



### ITEM FOR ENVIRONMENTAL BOARD AGENDA

**BOARD MEETING**

**DATE REQUESTED:** February 21, 2007

**NAME & NUMBER  
OF PROJECT:** St. Stephen's Private Driveway  
SP-06-0346D

**NAME OF APPLICANT  
OR ORGANIZATION:** St. Stephen's Episcopal School  
(Alberto Alaniz, P.E. - Phone 328-0011)

**LOCATION:** 4400 Block of Westlake Drive.

**PROJECT FILING DATE:** June 14, 2006

**WPDR/ENVIRONMENTAL  
STAFF:** Teresa Alvelo, 974-7105  
teresa.alvelo@ci.austin.tx.us

**WPDR/  
CASE MANAGER:** Lynda Courtney  
Lynda.courtney@ci.austin.tx.us

**WATERSHED:** Lake Austin (Water Supply Rural)  
Drinking Water Protection Zone

**ORDINANCE:** Comprehensive Watershed Ordinance (current Code)

**REQUEST:** Variance requests are as follows:  
1. To allow development within the Critical Water  
Quality Zone [LDC 25-8-261].  
2. To allow development within the Water Quality  
Transition Zone [LDC 25-8-453 (B)].

**STAFF RECOMMENDATION:** Recommended with condition.

**REASONS FOR  
RECOMMENDATION:** Findings of fact have been met, and applicant has worked  
closely with staff to preserve the natural/traditional  
characteristic of the land.

B-1



## MEMORANDUM

TO: Betty Baker, Chairperson  
Members of the Zoning and Platting Commission

FROM: Teresa Alvelo, Environmental Reviewer  
Watershed Protection and Development Review Department

DATE: February 7, 2007

SUBJECT: St. Stephens Private Drive  
4400 Block of Westlake Drive / SP-06-0346D

This project proposes the development of a 1670± foot private driveway extending from Bunny Run near the St. Stephen's School entrance to Westlake Drive. The purpose of this private driveway is to reduce traffic on Bunny Run and Royal Approach Drive, and also to satisfy the result of an agreement between The Gables residents, the Bunny Run Neighborhood Group, St. Stephens School, and City of Austin staff to provide primary student access to the school. Two variances are required in order to construct a small crossing in the Critical Water Quality Zone, and the Water Quality Transition Zone.

### **Description of Project Area**

The subject area lies within the 4400 block of Westlake Drive. It is located within the drainage acreage of St. Stephens Creek, which is a tributary in the Lake Austin watershed, a Water Supply Rural watershed. The proposed development is on the 245.89-acre St. Stephens tract, and is situated within the full-purpose jurisdiction of the City of Austin. Proposed new impervious cover will be 1.05 acres, or 0.52% of total impervious cover. Total (existing plus new) impervious cover will be 9.84%. The project is in the Drinking Water Protection Zone, but is not located over the Edwards Aquifer Recharge Zone. The applicant is also requesting an administrative cut/fill variance not to exceed eight feet in order to satisfy engineering requirements.

Critical Water Quality Zone, Water Quality Transition Zone, and 100-year floodplain is associated with this project.

The applicant has worked closely with staff to preserve the traditional and natural characteristic of the land. While some trees are proposed to be removed, many are not

protected-size status and/or are not Class I trees. The applicant worked closely with staff, particularly the City Arborist, to come up with a re-design in order to preserve a significant and healthy 41" live oak, originally slated for removal. Water quality is addressed by providing overland sheet flow to vegetated areas to the greatest extent possible. For areas where overland sheet flow is not possible, revegetation of disturbed areas in the critical water quality zone and water quality transition zone will be provided using 609-S, and strategically-placed switchgrass to minimize erosion hazards.

### **Hydrogeologic Report**

Elevation of the subject area ranges from approximately 655 to 715 above mean sea level. The subject area slopes downward predominantly from east to west. Surface geology of the subject area is comprised of the Glen Rose Formation. This formation is characterized as limestone, hard to soft, thin to thick bedded.

Soils on the subject area are classified within the Brackett Association, and consist of two individual series: Brackett soils, rolling; and Volente complex, 1 to 8 percent slopes.

### **Vegetation**

The majority of the subject area is covered by mature and re-growth, multi-trunked Ashe juniper, intermixed with live oak, Texas oak, and cedar elm. The shrub layer within the subject area includes, but is not limited to: immature Ashe juniper, immature cedar elm, Texas persimmon, Mexican buckeye, Virginia creeper, agarita, greenbriar, flameleaf sumac, Texas mountain laurel, American holly, and povertyweed. Also found is Texas prickly pear, frostweed, yellow Indian grass, little bluestem, and straggler daisy.

### **Critical Environmental Features**

There are no critical environmental features (CEF's) within 150 feet of the proposed LOC.

### **Water/Wastewater Report**

No utilities are proposed for this project.

### **Zoning and Platting Commission Variance Request(s)**

The following variances are being requested:

1. To allow development within the Critical Water Quality Zone [LDC 25-8-261],
2. To allow development within the Water Quality Transition Zone [LDC 25-8-453 (B)].

#### **1. Variance from Land Development Code LDC 25-8-261– Critical Water Quality Zone Development**

*Development is prohibited in a critical water quality zone.*

#### **2. Variance from Land Development Code LDC 25-8-453 (B) – Development in a Water Quality Transition Zone**

*Development is prohibited in a water quality transition zone in water supply rural watersheds.*

The applicant seeks approval for these two variances in order to construct a private driveway for St. Stephen's education facility. This drive will provide primary student access to the St. Stephen's Episcopal school facility in order to satisfy an agreement between interested neighborhood groups. Avoiding development within the critical water quality zone and water quality transition zone is not possible. Minimal disturbance will affect these areas.

**Recommendations:**

The proposed project is recommended, with condition, as the applicant has worked closely with staff to provide a project that respects the traditional and natural characteristic nature of the site to the greatest extent possible by minimizing total impervious cover, preserving significant Class I trees, and providing overland sheet flow and revegetation techniques that will minimize erosion hazards.

**Condition**

1. Applicant will provide water quality by maximizing overland sheet flow to vegetative areas to the greatest extent possible, and provide vegetative filter strips where overland sheet flow would be insufficient.

**Similar Cases**

August 7, 2002

Nalle Woods / SPC-02-0270C

Variances:

Water Supply Rural

LDC 25-8-453 Development in a Water Quality Transition Zone. Not recommended by staff.

LDC 25-8-302. Construction on Slopes.

Recommended by staff.

LDC 25-8-341/342. To exceed 4' cut/fill.

Recommended by staff.

All variances recommended by Environmental Board with a vote 8-0-0-1.

Staff conditions: 1. All disturbed areas are to be revegetated with a native grass/flower seed mix and all unstable cut or fill with a gradient of more than 33% must be stabilized with a permanent structure. 2. Impervious cover will be limited to 20% net site area. 3. An IPM plan for the site is required. 4. The applicant will retain over 75% of the site in a natural undisturbed state. 5. Level spreaders and vegetative filter strips will be added to provide water quality for the development in the

WQTZ and portions of the uplands, which do not require water quality.

August 7, 2002  
Lakeside @ Steiner Ranch  
Section 6 / C8-02-0003  
Variances:

Water Supply Rural  
LDC 25-8-262 (B) (2). Development within a Critical Water Quality Zone. Recommended by staff.

Recommended by Environmental Board with a vote 7-0-1-1.

Staff conditions: 1. Water quality measures are to be provided such as vegetation filter strips, improve storm water runoff and/or provide water quality methods approved and negotiated with City staff. 2. Any trees greater than 8 inches in caliper proposed to be removed within the crossing area in the CWQZ will be replaced at 100% with Class I trees or as negotiated with City staff.

Additional Board Condition: Lot 79 will be dedicated as greenbelt by plat note and restrictive covenant.

If you have any questions or need additional information, please contact Teresa Alvelo at 974-7105.

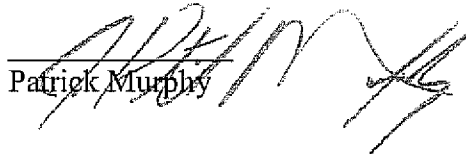


Teresa Alvelo, Environmental Reviewer  
Watershed Protection and Development Review Department

Environmental Program Coordinator:

  
Ingrid McDonald

Environmental Officer:

  
Patrick Murphy



**Watershed Protection and Development Review Department  
Staff Recommendations Concerning Required Findings  
Water Quality Variances**

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**Application Name:** *St. Stephens Road – Private Drive*  
**Application Case No:** *SP-06-0346D*  
**Code Reference:** *LDC 25-8-261*  
**Variance Request:** *To develop in the Critical Water Quality Zone*

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**A. Land Use Commission variance determinations from Chapter 25-8, Subchapter A – Water Quality of the City Code:**

1. The requirement will deprive the applicant of a privilege or the safety of property given to owners of other similarly situated property with approximately contemporaneous development.

