

FACILITY CONDITION ASSESSMENT



**BUREAU
VERITAS**

prepared for

DLR Group

1650 Spruce Street, Suite 300
Riverside, California 92507
Jesse Miller



Center for Independent Study (CIS)
2925 East Sierra Madre Boulevard
Pasadena, California 91107

PREPARED BY:

Bureau Veritas
10461 Mill Run Circle, Suite 1100
Owings Mills, Maryland 21117
800.733.0660
www.us.bureauveritas.com

BV CONTACT:

Anselmo Martinez
Program Manager
800.733.0660 x7298031
anselmo.martinez@bureauveritas.com

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Bureau Veritas

10461 Mill Run Circle, Suite 1100 | Owings Mills, MD 21117 | www.us.bureauveritas.com | p 800.733.0660

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1. Executive Summary

Campus Overview and Assessment Details

General Information	
Property Type	School campus
Number of Buildings	Three
Main Address	2925 East Sierra Madre Boulevard, Pasadena, California 91107
Site Developed	1958
Site Area	1.4 acres (estimated)
Parking Spaces	None
Outside Occupants / Leased Spaces	None
Date(s) of Visit	June 13, 2022
Management Point of Contact	Kevin Fleming / DLR Group 951.682.0470 kffleming@dlrgroup.com
On-site Point of Contact (POC)	Kristine Vukovic
Assessment and Report Prepared By	Jeroen Smit
Reviewed By	James Bryant, Technical Report Reviewer for Anselmo Martinez Program Manager anselmo.martinez@bureauveritas.com 800.733.0660 x7298031
AssetCalc Link	Full dataset for this assessment can be found at: https://www.assetcalc.net/

Campus Findings and Deficiencies

Historical Summary

This site was originally developed in 1958 and is part of the Pasadena High School campus. The structure is original with upgrades made to the restrooms, electrical, climate control, and ADA upgrades in the form of ramps, railings, door hardware, and access.

Architectural

The structures are brick with low slope, wood framed roofs. Windows are single-pane steel and appear to be original. The roofs were in the process of being replaced at the time of the assessment. Overall the buildings are sound and appear to be well maintained. The original windows are functional but upgrading to modern double-pane windows should be considered for energy conservation and noise abatement purposes. Typical lifecycle-based interior and exterior finish replacements are budgeted and anticipated.

Mechanical, Electrical, Plumbing and Fire (MEPF)

Chilled water and steam for climate control are provided by the central plant on the Pasadena High School campus. This system was installed around 2012. The older package units are still present on the exterior but appear to be abandoned in place. Electrical panels carry dates from 2002, when a major electrical upgrade was performed. Plumbing fixtures are of modern vintage and the supply and waste piping show signs of modernization as well. Fire sprinklers are present but only in service areas. Pull stations, strobes, and extinguishers are present in the classrooms. Solar Panels are located west of the buildings and are part of Pasadena High electrical services.

Site

The site is limited to the area immediately surrounding the three buildings, and consists of asphalt and concrete areas, walkways, and ramps. The asphalt walkway at the front of building N is most in need of repair due to cracking and lifting.

Recommended Additional Studies

No additional studies recommended at this time.

Facility Condition Index (FCI)

One of the major goals of the FCA is to calculate each building's Facility Condition Index (FCI), which provides a theoretical objective indication of a building's overall condition. By definition, the FCI is defined as the ratio of the cost of current needs divided by current replacement value (CRV) of the facility. The chart below presents the industry standard ranges and cut-off points.

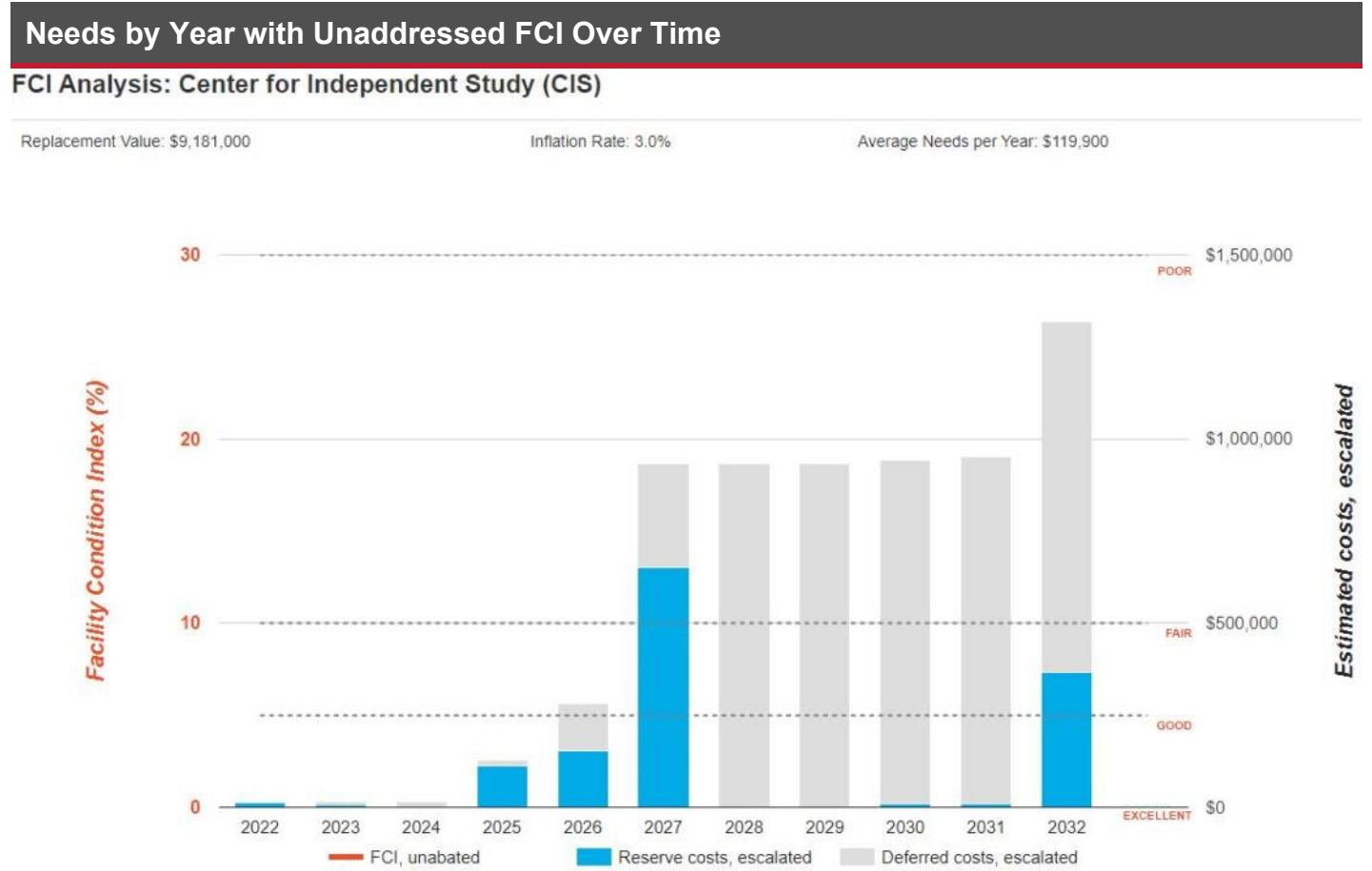
FCI Ranges and Description	
0 – 5%	In new or well-maintained condition, with little or no visual evidence of wear or deficiencies.
5 – 10%	Subjected to wear but is still in a serviceable and functioning condition.
10 – 30%	Subjected to hard or long-term wear. Nearing the end of its useful or serviceable life.
30% and above	Has reached the end of its useful or serviceable life. Renewal is now necessary.

The deficiencies and lifecycle needs identified in this assessment provide the basis for a portfolio-wide capital improvement funding strategy. In addition to the current FCI, extended FCI's have been developed to provide owners the intelligence needed to plan and budget for the "keep-up costs" for their facilities. As such the 3-year, 5-year, and 10-year FCI's are calculated by dividing the anticipated needs of those respective time periods by current replacement value. As a final point, the FCI's ultimately provide more value when used to relatively compare facilities across a portfolio instead of being over-analyzed and scrutinized as stand-alone values. The table below summarizes the individual findings for this FCA:

Facility (year built)	Cost/SF	Total SF	Replacement Value	Current	3-Year	5-Year	10-Year
Building N (1958)	\$404	6,760	\$2,731,040	0.4%	2.6%	9.4%	13.0%
Building P (1958)	\$404	7,220	\$2,916,880	0.0%	2.0%	11.2%	15.1%
Building Q (1958)	\$404	8,743	\$3,532,172	0.0%	0.0%	9.9%	13.8%

Campus Level FCI:

The vertical bars below represent the year-by-year needs identified for the entire campus. The orange line in the graph below forecasts what would happen to the campus FCI (left Y axis) over time, assuming zero capital expenditures over the next ten years. The dollar amounts allocated for each year (blue bars) are associated with the values along the right Y axis.



Similar graphs for the FCI and needs of each individual building over time are included in the separate report sections that follow.



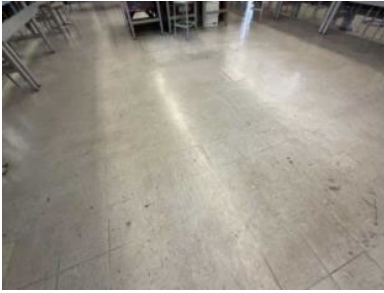
Immediate Needs

Facility/Building	Total Items	Total Cost
Building N	1	\$12,100
Total	1	\$12,100

Building N

ID	Location Description	UF Code	Description	Condition	Plan Type	Cost
3934321	Throughout building	C2030	Flooring, Vinyl Tile (VCT), Replace	Poor	Safety	\$12,100
Total (1 items)						\$12,100

Key Findings



Flooring in Poor condition.

Vinyl Tile (VCT)
Building N Center for Independent Study (CIS)
Throughout building

Uniformat Code: C2030
Recommendation: **Replace in 2022**

Priority Score: **90.9**

Plan Type: Safety

Cost Estimate: \$12,100

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VCT exhibits extensive wear and is poorly maintained, loose tiles present trip hazards - AssetCALC ID: 3934321



Sidewalk in Poor condition.

Asphalt
Site Center for Independent Study (CIS) Site

Uniformat Code: G2030
Recommendation: **Replace in 2023**

Priority Score: **85.8**

Plan Type:
Performance/Integrity

Cost Estimate: \$7,200

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Wide cracks were observed throughout the sidewalk. - AssetCALC ID: 3946016



Sidewalk in Poor condition.

Asphalt
Site Center for Independent Study (CIS) Site

Uniformat Code: G2030
Recommendation: **Seal in 2023**

Priority Score: **85.8**

Plan Type:
Performance/Integrity

Cost Estimate: \$600

\$\$\$\$

The sidewalk will need to be sealed after it is replaced. - AssetCALC ID: 3998660



Heat Pump

Packaged & Wall-Mounted
Building N Center for Independent Study (CIS)
Building exterior

Uniformat Code: D3030
Recommendation: **Replace in 2023**

Priority Score: **54.8**

Plan Type:
Retrofit/Adaptation

Cost Estimate: \$4,800

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Abandoned in Place - AssetCALC ID: 3934319

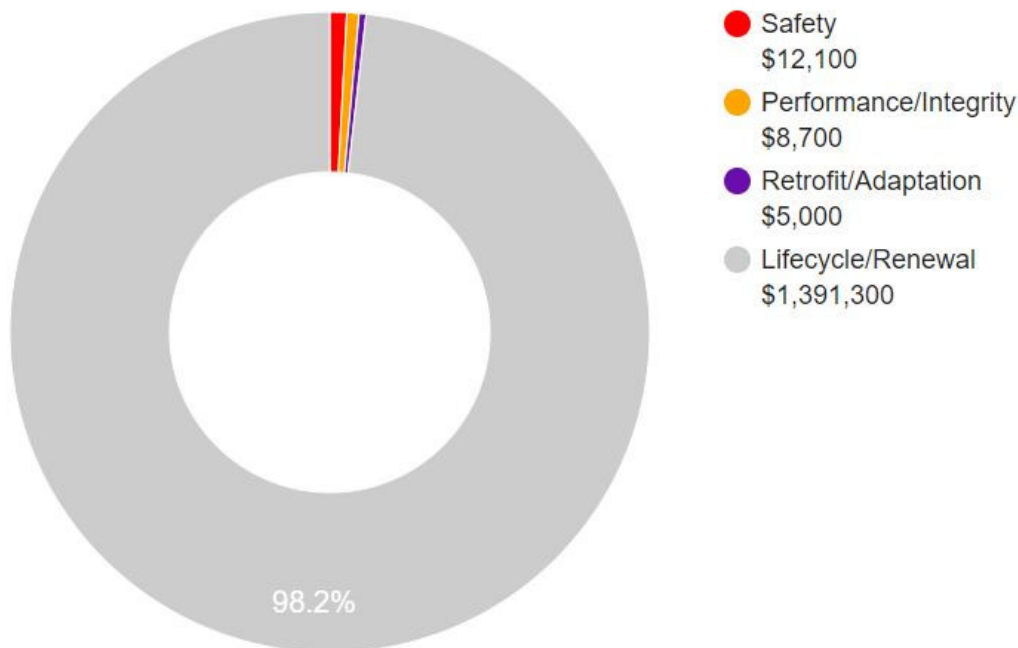
Plan Types

Each line item in the cost database is assigned a Plan Type, which is the primary reason or rationale for the recommended replacement, repair, or other corrective action. This is the “why” part of the equation. A cost or line item may commonly have more than one applicable Plan Type; however, only one Plan Type will be assigned based on the “best” fit, typically the one with the greatest significance.

