

Campus Report



Campus: Fred Kelly Stadium

Report: Mar 11, 2013

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Campus Executive Summary

Fred Kelly Stadium

Number of Buildings:	2
Replacement Value:	\$17,841,153
Repair Cost:	\$5,268,362
Total FCI:	29.53%
Total RSLI:	39%



Description:

Fred Kelly Stadium was constructed in 1965. The site is approximately 7 acres, and is adjacent to the El Modena High School Campus. The campus has an admissions/equipment building and a concessions/restroom building. Facilities include a competition grade track, football field, and home and away concrete spectator stands with an open press box above the home stands. There was a stadium refurbishment project in 2004-2006. ADA compliant ticket shacks at the Chapman Avenue entrances.

Building foundations are slab-on-grade construction. Exterior walls are painted CMU block. Exterior doors are wood with an overhead coiling door at equipment issue and iron gates at the admissions area. Roofs are low-slope built-up type.

Interior systems; doors, ceiling finishes, and floor finishes, are typically original construction.. Wall finishes are generally well maintained. The majority of the interior systems are well beyond expected service life.

Building Services including mechanical, electrical and plumbing systems are original to the building construction date and beyond expected life. All buildings have limited Fire Protection System that includes; fire sprinkler systems and fire extinguishers.

Communication and Security consisting of fire alarm system, internal security system locally monitored, all recently updated but in need for improvements.

Site Utilities including; electrical distribution, water distribution, sanitary and storm sewer is provided from the campus systems and are original to the building construction date. All utilities are served from public/municipal systems. The site lighting for stadium and pedestrian security was previously improved but generally systems are beyond expected life.

The detailed condition and deficiency statements are contained in this report for each building and site improvements on the campus.

Admissions/Ticketing

Executive Summary

Gross Area (SF):	960
Year Built:	1965
Last Reno:	
Replacement Value:	\$292,431
Repair Cost:	\$123,045
Total FCI:	42.08%
Total RSLI:	35%



Facility Description:

Current Investment Requirement and Condition by Uniformat Classification

Uniformat Classification	RSLI%	FCI%	Current Repair Amount
A10 Foundations	NR	0.00	\$0
B10 Superstructure	NR	0.00	\$0
B20 Exterior Enclosure	69.74	19.74	\$14,165
B30 Roofing	53.65	23.21	\$5,544
C10 Interior Construction	27.06	22.01	\$3,656
C30 Interior Finishes	47.02	0.00	\$0
D30 HVAC	0.00	110.00	\$46,881
D40 Fire Protection	73.33	0.00	\$0
D50 Electrical	27.91	94.76	\$46,791
E10 Equipment	60.00	0.00	\$0
E20 Furnishings	0.00	110.00	\$6,007
Total:	35.40	42.08	\$123,045

System Listing for Admissions/Ticketing

Uniformat	System Description	Unit Price	Qty	UoM	Life	Install Year	Calc Next Renewal	Next Renewal ¹	RSL ²	RSLI %	REMR	FCI%	Current Repair Amt	Current Replacement Amt
A1010	Standard Foundations	\$17.16	960	S.F.	100	1965	NR			NR		0.00	\$0	\$16,478
A1030	Slab on Grade	\$14.85	960	S.F.	100	1965	NR			NR		0.00	\$0	\$14,253
B1020	Roof Construction	\$27.79	960	S.F.	100	1965	NR			NR		0.00	\$0	\$26,680
B2010	Exterior Walls	\$30.59	960	S.F.	75	1965	NR			NR		0.00	\$0	\$29,362
B2020	Exterior Windows	\$2.16	960	S.F.	30	1965	1995		0	0.00		1	\$2,281	\$2,074
B2030	Exterior Doors	\$5,760	7	Ea.	30	2004	2034		22	73.33		0.29	\$11,884	\$40,320
B3010105	Built-Up	\$19.63	960	SF	25	2004	2029		17	68.00		0.00	\$0	\$18,842
B3020	Roof Openings	\$5,040	1	Ea.	30	1965	1995		0	0.00		1	\$5,544	\$5,040
C1010	Partitions	\$12.54	960	S.F.	75	1965	2040		28	37.33		0.00	\$0	\$12,041
C1020	Interior Doors	\$2,285	2	S.F.	40	1965	2005		0	0.00		0.80	\$3,656	\$4,571
C3010	Wall Finishes	\$10.84	960	S.F.	10	2005	2015		3	30.00		0.00	\$0	\$10,409
C3020410	Sealed Concrete	\$2.33	960	SF	75	1965	2040		28	37.33		0.00	\$0	\$2,239
C3030	Ceiling Finishes	\$11.52	960	S.F.	20	2005	2025		13	65.00		0.00	\$0	\$11,059
D3040	Distribution Systems	\$21.05	960	S.F.	30	1965	1995		0	0.00		1	\$22,232	\$20,211
D3050	Terminal & Package Units	\$23.34	960	S.F.	15			2012	0	0.00		1	\$24,650	\$22,409
D4030	Fire Protection Specialties	\$0.23	960	S.F.	15	2008	2023		11	73.33		0.00	\$0	\$221
D5010	Electrical Service/Distribution	\$7.89	960	S.F.	30	1965	1995		0	0.00		1	\$8,333	\$7,576
D5020	Branch Wiring	\$21.64	960	S.F.	30	1965	1995		0	0.00		1	\$22,855	\$20,777
D5020	Lighting	\$17.94	960	S.F.	30	2006	2036		24	80.00		0.69	\$11,801	\$17,225
D5030910	Fire Alarm System	\$2.59	960	SF	10			2012	0	0.00		1.00	\$2,488	\$2,488
D5030910	Security System, Camers, Access Control	\$1.37	960	SF	15	2001	2016	2012	4	0.00		1.00	\$1,313	\$1,313
E1020	Institutional Equipment	\$1.44	960	S.F.	20	2004	2024		12	60.00		0.00	\$0	\$1,382
E2010	Fixed Furnishings	\$5.69	960	S.F.	20	1965	1985		0	0.00		1	\$6,007	\$5,460

¹ For blank cells default to dates shown in Calculated Next Renewal Column

² Cells are left blank for Non Renewable Systems, no RSL will be calculated. Systems are expected to expire at the end of their life cycle.

Campus Report - Fred Kelly Stadium

Renewal Schedule

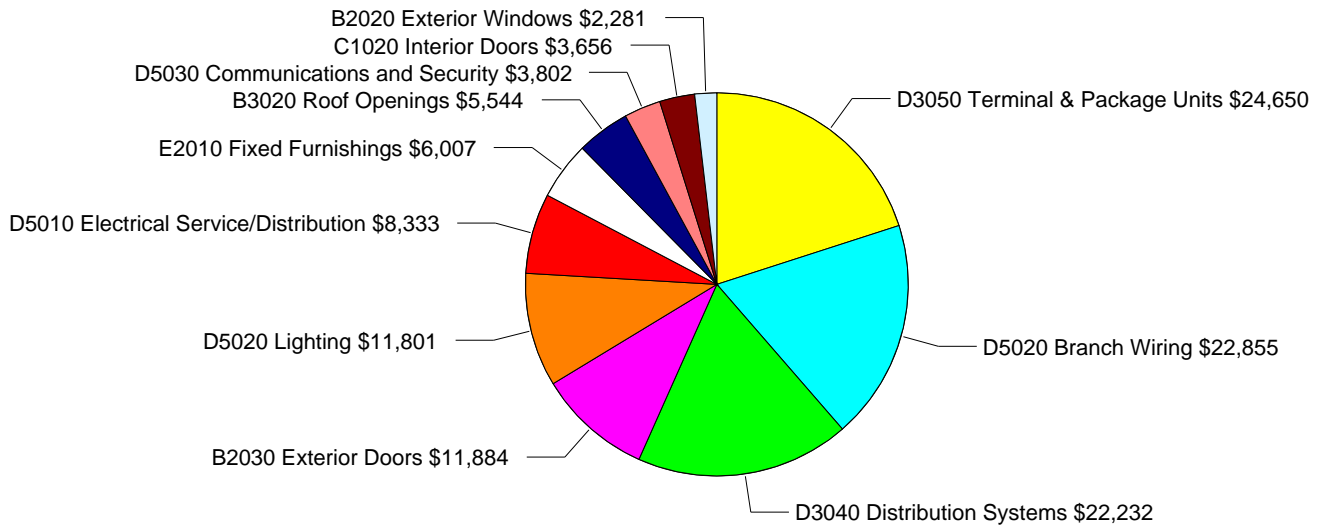
Uniformat	System Description	2012-13	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Total
Total		\$123,044		\$12,512							\$3,344	\$337	\$139,237
A1010	Standard Foundations												
A1030	Slab on Grade												
A2010	Basement Excavation												
A2020	Basement Walls												
B1010	Floor Construction												
B1020	Roof Construction												
B2010	Exterior Walls												
B2020	Exterior Windows	\$2,281											\$2,281
B2030	Exterior Doors	\$11,884											\$11,884
B3010105	Built-Up												
B3010120	Single Ply Membrane												
B3010130	Preformed Metal Roofing												
B3010140	Shingle & Tile												
B3020	Roof Openings	\$5,544											\$5,544
C1010	Partitions												
C1020	Interior Doors	\$3,656											\$3,656
C1030	Fittings												
C2010	Stair Construction												
C3010	Wall Finishes			\$12,512									\$12,512
C3020210	Carpet												
C3020210	Ceramic Tile												
C3020210	Epoxy												
C3020210	Terrazzo												
C3020210	Tile & Coverings												
C3020410	Rubber/Resilient												
C3020410	Sealed Concrete												
C3020410	VCT												
C3020410	Wood												
C3030	Ceiling Finishes												

