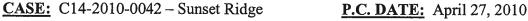
#### **ZONING CHANGE REVIEW SHEET**



May 11, 2010

**ADDRESS:** 8401 Southwest Parkway

**OWNER & APPLICANT:** Los Indios Ventures, Inc. (Tim Jamail)

**ZONING FROM: IP-NP** 

TO: GO-NP

AREA: 9.6 acres

# **SUMMARY STAFF RECOMMENDATION:**

The Staff recommendation is to grant general office – conditional overlay – neighborhood plan (GO-CO-NP) combining district zoning. The Conditional Overlay limits the number of daily vehicle trips to 2,200.

# **PLANNING COMMISSION RECOMMENDATION:**

April 27, 2010: APPROVED A POSTPONEMENT REQUEST BY THE NEIGHBORHOOD TO MAY 11, 2010.

[M. DEALEY; D. ANDERSON –  $2^{ND}$ ] (9-0)

May 11, 2010:

## **ISSUES:**

The Applicant's engineer has provided a letter outlining three different water quality scenarios which is located at the very back of the packet.

The Applicant has met to discuss the restrictive covenant amendment and rezoning cases with the Travis Country West Home Owners Association.

# **DEPARTMENT COMMENTS:**

The rezoning area is a legal tract with frontage on Southwest Parkway, contains one vacant structure and is zoned industrial park – neighborhood plan (IP-NP) district with the base district established through the 1985 Oak Hill Area Study. The Restrictive Covenant attached to the IP zoning ordinance establishes a maximum floor-to-area ratio of 0.25 to 1; requires compliance with the Williamson Creek ordinance; and establishes permitted and conditional commercial, industrial and civic uses.

The tract is adjacent to the Travis Country West subdivision to the east and south (SF-2-CO-NP), one single family residence to the west (GO-MU-CO-NP), and undeveloped land across Southwest Parkway to the north (LR, LO, SF-6-CO, all outside the Oak Hill Combined



Neighborhood Planning Area). Please refer to Exhibits A (Zoning Map) and A-1 (Aerial View).

The Applicant is seeking to amend the Restrictive Covenant in order to construct an office development, and has also been approached by a church to add religious assembly, and related administrative support, day care services and educational facilities as a permitted use.

Staff has recommended that the Applicant file a rezoning request from IP-NP to GO-NP in conjunction with the related Restrictive Covenant Amendment request to modify certain uses and development standards. Staff supports the rezoning and restrictive covenant amendment requests as it will remove an industrially-zoned tract and other intensive industrial and commercial uses over the aquifer, provide SOS water quality ponds, and reduce the maximum impervious cover for an office use from 65% to 55%.

# **EXISTING ZONING AND LAND USES:**

	ZONING	LAND USES
Site	IP-NP	One vacant structure; Undeveloped
North	SF-2-CO; SF-6-CO; LR; LO	Undeveloped; One single family residence
South	SF-2-CO-NP	Pond and single family residences within the Travis Country West subdivision
East	SF-2-CO-NP	Pond and single family residences within the Travis Country West subdivision
West	GO-MU-CO-NP	One single family residence

NEIGHBORHOOD PLANNING AREA: West Oak Hill TIA: Is not required

WATERSHED: Williamson Creek / DESIRED DEVELOPMENT ZONE: No
Barton Creek - Barton Springs Zone - Contributing Zone

**CAPITOL VIEW CORRIDOR:** No

**HILL COUNTRY ROADWAY:** Yes

Page 2 of 8

# **NEIGHBORHOOD ORGANIZATIONS:**

298 – Oak Hill Association of Neighborhoods (OHAN) 605 – City of Rollingwood

705 – OHAN 78735 712 – Travis Country West Home Owners Association

742 – Austin Independent School District 779 – Oak Hill Combined NPA Staff Liaison

786 - Home Builders Association of Greater Austin

917 - Barton Creek North Property Owners Association

943 – Save Our Springs Alliance 1037 – Hor

1037 - Homeless Neighborhood Association

1075 – League of Bicycling Voters

1113 – Austin Parks Association

1166 - Oak Hill Neighborhood Planning Contact Team

1200 - Super Duper Neighborhood Objectors and Appealers Organization

1224 – Austin Monorail Project

1228 – Sierra Club, Austin Regional Group

1236 – The Real Estate Council of Austin, Inc.

# Page 3 of 8

# **SCHOOLS:**

Oak Hill Elementary School

Small Middle School

Austin High School

# **CASE HISTORIES:**

NUMBER	REQUEST	COMMISSION	CITY COUNCIL
C14-2007-	DR to MF-1	To Grant MF-1-CO with	Approved MF-1-CO as
0250 –		the CO for 2,000 trips	Commission recommended with a
Amarra Drive		and maximum of 215	Restrictive Covenant for two-star
Lot 1 – 8718-		units. The Commission	Green Building and erosion and
8734		also recommended that	sedimentation control measures
Southwest		the Applicant comply	that exceed current requirements
Parkway;		with future erosion and	(3-20-08).
5105-5301		sedimentation controls at	
and 5305-		the site permit stage	
5325 Barton			
Creek			
Boulevard			
C14-06-0061	GO-MU-CO to	To Grant GO-MU-CO	Approved GO-MU-CO as
- 8509	GO-MU-CO,	with the CO for a 2,000	Commission recommended (07-
Southwest	in order to	trips per day limit	27-06).
Parkway	remove the CO		
	that restricts		
	development		
	of the Property		
	to one		
	residential unit		1.4.5.1.1.
C14-01-0083	DR to SF-2	To Grant SF-2-CO with	Approved SF-2-CO with CO for
- Sutter		CO for 2 residences	0.184 residences per acre (8-23-
Residence -			01).
8700			
Southwest			
Parkway			
C14-99-2144	LR; GR; IP to	To Grant SF-2-CO	Approved SF-2-CO with CO
– Travis	SF-2		establishing a maximum of 2.139
Country West			residential units per acre and
- Southwest			allowing one curb cut to Old Bee
Parkway at			Caves Road (10-5-00).
Travis Cook			
Road			
C14-94-0044	GO to GO-MU	To Grant GO-MU-CO	Approved GO-MU-CO with the
– Jamail			CO restricted to one dwelling unit
Zoning			(6-23-94).
Change –			
5601 Sunset			

C14-2010-0042

Page 4 of 8
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Ridge			
C14-92-0117	SF-3; LO, LR	Scheduled for	Not applicable
– Parkway II	to GR	Commission, but	
- 8212 Barton		postponed indefinitely -	
Club		Expired	

# **RELATED CASES:**

# 1985 Zoning and Restrictive Covenant

The subject property was annexed into the City limits on December 19, 1985 approved for IP zoning on September 17, 1987 (C14-85-288.166), as part of the Oak Hill Study. The Restrictive Covenant attached to the IP zoning ordinance establishes development standards, as well as permitted and conditional uses. A copy of the recorded Restrictive Covenant is provided as Attachment A.