Plan Type Descriptions

Safety	■	An observed or reported unsafe condition that if left unaddressed could result in injury; a system or component that presents potential liability risk.
Performance/Integrity	■	Component or system has failed, is almost failing, performs unreliably, does not perform as intended, and/or poses risk to overall system stability.
Accessibility	■	Does not meet ADA, UFAS, and/or other handicap accessibility requirements.
Environmental	■	Improvements to air or water quality, including removal of hazardous materials from the building or site.
Retrofit/Adaptation	■	Components, systems, or spaces recommended for upgrades in in order to meet current standards, facility usage, or client/occupant needs.
Lifecycle/Renewal	■	Any component or system that is not currently deficient or problematic but for which future replacement or repair is anticipated and budgeted.

Plan Type Distribution (by Cost)



10-YEAR TOTAL: \$1,417,100

2. Building N



Building N: Systems Summary

Address	2925 East Sierra Madre Boulevard, Pasadena, California 91107	
Constructed/Renovated	1958	
Building Size	6,760 SF	
Number of Stories	One	
<i>System</i>	<i>Description</i>	<i>Condition</i>
Structure	Masonry bearing walls with wood roof deck supported by wood joists on concrete slab on grade.	Fair
Façade	Primary Wall Finish: Brick Windows: Steel	Fair
Roof	Flat construction with modified bituminous finish	Excellent
Interiors	Walls: Painted brick Floors: Carpet, VCT Ceilings: Hard ceiling tile	Fair
Elevators	None	--
Plumbing	Distribution: Copper supply and cast iron waste and venting Hot Water: None Fixtures: Toilets, urinals, and sinks in all restrooms	Fair
HVAC	Central System: Boilers, chillers, air handlers, and cooling tower feeding fan coil and cabinet terminal units	Good

Building N: Systems Summary		
Fire Suppression	Wet-pipe sprinkler system and fire extinguishers	Fair
Electrical	Source and Distribution: Main panel with copper wiring. Fed from building P with copper wiring Interior Lighting: Linear fluorescent Emergency Power: None	Good
Fire Alarm	Alarm panel with smoke detectors, heat detectors, alarms, strobes, pull stations, back-up emergency lights, and exit signs	Fair
Equipment/Special	None	--
Accessibility	Presently it does not appear an accessibility study is needed for this building. See Appendix D.	
Key Issues and Findings	Steel windows are single pane and original. Upgrading to energy efficient double-pane windows is recommended. Some loose and missing floor tiles may present a trip hazard.	

Building N: Systems Expenditure Forecast						
System	Immediate	Short Term (1-2 yr)	Near Term (3-5 yr)	Med Term (6-10 yr)	Long Term (11-20 yr)	TOTAL
Facade	-	-	\$117,930	-	\$338,182	\$456,112
Roofing	-	-	-	-	\$176,854	\$176,854
Interiors	\$12,076	-	\$59,219	-	\$157,143	\$228,438
Plumbing	-	-	-	-	\$103,652	\$103,652
HVAC	-	\$4,930	\$41,871	\$4,409	\$165,328	\$216,538
Fire Protection	-	-	-	-	\$12,259	\$12,259
Electrical	-	-	-	\$58,810	\$33,208	\$92,018
Fire Alarm & Electronic Systems	-	-	\$20,091	\$36,075	\$31,302	\$87,468
TOTALS (3% inflation)	\$12,100	\$5,000	\$239,200	\$99,300	\$1,018,000	\$1,373,600

3. Building P



Building P: Systems Summary

Address	2925 East Sierra Madre Boulevard, Pasadena, California 91107	
Constructed/Renovated	1958	
Building Size	7,220 SF	
Number of Stories	One	
<i>System</i>	<i>Description</i>	<i>Condition</i>
Structure	Masonry bearing walls with wood roof deck supported by wood joists on concrete slab on grade.	Fair
Façade	Primary Wall Finish: Brick Windows: Steel	Fair
Roof	Flat construction with modified bituminous finish	Excellent
Interiors	Walls: Painted brick Floors: Carpet, VCT Ceilings: Hard ceiling tile, ACT	Fair
Elevators	None	--
Plumbing	Distribution: Copper supply and cast iron waste and venting Hot Water: None Fixtures: Toilets, urinals, and sinks in all restrooms	Fair
HVAC	Central System: Boilers, chillers, air handlers, and cooling tower feeding fan coil and cabinet terminal units	Good

Building P: Systems Summary		
Fire Suppression	Wet-pipe sprinkler system and fire extinguishers	Fair
Electrical	Source and Distribution: Main panel with copper wiring. Fed from campus switchboard with copper wiring Interior Lighting: Linear fluorescent Emergency Power: None	Good
Fire Alarm	Alarm panel with smoke detectors, heat detectors, alarms, strobes, pull stations, back-up emergency lights, and exit signs	Fair
Equipment/Special	None	--
Accessibility	Presently it does not appear an accessibility study is needed for this building. See Appendix D.	
Key Issues and Findings	Steel windows are single pane and original. Upgrading to energy efficient double-pane windows is recommended.	

Building P: Systems Expenditure Forecast

System	Immediate	Short Term (1-2 yr)	Near Term (3-5 yr)	Med Term (6-10 yr)	Long Term (11-20 yr)	TOTAL
Facade	-	-	\$104,056	-	\$338,182	\$442,238
Roofing	-	-	-	-	\$180,784	\$180,784
Interiors	-	-	\$85,471	-	\$142,463	\$227,934
Plumbing	-	-	-	\$2,338	\$89,307	\$91,645
HVAC	-	-	\$38,204	\$4,409	\$176,174	\$218,787
Fire Protection	-	-	-	\$11,295	-	\$11,295
Electrical	-	-	\$59,444	\$76,779	\$212,321	\$348,544
Fire Alarm & Electronic Systems	-	-	\$40,314	\$17,418	\$34,435	\$92,167
TOTALS (3% inflation)	-	-	\$327,500	\$112,300	\$1,173,700	\$1,613,500

4. Building Q



Building Q: Systems Summary

Address	2925 East Sierra Madre Boulevard, Pasadena, California 91107	
Constructed/Renovated	1958	
Building Size	8,700 SF	
Number of Stories	One, (mechanical mezzanine is present but not included in the count)	
<i>System</i>	<i>Description</i>	<i>Condition</i>
Structure	Masonry bearing walls with wood roof deck supported by wood joists on concrete slab on grade.	Fair
Façade	Primary Wall Finish: Brick Windows: Steel	Fair
Roof	Flat construction with modified bituminous finish	Excellent
Interiors	Walls: Painted brick Floors: Carpet, VCT Ceilings: Hard ceiling tile, ACT	Fair
Elevators	None	--
Plumbing	Distribution: Copper supply and cast iron waste and venting Hot Water: None Fixtures: Toilets, urinals, and sinks in all restrooms	Fair
HVAC	Central System: Boilers, chillers, air handlers, and cooling tower feeding fan coil and cabinet terminal units	Good
Fire Suppression	Wet-pipe sprinkler system and fire extinguishers	Fair

Building Q: Systems Summary

Electrical	Source and Distribution: Main panel with copper wiring. Fed from building P with copper wiring Interior Lighting: Linear fluorescent Emergency Power: None	Good
Fire Alarm	Alarm panel with smoke detectors, heat detectors, alarms, strobes, pull stations, back-up emergency lights, and exit signs	Fair
Equipment/Special	None	--
Accessibility	Presently it does not appear an accessibility study is needed for this building. See Appendix D.	
Key Issues and Findings	Steel windows are single pane and original. Upgrading to energy efficient double-pane windows is recommended.	

Building Q: Systems Expenditure Forecast						
System	Immediate	Short Term (1-2 yr)	Near Term (3-5 yr)	Med Term (6-10 yr)	Long Term (11-20 yr)	TOTAL
Facade	-	-	\$166,490	-	\$516,414	\$682,904
Roofing	-	-	-	-	\$202,400	\$202,400
Interiors	-	-	\$108,242	\$14,037	\$131,248	\$253,527
Plumbing	-	-	\$1,512	\$5,700	\$96,901	\$104,113
HVAC	-	-	\$42,788	-	\$206,163	\$248,951
Fire Protection	-	-	-	-	\$15,856	\$15,856
Electrical	-	-	-	\$70,468	\$42,949	\$113,417
Fire Alarm & Electronic Systems	-	-	\$26,764	\$46,658	\$41,698	\$115,120
Equipment & Furnishings	-	-	\$3,531	-	\$19,942	\$23,473
TOTALS (3% inflation)	-	-	\$349,400	\$136,900	\$1,273,600	\$1,759,900

5. Site Summary



Site Information		
System	Description	Condition
Pavement/Flatwork	Asphalt lots with limited areas of concrete aprons and pavement and adjacent concrete sidewalks, curbs, and ramps	Fair
Site Development	Building-mounted signage; wrought iron fencing	Fair
Landscaping and Topography	Limited landscaping features trees, bushes, and planters Irrigation present Low to moderate site slopes throughout	Fair
Utilities	Municipal water and sewer Local utility-provided electric and natural gas	Fair
Site Lighting	None	--
Ancillary Structures	None	--
Accessibility	Presently it does not appear an accessibility study is needed for the exterior site areas. See Appendix D.	
Key Issues and Findings	None observed at time of assessment.	



Site: Systems Expenditure Forecast						
System	Immediate	Short Term (1-2 yr)	Near Term (3-5 yr)	Med Term (6-10 yr)	Long Term (11-20 yr)	TOTAL
Site Pavement	-	\$10,284	\$4,172	\$84,656	\$61,508	\$160,620
Site Development	-	-	-	-	-	-
TOTALS (3% inflation)	-	\$10,300	\$4,200	\$84,700	\$61,600	\$160,800

6. Property Space Use and Observed Areas

Areas Observed

The interior spaces were observed in order to gain a clear understanding of the property's overall condition. Other areas accessed included the site within the property boundaries, the exterior of the property.

Key Spaces Not Observed

Areas of note that were either inaccessible or not observed for other reasons are listed here:

- Roofs were not accessed as replacement was in progress during site assessment.

7. ADA Accessibility

Generally, Title II of the Americans with Disabilities Act (ADA) prohibits discrimination by entities to access and use of “areas of public accommodations” and “public facilities” on the basis of disability. Regardless of their age, these areas and facilities must be maintained and operated to comply with the Americans with Disabilities Act Accessibility Guidelines (ADAAG).

A public entity (i.e. city governments) shall operate each service, program, or activity so that the service, program, or activity, when viewed in its entirety, is readily accessible to and usable by individuals with disabilities.

However, this does not:

1. Necessarily require a public entity to make each of its existing facilities accessible to and usable by individuals with disabilities;
2. Require a public entity to take any action that would threaten or destroy the historic significance of an historic property; or
3. Require a public entity to take any action that it can demonstrate would result in a fundamental alteration in the nature of a service, program, or activity or in undue financial and administrative burdens. In those circumstances where personnel of the public entity believe that the proposed action would fundamentally alter the service, program, or activity or would result in undue financial and administrative burdens, a public entity has the burden of proving that compliance with 35.150(a) of this part would result in such alteration or burdens. The decision that compliance would result in such alteration or burdens must be made by the head of a public entity or his or her designee after considering all resources available for use in the funding and operation of the service, program, or activity, and must be accompanied by a written statement of the reasons for reaching that conclusion. If an action would result in such an alteration or such burdens, a public entity shall take any other action that would not result in such an alteration or such burdens but would nevertheless ensure that individuals with disabilities receive the benefits or services provided by the public entity.

Removal of barriers to accessibility should be addressed from a liability standpoint in order to comply with federal law, but the barriers may or may not be building code violations. The Americans with Disabilities Act Accessibility Guidelines are part of the ADA federal civil rights law pertaining to the disabled and are not a construction code. State and local jurisdictions have adopted the ADA Guidelines or have adopted other standards for accessibility as part of their construction codes.

During the FCA, Bureau Veritas performed a limited high-level accessibility review of the facility non-specific to any local regulations or codes. The scope of the visual observation was limited to the same areas observed while performing the FCA and the categories set forth in the checklists that are included in the appendix. It is understood by the Client that the limited observations described herein do not comprise a full ADA Compliance Survey, and that such a survey is beyond the scope of this particular assessment. A full measured ADA survey would be required to identify any and all specific potential accessibility issues. Additional clarifications of this limited survey:

- This survey was visual in nature and actual measurements were not taken to verify compliance
- Only a representative sample of areas was observed
- Two overview photos were taken for each subsection regardless of perceived compliance or non-compliance
- Itemized costs for individual non-compliant items are not included in the dataset
- For any “none” boxes checked or reference to “no issues” identified, that alone does not guarantee full compliance

The campus was originally constructed in 1958 and widespread accessibility improvements appear to have been implemented along its history.

During the interview process with the client representatives, no complaints or pending litigation associated with potential accessibility issues within the campus was reported.

No detailed follow-up accessibility studies are included as recommendations since no major or moderate issues were identified at any of the campus facilities. Reference the appendix for specific data, photos, and tables or checklists associated with this limited accessibility survey.

8. Purpose and Scope

Purpose

Bureau Veritas was retained by the client to render an opinion as to the Property's current general physical condition on the day of the site visit.

Based on the observations, interviews and document review outlined below, this report identifies significant deferred maintenance issues, existing deficiencies, and material code violations of record, which affect the Property's use. Opinions are rendered as to its structural integrity, building system condition and the Property's overall condition. The report also notes building systems or components that have realized or exceeded their typical expected useful lives.