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Uniformat	System Description	2012-13	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Total
D3040	Distribution Systems	\$22,232											\$22,232
D3050	Terminal & Package Units	\$24,650											\$24,650
D4030	Fire Protection Specialties											\$337	\$337
D5010	Electrical Service/Distribution	\$8,333											\$8,333
D5020	Branch Wiring	\$22,855											\$22,855
D5020	Lighting	\$11,801											\$11,801
D5030910	Fire Alarm System	\$2,488									\$3,344		\$5,832
D5030910	Security System, Camers, Access Control	\$1,313											\$1,313
E1020	Institutional Equipment												
E1090	Other Equipment												
E2010	Fixed Furnishings	\$6,007											\$6,007

Deficiency Summary by System

Current deficiencies included assemblies that have reached or exceeded their design life or components of the assemblies that are in need of repair. Assemblies that have reached their design life are identified as current deficiencies and assigned the distress 'Beyond Useful Life'. The following chart lists all current deficiencies associated with this facility.



Budget Estimate Total: \$123,045

Condition Detail

System: B2020 - Exterior Windows



Location: Ticket windows on exterior corridor.

Material: System

Distress: Beyond Expected Life

Category: Capital Renewal

Priority: 3 - Necessary/Not Yet Critical (Years 2-5)

Correction: Renew System

Qty: 1-Ea.

Estimate: \$2,280.96

Assessor Name: Eduardo Lopez

Date Created: 01/29/2013

Notes: Transaction windows are beyond their expected life. System renewal is recommended.

System: B2030 - Exterior Doors

Photo is not available.

Location: Exterior doors

Material: Doors Ext. OUSD

Distress: Beyond Expected Life

Category: Capital Renewal

Priority: 3 - Necessary/Not Yet Critical (Years 2-5)

Correction: Replace door frame complete hardware

Qty: 4-Ea.

Estimate: \$11,884.15

Assessor Name: Ann Buerger Linden

Date Created: 02/05/2013

Notes: The overhead door and iron gates appear to be in well maintained operable condition. Exterior wood doors are original and in need of replacement with new hardware.

System: B3020 - Roof Openings



Location: Access from storage room.

Material: System

Distress: Beyond Expected Life

Category: Capital Renewal

Priority: 3 - Necessary/Not Yet Critical (Years 2-5)

Correction: Renew System

Qty: 1-Ea.

Estimate: \$5,544.00

Assessor Name: Eduardo Lopez

Date Created: 01/29/2013

Notes: The existing roof hatch is heavy and virtually inoperable. Install a code compliant roof hatch and ladder assembly to facilitate roof and rooftop equipment maintenance.

System: C1020 - Interior Doors



Location: Interior doors.s

Material: System

Distress: Beyond Expected Life

Category: Capital Renewal

Priority: 4 - Recommended (Years 6-10)

Correction: Renew System

Qty: 1-Ea.

Estimate: \$3,656.45

Assessor Name: Eduardo Lopez

Date Created: 01/29/2013

Notes: Interior doors are original to the building. System renewal at the next renovation is recommended.

System: D3040 - Distribution Systems



Location: Typical for entire building
Material: System
Distress: Beyond Expected Life
Category: Capital Renewal
Priority: 4 - Recommended (Years 6-10)
Correction: Renew System
Qty: 1-Ea.
Estimate: \$22,231.76
Assessor Name: Eduardo Lopez
Date Created: 01/29/2013

Notes: Recommend to be replaced during next remodel or renovation.

System: D3050 - Terminal & Package Units



Location: Typical for entire building
Material: System
Distress: Missing
Category: Capital Renewal
Priority: 4 - Recommended (Years 6-10)
Correction: Renew System
Qty: 1-Ea.
Estimate: \$24,649.57
Assessor Name: Eduardo Lopez
Date Created: 01/29/2013

Notes: Building is missing a Terminal & Package Unit and it is recommended to be added for all enclosed areas during next major renovation.

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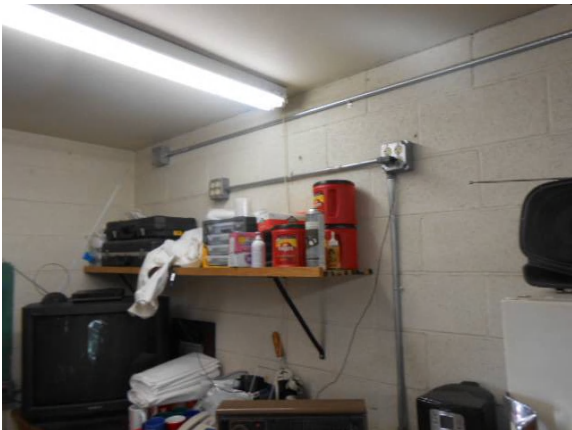
System: D5010 - Electrical Service/Distribution



Location: Typical for entire building
Material: System
Distress: Beyond Expected Life
Category: Capital Renewal
Priority: 4 - Recommended (Years 6-10)
Correction: Renew System
Qty: 1-Ea.
Estimate: \$8,333.11
Assessor Name: Eduardo Lopez
Date Created: 01/29/2013

Notes: The main electrical panels, distribution panel boards and feeders are mostly original to the building age. It is recommended to be replaced during the next major renovation.

System: D5020 - Branch Wiring



Location: Typical for entire building
Material: System
Distress: Beyond Expected Life
Category: Capital Renewal
Priority: 3 - Necessary/Not Yet Critical (Years 2-5)
Correction: Renew System
Qty: 1-Ea.
Estimate: \$22,855.22
Assessor Name: Eduardo Lopez
Date Created: 01/29/2013

Notes: The branch wiring, electrical panels and devices are mostly original to the building age. It is recommended to be replaced during the next major renovation.

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System: D5020 - Lighting



Location: Exterior Ticket Booth & Audio/Visual Entry

Material: HP Sodium Fixture, 250 W

Distress: Beyond Expected Life

Category: Capital Renewal

Priority: 1 - Currently Critical (Immediate)

Correction: Replace fixture H.P. sodium fixture, 250 W

Qty: 2-Ea.

Estimate: \$1,506.27

Assessor Name: Eduardo Lopez

Date Created: 01/29/2013

Notes: Exterior Wall pack lighting was previously replaced in 2006 but this one.

System: D5020 - Lighting



Location: General Admission, Storage, Carts Bay & Ticket Booths

Material: Fluorescent Lighting Fixture, 80 W

Distress: Beyond Expected Life

Category: Capital Renewal

Priority: 4 - Recommended (Years 6-10)

Correction: Replace fixture fluorescent lighting fixture, 80 W

Qty: 22-Ea.