# 2008 Oak Hill Neighborhood Plan and Rezonings

The property is designated as Office on the Future Land Use Map (FLUM) of the Oak Hill Neighborhood Plan. The rezonings associated with the West Oak Hill Neighborhood Plan Area were approved by Council on December 11, 2008 (C14-2008-0129, Ordinance No. 20081211-098). The base district of the subject property did not change, and the NP combining district was added.

#### 2010 Restrictive Covenant Amendment

The Applicant requests an amendment of the Restrictive Covenant to increase the FAR and reduce the maximum impervious cover for an office use, add religious assembly and related administrative support, day care services and educational facilities as a permitted use, provide SOS water quality ponds for either an office or religious assembly use, and remove 10 of the more intensive industrial and commercial uses over the aquifer (C14-85-288.166 (RCA) – Sunset Ridge).

# Land Use Determination and Approved Site Plan

The property has an approved land status determination and is not required to be platted (C8i-03-0087). There is an existing approved site plan for a three-story office building and a four-level parking garage that is within the 0.25: to 1 FAR limitation. This site plan is valid until September 9, 2010 (SPC-03-0014C). Please refer to Exhibit C.

## **ABUTTING STREETS:**

Name	ROW	Pavement	Classification	Sidewalks	Bike Route	Capital Metro
Southwest Parkway	Varies	Varies	Arterial, MAD 6, 17,300 vpd (TXDOT, 2005)	No	Yes, Priority 1 bike route	Not available
Sunset Ridge	50 feet	Varies	Local	No	No	No

