

Citywide Facility Condition Assessment

Report of

**Facility Condition Assessment** 

For City of Novato Novato Arts Center (Buildings 500, 781, 789 & Hamilton Cafe) 500 Palm Drive & 781/789 Hamilton Parkway, Novato, CA



March 4, 2013

Provided By:

Faithful+Gould, Inc.

Provided For:





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# **SECTION 1 - EXECUTIVE SUMMARY**

#### <u>INTRODUCTION</u>

In accordance with the agreement held between City of Novato, dated January 18, 2013 and Faithful+Gould Inc, this completed report provides a comprehensive Facility Condition Assessment of the Novato Arts Center building located at 500 Palm Drive and 781 / 789 Hamilton Parkway together with Hamilton Cafe, Novato, CA (The Facility). The facility consisted of the following buildings:

- Building 500
- Building 781
- Building 789
- Hamilton Cafe

This report provides a summary of the facility information known to us at the time of the study, the scope of work performed, an equipment inventory, evaluation of the visually apparent condition of the Property and an expenditure forecast of expenditures anticipated over the next 20 years. The expenditure forecast does not account for typical planned maintenance items such as changing filters to fan coil units and only considers deficiencies above a \$500 aggregated value.

Our cost rates to produce life cycle and replacement cost estimates are based on our knowledge of the local regional market rates. Our line item costs assume that the work will be undertaken by either in-house or by direct sub-contract labor. Identified recommended works that are required during the twenty-year study period have been included with an allowance of 25% for professional fees and general contractor overhead/profit and management costs (where applicable).

Charts EX-1 through to EX-4 provides a summary of the anticipated primary expenditures over the 20 year study period. Further details of these expenditures are included within each respective report section and within the 20 year expenditure forecast, in Appendix A.

The report also calculates the Facility Condition Index (FCI) of each facility based upon the calculated FCI. Further discussion of the Facility Condition Index is detailed in the sections below. The FCI does not include the site systems, however we have still included repair and replacement costs so that they can be represented in the study.

This report was completed in general accordance with the ASTM E2018-08 Standard Guide for Property Condition Assessments: Baseline Property Condition Assessment Process.

### **PROJECT DETAILS**

On January 23, 2013 Mr. Eric Whitworth and Mr. Mark Taylor of Faithful+Gould visited the facility to observe and document the condition of the building and the site components. During our site visit, Faithful+Gould was assisted by Edison Lewis, Director of Property Management Services for Keegan & Coppin and Heidi LaGrasta, Executive Director for the Marin Museum of Contemporary Art.

# Overview of the Buildings at the Facility





### **BUILDING SUMMARY**

### Table EX-1 Facility Details

BUILDING NAME: Building 500		<b>LAT/LONG</b> : 38°.03′27.97″N / -122°.31		2º.31′06.74″W			
ADDRESS:	500 Palm Drive	e, Novato, CA	OCCUPANCY STATUS:				
ADDRESS.	94949		OCCUPIED ⊠ VACANT □ PARTIALLY □				
HISTORIC DISTRICT:	YES 🖂	NO 🗌	HISTORIC BUILDING:	YES 🗌		NO ⊠	
GROSS SQUARE FOOTAGE OF BUILDING:	13,887		GROSS SQUARE FOOTAGE OF LAND:	84,260 (estimated) Whole Site		Vhole Site	
CURRENT REPLACEMENT VALUE:	\$3,497,760 (Taken from the City PEPIP-CA Property Schedule)		YEAR OF CONSTRUCTION::				
BUILDING USE:	Art Studios		NUMBER OF STORIES:		3		

#### **BUILDING DESCRIPTION**

Building 500 is located at the center of the Novato Arts center. In general the arts center contains four buildings, three of which are leased out to artists and the fourth being a small café. The art center is located at 500 Palm Drive, Novato and is assumed to have been constructed in Circa 1934; however this needs to be confirmed. The buildings belonged to the United States military and were once used as the base headquarters.

The building has a cast-in-place concrete load bearing exterior wall construction, which contains a single level basement construction. The roofs are a combination of 4" x 6"and 2' x 6" wood trusses for the steep-slopes. The roof covering is a tapered semi-cylindrical roofing tile laid convex side up to overlap flanking similar tiles laid concave side up, also called Spanish tile. The floor construction consisted of a cast-in-place reinforced beam and slab concrete floor slab. Doors consisted of hollow metal and solid wood doors at the entrances. The interior finishes of the building contained floor coatings, painted walls and solid painted ceilings as well as some areas of suspended ceilings.

The heating for the building is provided by one gas fired 850 MBH boiler which supplied heated water to cast iron radiators throughout the building. Domestic hot water is provided one electric fifty US gallon domestic water heater. The buildings are supplied with electricity from the Main Distribution Panel (MDP) located just west of the Hamilton Cafe. The light fixtures generally consisted of ceiling mounted and recessed 4' strip T8 fluorescent







fixtures in the hallways and restrooms with halogen track lights and other decorative lights to illuminate art. The building contains a fire alarm and a wet pipe fire sprinkler system as well as an intruder security system.





#### Table EX-2 Facility Details

BUILDING NAME:	Building 781		LAT/LONG:	38°.03′27.22″N / -122°.31′04.94″W		
ADDDECC.	781 Hamilton F	Parkway, Novato,	OCCUPANCY STATUS:			
ADDRESS:	CA 94949		OCCUPIED ⊠ VACANT ☐ PARTIALLY ☐			
HISTORIC DISTRICT:	YES ⊠ NO □		HISTORIC BUILDING:	YES 🗌		NO 🖂
GROSS SQUARE FOOTAGE OF BUILDING:	3,712		GROSS SQUARE FOOTAGE OF LAND:	84,260 (estimated) Whole Site		
CURRENT REPLACEMENT VALUE:	\$1,160,000 (Taken from the City PEPIP-CA Property Schedule)		YEAR OF CONSTRUCTION:	1930'S		
BUILDING USE: Art Studios		NUMBER OF STORIES:		1		

### **BUILDING DESCRIPTION**

Building 781 can also be found at the Novato Arts Center and provides artist studios, restroom facilities, as well as a large open room and kitchen area. We assume that this building was built circa 1930's; however this needs to be confirmed.

The building is constructed with typical 2" x 4" wood stud framing, with painted stucco exterior walls on a cast-in-place concrete stem wall. The roof is made up of 2" x 6" wood trusses for the steep-slopes with wood panel decking. The roof covering is a 3-tab asphalt shingle over roofing felt. The floor consisted of a wood floor joists running east and west. Doors consisted of hollow metal doors with and without glazing at the entrances and windows were single pane fixed steel frame with a hopper light at the bottom section. The interior finishes of the building contained ceramic floor tile in the restrooms, painted walls and exposed grid acoustical ceilings.

The building was heated via electric baseboard heaters with temperature controls located on the unit. There is one electric 10 US gallon domestic water heater which supplies the restrooms and sinks.

The building also receives power from the MDP for the site, and has a dedicated 225amp breaker for the building. The interior lighting is provided by a combination of surface mounted 1' x 4' and 4' strip fluorescent fixtures with T8 32 watt bulbs and electronic ballasts and halogen track lighting to illuminate art.

The building contained a fire alarm and a wet pipe fire sprinkler system.







### **Table EX-3 Facility Details**

BUILDING NAME:	Building 789		LAT/LONG:	38°.03′29.40″N / -122°.31′05.71″W		
ADDRESS:	789 Hamilton Parkway, Novato, CA 94949		OCCUPANCY STATUS:  OCCUPIED   VACANT   PARTIALLY   PA			
HISTORIC DISTRICT:	YES ⊠ NO □		HISTORIC BUILDING:	YES 🗌		NO 🗵
GROSS SQUARE FOOTAGE OF BUILDING:	8,347		GROSS SQUARE FOOTAGE OF LAND:	84,260 (estimated) Whole Site		Vhole Site
CURRENT \$2,025,760  (Taken from the City PEPIP-CA Property Schedule)		YEAR OF CONSTRUCTION:	N: 1930'S			
BUILDING USE:	Art Studios		NUMBER OF STORIES: 1			

### **BUILDING DESCRIPTION**

Building 789 is located at the northeast corner of the Novato Arts Center. The building is actually two separate facilities both of which provides artist studios, as well as restroom facilities. The facility to the west has the numbers 501 adhered to the wall which most of the tenants commonly refer to the building as. We assume that this building was built circa 1930's; however this needs to be confirmed.

The building is constructed with typical 2" x 4" wood stud framing, with painted stucco exterior walls on a cast-in-place concrete stem wall. The roof is made up of 2" x 6" wood trusses for the steep-slopes with wood panel decking. The roof covering is a combination of 3-tab asphalt shingles over roofing felt on the east side of the building and Spanish tile on the west side of the building. The floor consisted of a wood floor joists spanning in either direction supported by the perimeter foundation. Doors consisted of hollow metal doors with and without glazing at the entrances and windows were fixed aluminum frame with a hopper light at the bottom section. The interior finishes of the building contained ceramic floor tile in the restrooms, carpet in some of the hallways, VCT, painted walls and exposed grid acoustical ceilings.

The building was heated via two 160 MBH Rheem gas fueled forced air furnaces with electronic wall mounted thermostat temperature controls. There is one electric 75 US gallon domestic water heater which supplies the restrooms and sinks.







The building also receives power from the MDP for the site, and has a dedicated 225amp breaker for the building. The interior lighting is provided by a combination of surface mounted 1' x 4' and 4' strip fluorescent fixtures with T8 32 watt bulbs and electronic ballasts and halogen track lighting to illuminate art.

The building contained a fire alarm and a wet pipe fire sprinkler system.





#### Table EX-4 Facility Details

BUILDING NAME:	Hamilton Cafe		LAT/LONG:	38°.03′26.59″N / -122°.31′05.88″W		
ADDRESS:	502B South Palm Drive, Novato, CA 94949		OCCUPANCY STATUS:  OCCUPIED ☑ VACANT ☐ PARTIALLY ☐			
HISTORIC DISTRICT:	YES ⊠ NO □		HISTORIC BUILDING:	YES 🗌		NO 🖂
GROSS SQUARE FOOTAGE OF BUILDING:	1,830		GROSS SQUARE FOOTAGE OF LAND:	10,474 (estimated) Whole Facility		
CURRENT REPLACEMENT VALUE: \$539,210 (Taken from the City PEPIP-CA Property Schedule)		YEAR OF CONSTRUCTION:	1930			
BUILDING USE:	Cafe		NUMBER OF STORIES: 1			

### **BUILDING DESCRIPTION**

The Hamilton Café is located at the south side of the Novato Arts Center and is currently named the Beso Cafe. We assume that this building was built circa 1930's; however this needs to be confirmed.

The building is constructed with typical 2" x 4" wood stud framing, with painted stucco exterior walls on a cast-in-place concrete stem wall. The roof is made up of 2" x 6" wood trusses for the steep-slopes with wood panel decking with a Spanish tile roof covering. The floor consisted of a wood floor joists spanning east and west supported by the perimeter foundation. Doors consisted of hollow metal doors and wood doors with glazing at the entrances and windows were single pane fixed aluminum frame with a hopper light at the bottom section. The building has a raised patio with a wood deck and railing on the east side of the building to accommodate patrons who would like to dine outside.

The interior finishes of the building contained ceramic floor tile in the restrooms, with epoxy floor coating in the kitchen, and wood panel flooring in the dining area painted walls and painted gypsum wallboard ceilings.

The buildings heating and air condition was provided via a Carrier 7 ½ ton package A/C unit and a Champion 4,855 CFM evaporative cooling unit both of which are controlled by means of electronic wall mounted thermostat temperature controls. There is one electric 75 US gallon domestic water heater which supplies the restrooms and sinks.







The building also receives power from the MDP for the site, and has a dedicated 400amp breaker for the building. The interior lighting is provided by a combination of decorative pendent lighting in the dining area, recessed can lights and surface mounted fluorescent 4' strip lighting in the storage and kitchen area.

The building contained a fire alarm and a wet pipe fire sprinkler system.





### **BUILDING EXPENDITURE SUMMARY**

The building expenditure summary section provides an executive overview of the findings from the assessments. Charts EX-1 through EX-6 provides a summary of anticipated expenditures over the study period. In addition, we have scheduled key findings highlighting key items of interest and their anticipated failure year. Further details of these expenditures are included within each respective report section and within the expenditure forecast, in Appendix A of this report.

### **Building 500**

The results illustrate a total anticipated expenditure over the study period of circa \$850,841.



Chart EX-1 Building Expenditure Summary 1, 2, 3 & 4

- ╬ B Shell: Repaint exterior wall surfaces at an estimated cost of \$31,847 in years 2016, 2024 and 2032
- B Shell: Replace steel framed windows at an estimated cost of \$90,945 in year 2015
- ╬ B Shell: Replace clay tile roofing at an estimated cost of \$221,550 in year 2017
- C Interiors: Repaint interior wall surfaces at an estimated cost of \$62,222 in years 2016, 2024 and 2032
- ╬ C Interiors: Replace acoustic ceiling tiles at an estimated cost of \$25,295 in year 2025
- D Services: Replace sprinkler heads at an estimated cost of \$15,110 in year 2025
- ┰ D Services: Replace telephone and fire alarm system at a combined estimated cost of \$86,880 in year 2020

<sup>&</sup>lt;sup>1</sup> All costs presented in present day values <sup>2</sup> Costs represent total anticipated values over the 20 year study period

<sup>&</sup>lt;sup>3</sup> An allowance of 25% has been included for professional fees and general contractor overhead/profit and management costs <sup>4</sup> ADA Compliance was not examined as part of this project. The costs do not factor in bringing the recommended expenditures into compliance with current ADA rules.

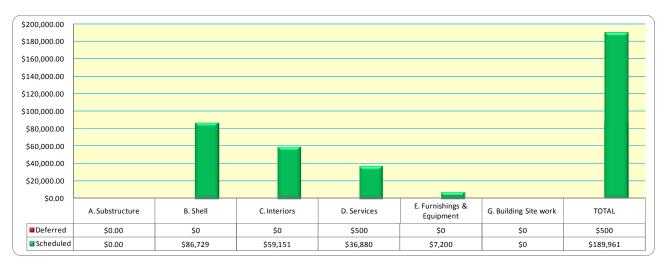


- → D Services: Replace security system at an estimated cost of \$8,922 in years 2020 and 2030
- → E Furnishings: Replace break room floor cabinets at an estimated cost of \$10,800 in year 2030

### **Building 781**

The results illustrate a total anticipated expenditure over the study period of circa \$190,461.

Chart EX-2 Building Expenditure Summary 1, 2, 3 & 4



<sup>&</sup>lt;sup>1</sup> All costs presented in present day values

- B Shell: Replace steel framed windows at an estimated cost of \$21,555 in year 2015
- B Shell: Repaint exterior wall surfaces at an estimated cost of \$8,708 in years 2016, 2024 and 2032
- B Shell: Replace asphalt shingle roof covering at an estimated cost of \$33,825 in year 2017
- C Interiors: Repaint interior wall surfaces at an estimated cost of \$8,125 in years 2016, 2024 and 2032
- C Interiors: Replace non-slip floor paint at an estimated cost of \$11,138 in year 2018
- D Services: Replace sprinkler heads at an estimated cost of \$3,898 in year 2025
- → D Services: Replace fire alarm system at an estimated cost of \$18,560 in year 2025.
- E Furnishings: Replace break room floor cabinets at an estimated cost of \$7,200 in year 2025

<sup>&</sup>lt;sup>2</sup> Costs represent total anticipated values over the 20 year study period

<sup>&</sup>lt;sup>3</sup> An allowance of 25% has been included for professional fees and general contractor overhead/profit and management costs <sup>4</sup> ADA Compliance was not examined as part of this project. The

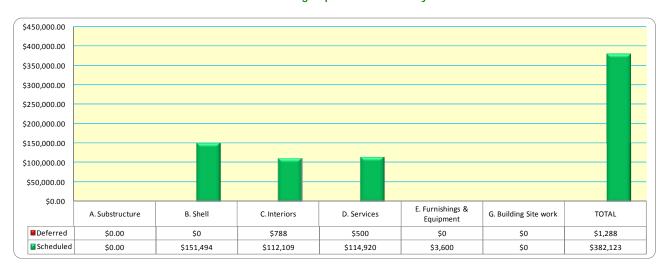
<sup>&</sup>lt;sup>4</sup>ADA Compliance was not examined as part of this project. The costs do not factor in bringing the recommended expenditures into compliance with current ADA rules.



### **Building 789**

The results illustrate a total anticipated expenditure over the study period of circa \$383,410

### Chart EX-3 Building Expenditure Summary 1, 2, 3 & 4



<sup>&</sup>lt;sup>1</sup> All costs presented in present day values

- ┰ B Shell: Repaint exterior wall surfaces at an estimated cost of \$14,015 in years 2016, 2024 and 2032
- B Shell: Replace older aluminum framed windows at an estimated cost of \$14,715 in year 2015
- B Shell: Replace roof coverings at a combined estimated cost of \$86,538 715 in year 2015
- C Interiors: Repaint interior wall and ceiling surfaces at an estimated cost of \$29,072 in years 2016, 2024 and 2032
- ┰ C Interiors: Replace sheet carpet floor covering at an estimated cost of \$5,224 in years 2016, 2024 and 2032
- ╬ D Services: Replace telephone and fire alarm system at a combined estimated cost of \$86,880 in year 2020

<sup>&</sup>lt;sup>2</sup> Costs represent total anticipated values over the 20 year study period <sup>3</sup> An allowance of 25% has been included for professional

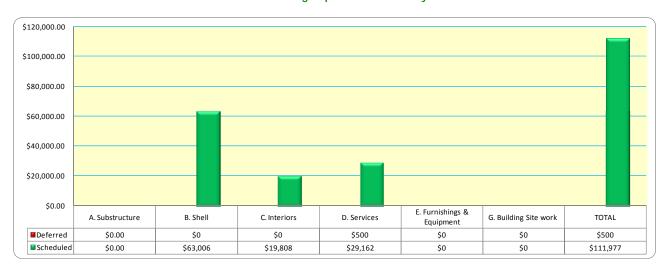
fees and general contractor overhead/profit and management costs <sup>4</sup> ADA Compliance was not examined as part of this project. The costs do not factor in bringing the recommended expenditures into compliance with current ADA rules.



### **Hamilton Cafe**

The results illustrate a total anticipated expenditure over the study period of circa \$112,477.

### Chart EX-4 Building Expenditure Summary 1, 2, 3 & 4



<sup>&</sup>lt;sup>1</sup> All costs presented in present day values

- B Shell: Repaint exterior wall surfaces at an estimated cost of \$4,365 in years 2016, 2024 and 2032
- B Shell: Replace steel framed windows at an estimated cost of \$9,630 in year 2015
- B Shell: Replace clay tile roofing at an estimated cost of \$37,125 in year 2017
- C Interiors: Repaint interior wall and ceiling surfaces at an estimated cost of \$5,629 in years 2016, 2024 and 2032
- D Services: Replace fire alarm system at an estimated cost of \$9,150 in year 2020

Costs represent total anticipated values over the 20 year study period
 An allowance of 25% has been included for professional

<sup>&</sup>lt;sup>3</sup> An allowance of 25% has been included for professional fees and general contractor overhead/profit and management costs

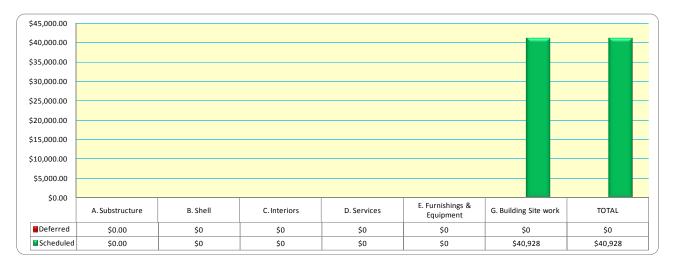
ADA Compliance was not examined as part of this project. The costs do not factor in bringing the recommended expenditures into compliance with current ADA rules.



# Site Systems

The results illustrate a total anticipated expenditure over the study period of circa \$40,928.

### Chart EX-5 Building Expenditure Summary 1, 2, 3 & 4



- G Building Sitework: Undertake seal coating including re-striping at the parking lot and roadway at an estimated cost of \$12,195 in year 2030
- G Building Sitework: Replace sealant to paving construction joints at an estimated cost of \$16,425 in years 2015 and 2030

<sup>&</sup>lt;sup>1</sup> All costs presented in present day values <sup>2</sup> Costs represent total anticipated values over the 20 year study period

<sup>&</sup>lt;sup>3</sup> An allowance of 25% has been included for professional fees and general contractor overhead/profit and management costs

<sup>&</sup>lt;sup>4</sup> ADA Compliance was not examined as part of this project. The costs do not factor in bringing the recommended expenditures into compliance with current ADA rules.



Chart EX-6 illustrates a summary of yearly anticipated expenditures over the cost study period for each of the Novato Arts Center buildings and the site systems. A detailed breakdown of anticipated expenditures is contained within Appendix A of this report.

\$250,000 \$200,000 Present Day Value \$150,000 \$100,000 \$50,000 \$0 2017 2022 2026 2028 2013 2014 2015 2016 2018 2019 2020 2021 2023 2024 2025 2027 2029 2030 2031 2032 Building 500 \$2,510 \$0 \$126,1 \$94.57 \$221.5 \$3.545 \$4,570 \$101,5 Ś0 \$500 ŚO \$94,07 \$48.75 \$0 \$0 \$500 \$2.880 \$50.73 \$94,07 \$0 Building 781 \$500 \$0 \$21,55 \$17,83 \$33,82 \$13,88 \$1,998 \$6,013 \$0 \$19,06 \$0 \$16,83 \$18,94 \$0 \$500 \$1,260 \$7,026 \$500 \$30,72 Building 789 \$1,288 \$3,300 \$43.02 \$44.08 \$86,53 \$1,200 \$2,654 \$19,20 \$0 \$42.23 \$0 \$43.08 \$29,03 \$0 \$0 \$500 \$4,740 \$18,13 \$1,288 \$43.08 Hamilton Café \$500 \$0 \$10.08 \$10,99 \$37,12 \$1,800 \$1,760 \$12.57 \$0 \$500 Ś0 \$9.994 \$2.880 \$0 Ś0 \$7,522 \$0 \$4,248 \$2,500 \$9.994 \$0 \$0 \$18,44 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$2,020 \$0 \$0 \$0 \$0 \$18,44 \$0 \$0 \$0 \$2,020

Chart EX-6 Expenditure Forecast 1, 2, 3 & 4

compliance with current ADA rules.