The physical condition of building systems and related components are typically defined as being in one of five condition ratings. For the purposes of this report, the following definitions are used:

Condition Ratings	
Excellent	New or very close to new; component or system typically has been installed within the past year, sound and performing its function. Eventual repair or replacement will be required when the component or system either reaches the end of its useful life or fails in service.
Good	Satisfactory as-is. Component or system is sound and performing its function, typically within the first third of its lifecycle. However, it may show minor signs of normal wear and tear. Repair or replacement will be required when the component or system either reaches the end of its useful life or fails in service.
Fair	Showing signs of wear and use but still satisfactory as-is, typically near the median of its estimated useful life. Component or system is performing adequately at this time but may exhibit some signs of wear, deferred maintenance, or evidence of previous repairs. Repair or replacement will be required due to the component or system's condition and/or its estimated remaining useful life.
Poor	Component or system is significantly aged, flawed, functioning intermittently or unreliably; displays obvious signs of deferred maintenance; shows evidence of previous repair or workmanship not in compliance with commonly accepted standards; has become obsolete; or exhibits an inherent deficiency. The present condition could contribute to or cause the deterioration of contiguous elements or systems. Either full component replacement is needed or repairs are required to restore to good condition, prevent premature failure, and/or prolong useful life.
Failed	Component or system has ceased functioning or performing as intended. Replacement, repair, or other significant corrective action is recommended or required.
Not Applicable	Assigning a condition does not apply or make logical sense, most commonly due to the item in question not being present.

Scope

The standard scope of the Facility Condition Assessment includes the following:

- Visit the Property to evaluate the general condition of the building and site improvements, review available construction documents in order to familiarize ourselves with, and be able to comment on, the in-place construction systems, life safety, mechanical, electrical, and plumbing systems, and the general built environment.
- Identify those components that are exhibiting deferred maintenance issues and provide cost estimates for Immediate Costs and Replacement Reserves based on observed conditions, maintenance history and industry standard useful life estimates. This will include the review of documented capital improvements completed within the last five-year period and work currently contracted for, if applicable.
- Provide a full description of the Property with descriptions of in-place systems and commentary on observed conditions.
- Provide a high-level categorical general statement regarding the subject Property's compliance to Title III of the Americans with Disabilities Act. This will not constitute a full ADA survey, but will help identify exposure to issues and the need for further review.
- Obtain background and historical information about the facility from a building engineer, property manager, maintenance staff, or other knowledgeable source. The preferred methodology is to have the client representative or building occupant complete a Pre-Survey Questionnaire (PSQ) in advance of the site visit. Common alternatives include a verbal interview just prior to or during the walk-through portion of the assessment.
- Review maintenance records and procedures with the in-place maintenance personnel.
- Observe a representative sample of the interior spaces/units, including vacant spaces/units, to gain a clear understanding of the property's overall condition. Other areas to be observed include the exterior of the property, the roofs, interior common areas, and the significant mechanical, electrical and elevator equipment rooms.
- Provide recommendations for additional studies, if required, with related budgetary information.
- Provide an Executive Summary at the beginning of this report, which highlights key findings and includes a Facility Condition Index as a basis for comparing the relative conditions of the buildings within the portfolio.

9. Opinions of Probable Costs

Cost estimates are attached throughout this report, with the Replacement Reserves in the appendix.

These estimates are based on Invoice or Bid Document/s provided either by the Owner/facility and construction costs developed by construction resources such as *R.S. Means*, *CBRE Whitestone*, and *Marshall & Swift*, Bureau Veritas's experience with past costs for similar properties, city cost indexes, and assumptions regarding future economic conditions.

Opinions of probable costs should only be construed as preliminary, order of magnitude budgets. Actual costs most probably will vary from the consultant's opinions of probable costs depending on such matters as type and design of suggested remedy, quality of materials and installation, manufacturer and type of equipment or system selected, field conditions, whether a physical deficiency is repaired or replaced in whole, phasing or bundling of the work (if applicable), quality of contractor, quality of project management exercised, market conditions, use of subcontractors, and whether competitive pricing is solicited, etc. Certain opinions of probable costs cannot be developed within the scope of this guide without further study. Opinions of probable cost for further study should be included in the FCA.

Methodology

Based upon site observations, research, and judgment, along with referencing Expected Useful Life (EUL) tables from various industry sources, Bureau Veritas opines as to when a system or component will most probably necessitate replacement. Accurate historical replacement records, if provided, are typically the best source of information. Exposure to the elements, initial quality and installation, extent of use, the quality and amount of preventive maintenance exercised, etc., 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 chronological age. The Remaining Useful Life (RUL) of a component or system equals the EUL less its *effective age*, whether explicitly or implicitly stated. Projections of Remaining Useful Life (RUL) are based primarily on age and condition with the presumption of continued use and maintenance of the Property similar to the observed and reported past use and maintenance practices, in conjunction with the professional judgment of Bureau Veritas's assessors. Significant changes in occupants and/or usage may affect the service life of some systems or components.

Where quantities could not be or were not derived from an actual construction document take-off or facility walk-through, and/or where systemic costs are more applicable or provide more intrinsic value, budgetary square foot and gross square foot costs are used. Estimated costs are based on professional judgment and the probable or actual extent of the observed defect, inclusive of the cost to design, procure, construct and manage the corrections.

Definitions

Immediate Needs

Immediate Needs are line items that require immediate action as a result of: (1) material existing or potential unsafe conditions, (2) failed or imminent failure of mission critical building systems or components, or (3) conditions that, if not addressed, have the potential to result in, or contribute to, critical element or system failure within one year or will most probably result in a significant escalation of its remedial cost.

For database and reporting purposes the line items with RUL=0, and commonly associated with *Safety* or *Performance/Integrity* Plan Types, are considered Immediate Needs.

Replacement Reserves

Cost line items traditionally called Replacement Reserves (equivalently referred to as Lifecycle/Renewals) are for recurring probable renewals or expenditures, which are not classified as operation or maintenance expenses. The replacement reserves should be budgeted for in advance on an annual basis. Replacement Reserves are reasonably predictable both in terms of frequency and cost. However, Replacement Reserves may also include components or systems that have an indeterminable life but, nonetheless, have a potential for failure within an estimated time period.

Replacement Reserves generally exclude systems or components that are estimated to expire after the reserve term and are not considered material to the structural and mechanical integrity of the subject property. Furthermore, systems and components that are not deemed to have a material effect on the use of the Property are also excluded. Costs that are caused by acts of God, accidents, or other occurrences that are typically covered by insurance, rather than reserved for, are also excluded.

Replacement costs are solicited from ownership/property management, Bureau Veritas's discussions with service companies, manufacturers' representatives, and previous experience in preparing such schedules for other similar facilities. Costs for work performed by the ownership's or property management's maintenance staff are also considered.

Bureau Veritas's reserve methodology involves identification and quantification of those systems or components requiring capital reserve funds within the assessment period. The assessment period is defined as the effective age plus the reserve term. Additional information concerning system's or component's respective replacement costs (in today's dollars), typical expected useful lives, and remaining useful lives were estimated so that a funding schedule could be prepared. The Replacement Reserves Schedule presupposes that all required remedial work has been performed or that monies for remediation have been budgeted for items defined as Immediate Needs.

For the purposes of 'bucketizing' the System Expenditure Forecasts in this report, the Replacement Reserves have been subdivided and grouped as follows: Short Term (years 1-3), Near Term (years 4-5), Medium Term (years 6-10), and Long Term (years 11-20).

Key Findings

In an effort to highlight the most significant cost items and not be overwhelmed by the Replacement Reserves report in its totality, a subsection of Key Findings is included within the Executive Summary section of this report. Key Findings typically include repairs or replacements of deficient items within the first five-year window, as well as the most significant high-dollar line items that fall anywhere within the ten-year term. Note that while there is some subjectivity associated with identifying the Key Findings, the Immediate Needs are always included as a subset.

Exceedingly Aged

A fairly common scenario encountered during the assessment process, and a frequent source of debate, occurs when classifying and describing "very old" systems or components that are still functioning adequately and do not appear nor were reported to be in any way deficient. To help provide some additional intelligence on these items, such components will be tagged in the database as Exceedingly Aged. This designation will be reserved for mechanical or electrical systems or components that have aged well beyond their industry standard lifecycles, typically at least 15 years beyond and/or twice their Estimated Useful Life (EUL). In tandem with this designation, these items will be assigned a Remaining Useful Life (RUL) not less than two years but not greater than 1/3 of their standard EUL. As such the recommended replacement time for these components will reside outside the typical Short Term window but will not be pushed 'irresponsibly' (too far) into the future.

10. Certification

DLR Group – Pasadena Unified School District (the Client) retained Bureau Veritas to perform this Facility Condition Assessment in connection with its continued operation of Center for Independent Study (CIS), 2925 East Sierra Madre Boulevard, Pasadena, California 91107, the “Property”. It is our understanding that the primary interest of the Client is to locate and evaluate materials and building system defects that might significantly affect the value of the property and to determine if the present Property has conditions that will have a significant impact on its continued operations.

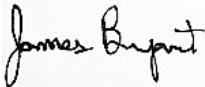
The conclusions and recommendations presented in this report are based on the brief review of the plans and records made available to our Project Manager during the site visit, interviews of available property management personnel and maintenance contractors familiar with the Property, appropriate inquiry of municipal authorities, our Project Manager’s walk-through observations during the site visit, and our experience with similar properties.

No testing, exploratory probing, dismantling or operating of equipment or in-depth studies were performed unless specifically required under the *Purpose and Scope* section of this report. This assessment did not include engineering calculations to determine the adequacy of the Property’s original design or existing systems. Although walk-through observations were performed, not all areas may have been observed (see Section 1 for specific details). There may be defects in the Property, which were in areas not observed or readily accessible, may not have been visible, or were not disclosed by management personnel when questioned. The report describes property conditions at the time that the observations and research were conducted.

This report has been prepared for and is exclusively for the use and benefit of the Client identified on the cover page of this report. The purpose for which this report shall be used shall be limited to the use as stated in the contract between the client and Bureau Veritas.

This report, or any of the information contained therein, is not for the use or benefit of, nor may it be relied upon by any other person or entity, for any purpose without the advance written consent of Bureau Veritas. Any reuse or distribution without such consent shall be at the client’s or recipient’s sole risk, without liability to Bureau Veritas.

Prepared by: Jeroen Smit
Project Manager

Reviewed by: 

James Bryant,
Technical Report Reviewer for
Anselmo Martinez, RA
Program Manager
anselmo.martinez@bureauveritas.com

11. Appendices

- Appendix A: Photographic Record
- Appendix B: Site Plan
- Appendix C: Pre-Survey Questionnaire
- Appendix D: Accessibility Review and Photos
- Appendix E: Component Condition Report
- Appendix F: Replacement Reserves
- Appendix G: Equipment Inventory List

Appendix A:

Photographic Record

Photographic Overview



1 - COVER PHOTO



2 - FRONT ELEVATION



3 - LEFT ELEVATION



4 - REAR ELEVATION



5 - RIGHT ELEVATION



6 - WALL AND ROOF STRUCTURE

Photographic Overview



7 - FACADE OVERVIEW



8 - CLASSROOM OVERVIEW



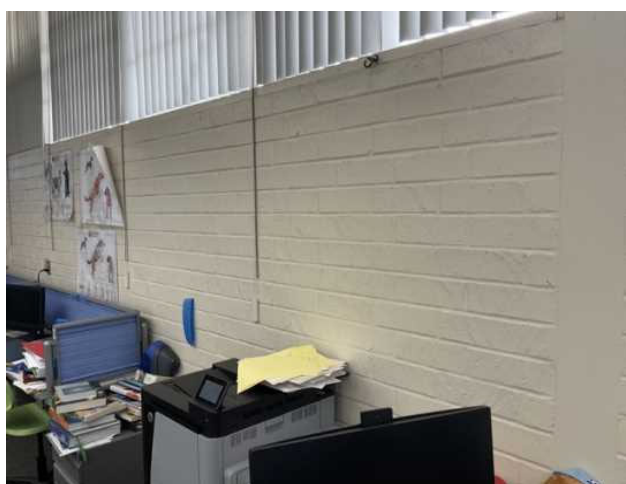
9 - CLASSROOM OVERVIEW



10 - HARD-TILE CEILING



11 - SUSPENDED CEILING



12 - INTERIOR WALLS

Photographic Overview



13 – VCT FLOORING



14 – CARPET TILE FLOORING



15 - BATHROOM VINYL FLOORING



16 - DUCTWORK

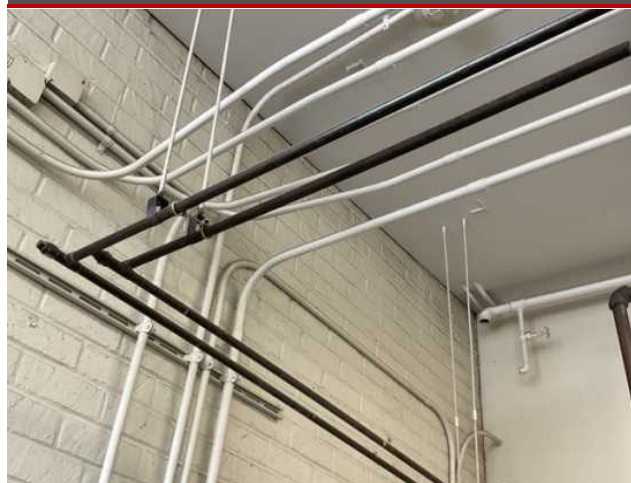


17 - CHILL WATER/STEAM PIPING

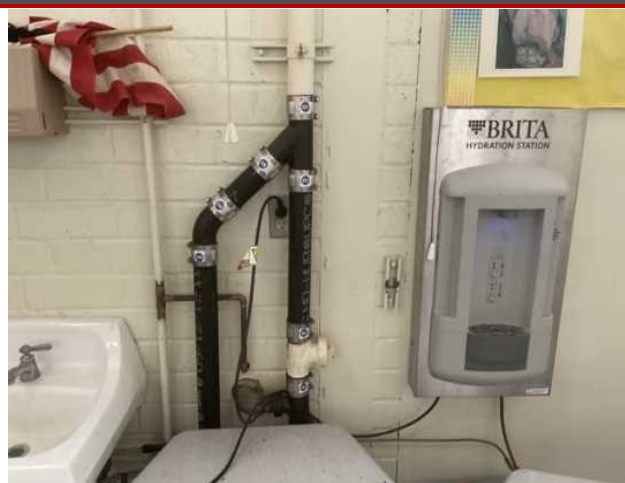


18 - DOMESTIC PIPING

Photographic Overview



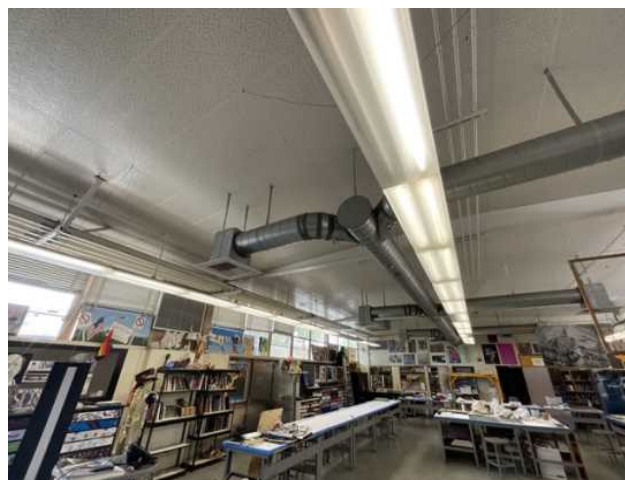
19 - DOMESTIC PIPING - SUPPLY



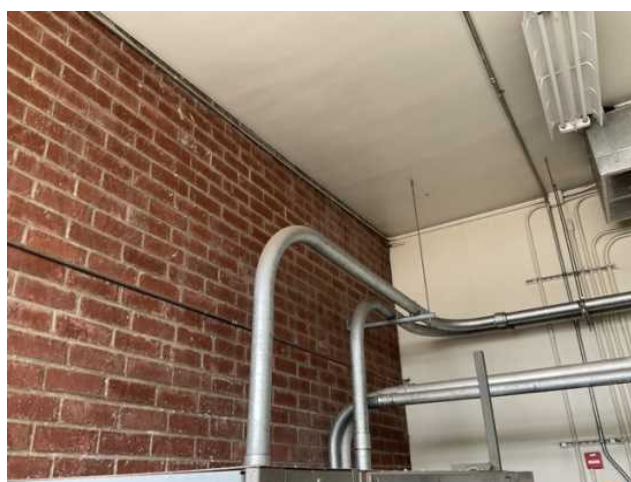
20 - WASTE PIPING



21 - RESTROOM FIXTURES



22 - INTERIOR LIGHTING



23 - ELECTRICAL METAL CONDUIT



24 - FIRE SPRINKLER RISER

Photographic Overview



25 - FIRE SPRINKLERS



26 - FIRE ALARM STROBE LIGHT



27 - ACCESSIBLE PANIC HARDWARE



28 - WALKWAY



29 - WALKWAY

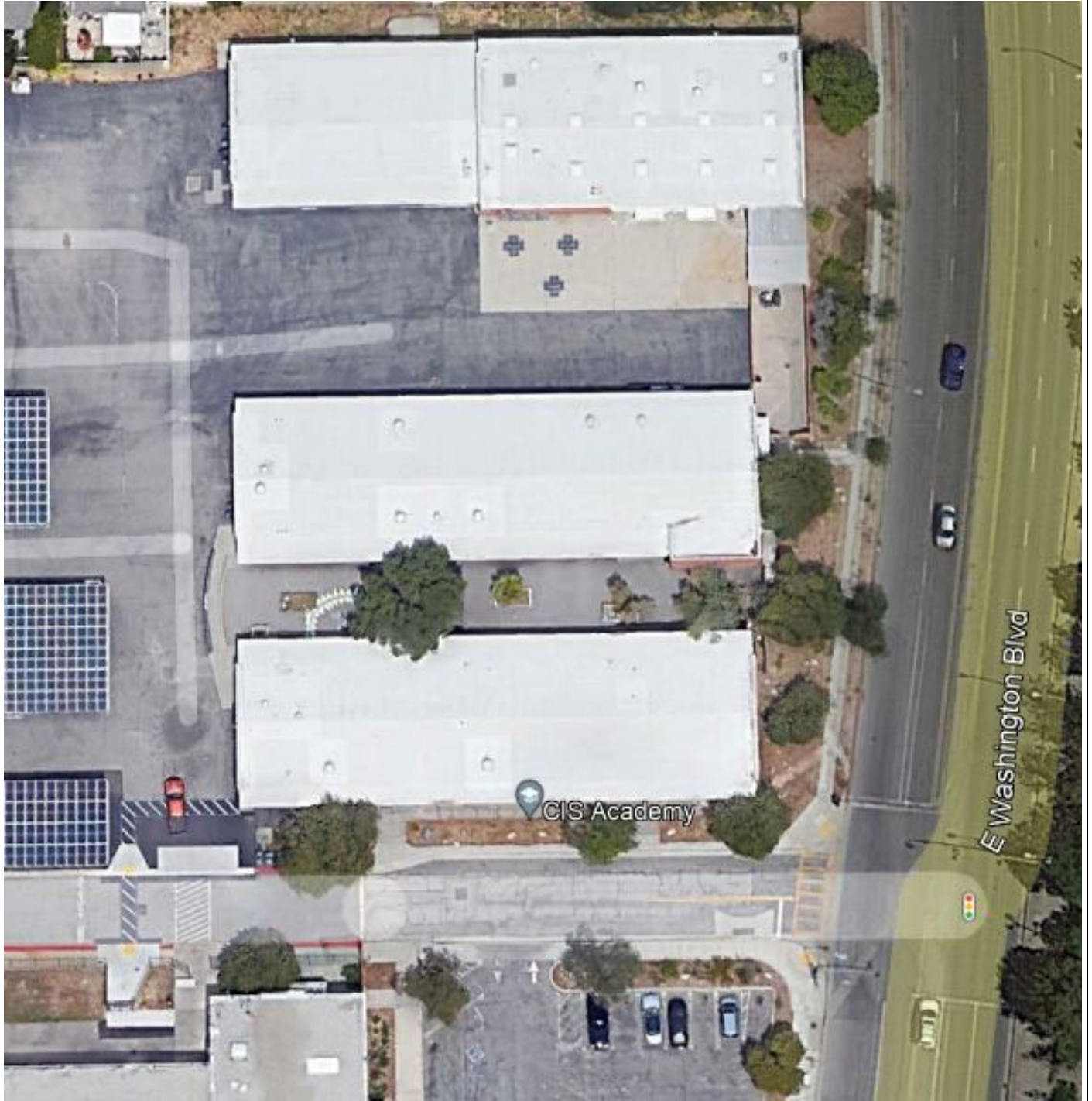


30 - SITE OVERVIEW

Appendix B:

Site Plan

Aerial Site Plan



**BUREAU
VERITAS**

Project Number

154554.22R000-023.354

Project Name

Center for Independent Study (CIS)

Source

Google

On-Site Date

June 13, 2022



Appendix C:

Pre-Survey Questionnaire

BV FACILITY CONDITION ASSESSMENT: PRE-SURVEY QUESTIONNAIRE

Building / Facility Name: Center for Independent Study (CIS)

Name of person completing form: Kristine Vucovic

Title / Association w/ property: Representative for client

Length of time associated w/ property:

Date Completed: 5/26/2022

Phone Number: 562.682.7029

Method of Completion: DURING - verbally completed during assessment

Directions: Please answer all questions to the best of your knowledge and in good faith. Please provide additional details in the Comments column, or backup documentation for any **Yes** responses.

Data Overview		Response		
1	Year(s) constructed	Constructed 1958	Renovated	
2	Building size in SF	SF		
3	Major Renovation/Rehabilitation		Year	Additional Detail
		Facade		
		Roof	2022	In progress
		Interiors		
		HVAC	2017	
		Electrical	2002	
		Site Pavement		
		Accessibility		
4	List other significant capital improvements (focus on recent years; provide approximate date).			
5	List any major capital expenditures planned/requested for the next few years. Have they been budgeted?			
6	Describe any on-going extremely problematic, historically chronic, or immediate facility needs.			

Mark the column corresponding to the appropriate response. Please provide additional details in the Comments column, or backup documentation for any **Yes** responses. (**NA** indicates "Not Applicable", **Unk** indicates "Unknown")

Question		Response				Comments
		Yes	No	Unk	NA	
7	Are there any problems with foundations or structures, like excessive settlement?		✗			
8	Are there any wall, window, basement or roof leaks?	✗				Roof replacement in progress
9	Has any part of the facility ever contained visible suspect mold growth, or have there been any indoor air quality complaints?			✗		
10	Are your elevators unreliable, with frequent service calls?				✗	
11	Are there any plumbing leaks, water pressure, or clogging/backup issues?		✗			
12	Have there been any leaks or pressure problems with natural gas, HVAC piping, or steam service?		✗			
13	Are any areas of the facility inadequately heated, cooled or ventilated? Poorly insulated areas?		✗			
14	Is the electrical service outdated, undersized, or problematic?		✗			
15	Are there any problems or inadequacies with exterior lighting?		✗			
16	Is site/parking drainage inadequate, with excessive ponding or other problems?		✗			
17	Are there any other unresolved construction defects or significant issues/hazards at the property that have not yet been identified above?		✗			
18	ADA: Has an accessibility study been previously performed? If so, when?				✗	
19	ADA: Have any ADA improvements been made to the property since original construction? Describe.	✗				Ramps, restrooms, door hardware, parking
20	ADA: Has building management reported any accessibility-based complaints or litigation?		✗			
21	Are any areas of the property leased to outside occupants?		✗			



Signature of Assessor

Signature of POC

Appendix D: Accessibility Review and Photos

Visual Checklist - 2010 ADA Standards for Accessible Design

Property Name: Center for Independent Studies

BV Project Number: 154554.22R000-023.354

Abbreviated Accessibility Checklist

Facility History & Interview

Question		Yes	No	Unk	Comments
1	Has an ADA survey previously been completed for this property? If so, indicate when.			X	
2	Have any ADA improvements been made to the property since original construction? Elaborate, especially if fully or partially addressed as the result of a previous study.	X			There are ramp and railings present not from original construction
3	Has building ownership/management reported any ADA complaints or litigation?			X	

Abbreviated Accessibility Checklist

Parking



OVERVIEW OF ACCESSIBLE PARKING AREA



CLOSE-UP OF STALL

Question		Yes	No	NA	Comments
1	Does the required number of standard ADA designated spaces appear to be provided?	X			
2	Does the required number of van-accessible designated spaces appear to be provided?	X			
3	Are accessible spaces on the shortest accessible route to an accessible building entrance?	X			
4	Does parking signage include the International Symbol of Accessibility?	X			
5	Does each accessible space have an adjacent access aisle?	X			
6	Do parking spaces and access aisles appear to be relatively level and without obstruction?	X			

Abbreviated Accessibility Checklist

Exterior Accessible Route



ACCESSIBLE PATH



CURB CUT

Question		Yes	No	NA	Comments
1	Is an accessible route present from public transportation stops and municipal sidewalks on or immediately adjacent to the property?	X			
2	Does a minimum of one accessible route appear to connect all public areas on the exterior, such as parking and other outdoor amenities, to accessible building entrances?	X			
3	Are curb ramps present at transitions through raised curbs on all accessible routes?	X			
4	Do curb ramps appear to have compliant slopes for all components?	X			
5	Do ramp runs on an accessible route appear to have compliant slopes?	X			
6	Do ramp runs on an accessible route appear to have a compliant rise and width?	X			
7	Do ramps on an accessible route appear to have compliant end and intermediate landings?	X			
8	Do ramps on an accessible route appear to have compliant handrails?	X			

Abbreviated Accessibility Checklist

Building Entrances



MAIN ACCESSIBLE ENTRANCE



SIGNAGE

Question		Yes	No	NA	Comments
1	Do a sufficient number of accessible entrances appear to be provided?	X			
2	If the main entrance is not accessible, is an alternate accessible entrance provided?			X	
3	Is signage provided indicating the location of alternate accessible entrances?			X	
4	Do doors at accessible entrances appear to have compliant maneuvering clearance area on each side?	X			
5	Do doors at accessible entrances appear to have compliant hardware?	X			
6	Do doors at accessible entrances appear to have a compliant clear opening width?	X			
7	Do pairs of accessible entrance doors in series appear to have the minimum clear space between them?	X			
8	Do thresholds at accessible entrances appear to have a compliant height?	X			

Abbreviated Accessibility Checklist

Interior Accessible Route



ACCESSIBLE INTERIOR PATH



HARDWARE

Question		Yes	No	NA	Comments
1	Does an accessible route appear to connect all public areas inside the building?	X			
2	Do accessible routes appear free of obstructions and/or protruding objects?	X			
3	Do ramps on accessible routes appear to have compliant slopes?	X			
4	Do ramp runs on an accessible route appear to have a compliant rise and width?	X			
5	Do ramps on accessible routes appear to have compliant end and intermediate landings?	X			
6	Do ramps on accessible routes appear to have compliant handrails?	X			
7	Are accessible areas of refuge and the accessible means of egress to those areas identified with accessible signage?			X	
8	Do public transaction areas have an accessible, lowered service counter section?			X	
9	Do public telephones appear mounted with an accessible height and location?			X	
10	Do doors at interior accessible routes appear to have compliant maneuvering clearance area on each side?	X			
11	Do doors at interior accessible routes appear to have compliant hardware?	X			
12	Do non-fire hinged, sliding, or folding doors on interior accessible routes appear to have compliant opening force?	X			

