



**BUREAU
VERITAS**

April 4, 2025

Via Email: pferrin@paradisevalleyaz.gov

Ms. Peggy A Ferrin
Town of Paradise Valley
6401 E Lincoln Drive
Paradise Valley, AZ 85253

RE: Town of Paradise Valley; Paradise Valley, Arizona
Proposal No: 172662.25P

Dear Ms. Ferrin:

We are pleased to provide Town of Paradise Valley (hereinafter referred to as “Client”) with the following proposal. If accepted, Bureau Veritas Technical Assessments LLC (hereinafter referred to as “BVTA”) will perform the services listed below (collectively, the “Services”) meeting the specifications hereafter described.

Property(ies)

Town of Paradise Valley
Multiple – see site list at end of proposal

Proposed Service(s) & Fee(s)

Service(s)	Lump Sum Fee(s)
Facility Condition Assessment & Inventory	\$36,380.19
Single-Line Assessment (<i>Electrical</i>)	\$29,400.00
Arc-Flash Assessment (<i>Electrical</i>)	\$37,320.00
Total	\$103,100.19

All fees referred to in this document are expressed in US Dollars. Pricing is not inclusive of taxes. If applicable, taxes shall be included at the time of invoicing, payable by the client and remitted by BVTA to the taxing municipality. The proposed fees are limited to the specific Services described in this Proposal, performed according to the requirements of the corresponding ASTM standard practices, or Client-specified Protocols.

Deliverable(s)

The quoted price includes the delivery of:

# of	Report Type	Method of Delivery
24	Draft	Email Full Report (PDF)
24	Final	Email Full Report (PDF)

Unless otherwise specified, BVTA will submit all reports in Final format. Timing for completion of any requested post-delivery modifications to the report will be determined at the time of the request.

BVTA's proposed fees include electronic deliverables only. If hard copy or fixed media deliverables are required in addition to electronic deliverables, BVTA will provide pricing for production and delivery upon request.

Timing

BVTA's report(s) will be delivered within 40 full business/working days after receipt and approval of the signed proposal document.

After engagement, a call will be placed to the designated onsite Point of Contact (POC) provided by the Client in order to schedule the site visit(s), where applicable. The Client acknowledges that the Point of Contact provided shall be deemed an agent of the Client for the purposes of providing access and conveying information pertaining to the Site.

Projects Placed on Hold or Canceled

Should the Client place the awarded project on hold or cancel the engagement after contract execution, the Client agrees to pay project-specific costs incurred by BVTA, such as administrative processing, regulatory database searches and non-recoverable travel fees, as well as a percentage of the project fee, depending upon the time the project is placed on hold or cancelled. Please note that BVTA invoices canceled jobs at the time of cancellation. Jobs on hold will be automatically invoiced 30 days from the date of the hold request. Requests to cancel or place projects on or off hold must be received by BVTA in writing (email acceptable) from the Client. Invoices billed as a result of projects being placed on hold or canceled are fully collectible.

Payment Details

BVTA will submit a monthly consolidated invoice inclusive of all services performed to date. 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:

Billing Milestone	Percentage Invoiced
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

*If comments on the Draft reports are not received within 60 calendar days, BVTA will invoice for Final Reports.

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 your BVTA administrator to pay via credit card or to receive wiring instructions. BVTA recommends payment by credit card for amounts less than \$1000. **Please ensure that Proposal #172662.25P or invoice number is clearly identified on all payments and correspondence for proper credit.**

Documents to be Furnished by Client

In order to facilitate a cursory review of pre-existing documents for each Project, BVTA asks to be furnished with electronic or printed copies of available site information. Such documents may include:

FCA Services:

- Inspection Reports (sewer, boiler, chiller, etc)
- Prior Engineering Reports (CNA, PNA, PCA, etc.)
- Prior Master Plans / Facility Master Plans
- Capital Expenditure Schedules (prior or planned)
- Rehabilitation budget & scope (draft or final)
- Accessibility Transition Plans/Self Evaluations
- Building Systems Maintenance Records
- Owner Elected Repair list (if available)
- Original Building Plans (can be viewed on-site)
- Fire Protection/Life Safety Plans
- Site Plan/Floor Plans

Note: Documents to be reviewed should be provided to BVTA within five (5) business days and not less than one (1) day prior to the onsite. In the event that documents can only be made available at the Site, BVTA will perform a cursory review during the site visit as time permits. If documents are received after the site visit date, or if the volume of documentation is determined by BVTA to be excessive, then the Project may be subject to additional review fees at the rate of \$215.00 per hour. Any additional review fees will be mutually agreed upon by BVTA and the Client at the time of review request and will be authorized using a Change Order.