Estimate: \$10,295.22

Assessor Name: Eduardo Lopez

Date Created: 01/24/2013

Notes: T8 fluorescent lamps and ballasts were updated in 2006; however light fixtures, switches and wiring are original to building age and it is recommended to be replaced during next remodel or renovation.

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System: D5030910 - Fire Alarm System

Photo is not available.

Location: Typical for entire building
Material: System
Distress: Missing
Category: Capital Renewal
Priority: 4 - Recommended (Years 6-10)
Correction: Renew System
Qty: 1-Ea.
Estimate: \$2,488.32
Assessor Name: Eduardo Lopez
Date Created: 01/29/2013

Notes: Building is missing a Fire Alarm system and it is recommended to be added throughout building wide during next major renovation.

System: D5030910 - Security System, Camers, Access Control



Location: Typical for entire building
Material: System
Distress: Beyond Expected Life
Category: Capital Renewal
Priority: 4 - Recommended (Years 6-10)
Correction: Renew System
Qty: 1-Ea.
Estimate: \$1,313.28
Assessor Name: Eduardo Lopez
Date Created: 01/29/2013

Notes: Security system is needing upgrades. Recommend replacing and enhancing during the next building renovation.

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System: E2010 - Fixed Furnishings



Location: Ticket counters.

Material: System

Distress: Beyond Expected Life

Category: Capital Renewal

Priority: 4 - Recommended (Years 6-10)

Correction: Renew System

Qty: 1-Ea.

Estimate: \$6,006.53

Assessor Name: Eduardo Lopez

Date Created: 01/29/2013

Notes: Interior counters are original to the building. System renewal is recommended at the next renovation.

Campus Report - Fred Kelly Stadium

Concessions/RRs

Executive Summary

Gross Area (SF): 2,200
Year Built: 1965
Last Reno:
Replacement Value: \$693,664
Repair Cost: \$422,837
Total FCI: 60.96%
Total RSLI: 12%



Facility Description:

Current Investment Requirement and Condition by Unifomat Classification

Unifomat Classification	RSLI%	FCI%	Current Repair Amount
A10 Foundations	NR	0.00	\$0
B10 Superstructure	NR	0.00	\$0
B20 Exterior Enclosure	0.00	41.22	\$44,352
B30 Roofing	10.75	11.50	\$5,544
C10 Interior Construction	18.65	53.79	\$29,707
C30 Interior Finishes	21.09	51.31	\$27,878
D20 Plumbing	0.00	179.77	\$91,009
D30 HVAC	0.00	110.00	\$107,436
D40 Fire Protection	2.29	106.57	\$17,319
D50 Electrical	28.62	69.53	\$78,682
E10 Equipment	0.00	110.00	\$10,454
E20 Furnishings	0.00	110.00	\$10,454
Total:	12.06	60.96	\$422,837

System Listing for Concessions/RRs

Uniformat	System Description	Unit Price	Qty	UoM	Life	Install Year	Calc Next Renewal	Next Renewal ¹	RSL ²	RSLI %	REMR	FCI%	Current Repair Amt	Current Replacement Amt
A1010	Standard Foundations	\$17.16	2,200	S.F.	100	1965	NR			NR		0.00	\$0	\$37,763
A1030	Slab on Grade	\$14.85	2,200	S.F.	100	1965	NR			NR		0.00	\$0	\$32,662
B1020	Roof Construction	\$27.79	2,200	S.F.	100	1965	NR			NR		0.00	\$0	\$61,142
B2010	Exterior Walls	\$30.59	2,200	S.F.	75	1965	NR			NR		0.00	\$0	\$67,288
B2030	Exterior Doors	\$5,760	7	Ea.	30	1965	1995		0	0.00		1	\$44,352	\$40,320
B3010105	Built-Up	\$19.63	2,200	SF	25	1990	2015		3	12.00		0.00	\$0	\$43,180
B3020	Roof Openings	\$5,040	1	Ea.	30	1965	1995		0	0.00		1	\$5,544	\$5,040
C1010	Partitions	\$12.54	2,200	S.F.	75	1965	2040		28	37.33		0.00	\$0	\$27,593
C1020	Interior Doors	\$2,285	1	Ea.	40	1965	2005		0	0.00		0.80	\$1,828	\$2,285
C1030	Fittings	\$11.52	2,200	S.F.	20	1965	1985		0	0.00		1	\$27,878	\$25,344
C3010	Wall Finishes	\$10.84	2,200	S.F.	10	2006	2016		4	40.00		0.00	\$0	\$23,855
C3020410	Sealed Concrete	\$2.33	2,200	SF	75	1965	2040		28	37.33		0.00	\$0	\$5,132
C3030	Ceiling Finishes	\$11.52	2,200	S.F.	20	1965	1985		0	0.00		1	\$27,878	\$25,344
D2010	Plumbing Fixtures	\$9.45	2,200	S.F.	30	1965	1995		0	0.00		3	\$58,182	\$20,782
D2020	Domestic Water Distribution	\$8.28	2,200	S.F.	30	1965	1995		0	0.00		1	\$20,038	\$18,216
D2030	Sanitary Waste	\$5.28	2,200	S.F.	30	1965	1995		0	0.00		1	\$12,789	\$11,627
D3040	Distribution Systems	\$21.05	2,200	S.F.	30	1965	1995		0	0.00		1	\$50,948	\$46,316
D3050	Terminal & Package Units	\$23.34	2,200	S.F.	15			2012	0	0.00		1	\$56,489	\$51,353
D4010	Sprinklers	\$7.16	2,200	S.F.	25	1965	1990		0	0.00		1	\$17,319	\$15,745
D4030	Fire Protection Specialties	\$0.23	2,200	S.F.	15	2008	2023		11	73.33		0.00	\$0	\$507
D5010	Electrical Service/Distribution	\$7.89	2,200	S.F.	30	1965	1995		0	0.00		1	\$19,097	\$17,361
D5020	Branch Wiring	\$21.64	2,200	S.F.	30	1965	1995		0	0.00		1	\$52,377	\$47,615
D5020	Lighting	\$17.94	2,200	S.F.	30	2006	2036		24	80.00		0.04	\$1,506	\$39,473
D5030910	Fire Alarm System	\$2.59	2,200	SF	10			2012	0	0.00		1.00	\$5,702	\$5,702
D5030910	Security System, Camers, Access Control	\$1.37	2,200	SF	15	2001	2016		4	26.67		0.00	\$0	\$3,010
E1090	Other Equipment	\$4.32	2,200	S.F.	20	1965	1985		0	0.00		1	\$10,454	\$9,504
E2010	Fixed Furnishings	\$4.32	2,200	S.F.	20	1965	1985		0	0.00		1	\$10,454	\$9,504

¹ For blank cells default to dates shown in Calculated Next Renewal Column

² Cells are left blank for Non Renewable Systems, no RSL will be calculated. Systems are expected to expire at the end of their life cycle.