This chart highlights significant expenditure for the Novato Arts Center within year 2016 primarily due to the systems which are expected to reach their Estimated Useful Life (EUL) and therefore due for replacement. The lines represent the total expenditure for each year, and are a useful tool to indicate the magnitude of the impeding issues the buildings and site/park systems will face.

### **RECOMMENDED WORKS UNDER \$500**

We have scheduled below recommended works that have not been included in the expenditure forecast or combined with other similar works that either fall below the threshold of \$500 or are recommended as industry best practice, represent efficiencies in maintenance, operations or energy.

### **Hamilton Cafe**



B Superstructure: Repair deck around tree

<sup>&</sup>lt;sup>1</sup> All costs presented in present day values

<sup>&</sup>lt;sup>2</sup> Costs represent total anticipated values over the 20 year study period

<sup>&</sup>lt;sup>3</sup> An allowance of 25% has been included for professional

fees and general contractor overhead/profit and management costs

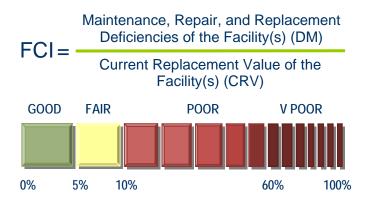
<sup>&</sup>lt;sup>4</sup> ADA Compliance was not examined as part of this project. The costs do not factor in bringing the recommended expenditures into



#### **INTERPRETING RESULTS**

In this report we have calculated the Facility Condition Index (FCI) for the facility; illustrating the likely condition of the systems and equipment should the required funding not be expended over the cost study period. The FCI is used in Facilities Management to provide a benchmark to compare the relative condition of a group of facilities. The FCI is primarily used to support asset management initiatives of federal, state, and local government facilities organizations.

The FCI is the ratio of accumulated Deferred Maintenance (DM) (total sum of required and recommended works) to the Current Replacement Value (CRV) for a constructed asset calculated by dividing DM by CRV. The range is from zero for a newly constructed asset, to one for a constructed asset with a DM value equal to its CRV. Acceptable ranges vary by "Asset Type", but as a general guideline the FCI scoring system is as follows:



The FCI is a relative indicator of condition, and should be tracked over time to maximize its benefit. It is advantageous to define condition ratings based on ranges of the FCI. There are a set of ratings: good (under 0.05 (under 5%)), fair (0.5 to 0.10 (5% to 10%)), and poor (over 0.10 (over 10%)) based on evaluating data from various clients at the time of the publication. Table EX-4 will help interpret the results:

Table EX-4 FCI Scoring System

Condition	Definition	Score	Percentage Value
GOOD	In a new or well maintained condition, with no visual evidence of wear, soiling or other deficiencies	0.00 to 0.05	0% to 5%
FAIR	Subject to wear, and soiling but is still in a serviceable and functioning condition	0.05 to 0.10	5% to 10%
POOR	Subjected to hard or long-term wear. Nearing the end of its useful or serviceable life.	Greater than 0.10	Greater than 10%
V-POOR	Subjected to hard or long-term wear. Has reached the end of its useful or serviceable life. Renewal now necessary	Greater than 0.60	Greater than 60%

If the FCI rating is 60% or greater then replacement of the asset/building should be considered instead of renewal.



Table EX-5 provides calculations of the FCI for each of the Novato Arts Center buildings (excluding the site system expenditure costs); illustrating both the current condition of the buildings and the likely condition of the buildings should the required funding not be expended over the study period. The results of the study indicate that currently the buildings are all in a GOOD condition rating at this time.

**Table EX-5 Facility Condition Index** 

Building Name	FCI	Gross Square Foot (GSF)	CRV per GSF	Current Replacement Value (CRV)	Deferred Maintenance Value (DM) 1, 2, 3 & 4	FCI Ratio	Property Condition Rating
Building 500	Current FCI Ratio	13,887	\$252	\$3,497,760	\$2,510	0.1%	GOOD
Building 500	Year 20 FCI Ratio	13,887	\$252	\$3,497,760	\$850,841	24.3%	POOR
Building 781	Current FCI Ratio	3,712	\$313	\$1,160,000	\$500	0.0%	GOOD
Building 781	Year 20 FCI Ratio	3,712	\$313	\$1,160,00	\$190,461	16.4%	POOR
Building 789	Current FCI Ratio	8,347	\$243	\$2,025,760	\$1,288	0.1%	GOOD
Building 789	Year 20 FCI Ratio	8,347	\$243	\$2,025,760	\$383,410	18.9%	POOR
Hamilton Café	Current FCI Ratio	1,830	\$295	\$539,210	\$500	0.1%	GOOD
Hamilton Café	Year 20 FCI Ratio	1,830	\$295	\$539,210	\$112,477	20.9%	POOR

<sup>&</sup>lt;sup>1</sup> All costs presented in present day values

Costs represent total anticipated values over the 20 year study period
 An allowance of 25% has been included for professional fees and general contractor overhead/profit and management costs

<sup>&</sup>lt;sup>4</sup>ADA Compliance was not examined as part of this project. The costs do not factor in bringing the recommended expenditures into compliance with current ADA rules.



Chart EX-7 indicates the affects of the FCI ratio per year, assuming the required funds and expenditures <u>ARE</u> made to address the identified works and deferred maintenance each year. As explained the buildings are in a GOOD condition rating (below 5%) and on a year by year basis Building 500 and the Hamilton Café fall into the FAIR condition in 2017 but then stay in the GOOD condition rating with the rest of the buildings for the remainder of the study period.

### Chart EX-7 Year by Year Effects of FCI over the Study Period

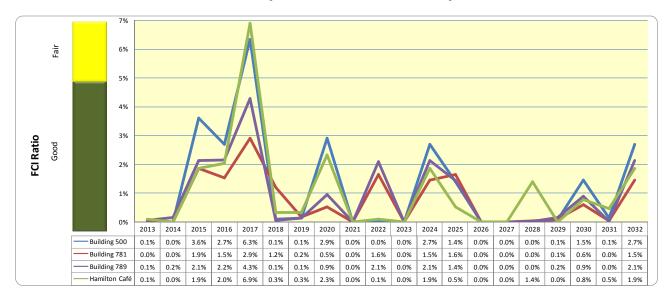




Chart EX-8 indicates the cumulative effects of the FCI ratio over the study period assuming the required funds and expenditures are <u>NOT</u> provided to address the identified actions and deferred maintenance each year. Building 500 falls into a FAIR condition rating in 2016 then into a POOR condition rating in 2017. Buildings 781 and 789 fall into a FAIR condition rating in 2017 then fall into a POOR condition rating in 2024. The Hamilton Café falls into a POOR condition rating in 2017.

Chart EX-8 Cumulative Effects of FCI over the Study Period





### PRIORITIZATION OF WORK

Faithful+Gould has prioritized the identified work in order to assist with analyzing the deficiencies found during the assessments. The following Priorities are shown below:

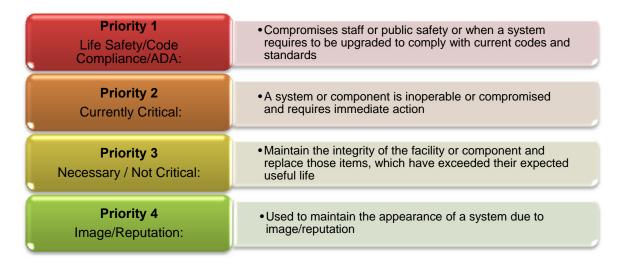
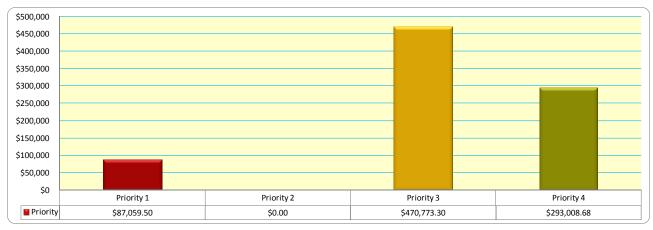


Chart EX-9 through to EX-13 illustrates the breakdown of expenditure according the priority coding providing an opportunity to strategically plan and effectively direct funding to the highest priority for each building and the site/park systems.

### **Building 500**

Chart EX-9 Cumulative Prioritization of Work

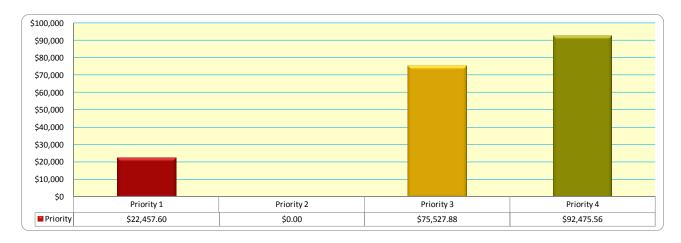


Priority 3 appears to require the most amount of expenditure in this study. This category illustrates that the work which needs to be undertaken is associated with necessary works to maintain the integrity of the building and replace equipment that has exceeded their EUL.



# **Building 781**

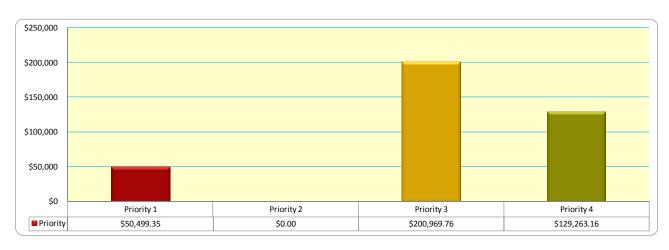
Chart EX-10 Cumulative Prioritization of Work



Priority 4 appears to require the most amount of expenditure in this study. This category illustrates that the work which needs to be undertaken is associated with image and reputation works.

### **Building 789**

Chart EX-11 Cumulative Prioritization of Work



Priority 3 appears to require the most amount of expenditure in this study. This category illustrates that the work which needs to be undertaken is associated with necessary works to maintain the integrity of the building and replace equipment that has exceeded their EUL.



### **Hamilton Cafe**

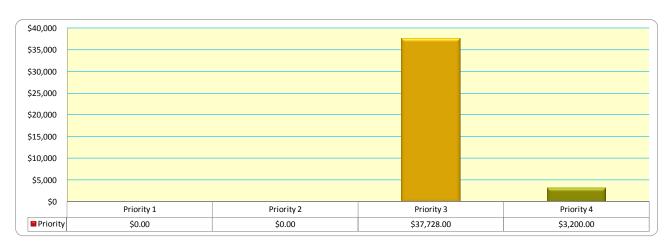
Chart EX-12 Cumulative Prioritization of Work



Priority 3 appears to require the most amount of expenditure in this study. This category illustrates that the work which needs to be undertaken is associated with necessary works to maintain the integrity of the building and replace equipment that has exceeded their EUL.

### Site Systems

Chart EX-13 Cumulative Prioritization of Work



Priority 3 appears to require the most amount of expenditure in this study. This category illustrates that the work which needs to be undertaken is associated with necessary works to maintain the integrity of the assets and replacement of assets that have exceeded their EUL.



Chart EX-14 through to EX-18 illustrates the expenditure per priority code, per each year within the 20 year study period.

### **Building 500**

Chart EX-14 Year by Year Cumulative Prioritization of Work



Chart EX-14 illustrates that there is seven key years for Priorities 1, 3, and 4 coding, throughout the study period.

### **Building 781**

Chart EX-15 Year by Year Cumulative Prioritization of Work

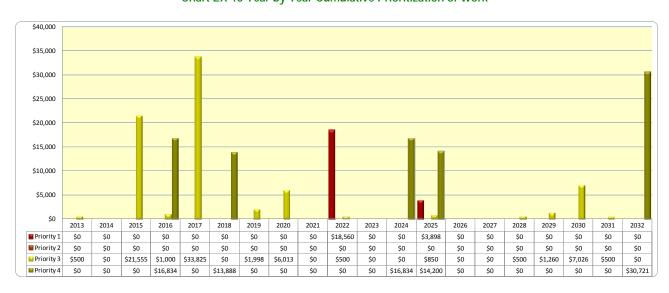


Chart EX-15 illustrates that there are eight key years for Priorities 1, 3, and 4 coding, throughout the study period



### **Building 789**

Chart EX-16 Year by Year Cumulative Prioritization of Work

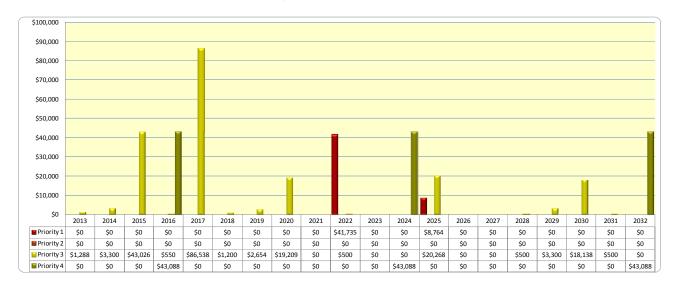


Chart EX-16 illustrates that there are six key years for Priorities 1, 3, and 4 coding, throughout the study period

## **Hamilton Cafe**

Chart EX-17 Year by Year Cumulative Prioritization of Work

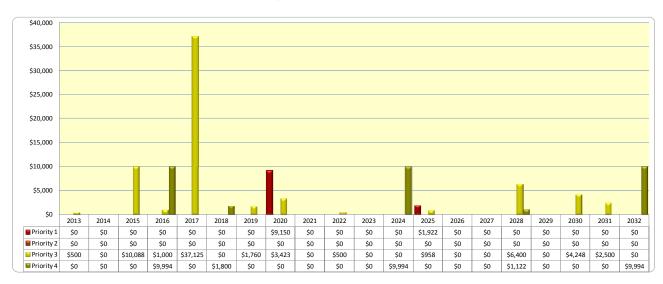


Chart EX-17 illustrates that there are six key years for Priorities 1, 3, and 4 coding, throughout the study period



# Site Systems

### Chart EX-18 Year by Year Cumulative Prioritization of Work

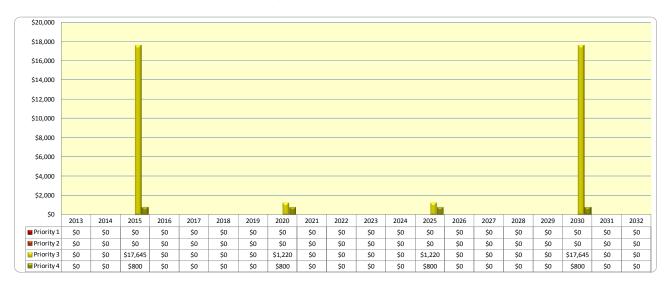


Chart EX-18 illustrates that are two key years for Priority 3 coding in the study period.



Faithful+Gould has prioritized the identified work according to the Plan Type or deficiency categories in order to assist with analyzing the deficiencies found during the assessments. The following Plan Types are shown below:

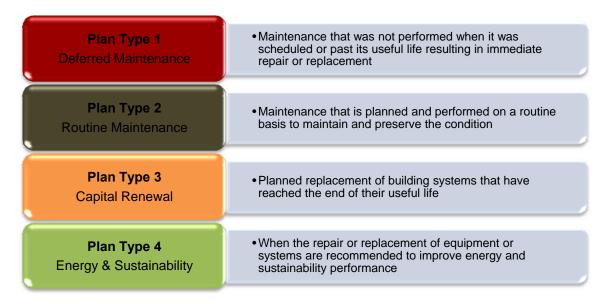
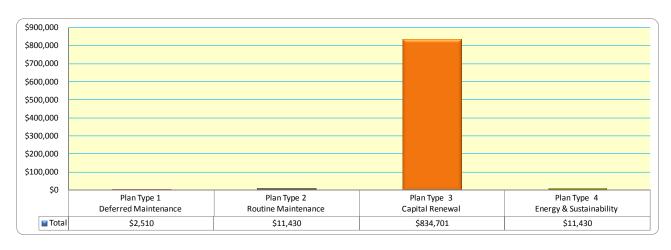


Chart EX-19 through to EX-23 illustrates the amount of expenditure, per category within the 20 year study period. These figures include each of the buildings and the site/park systems.

### **Building 500**



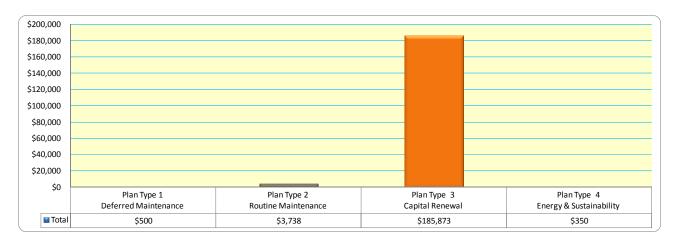


Plan Type 3 – Capital Renewal appears to require the most amount of expenditure in this study.



# **Building 781**

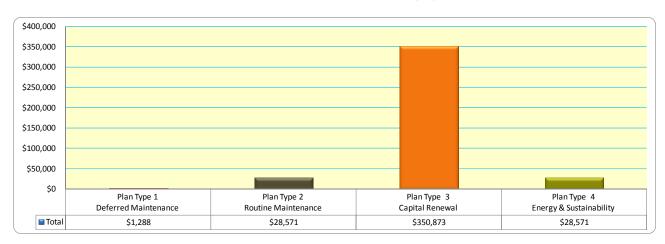
Chart EX-20 Cumulative Expenditure per Category of Works



Plan Type 3 – Capital Renewal appears to require the most amount of expenditure in this study.

# **Building 789**

Chart EX-21 Cumulative Expenditure per Category of Works

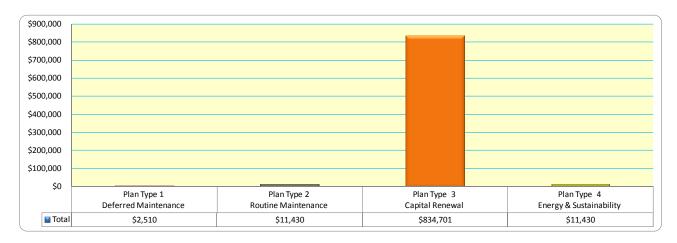


Plan Type 3 – Capital Renewal appears to require the most amount of expenditure in this study.



### **Hamilton Cafe**

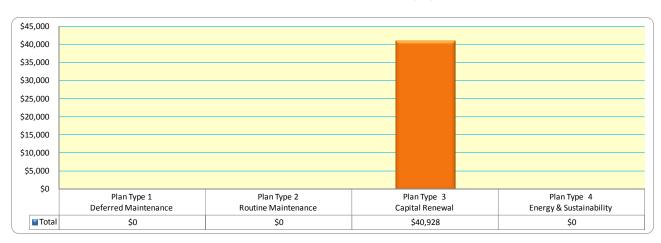
Chart EX-22 Cumulative Expenditure per Category of Works



Plan Type 3 – Capital Renewal appears to require the most amount of expenditure in this study.

### Site Systems

Chart EX-23 Cumulative Expenditure per Category of Works



Plan Type 3 – Capital Renewal appears to require the most amount of expenditure in this study.



Chart EX-24 through to EX-28 illustrates the amount of expenditure, per category, per each year within the 20 year study period.

### **Building 500**

Chart EX-24 Year by Year Cumulative Expenditure per Category of Works



Chart EX-24 illustrates that there are there are six main expenditure years for Plan Type 3 – Capital Renewal, throughout the study period.

### **Building 781**

Chart EX-25 Year by Year Cumulative Expenditure per Category of Works



Chart EX-25 illustrates that there are there are six main expenditure years for Plan Type 3 – Capital Renewal, throughout the study period.



# **Building 789**

Chart EX-26 Year by Year Cumulative Expenditure per Category of Works

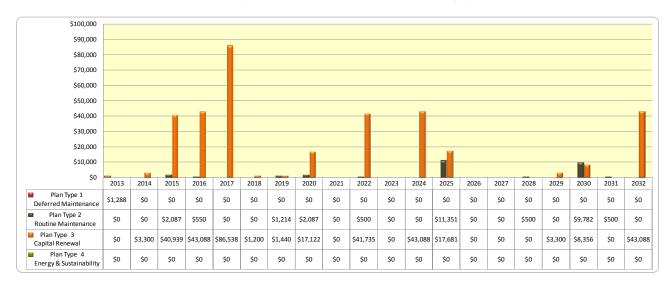


Chart EX-26 illustrates that there are there are six main expenditure years for Plan Type 3 – Capital Renewal, throughout the study period.

### **Hamilton Cafe**

Chart EX-27 Year by Year Cumulative Expenditure per Category of Works

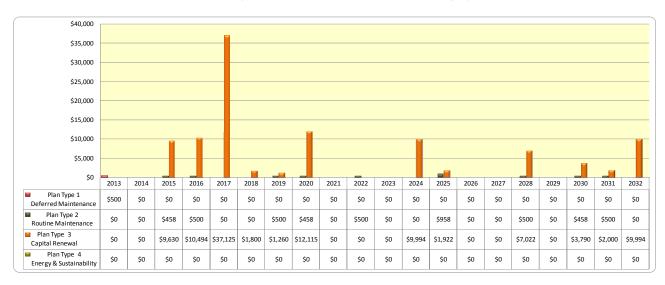


Chart EX-27 illustrates that there is one main expenditure year for Plan Type 3 – Capital Renewal, in the year 2017.