Terms & Conditions

BVTA will perform its Services subject to the attached "Terms & Conditions", which are incorporated by reference and made a part of this Proposal. Please indicate your acceptance of this Proposal by signing the attached "Project Authorization" page where indicated and return it to BVTA.

Please feel free to contact me at 800-733-0660 x.7297954, or at james.gregory@bureauveritas.com should you have any questions. BVTA welcomes the opportunity to be of service.

Sincerely,

Bureau Veritas Technical Assessments LLC



James P. Gregory
Associate Vice President

Attachments:

Description of Services

Terms & Conditions

Project Authorization

Description of Services

See project scope of work in Appendix of this proposal.

Terms & Conditions

Please refer to the Town of Paradise Valley's Professional Services Agreement.

Project Authorization

To contract with BVTA for this project, please review and edit the information below, sign, and return the entire agreement to BVTA.

Client Contact & Report Addressee:

Mr. Issac Chavira
Town of Paradise Valley
6401 E Lincoln Drive
Paradise Valley, AZ 85253

Report & Invoice Recipient:

Mr. Robert Deserano
Town of Paradise Valley
6401 E Lincoln Drive
Paradise Valley, AZ 85253

Phone: (480) 348-3594

Email: ichavira@paradisevalleyaz.gov

Project Information:

Property Name: Town of Paradise Valley
City/County: Paradise Valley / Maricopa

Address: 6401 E. Lincoln Street
State/Zip: Arizona / 85253

Building Information:

Type of Project: Government - Essential Facilities

Sites: 8

Square Feet: 73,792

Report Delivery Date: 40 business days from receipt of signed "Project Authorization" to proceed, site contact and mobilization fee, if required.

Service(s)	Lump Sum Fee(s)	Initials
Facility Condition Assessment & Inventory	\$36,380.19	
Single-Line Assessment (Electrical)	\$29,400.00	
Arc-Flash Assessment (Electrical)	\$37,320.00	
Total	\$103,100.19	

# of Reports	Report Type	Delivery Method
24	Draft	Email Full Report (PDF)
24	Final	Email Full Report (PDF)

Electronic Report Deliverables: BVTA's standard electronic delivery is through automated email links to our reports. If you prefer an alternate delivery method, please select one of our options listed below:

☐ Dropbox™

☐ Posted to BVTA Website

☐ Posted to Your Website

Site Point of Contact: (the POC shall be deemed an agent of the client for providing access and conveying site data)

POC:	POC Phone:
POC E-mail:	POC Cell:

Monthly Consolidated Invoicing Instructions (to be completed by the Client):

Include the following Contract/PO Number (optional):

Email Invoice to additional recipients (optional):

Custom invoice webposting instructions (if applicable):

I have read and verified the accuracy of the information set forth above, and in Proposal No. 172662.25P, including the legal name of the Client. I hereby certify that I am an employee authorized to sign this contract on behalf of the Client, and by my signature below I hereby accept the Proposal, as addressed to my company, including the attached Terms and Conditions, and authorize BVTA to proceed with the Services as described. Should any project information change, I understand that additional fees may accrue, and the due date may be extended.

Authorized Signature

(Printed Name)

Phone #

Company Name

Title

Date

BUREAU VERITAS FEE & LABOR BREAKDOWN

BUREAU VERITAS FEE BREAKDOWN	
LUMP SUM TOTAL	\$36,380.19
PROGRAM MANAGEMENT	\$6,483.00
FACILITY / SITE ASSESSMENTS	\$9,217.81
FACILITY / SITE REPORTING	\$18,570.00
BARCODING	\$2109.38
AFFIXATION	\$1108.38
BARCODE LABELS	\$1001.00

BUREAU VERITAS HOURLY BREAKDOWN			
Role	Rate	Hours	Sub-Total
Program Manager	\$140	52	\$7,280.00
Project Manager I	\$120	74	\$8,880.00
Project Manager II	\$130	74	\$9,620.00
Technical Reviewer	\$115	24	\$2,760.00
Admin	\$80	4	\$320.00
Data Development			\$1,443.00
Expenses			\$3,967.81
Barcode Affixation (per SF price)	0.015	73892 SF	\$1,108.38
Barcode Labels	Qty:	1000	\$1,001.00

