

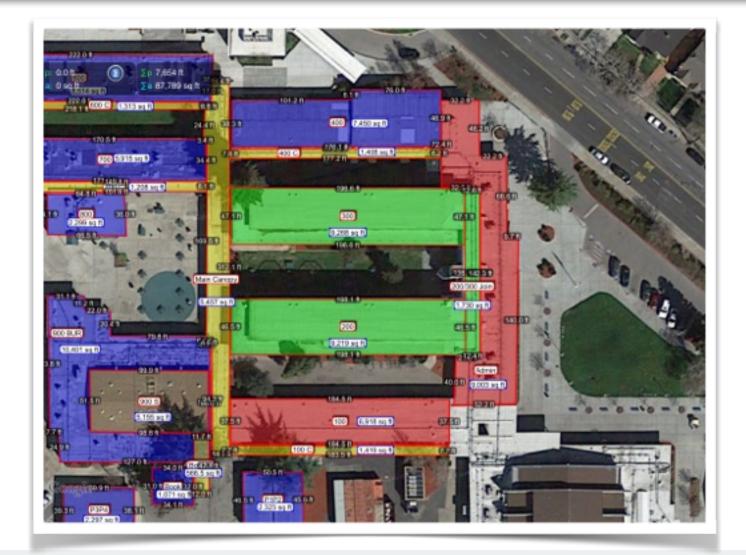


BUILDING	100 and Administ	tratio	n				Ē	N (G I N E E R I N IG SERVICES FOR THE BUILDING ENVI	G ELOPE
ROOF SQ FT	16,000							_		
ROOF CONSTRU	JCTION									
ROOF AGE	2006	⋖	0-5 YEARS		5-10 YEARS		10-15 YEARS		15+ YEARS	
DECK TYPE	METAL		PLYWOOD		PLANK		CONCRETE		LW CONCRETE	
INSULATION	NONE	4	ISO		FIBER		PERLITE		STYRO	
INSUL THICK	1 INCH		2 INCH		3 INCH		4 INCH		TAPERED	
MEMBRANE	METAL SS		SINGLE PLY		BUR	✓	MOD BIT		TWO SYSTEMS	
MEM SURFACE	COATING		MS CAP	\checkmark	GRAVEL		SMOOTH		GRANULE	
FLASHINGS	CAPSHEET	\	HYPALON							
DRAINAGE	JOSAM	~	SCUPPERS		GUTTERS	~	OVER EDGE			
SLOPE	NONE		1:12	✓	2:12		3:12		6:12	
ROOF CONDITIC	ON - RATINGS (1-1	0) ar	nd RECOMMENDA	TIOI	NS					#
FIELD		RE	EPAIRS NEEDED						RATING	5
			RESEAL SEAMS			5	SLIGHT RIDGING	~	SS RATING	
	CLEA	AR R	OOF OF DEBRIS		DE	CK F	REPAIR NEEDED			
	DECK F	REPA	AIR SUSPECTED		RESEAL/F	RPLA	CE FASTENERS			
		CF	RAZE CRACKING				TLE MEMBRANE			
		EX	CESSIVE WEAR				BERS EXPOSED			
PITCH/POND			EPAIRS NEEDED		WEWST O		DEI (O E) (I O O E D		RATING	5
	F		ONDING AREAS		FIX	DE	CK DEFLECTION			
		;	SOME PONDING		E	XCE:	SSIVE PONDING			
FLASHING		RE	EPAIRS NEEDED						RATING	5
		RES	EAL/REPAIR ALL		RES	EAL/	REPAIR SELECT		SS RATING	
			ECOAT AC DUCT		RE	SEA	L/RECOAT WALL			
	RESE		WALL FLASHING						5.170.00	_
DRAINAGE	4 D D /E		EPAIRS NEEDED ANCE CRICKETS	V	4 DD/EN	лы л п	NCE OVERFLOW		RATING	5
	ADDIE	ZINIT <i>F</i>	CLEAR DRAINS		ADD/EI	ипжі	ADD GUTTER			
	GUTT	ER F	REPAIR NEEDED		GUTTE	R CC	DATING NEEDED	7		
PENETRATION		RE	EPAIRS NEEDED						RATING	5
		RES	EAL/REPAIR ALL		RES	EAL/	REPAIR SELECT			
		REP	LACE SKYLIGHT		RAISE HEIG	HT V	WHEN POSSIBLE			
ADDITIONAL			CTION NEEDED							
			ROOF ACCESS		ADD	EXT	ERNAL LADDER			
MAINTENANCE			AD EQUIPMENT DRAINS CLEAN		VEED !	\ \ /\T	ERWAYS CLEAN			
WAINTENANCE			UNTIL REROOF		NEEP	VVAI	TRIM TREES			
			OOF OF DEBRIS		HVAC I	REPA	AIR SUSPECTED			
	Н	IAZN	IAT SUSPECTED		KEEP	SS G	UTTERS CLEAR			
LEAKS	Е	VIDI	ENCE OF LEAKS		YES		NO	√		
ROOF CONDITIC	ON - OVERALL SYS	STE	M RATING							
VERY POOR					REPLACE OR C	OAT	IMMEDIATELY - S	SPOT	Γ REPAIRS ONLY	
POOR					REPLACE OR (COAT	IN 1-2 YEARS - S	SPOT	Γ REPAIRS ONLY	
FAIR							REPLACE OF	CO	AT IN 3-5 YEARS	
MARGINAL							REPLACE OR	COA	T IN 5-10 YEARS	✓
GOOD							REPLACE OR C	OAT	IN 10-15 YEARS	

EXCELLENT

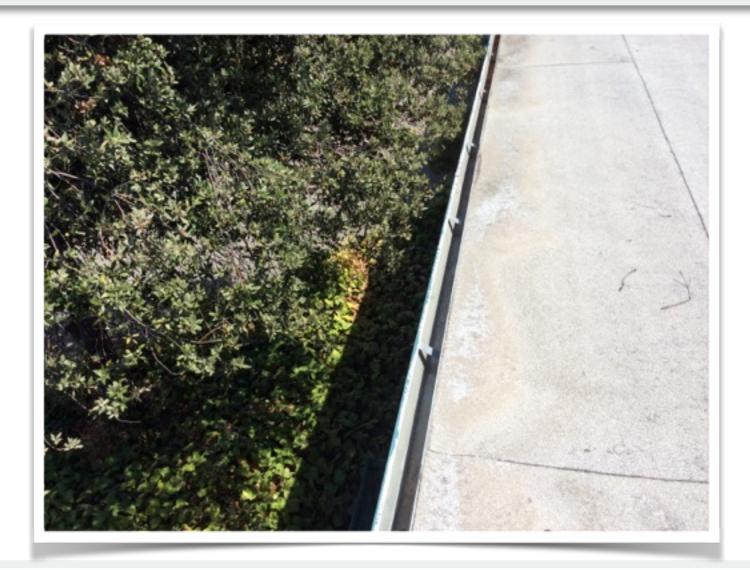
THIS ROOF IS SHOWING SOME AGE HOWEVER NO REPAIRS ARE NEEDED. THE ADJACENT CANOPY IS IN POOR CONDITION.

BUDGET ESTIMATES	
IMMEDIATE REPAIRS AS RECOMMENDED	\$0.00
YEARLY PREVENTIVE MAINENANCE	\$2,500.00
ROOF RECOATING	\$0.00
ROOF REPLACEMENT	\$240,000.00





Although the gutters are not rusting it is recommended to coat them when re-roofed.



The base flashing on the Admin building is showing signs of aging - some craze cracking.



BUILDING INFOR	RMATION					
FACILITY	James Lick HS					
DATE	August 20, 2014					
BUILDING	1000					
ROOF SQ FT	16,400					
ROOF CONSTRU	JCTION					
ROOF AGE	2005	V	0-5 YEARS	5-10 YEARS	3	10-15 YE



ROOF SQ FT	16,400						E	VGIVEERIN	IG SERVICES FOR THE BUILDING ENVE	LOPE
ROOF CONSTRU			_		_		_	-	_	_
ROOF AGE	2005	V	0-5 YEARS		5-10 YEARS		10-15 YEARS		15+ YEARS	
DECK TYPE	METAL		PLYWOOD		PLANK		CONCRETE		LW CONCRETE	
INSULATION	NONE	_	ISO		FIBER		PERLITE		STYRO	
INSUL THICK	1 INCH		2 INCH		3 INCH		4 INCH		TAPERED	
MEMBRANE	METAL SS		SINGLE PLY		BUR		MOD BIT		TWO SYSTEMS	
MEM SURFACE	COATING		MS CAP		GRAVEL		SMOOTH		GRANULE	
FLASHINGS	CAPSHEET		HYPALON							
DRAINAGE	JOSAM		SCUPPERS		GUTTERS	V	OVER EDGE			
SLOPE	NONE		1:12		2:12	✓	3:12		6:12	
ROOF CONDITION	ON - RATINGS (1-1	0) ai		ATIOI	NS					#
FIELD			EPAIRS NEEDED		10	-			RATING	6
1122		1 (1	RESEAL SEAMS		REDAIR R	LIST	ERS or RIDGING		SS RATING	
	CI E/	\D D	OOF OF DEBRIS				REPAIR NEEDED			
			AIR SUSPECTED				ACE FASTENERS			
	BEOK		RAZE CRACKING				TLE MEMBRANE			
			(CESSIVE WEAR				BERS EXPOSED			
PITCH/POND			EPAIRS NEEDED		WEWDRAN	IC FI	BERS EXPUSED		RATING	8
THOM/TOND	F		PONDING AREAS		FIX	(DF	CK DEFLECTION		IVATINO	O
			SOME PONDING				SSIVE PONDING			
FLASHING		RI	EPAIRS NEEDED						RATING	6
		RES	EAL/REPAIR ALL		RES	EAL/	REPAIR SELECT		SS RATING	
	RESEA	AL/R	ECOAT AC DUCT		RE	SEA	L/RECOAT WALL			
	RESI		WALL FLASHING							
DRAINAGE	4 D D //		EPAIRS NEEDED ANCE CRICKETS		4 DD/E	.11.1 \(\dagger{1} \)	NCE OVERFLOW		RATING	6
	ADD/E	ZINIT/	CLEAR DRAINS		ADD/EI	νпΑι	ADD GUTTER			
	GUTT	ER I	REPAIR NEEDED	7	GUTTE	R CC	DATING NEEDED	I		
PENETRATION		RI	EPAIRS NEEDED						RATING	6
		RES	EAL/REPAIR ALL		RES	EAL/	REPAIR SELECT			
		REP	LACE SKYLIGHT		RAISE HEIG	HT V	VHEN POSSIBLE			
ADDITIONAL			ACTION NEEDED							
			E ROOF ACCESS		ADD	EXT	ERNAL LADDER			
MAINTENANCE			AD EQUIPMENT P DRAINS CLEAN		KEED	۱۸/ΔΤ	ERWAYS CLEAN			
WAINTENANCE			UNTIL REROOF		KELI	V V/~\ I	TRIM TREES			
			OOF OF DEBRIS		HVAC	REP/	AIR SUSPECTED			
	H	IAZN	MAT SUSPECTED		KEEP	SS G	GUTTERS CLEAR			
LEAKS	E	EVID	ENCE OF LEAKS		YES		NO	\		
ROOF CONDITIO	ON - OVERALL SY	STEI	M RATING							
VERY POOR					REPLACE OR C	COAT	IMMEDIATELY - S	SPOT	REPAIRS ONLY	
POOR					REPLACE OR (COAT	Γ IN 1-2 YEARS - S	SPOT	Γ REPAIRS ONLY	
FAIR							REPLACE OF	R CO	AT IN 3-5 YEARS	
MARGINAL							REPLACE OR	COA	T IN 5-10 YEARS	⋖

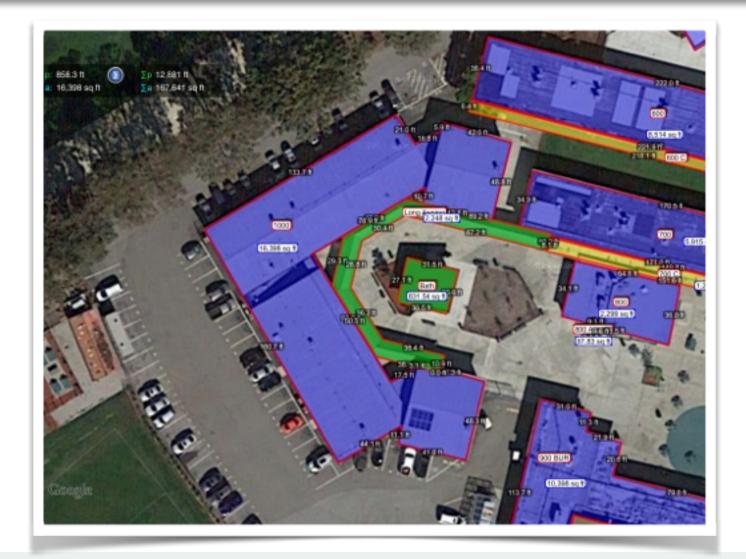
EXCELLENT

GOOD

THIS ROOF IS AGING WELL - NO REPAIRS NEEDED. THE GUTTERS ARE RUSTING QUITE HEAVILY HOWEVER -CONSIDER ADDING GUTTER COATING TO THE SCOPE OF ANOTHER ROOF PROJECT.

REPLACE OR COAT IN 10-15 YEARS

	BUDGET ESTIMATES
\$0.00	IMMEDIATE REPAIRS AS RECOMMENDED
\$1,500.00	YEARLY PREVENTIVE MAINENANCE
\$0.00	ROOF RECOATING
T \$246,000.00	ROOF REPLACEMENT

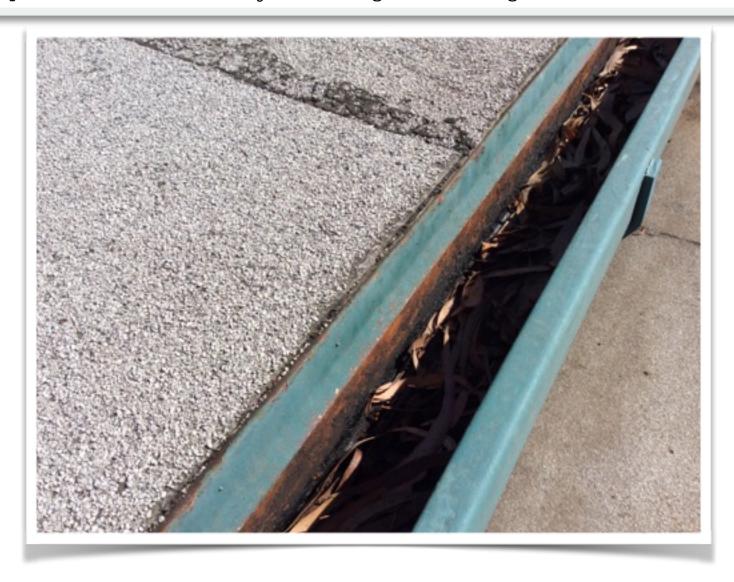




The photo below shows some normal aging - the roof should last another five-plus years.



The photo below shows the heavy rust in the gutters - coating them should be considered.