**Yes**     *The requirement will deprive the applicant of a privilege or the safety of property given to owners of other similarly-situated property. This driveway is intended to provide primary student access to and from St. Stephen's School. This will satisfy an agreement between the applicant, neighborhood groups, and the City of Austin staff to provide primary student access and reduce traffic on Royal Approach Drive and Bunny Run.*

2. The variance:

- a) Is not based on a condition caused by the method chosen by the applicant to develop the property, unless the development method provides greater overall environmental protection than is achievable without the variance;

**Yes**     *The variance is not based on a condition caused by the method chosen by the applicant to develop the property.*

- b) Is the minimum change necessary to avoid the deprivation of a privilege given to other property owners and to allow a reasonable use of the property;

**Yes**     *The alignment is the shortest route available that respects and preserves the traditional and natural characteristic of the land, including a significant and healthy 41" live oak tree.*

- c) Does not create a significant probability of harmful environmental consequences; and

**Yes**      *Minimal impervious cover, overland sheet flow, revegetation techniques, and tree preservation provides a small, if not minimal, impact on the environment for this proposed project.*

3. Development with the variance will result in water quality that is at least equal to the water quality achievable without the variance.

**Yes**      *Development of the driveway is only .52% (1.05 acres) of total impervious cover. The shortest-possible alignment was sought to minimize impervious cover, while at the same time creating minimal impact to the CWQZ, WQTZ, and protected-sized and/or significant trees.*

**B. Additional Land Use Commission variance determinations for a requirement of Section 25-8-393 (Water Quality Transition Zone), Section 25-8-423 (Water Quality Transition Zone), Section 25-8-453 (Water Quality Transition Zone), or Article 7, Division 1 (Critical Water Quality Zone Restrictions):**

1. The above criteria for granting a variance are met;

**Yes**      *LDC 25-8-453 prohibits development within a water quality transition zone in a water supply rural watershed. Therefore, a variance is being requested to address and satisfy this requirement.*

2. The requirement for which a variance is requested prevents a reasonable, economic use of the entire property; and

**Yes**      *Denial of this variance would prevent a reasonable, economic use of the lot.*

3. The variance is the minimum change necessary to allow a reasonable, economic use of the entire property.

**Yes**      *A minimum change is represented with this variance request.*

---

**Reviewer Name:**      Teresa Alvelo

**Reviewer Signature:**      Teresa Alvelo

**Date:**      January 31, 2007

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*Staff may recommend approval of a variance after answering all applicable determinations in the affirmative (YES).*



**Watershed Protection and Development Review Department  
Staff Recommendations Concerning Required Findings  
Water Quality Variances**

---

**Application Name:** *St. Stephens Road – Private Drive*  
**Application Case No:** *SP-06-0346D*  
**Code Reference:** *LDC 25-8-453 (B)*  
**Variance Request:** *To develop in the Water Quality Transition Zone*

---

**A. Land Use Commission variance determinations from Chapter 25-8, Subchapter A – Water Quality of the City Code:**

1. The requirement will deprive the applicant of a privilege or the safety of property given to owners of other similarly situated property with approximately contemporaneous development.

***Yes** The requirement will deprive the applicant of a privilege or the safety of property given to owners of other similarly-situated property. This driveway is intended to provide primary student access to and from St. Stephen's School. This will satisfy an agreement between the applicant, neighborhood groups, and the City of Austin staff to provide primary student access and reduce traffic on Royal Approach Drive and Bunny Run.*

2. The variance:

- a) Is not based on a condition caused by the method chosen by the applicant to develop the property, unless the development method provides greater overall environmental protection than is achievable without the variance;

***Yes** The variance is not based on a condition caused by the method chosen by the applicant to develop the property.*

- b) Is the minimum change necessary to avoid the deprivation of a privilege given to other property owners and to allow a reasonable use of the property;

***Yes** The alignment is the shortest route available that respects and preserves the traditional and natural characteristic of the land, including a significant and healthy 41" live oak tree.*

- c) Does not create a significant probability of harmful environmental consequences; and



**Yes**      *Minimal impervious cover, overland sheet flow, revegetation techniques, and tree preservation provides a small impact on the environment for this proposed project.*

3. Development with the variance will result in water quality that is at least equal to the water quality achievable without the variance.

**Yes**      *Development of the driveway is only .52% (1.05 acres) of total impervious cover. The shortest-possible alignment was sought to minimize impervious cover, while at the same time creating minimal impact to the CWQZ, WQTZ, and trees.*

**B. Additional Land Use Commission variance determinations for a requirement of Section 25-8-393 (Water Quality Transition Zone), Section 25-8-423 (Water Quality Transition Zone), Section 25-8-453 (Water Quality Transition Zone), or Article 7, Division 1 (Critical Water Quality Zone Restrictions):**

1. The above criteria for granting a variance are met;

**Yes**      *LDC 25-8-453 prohibits development within a water quality transition zone in a water supply rural watershed. Therefore, the variance being requested here will address and satisfy this requirement.*

2. The requirement for which a variance is requested prevents a reasonable, economic use of the entire property; and

**Yes**      *Denial of this variance would prevent a reasonable, economic use of the lot.*

3. The variance is the minimum change necessary to allow a reasonable, economic use of the entire property.

**Yes**      *A minimum change is represented with this variance request.*

---

**Reviewer Name:**      **Teresa Alvelo**

**Reviewer Signature:**      *Teresa Alvelo*

**Date:**      **January 31, 2007**

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*Staff may recommend approval of a variance after answering all applicable determinations in the affirmative (YES).*



January 30, 2007

Ms. Betty Baker, Chair  
City of Austin Zoning and Platting Commission  
City Hall  
301 West 2<sup>nd</sup> Street  
Austin, Texas 78701

Re: St. Stephens Roadway Private Dr.  
SP-06-0346D  
Austin, Travis County, Texas  
Variance Request

Dear Ms. Baker:

As an agent for Lion Gables Realty, L.P., Bury+Partners, Inc. is requesting variance from Section 25-8-261 of the City of Austin Land Development Code for the above referenced project, which states development in the Critical Water Quality Zone (CWQZ) can be administratively approved by the Director of Watershed Protection and Development Review Department.

As required in LDC Section 25-8- 261, in order to grant a variance the Platting and Zoning Commission must make the following findings of fact.

**Justification:**

1. Are there are special circumstances applicable to the property involved where strict application deprives such property owner of privileges or safety enjoyed by other similarly situated property with similarly timed development? **YES/NO**

**The strict application of the Ordinance in this case would deprive the property owner of privileges enjoyed by similarly situated and similarly timed development. Numerous developments exist within this watershed, along the same transportation corridors, with the same topographic and watershed related restraints. Many of these properties could not have been built without similar variances.**

BURY+PARTNERS, INC.  
3345 Bee Caves Road, Suite 200  
Austin, Texas 78746

TEL (512) 328-0011  
FAX (512) 328-0325

Austin • Dallas • Houston • San Antonio • Temple, Texas  
Fairfax • Warrenton • Williamsburg, Virginia

[www.burypartners.com](http://www.burypartners.com)

This variance is being requested due to the development being constructed within the critical water quality zone unique to this property. A drainage easement that conveys existing storm sewer run-off outflows from adjacent sites bisects a portion of the private roadway. Without this requested variance the applicant would be unable to provide access to the southern half of the subject tract. If this request for a critical water quality zone (CWQZ) is not approved the applicant would not be able to build the proposed development.

The proposed private roadway is an attempt to reduce the existing traffic flow of Bunny Run and Westlake Drive. The proposed project has been through various mediation meetings with Gables Residential, Bunny Run Neighborhood Group, St. Stephens School and the City of Austin staff to agree to this additional route for the students attending St. Stephens School.

2. Does the project demonstrate minimum departures from the terms of the ordinance necessary to avoid such deprivation of privileges enjoyed by such other property and to facilitate a reasonable use, and which will not create significant probabilities of harmful environmental consequences? YES/NO

We believe that by approving the developing within the critical water quality zone (CWQZ) variance for this tract, the departure from the minimum standards has been achieved by limiting the disturbance and preserving existing trees on site. The need for a variance is primarily due to modifications to the existing 100-year flood plain, which will not create harmful environmental consequences.

The variance does not provide the applicant with a special privilege not given to owners with similarly situated property. Due to the development in the critical water quality zone constraints of the lot and the Hill Country, any development on the subject tract providing access to the public would be required to obtain this variance.

