

## RAINWATER CONSERVATION SYSTEMS

COLEDESIGNMONTECITO.COM      CA GC LIC #501504

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93108**

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May 7 2016 / Updated Jan 12, 2026

Ganna Walska / LotusLand

695 Ashley Road  
Santa Barbara, CA  
93108

Greetings Lotus Land Board and Tyler Diehl

Hello and thanks Tyler for showing me around last month. I have completed my survey and here report my findings, recommendations and general cost estimates.

### FINDINGS AND RECOMMENDATIONS

By utilizing all available paved areas in Lotusland we can generate a great deal of relatively cheap water during a 9 month rain season. Estimates here use an average *rain year* of 18" and the industry *rate of capture* of 650 gallons per 1000 sq/ft per inch of rain.

This water currently runs off the property in a huge gusher at the South end swail where it's channeled into a 48" storm drain with steel grates and large concrete abutments. This water *would normally become part of the local aquifer* but because of paving, degrades creek beds and is quickly lost to the ocean, while local water tables sink.

We propose to capture this runoff water at two locations.

At the lower lot swail that exits the bottom south end of this lot, where we propose to instal a sump and pump water out whenever it's raining. Any over flow continues out on its usual course to the existing storm drain. The storage tanks have an auto shut off when full at which time the sump pumps are shut off, the excess water flows out the usual path to the existing storm drain at the South property line.

The captured rainwater is then pumped through two and a quarter inch pipes into adjacent tanks which are set in the S/W corner of the lot, on the dirt areas. (See plans below) From there the stored water can be lightly filtered as needed and pumped via the existing pressure booster system onto the gardens.

The upper lot water is gathered at the road leading out of this upper lot, near the *Staff Only* sign at the S/W of lot, with a surface drain grate across the road and a





sump at the West edge of road, near the existing power outlet and pressure tanks.

This upper lot water is then pumped into the proposed tank farm adjacent this road and lot by two 9,600 GPH pumps.

## DRAINAGE AREA - WATER AVAILABLE

From measurements of the upper and lower lots we have an approximate surface area of 40,000 square feet, combined with the road between the two lots adds additional 13,000 for total of 53,000 sq/ft. Therefore the equation is;

$53,000\text{sqft}/1000 \times 650 \text{ gallons per inch of rain} \times 18 \text{ inches rain per year} =$

632,000 gallons per year.

## TANKS

Many configurations are possible but for economic, aesthetic and visual reasons I am proposing the use of (30), 5,000 steel tanks painted gray/green (painting not included) and set into two *tank farm areas* as shown on the proprietary maps below. (15) steel tanks at the bottom S/W corner and (15) at the upper lot

area against the West side of property line, (out of setback) as shown will provide 150,000 gallons of water storage.

These tanks are all connected via 3" PVC at 2 foot height. Water pumped into the first tank will pass through a leaf and debris screen that will remove sticks, leaves etc as the water passes through the filtering screen placed outside the tank. The debris fall out to the ground for later cleanup. In the first tank, the water settles out dropping silt in that first tank. This tank will need occasional clean outs. From that tank the others are feed and water is drawn off the later tanks for use in the existing pressurized watering system. This simple protocol will substantially filter the collected water. The first and second tank will need some more regular cleaning and will have a clean out port at the very bottom.

**Note 1: Fire Department access:** to this water is an easy option. By installing approved Fire Department outlets on several tanks closest to the parking lots for use in an emergency by fire fighters, when for instance water pressure is depleted in a large fire emergency. 150,000 gallons could save a lot of houses, even lives and likely would be viewed favorably by Montecito and County fire.





## PUMPS

We recommend using simple, dependable 1/2 HP *industrial sump pumps* with a water pumping rate of 9600 / GPH gallon per hour. Two pumps per sump. These pumps have automatic float on switches and are submersed in a sump at the locations previously described. As rainwater begins to fill up the sump, (a 275 gallon industrial water storage bin 30" deep set into concrete in the ground), the pumps kicks on at a determined level and water is pumped out into the adjacent tanks. Two pumps in each sump will handle the highest flows expected of a 1" per hour rain which would create nearly 24,000 gallons per hour from one parking lot.

## PLANS PERMITS AND FEES

County has advised that the following agencies will need to sign off on this particular project.

Montecito Sanitary, Montecito County Water, Montecito Fire, County Building / Zoning, an *Historic Report* is also deemed likely to be needed by Zoning, and finally ABR is needed due to the visuality of the tank structures.

(Please see document photos below)

The *historic report* is to show nothing of historic, cultural, ethnic or intrinsic value is being disturbed. ABR will need elevations, drawings, color schemes.