BUILDING INFOR	RMATION					
FACILITY	James Lick HS					
DATE	August 20, 2014					
BUILDING	1300					
ROOF SQ FT	11,500					
ROOF CONSTRUCTION						

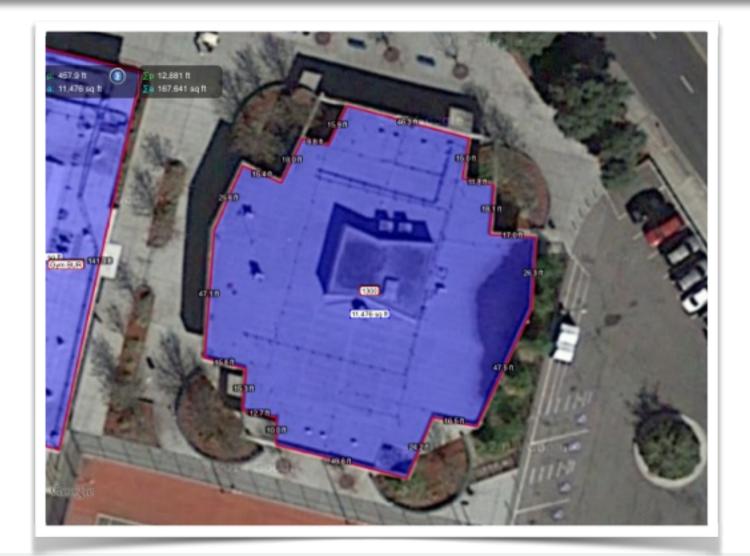


	1300							ENGINEERIN	IG SERVICES FOR THE BUILDING ENVI	ELOPE
ROOF SQ FT	11,500							_		
ROOF CONSTRU	UCTION									
ROOF AGE	2005	⋖	0-5 YEARS		5-10 YEARS		10-15 YEARS		15+ YEARS	
DECK TYPE	METAL		PLYWOOD		PLANK		CONCRETE		LW CONCRETE	
INSULATION	NONE	⋖	ISO		FIBER		PERLITE		STYRO	
INSUL THICK	1 INCH		2 INCH		3 INCH		4 INCH		TAPERED	
MEMBRANE	METAL SS		SINGLE PLY		BUR	4	MOD BIT		TWO SYSTEMS	
MEM SURFACE	COATING		MS CAP	✓	GRAVEL	\	SMOOTH		GRANULE	
FLASHINGS	CAPSHEET	⋖	HYPALON							
DRAINAGE	JOSAM	\checkmark	SCUPPERS		GUTTERS		OVER EDGE			
SLOPE	NONE		1:12	⋖	2:12		3:12		6:12	
ROOF CONDITIO	ON - RATINGS (1-1	l0) and l	RECOMMENDA	1OITA	NS					#
FIELD		REPA	AIRS NEEDED						RATING	3
		RE	SEAL SEAMS		RID	GING	THROUGHOUT	✓	SS RATING	
	CLEA	AR ROC	OF OF DEBRIS		DE	CK F	REPAIR NEEDED			
	DECK	REPAIR	SUSPECTED		RESEAL/F	RPLA	CE FASTENERS			
		CRAZ	ZE CRACKING	~	i	BRIT	TLE MEMBRANE			
		EXCE	ESSIVE WEAR		MEMBRAN	NE FII	BERS EXPOSED			
PITCH/POND		REPA	AIRS NEEDED						RATING	6
	F	ILL POI	NDING AREAS		FI>	(DEC	CK DEFLECTION			
		SO	ME PONDING		E	XCE	SSIVE PONDING			
FLASHING		REPA	AIRS NEEDED	\					RATING	3
		RESEA	L/REPAIR ALL	✓	RES	EAL/I	REPAIR SELECT		SS RATING	
			OAT AC DUCT		RE	SEAL	_/RECOAT WALL			
DDAINAGE	RESI		ALL FLASHING						DATINO	
DRAINAGE	Δ D D /E		AIRS NEEDED CE CRICKETS	V	ADD/E	NΗΔΝ	ICE OVERFLOW		RATING	6
	ADDIL		LEAR DRAINS		ADD/LI	NI IZI	ADD GUTTER			
	GUTT		PAIR NEEDED		GUTTE	R CC	DATING NEEDED			
PENETRATION		REPA	AIRS NEEDED	✓					RATING	4
		RESEA	L/REPAIR ALL	✓	RES	EAL/I	REPAIR SELECT			
		REPLA	CE SKYLIGHT		RAISE HEIG	HT W	VHEN POSSIBLE			
ADDITIONAL		ACT	ΓΙΟΝ NEEDED							
			OOF ACCESS		ADD	EXT	ERNAL LADDER			
BAAINITENIANIOE			D EQUIPMENT		WEED	\				
MAINTENANCE			RAINS CLEAN NTIL REROOF		KEEP	WAII	ERWAYS CLEAN TRIM TREES			
			OF OF DEBRIS		НУАС	REPA	AIR SUSPECTED			
			SUSPECTED		_		UTTERS CLEAR			
LEAKS			CE OF LEAKS	V	YES		NO			
	ON - OVERALL SY	_								
VERY POOR	J. TOVERNEL OT	OTENIT			REPLACE OR C	COAT	IMMEDIATELY -	SPO	T REPAIRS ONLY	
POOR									T REPAIRS ONLY	
FAIR									AT IN 3-5 YEARS	

ROOF CONDITIO	ON - OVERALL SYSTEM RATING
VERY POOR	REPLACE OR COAT IMMEDIATELY - SPOT REPAIRS ONLY
POOR	REPLACE OR COAT IN 1-2 YEARS - SPOT REPAIRS ONLY
FAIR	REPLACE OR COAT IN 3-5 YEARS
MARGINAL	REPLACE OR COAT IN 5-10 YEARS
GOOD	REPLACE OR COAT IN 10-15 YEARS
EXCELLENT	ONLY IF ROOF IS LESS THAN 5 YEARS OLD

ALTHOUGH IN BAD SHAPE FOR ITS AGE, WITH REPAIRS THE SYSTEM SHOULD LAST ANOTHER FIVE YEARS. HOWEVER THE FIELD RIDGING IS TOO NUMEROUS TO REPAIR AND MAY DICTATE WHEN THE SYSTEM ULTIMATELY FAILS.

	BUDGET ESTIMATES
\$15,000.00	IMMEDIATE REPAIRS AS RECOMMENDED
\$1,500.00	YEARLY PREVENTIVE MAINENANCE
\$0.00	ROOF RECOATING
\$172,500.00	ROOF REPLACEMENT





All flashing and penetration seams/joints need to be resealed.



The photo below shows the edge detail failing.



BUILDING INFOR	RMATION
FACILITY	James Lick HS
DATE	August 20, 2014
BUILDING	200 and 300
ROOF SQ FT	20,000
ROOF CONSTRI	ICTION



DOILDING	200 and 300							NGINEERIN	IG SERVICES FOR THE BUILDING ENVE	ELOPE
ROOF SQ FT	20,000							_		
ROOF CONSTRU	JCTION									
ROOF AGE	1995	✓	0-5 YEARS		5-10 YEARS		10-15 YEARS		15+ YEARS	
DECK TYPE	METAL		PLYWOOD	✓	PLANK		CONCRETE		LW CONCRETE	
INSULATION	NONE	~	ISO		FIBER		PERLITE		STYRO	
INSUL THICK	1 INCH		2 INCH		3 INCH		4 INCH		TAPERED	
MEMBRANE	METAL SS		SINGLE PLY		BUR		MOD BIT		TWO SYSTEMS	
MEM SURFACE	COATING		MS CAP		GRAVEL		SMOOTH		GRANULE	
FLASHINGS	CAPSHEET	~	HYPALON							
DRAINAGE	JOSAM	✓	SCUPPERS		GUTTERS		OVER EDGE			
SLOPE	NONE		1:12	4	2:12		3:12		6:12	
ROOF CONDITIO	ON - RATINGS (1-1	0) ar	nd RECOMMENDA	ATIOI	NS					#
FIELD			EPAIRS NEEDED						RATING	2
			RESEAL SEAMS		REPAIR B	LIST	ERS or RIDGING		SS RATING	
	CL F.A		OOF OF DEBRIS				REPAIR NEEDED			
			AIR SUSPECTED				CE FASTENERS			
			RAZE CRACKING	<u></u>			TLE MEMBRANE			
			CESSIVE WEAR	_			BERS EXPOSED	_		
PITCH/POND			EPAIRS NEEDED		IVILIVIDIVAL	V L 1 1	DENO EXI OOED		RATING	3
THOM/NOND	F		ONDING AREAS		FIX	(DE(CK DEFLECTION	~	10/11/10	
			SOME PONDING				SSIVE PONDING	_		
FLASHING		RE	EPAIRS NEEDED						RATING	3
		RES	EAL/REPAIR ALL		RES	EAL/	REPAIR SELECT		SS RATING	
	RESEA	AL/RE	ECOAT AC DUCT		RE	SEA	L/RECOAT WALL			
	RESI	EAL \	WALL FLASHING							_
DRAINAGE			EPAIRS NEEDED						RATING	2
	ADD/E	ENHA	NCE CRICKETS	✓	ADD/EN	IAH	NCE OVERFLOW			
	CUTT	TD F	CLEAR DRAINS REPAIR NEEDED	V	CUTTE	D CC	ADD GUTTER OATING NEEDED			
PENETRATION	GUII		EPAIRS NEEDED		GUITE	K CC	DATING NEEDED	•	RATING	3
LIVETTON			EAL/REPAIR ALL		RES	EAL/	REPAIR SELECT		10.01110	
		_	LACE SKYLIGHT				VHEN POSSIBLE			
ADDITIONAL		Д	CTION NEEDED							
	IMPF	ROVE	ROOF ACCESS	\	ADD	EXT	ERNAL LADDER	\		
	REMOV	E DE	AD EQUIPMENT							
MAINTENANCE			DRAINS CLEAN		KEEP	WAT	ERWAYS CLEAN			
			UNTIL REROOF	⋖			TRIM TREES			
			OOF OF DEBRIS				AIR SUSPECTED			
LEAKS			AT SUSPECTED ENCE OF LEAKS	_		SS G	SUTTERS CLEAR			
				•	YES		NO			_
	ON - OVERALL SYS	STEN	RATING)		000		
VERY POOR									F REPAIRS ONLY	
POOR					KEPLACE OR (JUA1	_		T REPAIRS ONLY	
FAIR							REPLACE O	≺ CO	AT IN 3-5 YEARS	

MARGINAL

EXCELLENT

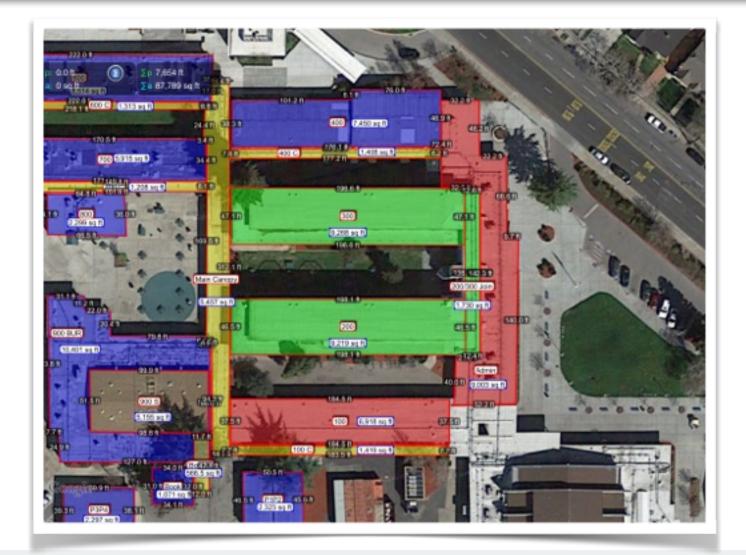
GOOD

ALTHOUGH THESE TWO ROOFS LOOK MUCH BETTER THAN 400, 600, AND 700 THEY ARE MANY YEARS PAST THEIR EXPECTED LIFESPAN. CORE CUTS REVEALED THE DECK AS HAVING EXTENSIVE DRYROT - AT LEAST AROUND THE PERIMETER EAVES. IT IS UNSAFE TO WALK ON THE ROOF PERIMETER.

REPLACE OR COAT IN 5-10 YEARS

REPLACE OR COAT IN 10-15 YEARS

	BUDGET ESTIMATES
\$0.00	IMMEDIATE REPAIRS AS RECOMMENDED
\$2,500.00	YEARLY PREVENTIVE MAINENANCE
\$0.00	ROOF RECOATING
\$300,000.00	ROOF REPLACEMENT



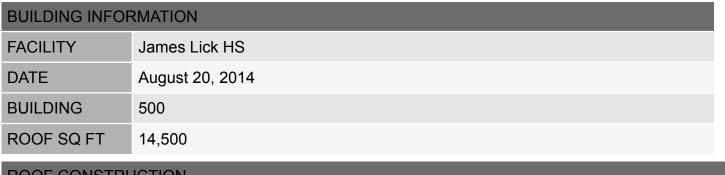


The photo below shows excessive ponding and signs of leaks.



It is suspected that most of the decking over the eaves has dryrot.







ROOF SQ FT	14,500						E	VGIVEERIN	IG SERVICES FOR THE BUILDING ENVE	LOPE
ROOF CONSTRU	JCTION		_		_		_			
ROOF AGE	2012	✓	0-5 YEARS		5-10 YEARS		10-15 YEARS		15+ YEARS	
DECK TYPE	METAL		PLYWOOD	✓	PLANK		CONCRETE		LW CONCRETE	
INSULATION	NONE	✓	ISO		FIBER		PERLITE		STYRO	
INSUL THICK	1 INCH		2 INCH		3 INCH		4 INCH		TAPERED	
MEMBRANE	METAL SS		SINGLE PLY		BUR		MOD BIT		TWO SYSTEMS	
MEM SURFACE	COATING	✓	MS CAP	✓	GRAVEL		SMOOTH	✓	GRANULE	
FLASHINGS	CAPSHEET	✓	HYPALON							
DRAINAGE	JOSAM	✓	SCUPPERS		GUTTERS	~	OVER EDGE			
SLOPE	SLIGHT	4	1:12		2:12		3:12		6:12	
ROOF CONDITIO	ON - RATINGS (1-1	0) ar	nd RECOMMENDA	ATIOI	NS					#
FIELD	,		EPAIRS NEEDED						RATING	7
			RESEAL SEAMS			RI	EPAIR BLISTERS	~	SS RATING	
	CLEA	AR R	OOF OF DEBRIS		DE		REPAIR NEEDED			
			AIR SUSPECTED		RESEAL/F	RPLA	ACE FASTENERS			
		CF	RAZE CRACKING				TLE MEMBRANE			
			CESSIVE WEAR				BERS EXPOSED			
PITCH/POND			EPAIRS NEEDED		MEMBIAN	.	BENO EXI GOED		RATING	6
11101111 01115	F		ONDING AREAS		FIX	(DE	CK DEFLECTION		10.000	
			SOME PONDING	✓			SSIVE PONDING			
FLASHING		RE	EPAIRS NEEDED	\					RATING	7
		RES	EAL/REPAIR ALL		RESEAL/RE	EPAII	R SELECT EDGE	✓	SS RATING	
	RESEA	AL/RI	ECOAT AC DUCT		RE	SEA	L/RECOAT WALL			
	RESI	EAL \	WALL FLASHING							
DRAINAGE			EPAIRS NEEDED						RATING	7
	ADD/E	ENHA	ANCE CRICKETS		ADD/EN	NHAI	NCE OVERFLOW			
	CUTT	ED E	CLEAR DRAINS REPAIR NEEDED		GUITTE	P CC	ADD GUTTER DATING NEEDED			
PENETRATION	0011		EPAIRS NEEDED		OOTIL	1. 0.0	DATING NEEDED		RATING	7
			EAL/REPAIR ALL		RES	EAL/	REPAIR SELECT			
		REP	LACE SKYLIGHT		RAISE HEIG	HT V	VHEN POSSIBLE			
ADDITIONAL		Α	CTION NEEDED							
	IMPF	ROVE	ROOF ACCESS		ADD	EXT	ERNAL LADDER	✓		
			AD EQUIPMENT							
MAINTENANCE			DRAINS CLEAN		KEEP	WAT	ERWAYS CLEAN			
			UNTIL REROOF		111/40		TRIM TREES			
			OOF OF DEBRIS				AIR SUSPECTED GUTTERS CLEAR			
LEAKS			ENCE OF LEAKS		YES		NO			
	ON - OVERALL SYS				120					
VERY POOR	OVERALL ST		M TO CHINO		REPLACE OR C	COAT	IMMEDIATELY - 9	SPO	T REPAIRS ONLY	
POOR							Γ IN 1-2 YEARS - S			
FAIR									AT IN 3-5 YEARS	
17 111							ILLI LAGE OF	. 55		

MARGINAL

EXCELLENT

GOOD

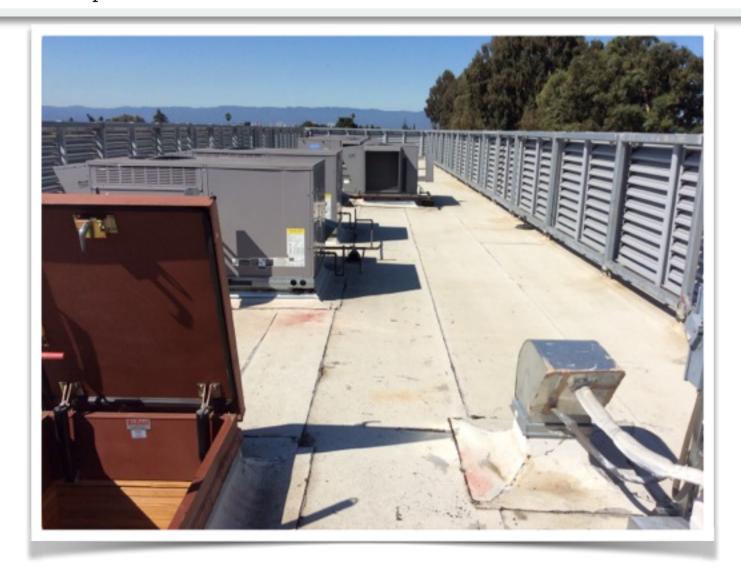
THIS IS A NEW ROOF AND SHOULD LAST FIFTEEN YEARS. HOWEVER IT IS LEAKING AND HAS SOME BLISTERS THAT NEED TO BE REPAIRED - HOPEFULLY UNDER WARRANTY. THE BLISTERS ARE A SIGN OF MOISTURE UNDER THE FELTS. ALSO REPAIR GAPS AT EDGE METAL PONDING LOCATIONS.