3. The proposal does not provide special privileges not enjoyed by other similarly situated properties with similarly timed development, and is not based on a special or unique condition, which was created as a result of the method by which a person voluntarily subdivided land. YES/NO

The property does not provide any special privileges not enjoyed by other similarly situated properties created by the way the property have been subdivided. The subdivision plat was approved by the Zoning and Platting Commission on April 18, 2006.

4. For a variance from the requirements for development within the Critical Water Quality Zone and/or Water Quality Transition Zone: Does the application of restrictions leave the property owner without any reasonable, economic use of the entire property? YES/NO

**The restrictions will leave the property owner without any reasonable, economic use of the property. Without the request for the variance, the applicant will be unable to develop any future projects within his property.**

5. For variances in the Barton Springs Zone, in addition to the above findings, the following additional finding must be included: Does the proposal demonstrate water quality equal to or better than would have resulted had development proceeded without the variance? YES/NO

**Not applicable. Development is not located in the Barton Springs Zone.**

We appreciate your consideration in reviewing this request. If we may be of further assistance or if you should have any questions, please do not hesitate to contact our office.

Sincerely,



Alberto Alaniz  
Project Director

Charles E. Fowler, Jr., P.E.  
Senior Vice President



January 30, 2007

Ms. Betty Baker, Chair  
City of Austin Zoning and Platting Commission  
City Hall  
301 West 2<sup>nd</sup> Street  
Austin, Texas 78701

Re: St. Stephens Roadway Private Dr.  
SP-06-0346D  
Austin, Travis County, Texas  
Variance Request

Dear Ms. Baker:

As an agent for Lion Gables Realty, L.P., Bury+Partners, Inc. is requesting variance from Section 25-8-453 of the City of Austin Land Development Code for the above referenced project, which states development in the critical water quality transition zone (CWQTZ) can be administratively approved by the Director of Watershed Protection and Development Review Department.

As required in LDC Section 25-8-453, in order to grant a variance the Platting and Zoning Commission must make the following findings of fact.

**Justification:**

1. Are there are special circumstances applicable to the property involved where strict application deprives such property owner of privileges or safety enjoyed by other similarly situated property with similarly timed development? **YES/NO**

**The strict application of the Ordinance in this case would deprive the property owner of privileges enjoyed by similarly situated and similarly timed development. Numerous developments exist within this watershed, along the same transportation corridors, with the same topographic and watershed related restraints. Many of these properties could not have been built without similar variances.**

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This variance is being requested due to the development within the critical water quality transition zone unique to this property. A drainage easement that conveys existing storm sewer run-off outflows from adjacent sites bisects a portion of the private roadway. Without this requested variance the applicant would be unable to provide access to the southern half of the subject tract. If this request for a Critical Water Quality Transition Zone (CWQTZ) is not approved the applicant will not be able to build the proposed development.

The proposed private roadway is an attempt to reduce the existing traffic flow of Bunny Run and Westlake Drive. The proposed project has been through various mediation meetings with Gables Residential, Bunny Run Neighborhood Group, St. Stephens School and the City of Austin staff to agree to this additional route for the students attending St. Stephens School.

2. Does the project demonstrate minimum departures from the terms of the ordinance necessary to avoid such deprivation of privileges enjoyed by such other property and to facilitate a reasonable use, and which will not create significant probabilities of harmful environmental consequences? YES/NO

We believe that by approving the developing within the Critical Water Quality Transition Zone (CWQTZ) variance for this tract, the departure from the minimum standards has been achieved by limiting the disturbance and preserving existing trees on site. The need for a variance is primarily due to modifications to the existing 100-year flood plain, which will not create harmful environmental consequences.

The variance does not provide the applicant with a special privilege not given to owners with similarly situated property. Due to the development in the critical water quality zone constraints of the lot and the Hill Country, any development on the subject tract providing access to the public would be required to obtain this variance.

3. The proposal does not provide special privileges not enjoyed by other similarly situated properties with similarly timed development, and is not based on a special or unique condition, which was created as a result of the method by which a person voluntarily subdivided land. YES/NO

The property does not provide any special privileges not enjoyed by other similarly situated properties created by the way the property have been subdivided. The subdivision plat was approved by the Zoning and Platting Commission on April 18, 2006.

4. For a variance from the requirements for development within the Critical Water Quality Zone and/or Water Quality Transition Zone: Does the application of restrictions leave the property owner without any reasonable, economic use of the entire property? YES/NO

**The restrictions will leave the property owner without any reasonable, economic use of the property. Without the request for the variance, the applicant will be unable to develop any future projects within his property.**

5. For variances in the Barton Springs Zone, in addition to the above findings, the following additional finding must be included: Does the proposal demonstrate water quality equal to or better than would have resulted had development proceeded without the variance? YES/NO

**Not applicable. Development is not located in the Barton Springs Zone.**

We appreciate your consideration in reviewing this request. If we may be of further assistance or if you should have any questions, please do not hesitate to contact our office.

Sincerely,



Alberto Alaniz  
Project Director

Charles E. Fowler, Jr., P.E.  
Senior Vice President



## **DIRECTIONS TO ST. STEPHENS ROAD – PRIVATE DRIVE**

**SP-06-0346D**

*At Mopac and Capital of Texas Hwy., travel north on Capital of Texas Hwy.*

*Cross the river, and then turn right onto Westlake Drive. Westlake Drive turns into Royal Approach Drive.*

*Travel on Royal Approach Drive to Bunny Run.*

*Turn left onto Bunny Run and travel until just before the St. Stephen's School entrance.*

*Access to the site can be made any where along the stretch of Bunny Run just before you reach the school.*