Renewal Schedule

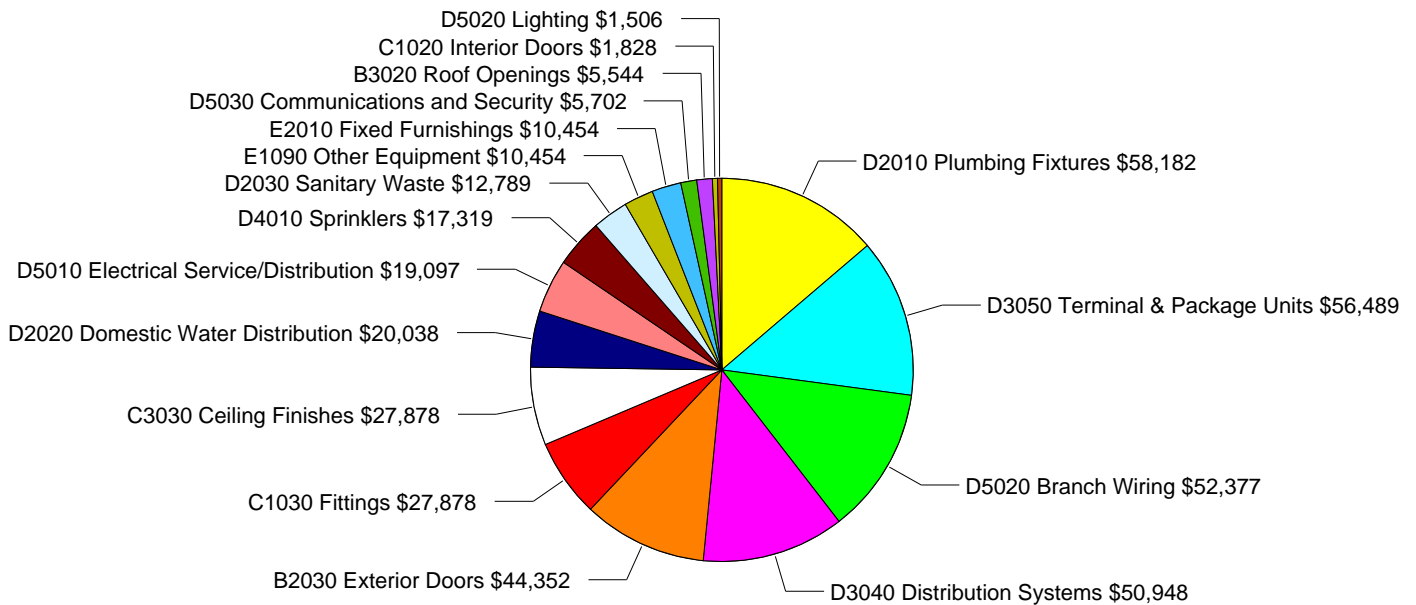
Uniformat	System Description	2012-13	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Total
Total		\$422,835		\$51,902	\$32,921						\$7,664	\$772	\$516,094
A1010	Standard Foundations												
A1030	Slab on Grade												
A2010	Basement Excavation												
A2020	Basement Walls												
B1010	Floor Construction												
B1020	Roof Construction												
B2010	Exterior Walls												
B2020	Exterior Windows												
B2030	Exterior Doors	\$44,352											\$44,352
B3010105	Built-Up			\$51,902									\$51,902
B3010120	Single Ply Membrane												
B3010130	Preformed Metal Roofing												
B3010140	Shingle & Tile												
B3020	Roof Openings	\$5,544											\$5,544
C1010	Partitions												
C1020	Interior Doors	\$1,828											\$1,828
C1030	Fittings	\$27,878											\$27,878
C2010	Stair Construction												
C3010	Wall Finishes				\$29,534								\$29,534
C3020210	Carpet												
C3020210	Ceramic Tile												
C3020210	Epoxy												
C3020210	Terrazzo												
C3020210	Tile & Coverings												
C3020410	Rubber/Resilient												
C3020410	Sealed Concrete												
C3020410	VCT												
C3020410	Wood												
C3030	Ceiling Finishes	\$27,878											\$27,878

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Uniformat	System Description	2012-13	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Total
D2010	Plumbing Fixtures	\$58,182											\$58,182
D2020	Domestic Water Distribution	\$20,038											\$20,038
D2030	Sanitary Waste	\$12,789											\$12,789
D3040	Distribution Systems	\$50,948											\$50,948
D3050	Terminal & Package Units	\$56,489											\$56,489
D4010	Sprinklers	\$17,319											\$17,319
D4030	Fire Protection Specialties											\$772	\$772
D5010	Electrical Service/Distribution	\$19,097											\$19,097
D5020	Branch Wiring	\$52,377											\$52,377
D5020	Lighting	\$1,506											\$1,506
D5030910	Fire Alarm System	\$5,702									\$7,664		\$13,366
D5030910	Security System, Camers, Access Control				\$3,387								\$3,387
E1020	Institutional Equipment												
E1090	Other Equipment	\$10,454											\$10,454
E2010	Fixed Furnishings	\$10,454											\$10,454
F1010	Special Structures												
F1020	Integrated Construction												
F1030	Special Construction Systems												
F1040	Special Facilities												

Deficiency Summary by System

Current deficiencies included assemblies that have reached or exceeded their design life or components of the assemblies that are in need of repair. Assemblies that have reached their design life are identified as current deficiencies and assigned the distress 'Beyond Useful Life'. The following chart lists all current deficiencies associated with this facility.



Budget Estimate Total: \$422,837

Condition Detail

System: B2030 - Exterior Doors



Location: Exterior doors
Material: System
Distress: Beyond Expected Life
Category: Capital Renewal
Priority: 4 - Recommended (Years 6-10)
Correction: Renew System
Qty: 1-Ea.
Estimate: \$44,352.00
Assessor Name: Eduardo Lopez
Date Created: 01/29/2013

Notes: Exterior doors, frames, and hardware are original and in fair to poor condition. Some frames are particularly degraded. System replacement is recommended.

System: B3020 - Roof Openings

Photo is not available.

Location: Roof
Material: System
Distress: Missing
Category: Safety
Priority: 3 - Necessary/Not Yet Critical (Years 2-5)
Correction: Renew System
Qty: 1-Ea.
Estimate: \$5,544.00
Assessor Name: Eduardo Lopez
Date Created: 01/29/2013

Notes: Provide a code compliant roof hatch and access ladder assembly to facilitate safe roof maintenance and rooftop equipment access.

System: C1020 - Interior Doors



Location: Janitor closet door.
Material: System
Distress: Beyond Expected Life
Category: Capital Renewal
Priority: 3 - Necessary/Not Yet Critical (Years 2-5)
Correction: Renew System
Qty: 1-Ea.
Estimate: \$1,828.22
Assessor Name: Eduardo Lopez
Date Created: 01/29/2013

Notes: System is beyond its expected life. System renewal is recommended.

System: C1030 - Fittings



Location: Building wide.
Material: System
Distress: Beyond Expected Life
Category: Capital Renewal
Priority: 3 - Necessary/Not Yet Critical (Years 2-5)
Correction: Renew System
Qty: 1-Ea.
Estimate: \$27,878.40
Assessor Name: Eduardo Lopez
Date Created: 01/29/2013

Notes: Fittings system includes toilet partitons and accessories, signage, and storage shelving. These systems are generally well maintained in fair condition, with some damaged areas. Main restrooms do have ADA accessible stalls. The toilet at the the first aid station is not accessible. System renewal to full ADA compliance at the next major renovation is recommended.

System: C3030 - Ceiling Finishes



Location: Interior ceilings.

Material: System

Distress: Beyond Expected Life

Category: Capital Renewal

Priority: 3 - Necessary/Not Yet Critical (Years 2-5)

Correction: Renew System

Qty: 1-Ea.

Estimate: \$27,878.40

Assessor Name: Eduardo Lopez

Date Created: 01/29/2013

Notes: Ceilings are well maintained with paint in fair condition. However there is underlying cracking in the plaster/drywall that is recommended to be replaced at the next building renovation.

System: D2010 - Plumbing Fixtures



Location: Women, Men & First Aid restrooms

Material: Tankless Water Closet

Distress: Beyond Expected Life

Category: Capital Renewal

Priority: 4 - Recommended (Years 6-10)

Correction: Replace tankless water closet

Qty: 14-Ea.

Estimate: \$17,296.47

Assessor Name: Eduardo Lopez

Date Created: 01/22/2013

Notes: Replace during next remodel or renovation.

System: D2010 - Plumbing Fixtures

Campus Report - Fred Kelly Stadium

Location: Women & Men restrooms
Material: Lavatory, Vitreous China
Distress: Beyond Expected Life
Category: Capital Renewal
Priority: 4 - Recommended (Years 6-10)
Correction: Replace lavatory, vitreous china
Qty: 10-Ea.
Estimate: \$10,749.89
Assessor Name: Eduardo Lopez
Date Created: 01/22/2013

Notes: Replace during next remodel or renovation.