SERVICE FEE BREAKDOWN BY SITE

Facility Condition Assessment Fee Breakdown				
Facility Name	SF	Address	City, State	Fee
EMT Ambulance Building	3,518	6517 E. Lincoln Drive	Paradise Valley, AZ	\$ 3,869.29
Town Hall	14,866	6401 E. Lincoln Drive	Paradise Valley, AZ	\$ 4,422.04
Public Works (3 buildings)	8,999	6401 E. Lincoln Drive	Paradise Valley, AZ	\$ 4,422.04
Police Department (2 buildings)	18,441	6433 E. Lincoln Drive	Paradise Valley, AZ	\$ 4,422.04
Fire Station 91	9,934	8444 N. Tatum Boulevard	Paradise Valley, AZ	\$ 4,422.04
Fire Station 92	11,434	6539 E. Lincoln Drive	Paradise Valley, AZ	\$ 4,422.04
Court	6,000	6517 E. Lincoln Drive	Paradise Valley, AZ	\$ 4,422.04
Communications Building	700	6824 N. Highlands Drive	Paradise Valley, AZ	\$ 3,869.29
				\$ 34,270.81

Single-Line Assessment & Arc Flash Fee Breakdown						
Facility Name	SF	Address	City, State	Single-Line Assessment Fee	Arc Flash Fee	Site Total
EMT Ambulance Building	3,518	6517 E. Lincoln Drive	Paradise Valley, AZ	\$ 2,700.00	\$ 3,000.00	\$ 5,700.00
Town Hall	14,866	6401 E. Lincoln Drive	Paradise Valley, AZ	\$ 5,100.00	\$ 6,300.00	\$ 11,400.00
Public Works (3 buildings)	8,999	6401 E. Lincoln Drive	Paradise Valley, AZ	\$ 4,200.00	\$ 5,100.00	\$ 9,300.00
Police Department (2 buildings)	18,441	6433 E. Lincoln Drive	Paradise Valley, AZ	\$ 6,300.00	\$ 7,500.00	\$ 13,800.00
Fire Station 91	9,934	8444 N. Tatum Boulevard	Paradise Valley, AZ	\$ 3,300.00	\$ 4,200.00	\$ 7,500.00
Fire Station 92	11,434	6539 E. Lincoln Drive	Paradise Valley, AZ	\$ 3,300.00	\$ 4,200.00	\$ 7,500.00
Court	6,000	6517 E. Lincoln Drive	Paradise Valley, AZ	\$ 2,400.00	\$ 4,200.00	\$ 6,600.00
Communications Building	700	6824 N. Highlands Drive	Paradise Valley, AZ	\$ 2,100.00	\$ 2,820.00	\$ 4,920.00
				Totals \$ 29,400.00	\$ 37,320.00	\$ 66,720.00

PROJECT APPROACH - FACILITY CONDITION ASSESSMENT

Project Understanding

BV understands that the Facility Condition Assessment (FCA) project with the Town of Paradise Valley (Town) will:

- Include a comprehensive assessment of all sites, buildings, building systems, and infrastructure.
- Follow ASTM E2018-24 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.
- Establish a protocol for FCA data to migrate/transfer to a CMMS/IWMS system.
- Collect Equipment Inventory and nameplate data for Town properties.
- OPTION: Affix Barcodes for tagging and tracking of equipment.

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 our 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 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.

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

- 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 to the right are typical but can be altered to meet your specifications and needs.