REPLACE OR COAT IN 5-10 YEARS

REPLACE OR COAT IN 10-15 YEARS

	BUDGET ESTIMATES
UNDER WARRANTY	IMMEDIATE REPAIRS AS RECOMMENDED
\$1,500.00	YEARLY PREVENTIVE MAINENANCE
\$0.00	ROOF RECOATING
\$217,500.00	ROOF REPLACEMENT



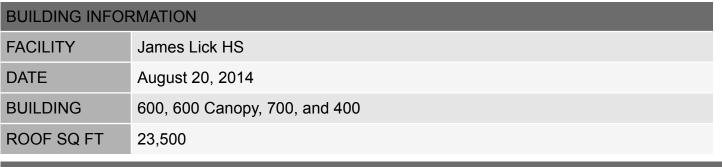


The photo below shows a large blister close to the hatch.



The photo below shows some ponding at the edge flashing.







BUILDING	600, 600 Canopy,	, 700	, and 400				Ě	NGIVEERIN	NG SERVICES FOR THE BUILDING ENVE	ELOPE
ROOF SQ FT	23,500									
ROOF CONSTRU	JCTION									
ROOF AGE	1995	\	0-5 YEARS		5-10 YEARS		10-15 YEARS		15+ YEARS	
DECK TYPE	METAL		PLYWOOD		PLANK	\	CONCRETE		LW CONCRETE	
INSULATION	NONE		ISO		FIBER		PERLITE		STYRO	
INSUL THICK	1 INCH		2 INCH		3 INCH		4 INCH		TAPERED	
MEMBRANE	METAL SS		SINGLE PLY		BUR	✓	MOD BIT		TWO SYSTEMS	
MEM SURFACE	COATING		MS CAP	✓	GRAVEL		SMOOTH		GRANULE	✓
FLASHINGS	CAPSHEET	V	HYPALON							
DRAINAGE	JOSAM	✓	SCUPPERS		GUTTERS	✓	OVER EDGE			
SLOPE	NONE		1:12	\	2:12		3:12		6:12	
POOF CONDITIO	DN - RATINGS (1-1	(1) ar		\TIOI	NS.					#
	M - KATINGS (T-T			1101	NO	-			RATING	1
FIELD			EPAIRS NEEDED							<u> </u>
			RESEAL SEAMS				ERS or RIDGING		SS RATING	
	CLEAR ROOF OF DEBRIS						REPAIR NEEDED			
	DECK	DECK REPAIR SUSPECTED				RPLA	ACE FASTENERS			
		CF	RAZE CRACKING		E	3RIT	TLE MEMBRANE			
		EX	CESSIVE WEAR	✓	MEMBRAN	IE FI	BERS EXPOSED	✓		
PITCH/POND		RI	EPAIRS NEEDED						RATING	6
	F	ILL F	ONDING AREAS		FIX	(DE	CK DEFLECTION			
		,	SOME PONDING		Е	XCE	SSIVE PONDING			
FLASHING			EPAIRS NEEDED		550		DEDAID OF LEAT		RATING	3
			EAL/REPAIR ALL				REPAIR SELECT		SS RATING	
			ECOAT AC DUCT		KE	SEA	L/RECOAT WALL			
DRAINAGE	RESI		EPAIRS NEEDED						RATING	3
DIV III VIOL	ADD/E		ANCE CRICKETS		ADD/EI	IAH	NCE OVERFLOW		1011110	
	7,007	,	CLEAR DRAINS		7,0072.		ADD GUTTER			
	GUTT	ER F	REPAIR NEEDED	✓	GUTTER COATING NEEDED					
PENETRATION		RI	EPAIRS NEEDED						RATING	3
		RES	EAL/REPAIR ALL		RES	EAL/	REPAIR SELECT			
		REP	LACE SKYLIGHT		RAISE HEIG	HT V	VHEN POSSIBLE			
ADDITIONAL		A	ACTION NEEDED							
			ROOF ACCESS	_	ADD	EXT	ERNAL LADDER	✓		
			AD EQUIPMENT							
MAINTENANCE			DRAINS CLEAN		KEEP	WAT	ERWAYS CLEAN			
			UNTIL REROOF	_		,, o	TRIM TREES			
			OOF OF DEBRIS	_			REPAIR NEEDED			
LEVIC			IAT SUSPECTED		YES		GUTTERS CLEAR			
LEAKS			ENCE OF LEAKS		YES	V	NO			
	ON - OVERALL SY	STE	RATING							
VERY POOR									T REPAIRS ONLY	
POOR					REPLACE OR (COA			T REPAIRS ONLY	
FAIR									OAT IN 3-5 YEARS	
MARGINAL									AT IN 5-10 YEARS	
COOD								TAO	IN 10 15 VEADS	

GOOD

EXCELLENT

MANY OF THE PENETRATION CAP FLASHING CAN BE REUSED. MANY OF THE PIPE SUPPORTS CAN BE REUSED. THE 600 CANOPY NEEDS TO BE ADDED TO THE SCOPE.

	BUDGET ESTIMATES
\$0.00	IMMEDIATE REPAIRS AS RECOMMENDED
\$3,000.00	YEARLY PREVENTIVE MAINENANCE
\$0.00	ROOF RECOATING
\$352,500.00	ROOF REPLACEMENT

REPLACE OR COAT IN 10-15 YEARS





The photo below shows the fibers exposed - the roof is well past it's end.



The attached canopy needs to be added to the Scope for roof replacement.



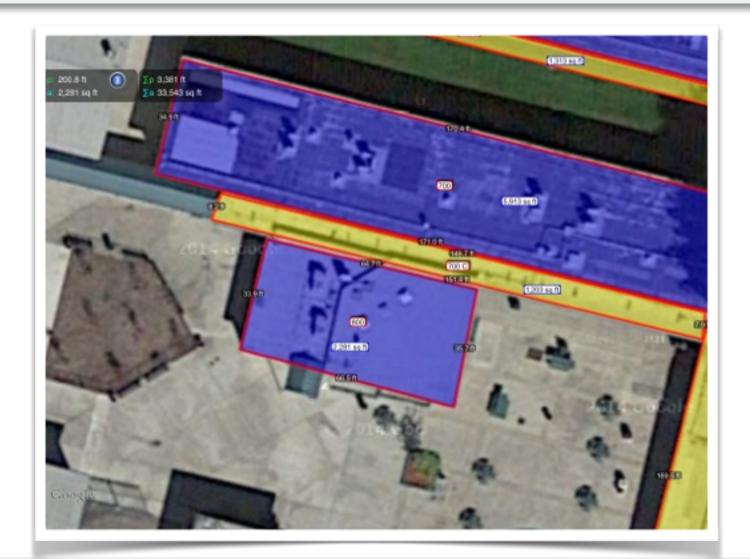
BUILDING INFOR	RMATION
FACILITY	James Lick HS
DATE	August 20, 2014
BUILDING	800
ROOF SQ FT	2,300



BUILDING	800						E	N (G I N E E R I N AG SERVICES FOR THE BUILDING EXVI	ELOPE
ROOF SQ FT	2,300							_		
ROOF CONSTRU	JCTION									
ROOF AGE	2005	\checkmark	0-5 YEARS		5-10 YEARS		10-15 YEARS		15+ YEARS	
DECK TYPE	METAL		PLYWOOD	\checkmark	PLANK		CONCRETE		LW CONCRETE	
INSULATION	NONE	✓	ISO		FIBER		PERLITE		STYRO	
INSUL THICK	1 INCH		2 INCH		3 INCH		4 INCH		TAPERED	
MEMBRANE	METAL SS		SINGLE PLY		BUR		MOD BIT		TWO SYSTEMS	
MEM SURFACE	COATING		MS CAP	\checkmark	GRAVEL		SMOOTH		GRANULE	
FLASHINGS	CAPSHEET		HYPALON							
DRAINAGE	JOSAM		SCUPPERS		GUTTERS		OVER EDGE	~		
SLOPE	NONE		1:12		2:12		3:12		6:12	
ROOF CONDITIO	ON - RATINGS (1-1	0) ar	nd RECOMMENDA	OITA	NS					#
FIELD		RE	EPAIRS NEEDED						RATING	6
			RESEAL SEAMS		REPAIR B	LIST	ERS or RIDGING		SS RATING	
	CLEA		OOF OF DEBRIS				REPAIR NEEDED			
			AIR SUSPECTED				CE FASTENERS			
	DEGIN.		RAZE CRACKING				TLE MEMBRANE			
			CESSIVE WEAR							
DITCH/DOND					MEMBRAN	NE FI	BERS EXPOSED		RATING	0
PITCH/POND			EPAIRS NEEDED CONDING AREAS		EIV	(DE(CK DEFLECTION		RATING	8
	Г		SOME PONDING				SSIVE PONDING			
		`	OOMET ONDING			XOL.	OOIVE I ONDING			
FLASHING	REPAIRS NEEDED								RATING	6
		RES	EAL/REPAIR ALL		RES	EAL/	REPAIR SELECT		SS RATING	
	RESEA	AL/RE	ECOAT AC DUCT		RE	SEA	L/RECOAT WALL			
	RES	EAL \	WALL FLASHING							
DRAINAGE		RE	EPAIRS NEEDED						RATING	6
	ADD/E	ENHA	ANCE CRICKETS		ADD/E	1AH/	NCE OVERFLOW			
			CLEAR DRAINS				ADD GUTTER			
	GUTT		REPAIR NEEDED		GUTTE	R CC	DATING NEEDED			_
PENETRATION			EPAIRS NEEDED						RATING	6
			EAL/REPAIR ALL				REPAIR SELECT			
		KEP	LACE SKYLIGHT		RAISE HEIG	ıHı V	VHEN POSSIBLE			
ADDITIONAL		Δ	CTION NEEDED							
7.001110147.2	IMPF		ROOF ACCESS		ADD	EXT	ERNAL LADDER			
	REMOV	E DE	AD EQUIPMENT							
MAINTENANCE	k	KEEP	DRAINS CLEAN		KEEP	WAT	ERWAYS CLEAN			
	SPOT RE	PAIR	UNTIL REROOF				TRIM TREES			
	CLEA	AR R	OOF OF DEBRIS		HVAC	REPA	AIR SUSPECTED	✓		
	F	IAZM	IAT SUSPECTED		KEEP	SS G	GUTTERS CLEAR			
LEAKS	E	EVIDE	ENCE OF LEAKS		YES		NO	✓		
ROOF CONDITIO	ON - OVERALL SY	STEN	M RATING							
VERY POOR					REPLACE OR C	COAT	IMMEDIATELY - S	SPOT	FREPAIRS ONLY	
POOR					REPLACE OR	COAT	Γ IN 1-2 YEARS - S	SPO	Γ REPAIRS ONLY	
FAIR							REPLACE OF	R CO	AT IN 3-5 YEARS	
MARGINAL							REPLACE OR	COA	T IN 5-10 YEARS	\checkmark
GOOD							REPLACE OR C	COAT	IN 10-15 YEARS	
EXCELLENT					C	NLY	IF ROOF IS LESS	THA	AN 5 YEARS OLD	
ADDITIONAL NO	TES									

THIS ROOF IS AGING WELL - NO REPAIRS NEEDED.

BUDGET ESTIMATES	
IMMEDIATE REPAIRS AS RECOMMENDED	\$0.00
YEARLY PREVENTIVE MAINENANCE	\$750.00
ROOF RECOATING	\$0.00
ROOF REPLACEMENT	\$34,500.00





The photo below shows that the AC ducts may need to be resealed soon.



Prevent AC units from leaking directly on the roof.



BUILDING INFORMATION							
FACILITY	James Lick HS						
DATE	August 20, 2014						
BUILDING	900 BUR						
ROOF SQ FT	10,000						
ROOF CONSTRU	JCTION						



20,22,,,,	OOO DOIN							NGINEERII	NG SERVICES FOR THE BUILDING ENVE	ELOPE
ROOF SQ FT	10,000									
ROOF CONSTRU	JCTION									
ROOF AGE	1995	✓	0-5 YEARS		5-10 YEARS		10-15 YEARS		15+ YEARS	
DECK TYPE	METAL		PLYWOOD		PLANK	\checkmark	CONCRETE		LW CONCRETE	
INSULATION	NONE	✓	ISO		FIBER		PERLITE		STYRO	
NSUL THICK	1 INCH		2 INCH		3 INCH		4 INCH		TAPERED	
MEMBRANE	METAL SS		SINGLE PLY		BUR		MOD BIT		TWO SYSTEMS	
MEM SURFACE	COATING		MS CAP	✓	3-PLY		GRANULE	✓	2 SYSTEMS	✓
FLASHINGS	CAPSHEET	~	HYPALON							
DRAINAGE	JOSAM		SCUPPERS		GUTTERS		OVER EDGE			
SLOPE	NONE		1:12	✓	2:12		3:12		6:12	
ROOF CONDITIO	N - RATINGS (1-1	0) an	d RECOMMENDA	ATIOI	NS					#
FIELD			PAIRS NEEDED						RATING	
			RESEAL SEAMS		REPAIR B	LIST	ERS or RIDGING		SS RATING	
	CI E/						REPAIR NEEDED			
	CLEAR ROOF OF DEBRIS DECK REPAIR SUSPECTED						CE FASTENERS			
	CRAZE CRACKING						TLE MEMBRANE	_		
			CESSIVE WEAR					_		
					MEMBKAN	NE FI	BERS EXPOSED	✓	DATING	
PITCH/POND	Г		PAIRS NEEDED ONDING AREAS		FIX	(DE(CK DEFLECTION		RATING	(
	·		SOME PONDING				SSIVE PONDING			
			JOINET ONDING		_	, (OL	301721 31131113			
FLASHING		RE	PAIRS NEEDED						RATING	3
		RESE	AL/REPAIR ALL		RES	EAL/	REPAIR SELECT		SS RATING	
	RESEA	AL/RE	COAT AC DUCT		RE	SEA	L/RECOAT WALL			
	RESI	EAL V	VALL FLASHING							
DRAINAGE		RE	PAIRS NEEDED						RATING	(
	ADD/E	ENHA	NCE CRICKETS		ADD/EN	1AH	NCE OVERFLOW			
			CLEAR DRAINS				ADD GUTTER			
DENIETDATION	GUTT		EPAIR NEEDED	V	GUTTE	R CC	DATING NEEDED	✓	DATINO	
PENETRATION			PAIRS NEEDED EAL/REPAIR ALL		DEC	⊏ ∧ι/	REPAIR SELECT		RATING	3
		_	ACE SKYLIGHT				VHEN POSSIBLE			
			JACE CITTETIN		TO WOL TIEFO		VIIEIVI OOOIDEE			
ADDITIONAL		A	CTION NEEDED							
	IMPF	ROVE	ROOF ACCESS		ADD	EXT	ERNAL LADDER			
	REMOV	E DE	AD EQUIPMENT							
MAINTENANCE	k	KEEP	DRAINS CLEAN		KEEP	WAT	ERWAYS CLEAN			
	SPOT RE	PAIR	UNTIL REROOF				TRIM TREES			
			OOF OF DEBRIS	_	HV	/AC F	REPAIR NEEDED	✓		
			AT SUSPECTED	V			UTTERS CLEAR			
EAKS	E	VIDE	NCE OF LEAKS		YES	✓	NO			
ROOF CONDITIO	N - OVERALL SY	STEM	RATING							
/ERY POOR					REPLACE OR C	COAT	IMMEDIATELY -	SPO	T REPAIRS ONLY	~
POOR					REPLACE OR (COAT	IN 1-2 YEARS -	SPO	T REPAIRS ONLY	

ROOF CONDITIO	N - OVERALL SYSTEM RATING
VERY POOR	REPLACE OR COAT IMMEDIATELY - SPOT REPAIRS ONLY
POOR	REPLACE OR COAT IN 1-2 YEARS - SPOT REPAIRS ONLY
FAIR	REPLACE OR COAT IN 3-5 YEARS
MARGINAL	REPLACE OR COAT IN 5-10 YEARS
GOOD	REPLACE OR COAT IN 10-15 YEARS
EXCELLENT	ONLY IF ROOF IS LESS THAN 5 YEARS OLD

THIS ROOF SHOULD BE INCLUDED IN THE CURRENT ROOF REPLACEMENT SCOPE. MANY OF THE PIPE SUPPORTS CAN BE REUSED.