# Site Systems

Chart EX-28 Year by Year Cumulative Expenditure per Category of Works



Chart EX-28 illustrates that there are two main expenditure years for Plan Type 3 – Capital Renewal, in the year 2015 and 2030.



# **SECTION 2 - A SUBSTRUCTURE**

### A10 FOUNDATIONS

### DESCRIPTION

The description of the respective structural systems for the building is based upon our observation of exposed portions of the building structure. There were no available drawings to review.

#### A1010 STANDARD FOUNDATIONS

Building 500, 781, 789, & Hamilton Cafe

A1011 Wall Foundations

Based on the sizing, type and anticipated loads of these wall systems and our visual observation, we anticipate that they are all founded on a series of mild-steel reinforced cast-in-place concrete spread and continuous footings.

Building 500, 781, 789, & Hamilton Cafe

A1012 Column Foundations and Pile Caps

Each of the buildings contains concrete column foundations which supports either the wood or concrete supporting column structures. The compressive strength of the concrete is unknown.

### A1030 SLABS-ON-GRADE

### Building 500

A1031 Standard Slab on Grade

The basement level of the building consisted of a cast-in-place concrete slab-on-grade (reference Photograph 1 in Appendix B), reinforced with welded wire fabric. We assume the floor slab was placed over 2" of sand and 4" compacted gravel fill, with the thickness of the concrete slab portion being approximately 4". The compressive strength of the concrete is unknown.



### CONDITION

#### A1010 STANDARD FOUNDATIONS

Building 500, 781, 789, & Hamilton Cafe

A1011 Wall Foundations

The footings are not visible due to their location below the exterior wall construction. However there is no deterioration to the wall constructions that they are supporting, therefore we assume them to be in good condition and free from defects.

Building 500, 781, 789, & Hamilton Cafe

A1012 Column Foundations and Pile Caps

The column foundations are assumed to be in good condition, as there are no signs of failure throughout the structure which they support or the surrounding concrete floor slab. We do not anticipate any expenditure during the study period.

### A1030 SLABS-ON-GRADE

Building 500

A1031 Standard Slab on Grade

The basement level of the building consisted of cast-in-place concrete slab-on-grade, reinforced with welded wire fabric. We assume the floor slab was placed over 2" sand and 4" compacted gravel fill with the thickness of the concrete slab portion being approximately 4"- 6". The compressive strength of the concrete is unknown.



#### A20 BASEMENT CONSTRUCTION

### DESCRIPTION

#### A2020 BASEMENT WALLS

### Building 500

A2021 Basement Wall Construction

The basement walls consisted of reinforced cast-in-place concrete with a thickness of approximately 12" (reference Photograph 2 in Appendix B). The exterior surface of the above ground areas contained a cement plaster surface with a painted finish, to match the surface of the upper cast-in-place concrete wall construction.

# CONDITION

### A2020 BASEMENT WALLS

### Building 500

A2021 Basement Wall Construction

The basement wall construction was observed to be in good condition. No issues or defects could be observed.

# PROJECTED EXPENDITURES

No projected expenditures are identified for A Substructure during the study period.

# SECTION 3 - B SHELL

#### B10 SUPERSTRUCTURE

## DESCRIPTION

The description of the respective structural systems for the building is based upon our observation of exposed portions of the building structure. There were no available drawings to review.

#### B1010 FLOOR CONSTRUCTION

Building 500, 781, 789, & Hamilton Cafe

B1012 Upper Floors Construction

All of the buildings have a wooden floor construction supported by wooden joists held up by 4" x 4" wooden posts along the perimeter wall. They are also spread throughout the interior supporting the building's loads (reference Photograph 146 in Appendix B), except for building 500 which consists of a reinforced cast-in-place concrete floor for the first and second floor.

The Hamilton Café has a wood decking area which is also supported by 4" x 4" wooden posts on concrete footings (reference Photograph 148 in Appendix B).

B1015 Exterior Stairs and Fire Escapes

Building 500 contained one set of metal scissor stairs with concrete treads and metal handrail leading from the second floor down to ground level (reference Photograph 5 in Appendix B).

#### B1020 ROOF CONSTRUCTION

Building 500, 781, 789, & Hamilton Cafe

B1022 Pitched Roof Construction

The steep-sloped gable roof sections consisted of wood truss construction supported via the perimeter walls (reference Photographs 57 and 58 in Appendix B). The wood trusses supported wood 2" x 8" rafters which were generally spaced at 18". However building 500 had large timber trusses and rafters that were exposed to the interior at the east section of the second floor (reference Photograph 7 in Appendix B). The trusses spanned in the direction of the perimeter walls. The roof coverings can be viewed in the roof covering section of this report.

#### B1030 STRUCTURAL FRAME

**Building 500** 

B1032 Concrete Frame Structure

As explained this building has reinforced cast-in-place concrete columns which support the upper floors and wood trusses resting on the perimeter walls which make up the roof construction. The concrete columns are approximately 14" x 14" square.

Building 781, 789, & Hamilton Cafe

B1033 Wood Frame Structure

The buildings have a light wood frame construction consisting of wood stud walls at the main section of the building and timber posts and beam each with wood rafters.

## CONDITION

#### B1010 FLOOR CONSTRUCTION

Building 500, 781, 789, & Hamilton Cafe

B1012 Upper Floors Construction

The cast-in-place floor construction and decking appeared to be in fair to good condition. The Hamilton café's deck located on the north and east side of the building has a large tree growing through the floor and has caused warping and deflection of the deck around the area. We recommend installing a new wood post in this area and widening the perimeter of the deck around the tree detaching the tree trunk from the deck. We anticipate the cost to be below the threshold level of \$500.

B1015 Exterior Stairs and Fire Escapes

The metal scissor stairs at building 500 appeared to be in fair condition. There is some weathering present on the south side of the staircase (reference Photograph 6 in Appendix B) – we recommend cleaning and carrying out routine maintenance to prevent these issues. We do not anticipate any expenditure within the twenty- year study period.

## B1020 ROOF CONSTRUCTION

Building 500, 781, 789, & Hamilton Cafe

B1022 Pitched Roof Construction



The pitched roof constructions appeared to be in fair to good condition. There were no visible signs of failure noted. We do not anticipate any expenditure during the cost study period which relates to replacement of these structures.

## B1030 STRUCTURAL FRAME

## **Building 500**

B1032 Concrete Frame Structure

The cast-in-place concrete structure appeared to be in fair to good condition. We do not anticipate the replacement of the structural elements during the cost study period.

## Building 781, 789, & Hamilton Cafe

B1033 Wood Frame Structure

The wood framed structure appeared to be in fair to good condition. We do not anticipate the replacement of the structural elements during the cost study period.



## DESCRIPTION

The description of the respective structural systems for the building is based upon our observation of exposed portions of the building structure. There were no available drawings to review.

#### **B2010 EXTERIOR WALLS**

Bldg 500, 781, 789, and Hamilton Cafe

B2011 Exterior Wall Construction

Building 500 contained a load bearing cast-in-place concrete exterior wall construction which supports the roof structures (reference Photograph 8 in Appendix B). The walls had a smooth stucco finish with presumably a latex paint covering The entrance of the building contained a decorative tabernacle type of detail around the front door (reference Photograph 10 in Appendix B) and a band of 4" x 4" hand painted tiles at mid-level. These exterior walls contained multiple 3" round gable vents to form pyramids to assist with air circulation throughout the building.

The other buildings were enclosed with wood stud wall construction, consisting of 2" x 6" wood studs at 16" centers, which are supported on the cast-in-place concrete footings. The exterior wall surfaces contained exterior cement plaster presumably over a metal lath and a moisture barrier with plywood sheathing (reference Photographs 59,117 and 155 in Appendix B). The stud walls are believed to contain fiberglass batt insulation in different locations at the perimeter of the building.

#### B2020 EXTERIOR WINDOWS

Bldg 500, 781, 789, and Hamilton Cafe

B2021 Windows

The buildings contained casement metal windows with single pane glazing (reference Photographs 9, 62, 65, 117 and 156 in Appendix B). The window units on the south west of building 500 contained steel security window bars (reference Photograph 2 in Appendix B).

Building 789 contained aluminum frame single and dual pane window units (reference Photograph 63 in Appendix B). It appeared that the newer aluminum framed windows were located at the east side building. The window frames contain caulking at the point where they meet the wall construction.

#### B2030 EXTERIOR DOORS

Building 500, 781, 789, & Hamilton Cafe

B2031 Glazed Doors & Entrances

Building 789 has a glazed aluminum double door at the main entrance (reference Photograph 54 in Appendix B).

B2039 Other Doors & Entrances

The buildings contained single and double wood doors with glazed vision panels and painted finish surfaces (reference Photographs 10, 11, 119, 142 and 155 in Appendix B). The buildings also contained painted hollow metal single hung doors. Door hardware consisted of a combination of lever or push pull door handles on the exterior and emergency push bars at the interior with closing devices.

#### CONDITION

## **B2010 EXTERIOR WALLS**

Bldg 500, 781, 789, and Hamilton Cafe

B2011 Exterior Wall Construction

The exterior wall systems generally appeared to be in fair to good condition. The surface of the building had little to no signs of deterioration, water ingress or general failure noted. However the stucco surfaces had started to deteriorate, particularly at buildings that had a wood superstructure and areas of installments such as subfloor vents and windows (reference Photographs 61 and 64 in Appendix B). We recommend that these areas of cracking are repaired at the surface of the stucco to coincide with painting early in the study period. The stucco surfaces at building 500 appeared to be in good condition, with no actions anticipated there.

#### B2020 EXTERIOR WINDOWS

Bldg 500, 781, 789, and Hamilton Cafe

B2021 Windows

The steel framed single pane window units appeared to be in fair to poor condition, particularly 789 and 781 buildings (reference Photographs 67, 118 and 157 in Appendix B). The single-pane design of the majority of the window units offers limited thermal insulation. Onsite personnel had mentioned the windows had ongoing comfort issues along with having operation problems this information combined with their RUL we have recommend replacing the units early in the study period with newer aluminum framed units with dual pane glazing. The perimeter sealant has a typical EUL of fifteen-years therefore we anticipate replacement will be necessary late-term in the study period with a suitable polyurethane sealant to maintain the efficiency of the windows.

The aluminum framed windows on the west side of building 789 which is also referred to as building 501 appeared to be in poor condition. We noted multiple panes which had cracks in them as well as the glazing putty failing in many of the units. Aluminum framed windows units have a typical EUL of thirty-years therefore due to observed condition and the RUL we anticipate replacement will be necessary early in the study period.

The aluminum framed windows on the east side of building 789 appeared to be in good working condition. We do not anticipate a requirement for their replacement as they do not require any actions during the study period. However the perimeter sealant was starting to deteriorate with surface cracking present in locations, therefore with a typical EUL of fifteen-years for exterior sealant we anticipate replacement will be necessary mid-term in the study period with a suitable polyurethane sealant.

#### B2030 EXTERIOR DOORS

Building 500, 781, 789, & Hamilton Cafe

B2039 Other Doors & Entrances

The solid wood and hollow metal door sets appeared to be in fair condition. The operation of the swing doors were satisfactory and operated without any difficulty. We do not anticipate any requirement for their replacement during the study period. The surface finish of the doors are satisfactory with a few isolated spots of deterioration (reference Photographs 69 and 121 in Appendix B), therefore we recommend that they are repainted/finished at the same time as the exterior wall repainting works.



#### B30 ROOFING

## DESCRIPTION

## B3010 ROOF COVERINGS

Building 500, 781, 789, & Hamilton Cafe

B3011 Roof Finishes

The buildings contained seven steep-sloped roof areas; these roof areas are located at different levels and buildings, and are shown on the following aerial plans:

## **Overview of Main Building Roof Levels**



The steep-sloped roof areas 1, 2, 3, 5 and 7 contained a clay tile roof system with tile battens and a felt underlayment (reference Photographs 13, 72 and 160 in Appendix B). The age of the roof covering systems is unknown; however we estimate them to be approximately forty-years old. The roof levels slope to the perimeter gutters which lead to downspouts that drain to ground level and are directed away from the buildings.

The steep-sloped roof areas 4 and 6 contained an asphalt shingle roofing system which appears to be a three tab rectangular strip shingle (reference Photograph 122 in Appendix B). The roof levels slope to the perimeter gutters which lead to downspouts that drain to ground level and are directed away from the buildings.



## CONDITION

#### B3010 ROOF COVERINGS

Building 500, 781, 789, & Hamilton Cafe

B3011 Roof Finishes

The asphalt shingle roof covering on the buildings 781, and the east side of 789 appeared to be in poor condition. The shingles have begun to shed granules and the edges of the shingles are beginning to curl. There were signs of water ingress on the ceiling finish of both buildings. The age of the roof covering is unknown however due to the EUL of 40-years and observed condition we recommend a full replacement early in the study period.

The clay roof tile covering at the Hamilton Café, building 500, and the west side of building 789 appeared to be in fair condition. We understand that the clay roof tile covering is over forty-years old and based on the typical EUL of fifty-years replacement is anticipated during the cost study period.

There are a few damaged soffit vents on the 789 building that we recommend are replaced (reference Photograph 60 in Appendix B).

The roof appears to drain well with adequate slope at all areas to allow water to run to the drains. The gutters appeared to be free from debris, adequately sized and spaced properly. There is evidence of a leak in the gutter at the Hamilton Café which we recommend is inspected and fixed if necessary (reference Photograph 149 in Appendix B). We do not anticipate any expenditure to the gutters and downspouts during the twenty- year cost study; however recommend the gutters are maintained on a regular basis to ensure they are free from debris and working properly.



# PROJECTED EXPENDITURES

Identified recommended works that are required during the twenty-year study period are detailed below. We have included a 25% allowance for professional fees and general contractor overhead/profit and management costs (where applicable).

## **Building 500**

Element No.	Building Element	Recommendation	Qty	Unit	Rate	Cost	Year	Priority Code
B2011	Exterior Wall Construction	Repaint exterior wall surfaces	16,940	SF	\$1.88	\$31,847	2016	4
B2011	Exterior Wall Construction	Repaint exterior wall surfaces	16,940	SF	\$1.88	\$31,847	2024	4
B2011	Exterior Wall Construction	Repaint exterior wall surfaces	16,940	SF	\$1.88	\$31,847	2032	4
B2021	Exterior Windows	Replace steel framed windows	2,021	SF	\$45.00	\$90,945	2015	3
B2021	Exterior Windows	Replace sealant at the window frames	1,880	LF	\$11.25	\$21,150	2030	3
B3011	Roof Finishes	Replace clay tile roofing	11,816	SF	\$18.75	\$221,550	2017	3
		Total Anticipated Ex	xpenditure	for B She	·II	\$429,186		_

Element No.	Building Element	Recommendation	Qty	Unit	Rate	Cost	Year	Priority Code
B2011	Exterior Wall Construction	Undertake repairs to stucco surfaces	1	LS	\$500	\$500	2016	3
B2011	Exterior Wall Construction	Repaint exterior wall surfaces	4,632	SF	\$1.88	\$8,708	2016	4
B2011	Exterior Wall Construction	Repaint exterior wall surfaces	4,632	SF	\$1.88	\$8,708	2024	4
B2011	Exterior Wall Construction	Repaint exterior wall surfaces	4,632	SF	\$1.88	\$8,708	2032	4
B2021	Exterior Windows	Replace steel framed windows	479	SF	\$45.00	\$21,555	2015	3
B2021	Exterior Windows	Replace sealant at the window frames	420	LF	\$11.25	\$4,725	2030	3
B3011	Roof Finishes	Replace asphalt shingle roofing	5,412	SF	\$6.25	\$33,825	2017	3
Total Anticipated Expenditure f		for B She		\$86,729				



## Building 789

Element No.	Building Element	Recommendation	Qty	Unit	Rate	Cost	Year	Priority Code
B2011	Exterior Wall Construction	Undertake repairs to stucco surfaces	1	LS	\$500	\$500	2016	3
B2011	Exterior Wall Construction	Repaint exterior wall surfaces	7,455	SF	\$1.88	\$14,015	2016	4
B2011	Exterior Wall Construction	Repaint exterior wall surfaces	7,455	SF	\$1.88	\$14,015	2024	4
B2011	Exterior Wall Construction	Repaint exterior wall surfaces	7,455	SF	\$1.88	\$14,015	2032	4
B2021	Exterior Windows	Replace older aluminum framed windows	327	SF	\$45.00	\$14,715	2015	3
B2021	Exterior Windows	Replace sealant at the window frames	684	LF	\$11.25	\$7,695	2030	3
B3011	Roof Finishes	Replace clay tile roofing	2,100	SF	\$18.75	\$39,375	2017	3
B3011	Roof Finishes	Replace asphalt shingle roofing	7,546	SF	\$6.25	\$47,163	2017	3
Total Anticipated Expenditure for B Shell				\$151,494				

## Hamilton Cafe

Element No.	Building Element	Recommendation	Qty	Unit	Rate	Cost	Year	Priority Code
B2011	Exterior Wall Construction	Undertake repairs to stucco surfaces	1	LS	\$500	\$500	2016	3
B2011	Exterior Wall Construction	Repaint exterior wall surfaces	2,322	SF	\$1.88	\$4,365	2016	4
B2011	Exterior Wall Construction	Repaint exterior wall surfaces	2,322	SF	\$1.88	\$4,365	2024	4
B2011	Exterior Wall Construction	Repaint exterior wall surfaces	2,322	SF	\$1.88	\$4,365	2032	4
B2021	Exterior Windows	Replace steel framed windows	214	SF	\$45.00	\$9,630	2015	3
B2021	Exterior Windows	Replace sealant at the window frames	236	LF	\$11.25	\$2,655	2030	3
B3011	Roof Finishes	Replace clay tile roofing	1,980	SF	\$18.75	\$37,125	2017	3
Total Anticipated Ex		kpenditure	for B She		\$63,005			

# **SECTION 4 - C INTERIORS**

## C10 INTERIOR CONSTRUCTION

DESCRIPTION

#### C1010 PARTITIONS

Building 500, 781, 789, & Hamilton Cafe

C1011 Fixed Partitions

The buildings generally contained wood stud wall interior partitions with gypsum board (reference Photographs 74, 75 and 123 in Appendix B), except for building 500 which contained both wood studs with gypsum board as well as CMU and hollow brick interior partitions (reference Photograph 15 in Appendix B).

#### C1020 INTERIOR DOORS

Building 500, 781, 789, & Hamilton Cafe

C1021 Interior Doors

The buildings contained single and double flush wood doors which are housed within metal frames (reference Photographs 16, 74, 77 and 125 in Appendix B). The doors all appeared to be one directional swing operation. Buildings 789 and 781 generally contained double doors leading into the artists' studio areas. The west side of building 789 and building 500 contained newer single hung solid wood doors with glazed view panels (reference Photograph 17 in Appendix B). The hardware generally consisted of aluminum lever style handles.

C1023 Interior Door Hardware

The interior door hardware generally consisted of aluminum lever style handles. Some of the doors contained door closing devices.

#### C1030 FITTINGS SPECIALTIES

Building 500, 781, 789

C1031 Fabricated Toilet Partitions

The restrooms in building 500 contained fiberglass floor mounted/hinged doors at the water closet cubicles. The restrooms in buildings 781 and 789 contained floor mounted/ hinged laminated wood toilet partitions at the water closet cubicles (reference Photographs 76 and 124 in Appendix B).



## CONDITION

#### C1010 PARTITIONS

Building 500, 781, 789, & Hamilton Cafe

C1011 Fixed Partitions

The interior fixed partitions all appeared to be in fair to good condition. There were no deficiencies found in relation to the wall structures. The fixed partitions are suitable for the current use.

#### C1020 INTERIOR DOORS

Building 500, 781, 789, & Hamilton Cafe

C1021 Interior Doors

The interior doors appeared to be in fair to good condition with no deficiencies noted. We do not anticipate any expenditure in relation to the internal doors during the cost study period.

C1023 Interior Door Hardware

The hardware at each of the doors appeared satisfactory with no issues of deterioration or failure noted generally throughout the building. The operation of the door handles, locks and hinged swing were noted to be in fair to good condition. We do not anticipate any expenditure during the study period.

### C1030 FITTINGS SPECIALTIES

Building 500, 781, 789

C1031 Fabricated Toilet Partitions

The fabricated fiberglass and laminated wood cubicle doors appeared to be in fair to good condition. Toilet partitions have a typical EUL of twenty-years therefore they will both require replacement late-term in the study period in order to maintain the appearance of the restrooms.



#### C30 INTERIOR FINISHES

## DESCRIPTION

#### C3010 WALL FINISHES

### Building 500, 781, 789, & Hamilton Cafe

C3012 Wall Finishes to Interior Walls

Interior walls at the buildings generally contained painted gypsum wallboard surfaces, except for building 500 which contained both painted gypsum wall board and CMU surfaces (reference Photographs 19, 79, 128 and 163 in Appendix B). The restrooms contained fiberglass reinforced paneling to mid-height.

Some rooms in the basement of building 500 contained 12" x 12" acoustical wall tiles (reference Photograph 20 in Appendix B).

Hamilton Café contained both 2" x 2" and 4" x 4" ceramic tile wall finishes at the kitchen and food prep area (reference Photograph 160 in Appendix B).

#### C3020 FLOOR FINISHES

#### Building 500, 781, 789, & Hamilton Cafe

C3023 Hardeners and Sealers

The restrooms at each level of Building 500 the Hamilton Cafe and buildings 781 and 789 contained an epoxy floor coating as well as the kitchen and food prep area of the Hamilton Café (reference Photograph 166 in Appendix B). The stairs to Building 500 and all but the bathrooms in building 781 contained a non-slip painted surface (reference Photograph 131 in Appendix B).

C3024 Flooring

Building 500 contained older VCT at the basement level as well as newer VCT at the kitchen areas at each level (reference Photograph 23 in Appendix B). The entryway and west hallway had 4" x 4" Saltillo tile laid in a straight pattern (reference Photograph 22 in Appendix B). The Hamilton Café contained a laminate wood floor throughout the dining area and hallway leading to the office and restrooms (reference Photograph 165 in Appendix B) and the restrooms have vinyl roll flooring (reference Photograph 164 in Appendix B). Building 789 contained a laminate wood floor on the north side of the building (reference Photograph 79 in Appendix B).