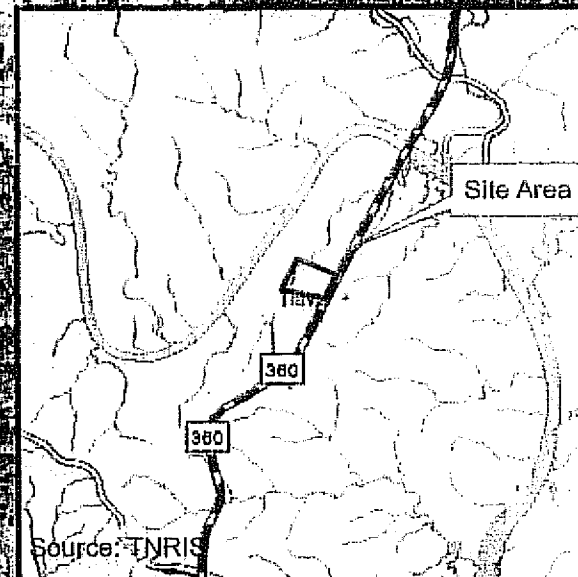
SP-06-0346D

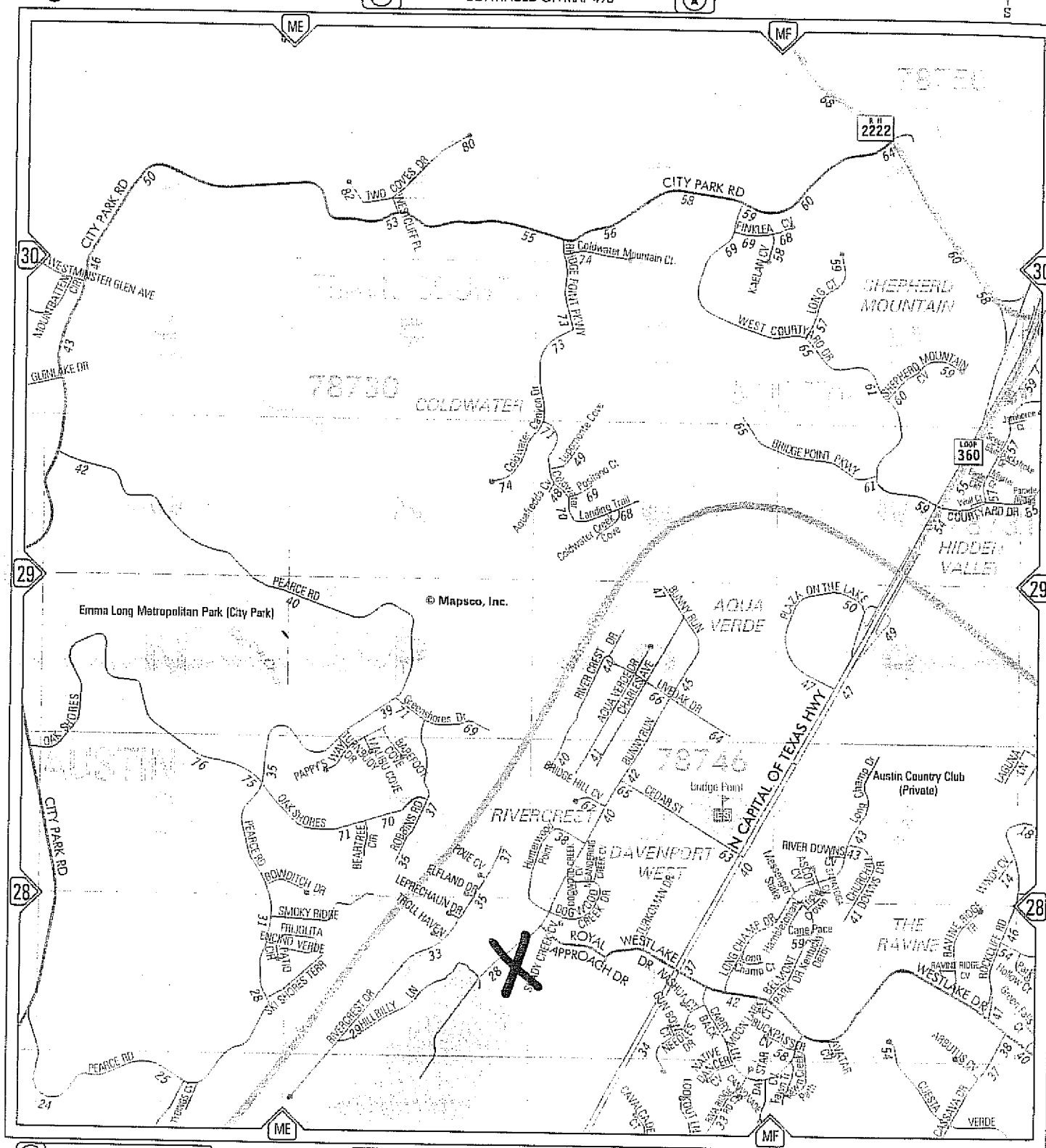
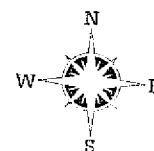
St. Stephens School Entry Drive  
City of Austin EA  
Figure 1: Site Location  
Travis County, Texas  
May 2006

Disclaimer:  
This map is intended for planning purposes all boundaries  
and designations are subject to confirmation



 Proposed Road Alignment





CONTINUED ON MAP 522

CONTINUED ON MAP 553

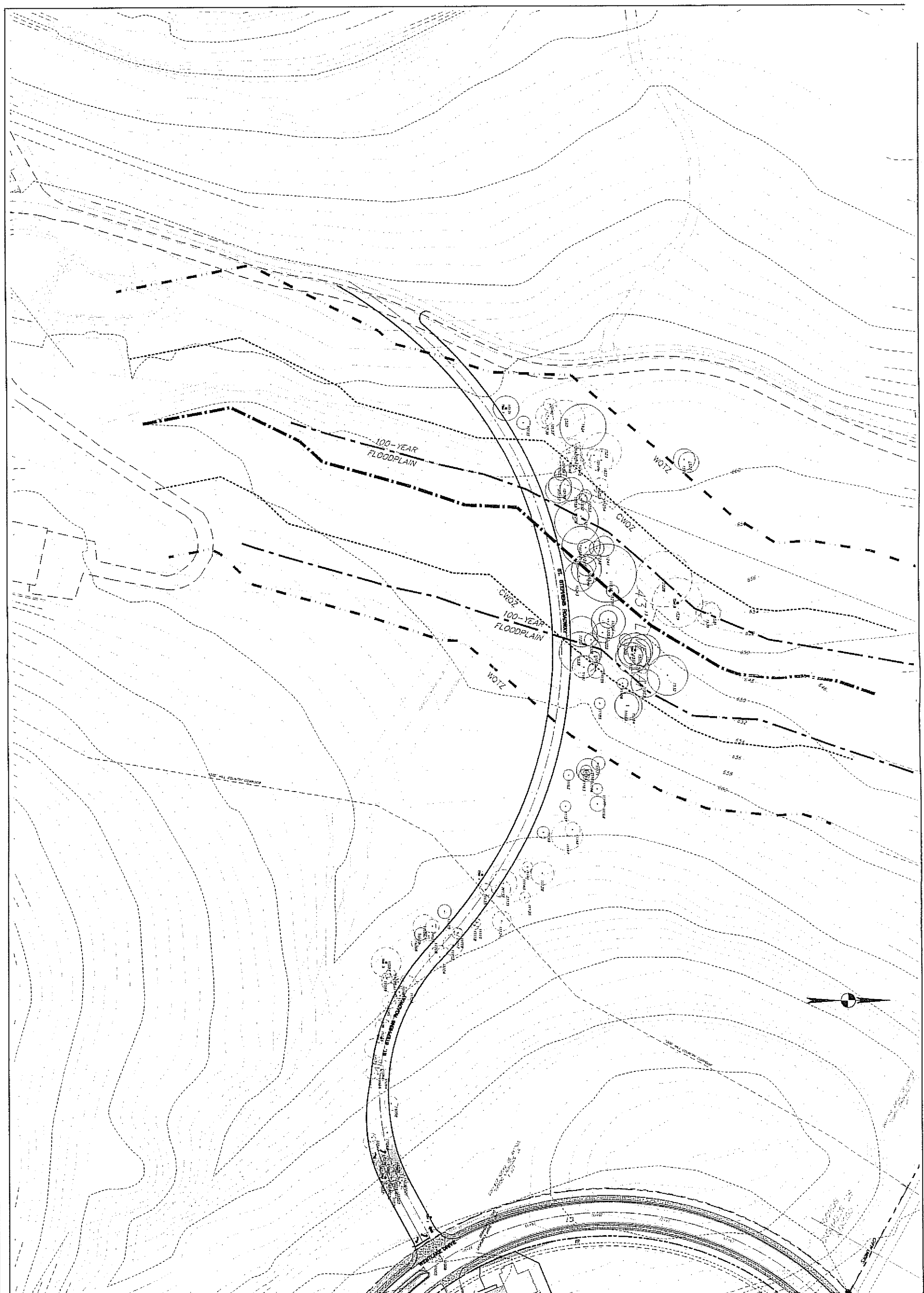
CONTINUED ON MAP 52a

SCALE IN MILES

SCALE IN FEET

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EXH  
SHEET

PLOTTING SCALE: 1" = 1'
DATE PLOTTED: Feb 14, 2007
FILE: C:\658\28\PROJECTS\65828\DWG\65828-01.dwg
DRAWN BY: BVR
DESIGNED BY: OW/AA
REVIEWED BY: JMK
PROJECT NO.: 1631-01

ST. STEPHENS ROADWAY  
LOOP 360 AT WESTLAKE DRIVE

WATERSTONE DEVELOPMENT

ROADWAY EXHIBIT

**Bury+Partners**  
ENGINEERING SOLUTIONS  
3345 Bee Caves Road, Suite 200  
Austin, Texas 78748  
Tel. (512) 220-0011 Fax (512) 220-0325  
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### ITEM FOR ENVIRONMENTAL BOARD AGENDA

**BOARD MEETING**

**DATE REQUESTED:** February 21, 2007

**NAME & NUMBER  
of Project:** Zachary Scott Off-Site Wastewater  
Improvements Revision #2  
SP-05-0033D

**NAME OF APPLICANT  
OR ORGANIZATION:** Lennar Buffington Zachary Scott, LP  
(John Clark, P.E. – Phone 439-4700)

**LOCATION:** 10300 Block of River Plantation Dr.

**PROJECT FILING DATE:** January 8, 2007

**WPDR/ENVIRONMENTAL  
STAFF:** Teresa Alvelo, 974-7105  
teresa.alvelo@ci.austin.tx.us

**WPDR/  
CASE MANAGER:** C. Yanez 974-1810  
c.yanez@ci.austin.tx.us

**WATERSHED:** Onion Creek and Rinard Creek Watersheds (Suburban)  
Desired Development Zone

**ORDINANCE:** Comprehensive Watershed Ordinance (current Code)

**REQUEST:** For Board to re-visit an approved, revised project with an  
associated approved variance to LDC 25-8-361, *Wastewater  
Restrictions*.

**STAFF RECOMMENDATION:** Recommended.

**REASONS FOR  
RECOMMENDATION:** Findings of fact have been met.



## MEMORANDUM

TO: Betty Baker, Chairperson  
Members of the Zoning and Platting Commission

FROM: Teresa Alvelo, Environmental Reviewer  
Watershed Protection and Development Review Department

DATE: February 21, 2007

SUBJECT: Zachary Scott Off-Site Wastewater Improvements Revision No. 2  
10300 Block of River Plantation Drive / SP-05-0033D  
Seeking Environmental Board recommendation for line realignment.