13	Do doors on interior accessible routes appear to have a compliant clear opening width?	X			
----	--	---	--	--	--

Abbreviated Accessibility Checklist

Public Restrooms



TOILET STALL OVERVIEW



SINK, FAUCET HANDLES AND ACCESSORIES

Question		Yes	No	NA	Comments
1	Do publicly accessible toilet rooms appear to have a minimum compliant floor area?	X			
2	Does the lavatory appear to be mounted at a compliant height and with compliant knee area?	X			
3	Does the lavatory faucet have compliant handles?	X			
4	Is the plumbing piping under lavatories configured to protect against contact?	X			
5	Are grab bars provided at compliant locations around the toilet?	X			
6	Do toilet stall doors appear to provide the minimum compliant clear width?	X			
7	Do toilet stalls appear to provide the minimum compliant clear floor area?	X			
8	Where more than one urinal is present in a multi-user restroom, does minimum one urinal appear to be mounted at a compliant height and with compliant approach width?			X	
9	Do accessories and mirrors appear to be mounted at a compliant height?	X			

Appendix E:

Component Condition Report

Component Condition Report | Center for Independent Study (CIS) / Building N

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
Facade						
B2010	Building Exterior	Fair	Exterior Walls, Brick	3,100 SF	20	3934316
B2020	Building Exterior	Fair	Window, Ribbon/Banded Style, Steel-Framed (by SF)	1,700 SF	5	3934290
B2050	Building Exterior	Fair	Exterior Door, Steel, Standard	13	20	3934302
Roofing						
B3010	Roof	Excellent	Roofing, Modified Bitumen	9,000 SF	20	3934311
Interiors						
C1030	Throughout building	Fair	Interior Door, Wood, Solid-Core	9	20	3934307
C1030	Throughout building	Good	Door Hardware, School, per Door	22	20	3934318
C1070	Throughout building	Fair	Suspended Ceilings, Acoustical Tile (ACT)	600 SF	5	3934296
C1070	Throughout building	Fair	Suspended Ceilings, Hard Tile, Replacement w/ ACT	5,500 SF	15	3934309
C2010	Restrooms	Good	Wall Finishes, Ceramic Tile	400 SF	29	3934326
C2010	Throughout building	Fair	Wall Finishes, any surface, Prep & Paint	9,700 SF	5	3934301
C2030	Throughout building	Poor	Flooring, Vinyl Tile (VCT)	2,220 SF	0	3934321
C2030	Classrooms	Fair	Flooring, Carpet, Commercial Tile	4,300 SF	3	3934293
C2030	Restrooms	Fair	Flooring, any surface, w/ Epoxy Coating, Prep & Paint	220 SF	5	3934308
C2050	Throughout building	Fair	Ceiling Finishes, any flat surface, Prep & Paint	660 SF	5	3934314
Plumbing						
D2010	Throughout building	Good	Sink/Lavatory, Wall-Hung, Vitreous China	2	20	3997900
D2010	Throughout building	Fair	Sink/Lavatory, Wall-Hung, Enameled Steel	3	19	3934295
D2010	Throughout building	Fair	Plumbing System, Supply & Sanitary, Low Density (excludes fixtures)	6,760 SF	20	3934323
D2010	N102	Good	Sink/Lavatory, Trough Style, Solid Surface	1	20	3934305
D2010	N102	Good	Sink/Lavatory, Service Sink, Laundry	1	20	3934315
D2010	Classrooms	Good	Sink/Lavatory, Vanity Top, Stainless Steel	2	20	3934304
D2010	Restrooms	Good	Toilet, Commercial Water Closet	4	20	3934297
HVAC						
D3030	Building exterior	NA	Heat Pump, Packaged & Wall-Mounted	1	1	3934319
D3050	Throughout building	Good	HVAC System, Ductwork, Medium Density	6,760 SF	20	3934306
D3050	N104	Fair	Fan Coil Unit, Hydronic Terminal [FC-N2]	1	4	3934298
D3050	N102	Fair	Fan Coil Unit, Hydronic Terminal [FC-N1]	1	4	3934322
D3050	N106	Fair	Fan Coil Unit, Hydronic Terminal [FC-N3]	1	4	3934317
D3050	N106	Fair	Fan Coil Unit, Hydronic Terminal [FC-N4]	1	4	3934320
D3050	Throughout building	Fair	HVAC System, Hydronic Piping, 4-Pipe	6,760 SF	20	3934324
D3060	Restrooms	Good	Supplemental Components, Hand Dryer, Restroom	2	8	3934294
D3060	Roof	Fair	Exhaust Fan, Roof or Wall-Mounted, 24" Damper	1	5	3934310
D3060	CBN	Fair	Exhaust Fan, Propeller, 0.25 HP Motor, 2000 CFM	1	5	3946012
D3060	Roof	Fair	Exhaust Fan, Roof or Wall-Mounted, 12" Damper	1	5	3934313
D3060	Roof	Fair	Exhaust Fan, Roof or Wall-Mounted, 16" Damper	2	5	3934303
Fire Protection						
D4010	Throughout building	Fair	Fire Suppression System, Existing Sprinkler Heads, by SF	6,760 SF	15	3934328
Electrical						
D5020	CBN 104	Fair	Distribution Panel, 120/208 V [LD]	1	9	3946006

Component Condition Report | Center for Independent Study (CIS) / Building N

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
D5030	Throughout building	Fair	Electrical System, Wiring & Switches, Average or Low Density/Complexity	6,760 SF	20	3934300
D5040	Throughout building	Fair	Interior Lighting System, Full Upgrade, High Density & Standard Fixtures	6,760 SF	10	3934325
D5040	Throughout building	Fair	Standard Fixture w/ Lamp, any type, w/ LED Replacement	16	10	3934292
Fire Alarm & Electronic Systems						
D6060	Throughout building	Fair	Intercom/PA System, Public Address Upgrade, Facility-Wide	6,760 SF	10	3934291
D7050	Throughout building	Fair	Fire Alarm System, Full System Upgrade, Simple Addressable, Upgrade/Install	6,760 SF	10	3934327
D8010	Throughout building	Fair	BAS/HVAC Controls, Basic System or Legacy Upgrades, Upgrade/Install	6,760 SF	3	3934312

Component Condition Report | Center for Independent Study (CIS) / Building P

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
Facade						
B2010	Building Exterior	Fair	Exterior Walls, Brick	3,100 SF	20	3934361
B2020	Building Exterior	Fair	Window, Ribbon/Banded Style, Steel-Framed (by SF)	1,500 SF	5	3934346
B2050	Building Exterior	Fair	Exterior Door, Steel, Standard	13	20	3934347
Roofing						
B3010	Roof	Excellent	Roofing, Modified Bitumen	9,200 SF	20	3934363
Interiors						
C1030	Throughout building	Good	Door Hardware, School, per Door	24	20	3934362
C1030	Throughout building	Fair	Interior Door, Steel, Standard	11	20	3934364
C1070	Throughout building	Fair	Suspended Ceilings, Acoustical Tile (ACT)	2,200 SF	15	3934340
C1070	Throughout building	Fair	Suspended Ceilings, Hard Tile, Replacement w/ ACT	4,420 SF	5	3934330
C2010	Throughout building	Fair	Wall Finishes, any surface, Prep & Paint	10,400 SF	5	3934342
C2010	Restrooms	Good	Wall Finishes, Ceramic Tile	400 SF	29	3934351
C2030	Restrooms	Fair	Flooring, any surface, w/ Epoxy Coating, Prep & Paint	200 SF	5	3934336
C2030	Throughout building	Fair	Flooring, Vinyl Tile (VCT)	6,620 SF	5	3934334
C2050	Throughout building	Fair	Ceiling Finishes, any flat surface, Prep & Paint	600 SF	5	3934329
Plumbing						
D2010	CBP	Fair	Sink/Lavatory, Commercial Kitchen, 1-Bowl	1	10	3946007
D2010	Restrooms	Fair	Sink/Lavatory, Wall-Hung, Enameled Steel	3	19	3934331
D2010	Restrooms	Good	Toilet, Commercial Water Closet	2	20	3934366
D2010	Throughout building	Fair	Plumbing System, Supply & Sanitary, Low Density (excludes fixtures)	7,220 SF	20	3934341
D2010	CBP	Good	Urinal, Waterless	3	20	3946021
HVAC						
D3050	P106	Fair	Fan Coil Unit, Hydronic Terminal [FC-P4]	1	4	3934332
D3050	Throughout building	Fair	HVAC System, Hydronic Piping, 4-Pipe	7,220 SF	20	3934350
D3050	P103	Fair	Fan Coil Unit, Hydronic Terminal [FC-P3]	1	4	3934353
D3050	P103	Fair	Fan Coil Unit, Hydronic Terminal [FC-P1]	1	4	3934356
D3050	Throughout building	Good	HVAC System, Ductwork, Medium Density	7,220 SF	20	3934358
D3050	Office	Fair	Fan Coil Unit, Hydronic Terminal [FC-P5]	1	4	3934339
D3060	Roof	Fair	Exhaust Fan, Roof or Wall-Mounted, 16" Damper	3	4	3934349
D3060	Restrooms	Good	Supplemental Components, Hand Dryer, Restroom	2	8	3934357
Fire Protection						
D4010		Fair	Fire Suppression System, Existing Sprinkler Heads, by SF	7,220 SF	10	4003045

Component Condition Report | Center for Independent Study (CIS) / Building P

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
Electrical						
D5020	CBP	Fair	Distribution Panel, 120/240 V [LBP]	1	9	3946022
D5020	Electrical room	Fair	Secondary Transformer, Dry, Stepdown	1	3	3946024
D5020	Electrical room	Fair	Secondary Transformer, Dry, Stepdown [LY]	1	3	3934359
D5020	P104	Fair	Distribution Panel, 120/240 V [LAP]	1	9	3934360
D5020	Electrical room	Fair	Switchboard, 120/208 V [SWITCHBOARD LX]	1	20	3934348
D5020	Electrical room	Fair	Supplemental Components, Bus Switch [L-Y]	1	10	3934352
D5020	Electrical room	Fair	Switchboard, 120/208 V	1	20	3946023
D5020	Electrical room	Fair	Supplemental Components, Bus Switch [L-X]	1	10	3934345
D5030	Throughout building	Fair	Electrical System, Wiring & Switches, Average or Low Density/Complexity	7,220 SF	20	3934344
D5040	Throughout building	Fair	Standard Fixture w/ Lamp, any type, w/ LED Replacement	16	10	3934333
D5040	Throughout building	Fair	Interior Lighting System, Full Upgrade, High Density & Standard Fixtures	7,220 SF	10	3934343

Fire Alarm & Electronic Systems

D6060	Throughout building	Fair	Intercom/PA System, Public Address Upgrade, Facility-Wide	7,220 SF	10	3934337
D7050	Throughout building	Fair	Fire Alarm System, Full System Upgrade, Simple Addressable, Upgrade/Install	7,220 SF	5	3934354
D8010	Throughout building	Fair	BAS/HVAC Controls, Basic System or Legacy Upgrades, Upgrade/Install	7,220 SF	4	3934338

Component Condition Report | Center for Independent Study (CIS) / Building Q

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
Facade						
B2010	Building Exterior	Fair	Exterior Walls, Brick	4,800 SF	20	3934379
B2020	Building Exterior	Fair	Window, Ribbon/Banded Style, Steel-Framed (by SF)	2,400 SF	5	3934378
B2050	Building Exterior	Fair	Exterior Door, Steel, Standard	14	20	3934383
Roofing						
B3010	Roof	Excellent	Roofing, Modified Bitumen	10,300 SF	20	3934398
Interiors						
C1030	Throughout building	Fair	Interior Door, Wood, Solid-Core	4	20	3934377
C1030	Throughout building	Good	Door Hardware, School, per Door	18	20	3934376
C1070	Throughout building	Fair	Suspended Ceilings, Hard Tile, Replacement w/ ACT	5,000 SF	5	3934382
C1070	Throughout building	Fair	Suspended Ceilings, Acoustical Tile (ACT)	2,743 SF	10	3934395
C1090	Classrooms	Fair	Lockers, Steel-Baked Enamel, 12" W x 15" D x 72" H, 3-door	15	5	3946009
C2010	Throughout building	Fair	Wall Finishes, any surface, Prep & Paint	6,000 SF	5	3934393
C2030	Classrooms	Fair	Flooring, Carpet, Commercial Standard	2,443 SF	5	3934370
C2030	Throughout building	Fair	Flooring, Vinyl Tile (VCT)	6,300 SF	5	3934367
C2050	Throughout building	Fair	Ceiling Finishes, any flat surface, Prep & Paint	1,000 SF	5	3934369
Plumbing						
D2010	Q107	Fair	Sink/Lavatory, Service Sink, Wall-Hung	1	20	3934394
D2010	Throughout building	Fair	Plumbing System, Supply & Sanitary, Low Density (excludes fixtures)	8,743 SF	20	3934397
D2010	Classrooms	Good	Sink/Lavatory, Wall-Hung, Vitreous China	2	20	3934390
D2010	CBQ	Fair	Emergency Plumbing Fixtures, Eye Wash & Shower Station	1	10	3946018
D2010	Classrooms	Fair	Sink/Lavatory, Commercial Kitchen, 1-Bowl	1	10	3946011
D2010	Building exterior	Fair	Drinking Fountain, Wall-Mounted, Single-Level	1	5	3934399