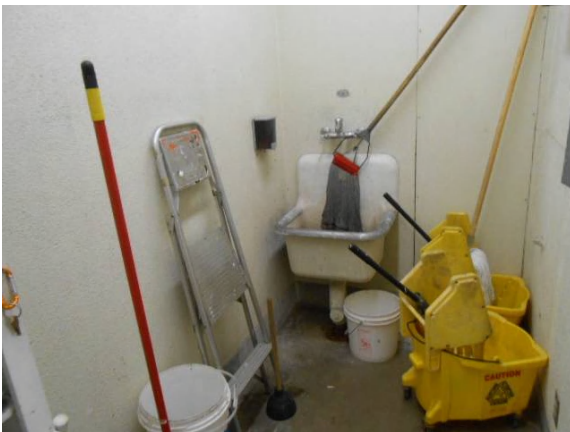
System: D2010 - Plumbing Fixtures



Location: Men restroom
Material: Urinal
Distress: Beyond Expected Life
Category: Capital Renewal
Priority: 4 - Recommended (Years 6-10)
Correction: Replace wall-hung urinal
Qty: 1-Ea.
Estimate: \$13,179.20
Assessor Name: Eduardo Lopez
Date Created: 01/22/2013

Notes: Replace during next remodel or renovation.

System: D2010 - Plumbing Fixtures



Location: Custodial Closet
Material: Service/Utility Sink
Distress: Beyond Expected Life
Category: Capital Renewal
Priority: 4 - Recommended (Years 6-10)
Correction: Replace sink and fixtures
Qty: 1-Ea.
Estimate: \$3,297.64
Assessor Name: Eduardo Lopez
Date Created: 01/22/2013

Notes: Replace during next remodel or renovation.

Campus Report - Fred Kelly Stadium

System: D2010 - Plumbing Fixtures



Location: North and East side of building
Material: Drinking Fountain
Distress: Missing
Category: Code Compliance
Priority: 4 - Recommended (Years 6-10)
Correction: Replace fountain drinking fountain
Qty: 6-Ea.
Estimate: \$11,929.98
Assessor Name: Eduardo Lopez
Date Created: 01/22/2013

Notes: The Drinking fountain is beyond its expected life and non-ADA. It is recommended to be replaced during next remodel or renovation.

System: D2010 - Plumbing Fixtures



Location: First Aid Room
Material: Sink, Stainless Steel
Distress: Beyond Expected Life
Category: Capital Renewal
Priority: 4 - Recommended (Years 6-10)
Correction: Replace sink, stainless steel
Qty: 1-Ea.
Estimate: \$1,729.07
Assessor Name: Eduardo Lopez
Date Created: 01/24/2013

Notes: Sink is mostly original and beyond expected life and it is recommended to be replaced during next remodel or renovation.

Campus Report - Fred Kelly Stadium

System: D2020 - Domestic Water Distribution



Location: Typical for entire building

Material: System

Distress: Beyond Expected Life

Category: Capital Renewal

Priority: 4 - Recommended (Years 6-10)

Correction: Renew System

Qty: 1-Ea.

Estimate: \$20,037.60

Assessor Name: Eduardo Lopez

Date Created: 01/29/2013

Notes: Domestic hot water was replaced in 2002 and is currently furnished for custodial room only; however it is recommended to replace the domestic water distribution system during next remodel or renovation.

System: D2030 - Sanitary Waste



Location: Typical for entire building

Material: System

Distress: Beyond Expected Life

Category: Capital Renewal

Priority: 4 - Recommended (Years 6-10)

Correction: Renew System

Qty: 1-Ea.

Estimate: \$12,789.22

Assessor Name: Eduardo Lopez

Date Created: 01/29/2013

Notes: Replace all above grade sanitary waste and vent piping during next remodel or renovation; below grade as needed.

Campus Report - Fred Kelly Stadium

System: D3040 - Distribution Systems



Location: Typical for entire building

Material: System

Distress: Beyond Expected Life

Category: Capital Renewal

Priority: 4 - Recommended (Years 6-10)

Correction: Renew System

Qty: 1-Ea.

Estimate: \$50,947.78

Assessor Name: Eduardo Lopez

Date Created: 01/29/2013

Notes: Recommend to be replaced during next remodel or renovation.

System: D3050 - Terminal & Package Units



Location: Typical for entire building

Material: System

Distress: Missing

Category: Capital Renewal

Priority: 4 - Recommended (Years 6-10)

Correction: Renew System

Qty: 1-Ea.

Estimate: \$56,488.61

Assessor Name: Eduardo Lopez

Date Created: 01/29/2013

Notes: Building is missing a Terminal & Package Unit and it is recommended to be added for all enclosed areas during next major renovation.

Campus Report - Fred Kelly Stadium

System: D4010 - Sprinklers



Location: Typical for entire building
Material: System
Distress: Inadequate
Category: Capital Renewal
Priority: 5 - Codes or Standards Compliance
Correction: Renew System
Qty: 1-Ea.
Estimate: \$17,319.46
Assessor Name: Eduardo Lopez
Date Created: 01/29/2013

Notes: Building is partially sprinklered, wet type fire sprinklers are currently located in the storage/electrical room and it's recommended to be added throughout building wide during next major renovation.

System: D5010 - Electrical Service/Distribution



Location: Typical for entire building
Material: System
Distress: Beyond Expected Life
Category: Capital Renewal
Priority: 4 - Recommended (Years 6-10)
Correction: Renew System
Qty: 1-Ea.
Estimate: \$19,096.70
Assessor Name: Eduardo Lopez
Date Created: 01/29/2013

Notes: The main electrical panels, distribution panel boards and feeders are mostly original to the building age. It is recommended to be replaced during the next major renovation.

Campus Report - Fred Kelly Stadium

System: D5020 - Branch Wiring



Location: Typical for entire building
Material: System
Distress: Beyond Expected Life
Category: Capital Renewal
Priority: 4 - Recommended (Years 6-10)
Correction: Renew System
Qty: 1-Ea.
Estimate: \$52,376.54
Assessor Name: Eduardo Lopez
Date Created: 01/29/2013

Notes: The branch wiring, electrical panels and devices are mostly original to the building age. It is recommended to be replaced during the next major renovation.

System: D5020 - Lighting



Location: Vending Area
Material: HP Sodium Fixture, 250 W
Distress: Beyond Expected Life
Category: Capital Renewal
Priority: 1 - Currently Critical (Immediate)
Correction: Replace fixture H.P. sodium fixture, 250 W
Qty: 2-Ea.
Estimate: \$1,506.27
Assessor Name: Eduardo Lopez
Date Created: 01/29/2013

Notes: Exterior Wall pack lighting was previously replaced in 2006 but these two. Replace during next remodel or renovation.

Campus Report - Fred Kelly Stadium

System: D5030910 - Fire Alarm System

Photo is not available.

Location: Typical for entire building
Material: System
Distress: Missing
Category: Capital Renewal
Priority: 4 - Recommended (Years 6-10)
Correction: Renew System
Qty: 1-Ea.
Estimate: \$5,702.40
Assessor Name: Eduardo Lopez
Date Created: 01/29/2013

Notes: Building is missing a Fire Alarm system and it is recommended to be added throughout building wide during next major renovation.

System: E1090 - Other Equipment



Location: Concessions prep and service areas.
Material: System
Distress: Inadequate
Category: Capital Renewal
Priority: 3 - Necessary/Not Yet Critical (Years 2-5)
Correction: Renew System
Qty: 1-Ea.
Estimate: \$10,454.40
Assessor Name: Eduardo Lopez
Date Created: 01/29/2013

Notes: Concessions equipment is very limited and original. Renew system at the next major renovation.

Campus Report - Fred Kelly Stadium

System: E2010 - Fixed Furnishings



Location: First aid station.

Material: System

Distress: Beyond Expected Life

Category: Capital Renewal

Priority: 3 - Necessary/Not Yet Critical (Years 2-5)

Correction: Renew System

Qty: 1-Ea.

Estimate: \$10,454.40

Assessor Name: Eduardo Lopez

Date Created: 01/29/2013

Notes: Cabinetry is original and beyond its expected life. System renewal is recommended.