C3025 Carpeting

The buildings 500 and 789 contained sheet carpet floor covering in the hallways, some of the artist's studios as well as the museum areas (reference Photographs 26 and 69 in Appendix B).

#### C3030 CEILING FINISHES

#### Building 500, 781, 789, & Hamilton Cafe

C3031 Ceiling Finishes

There was painted gypsum board ceilings within each of the buildings (reference Photographs 27, 87, 132 and 167 in Appendix B).

#### Building 500 & 789

C3032 Suspended Ceilings

The buildings contained 2' x 4' and 2' x 2' suspended acoustical tiled ceilings within a white enameled exposed grid throughout the buildings (reference Photographs 41 and 88 in Appendix B). The system is supported with wires from the underside of the roof construction above. The ceiling panels are generally 5/8" thick mineral board in fissured pattern. The ceiling system incorporated lighting components.

## CONDITION

## C3010 WALL FINISHES

### Building 500, 781, 789, & Hamilton Cafe

C3012 Wall Finishes to Interior Walls

Interior wall finishes appeared to be in fair to good condition generally throughout the buildings, with some minor marks observed, mainly in the 789 Building (reference Photograph 80 and 81 in Appendix B). The typical EUL of interior painted walls is eight-years, we are unaware of when all the buildings were last painted, however we have estimated it to be less than five-years and therefore we recommend that repainting is undertaken at each building early in the study period and then every eight-years after to maintain the appearance of the interior of the building.

The ceramic wall tiles and grout at the Hamilton Café appeared to be in good condition with no issues noted. We anticipate that the ceramic wall tiles will last beyond the study period however we do recommend re-grouting the tile later in the study period to maintain its appearance.

The fiberglass wall panels appeared to be in good condition with no issues noted. We anticipate that the fiberglass wall panels will last beyond the study period due to the EUL of thirty five-years if appropriate cleaning and care is provided.



#### C3020 FLOOR FINISHES

### Building 500, 781, 789, & Hamilton Cafe

C3023 Hardeners and Sealers

The epoxy floor coating within the restrooms and kitchen area appeared to be in fair to good condition. Based on the typical EUL of ten-years we recommend that the floor coatings are budgeted for replacement mid and late term in the study period.

The non-slip painted surfaces throughout building 781 and the stairs at building 500 appeared to be in fair to good condition. Therefore with an EUL of five- years and the observed condition we have made recommendations to repaint the interior non-slip floor areas starting in 2015 and then on a five-year cyclical basis throughout the study period.

#### Building 500, 789 & Hamilton Cafe

C3024 Flooring

The vinyl tile flooring appeared to be in fair to good condition at building 500 on the first and second floor, however the basement level and building 789's VCT was in poor condition. We are unaware of the age of the vinyl tile in the basement however based on observed conditions we anticipate a full replacement will be necessary early in the study period to maintain the buildings appearance. VCT has a typical EUL of eighteen years and therefore based on the EUL and observed condition we recommend a full replacement to all of the VCT in building 500 late term in the study period.

The laminate wood flooring at the Hamilton Café and building 789 appeared to be in good condition as it has recently been installed. The laminated flooring has a typical EUL of twenty-years therefore based on the EUL and observed condition we anticipate the flooring will last beyond the twenty-year study period with routine maintenance and repairs.

C3025 Carpeting

The sheet carpet flooring appeared to be in fair condition. Some areas of carpeting in 789 are stained and require cleaning/replacing (reference Photograph 84 in Appendix B). We are unaware of the age of the carpet, however based on observed conditions and the typical EUL of ten-years for this type of material; we anticipate replacement mid to late-term in the study period.

#### C3030 CEILING FINISHES

#### Building 500, 781, 789, & Hamilton Cafe

C3031 Ceiling Finishes

The painted gypsum ceilings appeared to be in fair to good condition. Painted surfaces usually have a typical EUL of eight years; therefore we recommend they are painted at the same time as the wall surfaces.



## Building 500 & 789

## C3032 Suspended Ceilings

The suspended acoustical ceiling systems appeared to be in fair to good condition with a few isolated spots of staining (reference Photograph 89 in Appendix B – 789 building). Suspended ceilings have a typical EUL of twenty-years therefore based on EUL and observed condition we anticipate a requirement for their replacement during the last part of the study period.

## PROJECTED EXPENDITURES

Identified recommended works that are required during the twenty-year study period are detailed below. We have included a 25% allowance for professional fees and general contractor overhead/profit and management costs (where applicable).

Element No.	Building Element	Recommendation	Qty	Unit	Rate	Cost	Year	Priority Code
C1010	Partitions	Replace toilet partitions	12	EACH	\$1,750	\$21,000	2025	3
C3012	Wall Finishes to Interior Walls	Repaint interior wall and ceiling surfaces	33,097	SF	\$1.88	\$62,222	2016	4
C3012	Wall Finishes to Interior Walls	Repaint interior wall and ceiling surfaces	33,097	SF	\$1.88	\$62,222	2024	4
C3012	Wall Finishes to Interior Walls	Repaint interior wall and ceiling surfaces	33,097	SF	\$1.88	\$62,222	2032	4
C3023	Hardeners and Sealers	Replace epoxy floor coating	488	SF	\$5.00	\$2,440	2018	3
C3023	Hardeners and Sealers	Replace non-slip floor paint	340	SF	\$3.25	\$1,105	2018	3
C3024	Flooring	Replace VCT flooring at basement	536	SF	\$3.75	\$2,010	2013	3
C3024	Flooring	Replace all VCT flooring at basement	1,156	SF	\$3.75	\$4,335	2031	3
C3025	Carpeting	Replace sheet carpet floor covering	118	SY	\$84.25	\$9942	2015	3
C3025	Carpeting	Replace sheet carpet floor covering	118	SY	\$84.25	\$9942	2025	3
C3032	Suspended Ceiling	Replace acoustic ceiling tiles	5,775	SF	\$4.38	\$25,295	2025	3
	-	Total Anticipated Exp	enditure f	or C Interio	ors	\$262,735		



Element No.	Building Element	Recommendation	Qty	Unit	Rate	Cost	Year	Priority Code
C1010	Partitions	Replace toilet partitions	4	EACH	\$1,750	\$7,000	2025	4
C3012	Wall Finishes to Interior Walls	Repaint interior wall and ceiling surfaces	4,322	SF	\$1.88	\$8,125	2016	4
C3012	Wall Finishes to Interior Walls	Repaint interior wall and ceiling surfaces	4,322	SF	\$1.88	\$8,125	2024	4
C3012	Wall Finishes to Interior Walls	Repaint interior wall and ceiling surfaces	4,322	SF	\$1.88	\$8,125	2032	4
C3023	Hardeners and Sealers	Replace epoxy floor coating	550	SF	\$5.00	\$2,750	2018	4
C3023	Hardeners and Sealers	Replace epoxy floor coating	550	SF	\$5.00	\$2,750	2032	4
C3023	Hardeners and Sealers	Replace epoxy floor coating	2,970	SF	\$3.75	\$11,138	2018	4
C3023	Hardeners and Sealers	Replace non-slip floor paint	2,970	SF	\$3.75	\$11,138	2032	4
Total Anticipated Expenditure for C I				or C Interi	ors	\$59,151		



Element No.	Building Element	Recommendation	Qty	Unit	Rate	Cost	Year	Priority Code
C1010	Partitions	Replace toilet partitions	4	EACE	\$1,750	\$7,000	2025	3
C3012	Wall Finishes to Interior Walls	Repaint interior wall and ceiling surfaces	15,464	SF	\$1.88	\$29,072	2016	4
C3012	Wall Finishes to Interior Walls	Repaint interior wall and ceiling surfaces	15,464	SF	\$1.88	\$29,072	2024	4
C3012	Wall Finishes to Interior Walls	Repaint interior wall and ceiling surfaces	15,464	SF	\$1.88	\$29,072	2032	4
C3023	Hardeners and Sealers	Replace epoxy floor coating	240	SF	\$5.00	\$1,200	2018	5
C3024	Flooring	Replace VCT flooring	210	SF	\$3.75	\$788	2013	3
C3024	Flooring	Replace VCT flooring	210	SF	\$3.75	\$788	2019	3
C3025	Carpeting	Replace sheet carpet floor covering	62	SY	\$84.25	\$5,224	2015	3
C3025	Carpeting	Replace sheet carpet floor covering	62	SY	\$84.25	\$5,224	2025	3
C3032	Suspended Ceiling	Replace acoustic ceiling tiles	1,246	SF	\$4.38	\$5,457	2025	3
	Total Anticipated Expenditure for C Interiors				ors	\$112,897		



## Hamilton Cafe

Element No.	Building Element	Recommendation	Qty	Unit	Rate	Cost	Year	Priority Code
C3012	Wall Finishes to Interior Walls	Repaint interior wall and ceiling surfaces	2,994	SF	\$1.88	\$5,629	2016	4
C3012	Wall Finishes to Interior Walls	Repaint interior wall and ceiling surfaces	2,994	SF	\$1.88	\$5,629	2024	4
C3012	Wall Finishes to Interior Walls	Repaint interior wall and ceiling surfaces	2,994	SF	\$1.88	\$5,629	2032	4
C3012	Wall Finishes to Interior Walls	Re-grout ceramic wall tile	96	SF	\$11.69	\$1,122	2028	3
C3023	Hardeners and Sealers	Replace epoxy floor coating	360	SF	\$5.00	\$1,800	2018	5
	Total Anticipated Expenditure for C Interiors			ors	\$19,808			

# **SECTION 5 - D SERVICES**

#### DESCRIPTION

## D2010 PLUMBING FIXTURES

Building 500, 781, 789, & Hamilton Cafe

D2011 Water Closets

The buildings contained floor mounted tank style vitreous china water closets with pressure assist system (reference Photographs 30, 90, 133 and 168 in Appendix B).

Building 500, 781, 789, & Hamilton Cafe

D2012 Urinals

The buildings contained vitreous china wall hung urinals, within the men's restrooms with flush valves (reference Photographs 31, 92 and 134 in Appendix B).

Building 500, 781, 789, & Hamilton Cafe

D2013 Lavatories

The buildings contain vanity top vitreous china lavatories (reference Photographs 93, 135 and 169 in Appendix B). The lavatories contain single lever style handles with non-metered faucets.

Building 500, 781, 789, & Hamilton Cafe

D2014 Sinks

We noted five single bowl stainless steel sinks within buildings 789 and 781 (reference Photographs 94 and 131 in Appendix B). The Hamilton Café contained two stainless steel wall mounted hand sinks (reference Photograph 171 in Appendix B), a prep sink, a fiberglass mop sink, as well as two stainless steel two compartment sinks (reference Photograph 170 in Appendix B). Building 500 contained two single bowl fiberglass utility sinks and single countertop stainless steel sinks.



#### Building 500 & 789

#### D2018 Drinking Fountains and Coolers

The buildings contained wall mounted stainless steel drinking fountains. Building 500's drinking fountain (reference Photograph 33 in Appendix B) was located by the entrance and building 789's drinking fountain was located at the north side of the building (reference Photograph 95 in Appendix B).

#### D2020 DOMESTIC WATER DISTRIBUTION

## Building 500, 781, 789, & Hamilton Cafe

D2021 Cold Water Service

Cold water piping throughout the buildings consisted of a copper system. We believe the cold water service for the facility is supplied directly from the street pressure. Taps are made to the water line downstream of the meter and routed to plumbing fixtures and equipment via copper pipe work.

## Building 500, 781, 789, & Hamilton Cafe

D2022 Hot Water Service

Domestic hot water was present at each of the buildings. The hot water is generated via electric water heaters at buildings 781 and 789 (reference Photographs 35, 96, 136 and 172 in Appendix B). Domestic hot water is generated via gas water heaters at the Hamilton Café and building 500 (reference Photographs 35 and in Appendix B.

Tables D20-1 through to D20-4 provides a summary of the water heaters:

Table D20-1 Summary of the Domestic Water Heating Equipment at Building 500

Location	Manufacturer	Model #	Serial #	Fuel/ Rating	Capacity	≈ Year of Installation
Mechanical Room in	A.O. Smith	EES-52_F202172506	Unknown	Electric	50 US Gallons	Assumed 2010
Basement					Galloris	

Unknown = Access limited or equipment had no name plates present (water heater was enclosed within a metal cabinet)
Assumed = Based on size of unit and area it serves / or possible year installed.



## Table D20-2 Summary of the Domestic Water Heating Equipment at Building 781

Location	Manufacturer	Model #	Serial #	Fuel/ Rating	Capacity	≈ Year of Installation
Utility Closet	State	Unknown	Unknown	Electric	10 US Gallons	Assumed 2010

Unknown = Access limited or equipment had no name plates present (water heater was enclosed within a metal cabinet) Assumed = Based on size of unit and area it serves / or possible year installed.

Table D20-3 Summary of the Domestic Water Heating Equipment at Building 789

Location	Manufacturer	Model #	Serial #	Fuel/ Rating	Capacity	≈ Year of Installation
Restroom / Wash Room	State	SBT75 75 NE 1	H98719001	Electric	75 US Gallons	1996

Unknown = Access limited or equipment had no name plates present (water heater was enclosed within a metal cabinet)
Assumed = Based on size of unit and area it serves / or possible year installed.

Table D20-4 Summary of the Domestic Water Heating Equipment at the Hamilton Cafe

Location	Manufacturer	Model #	Serial #	Fuel/ Rating	Capacity	≈ Year of Installation
Office/	Bradford White	Unknown	Unknown	Gas	Assumed 100 US	Assumed 2013
Stockroom					Gallons	

Unknown = Access limited or equipment had no name plates present (water heater was enclosed within a metal cabinet)
Assumed = Based on size of unit and area it serves / or possible year installed.

## D2030 SANITARY WASTE

Building 500, 781, 789, & Hamilton Cafe

D2031 Waste Piping

Waste piping was not directly inspected, however based on typical construction methods available at the time of construction, the piping is assumed to be cast iron pipe.

Hamilton Cafe

D2032 Floor Drains

Hamilton café contained a 75-1800 external gallon grease trap located at the south east corner of the building.



## CONDITION

## D2010 PLUMBING FIXTURES

Building 500, 781, 789, & Hamilton Cafe

D2011 Water Closets

The water closets at each of the buildings appeared to be in fair to good condition. The water closets flushed properly and did not have any cracks in the china, therefore based upon observed conditions and with a typical EUL of thirty-five-years, we anticipate that there will be no requirement for their replacement during the study period.

Building 500, 781, 789, & Hamilton Cafe

D2012 Urinals

The urinal and flush valves appeared to be in fair to good condition. The urinal flushed properly and did not have any cracks in the china therefore based upon observed conditions and with a typical EUL of thirty-five-years, we anticipate that there will be no requirement for their replacement during the study period. However we do recommend the flush valves are rebuilt mid to late term during the study period to maintain optimal performance.

Building 500, 781, 789, & Hamilton Cafe

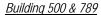
D2013 Lavatories

The lavatories at each of the buildings appeared to be in fair to good condition. The sinks drained properly and did not have any cracks in the china, therefore based upon observed conditions and with a typical EUL of thirty-five-years, we anticipate that there will be no requirement for their replacement during the study period. However we do recommend the faucets are replaced mid to late term during the study period to maintain optimal performance.

Building 500, 781, 789, & Hamilton Cafe

D2014 Sinks

The counter top stainless steel sinks and fiberglass utility sinks appeared to be in fair to good condition. We anticipate that there will be no requirement for replacement within the study period. However we do recommend the faucets are replaced mid to late term during the study period to maintain optimal performance.



D2018 Drinking Fountains and Coolers

The drinking fountains appeared to be in fair to good condition. Typically drinking fountains have a EUL of twenty- years, based on the EUL and observed condition we anticipate a full replacement late in the study period.

#### D2020 DOMESTIC WATER DISTRIBUTION

Building 500, 781, 789, & Hamilton Cafe

D2021 Cold Water Service

The domestic water systems at each of the buildings appeared to be in fair to good condition. No major problems were observed that could be attributed to age and deferred maintenance.

D2022 Hot Water Service

The domestic water heaters appeared to be in good condition. They were observed to be functional and operating correctly, however hot water heaters generally have a typical EUL of fifteen-years therefore each water heater will require replacement to maintain efficiency at the mid to late portion of the study period.

The hot water distribution pipes appeared to be in fair to good condition. We do not anticipate any expenditure within the cost study period.

## D2030 SANITARY WASTE

Building 500, 781, 789, & Hamilton Cafe

D2031 Waste Piping

No visually apparent problems with the sanitary waste piping were observed at any of the buildings.

Hamilton Cafe

D2032 Floor Drains

The grease trap interceptor appeared to be in good condition as it was recently installed. Typically a grease trap has a EUL of thirty-years. Base on the EUL and observed condition we do not anticipate any expenditure within the cost study period for a full replacement however routine maintenance and cleaning is required to keep it in good condition.



#### D30 HVAC

## DESCRIPTION

#### D3010 FUEL ENERGY SUPPLY SYSTEMS

#### Building 500, 789, & Hamilton Cafe

D3012 Gas Supply System

There is natural gas service to buildings 789, 500 and the Hamilton Cafe. The buildings contain pressure reducing station and gas meters located at the exterior of the buildings. Gas service is routed to the hot water boiler, furnaces, and hot water heaters.

#### D3020 HEAT GENERATION SYSTEMS

#### Building 500 & 789

D3021 Boilers

Building 500 contains a cast iron condensing boiler which is manufactured by Hydrotherm and supplies heating for the building. The boiler was recently installed in 2007 and has an output capacity of 850 MBH (reference Photograph 36 in Appendix B).

Building 789 contains two forced air furnaces which are manufactured by Rheem and supplies heating for the building. One of the units provides heat for the west half of the building also known as building 501 and the other unit supplies heating for the rest of the building (reference Photograph 97 in Appendix B).

### Building 500

D3022 Boiler Room Piping & Specialties

The system at the building contains heated water circulation pumps which are located in the boiler and pump rooms at basement level. The pumps are manufactured by Armstrong and have a motor capacity of ¼ HP respectively.

### Building 500, 781, & 789

D3021 Auxiliary Equipment

Building 500 contains cast iron radiators throughout the building which produce heat. The units each have thermostatically controlled valves to adjust the amount of heated water that enters the radiators (reference Photograph 39 in Appendix B).

Building 781 and 789 contain electric baseboard convection heaters in varying lengths. These heaters are generally found along the outside perimeter of the building and have self contained thermostats.

# D3040 HEAT HVAC DISTRIBUTION SYSTEMS

#### Building789 & Hamilton Cafe

D3041 Air Distribution Systems

The ductwork is sheet metal, except for flexible duct connections to ceiling and floor diffusers.

### Building 500, 781, 789, & Hamilton Cafe

D3042 Exhaust Ventilation Systems

The buildings contained exhaust fans at the ceiling level which are designed to remove air from typically interior spaces within the building. In addition to the ceiling units there are also some located at basement level which removes fumes from the basement area through the exterior windows (reference Photograph 40 in Appendix B). The exhausted air from the ceiling is ducted from the exhaust fan through ducts which travels up through the building and gets discharged at roof level.

#### D3050 HEAT TRANSFER TERMINAL AND PACKAGED UNITS

## Hamilton Cafe

D3051 Terminal Self- Contained Units

A secondary cooling system at the building is supplied via a Champion 4,855 CFM side draft evaporative cooling unit with a ¾ HP motor.

D3052 Package Units

Primary heating and cooling at the building is supplied via a horizontal mounted single-package high efficiency heat pump unit which is located at the ground level of the east elevation. The unit is manufactured by Carrier and has an estimated capacity of 7 1/2 tons (reference Photograph 176 in Appendix B).



Table D30-1 provides a summary of the HVAC equipment:

Table D30-1 Summary of the HVAC Equipment

Location	Equipment Type	Manufacturer	Model No.	Serial No.	Capacity /	Fuel Type	Year	
Building 500 Basement Mechanical Room	Boiler	HydroTherm	KN-10	KN-H-NET- MO7-1418	850 MBH	GAS	2004	
Hamilton Café East Elevation	Package A/C Unit	Carrier	50HJQ008	2304G21665	7½ tons	Electric	2004	
Hamilton Café East Elevation	Evaporative Cooler	Champion	7500 SD	MC50956	4,855 CFM	Electric	2004	
Building 789 Mechanical Room	Forced Air Furnace	Rheem	3214-200EB	F66NN3B302 3269	160 MBH	GAS	Assumed 1985	
Building 789 Mechanical Room	Forced Air Furnace	Rheem	3214-200EB	F66NN3B302 3268	160 MBH	GAS	Assumed 1985	

Unknown = Access limited or equipment had no name plates present.

Assumed = Based on size of unit and area it serves / or possible year installed.

## D3060 HVAC INSTRUMENTATION AND CONTROLS

Building 500, 781, 789, & Hamilton Cafe

D3069 Other Controls & Instrumentation

Building 500 is able to control the room temperature via thermostatically controlled valves located on the radiators throughout the building. Hamilton café and building 789 have electronic wall mounted thermostats to control the room temperature. Buildings 781 and 789's baseboard heating is controlled via a dial located on the individual unit.



## D3010 FUEL ENERGY SUPPLY SYSTEMS

CONDITION

Building 500, 789, & Hamilton Cafe

D3012 Gas Supply System

No visually apparent problems with the gas distribution piping were observed at the buildings. No issues have been reported regarding performance; therefore we believe the supply will be serviceable, through the end of the study period.

#### D3020 HEAT GENERATION SYSTEMS

Building 500 & 789

D3021 Boilers

The boiler in building 500 was observed to be in good condition. The typical EUL of a boiler of this kind is thirty-years; therefore as the boiler is under ten-years of age replacement will not be required during the study period. However repair works should be undertaken on the boiler every ten-years. This includes replacement of burner blower, blower bearings, blower motor, fireye, gas regulator, auto gas valve, solenoid valve and repair of the controls. We have accounted for the associated expenditure in the study period.