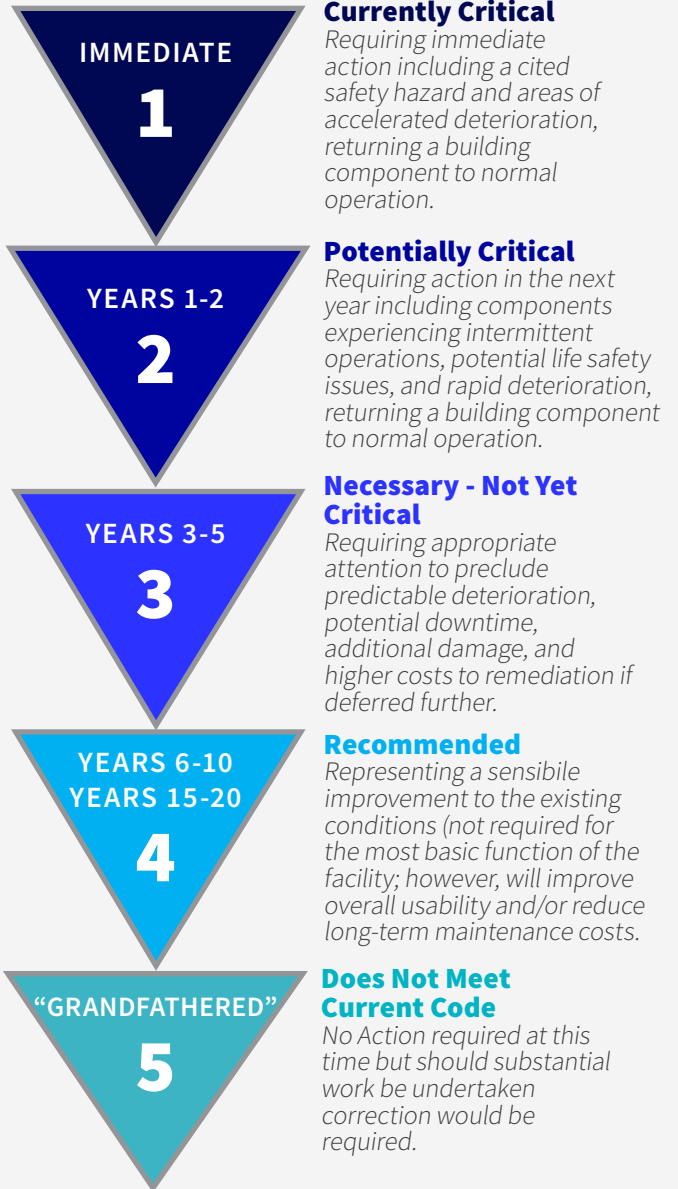
DEFICIENCY CATEGORIES/PLAN TYPES

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.

PRIORITY CLASSES



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 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 uses a cost library model for cost estimating. Our database follows Uniformat Level 4 framework and is based in part on data from national commercial cost estimating guides. 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 national cost estimating platforms.

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.

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-defined 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.

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.

The Capital Needs analysis will include a cost database sorted by building system and ranked by priority for repair. The format of the database will allow for reporting by building, system, or priority for repair, and a year-by-year analysis of capital needs.

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.

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 for **five (5) years**.

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.


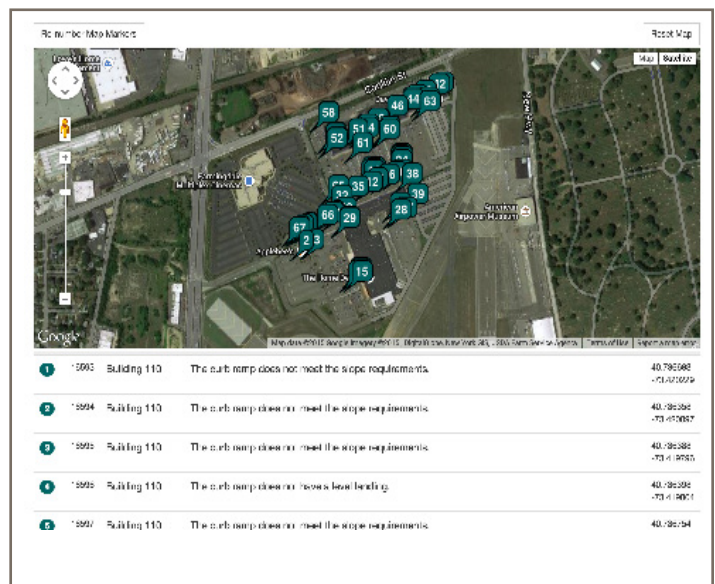
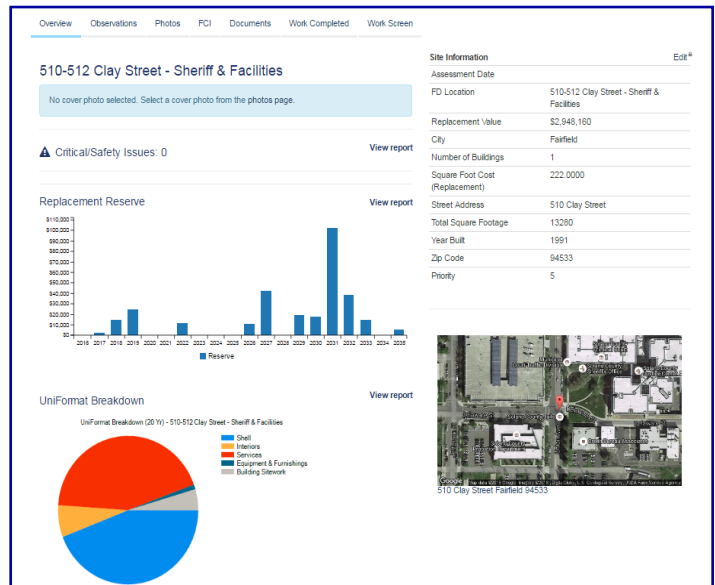
FEATURES INCLUDE:

- 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

ASSETCALC™ Photos FCI Documents Work Completed Work Screen Inventory

Observation Details - Obs #36672

Description	B2032 - Entrance door replacement to meet ADA guidelines
Component	
Attributes	
Action	
Master Cost Id	1916
Category	Exterior Enclosure / Exterior Doors / Solid Exterior Doors
Location	Main DeLaigas south entry door
Condition	Fair
Report Section	3.3
Comments	install remote-controlled door (or other appropriate building entry accommodation) for resident(s) at main northeast entrance door.
EMIG Comments	
Capacity Description	
Flagged for Review	No
GPS	
Created	svogr on 4/17/2010 2:41:40 PM
Last Modified	manderson on 10/27/2010 2:37:52 PM

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

CMMS-Ready Data

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

BV understands that the Town currently uses Lucity/Central Square as their CMMS. BV has experience with this software, and will work with the Town to transfer all data into this CMMS.

Replace Diesel Generator 600 to 750 KW
General Services Building
Open details page

Quantity	1 EA
Condition	Good
Total Estimated Cost	\$ 287,300
Next Action Required	2025
Total Workings	\$ 34,753.66
Universal Code	01000
Universal Code Level 1 Description	U - Generator
Location Description	Powerhouse
Unit Cost	\$ 159,553.33
Total Workings Subtotal	\$ 34,753.66
Total Workings	\$ 159,553
Year Observed	2008
Age	12
U-Response	25
Remaining Life	10
Renewal Cost 15	\$700
Available 10	\$ 159

The generator is in good condition and is regularly tested on a weekly basis. The generator will require routine maintenance over the assessment period.

[Open Details Page](#) [Close](#)

All Buildings **General Services Building (Building 161)**

Overview Location Summary Assets & Observations Inventory Photos FCI Documents Work Completed Work Screen Tools

Assets & Observations 19 [Export to Excel](#)

Search	Group By	Universal Code	Location	Unit	Year Observed	More Action
By ID, Universal, Description, etc.	Function					
U	Description etc.	Condition	Universal Code	Location	Subtotal	More Action
U	Replace 12' x 12' steel roll-up door	Good	U - Roll	General Services Building	\$ 27 K	2024
U	TPO Roof replacement 45 mils, full adhered	Good	U - Shell	General Services Building	\$ 210 K	2024
U	2' by 4' aluminum window	Good	U - Shell	General Services Building	\$ 205 K	2024
U	ADA Wrap drain pipes below accessible lavatory	Plus	C - Interior	General Services Building	\$ 130	2020
U	Replace carpet, standard commercial, medium traffic	Good	C - Interior	General Services Building	\$ 77 K	2020
U	Replace Vinyl tiles	Good	C - Interior	General Services Building	\$ 100 K	2020
U	Replace exterior wall damage	Plus	C - Interior	General Services Building	\$ 1 K	2020
U	Replace vinyl wall covering	U into Plus	C - Interior	General Services Building	\$ 45 K	2020
U	Replace Air cooled recirculating chiller 110 to 130 ton	Good	U - Services	General Services Building	\$ 165 K	2024
U	Replace Circulation Pump 80 HP	Good	U - Services	General Services Building	\$ 24 K	2020
U	Replace pumps & piping for chiller	Plus	U - Services	General Services Building	\$ 16 K	2020
U	Replace water heater commercial 100 gal	Good	U - Services	General Services Building	\$ 9 K	2022
U	Replace Diesel Generator 600 to 750 KW	Good	U - Services	General Services Building	\$ 287 K	2024
U	Air handler 21,000 24,500 CFM	Good	U - Services	General Services Building	\$ 18 K	2024
U	Air handler 21,000-24,500 CFM	Plus	U - Services	General Services Building	\$ 105 K	2020

OPTION: SINGLE LINE ASSESSMENT & ARC FLASH FOR ELECTRICAL

Project Understanding

Bureau Veritas will provide the necessary field evaluation of equipment, Arc Flash, and device coordination studies as requested for the following 8 facilities.