DGET ESTIMATES	
IMMEDIATE REPAIRS AS RECOMMENDED	\$0.00
YEARLY PREVENTIVE MAINENANCE	\$1,500.00
ROOF RECOATING	\$0.00
ROOF REPLACEMENT	\$150,000.00





The photo below shows the fibers exposed - the roof is well past it's end.



Some repairs are needed on AC units.







BUILDING	900 Shingle Secti	on							E N G I N E E R I N G ENGINEERING SERVICES FOR THE BUILDING ENVELOPE			
ROOF SQ FT	5,200							_				
ROOF CONSTRU	JCTION											
ROOF AGE	1995	✓	0-5 YEARS		5-10 YEARS		10-15 YEARS		15+ YEARS			
DECK TYPE	METAL		PLYWOOD		PLANK	~	CONCRETE		LW CONCRETE			
INSULATION	NONE	✓	ISO		FIBER		PERLITE		STYRO			
INSUL THICK	1 INCH		2 INCH		3 INCH		4 INCH		TAPERED			
MEMBRANE	METAL SS		SINGLE PLY		BUR		MOD BIT		SHINGLE			
MEM SURFACE	COATING		MS CAP		GRAVEL		SMOOTH		GRANULE			
FLASHINGS	CAPSHEET		HYPALON									
DRAINAGE	JOSAM		SCUPPERS		GUTTERS	7	OVER EDGE					
SLOPE	NONE		1:12		2:12	_	3:12		6:12			
							0.12		0.1.2	#		
	ON - RATINGS (1-1			AHOI	N 3			•	RATING	#		
FIELD			PAIRS NEEDED									
			RESEAL SEAMS				ERS or RIDGING		SS RATING			
	CLEAR ROOF OF DEBRIS				DE	CK F	REPAIR NEEDED					
	DECK	REPA	IR SUSPECTED		RESEAL/F	RPLA	CE FASTENERS					
	CRAZE CRACKING				i i	3RIT	TLE MEMBRANE					
		EX	CESSIVE WEAR		MEMBRAN	IE FI	BERS EXPOSED					
PITCH/POND		RE	PAIRS NEEDED						RATING	8		
	F	ILL P	ONDING AREAS		FIX	(DE	CK DEFLECTION					
		S	SOME PONDING		E	XCE	SSIVE PONDING					
FLASHING		RE	PAIRS NEEDED						RATING	5		
		RESE	EAL/REPAIR ALL		RES	EAL/	REPAIR SELECT		SS RATING			
			COAT AC DUCT		RE	SEA	L/RECOAT WALL					
	RESI		VALL FLASHING									
DRAINAGE			PAIRS NEEDED						RATING	4		
	ADD/ENHANCE CRICKETS				ADD/EI	NHAI	NCE OVERFLOW					
	CULT		CLEAR DRAINS EPAIR NEEDED	V	CUTTE	D C(ADD GUTTER DATING NEEDED	V				
PENETRATION	GOTT		PAIRS NEEDED		GOTTE	K CC	DATING NEEDED	•	RATING	5		
ILINETIVATION			EAL/REPAIR ALL		RESEAL/REPAIR SELECT				IVATINO			
			ACE SKYLIGHT		RAISE HEIG							
ADDITIONAL		A	CTION NEEDED									
	IMPF	ROVE	ROOF ACCESS		ADD	EXT	ERNAL LADDER					
	REMOV	E DE	AD EQUIPMENT									
MAINTENANCE	k	KEEP	DRAINS CLEAN		KEEP	WAT	ERWAYS CLEAN					
	SPOT RE	PAIR	UNTIL REROOF				TRIM TREES					
	CLEA	AR RO	OOF OF DEBRIS		HV	/AC F	REPAIR NEEDED					
	F	IAZM.	AT SUSPECTED		KEEP	SS G	SUTTERS CLEAR					
LEAKS	E	VIDE	NCE OF LEAKS		YES		NO	\				
ROOF CONDITION	ON - OVERALL SY	STEM	RATING									
VERY POOR					REPLACE OR C	COAT	IMMEDIATELY -	SPO	T REPAIRS ONLY			
POOR					REPLACE OR (COAT	Γ IN 1-2 YEARS - :	SPO	T REPAIRS ONLY			
FAIR							REPLACE OF	R CO	AT IN 3-5 YEARS			
MARGINAL							REPLACE OR	COA	T IN 5-10 YEARS	✓		
GOOD							REPLACE OR (COAT	IN 10-15 YEARS			
EXCELLENT					C	ONLY IF ROOF IS LESS THAN 5 YEARS OLD						

THIS ROOF SHOULD LAST ANOTHER 10 YEARS. INCUDE THE GUTTER WORK WITH THE BUR REPLACEMENT.

BUDGET ESTIMATES	
IMMEDIATE REPAIRS AS RECOMMENDED	\$0.00
YEARLY PREVENTIVE MAINENANCE	\$0.00
ROOF RECOATING	\$0.00
ROOF REPLACEMENT	\$78,000.00





The photo below shows the gutters are rusting heavily.



The shingles are showing some wear.



BUILDING INFOR	RMATION
FACILITY	James Lick HS
DATE	August 20, 2014
BUILDING	Boiler
ROOF SQ FT	2,080
DOOF CONCEDI	ICTION



ROOF SQ FT	2,080							NUIVEEKII	IS SERVICES FOR THE BUILDING ENVE	LOPE
ROOF CONSTRU	JCTION									
ROOF AGE	UNKNOWN		0-5 YEARS		5-10 YEARS		10-15 YEARS		15+ YEARS	✓
DECK TYPE	METAL		PLYWOOD		PLANK		CONCRETE	✓	LW CONCRETE	
INSULATION	NONE		ISO		FIBER		PERLITE		STYRO	
INSUL THICK	1 INCH		2 INCH		3 INCH		4 INCH		TAPERED	
MEMBRANE	METAL SS		SINGLE PLY		BUR	⋖	MOD BIT		TWO SYSTEMS	
MEM SURFACE	COATING		MS CAP	✓	3-PLY		GRANULE		SMOOTH	
FLASHINGS	CAPSHEET	✓	HYPALON							
DRAINAGE	JOSAM	✓	SCUPPERS		GUTTERS		OVER EDGE			
SLOPE	NONE		1:12	✓	2:12		3:12		6:12	
ROOF CONDITIO	ON - RATINGS (1-1	0) an	nd RECOMMENDA	IOITA	NS					#
FIELD			EPAIRS NEEDED						RATING	3
T ILLD			RESEAL SEAMS		DEDAID B	LICT	ERS or RIDGING		SS RATING	
							REPAIR NEEDED		001011110	
			OOF OF DEBRIS							
	DECK		AIR SUSPECTED				ACE FASTENERS			
			AZE CRACKING				TLE MEMBRANE	✓		
		EX	CESSIVE WEAR	✓	MEMBRAN	IE FI	BERS EXPOSED			_
PITCH/POND			PAIRS NEEDED						RATING	3
	F		ONDING AREAS				CK DEFLECTION			
		(SOME PONDING	V	E	XCE:	SSIVE PONDING			
EL ACLUNIO		D.	DAIDO NEEDED						DATINIO	0
FLASHING			EPAIRS NEEDED EAL/REPAIR ALL		DES	E	REPAIR SELECT		RATING SS RATING	2
			ECOAT AC DUCT				L/RECOAT WALL		55 RATING	
			WALL FLASHING		KE	OLA	L/NLOOA! WALL			
DRAINAGE			EPAIRS NEEDED						RATING	3
	ADD/E		NCE CRICKETS	~	ADD/EN	1AH	NCE OVERFLOW	✓		
			CLEAR DRAINS				ADD GUTTER			
	GUTT	ER F	REPAIR NEEDED		GUTTE	R CC	DATING NEEDED			
PENETRATION		RE	PAIRS NEEDED	⋖					RATING	3
		RESI	EAL/REPAIR ALL	✓	RES	EAL/	REPAIR SELECT			
		REPI	LACE SKYLIGHT		RAISE HEIG	HT V	VHEN POSSIBLE	✓		
ADDITIONAL			CTION NEEDED							
			ROOF ACCESS		ADD	EXT	ERNAL LADDER			
MAINITENIANICE			AD EQUIPMENT DRAINS CLEAN	_	VEED	\				
MAINTENANCE			UNTIL REROOF	_	KEEP	VVAI	ERWAYS CLEAN TRIM TREES			
			OOF OF DEBRIS	_	HV	/AC F	REPAIR NEEDED			
			AT SUSPECTED	_			GUTTERS CLEAR			
LEAKS			ENCE OF LEAKS		YES		NO NO	\		
ROOF CONDITIO	ON - OVERALL SYS	STEN	A RATING		_		_		_	
VERY POOR	A. SVERVALL OT	J T ⊑ 1\			REPLACE OR C	OAT	IMMEDIATELY - S	SPO	Γ REPAIRS ONI Y	
POOR									Γ REPAIRS ONLY	
FAIR					3_ 0, (, , , , ,			AT IN 3-5 YEARS	
MARGINAL									T IN 5-10 YEARS	
IVII (I COIIVAL							NEI LAGE OR		TIN U-10 ILANG	

GOOD

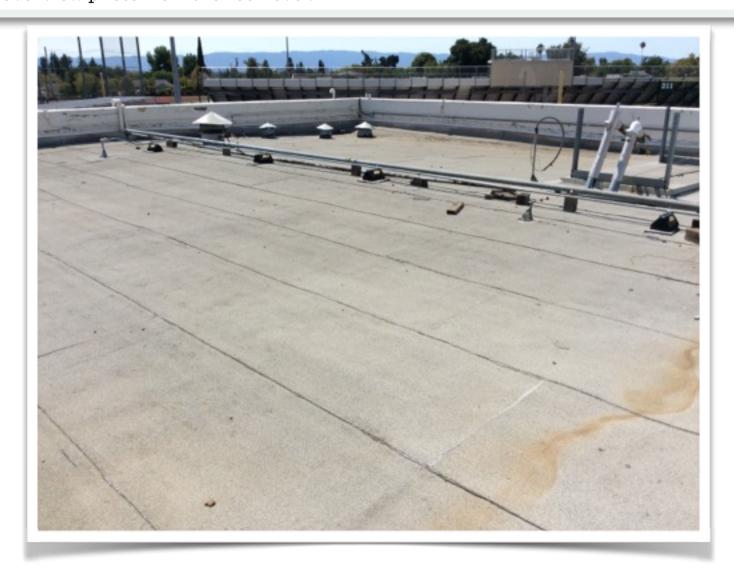
EXCELLENT

SPOT REPAIRS ONLY AND BUDGET TO REPLACE THIS ROOF AS SOON AS POSSIBLE.

BUDGET ESTIMATES	
IMMEDIATE REPAIRS AS RECOMMENDED	\$1,000.00
YEARLY PREVENTIVE MAINENANCE	\$1,500.00
ROOF RECOATING	\$0.00
ROOF REPLACEMENT	\$31,200.00

REPLACE OR COAT IN 10-15 YEARS



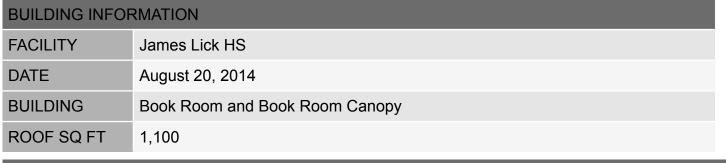


The photo below shows the need for penetration repairs.



The photo below shows the need for the wall to be sealed and coated.







BUILDING	Book Room and E	Book	Room Canopy				E	VGIVEERIN	G I N E E R I N IG SERVICES FOR THE BUILDING ENVE	LOPE
ROOF SQ FT	1,100							_		9
ROOF CONSTRU	JCTION									
ROOF AGE	UNKNOWN		0-5 YEARS		5-10 YEARS		10-15 YEARS		15+ YEARS	
DECK TYPE	METAL		PLYWOOD		PLANK		CONCRETE		LW CONCRETE	
INSULATION	NONE	\	ISO		FIBER		PERLITE		STYRO	
INSUL THICK	1 INCH		2 INCH		3 INCH		4 INCH		TAPERED	
MEMBRANE	METAL SS		SINGLE PLY		BUR	✓	MOD BIT		TWO SYSTEMS	
MEM SURFACE	COATING		3-PLY	\checkmark	GRAVEL		SMOOTH		GRANULE	✓
FLASHINGS	CAPSHEET		HYPALON							
DRAINAGE	JOSAM		SCUPPERS		GUTTERS		OVER EDGE			
SLOPE	NONE		1:12	✓	2:12		3:12		6:12	
ROOF CONDITIO	ON - RATINGS (1-1	0) ar	nd RECOMMENDA	OITA	NS					#
FIELD		RE	PAIRS NEEDED						RATING	3
			RESEAL SEAMS		REPAIR B	LIST	ERS or RIDGING		SS RATING	
	CLEA	AR R	OOF OF DEBRIS		DE	CK F	REPAIR NEEDED			
	DECK	REP/	AIR SUSPECTED		RESEAL/F	RPLA	ACE FASTENERS			
		CR	AZE CRACKING		[3RIT	TLE MEMBRANE	V		
		EX	CESSIVE WEAR		MEMBRAN	IE FI	BERS EXPOSED			
PITCH/POND		RE	EPAIRS NEEDED						RATING	6
	F	ILL P	ONDING AREAS		FIX	(DE	CK DEFLECTION			
		;	SOME PONDING		E	XCE	SSIVE PONDING			
FLASHING		RE	EPAIRS NEEDED						RATING	3
		RES	EAL/REPAIR ALL		RES	EAL/	REPAIR SELECT		SS RATING	
			ECOAT AC DUCT	V	RE	SEA	L/RECOAT WALL			
5549465	RESI		WALL FLASHING						DATINO	0
DRAINAGE	A D D / E		EPAIRS NEEDED ANCE CRICKETS		4 D D / E N		NCE OVERFLOW		RATING	3
	ADD/E	_INI 1/-	CLEAR DRAINS		ADD/EI	NI IAI	ADD GUTTER			
	GUTT	ER F	REPAIR NEEDED		GUTTE	R CC	DATING NEEDED	<u></u>		
PENETRATION		RE	EPAIRS NEEDED						RATING	3
		RES	EAL/REPAIR ALL		RES	EAL/	REPAIR SELECT			
		REPI	LACE SKYLIGHT		RAISE HEIG	HT V	VHEN POSSIBLE			
ADDITIONAL		А	CTION NEEDED							
			ROOF ACCESS		ADD	EXT	ERNAL LADDER			
BAAINITENIANICE			AD EQUIPMENT		VEED	\				
MAINTENANCE			DRAINS CLEAN UNTIL REROOF		KEEP	VVAI	TRIM TREES			
			OOF OF DEBRIS		H\.	/AC F	REPAIR NEEDED			
			AT SUSPECTED				SUTTERS CLEAR			
LEAKS			ENCE OF LEAKS		YES		NO	✓		
ROOF CONDITIO	ON - OVERALL SY:	STEN	/I RATING							
VERY POOR					REPLACE OR C	COAT	· IMMEDIATELY - S	SPO	T REPAIRS ONLY	
POOR					REPLACE OR (COAT	Γ IN 1-2 YEARS - S	SPO	T REPAIRS ONLY	~
FAIR							REPLACE OF	R CO	AT IN 3-5 YEARS	
MARGINAL							REPLACE OR	COA	T IN 5-10 YEARS	
GOOD							REPLACE OR C	COAT	IN 10-15 YEARS	

EXCELLENT

THIS ROOF IS IN POOR CONDITION YET IN BETTER SHAPE THAN THE MULTIPURPOSE BUR SYSTEM. THAT BEING SAID IT IS STILL RECOMMENDED TO REPLACE THE ROOF - THE ADJACENT CANOPY SHOUD BE INCLUDED.

