Industry	139.1	126.6	+9.9%	11.8%	12.5%	(71)	(102)	+16	+15
Buildings & Infrastructure	228.7	208.7	+9.6%	13.7%	14.3%	(56)	(65)	(2)	+11
Certification	81.4	75.5	+7.9%	19.0%	19.0%	+6	(2)	(3)	+11
Consumer Products Services	176.2	164.4	+7.2%	24.0%	24.5%	(52)	+3	(49)	(6)
TOTAL GROUP	**902.1**	**801.8**	**+12.5%**	**16.0%**	**16.1%**	**(13)**	**(18)**	**(1)**	**+6**