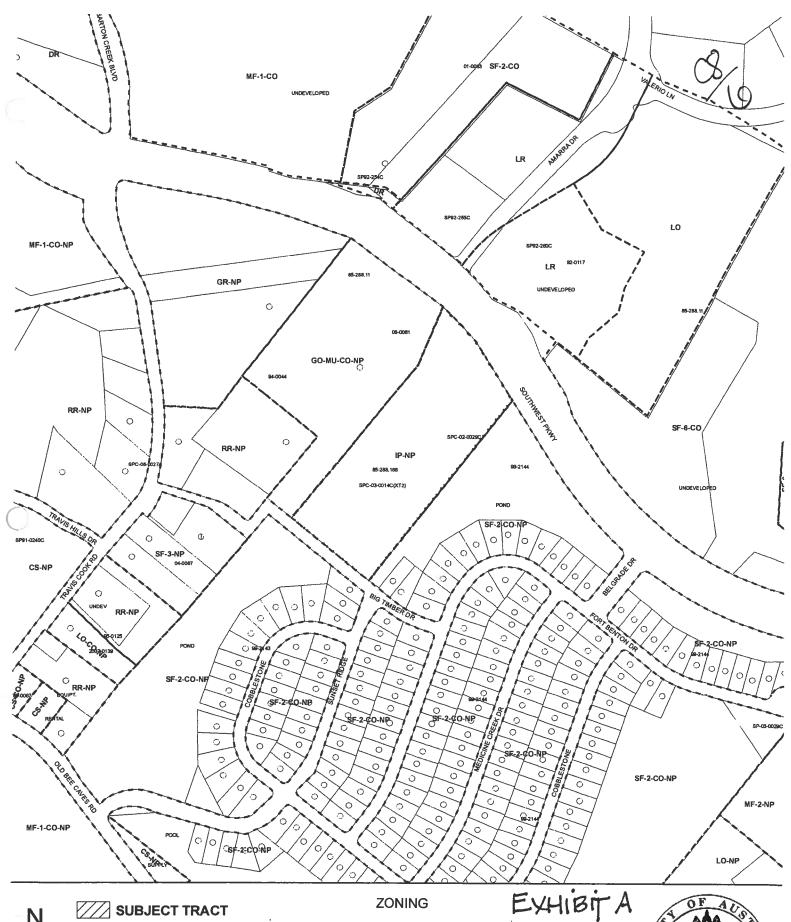
0/6

**CITY COUNCIL DATE:** May 27, 2010

**ACTION:** 

<u>CASE MANAGER:</u> Wendy Rhoades e-mail: wendy.rhoades@ci.austin.tx.us

**PHONE:** 974-7719







**ZONING BOUNDARY** 



**PENDING CASE** 

**ZONING CASE#:** C14-2010-0042

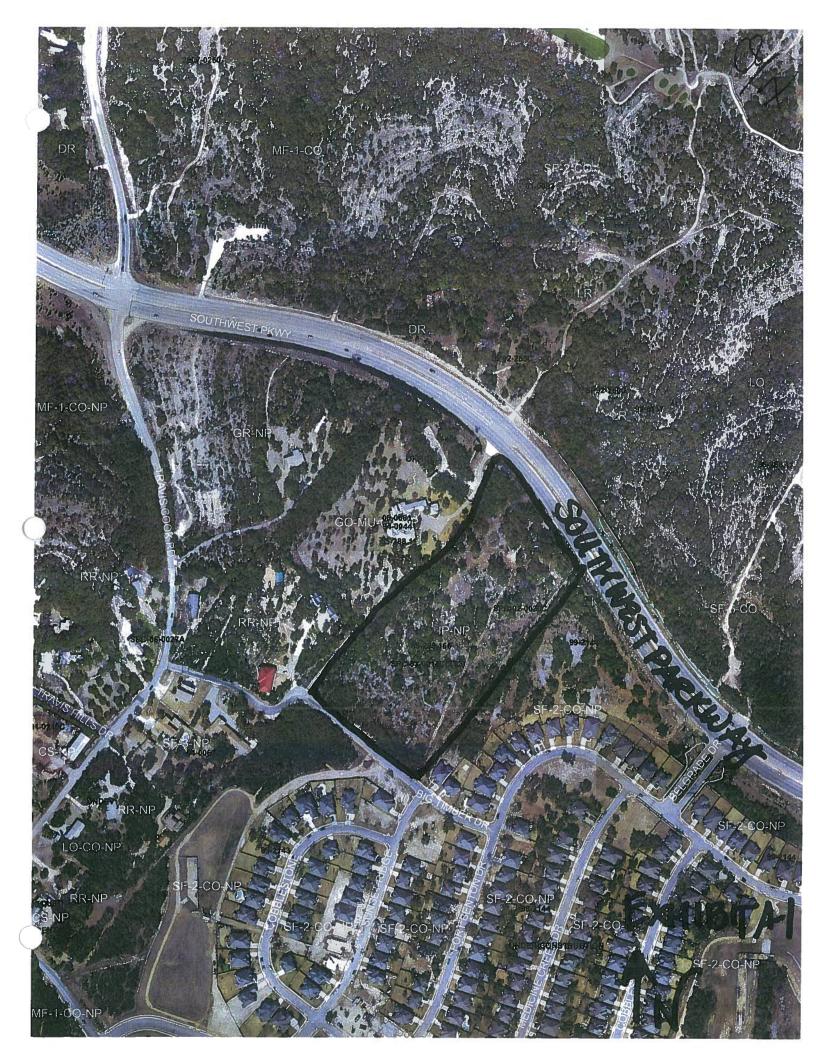
ADDRESS: 8401 SOUTHWEST PKWY

SUBJECT AREA: 9.6 ACRES

> GRID: **B21**

W. RHOADES MANAGER:





C&

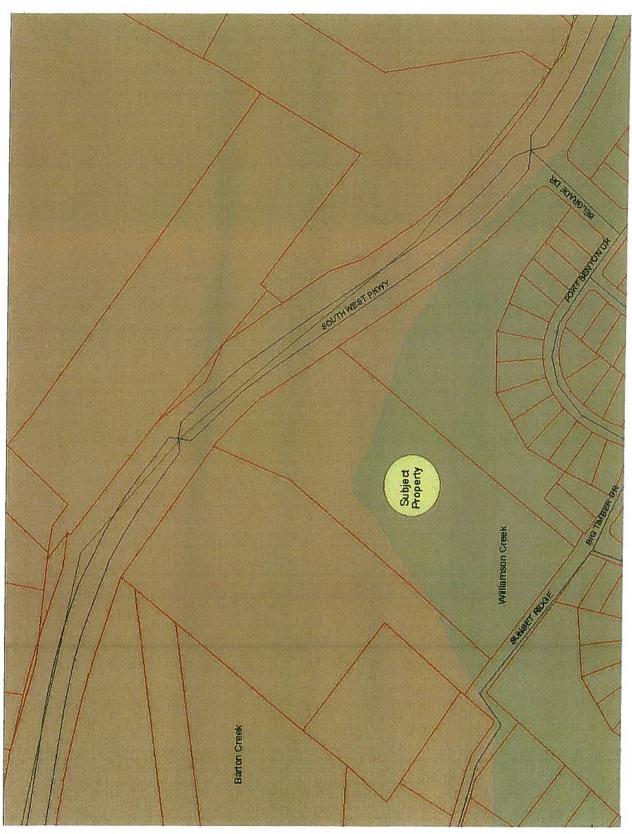


EXHIBIT B WATERSHED MAP

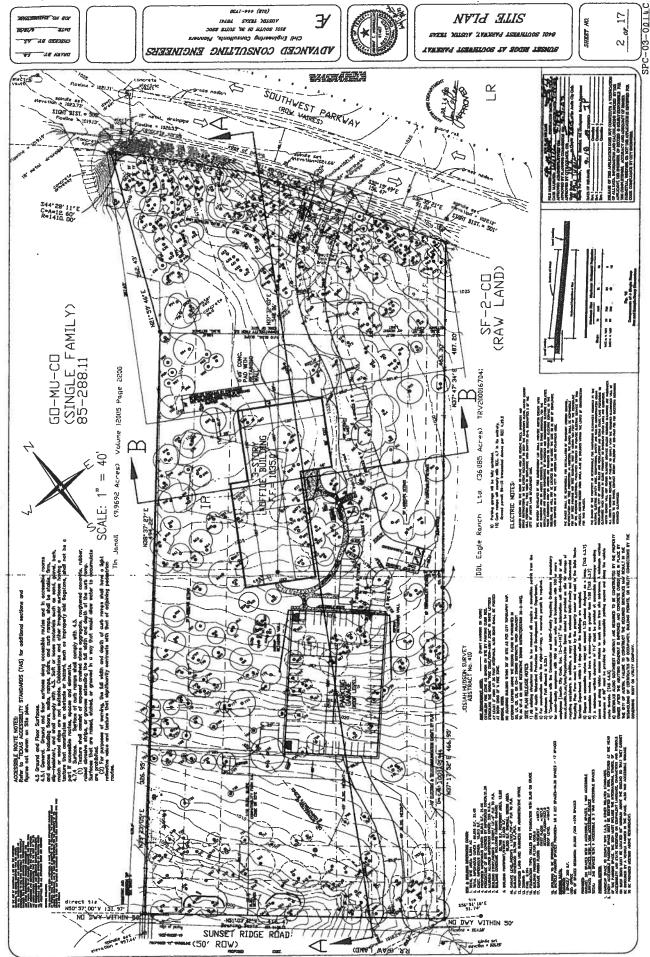


EXHIBIT C APPROVED SITE PLAN

#### RESTRICTIVE COVENANT

Owner: Boston Lane G.L.S. Joint Venture

Owner's Address: 11130 Jollyville Road. Austin, Texas 78759

Consideration: One and No/100 Dollars (\$1.00) and other good and valuable consideration paid by the City of Austin in hand to the Owners, the receipt and sufficiency of which is acknowledged.