HVAC

Component Condition Report | Center for Independent Study (CIS) / Building Q

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
D3050	Throughout building	Fair	HVAC System, Hydronic Piping, 4-Pipe	8,743 SF	20	3934388
D3050	Q103	Fair	Fan Coil Unit, Hydronic Terminal [FC-Q2]	1	4	3934392
D3050	Q105 Mezzanine	Fair	Fan Coil Unit, Hydronic Terminal [FC-Q3]	1	4	3934387
D3050	Q109 Mezzanine	Fair	Fan Coil Unit, Hydronic Terminal [FC-Q5]	1	4	3934374
D3050	Q107 Mezzanine	Fair	Fan Coil Unit, Hydronic Terminal [FC-Q4]	1	4	3934381
D3050	Q101	Fair	Fan Coil Unit, Hydronic Terminal [FC-Q1]	1	4	3934396
D3050	Throughout building	Good	HVAC System, Ductwork, Medium Density	8,743 SF	20	3934385
D3060	Roof	Fair	Exhaust Fan, Roof or Wall-Mounted, 16" Damper	2	5	3960121
Fire Protection						
D4010	Throughout building	Fair	Fire Suppression System, Existing Sprinkler Heads, by SF	8,743 SF	15	3934384
Electrical						
D5030	Throughout building	Fair	Electrical System, Wiring & Switches, Average or Low Density/Complexity	8,743 SF	20	3934372
D5040	Throughout building	Fair	Standard Fixture w/ Lamp, any type, w/ LED Replacement	16	10	3934375
D5040	Throughout building	Fair	Interior Lighting System, Full Upgrade, High Density & Standard Fixtures	8,743 SF	10	3934368
Fire Alarm & Electronic Systems						
D6060	Throughout building	Fair	Intercom/PA System, Public Address Upgrade, Facility-Wide	8,743 SF	10	3934386
D7050	Throughout building	Fair	Fire Alarm System, Full System Upgrade, Simple Addressable, Upgrade/Install	8,743 SF	10	3934389
D8010	Throughout building	Fair	BAS/HVAC Controls, Basic System or Legacy Upgrades, Upgrade/Install	8,743 SF	4	3934391
Equipment & Furnishings						
E1040	Roof	Fair	Laboratory Equipment, Exhaust Hood, Constant Volume 4 LF	1	5	3934380
E1040	Q105	Good	Laboratory Equipment, Lab Sink, Epoxy Resin	3	20	3934371

Component Condition Report | Center for Independent Study (CIS)

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
Special Construction & Demo						
F1020	Site	Fair	Shed/Gazebo/Shade Structure, Wood or Metal-Framed, Standard	500 SF	10	4003107

Component Condition Report | Center for Independent Study (CIS) / Site

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
Pedestrian Plazas & Walkways						
G2020	Site	Fair	Parking Lots, Pavement, Asphalt, Mill & Overlay	8,000 SF	10	3946008
G2020	Site	Fair	Parking Lots, Pavement, Concrete	2,700 SF	10	3946013
G2020	Site	Fair	Parking Lots, Pavement, Asphalt, Seal	7,800 SF	3	3946014
G2030	Site	Poor	Sidewalk, Asphalt, Seal	1,200 SF	1	3998660
G2030	Site	Poor	Sidewalk, Asphalt	1,200 SF	1	3946016
G2030	Site	Fair	Sidewalk, Asphalt	4,400 SF	15	3946005
G2030	Site	Fair	Sidewalk, Concrete, Small Areas/Sections	100 SF	25	3946019
G2030	Site	Fair	Sidewalk, Asphalt, Seal	4,400 SF	2	3946015
Sitework						
G2060	Site	Fair	Fences & Gates, Fence, Wrought Iron 6'	50 LF	25	3946010

Appendix F:

Replacement Reserves

Replacement Reserves Report

9/11/2022

Location	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	Total Escalated Estimate
Center for Independent Study (CIS)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$36,555	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$36,555
Center for Independent Study (CIS) / Building N	\$12,077	\$4,931	\$0	\$53,322	\$29,389	\$156,413	\$0	\$0	\$4,410	\$2,839	\$92,050	\$0	\$0	\$44,658	\$0	\$95,082	\$0	\$0	\$37,230	\$9,730	\$831,255	\$1,373,385
Center for Independent Study (CIS) / Building P	\$0	\$0	\$0	\$59,444	\$60,309	\$207,747	\$0	\$0	\$4,410	\$7,098	\$100,742	\$0	\$0	\$0	\$0	\$45,597	\$0	\$0	\$5,927	\$44,166	\$1,078,006	\$1,613,448
Center for Independent Study (CIS) / Building Q	\$0	\$0	\$0	\$0	\$63,502	\$285,837	\$0	\$0	\$0	\$0	\$136,871	\$0	\$0	\$0	\$0	\$65,561	\$0	\$0	\$0	\$41,700	\$1,166,332	\$1,759,803
Center for Independent Study (CIS) / Site	\$0	\$8,001	\$2,285	\$4,173	\$0	\$0	\$702	\$2,649	\$4,838	\$0	\$76,472	\$813	\$3,071	\$5,608	\$0	\$41,021	\$943	\$3,561	\$6,501	\$0	\$0	\$160,639
Grand Total	\$12,077	\$12,932	\$2,285	\$116,939	\$153,201	\$649,996	\$702	\$2,649	\$13,658	\$9,937	\$442,690	\$813	\$3,071	\$50,266	\$0	\$247,261	\$943	\$3,561	\$49,659	\$95,596	\$3,075,594	\$4,943,830

Center for Independent Study (CIS)

Uniformat Code	Location	Description	ID	Cost Description	Lifespan (EUL)	EAge	RUL	Quantity	Unit	Unit Cost *	Subtotal	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	Deficiency Repair Estimate								
F1020	Site	4003107	Shed/Gazebo/Shade Structure, Wood or Metal-Framed, Standard, Replace		30	20	10	500	SF	\$54.40	\$27,200											\$27,200											\$27,200								
Totals, Unescalated												\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$27,200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$27,200	
Totals, Escalated (3.0% inflation, compounded annually)												\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$36,555	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$36,555

Center for Independent Study (CIS) / Building N

Uniformat Code	Location	Description	ID	Cost Description	Lifespan (EUL)	EAge	RUL	Quantity	Unit	Unit Cost *	Subtotal	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	Deficiency Repair Estimate		
B2010	Building Exterior	3934316	Exterior Walls, Brick, Replace		50	30	20	3100	SF	\$57.66	\$178,758																						\$178,758	\$178,758	
B2020	Building Exterior	3934290	Window, Ribbon/Banded Style, Steel-Framed (by SF), Replace		30	25	5	1700	SF	\$59.84	\$101,728						\$101,728																	\$101,728	
B2050	Building Exterior	3934302	Exterior Door, Steel, Standard, Replace		40	20	20	13	EA	\$652.80	\$8,486																							\$8,486	
B3010	Roof	3934311	Roofing, Modified Bitumen, Replace		20	0	20	9000	SF	\$10.88	\$97,920																							\$97,920	
C1030	Throughout building	3934307	Interior Door, Wood, Solid-Core, Replace		40	20	20	9	EA	\$761.60	\$6,854																							\$6,854	
C1030	Throughout building	3934318	Door Hardware, School, per Door, Replace		30	10	20	22	EA	\$435.20	\$9,574																							\$9,574	
C1070	Throughout building	3934296	Suspended Ceilings, Acoustical Tile (ACT), Replace		25	20	5	600	SF	\$3.81	\$2,285						\$2,285																	\$2,285	
C1070	Throughout building	3934309	Suspended Ceilings, Hard Tile, Replacement w/ ACT, Replace		25	10	15	5500	SF	\$3.81	\$20,944																\$20,944							\$20,944	
C2010	Throughout building	3934301	Wall Finishes, any surface, Prep & Paint		10	5	5	9700	SF	\$1.63	\$15,830						\$15,830									\$15,830								\$15,830	
C2030	Restrooms	3934308	Flooring, any surface, w/ Epoxy Coating, Prep & Paint		10	5	5	220	SF	\$13.06	\$2,872						\$2,872										\$2,872								\$5,745
C2030	Throughout building	3934321	Flooring, Vinyl Tile (VCT), Replace		15	15	0	2220	SF	\$5.44	\$12,077	\$12,077																\$12,077							\$24,154
C2030	Classrooms	3934293	Flooring, Carpet, Commercial Tile, Replace		10	7	3	4300	SF	\$7.07	\$30,410					\$30,410										\$30,410									\$60,819
C2050	Throughout building	3934314	Ceiling Finishes, any flat surface, Prep & Paint		10	5	5	660	SF	\$2.18	\$1,436						\$1,436										\$1,436								\$2,872
D2010	Throughout building	3934323	Plumbing System, Supply & Sanitary, Low Density (excludes fixtures), Replace		40	20	20	6760	SF	\$5.44	\$36,774																							\$36,774	
D2010	Throughout building	3934295	Sink/Lavatory, Wall-Hung, Enameled Steel, Replace		30	11	19	3	EA	\$1,849.60	\$5,549																							\$5,549	
D2010	Throughout building	3997900	Sink/Lavatory, Wall-Hung, Vitreous China, Replace		30	10	20	2	EA	\$1,632.00	\$3,264																								\$3,264
D2010	N102	3934305	Sink/Lavatory, Trough Style, Solid Surface, Replace		30	10	20	1	EA	\$2,720.00	\$2,720																								\$2,720
D2010	N102	3934315	Sink/Lavatory, Service Sink, Laundry, Replace		30	10	20	1	EA	\$979.20	\$979																								\$979
D2010	Classrooms	3934304	Sink/Lavatory, Vanity Top, Stainless Steel, Replace		30	10	20	2	EA	\$1,305.60	\$2,611																								\$2,611
D2010	Restrooms	3934297	Toilet, Commercial Water Closet, Replace		30	10	20	4	EA	\$1,414.40	\$5,658																								\$5,658
D3030	Building exterior	3934319	Heat Pump, Packaged & Wall-Mounted, Replace		20	19	1	1	EA	\$4,787.20	\$4,787		\$4,787																						\$4,787
D3050	N104	3934298	Fan Coil Unit, Hydronic Terminal, Replace		20	16	4	1	EA	\$6,528.00	\$6,528						\$6,528																		\$6,528
D3050	N102	3934322	Fan Coil Unit, Hydronic Terminal, Replace		20	16	4	1	EA	\$6,528.00	\$6,528						\$6,528																		\$6,528
D3050	N106	3934317	Fan Coil Unit, Hydronic Terminal, Replace		20	16	4	1	EA	\$6,528.00	\$6,528						\$6,528																		\$6,528
D3050	N106	3934320	Fan Coil Unit, Hydronic Terminal, Replace		20	16	4	1	EA	\$6,528.00	\$6,528						\$6,528																		\$6,528
D3050	Throughout building	3934324	HVAC System, Hydronic Piping, 4-Pipe, Replace		40	20	20	6760	SF	\$8.70	\$58,839																								\$58,839
D3050	Throughout building	3934306	HVAC System, Ductwork, Medium Density, Replace		30	10	20	6760	SF	\$4.35	\$29,420																								\$29,420
D3060	Roof	3934310	Exhaust Fan, Roof or Wall-Mounted, 24" Damper, Replace		20	15	5	1	EA	\$3,264.00	\$3,264						\$3,264																		\$3,264
D3060	CBN	3946012	Exhaust Fan, Propeller, 0.25 HP Motor, 2000 CFM, Replace		20	15	5	1	EA	\$761.60	\$762						\$762																		\$762
D3060	Roof	3934313	Exhaust Fan, Roof or Wall-Mounted, 12" Damper, Replace		20	15	5	1	EA	\$1,523.20	\$1,523						\$1,523																		\$1,523
D3060	Roof	3934303	Exhaust Fan, Roof or Wall-Mounted, 16" Damper, Replace		20	15	5	2	EA	\$2,611.20	\$5,222						\$5,222																		\$5,222
D3060	Restrooms	3934294	Supplemental Components, Hand Dryer, Restroom, Replace		10	2	8	2	EA	\$1,740.80	\$3,482									\$3,482															\$3,482
D4010	Throughout building	3934328	Fire Suppression System, Existing Sprinkler Heads, by SF, Replace		25	10	15	6760	SF	\$1.16	\$7,870																\$7,870								\$7,870
D5020	CBN 104	3946006	Distribution Panel, 120/208 V, Replace		30	21	9	1	EA	\$2,176.00	\$2,176										\$2,176														\$2,176
D5030	Throughout building	3934300	Electrical System, Wiring & Switches, Average or Low Density/Complexity, Replace		40	20	20	6760	SF	\$2.72	\$18,387																								\$18,387
D5040	Throughout building	3934325	Interior Lighting System, Full Upgrade, High Density & Standard Fixtures, Replace		20	10	10	6760	SF	\$5.44	\$36,774													\$36,774											\$36,774
D5040	Throughout building	3934292	Standard Fixture w/ Lamp, any type, w/ LED Replacement, Replace		20	10	10	16	EA	\$304.64	\$4,874													\$4,874											\$4,874
D6060	Throughout building	3934291	Intercom/PA System, Public Address Upgrade, Facility-Wide, Replace		20	10	10	6760	SF	\$1.80	\$12,136												\$12,136												\$12,136
D7050	Throughout building	3934327	Fire Alarm System, Full System Upgrade, Simple Addressable, Upgrade/Install		20	10	10	6760	SF	\$2.18	\$14,710													\$14,710											\$14,710
D8010	Throughout building	3934312	BAS/HVAC Controls, Basic System or Legacy Upgrades, Upgrade/Install		15	12	3	6760	SF	\$2.72	\$18,387					\$18,387																			\$18,387
Totals, Unescalated												\$12,077	\$4,787	\$0	\$48,797	\$26,112	\$134,923	\$0	\$0	\$3,482	\$2,176	\$68,494	\$0	\$0	\$30,410	\$0	\$61,029	\$0	\$0	\$21,869	\$5,549	\$460,246	\$879,950		
Totals, Escalated (3.0% inflation, compounded annually)												\$12,077	\$4,931	\$0	\$53,322	\$29,389	\$156,413	\$0	\$0	\$4,410	\$2,839	\$92,050	\$0	\$0	\$44,658	\$0	\$95,082	\$0	\$0	\$37,230	\$9,730	\$831,255	\$1,373,385		