The forced air furnaces in building 789 were observed to be in fair condition for their age. The typical EUL of a furnace of this kind is thirty-years; therefore due to the EUL and observed condition we recommend a full replacement early in the study period. Repair work should also be undertaken once the new furnaces are installed every ten years. We have accounted for this expenditure in the study period.

D3022 Boiler Room Piping & Specialties

The circulation pumps were observed to be in fair condition, with no reported operating issues. Based on a typical EUL of fifteen-years for this type of pump and motor and based on their observed conditions, we anticipate replacement during the study period will be necessary, mid-term to maintain efficiency.



#### Building 500, 781, & 789

## D3023 Auxiliary Equipment

The radiators appeared to be in fair condition. We do not anticipate a requirement for their replacement during the study period. The thermostatic valve would be the only mechanical piece on the radiators which would need replacement and we recommend these be changed out on an as needed basis.

The baseboard heating appeared to be in fair condition. We do not anticipate a requirement for their replacement during the study period.

#### Building 789 & Hamilton Cafe

## D3041 Air Distribution Systems

Only a small proportion of the ducting in the building was reviewed but that portion was noted to be in fair to good condition with no deficiencies. We recommend that the duct work is cleaned every five-years starting at the start of the study period, as it was unclear when they were last cleaned.

## Building 500, 781, 789, & Hamilton Cafe

## D3042 Exhaust Ventilation Systems

The exhaust fans were observed to be in fair condition. Exhaust fans of this type have a EUL of fifteen-years, therefore based on the current observed condition and the future usage, we recommend replacement of the fans and components are undertaken near-term in the study period. The cost of these exhaust fans fall below the threshold therefore they will not appear in the project expenditures.

### Hamilton Cafe

### D3051 Terminal Self- Contained Units

The evaporative air conditioning unit appeared to be in fair to good condition. This type of air conditioning unit has a twenty-year EUL therefore due to the EUL and observed condition a full replacement will be necessary late term in the study period

## D3052 Package Units

The package A/C unit appeared to be in fair to good condition. Based on observed conditions and the typical EUL of fifteen to twenty-years we anticipate that it will last beyond the study period with only regular maintenance required. There will be no action for its replacement during the study period.



## D3060 HVAC INSTRUMENTATION AND CONTROLS

Building 500, 781, 789, & Hamilton Cafe

D3069 Other Controls & Instrumentation

The thermostat controls appeared to be in fair to good condition and functional. We are unaware of any issues and therefore we do not anticipate its replacement during the cost study period. We recommend that they are replaced along with the units. Until that time we do not anticipate any related issues.



#### D40 FIRE PROTECTION

## DESCRIPTION

#### D4010 SPRINKLERS

#### Building 500, 781, 789, & Hamilton Cafe

D4011 Sprinkler Water Supply

The buildings are protected with an automatic wet-pipe fire suppression system utilizing standard pendent commercial sprinkler heads fixed to fire-line pipes which are supported via the upper structure. The system is monitored by water flow and tamper switches connected to the fire alarm system (reference Photographs 98, and 177 in Appendix B).

## D4030 FIRE PROTECTION SPECIALTIES

Building 500, 781, 789, & Hamilton Cafe

D4031 Fire Extinguishers

Multipurpose portable wall mounted handheld fire extinguishers were provided throughout the buildings (reference Photographs 99, 137 and 178 in Appendix B).

### CONDITION

#### D4010 SPRINKLERS

Building 500, 781, 789, & Hamilton Cafe

D4011 Sprinkler Water Supply

The sprinkler system was observed to be in good condition and all inspections up to date. No visible corrosion or leaks were observed however with the sprinkler heads having a typical EUL of twenty-years, we anticipate that there will be a requirement for their replacement toward the end of the study period.

## D4030 FIRE PROTECTION SPECIALTIES

### Building 500, 781, 789, & Hamilton Cafe

D4031 Fire Extinguishers

We understand they are maintained on a yearly basis. The fire extinguishers were last tested in May of 2012. We do not anticipate a requirement to replace any fire extinguishers during the study period, as we expect that they will be replaced on an as-needed basis.

## D50 ELECTRICAL

## DESCRIPTION

The following information was obtained through our visual observations of the building systems. The electrical systems include the service entrance equipment, panel boards, safety switches, lighting fixtures, and security systems.

#### D5010 ELECTRICAL SERVICE & DISTRIBUTION

Building 500, 781, 789, & Hamilton Cafe

D5012 Low Tension Service & Dist.

The main incoming service for the site is routed from the transformer labeled T-1737 to the meter and the Main Distribution Panel (MDP) which is located on the south side of the buildings just west of the Hamilton Cafe. The MDP is manufactured by Square D and is rated at 208Y/120 volts at 1,200-amps, 3-phase, 4-wire. The electrical service is then distributed across the site to each of the buildings (reference Photographs 42, 100, 138 and 179 in Appendix B).

## D5020 LIGHTING & BRANCH WIRING

Building 500, 781, 789, & Hamilton Cafe

D5021 Branch Wiring Devices

The branch wiring devices at each of the buildings included switches, receptacles and other devices that would be generally associated with these types of buildings. Branch wiring was observed to typically be distributed in Electric Metallic Tubing (EMT) and flexible metal conduit.

Building 500, 781, 789, & Hamilton Cafe

D5022 Lighting Equipment

The interior lighting within each building is provided by a combination of surface mounted and recessed 4' strip 2 and 4 lamped fluorescent fixtures, 2' x 4' recessed fixtures halogen track lighting, circular surface mounted fluorescent and recessed can lights. The 4' strip fixtures generally contained T8 32W lamps and electronic ballasts (reference Photographs 44, 101, 102 103 and 167 in Appendix B).

The exterior lighting was a combination of twin tube C.F.L. coach lights, high pressure sodium wall packs and flood lighting (reference Photographs 110, 144 and 184 in Appendix B). All of the in-room lighting is controlled via local switching in the respective rooms.



#### D5030 COMMUNICATIONS & SECURITY

Building 500, 781, 789, & Hamilton Cafe

D5033 Telephone Systems

Telephone systems are present at these buildings, with the telephone boards mounted on the walls (reference Photographs 46 in Appendix B).

D5037 Fire Alarm Systems

Building 500, 781, 789, & Hamilton Cafe

The buildings are protected by digital automatic fire detection alarm systems. Addressable devices are located throughout the building such as smoke detectors, pull stations and fire bells (Reference Photographs 105, 141 and 182 in Appendix B).

Building 500, 781, 789, & Hamilton Cafe

D5038 Security and Detection Systems

The buildings contain an intruder alarm system, which consists of programmable security alarm panels. The alarm panel is located near the entrances. We understand that the security system is also monitored by Bay Alarm.

## CONDITION

## D5010 ELECTRICAL SERVICE AND DISTRIBUTION

Building 500, 781, 789, & Hamilton Cafe

D5012 Low Tension Service & Dist.

The major electrical equipment items appeared to be in fair condition. There was no indication of damage from short circuit or overload conditions. We were not provided preventative maintenance records for the main electrical equipment, and therefore we do recommend further evaluation of the equipment via an infrared electrical inspection which will highlight if high temperatures, excessive electrical resistance, failing components, ground faults and short circuiting issues exist.

We recommend budgeting for a cyclical allowance above and beyond normal annual electrical maintenance expenditures for cleaning the interiors of all enclosures, and infrared scans of connections, fuses, and breakers in switches, panel boards, and motor starters beginning at the start of the study period and repeated no more than every three-years thereafter. Any items identified as abnormal during the infrared scans should be corrected at that time.

Electrical panel boards generally have a EUL of thirty-years and based on the age of the panel boards present and their observed conditions we anticipate that there will be no requirement for their replacement during the study period.

#### D5020 LIGHTING & BRANCH WIRING

#### Building 500, 781, 789, & Hamilton Cafe

D5021 Branch Wiring Devices

The general receptacles and wiring appeared to be in fair to good condition within the buildings. We do not anticipate a requirement for their replacement during the cost study period.

D5022 Lighting Equipment

The interior lighting was observed in good condition and all fixtures were operating properly with no broken lenses or deteriorated housings. Therefore apart from re-lamping and replacement of fixtures on an individual basis, no actions are anticipated during the study period.

#### D5030 COMMUNICATIONS & SECURITY

## Building 500, 781, 789, & Hamilton Cafe

D5033 Telephone Systems

The existing telephone system equipment in the buildings was observed to be in fair to good condition. The typical EUL of these systems is fifteen-years, therefore based on changing and innovating technology we have included for replacement mid-term in the study period. There are no reported operating issues at this time which will require immediate action.

## Building 500, 781, 789, & Hamilton Cafe

D5038 Security and Detection Systems

The intruder alarm system appeared to be in fair to good condition. We are unaware of any operating issues with the systems; however security alarm devices have a typical EUL of ten-years therefore we have included for their replacement mid-term in the study period. Furthermore the security system replacement has also been included for replacement in the last part of the study period due to the duration of the study period.



## PROJECTED EXPENDITURES

Identified recommended works that are required during the twenty-year study period are detailed below. We have included a 25% allowance for professional fees and general contractor overhead/profit and management costs (where applicable).

Element No.	Building Element	Recommendation	Qty	Unit	Rate	Cost	Year	Priority Code
D2012	Urinals	Replace flush valves at urinals	5	EACH	\$238	\$1,190	2019	3
D2013	Lavatories	Replace faucets at lavatories	9	EACH	\$180	\$1,620	2019	3
D2013	Lavatories	Replace faucets at lavatories	9	EACH	\$180	\$1,620	2019	3
D2014	Sink	Replace faucet at sinks	7	EACH	\$180	\$1,260	2019	3
D2014	Sink	Replace faucet at sinks	7	EACH	\$180	\$1,260	2029	3
D2018	Drinking Fountains and Coolers	Replace drinking fountain	2	EACH	\$3,181	\$6,362	2030	3
D2022	Hot Water Service	Replace water heater	50	GAL	\$44	\$2,200	2025	3
D3021	Boiler	Overhaul the boiler	1	LS	\$3,500	\$3,500	2020	3
D3021	Boiler	Overhaul the boiler	1	LS	\$3,500	\$3,500	2030	3
D3022	Boiler Room Piping & Specialties	Replace hot water circulation pump	1	EACH	\$938	\$938	2020	3
D3022	Boiler Room Piping & Specialties	Replace hot water circulation pump	1	EACH	\$938	\$938	2020	3
D3022	Boiler Room Piping & Specialties	Replace hot water circulation pump	1	EACH	\$938	\$938	2020	3
D4011	Sprinkler Water Supply	Replace sprinkler heads	14,390	SF	\$1.05	\$15,110	2025	1
D5012	Low Tension Service & Dist	Preventative Maintenance of Electrical Equipment	1	LS	\$500	\$500	2013	3
D5012	Low Tension Service & Dist	Preventative Maintenance of Electrical Equipment	1	LS	\$500	\$500	2016	3
D5012	Low Tension Service & Dist	Preventative Maintenance of Electrical Equipment	1	LS	\$500	\$500	2019	3



D5012	Low Tension Service & Dist	Preventative Maintenance of Electrical Equipment	1	LS	\$500	\$500	2022	3
D5012	Low Tension Service & Dist	Preventative Maintenance of Electrical Equipment	1	LS	\$500	\$500	2025	3
D5012	Low Tension Service & Dist	Preventative Maintenance of Electrical Equipment	1	LS	\$500	\$500	2028	3
D5012	Low Tension Service & Dist	Preventative Maintenance of Electrical Equipment	1	LS	\$500	\$500	2031	3
D5033	Telephone System	Replace telephone system	14,390	SF	\$1.00	\$14,390	2020	3
D5037	Fire Alarm Systems	Replace fire alarm system	14,390	SF	\$5.00	\$71,950	2020	1
D5038	Security and Detection System	Replace security system	14,390	SF	\$0.62	\$8,922	2020	3
D5038	Security and Detection System	Replace security system	14,390	SF	\$0.62	\$8,922	2030	3
Total Anticipated Expenditure for D Services				es	\$148,119			

Element No.	Building Element	Recommendation	Qty	Unit	Rate	Cost	Year	Priority Code
D2012	Urinals	Replace flush valves at urinals	1	EACH	\$238	\$238*	2019	3
D2013	Lavatories	Replace faucets at lavatories	4	EACH	\$180	\$720	2019	3
D2013	Lavatories	Replace faucets at lavatories	4	EACH	\$180	\$720	2029	3
D2014	Sink	Replace faucet at sinks	3	EACH	\$180	\$540	2019	3
D2014	Sink	Replace faucet at sinks	3	EACH	\$180	\$540	2029	3
D2022	Hot Water Service	Replace water heater	10	GAL	\$35	\$350**	2025	3
D4011	Sprinkler Water Supply	Replace sprinkler heads	3,712	SF	\$1.05	\$3,898	2025	1
D5012	Low Tension Service & Dist	Preventative Maintenance of Electrical Equipment	1	LS	\$500	\$500	2013	3
D5012	Low Tension Service & Dist	Preventative Maintenance of Electrical Equipment	1	LS	\$500	\$500	2016	3



D5012	Low Tension Service & Dist	Preventative Maintenance of Electrical Equipment	1	LS	\$500	\$500	2019	3
D5012	Low Tension Service & Dist	Preventative Maintenance of Electrical Equipment	1	LS	\$500	\$500	2022	3
D5012	Low Tension Service & Dist	Preventative Maintenance of Electrical Equipment	1	LS	\$500	\$500	2025	3
D5012	Low Tension Service & Dist	Preventative Maintenance of Electrical Equipment	1	LS	\$500	\$500	2028	3
D5012	Low Tension Service & Dist	Preventative Maintenance of Electrical Equipment	1	LS	\$500	\$500	2031	3
D5033	Telephone System	Replace telephone system	3,712	SF	\$1.00	\$3,712	2020	3
D5037	Fire Alarm Systems	Replace fire alarm system	3,712	SF	\$5.00	\$18,560	2022	1
D5038	Security and Detection System	Replace security system	3,712	SF	\$0.62	\$2,301	2020	3
D5038	Security and Detection System	Replace security system	3,712	SF	\$0.62	\$2,301	2030	3
		Total Anticipated Ex	penditure	for D Service	es	\$37,388		

<sup>\*</sup>Under threshold, combined with like work

### Building 789

Element No.	Building Element	Recommendation	Qty	Unit	Rate	Cost	Year	Priorit y Code
D2012	Urinals	Replace flush valves at urinals	3	EACH	\$238	\$714	2019	3
D2013	Lavatories	Replace faucets at lavatories	6	EACH	\$180	\$1,080	2019	3
D2013	Lavatories	Replace faucets at lavatories	6	EACH	\$180	\$1,080	2029	3
D2014	Sink	Replace faucet at sinks	2	EACH	\$180	\$360*	2019	3
D2014	Sink	Replace faucet at sinks	2	EACH	\$180	\$360*	2029	3
D2018	Drinking Fountains and Coolers	Replace drinking fountain	1	EACH	\$3,181	\$3,181	2030	3
D2022	Hot Water Service	Replace water heater	75	GALLON	\$44	\$3,300	2014	3

<sup>\*\*</sup>Under threshold, combined with water heater building 500



D2022	Hot Water Service	Replace water heater	75	GALLON	\$44	\$3,300	2029	3
D3021	Boilers	Replace forced air furnace	1	LS	\$10,500	\$10,500	2015	3
D3021	Boilers	Replace forced air furnace	1	LS	\$10,500	\$10,500	2015	3
D3021	Boilers	Overhaul furnace	1	LS	\$6,300	\$6,300	2025	3
D3021	Boilers	Overhaul furnace	1	LS	\$6,300	\$6,300	2025	3
D3041	Air Distribution Systems	Clean ductwork	8,347	SF	\$0.25	\$2,087	2015	3
D3041	Air Distribution Systems	Clean ductwork	8,347	SF	\$0.25	\$2,087	2020	3
D3041	Air Distribution Systems	Clean ductwork	8,347	SF	\$0.25	\$2,087	2025	3
D3041	Air Distribution Systems	Clean ductwork	8,347	SF	\$0.25	\$2,087	2030	3
D4011	Sprinkler Water Supply	Replace sprinkler heads	8,347	SF	\$1.05	\$8,764	2025	1
D5012	Low Tension Service & Dist	Preventative Maintenance of Electrical Equipment	1	LS	\$500	\$500	2013	3
D5012	Low Tension Service & Dist	Preventative Maintenance of Electrical Equipment	1	LS	\$500	\$500	2016	3
D5012	Low Tension Service & Dist	Preventative Maintenance of Electrical Equipment	1	LS	\$500	\$500	2019	3
D5012	Low Tension Service & Dist	Preventative Maintenance of Electrical Equipment	1	LS	\$500	\$500	2022	3
D5012	Low Tension Service & Dist	Preventative Maintenance of Electrical Equipment	1	LS	\$500	\$500	2025	3
D5012	Low Tension Service & Dist	Preventative Maintenance of Electrical Equipment	1	LS	\$500	\$500	2028	3
D5012	Low Tension Service & Dist	Preventative Maintenance of Electrical Equipment	1	LS	\$500	\$500	2031	3
D5033	Telephone System	Replace telephone system	8,347	SF	\$1.00	\$8,347	2020	3
D5037	Fire Alarm Systems	Replace fire alarm system	8,347	SF	\$5.00	\$41,735	2022	1
D5038	Security and	Replace security system	2,927	SF	\$0.62	\$5,175	2020	3



	Detection System							
D5038	Security and Detection System	Replace security system	2,927	SF	\$0.62	\$5,175	2030	3
		Total Anticipated Ex	kpenditure	for D Servic	es	\$115,420		

<sup>\*</sup>Under threshold, combined with like work.



### Hamilton Cafe

Element No.	Building Element	Recommendation	Qty	Unit	Rate	Cost	Year	Priority Code
D2022	Hot Water Supply	Replace domestic water heater	10	GAL	\$30.00	\$300*	2012	3
D2013	Lavatories	Replace faucets at lavatories	4	EACH	\$180	\$225*	2019	3
D2014	Sink	Replace faucet at sinks	3	EACH	\$180	\$540*	2019	3
D2022	Hot Water Service	Replace water heater	100	GALLON	\$59	\$5,900	2028	3
D3041	Air Distribution Systems	Clean ductwork	1,830	SF	\$0.25	\$458*	2015	3
D3041	Air Distribution Systems	Clean ductwork	1,830	SF	\$0.25	\$458*	2020	3
D3041	Air Distribution Systems	Clean ductwork	1,830	SF	\$0.25	\$458*	2025	3
D3041	Air Distribution Systems	Clean ductwork	1,830	SF	\$0.25	\$458*	2030	3
D3051	Terminal Self- Contained Units	Replace evaporative cooler	1	EACH	\$2,000	\$2,000	2031	3
D4011	Sprinkler Water Supply	Replace sprinkler heads	1,830	SF	\$1.05	\$1,922	2025	1
D5012	Low Tension Service & Dist	Preventative Maintenance of Electrical Equipment	1	LS	\$500	\$500	2013	3
D5012	Low Tension Service & Dist	Preventative Maintenance of Electrical Equipment	1	LS	\$500	\$500	2016	3
D5012	Low Tension Service & Dist	Preventative Maintenance of Electrical Equipment	1	LS	\$500	\$500	2019	3
D5012	Low Tension Service & Dist	Preventative Maintenance of Electrical Equipment	1	LS	\$500	\$500	2022	3
D5012	Low Tension Service & Dist	Preventative Maintenance of Electrical Equipment	1	LS	\$500	\$500	2025	3
D5012	Low Tension Service & Dist	Preventative Maintenance of Electrical Equipment	1	LS	\$500	\$500	2028	3
D5012	Low Tension Service &	Preventative Maintenance of Electrical	1	LS	\$500	\$500	2031	3



	Dist	Equipment						
D5033	Telephone System	Replace telephone system	1,830	SF	\$1.00	\$1,830	2020	3
D5037	Fire Alarm Systems	Replace fire alarm system	1,830	SF	\$5.00	\$9,150	2020	1
D5038	Security and Detection System	Replace security system	2,927	SF	\$0.62	\$1,135	2020	3
D5038	Security and Detection System	Replace security system	2,927	SF	\$0.62	\$1,135	2030	3
		Total Anticipated Ex	penditure	for D Service	es	\$29,662		

<sup>\*</sup>Under threshold, combined with like work.



# SECTION 6 - E EQUIPMENT & FURNISHINGS

### E20 FURNISHINGS

### DESCRIPTION

### E2010 FIXED FURNISHINGS

Building 500, 781, 789

E2012 Fixed Casework

The buildings contained wood constructed fixed casework within the kitchen or break areas (reference Photographs 107 and 131 in Appendix B). The wood cabinets generally consisted of hardwood frames and plywood panels with plastic laminated finished panels and worktops.

### CONDITION

### E2010 FIXED FURNISHINGS

Building 500, 781, 789,

E2012 Fixed Casework

The fixed casework appeared to be in fair condition and suitable for its use. Cabinets have a typical EUL of twenty-years therefore based on the EUL and our observations replacement will be required during the twenty-year study period.



### PROJECTED EXPENDITURES

Identified recommended works that are required during the twenty-year study period are detailed below. We have included a 25% allowance for professional fees and general contractor overhead/profit and management costs (where applicable).