Property:

All that certain tract, piece or parcel of land, lying and being situated in the County of Travis, State of Texas, described in Exhibit "A" attached hereto and made a part hereof for all purposes, to which reference is here made for a more particular description of said property; and,

Owners of the Property, for the consideration, impress the Property with these covenants and restrictions running with the land:

- 1. The Property shall be limited to a maximum of.25 to 1 floor to area ratio as defined by Section 1212 of Chapter 13-2A of the Austin City Code.
- 2. Development of the Property shall be in compliance with Sections 9-10-171 through 9-10-230 and Sections 13-3-401 through 13-3-475 of the Austin City Code, which regulate site development and subdivisions in the Williamson Creek Watershed.
- 3. The Property shall be limited to the following use types, defined in the Austin City Code:

Commercial Uses Administrative and Business Offices Agricultural Sales and Services\* Arts and Craft Studio (Limited) Arts and Craft Studio (General) Arts and Craft Studio (Industrial) Building Maintenance Services Business Support Services Business or Trade School Communications Services Constructions Sales and Services Financial Services Indoor Entertainment Indoor Sports and Recreation Medical Offices Outdoor Sports and Recreation Personal Services Professional Offices Research Services\* Restaurant (Convenience) Restaurant (Limited) Restaurant (General) Bervice Station

\*Not permitted in the Critical Water Quality Zone.

Industrial Uses Custom Manufacturing Light Manufacturing Limited Warehouse and Distribution General Warehouse and Distribution



civic Uses
Communication Services Pacilities
Cultural Services
Cultural Services
Cultural Services (Commercial)
Group Homes, Class I (Limited & General)
Group Homes, Class II
Local Utility Services
Maintenance and Services Facilities
Railroad Facilities
Safety Services



4. The following use types are permitted if approved by the Conditional Use Procedure described in Sections 6200 through 6290 of Chapter 13-2A of the Austin City Code:

Commercial Uses Outdoor Entertainment

<u>Civic Uses</u> Club or Lodge Parking Facilities

- 5. If any person or entity shall violate or attempt to violate the foregoing agreement and covenant, it shall be lawful for the city of Austin, a municipal corporation, its successors and assigns, to prosecute proceedings at law or in equity, against such person or entity violating or attempting to violate such agreement or covenant, to prevent the person or entity from such actions, and to collect damages for such actions.
- 6. If any part of this agreement or covenant shall be declared invalid, by judgment or court order, the same shall in no way affect any of the other provisions of this agreement, and such remaining portion of this agreement shall remain in full effect.
- 7. If at any time the City of Austin, its successors or assigns, fails to enforce this agreement, whether or not any violations of it are known, such failure shall not constitute a waiver or estoppel of the right to enforce it.
- 8. This agreement may be modified, amended, or terminated only by joint action of both (a) a majority of the members of the City Council of the City of Austin, or such other governing body as may succeed the City Council of the City of Austin, and (b) the owner(s) of the Property at the time of such modification, amendment or termination.

All citations to the Austin City Code shall refer to the Austin City Code of 1981, as amended from time to time, unless otherwise specified.

When the context requires, singular nouns and pronouns include the plural.

EXECUTED this	the 28th day of		, 1987.
	Bostor	Land J.L.S. Foint	: Venture
	BY:	Pohart P. Guinn	

This instrument was acknowledged before me on this the Arthur of Calaborate and the Control of Boston Lane G.L.S. Joint Venture.

Water Public, State of Texas

Wotary's name (printed):

My commission expires: 3-23-85

288.166/2

(%)

# Oak Hill Surveying Co., Inc. 6120 Hwy. 290 West - Austin, TX 78735 - (512) 892-5320



Sept. 13, 1984

PIELD NOTES DESCRIBING A 12.1557 ACRE (529,500 S.F.) TRACT OF LAND OUT OF THE J. HUDSON SURVEY NO. 530 IN TRAVIS COUNTY, TEXAS, SAID 12.1557 ACRE TRACT OF LAND BEING CONVEYED TO E. F. OERTLI BY DEED RECORDED IN VOLUME 2401, PAGE 10 AND VOLUME 2308 PAGE 166 OF THE DEED RECORDS OF TRAVIS COUNTY, TEXAS, SAID 12.1557 ACRE TRACT OF LAND BEING MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS AS FOLLOWS:

BEGINNING at an iron pipe found on the Northeast line of a 50° wide roadway easement at the Southwest corner of that certain 52.59 acre tract of land conveyed to James H. Arnold, et. ux. by deed recorded in Volume 3459, Page 2250 of the Travis County Deed Records, said point being situated at the Southeast corner of said tract conveyed to E. P. Gertli by deed recorded in Volume 2401, Page 10 of the Travis County Deed Records.

THENCE with the Northeast boundary line of said Roadway Easement N46°49'20"W for 416.53 feet to an iron pipe found at the most Southerly corner of that cartain 11.50 scre tract of land conveyed to Evan Hintner by deed recorded in Volume 6513. Page 107 of the Travia County Deed Records.

THENCE along the East boundary of said 11.50 acre tract same being the West boundary of the herein described tract the following three (3) courses:

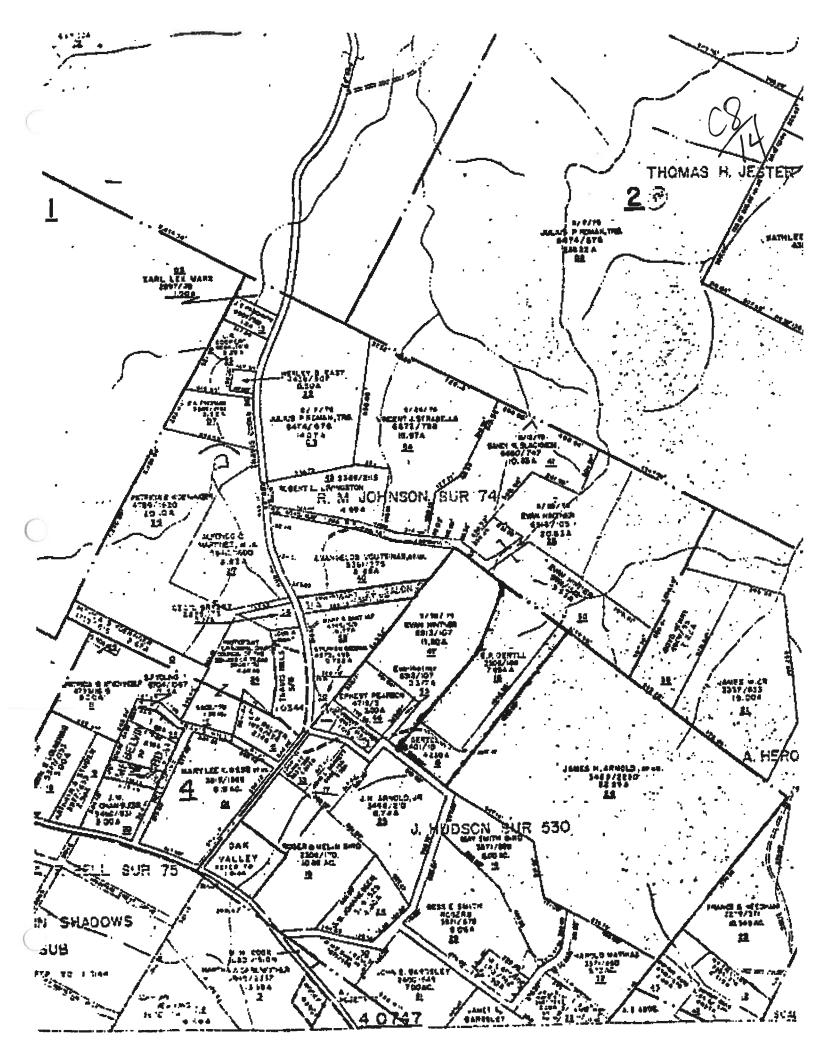
- 1. M43\*35'26"E for 326.82 feet to an iron pipe found.
- 2. 842°52'12"E for 494.13 feet to an iron pipe found.
- 3. W26°11°24"E for 450.08 feet to an iron pipe found on the Southwest boundary line of that certain 9.53 acre tract of land described in a deed to Evan Hintner recorded in Volume 5991, Page 1382 of the Travis County Deed Records.

THENCE with the fenced Southwest boundary line of said 9.53 scre tract \$46\*43'32"E for 517.82 feet to an Iron pipe found at the Northwest corner of said 52.59 acre James H. Arnold tract.

THENCE along the fenced West boundary line of said 52.59 acre tract S41°46'34"W for 1250.90 feet to the POINT OF BEGINNING of the herein described tract containing 12.1557 acres of land more or lass.

I HEREBY CERTIFY that these notes were prepared from a survey made on the ground under my supervision according to law and true true and correct to the best of my knowledge.

đm



C14-2010-0042 Page 6 of 8

# **SUMMARY STAFF RECOMMENDATION:**

9

The Staff recommendation is to grant general office – conditional overlay – neighborhood plan (GO-CO-NP) combining district zoning. The Conditional Overlay limits the number of daily vehicle trips to 2,200.

# BASIS FOR LAND USE RECOMMENDATION (ZONING PRINCIPLES)

1. The proposed zoning should be consistent with the purpose statement of the district sought.

The general office (GO) district is intended for offices and selected commercial uses predominantly serving community or City-wide needs, such as medical or professional offices. A building in a GO district may contain more than one use.

2. Zoning changes should promote compatibility with adjacent and nearby uses.

Staff supports the rezoning and restrictive covenant amendment requests as it will remove an industrially-zoned tract and other intensive industrial and commercial uses over the aquifer, provide SOS water quality ponds, and reduce the maximum impervious cover for an office use from 65% to 55%.

## **EXISTING CONDITIONS**

## **Site Characteristics**

The site contains one vacant structure located along Southwest Parkway, and is otherwise undeveloped. The property slopes gently towards Sunset Ridge to the south.

# **Impervious Cover**

The maximum impervious cover allowed on commercial properties subject to the Williamson Creek ordinance is 65% for areas with slopes between 10 and 20 percent.

# **Environmental**

This site is not located over the Edwards Aquifer Recharge Zone (the site is located over the Edwards Aquifer Contributing Zone). As shown in Exhibit B, the site is in the Williamson Creek and the Barton Creek Watershed of the Colorado River Basin, which are classified as Barton Springs Zone (BSZ) watersheds. It is in the Drinking Water Protection Zone. At this time, information has been provided indicating that a Restrictive Covenant grandfathers the property to the Williamson Creek Ordinance (Ordinance No. 840726-LL).

Single and two-family residential development shall not exceed a projected impervious cover of 40 percent. The projected impervious cover on any single commercial lot shall not exceed 40 percent within 200 feet of a Critical Water Quality Zone of a major waterway, within 100 feet of a Critical Water Quality Zone of an intermediate waterway, and no commercial

C14-2010-0042 Page 7 of 8

development shall occur within 100 feet of the centerline of a minor waterway. Unless the aforementioned commercial development provisions are more restrictive, no commercial development shall exceed 65 percent cover on slopes of 10 to 20 percent gradient, nor 25 percent on slopes greater than 20 percent gradient.



According to flood plain maps, there is no flood plain within the project location.

The site is located within the endangered species survey area.

Numerous trees will likely be impacted with a proposed development associated with this rezoning case. If further explanation or specificity is needed, please contact the City Arborist at 974-1876.

All developments on this site will be subject to providing detention, sedimentation, and filtration for water quality control when projected impervious cover exceeds 18 percent.

# **Transportation**

Additional right of way may be required at the time of subdivision or site plan application.

A traffic impact analysis was waived for this case because the applicant agreed to limit the intensity and uses for this development. If the zoning is granted, development should be limited through a conditional overlay to less than 2,200 vehicle trips per day. [LDC, 25-6-117]

# Water and Wastewater

The landowner intends to serve the site with City of Austin water and wastewater utilities. The landowner, at own expense, will be responsible for providing any water and wastewater utility improvements, offsite main extensions, utility relocations and or abandonments required by the land use. The water and wastewater utility plan must be reviewed and approved by the Austin Water Utility for compliance with City criteria. All water and wastewater construction must be inspected by the City of Austin. The landowner must pay the City inspection fee with the utility construction. The landowner must pay the tap and impact fee once the landowner makes an application for a City of Austin water and wastewater utility tap permit.

# Site Plan and Compatibility Standards

Any changes to the site plan which is affected by this amendment will need to proceed through the revision process. The revision will need to comply with Commercial Design Standards, Subchapter E, per the approval of the extension on February 6, 2007. FYI -The site plan was extended until September 9, 2010.