### **Original, Approved Alignment**

The original Zachary Scott off-site wastewater line project was approved on February 23, 2006. The approved site plan includes an environmental variance to LDC 25-8-361, *Wastewater Restrictions*. The variance was necessary to address a wastewater line extending for approximately 4,075 feet in a critical water quality zone, rather than merely providing for a necessary crossing. Also, parts of the alignment pass through portions of the Onion Creek Golf Course. A copy of the original environmental variance package is included in this packet.

This approved plan has since been determined to be unworkable to due unexpected, excessive costs, according to Austin Water Utility, a partner in this project. The excessive costs are mainly caused by fairway disturbance and excessive trench depth.

The driving force for the excessive trench depth is the elevation of the crossing at Rinard Creek, and increased distance from the waterway centerline. The approved plan calls for the crossing to be made three feet under the creek bed. This causes maximum trench depths of up to 30 feet in some areas of the alignment. Generally speaking, the farther from the creek centerline, the greater the trench depth. This depth increases bore lengths and the disturbance area considerably. The increased disturbance area creates a need for greater acreage for spoils and equipment storage. Benching is also required, as a safety component, when accommodating these depths.

In addition, in an attempt to maximize distance from the creek centerline, the approved alignment falls into several portions of the golf course fairway and one of the greens. Revegetation costs of the fairway and green have been determined to be excessive.

### **Proposed Realignment in Revision #2**

A realignment is being proposed in revision number two. Please note that both alignments fall within the Critical Water Quality Zone.

The realignment has the following basic goals: those are to shallow the line by crossing at Rinard Creek above the 100-year floodplain, realign some areas closer to the creek centerline to lessen the trench depth and reduce impacts to the golf course, and reduce bore lengths.

The following offers a comparison/contrast between the two alignments:

**Approved Alignment**

- Some areas are farther from the creek ctrln.
- The line crosses three feet under the creek bed.
- Trench depths approach 30 feet. Benching required for safety.
- Disturbance area of 7.61 acres.
- 74.13 tree inches removed.
- Total bore length is 1350 feet.
- Contains a groundwater mitigation plan.
- Reveg areas outside the golf course with 609S.

**Proposed Alignment in Revision #2**

- Some areas closer to the creek centerline.
- The line spans over the 100-year floodplain.
- Trench depths approach 12 feet. No benching required.
- Disturbance area of 4.40 acres.
- 387 tree inches removed.
- Total bore length is 300 feet.
- Contains a groundwater mitigation plan.
- Additional reveg plan that includes 609S and shrub understory plantings.
- A professional geoscientist will be present when trenching/boring near seeps or springs.

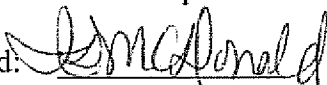
Because both alignments fall within the critical water quality zone, achieving one optimal alignment plan is not possible. Each alignment provides benefits and deficits. For instance, in order to considerably lessen disturbed areas via shallower trench depth (also a safety factor for line workers), the line was moved closer to the creek in some areas. However, lessening trench depth and disturbed areas causes the line to cross over the creekbed instead of three feet under it.

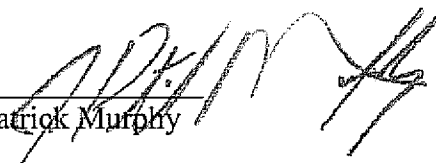
The goal is to provide a plan that is as sensitive to the environment as possible, but still offer a plan that is achievable for Austin Water Utility and the applicant. Environmental staff supports this proposed realignment.

If you have any questions or need additional information, please contact Teresa Alvelo at 974-7105.



Teresa Alvelo, Environmental Reviewer  
Watershed Protection and Development Review Department

Environmental Lead:   
Ingrid McDonald

Environmental Officer:   
Patrick Murphy



**TO:** Teresa Alvelo, Environmental Reviewer  
Watershed Protection and Development Review Department

**FROM:** Scott E. Hiers, P.G., Environmental Scientist  
Watershed Protection and Development Review Department

Mike Lyday, Environmental Scientist Senior  
Watershed Protection and Development Review Department

**DATE:** November 28, 2006

**SUBJECT:** Revised Zachary Scott Wasterwater Improvements (SP-05-0033D)

As you requested, we are providing you with Environmental Resource Management's comments and recommendations on the purposed changes to the alignment and design of the Zachary Scott wastewater improvements project. Austin Water Utility is requesting design modifications to the approved wastewater line plan; because, after receiving bids on the previously approved plan, the Austin Utility reports it is economically unfeasible. The cost saving measures include rising the elevation of the wastewater line to reduce the trenching depth and width plus adjusting the alignment of line minimize the disturbance of golf course fairway, which has a high restoration cost.

The environmental benefits of shallow line design are that it reduces the amount of disturbance by minimizing the trench depth and width compared to the design that is currently approved. It is our determination that these modifications are reasonable and do not create a significant probability of harmful environmental impact compared to the previously approved plan. However, there is a slight increased risk in minor environmental impacts occurring because of the alignment changes and the shallower trench design that will require mitigation.

The new line alignment has minimized tree loss, but relocating the line outside of the golf course fairway into the adjacent wooded area in order to reduce golf course restoration cost will result in the loss of some trees. Therefore, our recommendation is for restoration of all the disturbed areas outside of the golf course comply with City of Austin 609S native grassland seeding and planting specification, including disturbed areas outside the critical water quality zone. In addition, tree mitigation is required. In the thick wooded and shaded areas, for each caliper inch of tree removed, one caliper inch of bush or shrub will be required for mitigation.

The shallow line design will result in aerial crossing of Rinard Creek rather than boring the line underneath the creek. The aerial crossing is considered by Austin Water Utility staff not to be significant probability of harmful environmental consequence, because the elevation of aerial line will be between



Memo  
November 28, 2006  
Page two

the 25-years and 100-year floodplain for Rinard Creek exposing line only to gentle backwater flows from Onion Creek, plus the aerial line will be double-encased.

There is a slightly higher risk that the shallower trench depth might intercept a shallow groundwater table at the alluvial/bedrock interface. This lithologic contact often marks the boundary between lower and higher permeability rock units where contact springs and seeps form, which may be either the main water table or a perched water table. Therefore, we are recommending that a groundwater mitigation plan be provided and included as a bid item to the bid documents for this project. The mitigation plan should include construction techniques that preserve groundwater flow path to springs and seeps along Rinard Creek. The project design should include using flowable fill at the nearest manhole down gradient of spring to help redirect groundwater flow perpendicular to the trench. If groundwater is encountered, the mitigation plan will provide several engineering solutions to maintaining groundwater flow paths. In addition, a professional geoscientist should be present when trenching activities occur near springs and seeps area to insure that if groundwater is encountered, all trenching activities are stopped and the City geologist contacted.

It is our determination that the proposed modifications are reasonable and do not create a significant probability of harmful environmental impact compared to the previous approved plan. This plan will only slightly increase risk of intercepting the shallow groundwater table and disrupting the groundwater flow paths to contact springs and seeps along Rinard Creek. Tree loss mitigation and native grassland restoration will be more extensive than the typical Austin Clean Water Program guidelines. These guidelines require restoration only within the critical quality water zone and within critical environmental feature setback areas, where in this case, except for the golf fairway, restoration is occurring in all disturbed areas. This determination is based on the fact that the area and depth of disturbance is significantly reduced and that the proposed alignment is not a significant departure from the current approved plan.

If you have any questions, please call Scott Hiers at 974-1916 or Mike Lyday 974-2956.

Scott E. Hiers, P.G., Environmental Scientist  
Watershed Protection and Development Review Department

Mike Lyday, Environmental Scientist Senior  
Watershed Protection and Development Review Department

SH:

cc: Mike Lyday  
Pat Murphy

5316 Highway 290 West  
Suite 150  
Austin, Texas 78735

Phone 512.439.4700  
Fax 512.439.4716  
www.ljaengineering.com

January 8, 2007

Ms. Victoria Hsu, P.E., Director  
Watershed Protection and Development Review Department  
City of Austin  
P.O. Box 1088  
Austin, Texas 78767

RE: Zachary Scott Subdivision Wastewater Improvements (SP-05-0033D)  
Administrative Site Plan Revision  
LJA Job No. A135-401-435

Dear Hsu:

On behalf of the owner, Lennar Buffington Zachary Scott, L.P., LJA Engineering & Surveying, Inc. is submitting an Administrative Site Plan Revision for Zachary Scott Wastewater Improvements (SP-05-0033D) for your review and approval. The limits of construction are approximately 4.9 acres. This wastewater line is within the Rinard and Onion Creek Watersheds. There is no proposed impervious cover with this project. This project consist of approximately 4,075 linear feet of 18-inch, 24-inch and 27-inch wastewater lines, and the erosion/sedimentation/tree protection/restoration controls.