### Building 500

Element No.	Building Element	Recommendation	Qty	Unit	Rate	Cost	Year	Priority Code
E2012	Fixed Casework	Replace break room floor cabinets (inc countertops)	18	LF	\$600	\$10,800	2030	4
		Total Anticipated Expe	nditure for	E Fixed Fu	rnishings	\$10,800		

### Building 781

Element No.	Building Element	Recommendation	Qty	Unit	Rate	Cost	Year	Priority Code
E2012	Fixed Casework	Replace break room floor cabinets (inc countertops)	\$7,200	2025	4			
		Total Anticipated Expe	nditure for	E Fixed Fu	ırnishings	\$7,200		

### Building 789

Element No.	Building Element	Recommendation	Qty	Unit	Rate	Cost	Year	Priority Code
E2012	Fixed Casework	Replace break room floor cabinets (inc countertops)	6	LF	\$600	\$3,600	2020	4
		Total Anticipated Expe	nditure for	E Fixed Fu	ırnishings	\$3,600		



### G20 SITE IMPROVEMENTS

In addition to the four buildings located at this site, we have also undertaken a cursory review and assessment of the major site improvements to further assist the City in understanding the condition of the site over all. The FCI calculations which are located in the Executive Summary do not include any likely cost that has been shown in this section as they can't be attached to one particular building.

### DESCRIPTION

### G2020 PARKING LOTS

Building 500, 781, 789, & Hamilton Cafe

G2021 Bases and Sub-Bases

The site contains parking areas located at two locations around the site. There is a main parking area located to the west of the complex and road parking along the east side of the complex on Hamilton Parkway (reference Photographs 185 and 186 in Appendix B). The parking lots have an asphalt surface with white line striping denoting areas of parking stalls. We were not provided with the original specification details of the paving and therefore cannot comment on the specific asphalt mix type, classification or its suitability for its existing use. Table G20-1 provides a summary of the site systems.

Table G20-1 Schedule of Site Systems

System Type	System Surface	Location	Measurement	No. of Parking Spaces	No. of ADA Parking Spaces
Parking Lot	Asphalt	West	505 SY	8	2
Parking Lot	Asphalt	East	308 SY	12	2

### G2030 PEDESTRIAN PAVING

Building 500, 781, 789, & Hamilton Cafe

G2031 Paving & Surfacing

The complex contained cast-in-place concrete paving throughout providing walkways. We assume the paving is supported via a flexible base of sand setting bed and compacted sub grade (reference Photographs 47, 108 and 187 in Appendix B).

March 4, 2013

G2033 Exterior Steps

The buildings contained reinforced cast in place concrete steps and ramps as well as wood exterior steps and ramps (reference Photographs 3, 49, 111, 115 and 151 in Appendix B). The concrete ramps and steps contained painted steel handrails and the wood steps and ramps contained wood and steel handrails. The wood steps and ramps generally had a non slip painted surface.

### G2040 SITE DEVELOPMENT

Building 500, 781, 789, & Hamilton Cafe

G2043 Flagpoles

The site contained one galvanized steel flagpole situated at the center of the complex. The flagpole was approximately 25′ high with up lighting (reference Photograph 188 in Appendix B).

G2049 Miscellaneous Structures

The site contained a trash enclosure at the south side. The structure consisted of CMU walls with a painted metal panel gate to match the buildings.

### G2050 LANDSCAPING

Building 500, 781, 789, & Hamilton Cafe

G2056 Planters

Landscaping consisted of shrubs; succulents and ground cover, with a number of mature trees along the north side of the properties (reference Photographs 53 and 109 in Appendix B).

Building 500, 781, 789, & Hamilton Cafe

G2057 Irrigation Systems

The landscaped areas throughout the property are irrigated via a below grade automatic irrigation system. The irrigation system is supplied by below grade PVC piping and controllers. Pop-up type sprinkler heads and drip lines are scattered throughout the site.



### CONDITION

### G2020 PARKING LOTS

Building 500, 781, 789, & Hamilton Cafe

G2021 Bases and Sub-Bases

The asphalt paved areas throughout the site appeared to be in good condition; there were no major signs of surface deterioration such as alligator cracking. All areas of the asphalt should undergo asphaltic-based seal coat and the reapplication of surface markings starting in the near-term and then every five-years to extend the life of the pavements. Furthermore we have also recommended a full asphalt mill overlay and associated restriping, as the typical EUL of this work is twenty-years. However we recommend that the asphalt is re-assessed at the time prior to replacement to ascertain is the work will be necessary.

### G2030 PEDESTRIAN PAVING

Building 500, 781, 789, & Hamilton Cafe

G2031 Paving & Surfacing

The concrete pavements appeared to be in good condition however the sealant to the movement joints has started to deteriorate, with cracking and gaps present. We recommend that the sealant is removed and a new suitable polyurethane sealant applied during the study period.

The paving under the walkway on the south-west side of building 500 has large cracks; possibly due to sun exposure and lack of expansion joints within the paving (reference Photograph 48 in Appendix B). We recommend that these cracks are also sealed with suitable polyurethane sealant.

G2033 Exterior Steps

The concrete steps and ramps as well as wood exterior steps and ramps appeared to be in fair to good condition. We have noted areas where the wood and metal posts had deteriorated at the lower sections due to moisture (reference Photograph 113 in Appendix B) and also some areas of weathering (reference Photographs 50 and 153 in Appendix B). The area where the steel handrail enters the concrete paving at most locations was lower than the surrounding paving causing the area to gather water (reference Photograph 70 in Appendix B). We recommend installing a new suitable polyurethane sealant to these metal post areas to coincide with the pavement sealant to prevent further deterioration to the handrails and assure amble paint to the wooden posts to deter water intrusion. We have included costs for this work in the pavement sealant section in the buildings expenditures.



### G2040 SITE DEVELOPMENT

### Building 500, 781, 789, & Hamilton Cafe

G2043 Flagpoles

The flagpole appeared to be in fair to good condition with no issues observed and no reported instances of disrepair. We do not anticipate replacement during the study period.

G2049 Miscellaneous Structures

The trash enclosure was in fair to good condition generally and will not require replacement during the cost study period. However we do recommend repainting of the exterior surfaces to coincide with the surrounding buildings to maintain the appearance of the site.

### G2050 LANDSCAPING

### Building 500, 781, 789, & Hamilton Cafe

G2056 Planters

The planted beds are in good overall condition. The plant beds will require routine maintenance and replacement and should be addressed on an as-needed basis as part of routine maintenance and funded as an operational expense.

### Building 500, 781, 789, & Hamilton Cafe

G2057 Irrigation Systems

The irrigation system at the site is in good condition. We do not anticipate a requirement for replacement during the study period.



### G40 SITE ELECTRICAL UTILITIES

### DESCRIPTION

### G4020 SITE LIGHTING

Building 500, 781, 789, & Hamilton Cafe

G4021 Fixtures & Transformers

Site lighting consisted of high pressure sodium up-lighting, bollard lights and pole mounted lights (reference Photographs 189 and 190 in Appendix B).

### CONDITION

### G4020 SITE LIGHTING

Building 500, 781, 789, & Hamilton Cafe

G4021 Fixtures & Transformers

The exterior light fixtures appeared to be in good condition, with no yellowing lenses or visible deterioration. We do not anticipate their replacement during the cost study period, apart from replacement of the fixtures on an individual basis, no actions are recommended during the study period.



### PROJECTED EXPENDITURES

Identified recommended works that are required during the twenty-year study period are detailed below. We have included a 25% allowance for professional fees and general contractor overhead/profit and management costs (where applicable).

Element No.	Building Element	Recommendation	Qty	Unit	Rate	Cost	Year	Priority Code
G2021	Bases and Sub- Bases	Undertake seal coating including re-stripping at the parking lot and roadway	813	SY	\$1.50	\$1,220	2015	3
G2021	Bases and Sub- Bases	Undertake seal coating including re-stripping at the parking lots and roadway	813	SY	\$1.20	\$1,220	2020	3
G2021	Bases and Sub- Bases	Undertake seal coating including re-stripping at the parking lots and roadway  813  SY  \$1.20				\$1,220	2025	3
G2021	Bases and Sub- Bases	Undertake seal coating including re-striping at the parking lot and roadway	813	SY	\$15.00	\$12,195	2030	3
G2031	Paving & Surfacing	Replace sealant to paving construction joints*	1,460	LF	\$11.25	\$16,425	2015	3
G2031	Paving & Surfacing	Replace sealant to paving construction joints	1,460	LF	\$11.25	\$16,425	2030	3
G2049	Miscellaneous Structures	Repaint trash enclosure	1	LS	\$800	\$800	2015	4
G2049	Miscellaneous Structures	Repaint trash enclosure	1	LS	\$800	\$800	2020	4
G2049	Miscellaneous Structures	Repaint trash enclosure	1	LS	\$800	\$800	2025	4
G2049	Miscellaneous Structures	Repaint trash enclosure	1	LS	\$800	\$800	2030	4
		Total Anticipated Expend	iture for (	G Building	Sitework	\$40,928		

<sup>\*</sup> Includes bases of handrail at concrete exterior stairs

Appendix A
Twenty-Year **Expenditure Forecast** 2013 - 2032



Building 500 500 Palm Drive Novato, CA

Element No.	. Component Description	Estimated Useful Life or Replacement Cycle (Yrs)	Remaining Useful Life (Yrs)	l Quantity	Unit of Measurement	Unit Cost	Plan Type	Priority	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Total	Total	Combined Total
						\$			1 Deferred	Scheduled	Scheduled	Scheduled	Scheduled	6 Scheduled	Scheduled	Scheduled	9 Scheduled	10 Scheduled	11 Scheduled	12 Scheduled	13 Scheduled	Scheduled	15 Scheduled	16 Scheduled	17 Scheduled	18 Scheduled	19 Scheduled	20 Scheduled	Deferred	Scheduled	
A. SUBSTRI	JOTURE								•	40		•	40		-	40	40	\$0	40	40	•	**	-	-	•	40	**	40			**
B. SHELL							A. SUBSTRUCTURE	SUB-TUTALS	\$0			\$0														\$0		\$U	30	30	<b>\$</b> 0
B2011	Repaint exterior wall surfaces and doors  Replace steel framed windows	30	2	16,940.00 2,021.00	SF SF	\$1.88 \$45.00	Capital Renewal	3	\$0 \$0	\$0 \$0	\$0 \$90,945	\$31,847	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$31,847 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$31,847 \$0	\$0 \$0	\$95,542 \$90,945	\$95,542 \$90,945
B2021													**			**															
B2021	Replace sealant at the window frames  Replace clay tile roofing	15 50	4	1,880.00	LF SF	\$11.25 \$18.75	Capital Renewal	3	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$221,550	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$21,150 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$21,150 \$221,550	\$21,150 \$221,550
B3011	Replace day the rooting	50	*	11,816.00	3F	\$16.75	B. SHELL			\$0	\$90,945	\$31,847	\$221,550	\$0	\$0	\$0	\$0	\$0	\$0	\$31,847	\$0	\$0	\$0	\$0	\$0 \$0	\$21,150	\$0	\$31,847	\$0	\$429,187	\$429,187
C. INTERIO	Replace toilet partitions	20	12	12.00	EACH	\$1,750.00	Capital Renewal	3	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$21,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$21,000	\$21,000
C1010	' '			33.097.00	SF								**			**	•	-					\$0								
C3012	Repaint interior wall and ceiling surfaces	8	3	,		\$1.88	Capital Renewal	4	\$0	\$0	\$0	\$62,222	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$62,222	\$0	\$0		\$0	\$0	\$0	\$0	\$62,222	\$0	\$186,667	\$186,667
C3023	Replace epoxy floor coating	15	5	488.00	SF	\$5.00	Capital Renewal	3	\$0	\$0	\$0	\$0	\$0	\$2,440	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	<b>\$0</b>	\$0	\$0	\$0	\$0	\$2,440	\$2,440
C3023	Replace non-slip floor paint	15	5	340.00	SF	\$3.25	Capital Renewal	3	\$0	\$0	\$0	\$0	\$0	\$1,105	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,105	\$1,105
C3024	Replace VCT flooring at basement	18	0	536.00	SF	\$3.75	Deferred Maintenance	3	\$2,010	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,010	\$0	\$2,010
C3024	Replace VCT flooring	18	18	1,156.00	SF	\$3.75	Capital Renewal	3	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,335	\$0	\$0	\$4,335	\$4,335
C3025	Replace sheet carpet floor covering	10	2	118.00	SY	\$84.25	Capital Renewal	3	\$0	\$0	\$9,942	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$9,942	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$19,884	\$19,884
C3032	Replace acoustic ceiling tiles	20	2	5,775.00	SF	\$4.38	Capital Renewal	3	\$0	\$0	\$25,295	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$25,295	\$25,295
D. SERVICE	S						C. INTERIORS	SUB-TOTALS	\$2,010	\$0	\$35,237	\$62,222	\$0	\$3,545	\$0	\$0	\$0	\$0	\$0	\$62,222	\$30,942	\$0	\$0	\$0	\$0	\$0	\$4,335	\$62,222	\$2,010	\$260,726	\$262,736
D2012	Rebuild flush valves at urinals	15	6	5.00	EACH	\$238.00	Routine Maintenance	3	\$0	\$0	\$0	\$0	\$0	\$0	\$1,190	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,190	\$1,190
D2013	Replace faucets at lavatories	10	6	9.00	EACH	\$180.00	Routine Maintenance	3	\$0	\$0	\$0	\$0	\$0	\$0	\$1,620	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,620	\$0	\$0	\$0	\$0	\$3,240	\$3,240
D2014	Replace faucets at sinks	10	6	7.00	EACH	\$180.00	Capital Renewal	3	\$0	\$0	\$0	\$0	\$0	\$0	\$1,260	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,260	\$0	\$0	\$0	\$0	\$2,520	\$2,520
D2018	Replace drinking fountain	20	17	2.00	EACH	\$3,181.00	Capital Renewal	3	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$6,362	\$0	\$0	\$0	\$6,362	\$6,362
D2022	Replace water heater	15	12	50.00	GALLON	\$44.00	Energy & Sustainability	3	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,200	\$2,200
D3021	Overhaul the boiler	10	7	1.00	LS	\$3,500.00	Routine Maintenance	3	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,500	\$0	\$0	\$0	\$7,000	\$7,000
D3022	Replace hot water circulating pump	15	7	1.00	EACH	\$938.00	Capital Renewal	3	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$938	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$938	\$938
D3022	Replace hot water circulating pump	15	7	1.00	EACH	\$938.00	Capital Renewal	3	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$938	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$938	\$938
D3022	Replace hot water circulating pump	15	7	1.00	EACH	\$938.00	Capital Renewal	3	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$938	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$938	\$938
D4011	Replace sprinkler heads	20	12	14,390.00	SF	\$1.05	Capital Renewal	1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$15,110	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$15,110	\$15,110
D5012	Preventative maintenance of electrical equipment	3	9	1.00	LS	\$500.00	Deferred Maintenance	3	\$500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500	\$0	\$500
D5012	Preventative maintenance of electrical equipment	3	9	1.00	LS	\$500.00	Capital Renewal	3	\$0	\$0	\$0	\$500	\$0	\$0	\$500	\$0	\$0	\$500	\$0	\$0	\$500	\$0	\$0	\$500	\$0	\$0	\$500	\$0	\$0	\$3,000	\$3,000
D5033	Replace telephone system	15	7	14,390.00	SF	\$1.00	Capital Renewal	3	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$14,390	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$14,390	\$14,390
D5037	Replace fire alarm system	15	7	14,390.00	SF	\$5.00	Capital Renewal	1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$71,950	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$71,950	\$71,950
D5038	Replace security system	10	7	14,390.00	SF	\$0.62	Capital Renewal	3	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$8,922	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$8,922	\$0	\$0	\$0	\$17,844	\$17,844
E. EQUIPME	INT & FURNISHING Replace break room floor cabinets (inc			40.00	LE	400	D. SERVICES	SUB-TOTALS	\$500	\$0	\$0	\$500	\$0	\$0	\$4,570	\$101,576 \$0	\$0 \$0	\$500	\$0	\$0	\$17,810	\$0	\$0	\$500	\$2,880	\$18,784	\$500 \$0	\$0 \$0	\$500 \$0	\$147,619	\$148,119 \$10,800
E2012	countertops)	21	7	18.00	LF	\$600.00 E. EQUIP	Capital Renewal MENT & FURNISHING	SUB-TOTALS	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 <b>\$0</b>	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 <b>\$0</b>	\$10,800 \$10,800	\$0 \$0	\$0 \$0	\$0 \$0	\$10,800 \$10,800	\$10,800 \$0
F. SPECIAL	CONSTRUCTION AND DEMOLITION				F SPECIA	L CONSTRUCT	ON AND DEMOLITION	SUB-TOTALS	\$0	\$0	\$0	\$0	\$0	\$0	SO.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	SO.	\$0	\$n	\$0	\$0	\$0	\$0	\$0	\$0
G. BUILDIN	G SITEWORK								**																			<b>A</b> .		\$0	**
Z. GENERAI						G.	BUILDING SITEWORK	SUB-TOTALS	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0 \$0	\$0
							Z. GENERAL Expenditure Totals per '	SUB-TOTALS Year	\$0 \$2,510	\$0 \$0	\$0 \$126,182	\$0 \$94,570	\$0 \$221,550	\$0 \$3,545	\$0 \$4,570	\$0 \$101,576	\$0 \$0	\$0 \$500	\$0 \$0	\$0 \$94,070	\$0 \$48,752	\$0 \$0	\$0 \$0	\$0 \$500	\$0 \$2,880	\$0 \$50,734	\$0 \$4,835	\$0 \$94,070	\$0 \$2,510	\$0 \$848,331	\$0 \$850,841
							Total Cost (Inflated @ 49	% per Yr.)	\$2,510	\$0	\$136,478	\$106,378	\$259,182	\$4,313	\$5,783	\$133,667	\$0	\$712	\$0	\$144,816	\$78,053	\$0	\$0	\$900	\$5,394	\$98,824	\$9,795	\$198,190	\$2,510	\$1,182,485	\$1,184,995

Building 781 500 Palm Drive Novato, CA

Element No.	Component Description	Estimated Useful Life or Replacement Cycle	Remaining Usefu Life (Yrs)	ul Quantity	Unit of Measurement	Unit Cost	Plan Type	Priority	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Total	Total	Combined Total
		HIS				\$			1 Deferred											12 Scheduled									Deferred	Scheduled	
A. SUBSTRI	JCTURE																														
B. SHELL				<u> </u>			A. SUBSTRUCTURE	SUB-TOTALS		\$0	\$0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			\$0	\$0	\$0	\$0		
B2011	Undertake repairs to stucco surfaces	N/A	3	1.00	LS	\$500.00	Routine Maintenance	3	\$0	\$0	\$0	\$500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500	\$500
B2011	Repaint exterior wall surfaces	8	3	4,632.00	SF	\$1.88	Capital Renewal	4	\$0	\$0	\$0	\$8,708	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$8,708	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$8,708	\$0	\$26,124	\$26,124
B2021	Replace steel framed windows	30	2	479.00	SF	\$45.00	Capital Renewal	3	\$0	\$0	\$21,555	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$21,555	\$21,555
B2021	Replace sealant at perimeter of windows and door frames	15	17	420.00	LF	\$11.25	Capital Renewal	3	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,725	\$0	\$0	\$0	\$4,725	\$4,725
B3011	Replace asphalt shingle roofing	40	4	5,412.00	SF	\$6.25	Capital Renewal	3	\$0	\$0	\$0	\$0	\$33,825	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$33,825	\$33,825
C. INTERIO	RS						B. SHELL	SUB-TOTALS	\$0	\$0	\$21,555	\$9,208	\$33,825	\$0	\$0	\$0	\$0	\$0	\$0	\$8,708	\$0	\$0	\$0	\$0	\$0	\$4,725	\$0	\$8,708	\$0	\$86,729	\$86,729
C1010	Replace toilet partitions	20	12	4.00	EACH	\$1,750.00	Capital Renewal	4	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$7,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$7,000	\$7,000
C3012	Repaint interior wall and ceiling surfaces	8	3	4,322.00	SF	\$1.88	Capital Renewal	4	\$0	\$0	\$0	\$8,125	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$8,125	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$8,125	\$0	\$24,376	\$24,376
C3023	Replace epoxy floor covering	15	5	550.00	SF	\$5.00	Capital Renewal	4	\$0	\$0	\$0	\$0	\$0	\$2,750	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,750	\$0	\$5,500	\$5,500
C3023	Replace non-slip floor paint	15	5	2,970.00	SF	\$3.75	Capital Renewal	4	\$0	\$0	\$0	\$0	\$0	\$11,138	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$11,138	\$0	\$22,275	\$22,275
D SERVICE	5						C. INTERIORS	SUB-TOTALS	\$0	\$0	\$0	\$8,125	\$0	\$13,888	\$0	\$0	\$0	\$0	\$0	\$8,125	\$7,000	\$0	\$0	\$0	\$0	\$0	\$0	\$22,013	\$0	\$59,151	\$59,151
D2012	Rebuild flush valves at urinals	15	6	1.00	EACH	\$238.00	Routine Maintenance	3	\$0	\$0	\$0	\$0	\$0	\$0	\$238	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$238	\$238
D2013	Replace faucets at lavatories	10	6	4.00	EACH	\$180.00	Capital Renewal	3	\$0	\$0	\$0	\$0	\$0	\$0	\$720	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$720	\$0	\$0	\$0	\$0	\$1,440	\$1,440
D2014	Replace faucets at sinks	10	6	3.00	EACH	\$180.00	Capital Renewal	3	\$0	\$0	\$0	\$0	\$0	\$0	\$540	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$540	\$0	\$0	\$0	\$0	\$1,080	\$1,080
D2022	Replace water heater (Undertaken with other water heater replacement at other building)	15	12	10.00	GAL	\$35.00	Energy & Sustainability	3	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$350	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$350	\$350
D4011	Replace sprinkler heads	20	12	3,712.00	SF	\$1.05	Capital Renewal	1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,898	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,898	\$3,898
D5012	Preventative maintenance of electrical equipment	3	0	1.00	LS	\$500.00	Deferred Maintenance	3	\$500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500	\$0	\$500
D5012	Preventative maintenance of electrical equipment	3	3	1.00	LS	\$500.00	Routine Maintenance	3	\$0	\$0	\$0	\$500	\$0	\$0	\$500	\$0	\$0	\$500	\$0	\$0	\$500	\$0	\$0	\$500	\$0	\$0	\$500	\$0	\$0	\$3,000	\$3,000
D5033	Replace telephone system	15	7	3,712.00	SF	\$1.00	Capital Renewal	3	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,712	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,712	\$3,712
D5037	Replace fire alarm system	15	8	3,712.00	SF	\$5.00	Capital Renewal	1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$18,560	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$18,560	\$18,560
D5038	Replace security system	10	7	3,712.00	SF	\$0.62	Capital Renewal	3	\$0	\$0	\$0	\$0	\$0	\$0	\$1,000	\$2,301	\$0	\$0	\$0 \$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,301	\$0	\$0	\$0	\$4,603	\$4,603
E. EQUIPME	NT & FURNISHING			_			D. SERVICES	SUB-TUTALS	\$500	\$U	<b>\$</b> 0	\$500	ŞU	ψ	\$1,990	\$0,013	şu	\$19,000	\$U	\$0	34,740	ψ	ΨU	\$500	\$1,200	\$2,301	\$500	<b>\$</b> 0	\$500	\$30,000	\$37,380
E2012	Replace break room floor cabinets (inc countertops	21	12	12.00	LF	\$600.00	Capital Renewal	4 SLID TOTALS	\$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0	\$0	\$0 \$0	\$0 \$0	\$0	\$0	\$0 \$0	\$0 \$0	\$7,200 \$7,200	\$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0	\$0 \$0	\$0 \$0	\$0 \$0	\$7,200 \$7,200	\$7,200 \$7,200
F. SPECIAL	CONSTRUCTION AND DEMOLITION						MENT & FORMISHING	JOD-TOTALS	φυ	70	90	90	30	\$0	30	30	\$0	\$0	\$0	90	\$1,200	90	90	90	30	40		90	90	\$7,200	\$1,200
G. BUILDIN	SITEWORK				F. SPECIA	LCONSTRUCT	TION AND DEMOLITION	SUB-TOTALS	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0 \$0	\$0
Z. GENERAI	-					G	BUILDING SITEWORK	SUB-TOTALS	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0 \$0	\$0
				1			Z. GENERAL	SUB-TOTALS	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0 \$0	\$0
							Expenditure Totals per Y		\$500	\$0	\$21,555	\$17,834	\$33,825	\$13,888	\$1,998	\$6,013	\$0	\$19,060	\$0	\$16,834	\$18,948	\$0	\$0	\$500	\$1,260	\$7,026	\$500	\$30,721	\$500	\$189,961	\$190,461
							Total Cost (Inflated @ 4%	per Yr.)	\$500	\$0	\$23,314	\$20,060	\$39,570	\$16,896	\$2,528	\$7,913	\$0	\$27,128	\$0	\$25,914	\$30,336	\$0	\$0	\$900	\$2,360	\$13,687	\$1,013	\$64,725	\$500	\$276,345	\$276,845