Site

Executive Summary



Gross Area (SF):	315,326	Repair Cost:	\$4,722,480
Year Built:	1965	Total FCI:	28.02%
Last Reno:		Total RSLI:	39%
Replacement Value:	\$16,855,058		

Facility Description:

Current Investment Requirement and Condition by Unifomat Classification

Unifomat Classification	RSLI%	FCI%	Current Repair Amount
G10 Site Preparation	NR	0.00	\$0
G20 Site Improvements	55.00	10.57	\$1,171,941
G30 Site Mechanical Utilities	6.00	0.31	\$4,257
G40 Site Electrical Utilities	8.80	86.11	\$3,546,282
Total:	39.42	28.02	\$4,722,480

System Listing for Site

Uniformat	System Description	Unit Price	Qty	UoM	Life	Install Year	Calc Next Renewal	Next Renewal ¹	RSL ²	RSLI %	REMR	FCI%	Current Repair Amt	Current Replacement Amt
G1030	Site Earthwork	\$0.81	315,326	S.F.	100	1965	NR			NR		0.00	\$0	\$254,279
G2010	Roadways	\$0.89	315,326	S.F.	50	1965	2015		3	6.00		0.00	\$0	\$281,523
G2030	Pedestrian Paving	\$8.02	315,326	S.F.	50	2004	2054		42	84.00		0.00	\$0	\$2,529,167
G2040105	Fence & Guardrails	\$3.27	315,326	S.F.	30	2004	2034		22	73.33		0.04	\$38,203	\$1,030,738
G2040940	Playing Fields	\$11.52	315,326	S.F.	50	2004	2054		42	84.00		0.00	\$0	\$3,632,556
G2040950	Grandstands	\$7.92	315,326	S.F.	50	1965	2015		3	6.00		0.05	\$128,428	\$2,497,382
G2050	Landscaping and Irrigation	\$3.54	315,326	S.F.	20	1965	1985		0	0.00		0.90	\$1,005,310	\$1,117,011
G3010	Water Supply	\$2.09	315,326	S.F.	50	1965	2015		3	6.00		0.01	\$4,257	\$658,401
G3020	Sanitary Sewer	\$1.53	315,326	S.F.	50	1965	2015		3	6.00		0.00	\$0	\$481,314
G3030	Storm Sewer	\$0.81	315,326	S.F.	50	1965	2015		3	6.00		0.00	\$0	\$254,279
G4010	Electrical Distribution	\$3.59	315,326	S.F.	30	1965	1995		0	0.00		1	\$1,130,633	\$1,130,633
G4020	Site Lighting	\$7.66	315,326	S.F.	30	1965	1995		0	0.00		1	\$2,415,649	\$2,415,649
G4030	Site Communications and Security	\$1.81	315,326	S.F.	30	2001	2031		19	63.33		0.00	\$0	\$572,127

¹ For blank cells default to dates shown in Calculated Next Renewal Column

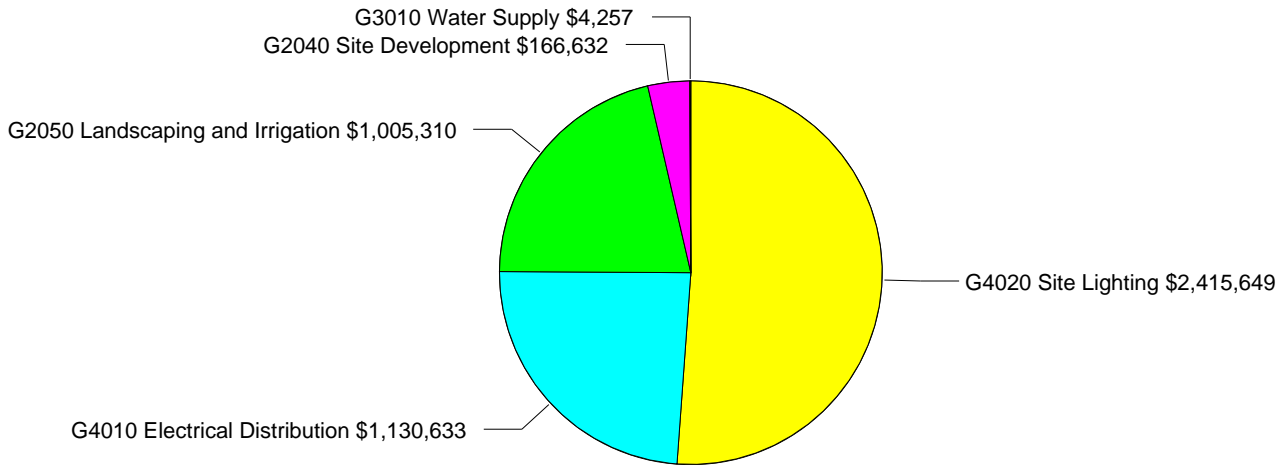
² Cells are left blank for Non Renewable Systems, no RSL will be calculated. Systems are expected to expire at the end of their life cycle.

Renewal Schedule

Uniformat	System Description	2012-13	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Total
Total		\$4,722,480		\$4,590,601									\$9,313,081
G1030	Site Earthwork												
G2010	Roadways			\$338,391									\$338,391
G2020	Parking Lots												
G2030	Pedestrian Paving												
G2040105	Fence & Guardrails	\$38,203											\$38,203
G2040920	Swimming Pools												
G2040940	Playing Fields												
G2040950	Grandstands	\$128,428		\$2,728,957									\$2,857,385
G2050	Landscaping and Irrigation	\$1,005,310											\$1,005,310
G3010	Water Supply	\$4,257		\$719,452									\$723,709
G3020	Sanitary Sewer			\$525,944									\$525,944
G3030	Storm Sewer			\$277,857									\$277,857
G4010	Electrical Distribution	\$1,130,633											\$1,130,633
G4020	Site Lighting	\$2,415,649											\$2,415,649
G4030	Site Communications and Security												

Deficiency Summary by System

Current deficiencies included assemblies that have reached or exceeded their design life or components of the assemblies that are in need of repair. Assemblies that have reached their design life are identified as current deficiencies and assigned the distress 'Beyond Useful Life'. The following chart lists all current deficiencies associated with this facility.



Budget Estimate Total: \$4,722,480

Condition Detail

System: G2040105 - Fence & Guardrails



Location: Fences, particlaarly at grandstand.

Material: Chain Link Fence and Gate Repairs

Distress: Failing

Category: Safety

Priority: 2 - Potentially Critical (Year 1)

Correction: Minor chain link fence repairs (per 10 L.F.)

Qty: 200-Ea.

Estimate: \$38,203.20

Assessor Name: Ann Buerger Linden

Date Created: 02/05/2013

Notes: Although many fencing sections were included in the 2004 refurbishment project, there are several intances of damaged or questional fencing and rails. Eroded foundations, rusted connections are found at various locations, particularly around the grandstands.

System: G2040950 - Grandstands



Location: Concrete grandstands

Material: Concrete Stairs

Distress: Damaged

Category: Deferred Maintenance

Priority: 1 - Currently Critical (Immediate)

Correction: Repair concrete steps

Qty: 500-S.F.

Estimate: \$15,055.20

Assessor Name: Ann Buerger Linden

Date Created: 02/05/2013

Notes: Concrete risers and steps are in need of repairs at various points throughout the stadium.

Campus Report - Fred Kelly Stadium

System: G2040950 - Grandstands



Location: East concrete grandstand.
Material: Professional Services Study
Distress: Damaged
Category: Deferred Maintenance
Priority: 3 - Necessary/Not Yet Critical (Years 2-5)
Correction: Professional Structural Engineer Analysis
Qty: 1-Each
Estimate: \$37,254.79
Assessor Name: Ann Buerger Linden
Date Created: 02/05/2013

Notes: Provide an engineering study of the east grandstand. Approximately one inch of offset is observed at a control joint. The back slope has cracking that may be allowing water intrusion/undermining of earth berming. An engineer's study for structural stabilization is recommended.

System: G2040950 - Grandstands



Location: Concrete grandstands
Material: Recaulk sidewalk expansion joints
Distress: Missing
Category: Deferred Maintenance
Priority: 3 - Necessary/Not Yet Critical (Years 2-5)
Correction: Recaulk sidewalk expansion joint
Qty: 2,000-L.F.
Estimate: \$76,118.40
Assessor Name: Ann Buerger Linden
Date Created: 02/05/2013

Notes: Joints in concrete grandstands are typically not caulked. Caulking is recommended to prevent water intrusion to the fill beneath the stands.

Campus Report - Fred Kelly Stadium

System: G2050 - Landscaping and Irrigation



Location: Site wide.

Material: System

Distress: Beyond Expected Life

Category: Capital Renewal

Priority: 3 - Necessary/Not Yet Critical (Years 2-5)

Correction: Renew System

Qty: 1-Ea.