The revision is being submitted at the request of the City of Austin's Water Utility Department, in an effort to reduce cost in the Zachary Scott off-site wastewater line. This line is being constructed (SER 2260) as a reimbursable regional line to serve the Rinard Creek Watershed. The wastewater line was permitted and bid. After reviewing the bids the Water Utility Department requested Zachary Scott to look at alternate designs to reduce construction cost. After reviewing several options it was determined that the only way to reduce the construction cost, as identified, was to shallow the line, reduce bores and lessen the impact on the existing Onion Creek Golf Course. The plan revision includes an aerial crossing over Rinard Creek in lieu of a bore under Rinard Creek. Going over Rinard Creek reduces the line depths by over eleven (11) feet. In addition the bore lengths were reduced from approximately 1350 feet to 300 feet. The wastewater line was realigned outside of the golf course where possible to reduce the golf course restoration cost. Reducing the depth of wastewater line also reduces the impact of the trench zone by allowing the line to be constructed without benching. I have attached an aerial photo which illustrates the original alignment and the revised alignment.

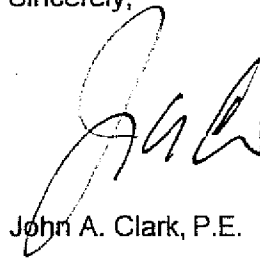
We have been working with City staff members: Pat Murphy, Teresa Alvelo, Mike Lyday and Scott Hiers in an effort to address environmental concerns they had on the revised alignment. The items addressed were tree mitigation, native reseeding, and a way to mitigate any ground water that may be encountered during construction.

There was one variance granted with the original site plan. The variance for constructing within the Critical Water Quality Zone LDC 25-8-361 was approved by Zoning and Platting Commission on January 17, 2006. The revised alignment is still within the critical water quality zone. No additional variances have been identified or being requested at this time.

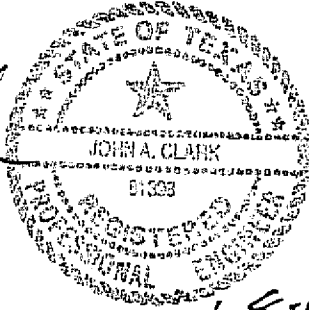
I hereby certify that to the best of my knowledge this summary letter is correct and that the accompanying plans are complete and in compliance with Title 25 of the City of Austin Land Development Code.

If you have any questions, please do not hesitate to contact me at 439-4700.

Sincerely,



John A. Clark, P.E.



Attachments

1-8-07

cc: Bryan Simms, Lennar Homes

5316 Highway 290 West  
Suite 150  
Austin, Texas 78735

Phone 512.439.4700  
Fax 512.439.4716  
www.ljaengineering.com

January 29, 2007

Teresa Alvelo  
Watershed Protection and Development Review Department  
City of Austin  
P.O. Box 1088  
Austin, Texas 78767

RE: Zachary Scott Subdivision Off-site Wastewater Line (SP-05-0033D)  
LJA Job No. A135-401-404

Dear Ms. Alvelo:

The Zachary Scott Subdivision Off-site Wastewater Line was originally approved by the City of Austin February 23, 2006. With this approval an Environmental Variance was approved from LDC 25-8-361(A) "A wastewater line is prohibited in a critical water quality zone, except for a necessary crossing". This variance was granted by the Environmental Board on November 16, 2006 and by the Platting and Zoning Commission on January 17, 2006.

We have submitted a revision to the Zachary Scott Off-site Wastewater Line (SP-05-0033D) in an effort to reduce the construction cost of the project at the request of the City of Austin Water Utility. In the original design the wastewater line was designed to go under Rinard Creek, which caused a majority of the wastewater line to be thirty (30) feet deep. Due to the line depth and the large amount of bores the construction cost was excessive. The best and only option to reduce the construction cost and provide gravity sewer service for the watershed was to cross Rinard Creek above the floodplain. This aerial crossing is designed to keep the flow line of wastewater line above the fully developed 25-year floodplain, calculated using the City of Austin's model for Onion Creek. Due to the influence of Onion Creek floodwater during storm events, the highest water surface elevations will be concurrent with the peak stages at the confluence at Onion Creek and Rinard Creek. In other words the Onion Creek 25 and 100 year storm events cause a backwater into Rinard Creek. The calculated velocity for the 100 year storm at the wastewater line is 1.3 feet per second. As a factor of safety the wastewater line is designed to withstand a velocity of 5 feet per second.

Due to the aerial crossing, it was decided that this was a significant change and that the variance should be re-requested. Per LDC 25-8-361(A)(1) "The Land Use Commission may grant a variance to the prohibition of this subsection. An application for a variance must provide an environmental assessment evaluating the effects of the alternate sewer alignments".

Findings of Fact:

1. *Does the requirement deprive the applicant of a privilege or the safety of property given to owners of the other similarly situated property with approximately contemporaneous development?*

Yes, as mentioned above this variance was previously granted to this project. This project like others has topographic and existing element restraints that effect the ability of this project to access the existing wastewater facilities. The City of Austin

has identified this interceptor as a regional project to serve all the Rinard Creek Watershed, not just the Zachary Scott project. The wastewater line has been kept on the same assignment; per staff's recommendation, in the vicinity of the critical environmental feature. The proposed revision raises the wastewater line from 30 feet deep to 12 feet deep. The shallower depth is very important in minimizing the disturbed area and limits of construction. The overall limits of construction was reduced by approximately three acres.

- 2.(a) *The variance is not based on a condition caused by the method chosen by the applicant to develop the property, unless the development method provides greater overall environmental protection than is achievable without the variance*

Yes, this method provides greater overall environmental protection because by reducing the overall depth of the wastewater line the disturbed area is also reduced. With the proposed revision the limits of construction is reduced by approximately three acres.

- 2.(b) *The variance is the minimum change necessary to avoid the deprivation of a privilege given to other property owners and to allow a reasonable use of the property.*

Yes, the existing Onion Creek Golf Course currently encroaches within the critical water quality zone. The placement of the wastewater line is within and immediately adjacent to the Onion Creek Golf Course.

- 2.(c) *The variance does not create a significant probability of harmful environmental consequences.*


Yes, with the combination of the shallower wastewater line and the limits of construction being reduced by approximately three acres this variance does not create a significant probability of harmful environmental consequences.

3. *The development with the variance will result in water quality that is at least equal to the water quality achievable without the variance.*

Yes, because this variance is for the installation of a wastewater line, reducing the cut reduces the disturbed area. The limits of construction are approximately three acres less than the original construction plans which the variance was previously granted. Water quality impacts will be reduced due to reduction in disturbed area.

If you have any questions, please do not hesitate to contact me at 439-4700.

Sincerely,

  
John A. Clark, P.E.





**ITEM FOR ENVIRONMENTAL BOARD AGENDA**

**BOARD MEETING**  
**DATE REQUESTED:** November 16, 2005 ✓

**NAME & NUMBER OF PROJECT:** Zachary Scott Off-Site Wastewater Improvements  
SP-05-0033D

**NAME OF APPLICANT OR ORGANIZATION:** Lennar Buffington Zachary Scott, LP  
(Hugo Elizondo, P.E. - Phone 312-5040)

**LOCATION:** 10300 Block of River Plantation Dr.

**PROJECT FILING DATE:** September 27, 2005

**WPDR/ENVIRONMENTAL STAFF:** Teresa Alvelo, 974-7105  
teresa.alvelo@ci.austin.tx.us

**WPDR/ CASE MANAGER:** Betty Torres, 974-9795  
betty.torres@ci.austin.tx.us

**WATERSHED:** Onion Creek and Rinard Creek Watersheds (Suburban)  
Desired Development Zone

**ORDINANCE:** Comprehensive Watershed Ordinance (current Code)

**REQUEST:** Variance request is as follows:  
1. To allow wastewater improvements in a critical water quality zone. (LDC Section 25-8-361).

**STAFF RECOMMENDATION:** Recommended.

**REASONS FOR RECOMMENDATION:** Findings of fact have been met.



## MEMORANDUM

TO: Betty Baker, Chairperson  
Members of the Zoning and Platting Commission

FROM: Teresa Alvelo, Environmental Reviewer  
Watershed Protection and Development Review Department

DATE: November 16, 2005

SUBJECT: Zachary Scott Off-Site Wastewater Improvements  
10300 Block of River Plantation Drive / SP-05-0033D

A variance to develop off-site wastewater improvements within a critical water quality zone is being requested for this project. The improvements are required in order to provide essential wastewater services to the planned Zachary Scott subdivision.