Building 789 500 Palm Drive Novato, CA

Element No.	Component Description	Estimated Useful Life or Replacement Cycle	Remaining Useful Life (Yrs)	Quantity	Unit of Measurement	Unit Cost	Plan Type	Priority	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Total	Total	Combined Total
		ITISI				\$							5 Scheduled			8 Scheduled	9 Scheduled	10 Scheduled	11 Scheduled		13 Scheduled	14 Scheduled	15 Scheduled	16 Scheduled	17 Scheduled	18 Scheduled	19 Scheduled	20 Scheduled	Deferred	Scheduled	
A. SUBSTRU	ICTURE								40	40	•	•	***			-	40	**	40	40	•	•	-	40	•	40	40	•		-	**
B. SHELL							A. SUBSTRUCTURE	SUB-TOTALS	ŞU	\$0	\$0	\$0	\$0	\$U	\$0	\$0	ŞU	\$0	\$0	\$0 \$0	\$0 \$0	ŞU	ŞU	\$0	<b>\$</b> 0	\$0		\$0 \$0	\$0 \$0	\$0	
B2011	Undertake repairs to stucco surfaces	N/A	3	1.00	LS	\$50.00	Routine Maintenance	3	\$0	\$0	\$0	\$500		\$0	\$0	\$0	\$0	\$0	\$0			\$0	\$0	\$0	\$0	\$0	\$0			\$500	\$500
B2011	Repaint exterior wall surfaces and doors	8	3	7,455.00	SF	\$1.88	Capital Renewal	4	\$0	\$0	\$0	\$14,015	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$14,015	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$14,015	\$0	\$42,046	\$42,046
B2021	Replace older aluminum window frames	30	2	327.00	SF	\$45.00	Capital Renewal	3	\$0	\$0	\$14,715	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$14,715	\$14,715
B2021	Replace sealant at perimeter of windows and door frames	15	17	684.00	LF	\$11.25	Capital Renewal	3	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$7,695	\$0	\$0	\$0	\$7,695	\$7,695
B3011	Replace clay tile roofing	50	4	2,100.00	SF	\$18.75	Capital Renewal	3	\$0	\$0	\$0	\$0	\$39,375	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$39,375	\$39,375
B3011	Replace asphalt shingle roofing	40	4	7,546.00	SF	\$6.25	Capital Renewal	3	\$0	\$0	\$0	\$0	\$47,163	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$47,163	\$47,163
C. INTERIOR	RS					T .	1	SUB-TOTALS		\$0		\$14,515		\$0	\$0	\$0	\$0	\$0	\$0	\$14,015	\$0	\$0	\$0	\$0	\$0	\$7,695	\$0	\$14,015	\$0	\$151,494	\$151,494
C1010	Replace toilet partitions	20	12	4.00 15,464.00	Each	\$1,750.00 \$1.88	Capital Renewal  Capital Renewal	3	\$0	\$0 \$0	\$0 \$0	\$0 \$29,072	\$0 \$0	\$0	\$0 \$0	\$0	\$0	\$0	\$0 \$0	\$0 \$29,072	\$7,000	\$0	\$0 \$0	\$0 \$0	\$0	\$0	\$0 \$0	\$0 \$29,072	\$0 \$0	\$7,000 \$87,217	\$7,000 \$87,217
C3012	Repaint interior wall and ceiling surfaces	8						4	\$0					\$0		\$0	\$0	\$0			\$0	\$0		**	\$0	\$0					
C3023	Replace epoxy floor covering	15	5	240.00	SF	\$5.00	Capital Renewal	3	\$0	\$0	\$0	\$0	\$0	\$1,200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,200	\$1,200
C3024	Replace VCT flooring	18	0	210.00	SF	\$3.75	Deferred Maintenance	3	\$788	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$788	\$0	\$788	\$788	\$1,576
C3025	Replace sheet carpeting	10	2	62.00	SY	\$84.25	Capital Renewal	3	\$0	\$0	\$5,224	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,224	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$10,447	\$10,447
C3032	Replace acoustic ceiling tiles	20	12	1,246.00	SF	\$4.38	Capital Renewal	3 SUBJECTALS	\$0 \$788	\$0 <b>\$0</b>	\$0 \$5,224	\$0 \$29,072	\$0 \$0	\$0 \$1,200	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 <b>\$0</b>	\$0 \$29,072	\$5,457 \$17,681	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$788	\$0 \$29,072	\$0 \$788	\$5,457 \$112,109	\$5,457 \$112,897
D. SERVICE	S					T	O. HETEKOKO	502 1017125																							
D2012	Replace flush valves at urinals	15	6	3.00	EACH	\$238.00	Capital Renewal	3	\$0	\$0	\$0	\$0	\$0	\$0	\$714	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$714	\$714
D2013	Replace faucets at lavatories	10	6	6.00	EACH	\$180.00	Capital Renewal	3	\$0	\$0	\$0	\$0 \$0	\$0	\$0 \$0	\$1,080	\$0 \$0	\$0	\$0	\$0	\$0	\$0	\$0 \$0	\$0 \$0	\$0 \$0	\$1,080	\$0	\$0	\$0 \$0	\$0	\$2,160	\$2,160
D2014	Replace faucets at sinks		6	2.00	EACH	\$180.00	Capital Renewal	3	\$0	\$0	\$0	\$0	\$0 \$0	\$0	\$360	\$0 \$0	\$0	\$0	\$0	\$0	\$0		\$0	\$0	\$360 \$0	\$0	\$0	\$0	\$0	\$720	\$720
D2018	Replace drinking fountain  Replace water heater	20	17	75.00	GAL GAL	\$3,181.00 \$44.00	Capital Renewal  Energy & Sustainability	3	\$0 \$0	\$0 \$3,300	\$0 \$0	\$0	\$0	\$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0	\$3,300	\$3,181 \$0	\$0 \$0	\$0	\$0 \$0	\$3,181 \$6,600	\$3,181 \$6,600
D2022	Replace water fleater	30	2	2.00	LS	\$10,500.00	Energy & Sustainability	3	\$0	\$3,300	\$21,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,300	\$0	\$0	\$0	\$0	\$21,000	\$21,000
D3021	Clean ductwork	5	2	8,347.00	SF	\$0.25	Routine Maintenance	3	\$0	\$0	\$2,087	\$0	\$0	\$0	\$0	\$2,087	\$0	\$0	\$0	\$0	\$2,087	\$0	\$0 \$0	SO SO	\$0	\$2,087	\$0	\$0	\$0	\$8,348	\$8,348
D4011	Replace sprinkler heads	20	12	8,347.00	SF	\$1.05	Routine Maintenance	1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$8,764	\$0	\$0	SO SO	\$0	\$2,007	\$0	\$0	\$0	\$8,764	\$8,764
D5012	Preventative Maintenance of electrical	3	0	1.00	LS	\$500.00	Deferred Maintenance	3	\$500	\$0	\$0	\$0	\$0	\$0	\$0	\$0 \$0	\$0	\$0	\$0	\$0	\$0,704	\$0	\$0	SO SO	\$0	\$0	\$0	\$0	\$500	\$0,704	\$500
D5012	Preventative Maintenance of electrical	3	3	1.00	LS	\$500.00	Routine Maintenance	3	\$0	\$0	\$0	\$500	\$0	\$0	\$500	\$0	\$0	\$500	\$0	\$0	\$500	\$0	\$0	\$500	\$0	\$0	\$500	\$0	\$0	\$3,000	\$3,000
D5033	equipment  Replace telephone system	15	7	8,347.00	SF	\$1.00	Capital Renewal	3	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$8,347	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$8,347	\$8,347
D5037	Replace fire alarm system	15	9	8,347.00	SF	\$5.00	Capital Renewal	1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$41,735	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$41,735	\$41,735
D5038	Replace security system	10	7	8,347.00	SF	\$0.62	Capital Renewal	3	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,175	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,175	\$0	\$0	\$0	\$10,350	\$10,350
E. EQUIPME	NT & FURNISHING						D. SERVICES	SUB-TOTALS	\$500	\$3,300	\$23,087	\$500	\$0	\$0	\$2,654	\$15,609	\$0	\$42,235	\$0	\$0	\$11,351	\$0	\$0	\$500	\$4,740	\$10,443	\$500	\$0	\$500	\$114,920	\$115,420
E2012	Replace break room floor cabinets (inc countertops)	21	7	6.00	LF	\$600.00	Capital Renewal	3	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,600	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,600	\$3,600
F. SPECIAL	CONSTRUCTION AND DEMOLITION					E. EQUIP	MENT & FURNISHING	SUB-TOTALS	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,600	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,600 \$0	\$3,600
G. BUILDING	SITEWORK				F. SPECIA	L CONSTRUCTI	ON AND DEMOLITION	SUB-TOTALS	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0 \$0	\$0
Z. GENERAL						G.	BUILDING SITEWORK	SUB-TOTALS	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
							Z. GENERAL Expenditure Totals per '	SUB-TOTALS	\$0 \$1,288	\$0 \$3,300	\$0 \$43.026	\$0 \$44,088	\$0 \$86,538	\$0 \$1,200	\$0 \$2.654	\$0 \$19,209	\$0 \$0	\$0 \$42,235	\$0 \$0	\$0 \$43.088	\$0 \$29,032	\$0 \$0	\$0 \$0	\$0 \$500	\$0 \$4,740	\$0 \$18,138	\$0 \$1,288	\$0 \$43.088	\$0 \$1,288	\$0 \$0 \$382.123	\$0 \$383,410
							Total Cost (Inflated @ 45		\$1,288	\$3,432	\$46,536	\$44,088	\$101,237	\$1,200	\$2,654	\$19,209	\$0	\$42,235	\$0	\$43,088	\$29,032 \$46,482	\$0	\$0	\$900	\$8,878	\$18,138	\$1,288	\$90,779	\$1,288	\$382,123 \$542,319	\$383,410 \$543,606

Hamilton Café 500 Palm Drive Novato, CA

Element N	lo. Component Description	Estimated Useful Life or Replacement Cycle	Remaining Useful Life (Yrs)	Quantity	Unit of Measurement	Unit Cost	Plan Type	Priority	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Total	Total	Combined Total
		(Yrs)				\$			1 Deferred	2 Scheduled	3 Scheduled						9 Scheduled						15 Scheduled	16 Scheduled	17 Scheduled	18 Scheduled		20 Scheduled		Scheduled	
A. SUBSTI	RUCTURE																														
B. SHELL						1	A. SUBSTRUCTURE	SUB-TOTALS							\$0		\$0							\$0				\$0		\$0	\$0
B2011	Undertake repairs to stucco surfaces	N/A	3	1.00	LS	\$500.00	Capital Renewal	3	\$0	\$0	\$0	\$500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500	\$500
B2011	Repaint exterior wall surfaces	8	3	2,322.00	SF	\$1.88	Capital Renewal	4	\$0	\$0	\$0	\$4,365	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,365	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,365	\$0	\$13,096	\$13,096
B2021	Replace steel framed windows	30	2	214.00	SF	\$45.00	Capital Renewal	3	\$0	\$0	\$9,630	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$9,630	\$9,630
B2021	Replace sealant at the window frames	15	17	236.00	LF	\$11.25	Capital Renewal	3	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,655	\$0	\$0	\$0	\$2,655	\$2,655
B3011	Replace clay tile roofing	50	4	1,980.00	SF	\$18.75	Capital Renewal	3	\$0	\$0	\$0	\$0	\$37,125	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$37,125	\$37,125
C. INTERI	ORS		<u>'</u>			<u>'</u>	B. SHELL	SUB-TOTALS	\$0	\$0	\$9,630	\$4,865	\$37,125	\$0	\$0	\$0	\$0	\$0	\$0	\$4,365	\$0	\$0	\$0	\$0	\$0	\$2,655	\$0	\$4,365	\$0	\$63,006	\$63,006
C3012	Repaint interior wall and ceiling surfaces	8	7	2,994.00	SF	\$1.88	Capital Renewal	4	\$0	\$0	\$0	\$5,629	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,629	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,629	\$0	\$16,886	\$16,886
C3012	Regrout ceramic wall tiles	15	15	96.00	SF	\$11.69	Capital Renewal	4	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,122	\$0	\$0	\$0	\$0	\$0	\$1,122	\$1,122
C3023	Replace epoxy floor coating	15	5	360.00	SF	\$5.00	Capital Renewal	4	\$0	\$0	\$0	\$0	\$0	\$1,800	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,800	\$1,800
D. SERVIC	DES .						C. INTERIORS	SUB-TOTALS	\$0	\$0	\$0	\$5,629	\$0	\$1,800	\$0	\$0	\$0	\$0	\$0	\$5,629	\$0	\$0	\$0	\$1,122	\$0	\$0	\$0	\$5,629	\$0	\$19,808	\$19,808
D2013	Replace faucets at lavatories	10	6	4.00	EACH	\$180.00	Capital Renewal	3	\$0	\$0	\$0	\$0	\$0	\$0	\$720	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$720	\$720
D2014	Replace faucets at sinks	10	6	3.00	EACH	\$180.00	Capital Renewal	3	\$0	\$0	\$0	\$0	\$0	\$0	\$540	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$540	\$540
D2022	Replace water heater	15	15	100.00	EACH	\$59.00	Energy & Sustainability	3	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,900	\$0	\$0	\$0	\$0	\$0	\$5,900	\$5,900
D3041	Clean ductwork	5	2	1,830.00	SF	\$0.25	Routine Maintenance	3	\$0	\$0	\$458	\$0	\$0	\$0	\$0	\$458	\$0	\$0	\$0	\$0	\$458	\$0	\$0	\$0	\$0	\$458	\$0	\$0	\$0	\$1,832	\$1,832
D3051	Replace evaporative cooler	20	18	1.00	EACH	\$2,000.00	Energy & Sustainability	3	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,000	\$0	\$0	\$2,000	\$2,000
D4011	Replace sprinkler heads	20	12	1,830.00	SF	\$1.05	Capital Renewal	1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,922	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,922	\$1,922
D5012	Preventative maintenance of electrical equipment	3	0	1.00	LS	\$500.00	Deferred Maintenance	3	\$500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500	\$0	\$500
D5012	Preventative maintenance of electrical equipment	3	3	1.00	LS	\$500.00	Routine Maintenance	3	\$0	\$0	\$0	\$500	\$0	\$0	\$500	\$0	\$0	\$500	\$0	\$0	\$500	\$0	\$0	\$500	\$0	\$0	\$500	\$0	\$0	\$3,000	\$3,000
D5033	Replace telephone system	15	7	1,830.00	SF	\$1.00	Capital Renewal	3	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,830	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,830	\$1,830
D5037	Replace fire alarm system	15	7	1,830.00	SF	\$5.00	Capital Renewal	1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$9,150	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$9,150	\$9,150
D5038	Replace seceurity system	10	7	1,830.00	SF	\$0.62	Capital Renewal	3	\$0 \$500	\$0	\$0 \$458	\$0 \$500	\$0	\$0 \$0	\$0 \$1,760	\$1,135 \$12,573	\$0	\$0 \$500	\$0 \$0	\$0	\$0 \$2,880	\$0	\$0 \$0	\$0 \$6,400	\$0	\$1,135 \$1,593	\$0 \$2,500	\$0	\$0 \$500	\$2,269 \$29,162	\$2,269 \$29,662
F FOLIPA	MENT & FURNISHING						D. SERVICES	S SUB-TUTALS	\$300	\$0	\$430	\$300	<b>3</b> 0	<b>40</b>	\$1,700	\$12,513	30	\$300	φ0	Ģ0	\$2,000	<b>30</b>	40	\$0,400	40	\$1,050	<i>\$2,500</i>	<b>\$</b> 0	\$500	\$0	\$23,002
F. SPECIA	L CONSTRUCTION AND DEMOLITION					E. EQUIP	MENT & FURNISHING	SUB-TOTALS	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0 \$0	\$0
G. BUILDI	NG SITEWORK				F. SPECIA	L CONSTRUCTI	ON AND DEMOLITION	SUB-TOTALS	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0 \$0	\$0
Z. GENER.	AL					G.	BUILDING SITEWORK	SUB-TOTALS	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
						l	Z. GENERAL	SUB-TOTALS	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0 \$0	\$0
							Expenditure Totals per Total Cost (Inflated @ 4		\$500 \$500	\$0 \$0	\$10,088 \$10,911	\$10,994 \$12,367	\$37,125 \$43,431	\$1,800 \$2,190	\$1,760 \$2,227	\$12,573 \$16,545	\$0 \$0	\$500 \$712	\$0 \$0	\$9,994 \$15,385	\$2,880 \$4,610	\$0 \$0	\$0 \$0	\$7,522 \$13,547	\$0 \$0	\$4,248 \$8,274	\$2,500 \$5,065	\$9,994 \$21,056		\$111,977 \$156,319	\$112,477 \$156,819

Site Systems 500 Palm Drive Novato, CA

Element	No. C	Component Description	Estimated Useful Life or Replacement Cycle (Yrs)	Remaining Useful Life (Yrs)	Quantity	Unit of Measurement	Unit Cost	Plan Type	Priority	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Total	Total	Combined Total
							\$			1		3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20			
										Deferred	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Deferred	Scheduled	
A. SUBS	TRUCTURE						1																								$\overline{}$	
							<u> </u>	A. SUBSTRUCT	UDE CUD TOTAL C	60	**	**	60	60	**	**	**	en.	**	ėn.	**	eo.	60	**	60	**	**	60	ėo.	60		**
R SHEL								A. SUBSTRUCT	URE SUB-TUTALS	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
								B. SH	IELL SUB-TOTALS	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
C. INTER	RIORS																															
																															/	
								C. INTERI	ORS SUB-TOTALS	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
D. SERV	ICES																															
																															1	
								D. SERVI	CES SUB-TOTALS	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
E. EQUIF	PMENT & FURNIS	IISHING	1		<del></del>	<del>                                     </del>	1																								4	
							E FOLUE	DMENT & FLIDNISH	IING SUB TOTALS	\$n	\$n	\$n	\$n	\$0	\$n	\$n	\$n	\$n	\$n	\$n	\$n	\$n	\$0	¢n	\$n	\$n	\$n	\$n	\$n	\$n	\$0	\$n
F. SPECI	AL CONSTRUCT	TION AND DEMOLITION					E. EGOII	MENT & FORMO	III O DOD TOTALD	Ų.		<del>-</del>	•	•	-	-	-	•	ţ.	<b>4</b> 0			•	•		•		-	Ų.		<u> </u>	, v
																															\$0	
G . D	OING SITEWORK	12				F. SPECIA	L CONSTRUCT	ION AND DEMOLIT	ION SUB-TOTALS	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
G. BUILL																																
G2021		seal coating including re-striping at glot and roadway	5	2	813.00	SY	\$1.50	Capital Renewa	3	\$0	\$0	\$1,220	\$0	\$0	\$0	\$0	\$1,220	\$0	\$0	\$0	\$0	\$1,220	\$0	\$0	\$0	\$0	\$1,220	\$0	\$0	\$0	\$4,878	\$4,878
G2031	Replace seal	ealant to paving construction joints	15	2	1,460.00	LF	\$11.25	Capital Renewa	i 3	\$0	\$0	\$16,425	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$16,425	\$0	\$0	\$0	\$32,850	\$32,850
G2049	Repaint trash	ash enclosure	5	2	1.00	LS	\$800.00	Capital Renewa	ıl 4	\$0	\$0	\$800	\$0	\$0	\$0	\$0	\$800	\$0	\$0	\$0	\$0	\$800	\$0	\$0	\$0	\$0	\$800	\$0	\$0	\$0	\$3,200	\$3,200
					l			BUILDING SITEW	ODK SUB TOTALS	\$n	en en	\$18,445	en.	•0	en.	en en	\$2.020	\$n	\$0	\$n	en en	\$2.020	\$0	en en	en en	*0	\$18,445	\$0	¢n.	en.	\$40,928	
Z. GENE	RAL						G.	BUILDING SHEW	UKK SUB-TUTALS	\$0	\$0	\$10,440	\$0	\$0	\$0	\$0	φ2,020	\$0	\$0	\$0	\$0	<b>42,020</b>	30	30	\$0	\$0	\$10,440	<b>40</b>	<b>\$</b> 0	<del>90</del>	940,820	940,820
		-																													\$0	
		<u> </u>							RAL SUB-TOTALS	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
								Expenditure Totals	per Year	\$0	\$0	\$18,445	\$0	\$0	\$0	\$0	\$2,020	\$0	\$0	\$0	\$0	\$2,020	\$0	\$0	\$0	\$0	\$18,445	\$0	\$0	\$0	\$40,928	\$40,928
								Total Cost (Inflated	@ 4% per Yr.)	\$0	\$0	\$19,950	\$0	\$0	\$0	\$0	\$2,658	\$0	\$0	\$0	\$0	\$3,233	\$0	\$0	\$0	\$0	\$35,928	\$0	\$0	\$0	\$61,768	\$61,768

# Appendix B Photographs





### 500 Building

# Photograph No. 1

View of the underneath of the first floor concrete floor construction.