- EMT Ambulance Building
- Town Hall
- Public Works (3 buildings)
- Police Department (2 buildings)
- Fire Station 91
- Fire Station 92
- Court Building
- Communications Building

This scope is based upon the information shown above, and the assisted and immediate access to all electrical equipment. To perform the collection of information for these facilities, the Town of Paradise Valley will be required to provide technicians who are familiar with all facets of the facilities listed above. The technician(s) shall have ready access, including keys and permissions required, to access the equipment and facilities.

These assessments are limited to Switchboards, Panelboards, Distribution Boards, Motor Control Centers Transformers, and Safety Switches rated 100 amperes or more. Additional equipment such as Motor Starters, Variable Frequency Drives, and Safety Switches rated less than 100 amperes may be included in the assessments at extra cost, with the written direction of the Town of Paradise Valley.

Any other services, other than listed above, are excluded from this proposal.

Deliverables

The deliverables for this project are as follows:

1. Collect system data during onsite visit(s). (Single-Line Assessment)
 - a. Coordinate assessment activities with FCA assessments and Town. A Town of Paradise Valley electrician will be present to minimize a potential accidental loss of power. All activities will be done without interrupting operations and power at the facility. The assessment team will develop a communication plan prior to beginning work - that will identify a protocol in the event of accidental power loss.
 - b. Verify electrical equipment is properly identified, where no identification is found, the vendor will provide a unique identifier for the panel which will be shown on the Single-Line Diagram.
 - c. Notify Owner of any concerns with existing equipment based on visual survey.
2. Collect system data during onsite visit(s). (Arc-Flash Assessment)
 - a. Coordinate assessment activities with FCA assessments and Town. A Town of Paradise Valley electrician will be present to minimize a potential accidental loss of power. All Arc Flash activities will be done without interrupting operations and power at the facility. The assessment and arc flash team will develop a communication plan prior to beginning work - that will identify a protocol in the event of accidental power loss.
 - b. Verify electrical equipment is properly identified, where no identification is found, the vendor will provide a unique identifier for the panel which will be shown on the arc flash label.
 - c. Notify Owner of any concerns with existing equipment based on visual survey.
2. Arc Flash Analysis:
 - a. Evaluate as-is condition.
 - b. Provide recommendations to lower incident energy level.
 - c. Arc Flash final report.
 - d. Install self-adhesive labels on each piece of equipment.
 - e. Identify recommended PPE requirements.
 - f. The system(s) to be analyzed will be limited to equipment traditionally shown on the one-line diagramssuch asservices, distribution boards, motor control centers, panelboards, transformers, and fusible disconnects protecting this equipment. The study will exclude equipment without overcurrent protective devices as well as the secondary side of transformers rated 15 kVA or less and 250 Volts or less.
3. Short Circuit Analysis and Coordination Study
 - a. Review 3-phase and Line-to-ground currents vs. protective devices to ensure device can clear a fault.
 - b. Nearest protective device upstream should clear the fault.

- c. Recommend adjustments if not properly coordinated.
- 4. Document Equipment
 - a. Draw one-line diagrams for each building.
 - b. Provide list of all equipment with ratings and install date to Owner in Excel.
- 5. Arc Flash Report
 - a. Executive Summary.
 - b. Introduction/Methodology (How the survey was done and what codes need to be followed).
 - i. Arc Flash.
 - ii. Short circuit study.
 - iii. Protective Device Coordination study.
 - c. Findings (provide a complete single line diagram, equipment documentation, identify any issues).
 - d. Provide recommendations for the adjustment of overcurrent protective devices.
 - e. Supporting Data (produced by software used for analysis).
 - f. Placement of Arc Flash labels.

Exclusions

The following services are not included in this proposal for engineering services, and for the purposes of this proposal are understood to be provided by Bureau Veritas or others as an additional service.

1. Site surveys and existing building dimensional surveys.
2. Changes required due to unanticipated field conditions.
3. Electrical Design of any type.
4. Design or construction services associated with demolition.
5. Cost estimating, including quantity take-offs.
6. Services performed at Client's request in connection with peer reviews.
7. Supervision of or responsibility for contractor means, methods and sequences of demolition and construction.