### **Description of Project Area**

The 271-acre Zachary Scott subdivision is located at the east corner of the intersection of Bradshaw Lane and Old Lockhart Road. The southwestern boundary of the site is bordered by Rinard Creek, and the western boundary lies along Onion Creek. The site drains into the Onion Creek and Rinard Creek watersheds, both of which are classified as Suburban. The property partially lies within both watersheds. The confluence of Rinard Creek and Onion Creek lies about 1,000 feet west of the project's western boundary. The improvements will consist of the installation of wastewater lines and manholes to serve the subdivision.

The wastewater system in this area directs wastewater to the existing Onion Creek Wastewater Treatment Plant. This plant is located on the opposite side of Rinard Creek, and is beyond homes and structures of the Onion Creek subdivision. This existing wastewater service is a decentralized system that serves the general area. The effluent from the treatment plant is used to irrigate the Onion Creek Golf Course. This decentralized system is slated to service not only the Zachary Scott subdivision, but also the proposed Bella Fortuna and Legend's Way subdivisions.

These improvements will be constructed within portions of the critical water quality zone, and water quality transition zone. The decentralized nature of this system dictates that the wastewater line design. Other options would require installation of lines within the critical water quality zone at even greater lengths. A portion of the improvements are not only located in the critical water quality zone, but also falls within the boundaries of the Onion Creek Golf Course. An agreement to install lines within the boundaries of the golf course is pending.

### **Hydrogeologic Report**

Elevation ranges from about 694 feet above Mean Sea Level on the east side to about 594 feet above MSL in the centerline of Rinard Creek on the south and west sides. The property is underlain by marine limestone and clay-rich limestone deposits. The rock outcropping in the property and in the creek are from the Austin Group and consist of mostly soft, easily weathered clay and marl deposits with interbeds of ledge-forming biomicrite limestone. The Austin Group members typically weather into deep, clay soils that contain abundant chert gravels and fossils.

Outcrops include limestone ledge and fossiliferous beds of the Dessau Chalk Formation and the Burditt Marl. The nature of the rocks forms ledges that create the banks of the stream channels and underlie the floor of the stream channels. The erosion resistance of these rocks creates a broad, shallow stream channel with vertical sides in most locations.

### **Vegetation**

The proposed route along Rinard Creek to the proposed crossing site is primarily open to semi-open canopy with the majority of the trees being mesquite, cedar elm and hackberry. Once the line crosses Rinard Creek and moves to the west toward the golf course, larger trees occur in the floodplain of a former meander of Onion Creek. Species represented include the Texas pecan, hackberry, and cedar elm.

### **Critical Environmental Features**

A number of rimrocks, seeps, and springs that feed into Rinard Creek were identified, none of which fall within the footprint of the project's limit of construction. The seeps and springs occur at the contact between two geologic members where infiltrating water encounters a tight clay zone, travels along the zone horizontally, and ultimately discharges when the horizon is truncated by erosion at the creek bank.

Applicant has worked very closely with COA Watershed Engineering and Environmental Resources Management staff to take measures that are specifically designed to protect the rimrocks, seeps, springs, creek and creek bed.

### **Water/Wastewater Report**

Water and wastewater services will be provided by the City of Austin. A gravity main will be routed generally westward of the Zachary Scott subdivision to cross Rinard Creek, and continue along the Rinard Creek critical water quality zone to existing Lift Station No. 147.



The bore depth of the required Rinard Creek Crossing is proposed at a minimum of three feet under the bed of the creek. Working closely with COA Watershed Engineering staff and Environmental Resources Management (ERM) staff, the applicant chose the least-environmentally sensitive location for the Rinard Creek crossing. Manholes, bore and receiving pits will be located a minimum 75 feet from the creek centerline.

### **Zoning and Platting Commission Variance Request**

The following variance is being requested:

1. To allow wastewater improvements within a Critical Water Quality Zone (LDC Section 25-8-361).

### **1. Variance from Land Development Code Section 25-8-361 – Wastewater Restrictions**

*A wastewater line is prohibited in a critical water quality zone, except for a necessary crossing.*

The proposed location of the wastewater line is a necessary and essential component of a wastewater system currently served by the nearest-available wastewater treatment plant. The plant is located on the opposite bank of Rinard Creek from the proposed Zachary Scott subdivision. This configuration, along with the location of the Onion Creek subdivision, presents a situation that offers no alternative to placing the improvements outside the critical water quality zone.

### **Recommendations:**

Staff recommends approval of this variance request for the following reasons:

- 1) Variance approval is vital in order to provide reasonable and economic use of the property, as environmentally-superior alternatives are not available.
- 2) The applicant worked closely with COA Watershed Engineering and ERM staff to protect rimrocks, seeps, springs, the creek, creek bed and trees, and also to adequately address erosion hazards.
- 3) In designing the wastewater line, applicant referenced, under direction of COA Watershed Engineering, the Appendix C-Erosion Hazard Model.
- 4) The applicant has been conscientious in designing and placing improvements in order to minimize adverse impacts on the natural and traditional character of the land. Significant redesign has taken place to minimize impacts to the creek and critical water quality zone.

### **Conditions:**

1. Open-cut trenching will occur no closer than 150 feet to any CEF. Setbacks of 50 feet are required for areas where the wastewater line will be bored.
2. Bores affecting seeps or springs will be treated with controlled low-strength material (CLSM), City of Austin Standards and Specification Manual 402S.
3. Much of the wastewater line alignment should follow the edge of the golf course, rather than through the riparian woodlands located closer to the creek bed.
4. Where feasible, bore under trees, rather than trench through critical root zones.

5. Manholes are set back to the greatest extent possible from the creek bank in order to minimize possible erosion hazards.
6. Disturbed areas within the CWQZ are restored using COA Standard Specification 609S or in-kind revegetation within portions of the golf course perimeter.

**Similar Cases**

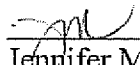
No similar cases found.

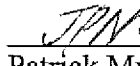
Staff supports and recommends approval of this variance with conditions.

If you have any questions or need additional information, please contact Teresa Alvelo at 974-7105.



Teresa Alvelo, Environmental Reviewer  
Watershed Protection and Development Review Department

Environmental Lead:   
Jennifer Mayer

Environmental Officer:   
Patrick Murphy



**Watershed Protection and Development Review Department  
Staff Recommendations Concerning Required Findings  
Water Quality Variances**

---

**Application Name:** *Zachary Scott Subdivision Wastewater Improvements*  
**Application Case No:** *SP-05-0033D*  
**Code Reference:** *LDC 25-8-361*  
**Variance Request:** *To allow wastewater improvements within a Critical Water Quality Zone.*

---

**A. Land Use Commission variance determinations from Chapter 25-8, Subchapter A – Water Quality of the City Code:**

1. The requirement will deprive the applicant of a privilege or the safety of property given to owners of other similarly situated property with approximately contemporaneous development.

*Yes The requirement will deprive the applicant of a privilege or the safety of property given to owners of other similarly situated property with approximately contemporaneous development. Variance approval is necessary in order to provide vital wastewater services to the referenced subdivision.*

2. The variance:

- a) Is not based on a condition caused by the method chosen by the applicant to develop the property, unless the development method provides greater overall environmental protection than is achievable without the variance;

*Yes The variance is not based on a condition caused by the method chosen by the applicant to develop the property. The existing decentralized wastewater treatment plant is located across Rinard Creek from the proposed Zachary Scott subdivision. This is a condition not caused by the applicant.*

- b) Is the minimum change necessary to avoid the deprivation of a privilege given to other property owners and to allow a reasonable use of the property;

*Yes Applicant has worked very closely with COA Watershed Engineering and ERM staff to design a plan that offers a minimum change necessary to avoid the deprivation of a privilege given to other property owners and to allow a reasonable use of the property. Available alternative options would result in a change greater than what is being presented with this variance request.*

- c) Does not create a significant probability of harmful environmental consequences; and

**Yes**                    *The approved variance does not create a significant probability of harmful environmental consequences. The proposed plan makes every feasible effort to avoid harmful environmental consequences. Numerous bores are proposed to protect rimrocks, seeps, springs, and to preserve a maximum number of trees. Careful attention to potential erosion hazards were observed, and steps taken to avoid harmful erosion hazards.*

3. Development with the variance will result in water quality that is at least equal to the water quality achievable without the variance.