If the restrictive covenant amendment is approved, a correction will need to be submitted to update the FAR, gross floor area on the site plan sheets.

Page 8 of 8

The site is located within 1,000 feet of Southwest Parkway and within a Hill Country Roadway Corridor. Except for clearing necessary to provide utilities or site access, a 75 foot vegetative buffer will be required along Southwest Parkway. The height of a building in the Southwest Parkway roadway corridor may not exceed the lesser of: the height permitted by the zoning or the site plan approved for the property; or 60 feet.

The site is subject to compatibility standards. Along the east property line, the following standards apply:

- · No structure may be built within 25 feet of the property line.
- · No structure in excess of two stories or 30 feet in height may be constructed within 50 feet of the property line.
- · No structure in excess of three stories or 40 feet in height may be constructed within 100 feet of the property line.
- · No parking or driveways are allowed within 25 feet of the property line. In addition, a fence, berm, or dense vegetation must be provided to screen adjoining properties from views of parking, mechanical equipment, storage, and refuse collection.

Additional design regulations will be enforced at the time a site plan is submitted.

# **Travis Country West Homeowner's Association**

11149 Research Blvd., Suite 100, Austin, TX 78759-5227 Voice (512) 502-7517 Fax (512) 346-4873 1-800-900-9120

1149 Research Blvd., Suite 100 Austin, TX 78759



April 23, 2010

To Whom It May Concern:

Please consider this letter as a first request for postponement of rezoning case #: C14-85-288.166(RCA) – Sunset Ridge pertaining to the property located at 8401 Southwest Parkway. We are making this request on behalf of the Travis Country West Home Owner's Association (The Association). The Association would like to request a two-week postponement with a date certain of May 11, 2010. We hope to complete our decision process that will determine our public input on the case during the two weeks and we hope that we will not need to request a second postponement.

Sincerely,

Seth Prejean Director Travis Country West HOA

# LJA Engineering & Surveying, Inc.



5316 Highway 290 West Suite 150

Phone Fax 512.439.4700 512.439.4716

Austin, Texas 78735

www.ijaengineering.com

May 5, 2010

Mr. Tim Jamail Los Indios Ventures, Inc. 151 South First Street, Suite 200 Austin, TX 78714

Re.

8401 Southwest Parkway LJA Job Number A188-0401

Dear Mr. Jamail:

We are writing this letter to provide information to you on potential water quality scenarios for the 9.6 acre Sunset Ridge tract located at 8401 Southwest Parkway, east of Travis Cook Road. As you are aware, the referenced tract is subject to a City approved Restrictive Covenant, Case Number C14-85-266.166. Paragraph 2 of the Restrictive Covenant requires that the "Development of the Property shall be in compliance with Sections 9-10-171 through 9-10-230 and Sections 13-3-401 through 13-3-475 of the Austin City Code, which regulate site development and subdivisions in the Williamson Creek Watershed." Under these regulations, the subject tract would be allowed to be developed as a commercial development with 65% impervious cover and require water quality treatment via a sedimentation / filtration pond sized to capture the first 0.5 inch of runoff.

In conjunction with the two possible proposed amendments to the Restrictive Covenant, one to allow for an increased FAR under the existing approved uses and the other possible amendment to allow for religious assembly use, it is our understanding that you have agreed to further restrict development of the property under either scenario such that water quality treatment will be increased to meet the non-degradation requirements of Section 1.6.9.3 of the Environmental Criteria Manual, as defined in the SOS Ordinance. Based on this, we have analyzed three basic scenarios in order to quantify the increased water quality benefits as proposed:

- 1) 65% impervious cover under the Williamson Creek Ordinance
- 2) 65% impervious cover for Church use, with SOS water quality controls
- 3) 55% impervious cover for Office use, with SOS water quality controls

It is important to note that no specific site plan was used to evaluate these scenarios; rather a generic control was used for the entire site acreage for comparison purposes. The actual volumes of ponds and pollutant loads may vary slightly once design is undertaken as controls are sized by drainage area contributing to them.

The first scenario is essentially a review of pollutant loads based on existing agreements in place. The Williamson Creek Ordinance (Ordinance No. 801218-W) requires water quality controls to be sized for a 0.5 inch capture volume, treated with a conventional sedimentation / filtration pond. The City of Austin has performed studies quantifying the amount of pollutant load bypassing water quality controls when the capture volume is 0.5 inches, specifically in <a href="The First Flush of Runoff and its Effects on Control Structure Design">The First Flush of Runoff and its Effects on Control Structure Design</a>, 1990. The City's findings indicated that between 20 and 25 percent of the annual pollutant load was left untreated at this capture volume. In order to determine the actual pollutant load removals, we have used the City's published data on sedimentation / filtration pond efficiency coupled with the percent capture as described above. The results for all the required pollutants are shown on the enclosed spreadsheets, but overall removal percentage of annual pollutant loads range from 25% for total nitrogen (TN) to 71% for total suspended solids (TSS).



The second and third scenarios are potential development scenarios under which the site would voluntarily comply with the non-degradation requirements of the SOS ordinance, which requires no increase in the developed pollutant load from the pre-developed (baseline) pollutant load. Per these requirements, the capture volume is determined based upon the percent impervious cover draining to the pond. Based on this, the capture volume for Scenario 2 is 1.77 Inches, while for Scenario 3 it is 1.59 inches. The attached spreadsheets show the required pollutant removal rates which range from 94.8% for TSS to 99.3% for Fecal Streptococci (FS) for Scenario 2, and from 93.5% for TSS to 99.1% for FS for Scenario 3. In order to accomplish this level of pollutant load removal, a form of retention followed by Irrigation or infiltration on vegetated areas is required, thus resulting in a zero-discharge system that effectively removes 100% of the total pollutant load.