Center for Independent Study (CIS) / Building P

Uniformat Code	Location	Description	ID	Cost Description	Lifespan (EUL)	EAge	RUL	Quantity	Unit	Unit Cost *	Subtotal	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
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Uniformat Code	Location Description	ID	Cost Description	Lifespan (EUL)	Age	RUL	Quantity	Unit	Unit Cost *	Subtotal	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	Deficiency Repair Estimate			
B3010	Roof	3934363	Roofing, Modified Bitumen, Replace	20	0	20	9200	SF	\$10.88	\$100,096																					\$100,096	\$100,096			
C1030	Throughout building	3934364	Interior Door, Steel, Standard, Replace	40	20	20	11	EA	\$652.80	\$7,181																					\$7,181	\$7,181			
C1030	Throughout building	3934362	Door Hardware, School, per Door, Replace	30	10	20	24	EA	\$435.20	\$10,445																					\$10,445	\$10,445			
C1070	Throughout building	3934330	Suspended Ceilings, Hard Tile, Replacement w/ ACT, Replace	25	20	5	4420	SF	\$3.81	\$16,831						\$16,831																\$16,831	\$16,831		
C1070	Throughout building	3934340	Suspended Ceilings, Acoustical Tile (ACT), Replace	25	10	15	2200	SF	\$3.81	\$8,378																					\$8,378	\$8,378			
C2010	Throughout building	3934342	Wall Finishes, any surface, Prep & Paint	10	5	5	10400	SF	\$1.63	\$16,973						\$16,973																\$16,973	\$33,946		
C2030	Restrooms	3934336	Flooring, any surface, w/ Epoxy Coating, Prep & Paint	10	5	5	200	SF	\$13.06	\$2,611						\$2,611																	\$2,611	\$5,222	
C2030	Throughout building	3934334	Flooring, Vinyl Tile (VCT), Replace	15	10	5	6620	SF	\$5.44	\$36,013						\$36,013																\$36,013	\$72,026		
C2050	Throughout building	3934329	Ceiling Finishes, any flat surface, Prep & Paint	10	5	5	600	SF	\$2.18	\$1,306						\$1,306																	\$1,306	\$2,611	
D2010	Throughout building	3934341	Plumbing System, Supply & Sanitary, Low Density (excludes fixtures), Replace	40	20	20	7220	SF	\$5.44	\$39,277																						\$39,277	\$39,277		
D2010	CBP	3946007	Sink/Lavatory, Commercial Kitchen, 1-Bowl, Replace	30	20	10	1	EA	\$1,740.80	\$1,741											\$1,741												\$1,741	\$1,741	
D2010	Restrooms	3934331	Sink/Lavatory, Wall-Hung, Enameled Steel, Replace	30	11	19	3	EA	\$1,849.60	\$5,549																						\$5,549	\$5,549		
D2010	Restrooms	3934366	Toilet, Commercial Water Closet, Replace	30	10	20	2	EA	\$1,414.40	\$2,829																							\$2,829	\$2,829	
D2010	CBP	3946021	Urinal, Waterless, Replace	30	10	20	3	EA	\$652.80	\$1,958																							\$1,958	\$1,958	
D3050	P106	3934332	Fan Coil Unit, Hydronic Terminal, Replace	20	16	4	1	EA	\$6,528.00	\$6,528						\$6,528																		\$6,528	\$6,528
D3050	P103	3934353	Fan Coil Unit, Hydronic Terminal, Replace	20	16	4	1	EA	\$6,528.00	\$6,528						\$6,528																		\$6,528	\$6,528
D3050	P103	3934356	Fan Coil Unit, Hydronic Terminal, Replace	20	16	4	1	EA	\$6,528.00	\$6,528						\$6,528																		\$6,528	\$6,528
D3050	Office	3934339	Fan Coil Unit, Hydronic Terminal, Replace	20	16	4	1	EA	\$6,528.00	\$6,528						\$6,528																		\$6,528	\$6,528
D3050	Throughout building	3934350	HVAC System, Hydronic Piping, 4-Pipe, Replace	40	20	20	7220	SF	\$8.70	\$62,843																							\$62,843	\$62,843	
D3050	Throughout building	3934358	HVAC System, Ductwork, Medium Density, Replace	30	10	20	7220	SF	\$4.35	\$31,421																							\$31,421	\$31,421	
D3060	Roof	3934349	Exhaust Fan, Roof or Wall-Mounted, 16" Damper, Replace	20	16	4	3	EA	\$2,611.20	\$7,834						\$7,834																		\$7,834	\$7,834
D3060	Restrooms	3934357	Supplemental Components, Hand Dryer, Restroom, Replace	10	2	8	2	EA	\$1,740.80	\$3,482																							\$3,482	\$3,482	
D4010	Building P	4003045	Fire Suppression System, Existing Sprinkler Heads, by SF, Replace	25	15	10	7220	SF	\$1.16	\$8,405																							\$8,405	\$8,405	
D5020	Electrical room	3946024	Secondary Transformer, Dry, Stepdown, Replace	30	27	3	1	EA	\$27,200.00	\$27,200					\$27,200																			\$27,200	\$27,200
D5020	Electrical room	3934359	Secondary Transformer, Dry, Stepdown, Replace	30	27	3	1	EA	\$27,200.00	\$27,200					\$27,200																			\$27,200	\$27,200
D5020	Electrical room	3934348	Switchboard, 120/208 V, Replace	40	20	20	1	EA	\$54,400.00	\$54,400																							\$54,400	\$54,400	
D5020	Electrical room	3946023	Switchboard, 120/208 V, Replace	40	20	20	1	EA	\$43,520.00	\$43,520																								\$43,520	\$43,520
D5020	CBP	3946022	Distribution Panel, 120/240 V, Replace	30	21	9	1	EA	\$2,720.00	\$2,720																								\$2,720	\$2,720
D5020	P104	3934360	Distribution Panel, 120/240 V, Replace	30	21	9	1	EA	\$2,720.00	\$2,720																								\$2,720	\$2,720
D5020	Electrical room	3934352	Supplemental Components, Bus Switch, Replace	30	20	10	1	EA	\$3,851.52	\$3,852																								\$3,852	\$3,852
D5020	Electrical room	3934345	Supplemental Components, Bus Switch, Replace	30	20	10	1	EA	\$3,851.52	\$3,852																								\$3,852	\$3,852
D5030	Throughout building	3934344	Electrical System, Wiring & Switches, Average or Low Density/Complexity, Replace	40	20	20	7220	SF	\$2.72	\$19,638																							\$19,638	\$19,638	
D5040	Throughout building	3934333	Standard Fixture w/ Lamp, any type, w/ LED Replacement, Replace	20	10	10	16	EA	\$304.64	\$4,874																								\$4,874	\$4,874
D5040	Throughout building	3934343	Interior Lighting System, Full Upgrade, High Density & Standard Fixtures, Replace	20	10	10	7220	SF	\$5.44	\$39,277																								\$39,277	\$39,277
D6060	Throughout building	3934337	Intercom/PA System, Public Address Upgrade, Facility-Wide, Replace	20	10	10	7220	SF	\$1.80	\$12,961																								\$12,961	\$12,961
D7050	Throughout building	3934354	Fire Alarm System, Full System Upgrade, Simple Addressable, Upgrade/Install	20	15	5	7220	SF	\$2.18	\$15,711						\$15,711																		\$15,711	\$15,711
D8010	Throughout building	3934338	BAS/HVAC Controls, Basic System or Legacy Upgrades, Upgrade/Install	15	11	4	7220	SF	\$2.72	\$19,638						\$19,638																		\$19,638	\$39,277
Totals, Unescalated												\$0	\$0	\$0	\$54,400	\$53,584	\$179,204	\$0	\$0	\$3,482	\$5,440	\$74,961	\$0	\$0	\$0	\$0	\$29,267	\$0	\$0	\$3,482	\$25,187	\$596,866		\$1,025,873	
Totals, Escalated (3.0% inflation, compounded annually)												\$0	\$0	\$0	\$59,444	\$60,309	\$207,747	\$0	\$0	\$4,410	\$7,098	\$100,742	\$0	\$0	\$0	\$0	\$45,597	\$0	\$0	\$5,927	\$44,166	\$1,078,006		\$1,613,448	

Center for Independent Study (CIS) / Building Q

Uniformat Code	Location Description	ID	Cost Description	Lifespan (EUL)	Age	RUL	Quantity	Unit	Unit Cost *	Subtotal	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	Deficiency Repair Estimate		
B2010	Building Exterior	3934379	Exterior Walls, Brick, Replace	50	30	20	4800	SF	\$57.66	\$276,787																						\$276,787	\$276,787	
B2020	Building Exterior	3934378	Window, Ribbon/Banded Style, Steel-Framed (by SF), Replace	30	25	5	2400	SF	\$59.84	\$143,616						\$143,616																		\$143,616
B2050	Building Exterior	3934383	Exterior Door, Steel, Standard, Replace	40	20	20	14	EA	\$652.80	\$9,139																							\$9,139	\$9,139
B3010	Roof	3934398	Roofing, Modified Bitumen, Replace	20	0	20	10300	SF	\$10.88	\$112,064																							\$112,064	\$112,064
C1030	Throughout building	3934377	Interior Door, Wood, Solid-Core, Replace	40	20	20	4	EA	\$761.60	\$3,046																							\$3,046	\$3,046
C1030	Throughout building	3934376	Door Hardware, School, per Door, Replace	30	10	20	18	EA	\$435.20	\$7,834																							\$7,834	\$7,834
C1070	Throughout building	3934382	Suspended Ceilings, Hard Tile, Replacement w/ ACT, Replace	25	20	5	5000	SF	\$3.81	\$19,040						\$19,040																		\$19,040
C1070	Throughout building	3934395	Suspended Ceilings, Acoustical Tile (ACT), Replace	25	15	10	2743	SF	\$3.81	\$10,445											\$10,445													\$10,445
C1090	Classrooms	3946009	Lockers, Steel-Baked Enamel, 12" W x 15" D x 72" H, 3-door, Replace	20	15	5	15	EA	\$544.00	\$8,160						\$8,160																		\$8,160
C2010	Throughout building	3934393	Wall Finishes, any surface, Prep & Paint	10	5	5	6000	SF	\$1.63	\$9,792						\$9,792										\$9,792								\$19,584
C2030	Throughout building	3934367	Flooring, Vinyl Tile (VCT), Replace	15	10	5	6300	SF	\$5.44	\$34,272							\$34,272																\$34,272	\$68,544
C2030	Classrooms	3934370	Flooring, Carpet, Commercial Standard, Replace	10	5	5	2443	SF	\$8.16	\$19,935						\$19,935										\$19,935								\$39,870
C2050	Throughout building	3934369	Ceiling Finishes, any flat surface, Prep & Paint	10	5	5	1000	SF	\$2.18	\$2,176						\$2,176										\$2,176								\$4,352
D2010	Throughout building	3934397	Plumbing System, Supply & Sanitary, Low Density (excludes fixtures), Replace	40	20	20	8743	SF	\$5.44	\$47,562																							\$47,562	\$47,562
D2010	Building exterior	3934399	Drinking Fountain, Wall-Mounted, Single-Level, Replace	15	10	5	1	EA	\$1,305.60	\$1,306						\$1,306																	\$1,306	\$2,611
D2010	CBQ	3946018	Emergency Plumbing Fixtures, Eye Wash & Shower Station, Replace	20	10	10	1	EA	\$2,502.40	\$2,502											\$2,502													\$2,502
D2010	Classrooms	3946011	Sink/Lavatory, Commercial Kitchen, 1-Bowl, Replace	30	20	10	1	EA	\$1,740.80	\$1,741											\$1,741													\$1,741
D2010	Q107	3934394	Sink/Lavatory, Service Sink, Wall-Hung, Replace	35	15	20	1	EA	\$1,523.20	\$1,523																							\$1,523	\$1,523
D2010	Classrooms	3934390	Sink/Lavatory, Wall-Hung, Vitreous China, Replace	30	10	20	2	EA	\$1,632.00	\$3,264																							\$3,264	\$3,264
D3050	Q103	3934392	Fan Coil Unit, Hydronic Terminal, Replace	20	16	4	1	EA	\$6,528.00	\$6,528						\$6,528																		\$6,528
D3050	Q105 Mezzanine	3934387	Fan Coil Unit, Hydronic Terminal, Replace	20	16	4	1	EA	\$6,528.00	\$6,528						\$6,528																		\$6,528
D3050	Q109 Mezzanine	3934374	Fan Coil Unit, Hydronic Terminal, Replace	20	16	4	1	EA	\$6,528.00	\$6,528						\$6,528																		\$6,528
D3050	Q107 Mezzanine	3934381	Fan Coil Unit, Hydronic Terminal, Replace	20	16	4	1	EA	\$6,528.00	\$6,528						\$6,528																		\$6,528
D3050	Q101	3934396	Fan Coil Unit, Hydronic Terminal, Replace	20	16	4	1	EA	\$6,528.00	\$6,528						\$6,528																		\$6,528
D3050	Throughout building	3934388	HVAC System, Hydronic Piping, 4-Pipe, Replace	40	20	20	8743	SF	\$8.70	\$76,099																							\$76,099	\$76,099