	BUDGET ESTIMATES
\$0.00	IMMEDIATE REPAIRS AS RECOMMENDED
\$750.00	YEARLY PREVENTIVE MAINENANCE
\$0.00	ROOF RECOATING
\$16,500.00	ROOF REPLACEMENT





The photo below shows the AC ducts in need of being resealed and recoated.



The Book Room Canopy should be added to the scope for roof replacement.



BUILDING INFOR	RMATION
FACILITY	James Lick HS
DATE	August 20, 2014
BUILDING	Child Care
ROOF SQ FT	8,000
5005 00110551	



BUILDING	Child Care						E	N (G I N E E K I N NG SERVICES FOR THE BUILDING ENVE	ELOPE
ROOF SQ FT	8,000							_		
ROOF CONSTRU	JCTION									
ROOF AGE	2011	4	0-5 YEARS		5-10 YEARS		10-15 YEARS		15+ YEARS	
DECK TYPE	METAL		PLYWOOD	√	PLANK		CONCRETE		LW CONCRETE	
INSULATION	NONE	4	ISO		FIBER		PERLITE		STYRO	
INSUL THICK	1 INCH		2 INCH		3 INCH		4 INCH		TAPERED	
MEMBRANE	METAL SS		SINGLE PLY		BUR	\	MOD BIT		TWO SYSTEMS	
MEM SURFACE	COATING		MS CAP	✓	3-PLY		GRANULE		SMOOTH	
FLASHINGS	CAPSHEET		HYPALON							
DRAINAGE	JOSAM	✓	SCUPPERS		GUTTERS	✓	OVER EDGE			
SLOPE	NONE		1:12	✓	2:12		3:12		6:12	
ROOF CONDITIO	DN - RATINGS (1-1	0) ar	nd RECOMMENDA	TIOITA	NS					#
FIELD	,		EPAIRS NEEDED						RATING	6
			RESEAL SEAMS		REPAIR B	LIST	ERS or RIDGING		SS RATING	
	CI E		OOF OF DEBRIS				REPAIR NEEDED			
			AIR SUSPECTED				ACE FASTENERS			
	BEOK		RAZE CRACKING							
							TLE MEMBRANE			
DITOLUDOND			CESSIVE WEAR		MEMBRAN	1E FI	BERS EXPOSED		DATINIO	_
PITCH/POND	_		EPAIRS NEEDED		FIX	/ DE/			RATING	5
	F		ONDING AREAS SOME PONDING				CK DEFLECTION SSIVE PONDING			
		•	SOME PONDING			ACE	33IVE PONDING			
FLASHING		RF	EPAIRS NEEDED						RATING	6
1 27 (31 111 (3			EAL/REPAIR ALL		RES	EAL/	REPAIR SELECT		SS RATING	
			ECOAT AC DUCT				L/RECOAT WALL			
	RES	EAL \	WALL FLASHING							
DRAINAGE		RE	EPAIRS NEEDED						RATING	5
	ADD/E	ENHA	ANCE CRICKETS	\checkmark	ADD/E	IAH	NCE OVERFLOW			
			CLEAR DRAINS				ADD GUTTER			
	GUTT	ER F	REPAIR NEEDED		GUTTE	R CC	DATING NEEDED			
PENETRATION		RE	EPAIRS NEEDED						RATING	6
			EAL/REPAIR ALL				REPAIR SELECT			
		REP	LACE SKYLIGHT		RAISE HEIG	HT V	VHEN POSSIBLE			
ADDITIONAL		۸	CTION NEEDED							
ADDITIONAL	IMPE		ROOF ACCESS		ΔΠΠ	FXT	ERNAL LADDER			
		_	AD EQUIPMENT		ADD	LXI	LINAL LADDLIN			
MAINTENANCE			DRAINS CLEAN		KEEP	WAT	ERWAYS CLEAN			
	SPOT RE	PAIR	UNTIL REROOF				TRIM TREES			
	CLEA	AR R	OOF OF DEBRIS		HV	/AC F	REPAIR NEEDED			
	H	HAZN	IAT SUSPECTED		KEEP	SS G	SUTTERS CLEAR			
LEAKS	E	EVIDI	ENCE OF LEAKS	√	YES		NO			
ROOF CONDITIO	ON - OVERALL SY	STE	M RATING							
VERY POOR					REPLACE OR C	COAT	IMMEDIATELY - S	SPO	T REPAIRS ONLY	
POOR					REPLACE OR (COAT	Γ IN 1-2 YEARS - S	SPO	Γ REPAIRS ONLY	
FAIR							REPLACE OF	R CO	AT IN 3-5 YEARS	
MARGINAL							REPLACE OR	COA	T IN 5-10 YEARS	~
GOOD							REPLACE OR C	COAT	IN 10-15 YEARS	

EXCELLENT

THE UPPER LEVEL HAS QUITE A FEW REPAIRS FOR A NEW ROOF. PONDING AT THE PERIMETER EDGE IS A PROBLEM. THE ROOF WILL SIMPLY NEED MORE THAN NORMAL MAINTENANCE. THE LOWER ROOFS LOOK GOOD.

	BUDGET ESTIMATES
\$0.00	IMMEDIATE REPAIRS AS RECOMMENDED
\$2,000.00	YEARLY PREVENTIVE MAINENANCE
\$0.00	ROOF RECOATING
\$120,000.00	ROOF REPLACEMENT



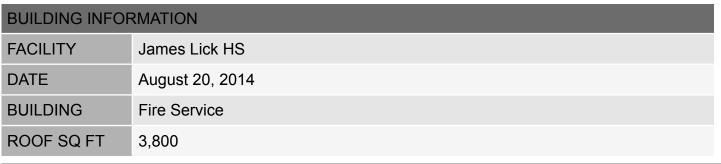


The photo below shows ponding and leaking issues at the perimeter of the upper roof.



The photo below shows the lower levels in better shape.





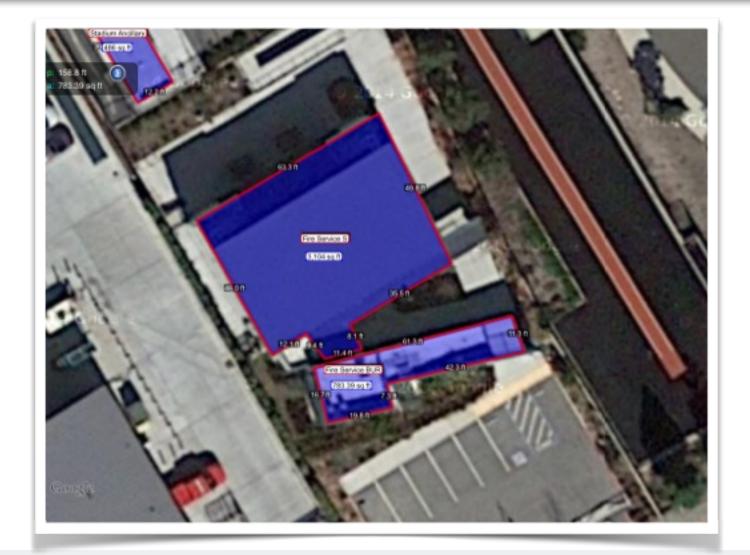


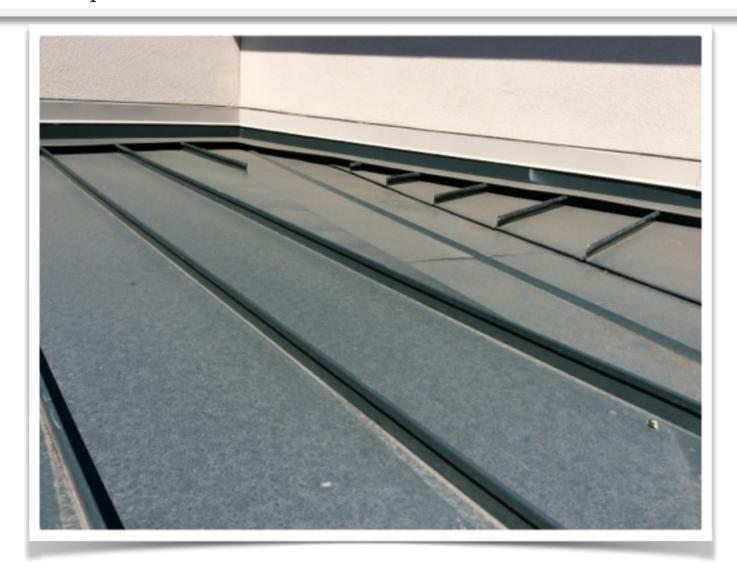
ROOF SQ FT	3,800						E	VGIVEERIN	IG SERVICES FOR THE BUILDING ENVE	LOPE
ROOF CONSTRU							_			=
ROOF AGE	2012	J	0-5 YEARS		5-10 YEARS		10-15 YEARS		15+ YEARS	
DECK TYPE	METAL		PLYWOOD		PLANK		CONCRETE		LW CONCRETE	
INSULATION	NONE		ISO		FIBER		PERLITE		STYRO	
INSUL THICK	1 INCH		2 INCH		3 INCH		4 INCH		TAPERED	
MEMBRANE	METAL SS	_	SINGLE PLY		BUR	_	MOD BIT		TWO SYSTEMS	
MEM SURFACE	COATING		MS CAP		3-PLY		GRANULE		SMOOTH	
FLASHINGS	CAPSHEET	_	HYPALON		3-1 E1		OIVAIVOLL		SWOOTT	
DRAINAGE	JOSAM	_	SCUPPERS		GUTTERS	7	OVER EDGE			
SLOPE	NONE		1:12		2:12	_	3:12		6:12	
							5.12		0.12	
	ON - RATINGS (1-1			AHOI	NS				DATING	#
FIELD			PAIRS NEEDED						RATING	8
			RESEAL SEAMS				ERS or RIDGING		SS RATING	8
	CLEA	AR RO	OOF OF DEBRIS		DE	CK F	REPAIR NEEDED			
	DECK I	REPA	IR SUSPECTED		RESEAL/F	RPLA	CE FASTENERS			
		CR	AZE CRACKING		E	3RIT	TLE MEMBRANE			
		EX	CESSIVE WEAR		MEMBRAN	IE FI	BERS EXPOSED			
PITCH/POND		RE	PAIRS NEEDED						RATING	8
	F	ILL P	ONDING AREAS		FIX	(DE	CK DEFLECTION			
		5	SOME PONDING		E	XCE:	SSIVE PONDING			
FLASHING			PAIRS NEEDED		5-0				RATING	8
			EAL/REPAIR ALL				REPAIR SELECT		SS RATING	8
			COAT AC DUCT		KE	SEA	L/RECOAT WALL			
DRAINAGE	IXESI		PAIRS NEEDED						RATING	8
DIV III VIOL	ADD/E		NCE CRICKETS		ADD/EN	1AH	NCE OVERFLOW		1011110	
			CLEAR DRAINS				ADD GUTTER			
	GUTT	ER R	EPAIR NEEDED		GUTTE	R CC	DATING NEEDED			
PENETRATION		RE	PAIRS NEEDED						RATING	8
		RESE	EAL/REPAIR ALL		RES	EAL/	REPAIR SELECT			
		REPL	ACE SKYLIGHT		RAISE HEIG	HT V	WHEN POSSIBLE			
ADDITIONAL		A	CTION NEEDED							
		_	ROOF ACCESS		ADD	EXT	ERNAL LADDER			
			AD EQUIPMENT							
MAINTENANCE			DRAINS CLEAN		KEEP	WAI	ERWAYS CLEAN			
			UNTIL REROOF OF OF DEBRIS		ЫV	/A C F	TRIM TREES REPAIR NEEDED			
			AT SUSPECTED				SUTTERS CLEAR			
LEAKS			ENCE OF LEAKS		YES		NO	7		
	ON - OVERALL SYS	_								
VERY POOR	OIL STEINER ST	J 1 E 10	TOTALING		REPLACE OR C	COAT	IMMEDIATELY - 9	SPO ⁻	T REPAIRS ONLY	
POOR							IN 1-2 YEARS - S			
FAIR					2.02 010	. J/ \		_	AT IN 3-5 YEARS	
MARGINAL									T IN 5-10 YEARS	
GOOD									IN 10-15 YEARS	
EXCELLENT						NII V	IF ROOF IS LESS			

EXCELLENT

BOTH ROOF SYSTEMS ARE NEW AND IN GREAT SHAPE.

BUDGET ESTIMATES	
IMMEDIATE REPAIRS AS RECOMMENDED	\$0.00
YEARLY PREVENTIVE MAINENANCE	\$1,500.00
SS ROOF RECOATING	\$30,000.00
BUR ROOF REPLACEMENT	\$12,000.00





BUILDING INFORMATION						
FACILITY	James Lick HS					
DATE	August 20, 2014					
BUILDING	Gym BUR					
ROOF SQ FT	20,000					
ROOF CONSTRUCTION						



BUILDING	Gym BUR						E E	N U VGIVEERIN	G SERVICES FOR THE BUILDING ENVE	LOPE
ROOF SQ FT	20,000							_		
ROOF CONSTRU	JCTION									
ROOF AGE	2002	✓	0-5 YEARS		5-10 YEARS		10-15 YEARS		15+ YEARS	
DECK TYPE	METAL		PLYWOOD	\checkmark	PLANK		CONCRETE		LW CONCRETE	
INSULATION	NONE	✓	ISO		FIBER		PERLITE		STYRO	
INSUL THICK	1 INCH		2 INCH		3 INCH		4 INCH		TAPERED	
MEMBRANE	METAL SS		SINGLE PLY		BUR	\	MOD BIT		TWO SYSTEMS	
MEM SURFACE	COATING	✓	MS CAP	⋖	3-PLY		GRANULE		SMOOTH	~
FLASHINGS	CAPSHEET	✓	HYPALON							
DRAINAGE	JOSAM	⋖	SCUPPERS		GUTTERS	~	OVER EDGE			
SLOPE	NONE		1:12	$ \checkmark $	2:12		3:12		6:12	
ROOF CONDITIO	ON - RATINGS (1-1	10) aı	nd RECOMMENDA	IOITA	NS					#
FIELD			EPAIRS NEEDED						RATING	4
			RESEAL SEAMS		REPAIR B	LIST	ERS or RIDGING		SS RATING	
	CLEA	AR R	OOF OF DEBRIS		DE	CK F	REPAIR NEEDED			
			AIR SUSPECTED		RESEAL/E	PI Δ	CE FASTENERS			
			RAZE CRACKING				TLE MEMBRANE			
			(CESSIVE WEAR				BERS EXPOSED			
PITCH/POND			EPAIRS NEEDED		IVILIVIDITAL	(<u> </u>	BLN3 LAFO3LD		RATING	4
THOM/TOND	F		PONDING AREAS		FIX	DFO	CK DEFLECTION		IVATINO	7
	'		SOME PONDING		EXCESSIVE PONDING			7		
		1								
FLASHING		RI	EPAIRS NEEDED						RATING	4
		RES	EAL/REPAIR ALL		RES	EAL/	REPAIR SELECT		SS RATING	
	RESEA	RESEAL/RECOAT AC DUCT			RE	SEA	L/RECOAT WALL			
	RES	EAL	WALL FLASHING							
DRAINAGE			EPAIRS NEEDED	V					RATING	4
	ADD/E	ENH/	ANCE CRICKETS		ADD/EN	NHAN	NCE OVERFLOW			
	CUTT	ED I	CLEAR DRAINS REPAIR NEEDED	_	ADD GUTTER GUTTER COATING NEEDED					
PENETRATION	0011		EPAIRS NEEDED	_	OOTIL	i CC	ATINO NEEDED		RATING	4
			EAL/REPAIR ALL		RES	EAL/	REPAIR SELECT			
		REP	LACE SKYLIGHT		RAISE HEIG	HT V	WHEN POSSIBLE			
ADDITIONAL		A	ACTION NEEDED							
	IMPF	ROVE	ROOF ACCESS	✓	ADD	EXT	ERNAL LADDER			
			EAD EQUIPMENT							
MAINTENANCE			P DRAINS CLEAN	✓	KEEP WATERWAYS CLEAN					
			UNTIL REROOF		TRIM TREES					
			OOF OF DEBRIS	✓			REPAIR NEEDED SUTTERS CLEAR			
LEAKS			ENCE OF LEAKS		YES		NO	_		
	ON - OVERALL SY				120					
VERY POOR	JA - OVERALL SY	JIE	VITATING		REPLACE OR C	:ΟΔΤ	IMMEDIATELY .	SPOT	REPAIRS ONLY	
POOR							IN 1-2 YEARS - S			
FAIR						. J/ (1			AT IN 3-5 YEARS	
MARGINAL									T IN 5-10 YEARS	
W. COLV.C							L. L OL ON	JUA	0 10 12/110	

EXCELLENT

ADDITIONAL NOTES

GOOD

WITH REPAIRS THIS ROOF SHOULD LAST ANOTHER FIVE YEARS. GUTTER REPAIR AND COATING WOULD NOT BE PART OF THE REPAIR SCOPE - ADD TO REROOF SCOPE IN A FEW YEARS.