Estimate: \$1,005,309.74

Assessor Name: Eduardo Lopez

Date Created: 01/29/2013

Notes: Landscape systems are in need of renewal. Erosion due to loss of ground cover, emerging roots, etc. is widespread on sloped areas. Irrigation systems are antiquated. System re-design and restoration is recommended.

System: G3010 - Water Supply



Location: Site Drinking Fountains

Material: Drinking Fountain

Distress: Beyond Expected Life

Category: Deferred Maintenance

Priority: 1 - Currently Critical (Immediate)

Correction: Replace fountain drinking fountain

Qty: 2-Ea.

Estimate: \$4,256.58

Assessor Name: Sonny Satterfield

Date Created: 01/28/2013

Notes: Replace Drinking Fountains during next remodel or renovation.

System: G4010 - Electrical Distribution



Location: Site Electrical Distribution

Material: System

Distress: Beyond Expected Life

Category: Capital Renewal

Priority: 4 - Recommended (Years 6-10)

Correction: Renew System

Qty: 1-Ea.

Estimate: \$1,130,632.91

Assessor Name: Eduardo Lopez

Date Created: 01/29/2013

Notes: Transformer was replaced in 1996; However the main electrical panels, distribution panel boards and feeders are mostly original to the building age. It is recommended to be replaced during the next major renovation.

System: G4020 - Site Lighting



Location: Site Lighting

Material: System

Distress: Beyond Expected Life

Category: Capital Renewal

Priority: 4 - Recommended (Years 6-10)

Correction: Renew System

Qty: 1-Ea.

Estimate: \$2,415,649.42

Assessor Name: Eduardo Lopez

Date Created: 01/29/2013

Notes: Some Exterior lighting and wiring was replaced during 2006 updates including repaint of light poles; however Stadium Light Fixtures and Light Poles remain original to building age and it is recommended to be replaced. A P.E. study is recommended for the SW Light Pole Base where are signs of failure are.

Glossary

ABMA	American Boiler Manufacturers Association http://www.abma.com/
ACEEE	American Council for an Energy-Efficient Economy
ACGIH	American Council of Governmental and Industrial Hygienists
AEE	Association of Energy Engineers
AFD	Adjustable Frequency Drive
AFTC	After Tax Cash Flow
AGA	American Gas Association
AHU	Air Handling Unit
Amp	Ampere
ANSI	American National Standards Institute
ARI	Air Conditioning and Refrigeration Institute
ASD	Adjustable Speed Drive
ASHRAE	American Society of Heating Refrigerating and Air-Conditioning Engineers Inc.
ASME	American Society of Mechanical Engineers
Assessment	Visual survey of a facility to determine its condition. It involves looking at the age of systems reviewing information from local sources and visual evidence of potential problems to assign a condition rating. It does not include destructive testing of materials or testing of systems or equipment for functionality.
ATS	After Tax Savings
AW	Annual worth
BACNET	Building Automation Control Network
BAS	Building Automation System
BCR	Benefit Cost Ratio
BEP	Business Energy Professional (AEE)
BF	Ballast Factor
BHP	Brake Horsepower (motors)
BHP	Boiler Horsepower (boilers)
BLCC	Building Life Cycle Cost analysis program (FEMP)
BOCA	Building Officials and Code Administrators
BTCF	Before Tax Cash Flow
BTS	Before Tax Savings
Btu	British thermal unit
Building Addition	An area space or component of a building added to a building after the original building's year built date.
CAA	Clean Air Act
CAAA-90	Clean Air Act Amendments of 1990
CABO	Council of American Building Officials
CAC	Conventional Air Conditioning
CADDET	Center for the Analysis and Dissemination of Demonstrated Energy Technologies

Calculated Next Renewal	The year a system or element would be expected to expire based solely on the date it was installed and the expected useful lifetime for that kind of system.
Capital Renewal	Capital renewal is condition work (excluding suitability and energy audit work) that includes the replacement of building systems or elements (as they become obsolete or beyond their useful life) not normally included in an annual operating budget. Calculated next renewal The year a system or element would be expected to expire based solely on the date it was installed and the expected useful lifetime for that kind of system. Next renewal The assessor adjusted expected useful life of a system or element based on on-site inspection.
CDD	Cooling Degree Days
CDGP	Certified Distributed Generation Professional
CEC	California Energy Commission
CEM	Certified Energy Manager
CEP	Certified Energy Procurement Professional
CFC	Chlorofluorocarbon
CFD	Cash Flow Diagram
CFL	Compact Fluorescent Light
CFM cfm	Cubic Feet per Minute
CHP	Combined Heat and Power (a.k.a. cogeneration)
CHW	Chilled Water
Condition	Condition refers to the state of physical fitness or readiness of a facility system or system element for its intended use.
COP	Coefficient of Performance
Cp	Heat Capacity of Material
CPUC	California Public Utility Commission
CRI	Color Rendering Index
CRT	Cathode Ray Tube VDT HMI
CTC	Competitive Transition Charge
Cu	Coefficient of Utilization
Current Replacement Value (CRV)	CRV represents the hypothetical total cost of rebuilding or replacing an existing facility in current dollars to its optimal condition (excluding auxiliary facilities) under current codes and construction standards.
Cv	Value Coefficient
CWS	Chilled Water System
D d	Distance (usually feet)
DB	Dry Bulb
DCV	Demand Control Ventilation
DD	Degree Day
DDB	Double Declining Balance
DDC	Direct Digital Controls
Deferred maintenance	Deferred maintenance is condition work (excluding suitability and energy audit needs) deferred on a planned or unplanned basis to a future budget cycle or postponed until funds are available.

Deficiency	A deficiency is a repair item that is damaged missing inadequate or insufficient for an intended purpose.
Delta	Difference
Delta P	Pressure Difference
Delta T	Temperature Difference
DG	Distributed Generation
DOE	Department of Energy
DP	Dew Point
DR	Demand Response
DX	Direct Expansion Air Conditioner
EA	Energy Audit
EBITDA	Earnings before Interest Taxes Depreciation and Amortization
ECI	Energy Cost Index
ECM	Energy Conservation Measure
ECO	Energy Conservation Opportunity
ECPA	Energy Conservation and Production Act
ECR	Energy Conservation Recommendation
ECS	Energy Control System
EER	Energy Efficiency Ratio
EERE	Energy Efficiency and Renewable Energy division of US DOE
EIA	Energy Information Agency
EIS	Energy Information System
EMCS	Energy Management Computer System
EMO	Energy Management Opportunity
EMP	Energy Management Project
EMR	Energy Management Recommendation
EMS	Energy Management System
Energy Utilization Index (EUI)	EUI is the measure of total energy consumed in the cooling or heating of a building in a period expressed as British thermal unit (BTU) per (cooled or heated) gross square foot.
EO	Executive Order
EPA	Environmental Protection Agency
EPACT	Energy Policy Act of 1992
EPCA	Energy Production and Conservation Act of 1975
EPRI	Electric Power Research Institute
EREN	Efficiency and Renewable Energy (Division of USDOE)
ERV	Energy Recovery Ventilator
ESCO	Energy Service Company
ESPC	Energy Savings Performance Contract
EUI	Energy Use Index
EWG	Exempt Wholesale Generators