This permit schedule is standard for new structures like the tanks and electrical in Montecito. Total cost for this *permit* is estimated to be in the 5%-10% of project cost range. An architect likely will be needed to draw acceptable elevations for ABR. Contractor can provide plans/drawings acceptable for County and other entities and Shepard the permits at a small hourly rate, (\$80/hr).

SB County Zoning indicated we could benefit by choosing one of the older existing permits and using it to preclude applying for a brand new permit. It's worth a try



## COSTS

Working from my first draft plans, measurements and my specified designs, to do the outlined work including materials, based on these particular design parameters.

**Note 2:** The final plans may change. This price here reflects only this design at this time.

**Note 3:** Plans, Permits and Fees are not included in this estimate.

My revised estimates for this work as shown to be in the \$250,000- \$300,000 range. Depending on design approvals, rising material prices, labor, and insurance costs.

That price will obtain for Lotusland approximately 630,000 gallons of rainwater per year, stored in 150,000 gallon increments, across (30) 5,000 gallon tanks.

**Note 4:** Sending/selling stored water to other locations and also releasing unneeded stored water back into the aquifer are also possible benefits.

That's 35,111 gallons per inch of rain. Every 4.27 inches of rain will fill the tanks with 150,000 gallons.

This will make it possible for Lotusland to rely on stored water and much less on pumping out of the aquifer in summer months.

Sincerely, Thomas M. Cole



*Lotus Land*

COUNTY OF SANTA BARBARA

Planning and Development

www.sbcountyplan...

**(3) SETS OF PLANS**  
 SITE PLAN, MANF. SPECS  
 FOR WATER TANKS, INSTALLATION  
 SPECS, PLUMBING AND ELECTRICAL,  
 PUMP SPECS.

**Reference Address**  
 695 ASHLEY RD, SANTA BARBARA

**Reference Owner**  
 WALSKA GANNA LOTUSLAND FOUNDATION

**Legal Description**

**Supervisorial District:** 1

**Permit History by Par**  
**Parcel Number** 013-090-0

Printed on April 28, 2016 at 9:45 AM

**Parcel Geographical Data**

**BAR Jurisdiction:** All or portion within Montecito BAR

**High Fire Hazard Area:** Check Fire Hazard Maps

**Home Exemption Value:** 0.00

**Rural Region:** All or portion within South Coast Rural Region

**Trails:** Trail Corridor Likely, Check Trail Layers

**Comprehensive Plan:** EDUCATIONAL FACILITY

**Historical Resource:** Potential Historic Resource Exists

**Personal Value:** 0.00

**South Coast Conduit: South Coast Conduit May Be Within this Parcel.**  
Contact Cachuma Operations & Maintenance Board at 687-4011 ←