REPLACE OR COAT IN 10-15 YEARS

BUDGET ESTIMATES	
IMMEDIATE REPAIRS AS RECOMMENDED	\$20,000.00
YEARLY PREVENTIVE MAINENANCE	\$1,500.00
ROOF RECOATING	\$0.00
ROOF REPLACEMENT	\$300,000.00





The photo below shows the need for penetration repairs.



Some drains need to be cleared and debris removed.







ROOF SQ FT	11,000						ENGINEERII	NG SERVICES FOR THE BUILDING ENVE	ELOPE
ROOF CONSTRU	,	_		_		_			_
ROOF AGE	2002	✓ 0-5 YEARS		5-10 YEARS		10-15 YEARS		15+ YEARS	
DECK TYPE	METAL		_	PLANK		CONCRETE		LW CONCRETE	
INSULATION	NONE	_		FIBER		PERLITE		STYRO	
INSUL THICK	1 INCH			3 INCH		4 INCH		TAPERED	
		_		BUR		MOD BIT		SHINGLE	
MEMBRANE	METAL SS	SINGLE PLY							
MEM SURFACE	COATING	MS CAP		GRAVEL		SMOOTH		GRANULE	
FLASHINGS	CAPSHEET	HYPALON				0.455 55.05			
DRAINAGE	JOSAM	SCUPPERS		GUTTERS		OVER EDGE		0.40	
SLOPE	NONE	1:12		2:12	•	3:12		6:12	
ROOF CONDITIO	DN - RATINGS (1-1	0) and RECOMMEND	ATIO	NS					#
FIELD		REPAIRS NEEDED						RATING	5
		RESEAL SEAMS		REPAIR B	LISTI	ERS or RIDGING		SS RATING	
	CLEA	AR ROOF OF DEBRIS		DE	CK F	REPAIR NEEDED			
	DECK F	REPAIR SUSPECTED		RESEAL/I	RPLA	CE FASTENERS			
		CRAZE CRACKING		1	BRIT1	ΓLE MEMBRANE			
		EXCESSIVE WEAR		MEMBRAN	NE FIE	BERS EXPOSED			
PITCH/POND		REPAIRS NEEDED						RATING	8
	F	ILL PONDING AREAS		FIX	K DEC	CK DEFLECTION			
		SOME PONDING		E	XCES	SSIVE PONDING			
FLASHING		REPAIRS NEEDED						RATING	2
		RESEAL/REPAIR ALL		RES	EAL/F	REPAIR SELECT		SS RATING	
	RESEA	AL/RECOAT AC DUCT				_/RECOAT WALL			
	RESE	EAL WALL FLASHING		EXCESSIVE	FLAS	SHING DAMAGE	✓		
DRAINAGE	4 D.D. //5	REPAIRS NEEDED		A D D / E		10E 0) (EDEL 0) A		RATING	3
	ADD/E	ENHANCE CRICKETS		ADD/EI	NHAN	ICE OVERFLOW			
	CUTT	CLEAR DRAINS ER REPAIR NEEDED		CUTTE		ADD GUTTER ATING NEEDED	_		
PENETRATION	9011	REPAIRS NEEDED		GOTTE	il CC	ATING NEEDED		RATING	_
LINETTOTION		RESEAL/REPAIR ALL		RES	FAI /F	REPAIR SELECT		1011110	
		REPLACE SKYLIGHT				HEN POSSIBLE			
ADDITIONAL		ACTION NEEDED							
	IMPR	OVE ROOF ACCESS		ADD	EXT	ERNAL LADDER			
	REMOVI	E DEAD EQUIPMENT							
MAINTENANCE	к	EEP DRAINS CLEAN		KEEP	WATE	ERWAYS CLEAN			
	SPOT REI	PAIR UNTIL REROOF				TRIM TREES			
	CLEA	AR ROOF OF DEBRIS		H\	/AC F	REPAIR NEEDED			
	Н	AZMAT SUSPECTED		KEEP	SS G	UTTERS CLEAR			
LEAKS	E	EVIDENCE OF LEAKS		YES		NO	✓		
ROOF CONDITIO	ON - OVERALL SYS	STEM RATING							
VERY POOR				REPLACE OR (COAT	IMMEDIATELY -	SPO	T REPAIRS ONLY	
POOR				REPLACE OR	COAT	IN 1-2 YEARS -	SPO	T REPAIRS ONLY	
FAIR						REPLACE O	R CO	OAT IN 3-5 YEARS	
MARGINAL						REPLACE OR	COA	AT IN 5-10 YEARS	
GOOD						REPLACE OR	COAT	IN 10-15 YEARS	✓

EXCELLENT

THIS ROOF SHOULD LAST ANOTHER 10 YEARS PLUS. INCUDE THE GUTTER WORK WITH THE BUR REPLACEMENT. ALL FLASHINGS ARE DAMAGED FROM BEING REUSED WHEN LAST REROOFED - HOWEVER THEY SEEM TO BE FUNCTIONAL. THIS MAY BE A PROBLEM THOUGH WITH A LARGE STORM.

	BUDGET ESTIMATES
\$0.00	IMMEDIATE REPAIRS AS RECOMMENDED
\$1,000.00	YEARLY PREVENTIVE MAINENANCE
\$0.00	ROOF RECOATING
\$165,000.00	ROOF REPLACEMENT



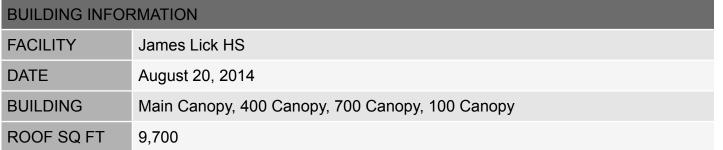


The photo below shows the cap flashing in bad shape.



The wall flashing is quite rough and may eventually cause problems in the system.







BUILDING	Main Canopy, 400) Car	opy, 700 Canopy,	100	Canopy		Ē	NGIVEERI	G I N E E R I N NG SERVICES FOR THE BUILDING ENVE	G
ROOF SQ FT	9,700							_		
ROOF CONSTRU	JCTION									
ROOF AGE	UNKNOWN		0-5 YEARS		5-10 YEARS		10-15 YEARS		15+ YEARS	⋖
DECK TYPE	METAL		PLYWOOD	⋖	PLANK		CONCRETE		LW CONCRETE	
INSULATION	NONE	\	ISO		FIBER		PERLITE		STYRO	
INSUL THICK	1 INCH		2 INCH		3 INCH		4 INCH		TAPERED	
MEMBRANE	METAL SS		SINGLE PLY		BUR	✓	MOD BIT		TWO SYSTEMS	
MEM SURFACE	COATING		MS CAP	✓	GRAVEL		SMOOTH		GRANULE	✓
FLASHINGS	CAPSHEET		HYPALON							
DRAINAGE	JOSAM	~	SCUPPERS		GUTTERS	~	OVER EDGE			
SLOPE	NONE		1:12	✓	2:12		3:12		6:12	
ROOF CONDITIO)N - RATINGS (1-1	0) ar	d RECOMMENDA	TIOI	NS					#
FIELD			EPAIRS NEEDED		10	-		-	RATING	2
TILLD					DEDAID D	LICT	TDC or DIDCING		SS RATING	_
	01.5		RESEAL SEAMS				ERS or RIDGING REPAIR NEEDED		33 NATINO	
			OOF OF DEBRIS							
	DECK		AIR SUSPECTED				ACE FASTENERS			
			AZE CRACKING	V	E	3RIT	TLE MEMBRANE	V		
		EX	CESSIVE WEAR	✓	MEMBRAN	IE FI	BERS EXPOSED	✓		
PITCH/POND		RE	PAIRS NEEDED						RATING	3
	F		ONDING AREAS				CK DEFLECTION			
		(SOME PONDING		Е	XCE	SSIVE PONDING			
		DE							DATINIO	
FLASHING			EPAIRS NEEDED EAL/REPAIR ALL		DECEAL (DEDAID OF LECT				RATING SS RATING	3
			ECOAT AC DUCT		RESEAL/REPAIR S				33 KATING	
			WALL FLASHING		RESEAL/RECOAT WALL					
DRAINAGE	, (= 0.		PAIRS NEEDED						RATING	3
	ADD/E	ENHA	NCE CRICKETS	✓	ADD/EN	IAH	NCE OVERFLOW			
			CLEAR DRAINS				ADD GUTTER			
	GUTT	ER F	REPAIR NEEDED		GUTTE	R C	DATING NEEDED	~		
PENETRATION		RE	PAIRS NEEDED						RATING	3
		RES	EAL/REPAIR ALL		RES	EAL/	REPAIR SELECT			
		REPI	LACE SKYLIGHT		RAISE HEIG	HT V	VHEN POSSIBLE			
ADDITIONAL			CTION NEEDED							
			ROOF ACCESS		ADD	EXT	TERNAL LADDER			
BAAINITENIANICE			AD EQUIPMENT		KEED	\				
MAINTENANCE			DRAINS CLEAN UNTIL REROOF		KEEP	VVAI	TRIM TREES			
			OOF OF DEBRIS	_	H\	/AC. I	REPAIR NEEDED			
			AT SUSPECTED	_			SUTTERS CLEAR			
LEAKS			ENCE OF LEAKS		YES		NO	✓		
ROOF CONDITIO	N - OVERALL SY	STEN	A RATING		_		_			
VERY POOR	OVERVIEW OF		. 10 (111(6)		REPLACE OR C	COAT	IMMEDIATELY - S	SPO	T REPAIRS ONLY	
POOR									T REPAIRS ONLY	
FAIR						. 5/1			AT IN 3-5 YEARS	
MARGINAL									T IN 5-10 YEARS	
GOOD									IN 10-15 YEARS	
EXCELLENT					0	NLY	IF ROOF IS LESS			
,	TES									

THESE CANOPIES ARE IN POOR CONDITION. SPOT REPAIR ONLY AND BUDGET FOR REPLACEMENT.

BUDGET ESTIMATES	
IMMEDIATE REPAIRS AS RECOMMENDED	\$0.00
YEARLY PREVENTIVE MAINENANCE	\$3,000.00
ROOF RECOATING	\$0.00
ROOF REPLACEMENT	\$145,500.00





The photo below shows excessive ponding next to building 700.



The roof is worn and close to exposing the membrane fibers.







BUILDING	P1 and P2						E E	NGIVEERIN	G SERVICES FOR THE BUILDING ENVE	LOPE
ROOF SQ FT	2,300							_		
ROOF CONSTRU	JCTION									
ROOF AGE	UNKNOWN		0-5 YEARS		5-10 YEARS		10-15 YEARS		15+ YEARS	
DECK TYPE	METAL		PLYWOOD		PLANK		CONCRETE		LW CONCRETE	
INSULATION	NONE		ISO		FIBER		PERLITE		STYRO	
INSUL THICK	1 INCH		2 INCH		3 INCH		4 INCH		TAPERED	
MEMBRANE	METAL SS	⋖	SINGLE PLY		BUR		MOD BIT		TWO SYSTEMS	
MEM SURFACE	COATING		MS CAP		GRAVEL		SMOOTH		GRANULE	
FLASHINGS	CAPSHEET		HYPALON							
DRAINAGE	JOSAM		SCUPPERS		GUTTERS		OVER EDGE			
SLOPE	NONE		1:12	✓	2:12		3:12		6:12	
ROOF CONDITIO)N - RATINGS (1-1	0) an	d RECOMMENDA	IOITA	NS					#
FIELD		RE	PAIRS NEEDED						RATING	3
			RESEAL SEAMS		REPAIR B	LIST	ERS or RIDGING			
	CL F/		OOF OF DEBRIS				REPAIR NEEDED			
			IR SUSPECTED				CE FASTENERS			
	BEOK		AZE CRACKING							
							TLE MEMBRANE			
			CESSIVE WEAR		MEMBRAN	NE FI	BERS EXPOSED		5.70.0	
PITCH/POND	_		PAIRS NEEDED		ΕIX	/ DE/			RATING	5
	F		ONDING AREAS SOME PONDING				CK DEFLECTION SSIVE PONDING			
			SOME PONDING			ACE,	SSIVE POINDING			
FLASHING		RF	PAIRS NEEDED						RATING	3
1 27 (31 111 43	RESEAL/REPAIR ALL				RES	EAL/	REPAIR SELECT		1011110	
			COAT AC DUCT				L/RECOAT WALL			
	RESI	EAL V	VALL FLASHING							
DRAINAGE		RE	PAIRS NEEDED						RATING	3
	ADD/E	ENHA	NCE CRICKETS		ADD/E	1AH	NCE OVERFLOW			
			CLEAR DRAINS		ADD GUTTER					
	GUTT	ER R	EPAIR NEEDED	✓	GUTTE	R CC	DATING NEEDED	✓		
PENETRATION		RE	PAIRS NEEDED						RATING	-
			EAL/REPAIR ALL				REPAIR SELECT			
		REPL	ACE SKYLIGHT		RAISE HEIG	HT V	VHEN POSSIBLE			
ADDITIONAL			OTION NEEDED							
ADDITIONAL	IMDE		ROOF ACCESS		ADD	LVT	ERNAL LADDER			
			AD EQUIPMENT		ADD	LAI	LINAL LADDLIN			
MAINTENANCE			DRAINS CLEAN		KEEP	WAT	ERWAYS CLEAN			
			UNTIL REROOF				TRIM TREES			
	CLEA	AR RO	OOF OF DEBRIS	✓	HVAC REPAIR NEEDED					
	-	IAZM	AT SUSPECTED		KEEP GUTTERS CLEAR					
LEAKS	E	VIDE	ENCE OF LEAKS		YES	\	NO			
ROOF CONDITIO	ON - OVERALL SY	STEM	1 RATING							
VERY POOR					REPLACE OR C	COAT	IMMEDIATELY - S	SPO	T REPAIRS ONLY	
POOR					REPLACE OR (COAT	T IN 1-2 YEARS - \$	SPO	T REPAIRS ONLY	✓
FAIR							REPLACE OF	R CO	AT IN 3-5 YEARS	
MARGINAL							REPLACE OR	COA	T IN 5-10 YEARS	
GOOD							REPLACE OR C	COAT	IN 10-15 YEARS	
EXCELLENT					C	NLY	IF ROOF IS LESS	THA	AN 5 YEARS OLD	

SPOT REPAIR AND BUDGET TO RECOAT THE ROOF WITHIN TWO YEARS.