Based on this, the following Table summarizes the three scenarios:

		Scenario 1		Scenario 2		Scenario 3	
Reqd Capture Vol.	8	17,424 cf		61,6	581 cf	55,408 cf	
	Baseline	Polluntant Load Removed	Percentage Removed	Polluntant Load Removed	Percentage Removed	Polluntant Load Removed	Percentage Removed
TSS	191	2629	71%	3685	100%	2920	4000/
TP	0.13	2.52	47%	5.36	100%	4.25	100% 100%
TN	1.9	15.1	25%	61.0	100%	48.3	100%
COD	76	1418	54%	2646	100%	2097	100%
BOD	28	109	41%	268	100%	212	100%
Pb	0.0106	0.6673	66%	1.0050	100%	0.7963	100%
FC	6.29E+10	2.13E+12	36%	5.92E+12	100%	4.69E+12	100%
FS	4.71E+10	4.54E+12	65%	6.99E+12	100%	5.54E+12	100%
TOC	21.1	318.4	50%	636.5	100%	504.3	100%
Zn	0.0278	0.9916	59%	1.6749	100%	1.3271	100%

In addition, as mentioned previously, in order for Scenarios 2 and 3 to meet the non-degradation requirements, both scenarios will require a vegetated area for irrigation or infiltration of the treated stormwater.

Please feel free to call with any questions or if you need additional information.

Sincerely,

Danny Miller, P.F. Senior Project Manager

W:\A188\401\WQ Summary.doc

# SUNSET RIDGE TRACT (LOS INDIOS VENTURES, INC.) WILLIAMSON CREEK ORDINANCE POND WITH SOS POLLUTANT LOADINGS

SITE DATA WATER QUALITY AREA A 9.60 ACRES
IMPERVIOUS COVER
CAPTURE VOL. (IN.) 65.0% 0.50 RECHARGE ZONE? NO RUNOFF COEFF. (Rf) LAND USE (SF, MF, CO?) CO

**BASELINE LOADING** 

(FROM TABLE 1-10)		
	UNIT	BASELINE
POLLUTANT	LOAD(Bp)	LOAD (Up)
TSS	19.9	191
TP	0.014	0.13
TN	0.2	1.9
COD	7.9	76
BOD	2.9	28
Pb FC FS TOC	0.0011	0.011
FC	6.55E+09	6.29E+10
FS	4.91E+09	4.71E+10
TOC	2.2	21
Zn	0.0029	0.028

SOS RULES TABLE 1-11
POLLUTANT CONCENTRATIONS FOR DEVELOPED SITES

	POLEGIANT CONCENTRATIONS FOR DEVELOPED SITES									
SF: 0-15%	SF: >15%	MF: 0-15%	MF: >15%	CO: 0-15%	CO: >15%					
82.5	- 110	82.5	110	82.5	110					
0.1	0.16	0.1	0.16	0.1	0.16					
1.27	2	0.97	1.4	1.18						
28.5	35	28.5	35	50.5	79					
8	8	. 8	8	8	8					
0.012	0.02	0.012	0.02	0.017	0.03					
6200	8400	6200	8400	21500						
7000	11000	7000	11000	24500						
7.5	9	7.5	9	12.5						
0.024	0.04	0.024	0.04	0.029	0.05					

#### **DEVELOPED LOADING**

		DEVELOP
į.	UNIT	ED LOAD
POLLUTANT	LOAD(Dp)	(Tp)
TSS	383.8	3685
TP	0.558	5.36
TN	6.35	60.97
COD	275.7	2646
BOD	27.9	268
Pb	0.1047	1.005
FC	6.17E+11	5.92E+12
FS	7.28E+11	6.99E+12
TOC	66.3	636
Zn	0.174	1.675

UNIT LOADS FOR DEVELOPED SITE	UNIT	T LOADS	FOR	DEVEL	OPED	SITE
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SF: 0-15%	SF: >15%	MF: 0-15%	MF: >15%	CO: 0-15%	CO: >15%
287.9				287.9	383.8
0.349	0.558	0.349	0.558	0.349	0.558
4.43	6.98	3.38	4.89	4.12	6.35
99.5	122,1	99.5	122.1	176.2	275.7
27.92	27.92	27.92	27.92	27.92	
0.0419	0.0698	0.0419	0.0698	0.0593	0.1047
9.81E+10	1.33E+11	9.81E+10	1.33E+11	3.40E+11	6.17E+11
1.11E+11	1.74E+11	1.11E+11	1.74E+11	3.88E+11	7.28E+11
26.2	31.4	26.2	31.4	43.6	66.3
0.084	0.140	0.084	0.140	0.101	0.174

# DEMOVA

REMOVAL		<del>~</del>			·		
POLLUTANT	Rp	REQ'D REMOVAL (LB)	Efficiency:	% of Annual Load Captured*	BMP REMOVAL: SED/FIL LB REMOVED	Remaining Load	Actual Removal %
TSS	N/A	N/A	87%	82%	2,629	1,056	71%
TP	N/A	N/A	61%		2.518	2.84	47%
TN	N/A	N/A	31%	80%	15.1	45.8	25%
COD	N/A	N/A	67%	80%	1,418	1,228	54%
BOD	N/A	N/A	51%	80%	109	159	41%
Pb	N/A	N/A	80%	83%	0.687	0,338	66%
FC	N/A	N/A	36%	77%	2.13E+12	3.79E+12	36%
FS	N/A	N/A	65%	75%	4.54E+12	2.45E+12	65%
TOC	N/A	N/A	61%		318	318	50%
Zn	N/A	N/A	80%	74%	0.992	0.683	59%

# SUNSET RIDGE TRACT (LOS INDIOS VENTURES, INC.)

SOS POLLUTANT LOADINGS (65% I.C. ON TRACT)

SITE DATA

 WATER QUALITY AREA
 A

 ACRES
 9.60

 IMPERVIOUS COVER
 65.0%

 CAPTURE VOL. (IN.)
 1.77

 RECHARGE ZONE?
 NO

 RUNOFF COEFF. (Rf)
 0.4736

 LAND USE (SF, MF, CO?)
 CO

BASELINE LOADING (FROM TABLE 1-10)

UNIT BASELINE POLLUTANT LOAD(Bp) LOAD (Up) TSS TP 19.9 0.014 0.13 TN 0.2 1.9 COD 7.9 76 BOD 2.9 28 Pb FC 0.0011 0.011 6.55E+09 6.29E+10 4.91E+09 4.71E+10 TOC 0.0029 0.028