**Urban:** All or portion within Urban Area

**Exemption Code:** WC

**HMA:** All or portion within the South Coast HMA

**Plan Area:** All or portion Within Montecito Community Plan

**Tax Rate Area:** 061008

**Use Code:** 8600

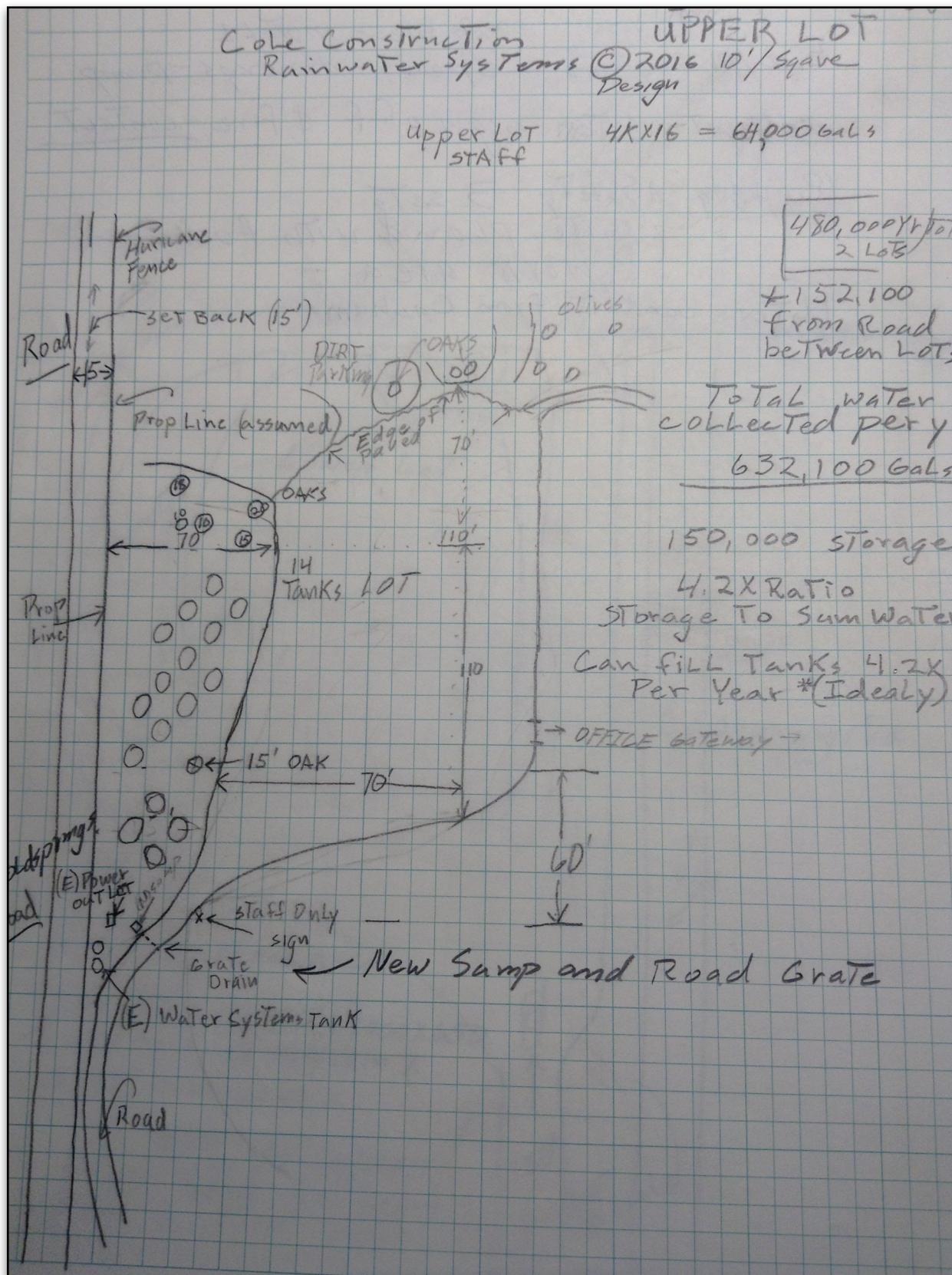
**Special Districts and Other Information of Interest (derived from the Tax Rate Area number):**