BUDGET ESTIMATES	
IMMEDIATE REPAIRS AS RECOMMENDED	\$0.00
YEARLY PREVENTIVE MAINENANCE	\$500.00
ROOF RECOATING	\$23,000.00
ROOF REPLACEMENT	\$0.00





BUILDING INFORMATION							
FACILITY	James Lick HS						
DATE	August 20, 2014						
BUILDING	P3 and P4						
ROOF SQ FT	2,300						



BUILDING	P3 and P4			ENGINEERING SERVICES FOR THE BUILDING							
ROOF SQ FT	2,300							_			
ROOF CONSTRU	JCTION										
ROOF AGE	UNKNOWN		0-5 YEARS		5-10 YEARS		10-15 YEARS		15+ YEARS	✓	
DECK TYPE	METAL		PLYWOOD	~	PLANK		CONCRETE		LW CONCRETE		
INSULATION	NONE		ISO		FIBER		PERLITE		STYRO		
INSUL THICK	1 INCH		2 INCH		3 INCH		4 INCH		TAPERED		
MEMBRANE	METAL SS		SINGLE PLY		BUR	✓	MOD BIT		TWO SYSTEMS		
MEM SURFACE	COATING		MS CAP	✓	GRAVEL		SMOOTH		GRANULE		
FLASHINGS	CAPSHEET		HYPALON								
DRAINAGE	JOSAM		SCUPPERS		GUTTERS		OVER EDGE	✓			
SLOPE	NONE		1:12		2:12		3:12		6:12		
ROOF CONDITIO	ON - RATINGS (1-1	0) ar	nd RECOMMENDA	IOITA	NS					#	
FIELD			EPAIRS NEEDED					-	RATING	3	
11220			RESEAL SEAMS		REDAIR R	LIST	ERS or RIDGING		SS RATING		
	CLE		OOF OF DEBRIS				REPAIR NEEDED				
			AIR SUSPECTED								
	DEGR		RAZE CRACKING				ACE FASTENERS				
							TLE MEMBRANE	⋖			
DITOUUDOND			CESSIVE WEAR		MEMBRAN	1E FI	BERS EXPOSED		DATING		
PITCH/POND	_		EPAIRS NEEDED		ΓIX	/ DE/			RATING	4	
	F		ONDING AREAS SOME PONDING				CK DEFLECTION SSIVE PONDING				
		•	SOME FONDING			ACE	33IVE FONDING				
FLASHING		RE	EPAIRS NEEDED						RATING	3	
			EAL/REPAIR ALL		RES	EAL/	REPAIR SELECT		SS RATING		
	RESEA	AL/RE	ECOAT AC DUCT		RE	SEA	L/RECOAT WALL				
	RESI	EAL \	WALL FLASHING								
DRAINAGE		RE	EPAIRS NEEDED						RATING	3	
	ADD/E	ENHA	ANCE CRICKETS		ADD/EN	1AH/	NCE OVERFLOW				
			CLEAR DRAINS				ADD GUTTER				
	GUTT		REPAIR NEEDED		GUTTE	R CC	DATING NEEDED				
PENETRATION			EPAIRS NEEDED						RATING	3	
			EAL/REPAIR ALL				REPAIR SELECT				
		KEP	LACE SKYLIGHT		KAISE HEIG	ımı v	VHEN POSSIBLE				
ADDITIONAL		Δ	ACTION NEEDED								
	IMPF	ROVE	ROOF ACCESS		ADD	EXT	ERNAL LADDER				
	REMOV	E DE	AD EQUIPMENT								
MAINTENANCE	k	KEEP	DRAINS CLEAN		KEEP	WAT	ERWAYS CLEAN				
	SPOT RE	PAIR	UNTIL REROOF	⋖			TRIM TREES				
	CLEA	AR R	OOF OF DEBRIS		HV	/AC F	REPAIR NEEDED				
	H	IAZIV	IAT SUSPECTED		KEEP	SS G	SUTTERS CLEAR				
LEAKS	E	EVIDI	ENCE OF LEAKS		YES	✓	NO				
ROOF CONDITIO	ON - OVERALL SY	STEN	M RATING								
VERY POOR							IMMEDIATELY - S				
POOR					REPLACE OR (COAT	Γ IN 1-2 YEARS - S	SPO	T REPAIRS ONLY	✓	
FAIR							REPLACE OF	R CO	AT IN 3-5 YEARS		
MARGINAL							REPLACE OR	COA	T IN 5-10 YEARS		
GOOD							REPLACE OR C	COAT	IN 10-15 YEARS		

GOOD

EXCELLENT

THIS ROOF IS IN POOR CONDITION YET IN BETTER SHAPE THAN THE MULTIPURPOSE BUR SYSTEM. THAT BEING SAID IT IS STILL RECOMMENDED TO REPLACE THE ROOF.

REPLACE OR COAT IN 10-15 YEARS

BUDGET ESTIMATES	
IMMEDIATE REPAIRS AS RECOMMENDED	\$0.00
YEARLY PREVENTIVE MAINENANCE	\$750.00
ROOF RECOATING	\$0.00
ROOF REPLACEMENT	\$34,500.00









BUILDING	Pool Treatment			E N G I N E E R Engineering Services for the Bun						
ROOF SQ FT	750									
ROOF CONSTRU	JCTION									
ROOF AGE	UNKNOWN		0-5 YEARS		5-10 YEARS		10-15 YEARS	✓	15+ YEARS	
DECK TYPE	METAL		PLYWOOD		PLANK		CONCRETE		LW CONCRETE	
INSULATION	NONE	⋖	ISO		FIBER		PERLITE		STYRO	
INSUL THICK	1 INCH		2 INCH		3 INCH		4 INCH		TAPERED	
MEMBRANE	METAL SS		SINGLE PLY		BUR		MOD BIT		TWO SYSTEMS	
MEM SURFACE	COATING		MS CAP		3-PLY		GRANULE		SMOOTH	
FLASHINGS	CAPSHEET		HYPALON							
DRAINAGE	JOSAM		SCUPPERS		GUTTERS		OVER EDGE	√		
SLOPE	NONE		1:12	✓	2:12		3:12		6:12	
ROOF CONDITIO	ON - RATINGS (1-1	0) an	d RECOMMENDA	OITA	NS					#
FIELD		RE	PAIRS NEEDED						RATING	6
			RESEAL SEAMS		REPAIR B	LIST	ERS or RIDGING		SS RATING	
	CLEA	AR RO	OOF OF DEBRIS		DE	CK F	REPAIR NEEDED			
	DECK I	REPA	IR SUSPECTED		RESEAL/F	RPLA	ACE FASTENERS			
		CR	AZE CRACKING			3RIT	TLE MEMBRANE			
		EX	CESSIVE WEAR				BERS EXPOSED			
PITCH/POND		RE	PAIRS NEEDED						RATING	6
	F	ILL P	ONDING AREAS		FIX	(DE(CK DEFLECTION			
		5	SOME PONDING		Е	XCE	SSIVE PONDING			
FLASHING		RE	PAIRS NEEDED						RATING	6
		RES	EAL/REPAIR ALL		RES	EAL/	REPAIR SELECT		SS RATING	
			COAT AC DUCT		RESEAL/RECOAT WALL					
5549465	RESI		VALL FLASHING						DATINO	
DRAINAGE	A D D / E		PAIRS NEEDED NCE CRICKETS		4 DD/EN		NCE OVERFLOW		RATING	6
	ADD/E		CLEAR DRAINS		ADD/EI	NI IAI	ADD GUTTER			
	GUTT		REPAIR NEEDED		GUTTE	R CC	DATING NEEDED			
PENETRATION		RE	PAIRS NEEDED						RATING	6
		RESI	EAL/REPAIR ALL		RES	EAL/	REPAIR SELECT			
		REPL	ACE SKYLIGHT		RAISE HEIG	HT V	VHEN POSSIBLE			
ADDITIONAL			CTION NEEDED							
			ROOF ACCESS		ADD	EXT	ERNAL LADDER			
MAINITENIANICE			AD EQUIPMENT		VEED	\^/^ T				
MAINTENANCE			DRAINS CLEAN UNTIL REROOF		KEEP	VVAI	ERWAYS CLEAN TRIM TREES			
			OOF OF DEBRIS		ΗV	/AC F	REPAIR NEEDED			
			AT SUSPECTED				SUTTERS CLEAR			
LEAKS	E	EVIDE	ENCE OF LEAKS		YES		NO	✓		
ROOF CONDITIO	ON - OVERALL SY	STEN	1 RATING							
VERY POOR					REPLACE OR C	COAT	IMMEDIATELY - S	SPO	T REPAIRS ONLY	
POOR					REPLACE OR (COAT	Γ IN 1-2 YEARS - S	SPO	T REPAIRS ONLY	
FAIR							REPLACE OF	R CO	AT IN 3-5 YEARS	
MARGINAL							REPLACE OR	COA	T IN 5-10 YEARS	✓
GOOD							REPLACE OR C	CAT	IN 10-15 YEARS	

EXCELLENT

THIS ROOF IS AGING WELL BUT IS SUSPECTED TO BE OLD. A BUR SYSTEM HAS A LIFESPAN OF 10-20 YEARS.

BUDGET ESTIMATES	
IMMEDIATE REPAIRS AS RECOMMENDED	\$0.00
YEARLY PREVENTIVE MAINENANCE	\$500.00
ROOF RECOATING	\$0.00
ROOF REPLACEMENT	\$11,250.00





BUILDING INFOR	BUILDING INFORMATION						
FACILITY	James Lick HS						
DATE	August 20, 2014						
BUILDING	Pressbox						
ROOF SQ FT	200						



BUILDING	Pressbox						E	N (S I N E E R I N OS SERVICES FOR THE BUILDING ENVI	G ELOPE		
ROOF SQ FT	200								a delines for the sales of the			
ROOF CONSTRU	JCTION											
ROOF AGE	2005	⋖	0-5 YEARS		5-10 YEARS		10-15 YEARS		15+ YEARS			
DECK TYPE	METAL PLATE	✓	PLYWOOD		PLANK		CONCRETE		LW CONCRETE			
INSULATION	NONE		ISO		FIBER		PERLITE		STYRO			
INSUL THICK	1 INCH		2 INCH		3 INCH		4 INCH		TAPERED			
MEMBRANE	METAL SS		SINGLE PLY		BUR		MOD BIT		SHINGLE			
MEM SURFACE	COATING	✓	MS CAP		GRAVEL		SMOOTH		GRANULE			
FLASHINGS	CAPSHEET		HYPALON									
DRAINAGE	JOSAM		SCUPPERS		GUTTERS		OVER EDGE	✓				
SLOPE	SLIGHT	\checkmark	1:12		2:12		3:12		6:12			
ROOF CONDITIO	ON - RATINGS (1-1	0) ar	nd RECOMMENDA	OITA	NS					#		
FIELD		RE	EPAIRS NEEDED						RATING	7		
			RESEAL SEAMS		REPAIR B	LIST	ERS or RIDGING					
	CLEA	AR R	OOF OF DEBRIS		DE	CK F	REPAIR NEEDED					
			AIR SUSPECTED		RESEAL/F	RPLA	CE FASTENERS					
		CF	RAZE CRACKING				TLE MEMBRANE					
			CESSIVE WEAR				RTING TO RUST					
PITCH/POND			EPAIRS NEEDED			017			RATING	7		
11101111101111	F		ONDING AREAS		FIΣ	(DE(CK DEFLECTION		10.01110			
			SOME PONDING				SSIVE PONDING					
FLASHING		RE	EPAIRS NEEDED						RATING	7		
		RES	EAL/REPAIR ALL		RES	EAL/	REPAIR SELECT					
	RESEA	AL/RE	ECOAT AC DUCT		RESEAL/RECOAT WALL							
	RESI	EAL \	WALL FLASHING		EXCESSIVE FLASHING DAMAGE							
DRAINAGE			PAIRS NEEDED						RATING	7		
	ADD/E	ENHA	NCE CRICKETS		ADD/E	NHAI	NCE OVERFLOW					
	CUTT	ED E	CLEAR DRAINS REPAIR NEEDED		GUITTE	P CC	ADD GUTTER DATING NEEDED					
PENETRATION	0011		EPAIRS NEEDED		OOTIL	1 00	DATING NEEDED		RATING			
			EAL/REPAIR ALL		RES	EAL/	REPAIR SELECT		70.1110			
		REP	LACE SKYLIGHT		RAISE HEIG	HT V	VHEN POSSIBLE					
ADDITIONAL		Д	CTION NEEDED									
	IMPF	ROVE	ROOF ACCESS		ADD	EXT	ERNAL LADDER					
	REMOV	E DE	AD EQUIPMENT									
MAINTENANCE			DRAINS CLEAN		KEEP	WAT	ERWAYS CLEAN					
			UNTIL REROOF		1.10	/A O F	TRIM TREES					
			OOF OF DEBRIS				REPAIR NEEDED GUTTERS CLEAR					
LEAKS			ENCE OF LEAKS		YES		NO	V				
	ON - OVERALL SY	_			120		140					
VERY POOR	JIV OVERVIEWS				REPLACE OR C	COAT	IMMEDIATELY - 9	SPOT	T REPAIRS ONLY			
POOR							Γ IN 1-2 YEARS - S					
FAIR					THE DIGITAL OF THE		_		AT IN 3-5 YEARS			
MARGINAL									T IN 5-10 YEARS	_		
GOOD												
EXCELLENT					ONLY IF ROOF IS LESS THAN 5 YEARS OLD							

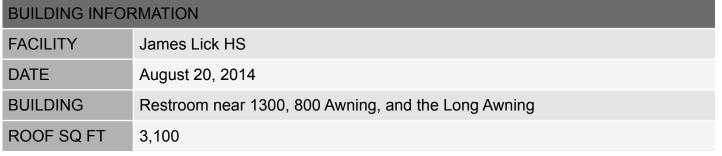
EXCELLENT

THIS COATED STEEL PLATED ROOF IS IN GOOD SHAPE. A GOOD COATING WILL LAST 10-15 YEARS.

BUDGET ESTIMATES	
IMMEDIATE REPAIRS AS RECOMMENDED	\$0.00
YEARLY PREVENTIVE MAINENANCE	\$200.00
ROOF RECOATING	\$2,000.00
ROOF REPLACEMENT	\$0.00