SOS RULES TABLE 1-11
POLLUTANT CONCENTRATIONS FOR DEVELOPED SITES

TOCCOTACT CONCENTRATIONS FOR DEVELOPED SITES						
SF: 0-15%	SF: >15%	MF: 0-15%	MF: >15%	CO: 0-15%	CO: >15%	
82.5	110	82.5	110	82.5	110	
0.1	0.16	0.1	0.16	0.1	0.16	
1.27	2	0.97	1.4	1.18		
28.5	35	28.5	35	50.5	79	
8	8	8	8	8	8	
0.012	0.02	0.012	0.02	0.017	0.03	
6200	8400	. 6200	8400	21500	39000	
7000	11000	7000	11000	24500	46000	
7.5	9	7.5	9	12.5	19	
0.024	0.04	0.024	0.04	0.029	0.05	

**DEVELOPED LOADING** 

		DEVELOP
ł	UNIT	ED LOAD
POLLUTANT	LOAD(Dp)	(Tp)
TSS	383.8	3685
TP	0.558	5.36
TN	6.35	60.97
COD	275.7	2646
BOD	27.9	268
Pb	0.1047	1.005
FC	6.17E+11	5.92E+12
FC FS TOC	7.28E+11	6.99E+12
	66.3	636
Zn	0.174	1.675

UNIT LOADS FOR DEVELOPED SITES

			ļ		
SF: 0-15%	SF: >15%	MF: 0-15%	MF: >15%	CO: 0-15%	CO: >15%
287.9	383.8	287.9	383.8	287.9	383.8
0.349	0.558	0.349	0.558	0.349	
4.43	6.98	3.38	4.89	4.12	6.35
99.5	122.1	99.5	122.1	176.2	275.7
27.92	27.92	27.92	27.92	27.92	27.92
0.0419	0.0698	0.0419	0.0698	0.0593	0,1047
9.81E+10	1.33E+11	9.81E+10	1.33E+11	3.40E+11	6.17E+11
1.11E+11	1.74E+11	1.11E+11	1.74E+11	3.88E+11	7.28E+11
26.2	31.4	26.2	31.4		
0.084	0.140	0.084	0.140		0.174

REMOVAL

		REQ'D	BMP REMOVAL: RETENTION	
		REMOVAL		LB
POLLUTANT	Rp	(LB)	% REMOVAL	REMOVED
TSS	94.8%	3494	100%	3685
TP	97.5%	5.23	100%	5.36
TN	96.9%	59.0	100%	61.0
COD	97.1%	2571	100%	2646
BOD	89.6%	240	100%	268
Pb	98.9%	0.994	100%	1.005
FC	98.9%	5.86E+12	100% .	5.92E+12
FS	99.3%	6.94E+12	100%	6.99E+12
TOC	96.7%	615	100%	636
Zn	98.3%	1.647	100%	1.675

# SUNSET RIDGE TRACT (LOS INDIOS VENTURES, INC.)

SOS POLLUTANT LOADINGS (55% I.C. ON TRACT)

SITE DATA

WATER QUALITY AREA A
ACRES 9.60
IMPERVIOUS COVER 55.0%
CAPTURE VOL. (IN.) 1.59

RECHARGE ZONE? NO RUNOFF COEFF. (Rf) 0.3753 LAND USE (SF, MF, CO?) CO

BASELINE LOADING (FROM TABLE 1-10)

	UNIT	BASELINE
POLLUTANT	LOAD(Bp)	LOAD (Up)
TSS	19.9	191
TP	0.014	0.13
TN	0.2	1.9
COD	7.9	76
BOD	2.9	28
Pb	0.0011	0.011
FC	6.55E+09	6.29E+10
FS	4.91E+09	4.71E+10
TOC	2.2	21
Zn	0.0029	0.028

DEVELOPED LOADING

	· · · · · · · · · · · · · · · · · · ·	DEVELOP
	UNIT	ED LOAD
POLLUTANT	LOAD(Dp)	(Tp)
TSS	304.1	2920
TP	0.442	4.25
TN	5.03	48.31
COD	218.4	2097
BOD	22.1	212
Pb	0.0829	0.796
FC	4.89E+11	4.69E+12
FS	5.77E+11	5.54E+12
TOC	52.5	504
Zn	0.138	1.327

SOS RULES TABLE 1-11
POLLUTANT CONCENTRATIONS FOR DEVELOPED SITES

SF: 0-15%		MF: 0-15%	MF: >15%	CO: 0-15%	CO: >15%
82.5	110	82.5	110	82.5	110
0.1		0.1	0.16	0.1	0.16
1.27		0.97	1.4	1.18	
28.5	35	28.5	35	50.5	79
8	8	. 8	8	8	8
0.012	0.02	0.012	0.02	0.017	0.03
6200	8400	. 6200	8400	21500	39000
7000	11000	7000	11000	24500	46000
7.5	9	7.5	9	12.5	19
0.024	0.04	0.024	0.04	0.029	0.05

**UNIT LOADS FOR DEVELOPED SITES** 

		-			
SF: 0-15%	SF: >15%	MF: 0-15%	MF: >15%	CO: 0-15%	CO: >15%
228.1	304.1	228.1	304.1	228.1	304.1
0.276	0.442	0.276	0.442	0.278	0.442
3.51	5.53	2.68	3.87	3.26	5.03
78.8	96.8	78.8	96.8	139.6	218.4
22.12	22.12	22.12	22.12	22.12	22.12
0.0332	0.0553	0.0332	0.0553	0.0470	0.0829
7.77E+10	1.05E+11	7.77E+10	1.05E+11	2.70E+11	4.89E+11
8.78E+10	1.38E+11	8.78E+10	1.38E+11	3.07E+11	5.77E+11
20.7	24.9	20.7	24.9	34.6	52.5
0.066	0.111	0.066	0.111	0.080	0.138

REMOVAL

TEMOVAL .			r	
POLLUTANT	Rp	REQ'D REMOVAL (LB)	BMP REMOVAL: RETENTION / INFILTRATION LB REMOVAL REMOVED	
TSS	93.5%	2729		REMOVED 2920
TP	96.8%	4.11	100%	
TN	96.0%	46.4		4.25
				48.3
COD	96.4%	2021	100%	2097
BOD	86.9%	184	100%	212
Pb	98.7%	0.786	100%	0.796
FC	98.7%	4.63E+12	100% .	4.69E+12
FS	99.1%	5.49E+12	100%	5.54E+12
TOC	95.8%	483	100%	504
Zn	97.9%	1.299	100%	1,327