Uniformat Code	Location Description	ID	Cost Description	Lifespan (EUL)	EA	RUL	Quantity	Unit	Unit Cost *	Subtotal	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	Deficiency Repair Estimate	
D3050	Throughout building	3934385	HVAC System, Ductwork, Medium Density, Replace	30	10	20	8743	SF	\$4.35	\$38,050																					\$38,050	\$38,050	
D3060	Roof	3960121	Exhaust Fan, Roof or Wall-Mounted, 16" Damper, Replace	20	15	5	2	EA	\$2,611.20	\$5,222						\$5,222																\$5,222	
D4010	Throughout building	3934384	Fire Suppression System, Existing Sprinkler Heads, by SF, Replace	25	10	15	8743	SF	\$1.16	\$10,178																\$10,178						\$10,178	
D5030	Throughout building	3934372	Electrical System, Wiring & Switches, Average or Low Density/Complexity, Replace	40	20	20	8743	SF	\$2.72	\$23,781																					\$23,781	\$23,781	
D5040	Throughout building	3934375	Standard Fixture w/ Lamp, any type, w/ LED Replacement, Replace	20	10	10	16	EA	\$304.64	\$4,874											\$4,874											\$4,874	
D5040	Throughout building	3934368	Interior Lighting System, Full Upgrade, High Density & Standard Fixtures, Replace	20	10	10	8743	SF	\$5.44	\$47,562											\$47,562											\$47,562	
D6060	Throughout building	3934386	Intercom/PA System, Public Address Upgrade, Facility-Wide, Replace	20	10	10	8743	SF	\$1.80	\$15,695											\$15,695											\$15,695	
D7050	Throughout building	3934389	Fire Alarm System, Full System Upgrade, Simple Addressable, Upgrade/Install	20	10	10	8743	SF	\$2.18	\$19,025											\$19,025											\$19,025	
D8010	Throughout building	3934391	BAS/HVAC Controls, Basic System or Legacy Upgrades, Upgrade/Install	15	11	4	8743	SF	\$2.72	\$23,781					\$23,781															\$23,781		\$47,562	
E1040	Roof	3934380	Laboratory Equipment, Exhaust Hood, Constant Volume 4 LF, Replace	15	10	5	1	EA	\$3,046.40	\$3,046						\$3,046															\$3,046	\$6,093	
E1040	Q105	3934371	Laboratory Equipment, Lab Sink, Epoxy Resin, Replace	30	10	20	3	EA	\$2,665.60	\$7,997																						\$7,997	\$7,997
Totals, Unescalated											\$0	\$0	\$0	\$0	\$56,421	\$246,565	\$0	\$0	\$0	\$0	\$101,845	\$0	\$0	\$0	\$0	\$42,081	\$0	\$0	\$0	\$23,781	\$645,770	\$1,116,463	
Totals, Escalated (3.0% inflation, compounded annually)											\$0	\$0	\$0	\$0	\$63,502	\$285,837	\$0	\$0	\$0	\$0	\$136,871	\$0	\$0	\$0	\$0	\$65,561	\$0	\$0	\$0	\$41,700	\$1,166,332	\$1,759,803	

Center for Independent Study (CIS) / Site

Uniformat Code	Location Description	ID	Cost Description	Lifespan (EUL)	EA	RUL	Quantity	Unit	Unit Cost *	Subtotal	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	Deficiency Repair Estimate
G2020	Site	3946014	Parking Lots, Pavement, Asphalt, Seal	5	2	3	7800	SF	\$0.49	\$3,819				\$3,819					\$3,819					\$3,819								\$15,276
G2020	Site	3946008	Parking Lots, Pavement, Asphalt, Mill & Overlay	25	15	10	8000	SF	\$3.81	\$30,464										\$30,464												\$30,464
G2020	Site	3946013	Parking Lots, Pavement, Concrete, Replace	50	40	10	2700	SF	\$9.79	\$26,438										\$26,438												\$26,438
G2030	Site	3998660	Sidewalk, Asphalt, Seal	5	4	1	1200	SF	\$0.49	\$588			\$588				\$588					\$588					\$588					\$2,350
G2030	Site	3946016	Sidewalk, Asphalt, Replace	25	24	1	1200	SF	\$5.98	\$7,181			\$7,181																			\$7,181
G2030	Site	3946015	Sidewalk, Asphalt, Seal	5	3	2	4400	SF	\$0.49	\$2,154			\$2,154					\$2,154					\$2,154				\$2,154					\$8,617
G2030	Site	3946005	Sidewalk, Asphalt, Replace	25	10	15	4400	SF	\$5.98	\$26,330															\$26,330							\$26,330
Totals, Unescalated											\$0	\$7,768	\$2,154	\$3,819	\$0	\$0	\$588	\$2,154	\$3,819	\$0	\$56,902	\$588	\$2,154	\$3,819	\$0	\$26,330	\$588	\$2,154	\$3,819	\$0	\$0	\$116,655
Totals, Escalated (3.0% inflation, compounded annually)											\$0	\$8,001	\$2,285	\$4,173	\$0	\$0	\$702	\$2,649	\$4,838	\$0	\$76,472	\$813	\$3,071	\$5,608	\$0	\$41,021	\$943	\$3,561	\$6,501	\$0	\$0	\$160,639

Appendix G:

Equipment Inventory List

D30 HVAC													
Index	ID	UFCode	Component Description	Attributes	Capacity	Building	Location Detail	Manufacturer	Model	Serial	Dataplate Yr	Barcode	Qty
1	3934319	D3030	Heat Pump	Packaged & Wall-Mounted	3 TON	Center for Independent Study (CIS) / Building N	Building exterior	Bard Manufacturing Company	36WH7-A05C	058H900650944	2005	1009998	
2	3934322	D3050	Fan Coil Unit [FC-N1]	Hydronic Terminal	2250 CFM	Center for Independent Study (CIS) / Building N	N102	McQuay	F.HZH.1.S30.F.J.70.M.00.AX.71.A.Z.C.1	E723746330	2001	1009999	
3	3934298	D3050	Fan Coil Unit [FC-N2]	Hydronic Terminal	2250 CFM	Center for Independent Study (CIS) / Building N	N104	McQuay	F.HZH.1.S30.F.J.70.M.00.AX.71.A.Z.C.1	E723746560	2001	1009997	
4	3934317	D3050	Fan Coil Unit [FC-N3]	Hydronic Terminal	2250 CFM	Center for Independent Study (CIS) / Building N	N106	McQuay	F.HZH.1.S30.F.J.70.M.00.AX.71.A.Z.C.1	E723746450	2001	1009996	
5	3934320	D3050	Fan Coil Unit [FC-N4]	Hydronic Terminal	2250 CFM	Center for Independent Study (CIS) / Building N	N106	McQuay	F.HZH.1.S30.F.J.70.M.00.AX.71.A.Z.C.1	E723746420	2001	1009995	
6	3934356	D3050	Fan Coil Unit [FC-P1]	Hydronic Terminal	2250 CFM	Center for Independent Study (CIS) / Building P	P103	McQuay	F.HZH.1.S30.F.J.70.M.00.AX.71.A.Z.C.1	E723746510	2001	1009990	
7	3934353	D3050	Fan Coil Unit [FC-P3]	Hydronic Terminal	2250 CFM	Center for Independent Study (CIS) / Building P	P103	McQuay	F.HZH.1.S30.F.J.70.M.00.AX.71.A.Z.C.1	E723746330	2001	1009991	
8	3934332	D3050	Fan Coil Unit [FC-P4]	Hydronic Terminal	2250 CFM	Center for Independent Study (CIS) / Building P	P106	McQuay	F.HZH.1.S30.F.J.70.M.00.AX.71.A.Z.C.1	E723746450	2001	1009993	
9	3934339	D3050	Fan Coil Unit [FC-P5]	Hydronic Terminal	2250 CFM	Center for Independent Study (CIS) / Building P	Office	McQuay	F.HZH.1.S30.F.J.70.M.00.AX.71.A.Z.C.1	E723746440	2001	1009994	
10	3934396	D3050	Fan Coil Unit [FC-Q1]	Hydronic Terminal	2250 CFM	Center for Independent Study (CIS) / Building Q	Q101	McQuay	F.HZH.1.S20.F.J.70.M.00.AX.71.A.Z.C.1	E723746420	2001	1009983	
11	3934392	D3050	Fan Coil Unit [FC-Q2]	Hydronic Terminal	2250 CFM	Center for Independent Study (CIS) / Building Q	Q103	McQuay	F.HZH.1.S30.F.J.70.M.00.AX.71.A.Z.C.1	E723746560	2001	1009984	
12	3934387	D3050	Fan Coil Unit [FC-Q3]	Hydronic Terminal	2250 CFM	Center for Independent Study (CIS) / Building Q	Q105 Mezzanine	McQuay	F.HZH.1.S30.F.J.70.M.00.AX.71.A.Z.C.1	E723746280	2001	1009985	
13	3934381	D3050	Fan Coil Unit [FC-Q4]	Hydronic Terminal	2250 CFM	Center for Independent Study (CIS) / Building Q	Q107 Mezzanine	McQuay	F.HZH.1.S30.F.J.70.M.00.AX.71.A.Z.C.1	E723746330	2001	1009987	
14	3934374	D3050	Fan Coil Unit [FC-Q5]	Hydronic Terminal	2250 CFM	Center for Independent Study (CIS) / Building Q	Q109 Mezzanine	McQuay	F.HZH.1.S30.F.J.70.M.00.AX.71.A.Z.C.1	E723746590	2001	1009986	
15	3946012	D3060	Exhaust Fan	Propeller, 0.25 HP Motor, 2000 CFM		Center for Independent Study (CIS) / Building N	CBN	Patton	No tag/plate found	No tag/plate found		1010000	
16	3934313	D3060	Exhaust Fan	Roof or Wall-Mounted, 12" Damper		Center for Independent Study (CIS) / Building N	Roof	Greenheck	Inaccessible	Inaccessible	2001	Inaccessible	
17	3934349	D3060	Exhaust Fan	Roof or Wall-Mounted, 16" Damper		Center for Independent Study (CIS) / Building P	Roof	Greenheck			2001		3
18	3960121	D3060	Exhaust Fan	Roof or Wall-Mounted, 16" Damper		Center for Independent Study (CIS) / Building Q	Roof	Greenheck			2001		2
19	3934303	D3060	Exhaust Fan	Roof or Wall-Mounted, 16" Damper		Center for Independent Study (CIS) / Building N	Roof	Greenheck			2001		2
20	3934310	D3060	Exhaust Fan	Roof or Wall-Mounted, 24" Damper		Center for Independent Study (CIS) / Building N	Roof	Greenheck	Inaccessible	Inaccessible	2001	Inaccessible	
D50 Electrical													
Index	ID	UFCode	Component Description	Attributes	Capacity	Building	Location Detail	Manufacturer	Model	Serial	Dataplate Yr	Barcode	Qty
1	3946024	D5020	Secondary Transformer	Dry, Stepdown	225 KVA	Center for Independent Study (CIS) / Building P	Electrical room	Jeffries	No tag/plate found	No tag/plate found	1958	1009975	
2	3934359	D5020	Secondary Transformer [LY]	Dry, Stepdown	225 KVA	Center for Independent Study (CIS) / Building P	Electrical room	Jeffries Transformer Co.	223-812-20	No tag/plate found	1958	1009982	
3	3946023	D5020	Switchboard	120/208 V	400 AMP	Center for Independent Study (CIS) / Building P	Electrical room	Siemens	No tag/plate found	No tag/plate found	2002	1009979	
4	3934348	D5020	Switchboard [SWITCHBOARD LX]	120/208 V	800 AMP	Center for Independent Study (CIS) / Building P	Electrical room	Siemens	SB3 Rev. A	17-58614-A00020-01	2002	1009978	
5	3934360	D5020	Distribution Panel [LAP]	120/240 V	200 AMP	Center for Independent Study (CIS) / Building P	P104	Siemens	S1C42QJ225CTS	60-13542-D00	2001	1009992	
6	3946022	D5020	Distribution Panel [LBP]	120/240 V	200 AMP	Center for Independent Study (CIS) / Building P	CBP	Siemens	No tag/plate found	No tag/plate found	2001	1009976	
7	3946006	D5020	Distribution Panel [LD]	120/208 V	250 AMP	Center for Independent Study (CIS) / Building N	CBN 104	Siemens	P1C42ML250CBF	No tag/plate found	2001	1009977	
8	3934333	D5040	Standard Fixture w/ Lamp	any type, w/ LED Replacement	400 W	Center for Independent Study (CIS) / Building P	Throughout building						16
9	3934375	D5040	Standard Fixture w/ Lamp	any type, w/ LED Replacement	400 W	Center for Independent Study (CIS) / Building Q	Throughout building						16
10	3934292	D5040	Standard Fixture w/ Lamp	any type, w/ LED Replacement	400 W	Center for Independent Study (CIS) / Building N	Throughout building						16
E10 Equipment													
Index	ID	UFCode	Component Description	Attributes	Capacity	Building	Location Detail	Manufacturer	Model	Serial	Dataplate Yr	Barcode	Qty
1	3934380	E1040	Laboratory Equipment	Exhaust Hood, Constant Volume 4 LF		Center for Independent Study (CIS) / Building Q	Roof						