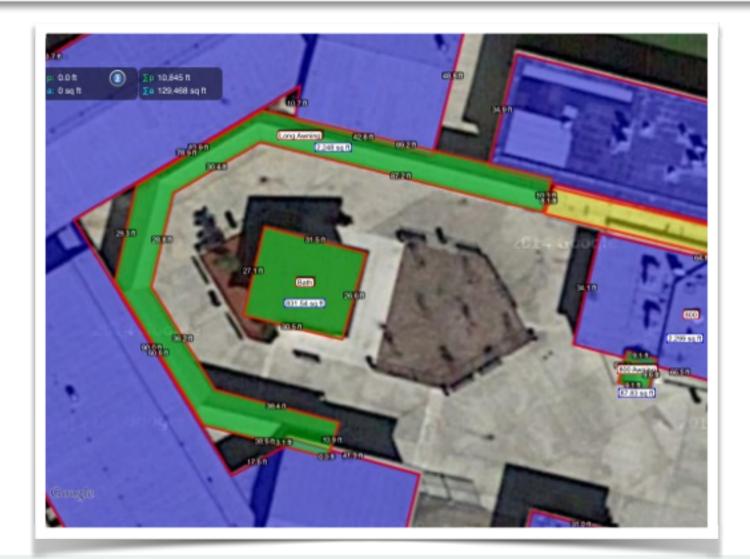




BUILDING	Restroom near 1300, 800 Awning, and the Long Awning								I N E E R I N IG SERVICES FOR THE BUILDING ENVE	ELOPE
ROOF SQ FT	3,100									
ROOF CONSTRU	ROOF CONSTRUCTION									
ROOF AGE	UNKNOWN		0-5 YEARS		5-10 YEARS		10-15 YEARS	~	15+ YEARS	
DECK TYPE	METAL		PLYWOOD		PLANK		CONCRETE		LW CONCRETE	
INSULATION	NONE		ISO		FIBER		PERLITE		STYRO	
INSUL THICK	1 INCH		2 INCH		3 INCH		4 INCH		TAPERED	
MEMBRANE	METAL SS	✓	SINGLE PLY		BUR		MOD BIT		SHINGLE	
MEM SURFACE	COATING		MS CAP		GRAVEL		SMOOTH		GRANULE	
FLASHINGS	CAPSHEET		HYPALON							
DRAINAGE	JOSAM		SCUPPERS		GUTTERS	✓	OVER EDGE			
SLOPE	NONE		1:12		2:12	~	3:12		6:12	
POOF CONDITIO		0) 0								#
	ON - RATINGS (1-1			A1101	NO.	-		-	RATING	
FIELD		K	EPAIRS NEEDED							
			RESEAL SEAMS				ERS or RIDGING		SS RATING	
			OOF OF DEBRIS		DE	CK F	REPAIR NEEDED			
	DECK	REP	AIR SUSPECTED		RESEAL/F	RPLA	CE FASTENERS			
		CF	RAZE CRACKING		· ·	3RIT	TLE MEMBRANE			
		Ε>	CESSIVE WEAR			STA	RTING TO RUST	\checkmark		
PITCH/POND		R	EPAIRS NEEDED						RATING	8
	F	ILL F	PONDING AREAS		FIX DECK DEFLECTION					
			SOME PONDING		E	XCE	SSIVE PONDING			
FLASHING	REPAIRS NEEDED								RATING	6
			EAL/REPAIR ALL				REPAIR SELECT		SS RATING	
			ECOAT AC DUCT		RESEAL/RECOAT WALL EXCESSIVE FLASHING DAMAGE					
DRAINAGE	RESI		WALL FLASHING EPAIRS NEEDED		EXCESSIVE	FLA	SHING DAWAGE		RATING	6
DIVAINAGE	ADD/F		ANCE CRICKETS		ADD/FI	JHAN	ICE OVERFLOW		NATING	U
	, 1887	_1 11 1/	CLEAR DRAINS		7,00721	11 17 (1	ADD GUTTER			
	GUTT	ERI	REPAIR NEEDED		GUTTE	R CC	DATING NEEDED			
PENETRATION		R	EPAIRS NEEDED						RATING	-
		RES	EAL/REPAIR ALL		RESEAL/REPAIR SELECT					1
		REP	LACE SKYLIGHT		RAISE HEIGHT WHEN POSSIBLE					
ADDITIONAL		A	ACTION NEEDED							
	IMPF	ROVE	ROOF ACCESS		ADD	EXT	ERNAL LADDER			
	REMOV	E DE	EAD EQUIPMENT							
MAINTENANCE			P DRAINS CLEAN		KEEP	WAT	ERWAYS CLEAN			
			UNTIL REROOF			_	TRIM TREES			
			OOF OF DEBRIS				REPAIR NEEDED			
15416			MAT SUSPECTED			SS G	UTTERS CLEAR	_		
LEAKS			ENCE OF LEAKS		YES		NO	•		_
	ON - OVERALL SY	STE	M RATING							
VERY POOR									FREPAIRS ONLY	
POOR					REPLACE OR (COAT	IN 1-2 YEARS - S			
FAIR									AT IN 3-5 YEARS	✓
MARGINAL									T IN 5-10 YEARS	
GOOD									IN 10-15 YEARS	
EXCELLENT					C	NLY	IF ROOF IS LESS	THA	N 5 YEARS OLD	

METAL ROOFS CAN LAST FOR DECADES IF MANAGED AND MAINTAINED. THESE ROOFS ARE STARTING TO SHOW RUST - BUDGET TO RECOAT WITHIN THREE TO FIVE YEARS.

BUDGET ESTIMATES	
IMMEDIATE REPAIRS AS RECOMMENDED	\$0.00
YEARLY PREVENTIVE MAINENANCE	\$500.00
ROOF RECOATING	\$31,000.00
ROOF REPLACEMENT	\$0.00

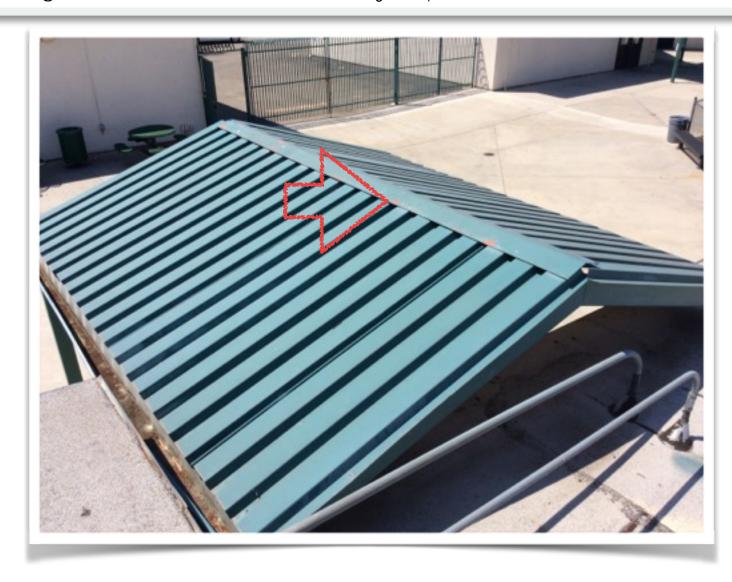




The photo below shows the beginning signs of rust.



If managed and recoated within the next few years, these roofs should last for decades.







BUILDING	Stadium Ancillary				IS SERVICES FOR THE BUILDING ENVE	ELOPE				
ROOF SQ FT	750							_		
ROOF CONSTRU	JCTION									
ROOF AGE	2012	⋖	0-5 YEARS		5-10 YEARS		10-15 YEARS		15+ YEARS	
DECK TYPE	METAL		PLYWOOD	~	PLANK		CONCRETE		LW CONCRETE	
INSULATION	NONE	S	ISO		FIBER		PERLITE		STYRO	
INSUL THICK	1 INCH		2 INCH		3 INCH		4 INCH		TAPERED	
MEMBRANE	METAL SS		SINGLE PLY		BUR	✓	MOD BIT		TWO SYSTEMS	
MEM SURFACE	COATING		MS CAP		3-PLY		GRANULE		SMOOTH	
FLASHINGS	CAPSHEET	4	HYPALON							
DRAINAGE	JOSAM		SCUPPERS	~	GUTTERS		OVER EDGE			
SLOPE	NONE		1:12	\	2:12		3:12		6:12	
ROOF CONDITIO	ON - RATINGS (1-1	0) ar	nd RECOMMENDA	ATIOI	NS					#
FIELD		RI	EPAIRS NEEDED						RATING	7
			RESEAL SEAMS		REPAIR B	LIST	ERS or RIDGING		SS RATING	
	CLEA	AR R	OOF OF DEBRIS		DE	CK F	REPAIR NEEDED			
	DECK	REPA	AIR SUSPECTED		RESEAL/F	RPLA	ACE FASTENERS			
		CF	RAZE CRACKING				TLE MEMBRANE			
		EX	CESSIVE WEAR				BERS EXPOSED			
PITCH/POND			EPAIRS NEEDED		WEWDIO		DEI TO EXI OCED		RATING	7
	F		ONDING AREAS		FIX	(DE	CK DEFLECTION			
		;	SOME PONDING		Е	XCE	SSIVE PONDING			
FLASHING		RE	EPAIRS NEEDED						RATING	7
		RES	EAL/REPAIR ALL		RES	EAL/	REPAIR SELECT		SS RATING	
	RESEA	AL/RE	ECOAT AC DUCT		RE	SEA	L/RECOAT WALL			
	RESI		WALL FLASHING							
DRAINAGE	ADD/ (EPAIRS NEEDED ANCE CRICKETS		4 DD/EN		NCE OVERFLOW		RATING	7
	ADDIL	_11111/-	CLEAR DRAINS		ADD/LI	NI IAI	ADD GUTTER			
	GUTT	ER F	REPAIR NEEDED		GUTTE	R CO	DATING NEEDED			
PENETRATION		RE	EPAIRS NEEDED						RATING	3
		RES	EAL/REPAIR ALL		RES	EAL/	REPAIR SELECT			
		REP	LACE SKYLIGHT		RAISE HEIG	HT V	VHEN POSSIBLE			
ADDITIONAL			ACTION NEEDED							
			ROOF ACCESS		ADD	EXT	ERNAL LADDER			
MAINTENANCE			AD EQUIPMENT DRAINS CLEAN		KEED	\ \ /\T	ERWAYS CLEAN			
MAINTLINANCE			UNTIL REROOF		INELI	V V 🔼 I	TRIM TREES			
			OOF OF DEBRIS		ΗV	/AC F	REPAIR NEEDED			
			IAT SUSPECTED				GUTTERS CLEAR			
LEAKS	E	EVIDI	ENCE OF LEAKS		YES		NO	✓		
ROOF CONDITIO	ON - OVERALL SY	STE	M RATING							
VERY POOR					REPLACE OR C	COAT	IMMEDIATELY - S	SPO	TREPAIRS ONLY	
POOR					REPLACE OR (COAT	Γ IN 1-2 YEARS - \$	SPO	TREPAIRS ONLY	
FAIR							REPLACE OF	R CO	AT IN 3-5 YEARS	
MARGINAL							REPLACE OR	COA	T IN 5-10 YEARS	

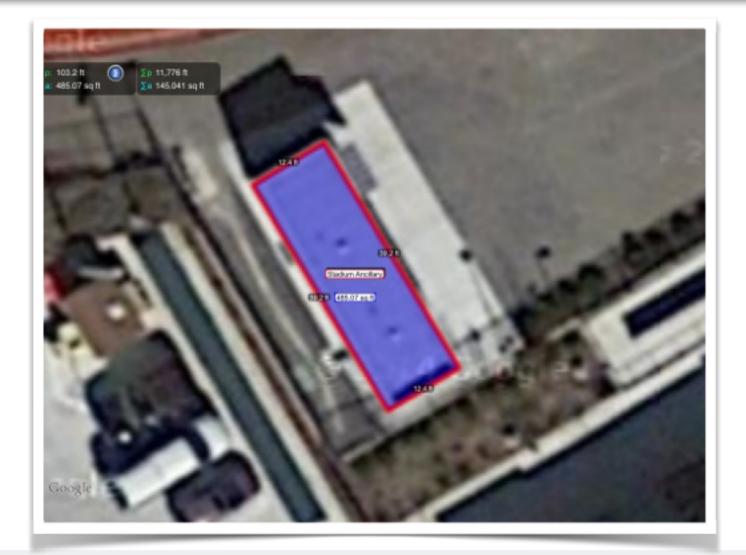
GOOD

EXCELLENT

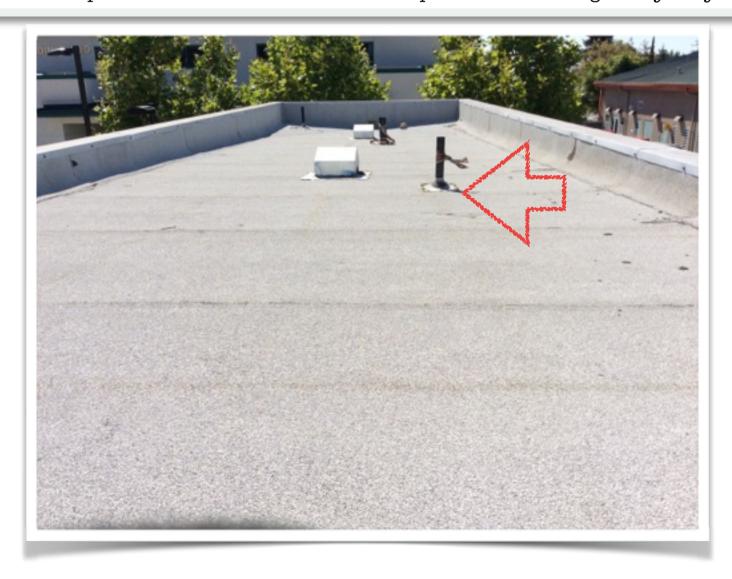
THE ROOF IS NEW AND IN GREAT SHAPE. THE PENETRATION FLASHINGS WERE INSTALLED INCORRECTLY ON TOP OF THE MEMBRANE. THEREFORE THEY WILL NEED TO BE RESEALED EVERY 3-5 YEARS.

REPLACE OR COAT IN 10-15 YEARS

BUDGET ESTIMATES	
IMMEDIATE REPAIRS AS RECOMMENDED	\$0.00
YEARLY PREVENTIVE MAINENANCE	\$750.00
ROOF RECOATING	\$0.00
ROOF REPLACEMENT	\$11,250.00



An overview photo from the roof level. Reseal the penetration flashings every 3-5 years.







BUILDING	TICKEL DOULL							ENGINEERIN	NG SERVICES FOR THE BUILDING ENVE	LOPE
ROOF SQ FT	200							_		
ROOF CONSTRU	JCTION									
ROOF AGE	2005	\	0-5 YEARS		5-10 YEARS		10-15 YEARS		15+ YEARS	
DECK TYPE	METAL PLATE		PLYWOOD	✓	PLANK		CONCRETE		LW CONCRETE	
INSULATION	NONE	\	ISO		FIBER		PERLITE		STYRO	
INSUL THICK	1 INCH		2 INCH		3 INCH		4 INCH		TAPERED	
MEMBRANE	METAL SS		SINGLE PLY		BUR		MOD BIT		SHINGLE	\
MEM SURFACE	COATING		MS CAP		GRAVEL		SMOOTH		GRANULE	
FLASHINGS	CAPSHEET		HYPALON							
DRAINAGE	JOSAM		SCUPPERS		GUTTERS	~	OVER EDGE			
SLOPE	SLIGHT		1:12		2:12	~	3:12		6:12	
							_			#
)N - RATINGS (1-1				NS				RATING	7
FIELD			PAIRS NEEDED						RATING	'
		ſ	RESEAL SEAMS				ERS or RIDGING			
	CLEA	AR RO	OOF OF DEBRIS		DE	CK F	REPAIR NEEDED			
	DECK	REPA	IR SUSPECTED		RESEAL/F	RPLA	CE FASTENERS			
		CR	AZE CRACKING		i i	3RIT	TLE MEMBRANE			
		EX	CESSIVE WEAR			STA	RTING TO RUST			
PITCH/POND		RE	PAIRS NEEDED						RATING	7
	F	ILL P	ONDING AREAS		FIX	(DE(CK DEFLECTION			
		S	SOME PONDING		Е	XCE	SSIVE PONDING			
FLASHING		RE	PAIRS NEEDED						RATING	7
			AL/REPAIR ALL				REPAIR SELECT			
			COAT AC DUCT				L/RECOAT WALL			
DDAINAGE	RESI		VALL FLASHING		EXCESSIVE	FLA	SHING DAMAGE		DATING	-
DRAINAGE	4 DD/[PAIRS NEEDED NCE CRICKETS		4 DD/E		NCE OVERFLOW		RATING	7
	ADD/E		CLEAR DRAINS		ADD/EI	NUAI	ADD GUTTER			
	GUTT		EPAIR NEEDED		GUTTE	R CC	ADD GOTTEN DATING NEEDED			
PENETRATION	3011		PAIRS NEEDED		GOTTE	1. 00	ATINO NEEDED		RATING	_
			EAL/REPAIR ALL		RES	EAL/	REPAIR SELECT		1011110	
			ACE SKYLIGHT				VHEN POSSIBLE			
ADDITIONAL		A	CTION NEEDED							
	IMPF	ROVE	ROOF ACCESS		ADD	EXT	ERNAL LADDER			
	REMOV	E DE	AD EQUIPMENT							
MAINTENANCE	k	KEEP	DRAINS CLEAN		KEEP	WAT	ERWAYS CLEAN			
	SPOT RE	PAIR	UNTIL REROOF				TRIM TREES			
	CLEA	AR RO	OOF OF DEBRIS		HV	/AC F	REPAIR NEEDED			
	F	IAZM.	AT SUSPECTED		KEEP	SS G	UTTERS CLEAR			
LEAKS	E	EVIDE	NCE OF LEAKS		YES		NO			
ROOF CONDITIC	N - OVERALL SY	STEM	I RATING							
VERY POOR					REPLACE OR C	COAT	IMMEDIATELY -	SPO	T REPAIRS ONLY	
POOR					REPLACE OR (COAT	Γ IN 1-2 YEARS -	SPO	T REPAIRS ONLY	
FAIR							REPLACE O	R CO	AT IN 3-5 YEARS	
MARGINAL							REPLACE OR	COA	AT IN 5-10 YEARS	
GOOD							REPLACE OR	COAT	IN 10-15 YEARS	

EXCELLENT

THIS SHINGLE ROOF IS IN GREAT SHAPE. IT WILL LAST 20-30 YEARS.

BUDGET ESTIMATES	
IMMEDIATE REPAIRS AS RECOMMENDED	\$0.00
YEARLY PREVENTIVE MAINENANCE	\$200.00
ROOF RECOATING	\$0.00
ROOF REPLACEMENT	\$0.00