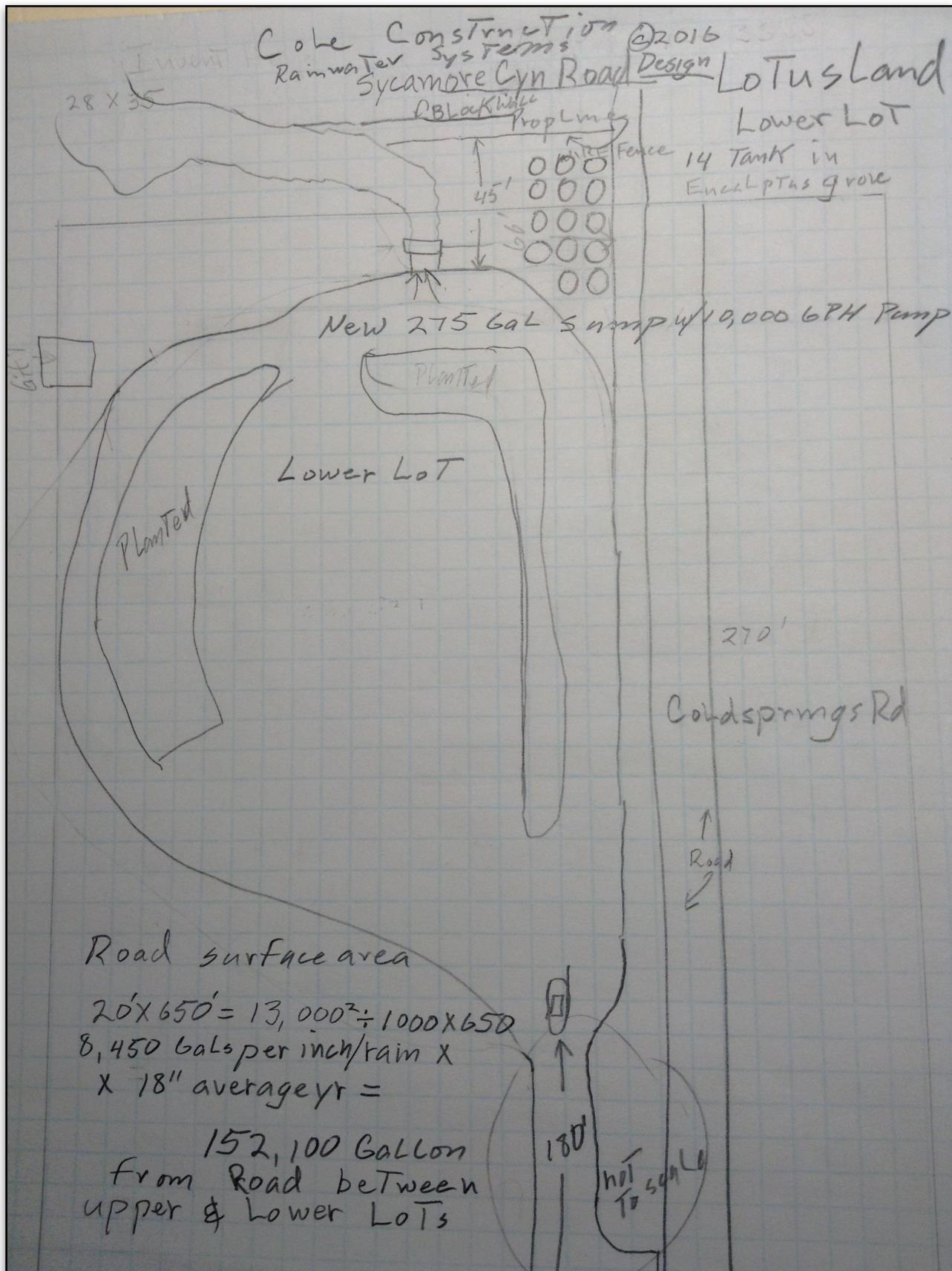
COLD SPRINGS ELEM. SCHOOL  
 MONTECITO SANITARY  
 MONTECITO COUNTY WATER

MONTECITO FIRE PROTECTION  
 SANTA BARBARA COUNTY WATER AGENCY  
 SANTA BARBARA (SB1537) UNIFIED SCHOOL

**Accela Cases**

Case Number	Dept.	Filed	Planner	Project Name	Status
02PMC-00000-00089	P	3/16/2002	EG	90-CP-004 SI LOTUSLAND PERPETUAL	Monitoring In Progress
02LUP-00000-00727	P	6/27/2002		LOTUSLAND DONOR GARDEN WALL	Closed
02LUP-00000-00955	P	8/30/2002	TE	LOTUSLAND GREENHOUSE DEMO/RECONSTRUCTION	Closed
02BDP-00000-01619	B	9/20/2002	CD	LOTUSLAND / GREENHOUSE	Closed
02BDP-00000-01629	B	9/24/2002	TA	LOTUSLAND / GARDEN WALL & FOUNTAIN	Closed
02BDP-00001-01619	B	6/12/2003	CD	LOTUSLAND / 2ND GREENHOUSE	Closed
04LUP-00000-00522	P	5/25/2004	AL	WALSKA GANNA GRDG/ROAD IMPRVMTS	Closed
04SCD-00000-00027	P	8/26/2004	AL	WALSKA GANNA GRDG/ROAD IMPRVMTS	Closed
04GRD-00000-00240	B	10/1/2004	CD	TIMBROOK / ASPHALT (E) MAINT ROAD	Closed
05CNP-00000-00298	B	6/6/2005		LOTUSLAND RE-ROOF 24 SQ	Closed
05CNP-00000-00866	B	12/7/2005		LOTUSLAND RE-ROOF 14 SQ	Closed
08FLM-00000-00076	B	10/6/2008	AB	NORM THOMPSON/LOCATION PLUS	Closed
09FLM-00000-00012	B	1/26/2009	AB	COLDWATER CREEK/LOCATIONS PLUS	Closed
09FLM-00000-00013	B	1/26/2009	AB	VICTORIA SECRETS/SBLS	Closed
09FLM-00000-00015	B	1/26/2009	AB	SAM'S CLUB/LOCATIONS PLUS	Closed
09FLM-00001-00015	B	1/30/2009	AB	SAM'S CLUB/LOCATIONS PLUS RIDERS	Closed
10FLM-00000-00004	B	1/8/2010		Bergdorf Goodman - Peter McClafferty	Closed
10FLM-00000-00046	B	5/25/2010	PO	Lula Magazine - PM Productions	Closed
11FLM-00000-00081	B	8/29/2011	AH	MMG Worldwide - John Wheeler	Closed
13FLM-00000-00099	B	12/5/2013	AH	WE SEE BEAUTY ALSIONA	Closed
14FLM-00000-00016	B	3/7/2014	AH	June & Johnny (Lotusland) Rene Jermal	Approved to Issue