Extended Facility Condition Index (EFCI)	EFCI is calculated as the condition needs for the current year plus facility system renewal needs going out to a set time in the future divided by Current Replacement Value.
F	Fahrenheit
f	Frequency
Facility	A facility refers to site(s) building(s) or building addition(s) or combinations thereof that provide a particular service.
Facility Condition Assessment (FCA)	FCA is a process for evaluating the condition of buildings and facilities for programming and budgetary purposes through an on site inspection and evaluation process.
Facility Condition Index (FCI)	FCI is an industry-standard measurement of a facility's condition that is the ratio of the cost to correct a facility's deficiencies to the Current Replacement Value of the facilities. The higher the FCI the poorer the condition of a facility. After an FCI is established for all buildings within a portfolio a building's condition can be ranked relative to other buildings. The FCI may also represent the condition of a portfolio based on the cumulative FCIs of the portfolio's facilities.
FC	Footcandle
FCA	Fuel Cost Adjustment
FEMIA	Federal Energy Management Improvement Act of 1988
FEMP	Federal Energy Management Program
FERC	Federal Energy Regulatory Commission
FESR	Fuel Energy Savings Ratio
FLA	Full Load Amps
FLF	Facility Load Factor (usually monthly)
FLRPM	Full Load Revolutions per Minute
FMS	Facility Management System
FPM fpm	Feet per Minute (velocity)
FSEC	Florida Solar Energy Center
Ft	Foot
GPM gpm	Gallons per Minute
GRI	Gas Research Institute
Gross Square Feet (GSF)	The size of the enclosed floor space of a building in square feet measured to the outside face of the enclosing wall.
GUI	Graphical User Interface
H h	Enthalpy Btu/lb
HCFC	Hydrochlorofluorocarbons
HDD	Heating Degree days
HFC	Hydrofluorocarbons
HHV	Higher Heating Value
HID	High Intensity Discharge (lamp)
HMI	Human Machine Interface
HMMI	Human Man Machine Interface
HO	High Output (lamp)
HP Hp hp	Horsepower
HPS	High Pressure Sodium (lamp)

HR	Humidity Ratio
Hr hr	Hour
HRU	Heat Recovery Unit
HVAC	Heating Ventilation and Air-Conditioning
Hz	Hertz
I	Intensity (lumen output of lamp)
I i	Interest rate or Discount rate
IAQ	Indoor Air Quality
ICA	International Cogeneration Alliance
ICBO	International Conference of Buildings Officials
ICC	International Code Council
ICP	Institutional Conservation Program
IECC	International Energy Conservation Code
IEEE	Institute of Electrical and Electronic Engineers
IESNA	Illuminating Engineering Society of North America
Install year	The year a building or system was built or the most recent major renovation date (where a minimum of 70 of the system's Current Replacement Value (CRV) was replaced).
IRP	Integrated Resource Planning
IRR	Internal Rate of Return
ISO	Independent System Operator
ITA	Independent Tariff Administrator
K	Kelvins (color temperature of lamp)
k	Kilo multiple of thousands in SI system
K k	Thermal Conductivity of Material
KVA	Kilovolt Ampere
KVAR	Kilovolt Ampere Reactive
kW	kiloWatt
kWh	kiloWatt hour
L	Length (usually feet)
LCC	Life Cycle Costing
LDC	Local Distribution Company
LEED	Leadership in Energy and Environmental Design
LEED EB	LEED for Existing Buildings
LEED NC	LEED for new construction
LF	Load Factor
LHV	Lower Heating Value
Life cycle	The period of time that a building or site system or element can be expected to adequately serve its intended function.
LPS	Low Pressure Sodium (lamp)
Lu	Lumen Output of a Lamp or Fixture
M	Mega multiple of millions in SI system

M&V	Measurement and Verification
MACRS	Modified Accelerated Cost Recovery System
MARR	Minimum Attractive Rate of Return
Mbtu	Thousand Btu
MCF	Thousand Cubic Feet (usually of gas)
MEC	Model Energy Code
Mm	Multiple of Thousands in I/P System
MMBtu	Million Btu
MMCS	Maintenance Management Computer System
MMI	Man Machine Interface
MMS	Maintenance Management System
MSE 2000	Management System for Energy 2000 (ANSI Georgia Tech Univ)
MW	MegaWatt
MWH MWh	MegaWatt hour
NAAQS	National Ambient Air Quality Standards
NAESCO	National Association of Energy Service Companies
NAIMA	North American Insulation Manufacturers Association
NEA	National Energy Act of 1978
NECPA	National Energy Conservation Policy Act
NEMA	National Electrical Manufacturer's Association
NERC	North American Electric Reliability Council
Next Renewal	The Next Renewal date is an override of the "Calculated Next Renewal" date and is based upon the assessor's visual inspection.
NFPA	National Fire Protection Association
NGPA	National Gas Policy Act of 1978
NLRPM	No Load Revolutions per Minute (speed)
Nn	Equipment or Project lifetime in economic analysis
NOPR	Notice of Proposed Rule Making from FERC
NOx	Nitrogen Oxide Compounds
NPV	Net present value in economic analysis
NREL	National Renewable Energy Laboratory
NUG	Non-Utility Generator
O&M	Operation and Maintenance
OA	Outside Air
ODP	Ozone Depletion Potential
OPAC	Off-Peak Air Conditioning
P	Present value in economic analysis
PBR	Performance Based Rates
PEA	Preliminary Energy Audit
PF	Power Factor

PID	Proportional plus integral plus derivative (control system)
PM	Preventive Maintenance
PM	Portfolio Manager in Energy Star rating system
PoolCo	Power Pool Company or Organization
POU	Point of Use
PQ	Power Quality
PSC	Public Service Commission
PSIA psia	Pounds per square inch absolute (pressure)
PSIG psig	Pounds per square inch gauge (pressure)
PUC	Public Utility Commission
PUHCA	Public Utilities Holding Company Act of 1935
PURPA	Public Utilities Regulatory Policies of 1978
PV	Photovoltaic system
PV	Present Value
PW	Present Worth
PX	Power Exchange
Q	Heat load due to conduction using degree days
q	Rate of heat flow in Btu per hour
QF	Qualifying Facility
R	Electrical resistance
R	Thermal Resistance
RC	Remote controller
RCR	Room Cavity Ratio
RCRA	Resource Conservation and Recovery Act
Remaining Service Life (RSL)	RSL is the number of years service remaining for a system or equipment item. It is automatically calculated based on the difference between the current year and the "Calculated Next Renewal" date or the "Next Renewal" date whichever one is the later date.
Remaining Service Life Index (RSLI)	RSLI is defined as a percentage ratio of the remaining service life of a system. It usually ranges from 0 to 100
REMR	Repair Evaluation Maintenance Rehabilitation (REMR) is a scale used to objectively rank systems based on their condition
Renewal Schedule	A timeline that provides the items that need repair the year in which the repair is needed and the estimated price of the renewal.
RH	Relative Humidity
RLA	Running Load Amps
RMS	Root Mean Square
RO	Reverse Osmosis
ROI	Return on Investment
RPM	Revolutions Per Minute
RTG	Regional Transmission Group
RTO	Regional Transmission Organization

RTP	Real Time Pricing
SBCCI	Southern Building Code Congress International
SC	Scheduling Coordinator
SC	Shading Coefficient
SCADA	Supervisory Control and Data Acquisition Systems
SEER	Seasonal Energy Efficiency Ratio
SHR	Sensible Heat Ratio
Site	The grounds and utilities roadways landscaping fencing and other typical land improvements needed to support the facility.
Soft Cost	An expense item that is not considered direct construction cost. Soft cost includes architectural engineering financing legal fees and other pre-and-post construction expenses.
SOx	Sulfur Oxide Compounds
SP	Static Pressure
SP SPB	Simple Payback
SPP	Simple Payback Period
SPP	Small Power Producers
STR	Stack Temperature Rise
SV	Specific Volume
System	System refers to building and related site work elements as described by ASTM Unifomat II Classification for Building Elements (E1557-97) a format for classifying major facility elements common to most buildings. Elements usually perform a given function regardless of the design specification construction method or materials used. See also Unifomat II.
T	Temperature
T	Tubular (lamps)
TAA	Technical Assistance Audit
TCP/IP	Transmission Control Protocol/Internet Protocol
TES	Thermal Energy Storage
THD	Total Harmonic Distortion
TOD	Time of Day
TOU	Time of Use
TQM	Total Quality Management
TransCo	Transmission Company
U	Thermal Conductance
UDC	Utility Distribution Company
UL	Underwriters Laboratories
UNIFORMAT II	The ASTM UNIFORMAT II Classification for Building Elements (E1557-97) a format for classifying major facility components common to most buildings.
USGBC	US Green Building Council
V	Volts Voltage

V	Volume
v	Specific Volume
VAV	Variable Air Volume
VDT	Video Display Terminal
VFD	Variable Frequency Drive
VHO	Very High Output
VSD	Variable Speed Drive
W	Watts
W	Width
WB	Wet bulb
WH Wh	Watt Hours
Year built	The year that a building or addition was originally built based on substantial completion or occupancy.
Z	Electrical Impedance