# Photograph No. 2

View of the basement wall construction. Also shows a metal cased window with exterior security rail surround.



# Photograph No. 3

View of an access ramp on the east side of the building.  $\,$ 



View of the cracking in concrete around base of guardrail.



# Photograph No. 5

View of exterior steps leading to fire exit.



# Photograph No. 6

Further view of the steps showing deterioration. Predominantly on the left side of the staircase.



View of wood truss roof construction.



# Photograph No. 8

View of the cast-in-place concrete walls.

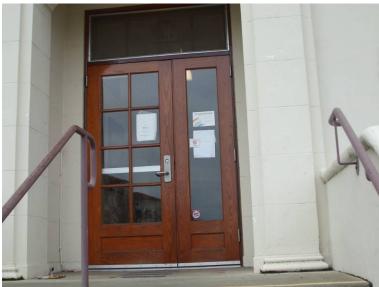


# Photograph No. 9

View of a metal cased window.



View of a wood double arched door with glass-views on the west side of the property. Also shows decorative door surround.



# Photograph No. 11

View of a wood door with glass-views and side window unit at the east side of the property.



# Photograph No. 12

View of an exterior hollow metal door.



View of clay tile roof covering.



# Photograph No. 14

View of the extended roof soffit forming an exterior walkway. Also shows surface mounted uncovered light fixture.



# Photograph No. 15

View of interior masonry walls forming the corridor in the basement.



View of single interior wood door in the basement.



# Photograph No. 17

View of the two single wood doors with glass-views located on the first floor.



# Photograph No. 18

View of interior staircase leading from the first floor to the basement.



View of painted wall finish in the lobby. Also shows wall mounted light fixtures.



# Photograph No. 20

View of acoustical wall tiles in the basement.



# Photograph No. 21

View of absent acoustical wall tiles.



View of ceramic floor tiles in the lobby



# Photograph No. 23

View of the VCT floor on the upper level.



# Photograph No. 24

View of the vinyl roll floor in the restrooms. Also shows vitreous china countertop lavatories.



View of the detached vinyl roll floor in the men's restroom.



# Photograph No. 26

View of the sheet carpet floor in the presentation room.



# Photograph No. 27

View of a painted gypsum wall board ceiling. Also shows surface mounted track lighting.



View of suspended acoustic ceiling system. Also shows 2' x 4' recessed light fixtures and ceiling fans.



# Photograph No. 29

View of the elevator.



# Photograph No. 30

View of an ADA compliant vitreous china water closet within the men's restroom.



View of the vitreous china urinal within the men's restroom.



# Photograph No. 32

View of single stainless steel countertop sink in the kitchen. Also shows kitchen cabinets.



# Photograph No. 33

View of two wall mounted drinking fountains.



View of the distribution pump for the hot water system.



# Photograph No. 35

View of the electric water heater.



# Photograph No. 36

View of the natural gas boiler.



View of the control panel for the boiler.



# Photograph No. 38

View of the water storage tank.



# Photograph No. 39

View of a cast iron radiator.



Photograph No. 40

View of a sidewall exhaust fan.



Photograph No. 41

View of the main breaker.



# Photograph No. 42

View of a panelboard.



View of a recessed CFL circular light fixture.



Photograph No. 44

View of a 4' strip fluorescent light fixture.



# Photograph No. 45

View of a covered pendant light fixture above entrance door.



View of the telephone board.



# Photograph No. 47

View of the paving stones on the exterior walkway.



# Photograph No. 48

View of a crack in the paving stones.



View of the cast in place concrete steps at the east side of the property.



## Photograph No. 50

View of deterioration on the concrete steps.



# Photograph No. 51

View of the mailboxes located at the east side of the property.



View of fixed metal bikeracks at the west side of the property.

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# Photograph No. 53

View of landscaping for the 500 building.



# Photograph No. 54

View of a tree, planted too close to the foundation of the building.



# 789 Building

# Photograph No. 55

View of the concrete floor slab in the mechanical room of the 789 building.



#### Photograph No. 56

View of the wooden access ramp located at the main entrance of the 789 building.



## Photograph No. 57

View of the pitched roof construction of the 789 building.



View of the pitched roof construction of the 501 building.



# Photograph No. 59

View of the exterior walls finished with painted stucco.



# Photograph No. 60

View of a subfloor vent.



View of another subfloor vent showing deterioration on surrounding stucco.



# Photograph No. 62

View of 789 & 501 building windows.



# Photograph No. 63

Closer view of the newer aluminum windows on the 789 building.



View of cracking around window on the 789 building.



# Photograph No. 65

View of the windows on the 501 building.



## Photograph No. 66

View of the deteriorated glazing putty on windows of the 501 building.



View of double glazed entrance door of building 789.



# Photograph No. 68

View of the double hollow metal entrance door of building 501.



## Photograph No. 69

View of deterioration on the entrance door which needs repainting.



View of the base of the handrail at the entrance of the 501 building. This is deteriorated and needs caulking.



# Photograph No. 71

View of alternative entrance door to 501 building.



## Photograph No. 72

View of both types of roof covering on the building.



View of a damaged soffit vent on the 789 building.



# Photograph No. 74

View of interior wall partitions in the 789 building that form the corridor. Also shows single wood door.



## Photograph No. 75

View of interior wall partitions in the 501 building that form the corridor.



View of fixed toilet partiions in the women's restroom, 789 building.



# Photograph No. 77

View of a double wood door with glass-view in the 789 building.



#### Photograph No. 78

View of interior steps in the mechanical room. They are worn and need repainting.



View of the painted wall finish in the 789 building. Also shows laminate wood floor.



# Photograph No. 80

View of deterioration to interior wall finish located in the corridor of the 789 building.

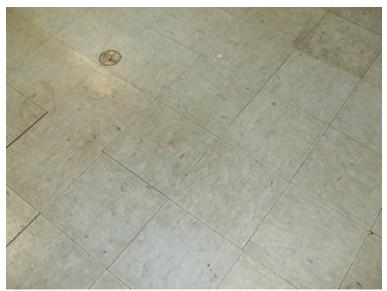


## Photograph No. 81

View of staining on wall finish in the 789 building.



View of painted wall finish within 501 building. Also shows internal ramp with handrail and sheet carpet floor finish.



# Photograph No. 83

View of worn VCT floor in kitchen in the 789 building.



#### Photograph No. 84

View of stained carpet in the 789 building.



View of ceramic floor tiles in the women's restroom in building 789. Also shows wall mounted vitreous china lavatories.



## Photograph No. 86

View of vinyl roll floor in restrooms in the 501 building.



#### Photograph No. 87

View of painted gypsum board ceiling in kitchen. Also shows damaged soffit.



View of acoustical ceiling tiles in the 789 building.



# Photograph No. 89

View of stained acoustical ceiling tile.



## Photograph No. 90

View of ADA compliant vitreous china water closet located in the women's restroom of the 789 building.



View of ADA compliant vitreous china water closet located in the men's restroom of the 501 building.



## Photograph No. 92

View of vitreous china urinals in the men's restroom of the 789 building.



#### Photograph No. 93

View of vitreous china lavatories in the men's restroom, 789 building.



View of countertop sink located within the 501 building.



## Photograph No. 95

View of a wall mounted drinking fountain located in the corridor of the 789 building.



#### Photograph No. 96

View of a natural gas boiler located in the mechanical room.



View of a natural gas furnace.



# Photograph No. 98

View of the fire sprinkler system supply located at the east side of the property.



## Photograph No. 99

View of one of the fire extinguishers that are located throughout the building.



View of a panelboard.



# Photograph No. 101

View of a 2' x '4 recessed light fixture in the main space of the 789 building.



## Photograph No. 102

View of a surface mounted circular light fixture in the restroom's of the 501 building.



View of a 4' strip light fixture within the men's restroom, 789 building.



## Photograph No. 104

View of wall mounted light fixtures within the women's restroom, 789 building.



#### Photograph No. 105

View of the fire alarm control panel located within the mechanical room.



View of an Emergency Exit light, in the main space of the 789 building. Also shows missing ceiling tiles to the right of the sign.



#### Photograph No. 107

View of fixed kitchen cabinets which have reached the end of their estimated useful life.



#### Photograph No. 108

View of the paving leading to the 501 building.



View of landscaping at the west side of the property.



# Photograph No. 110

View of wall mounted light exterior light fixture, outside main entrance to 501.



## Photograph No. 111

View of a set of exterior wooden steps on the 789 building.



View of another set of exterior steps.



# Photograph No. 113

View of deteriorated post on exterior steps.



# Photograph No. 114

Closer view of ramp handrails which needs repainting.



#### **BUILDING 781??**

#### Photograph No. 115

View of exterior stairs.



## Photograph No. 116

Closer view of handrail on exterior steps which need repainting.



## Photograph No. 117

View of the exterior walls finished with painted stucco. Also shows metal cased windows.



View of deterioration on the inside of the window frame.



# Photograph No. 119

View of glazed entrance door.



# Photograph No. 120

View of single hollow metal door.



Photograph No. 121

View of paint peeling off door hinge.



# Photograph No. 122

View of asphalt shingle roof covering.



## Photograph No. 123

View of the interior wall partitions that form the corridor.



Photograph No. 124

View of fixed toilet partition.



Photograph No. 125

View of double interior wood door.



## Photograph No. 126

View of single interior hollow wood door.



View of ceramic wall tiles in the kitchen.



# Photograph No. 128

View of painted gypsum board wall finish. Also shows Emergency Exit door and sign.



# Photograph No. 129

View of wood panel floor.



View of vinyl roll floor present within the restrooms.



## Photograph No. 131

View of the painted non-slip kitchen floor. Also shows fixed kitchen cabinets and countertop stainless steel sinks.



### Photograph No. 132

View of painted gypsum board ceiling. Also shows track lighting.



View of an ADA compliant vitreous china water closet within the mens's restrooms.



# Photograph No. 134

View of a vitreous china urinal within the men's restroom.



## Photograph No. 135

View of two vitreous china countertop lavatories in the women's restroom.



Photograph No. 136

View of electric water heater.



Photograph No. 137

View of a cased fire extinguisher.



## Photograph No. 138

View of a panelboard.



View of a strip light fixture in the kitchen space.



# Photograph No. 140

View of a surface mounted light fixture within the men's restroom.



#### Photograph No. 141

View of the fire alarm control panel.



View of paving leading to cast-in-place concrete exterior steps.



Photograph No. 143

View of cracks in exterior steps.



## Photograph No. 144

View of a wall mounted exterior light.



Photograph No. 145

View of landscaping around the building.



# **Hamilton Café**

# Photograph No. 146

View of suspended wood floor construction.



# Photograph No. 147

View of timber decking at the east side of the property.

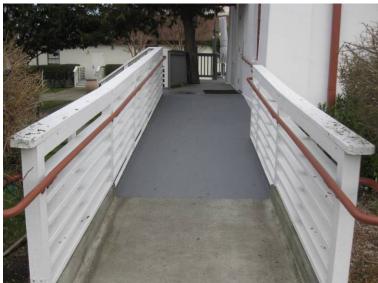


# Photograph No. 148

View of timber decking supports.

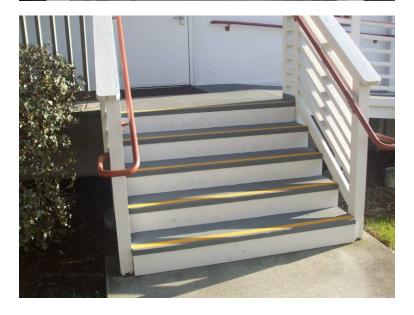


View of tree planted in within timber decking. Tree has expanded larger than the hole and is causing damage to surrounding decking.



## Photograph No. 150

View of the access ramp.



## Photograph No. 151

View of exterior stairs leading to decking area and north entrance.



View of exterior stairs leading to the entrance at the south side of the property.



# Photograph No. 153

View of deterioration on side of staircase at the south side of the property.



#### Photograph No. 154

View of canopy over the south entrance door.



View of the exterior walls finished with painted stucco. Also shows double glazed entrance door.



# Photograph No. 156

View of the metal painted windows in wood subframes.



### Photograph No. 157

Signs of deterioration to the wood subframe.



View of hollow metal entrance door at the south of the property.



# Photograph No. 159

View of a hollow metal entrance door at the north side of the property.



### Photograph No. 160

View of Spanish tile roof finish.



View of the soffit, fasica board and downspouts which have recently been painted.



# Photograph No. 162

Evidence of a leak in the gutter pipe.



### Photograph No. 163

View of the painted wall finish.



Photograph No. 164

View of the vinyl roll floor in the restrooms.



Photograph No. 165

View of the laminate wood floor.



## Photograph No. 166

View of the epoxy floor in the kitchen area. Also shows kitchen units.



View of the painted ceiling finish. Also shows decorative pendant light fixtures.



# Photograph No. 168

View of the ADA compliant vitreous china water closet in the men's restroom.



#### Photograph No. 169

View of the vitreous china lavatory in the women's restroom.



View of stainless steel mobile sinks in the kitchen. Also shows ceramic wall tile finish.



# Photograph No. 171

View of fixed stainless steel sink area in the kitchen.



### Photograph No. 172

View of the natural gas water heater.



View of two condensers for inside walk-in freezer units.



# Photograph No. 174

View of an evaporative cooler unit.



# Photograph No. 175

View of a fume hood exhaust system.



View of package air conditioning unit.



# Photograph No. 177

View of the fire riser for the sprinkler system.



### Photograph No. 178

View of a fire extinguisher located in the office.



View of a panelboard located in the office.



# Photograph No. 180

View of a surface mounted strip light fixture.



## Photograph No. 181

View of a surface mounted light fixture.



View of the fire alarm control panel.



# Photograph No. 183

View of a CCTV camera. Also shows a surface mounted twin spotlamp.



#### Photograph No. 184

View of a pole mounted decorative light fixture.



# Site Systems

Photograph No. 185

View of the site's parking lot.



# Photograph No. 186

View of two ADA spaces in the parking lot.



# Photograph No. 187

View of site paving.



Photograph No. 188

View of site flagpole.



Photograph No. 189

View of a site bollard light.



Photograph No. 190

View of pole mounted site lights.

# Appendix C Asset Inventory



Location	Facility	Location of Asset	Life Cycle Code	Туре	Equipment Type	Manufacturer	Model No.	Serial No.	Tag	Fuel Type	Capacity / Rating	Speed (FPM)	No. of Landings	Year Manufactur e
Novato Arts Center	Building 500	Mechanical Room in Basement	D2022	Hot Water Service	Water Heater	AO Smith	EES-52_F202172506	Unknown		Electric	50 Gallons			Assumed 2010
Novato Arts Center	Building 500	Mechanical Room in Basement	D3021	Boilers	Boiler	HydroTherm	KN-10	KN-H-NET-MO7- 1418		Gas	850 MBH			2004
Novato Arts Center	Building 781	Utility Closet	D2022	Hot Water Service	Water Heater	State	Unknown	Unknown		Electric	10 Gallons			Assumed 2010
Novato Arts Center	Building 789	Restroom / Wash Room	D2022	Hot Water Service	Water Heater	State	SBT7575NE1	H98719001		Electric	75 Gallons			1996
Novato Arts Center	Building 789	Mechanical Room	D3021	Boilers	Furnace	Rheem	3214-200EB	F66NN3B3023269		Gas	160 MBH			Assumed 1985
Novato Arts Center	Building 789	Mechanical Room	D3021	Boilers	Furnace	Rheem	3214-200EB	F66NN3B3023268		Gas	160 MBH			Assumed 1985
Novato Arts Center	Hamilton Café	Office / Store Room	D2022	Hot Water Service	Water Heater	Bradford White	Unknown	Unknown		Gas	Assumed 100 Gallons			Assumed 2013
Novato Arts Center	Hamilton Café	East Elevation	D3051	Split-Systems	Evaporative Cooler	Champion	7500 SD	MC50956		Electric	4855 CFM			2004
Novato Arts Center	Hamilton Café	East Elevation	D3052	Package Units	Package AC Unit	Carrier	50HJQ008	2304G21665		Electric	7 ½ Tons			2004

# **Appendix D**

Document Review and Warranty Information





#### **DOCUMENT REVIEW & WARRANTY INFORMATION**

In addition to the completion of our visual evaluation, Faithful+Gould interviewed the various representatives from the City of Novato (were possible), and reviewed the following documentation:

None available

# **Appendix E**Glossary of Terms





#### **Acronyms & Glossary of Terms**

CMU Concrete Masonry Unit

BUR Built-Up Roof

EIFS Exterior Insulation and Finish System EPDM Ethylene Propylene Diene Monomer

SC Solid Core Doors HM Hollow Metal Doors

MH Man Holes

ABC Aggregate Base Course EMT Electrical Metallic Conduit

EUL Estimated Useful Life RUL Recommended Useful Life

EOL End of Life

FCI Facility Condition Index
CRV Current Replacement Value
DM Deferred Maintenance

SF Square Foot SY Square Yards

PSF Pounds-Per-Square-Foot PSI Pounds-Per-Square-Inch

NFPA National Fire Protection Association

FACP Fire Alarm Control Panel
NAC Notification Appliance Circuit
FCC Fire Command Center

HVAC Heating Ventilating and Air conditioning

VAV Variable Air Volume
AHU Main Air Handling Units

HP Horse Power

FSS Fuel Supply System MDP Main Distribution Panel

SES Service Entrance Switchboard's

NEMA National Electrical Manufactures Association

HID Intensity Discharge
EMT Electrical Metallic Tubing

KVA kilovolt-ampere RO Reverse Osmosis

BTU/HR British Thermal Units per Hour

kW Kilowatt

FPM Feet per Minute (Elevator Speed)

Amp Amperage



#### Acronyms & Glossary of Terms

BTU – British Thermal Unit; the energy required to raise the temperature of one pound of water by one degree.

**Building Envelope** - The enclosure of the building that protects the building's interior from the outside elements, namely the exterior walls, roof and soffit areas.

**Building Systems** – Interacting or independent components or assemblies, which from single integrated units, that comprise a building and its site work, such as, pavement and flatwork, structural frame, roofing, exterior walls, plumbing, HVAC, electrical, etc.

Caulking – Soft, putty-like material used to fill joints, seams, and cracks.

Codes - See building codes.

Component – A fully functional portion of a building system, piece of equipment, or building element.

**Deferred Maintenance** – Physical deficiencies that cannot be remedied with routine maintenance, normal operating maintenance, etc., excluding de minimis conditions that generally do not present a material physical deficiency to the subject property.

**Expected Useful Life (EUL)** – The average amount of time in years that an item, component or system is estimated to function when installed new and assuming routine maintenance is practiced.

**Facility** – All or any portion of buildings, structures, site improvements, complexes, equipment, roads, walks, passageways, parking lots, or other real or personal property located on site.

**Flashing** – A thin, impervious sheet of material placed in construction to prevent water penetration or to direct the flow of water. Flashing is used especially at roof hips and valleys, roof penetrations, joints between a roof and a vertical wall, and in masonry walls to direct the flow of water and moisture.

Remaining Useful Life (RUL) – A subjective estimate based upon observations, or average estimates of similar items, components, or systems, or a combination thereof, of a number of remaining years that an item, component, or system is established to be able to function in accordance with its intended purpose before warranting replacement. Such period of time is affected by the initial quality of an item, component, or system, the quality of the initial installation, the quality and amount of preventative maintenance exercised, climatic conditions, extent of use, etc.

Thermal Resistance (R) – A unit used to measure a material's resistance to heat transfer. The formula for thermal resistance is: R = Thickness(in inches)/K

**Structural Frame** – The components or building systems that support the building's nonvariable forces or weights (dead loads) and variable forces or weights (live loads).

**Warranty** – Legally enforceable assurance of quality or performance of a product or work, or of the duration of satisfactory performance. Warranty guarantee and guaranty are substantially identical in meaning; nevertheless, confusion frequently arises from supposed distinctions attributed to guarantee (or guaranty) being exclusively indicative of duration of satisfactory performance or of a legally enforceable assurance furnished by a manufacturer or other third party. The uniform commercial code provisions on sales (effective in all states except Louisiana) use warranty but recognize the continuation of the use of guarantee and guaranty.