## 5. ARCHITECTURAL HISTORIANS

PRESERVATION PLANNING ASSOCIATES ALEXANDRA COLE 519 FIG AVE SANTA BARBARA, CA 93101	Work Phone Fax Number Alt Phone Email Address Notes	(805) 450-6658 (805) 962-8578 accole5@yahoo.com
PROVENIENCE GROUP CAROLE DENARDO 1552 N. REFUGIO RD SANTA YNEZ, CA 93460	Work Phone Fax Number Alt Phone Email Address Notes	(805) 350-3134 cdenardo@proveniencegroup.com
RINCON CONSULTANTS, INC. SHANNON CARMACK 180 N. ASHWOOD AVE VENTURA, CA 93003	Work Phone Fax Number Alt Phone Email Address Notes	(805) 644-4455 (805) 644-4240 info@rinconconsultants.com
ROY HARTHORN CODE CONSULTANT ROY HARTHORN PO BOX 90756 SANTA BARBARA, CA 93190	Work Phone Fax Number Alt Phone Email Address Notes	(805) 569-8798 (805) 569-8798 roy.harthon@gmail.com
SAN BUENAVENTURA RESEARCH ASSOCIATES JUDITH TRIEM 1328 WOODLAND DRIVE SANTA PAULA, CA 93060	Work Phone Fax Number Alt Phone Email Address Notes	(805) 525-1909 (805) 525-1597 mitch@historicresources.com
SAN BUENAVENTURA RESEARCH ASSOCIATES MITCH STONE 1328 WOODLAND DRIVE SANTA PAULA, CA 93060	Work Phone Fax Number Alt Phone Email Address Notes	(805) 525-1909 (805) 525-1597 mitch@historicresources.com

LIX Building Cases						
Application Number	Type	Description	Issuance Date	Action Date	Status	Plan
243916	C	PLUMBING	05/27/92	10/15/92	F	
243917	C	PLUMBING	05/27/92	10/15/92	F	
243918	C	PLUMBING	05/27/92	10/15/92	F	
243919	C	PLUMBING	05/27/92	10/15/92	F	
243920	C	PLUMBING	05/27/92	10/15/92	F	
243921	C	PLUMBING	05/27/92	10/15/92	F	
244410	C	PAVILION	12/11/92	09/09/93	F	EG
245448	C	KIOSK	12/11/92	09/09/93	F	
245456	C	GRADING	12/11/92	09/09/93	F	
246739	C	MECHAN'L	04/28/93	06/01/93	F	
248600	C	REMODEL	01/24/94	08/30/94	F	E
254268	C	ALTER	05/19/95	01/25/96	F	
256731	C	REPAIRELC	01/01/96	01/25/96	F	E
110885		ELEC	03/06/86	09/09/86	F	
111703	R	DEMO	04/23/86	02/12/88	F	
119709	R	PL	08/13/87	10/01/87	F	
126483	R	EL	09/29/88	01/25/89	F	
131998	R	EL/MECH	08/14/89	10/26/89	F	
LIX Planning Cases						
Application Number		Description	Issuance Date	Action Date	Status	Plan
90-CP-004		98-SD-002	11/11/11	00/00/00		
95-LUS-465		# VISITORS	11/13/95	11/13/95	A	
99-LUS-312		# OF VISIT	06/04/99	00/00/00		
90-CP-004		REVISION	08/29/97	11/25/98	A	VSG
90-CP-04RV		APPLAPPRVL	12/03/98	00/00/00		
90-CP-004		REV APPEAL	12/03/98	05/25/99	A	VSG
87-BAR-166		GARDN BLGS	04/15/87	03/20/92	AF	
87-CP-075		EDUC TOURS	09/02/81	08/16/90	CQ	DLM
88-CP-118		GARDN BLDG	11/30/88	01/25/90	W	DLM
88-EIR-021		1516490CP4	11/11/11	00/00/00		DFS
90-CP-004		GARDN BLDG	12/22/89	04/03/91	A	VSG
92-GR-105		SEWER SYST	07/27/92	00/00/00		CK
92-LUS-527		MUS. FACIL	11/23/92	11/23/92	A	VG
92-M-007		LOTUSLAND	01/27/92	00/00/00		VSG
93-BAR-166		SIGNS	08/11/93	08/27/93	A	VL
93-SCC-020		SIGNS	10/04/93	00/00/00		
99-LUS-310		LOTUSLAND	06/04/99	00/00/00		
90-CP-004		APPROVAL	04/05/91	07/16/91	AC	VG
90-CP-004		COMPL/CVAR	11/15/94	00/00/00		VSG