**Yes**                    *Water quality will at least be equal to the water quality achievable without the variance. The use of bores, setbacks, erosion hazards prevention, revegetation techniques, and careful application of controlled low-strength material will result in comparable water quality experienced without development with the variance.*

**B. Additional Land Use Commission variance determinations for a requirement of Section 25-8-393 (Water Quality Transition Zone), Section 25-8-423 (Water Quality Transition Zone), Section 25-8-453 (Water Quality Transition Zone), or Article 7, Division 1 (Critical Water Quality Zone Restrictions):**

1. The above criteria for granting a variance are met;

**Yes**                    *The above criteria for granting a variance are met.*

2. The requirement for which a variance is requested prevents a reasonable, economic use of the entire property; and

**Yes**                    *Development of the Zachary Scott subdivision is not possible without granting of the variance. Reasonable and economic use of the entire property would be denied without granting a variance that provides wastewater service for the referenced subdivision.*

3. The variance is the minimum change necessary to allow a reasonable, economic use of the entire property.

**Yes**                    *The variance presents the minimum change necessary to allow a reasonable, economic use of the entire property. Available alternative options would result in a change greater than what is being presented with this variance request.*

---

**Reviewer Name:**     Teresa Alvelo

**Reviewer Signature:** Teresa Alvelo

**Date:**                    November 2, 2005

---

*Staff may recommend approval of a variance after answering all applicable determinations in the affirmative (YES).*

## **DIRECTIONS TO ZACHARY SCOTT OFF-SITE WASTEWATER SITE**

### **Choice 1**

These directions will take you to the Onion Creek Wastewater Treatment Plant (and associated Lift Station No. 147) location. This route is suggested due to easy access to the creek. The proposed line route can then be walked fairly easily.

-At Onion Creek Parkway and the IH-35 (north bound) Access road, take Onion Creek Parkway east to Pinehurst.

-Turn north onto Pinehurst and travel all the way around to River Plantation Drive. It's only possible to turn south onto River Plantation Drive at this point.

-Turn right (south) onto River Plantation Drive, cross over the bridge, and immediately find the drive to the Onion Creek Wastewater Treatment plant on the right.

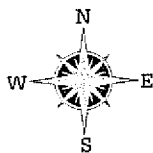
If you pass Interlacen Lane on the left, you've traveled too far.

### **Choice 2**

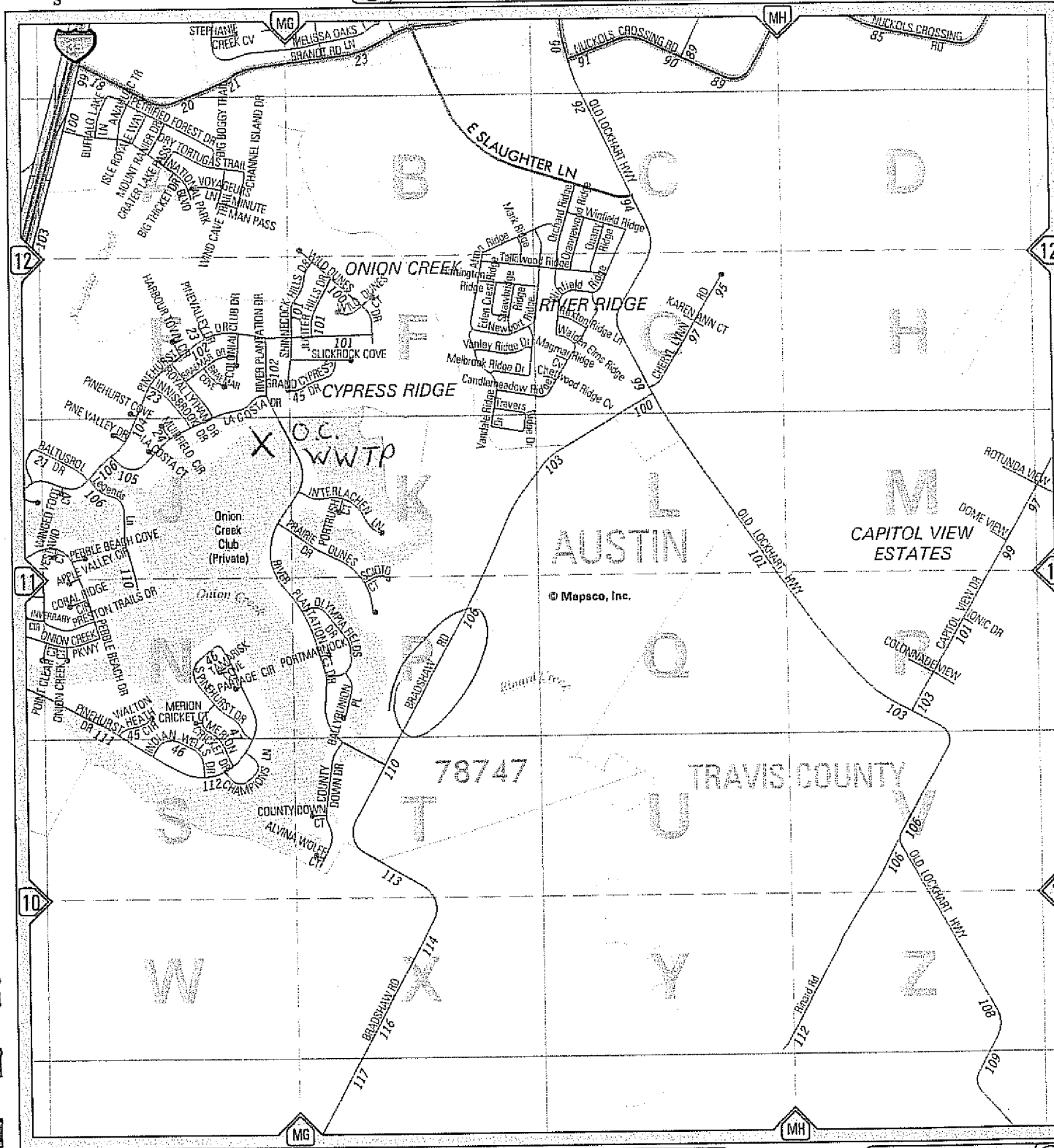
-At Slaughter Lane and I-35, take Slaughter Lane east to Old Lockhart Road.

-At Old Lockhart Road, turn south until you see Bradshaw Road on the right. You can only turn right onto Bradshaw Road at this point.

-Turn right onto Bradshaw Road and travel roughly a half mile to the dirt road with gate on the right. This dirt road will take you to the creek in the general vicinity of the proposed line crossing.



CONTINUED ON MAP 674



CONTINUED ON MAP 703

CONTINUED ON MAP 734

CONTINUED ON MAP 705



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## **ENVIRONMENTAL BOARD MOTION 022107 B-2**

**Date:** February 21, 2007

**Subject:** Second Revision of the Zachary Scott off-site Wastewater Improvements

**Motioned By:** Phil Moncada

**Seconded By:** Jon Beall

### **Recommendation:**

The Environmental Board **recommended with conditions** a proposed variance to Land Development Code Section 25-8-361 – To allow development within the within the Critical Water Quality Zone for the Second Revision of the Zachary Scott Off-site Wastewater Improvements project.

Variances to this project were previously recommended by the Environmental Board, but the project has changed significantly and the Board requested to re-evaluate the proposed variances.

### **Staff Conditions:**

1. Open-cut trenching will occur no closer than 150 feet to any Critical Environmental Feature. Setbacks of 50 feet are required for areas where the wastewater line will be bored.
2. Bores affecting seeps or springs will be treated with controlled low-strength material (CLSM), City of Austin Standards and Specification Manual 402S.
3. Much of the wastewater line alignment should follow the edge of the golf course, rather than through the riparian woodlands located closer to the creek bed.
4. Where feasible, bore under trees, rather than trench through critical root zones.
5. Manholes are set back to the greatest extent possible from the creek bank in order to minimize possible erosion hazards.
6. Disturbed areas within the Critical Water Quality Zone are restored using City of Austin Standard Specification 609S or in-kind revegetation within portions of the golf course perimeter.

### **Board Conditions:**

1. That city staff provide a report to the Land Use Commission, Wastewater Commission, and Austin City Council on how certificates of occupancy were issued prior to the conveyance system being complete.
2. The Austin Water Utility shall inspect this aerial line on an annual basis.

### **Rationale:**

The Board finds that the Findings of Fact have been met on this project. The project ultimately disturbs approximately half of the area being disturbed by the previously approved project, thus permitting

substantial savings to the Austin Water Utility. In addition, secondary containment is being provided on the aerial crossing.

It is important to note that the Board does NOT support aerial crossings of this nature, but has found itself in a quandary regarding irresponsible activities by the Austin Water Utility.

The Austin Water Utility provided Certificates of Occupancy to homeowners in this development prior to the wastewater line being completed, and now that service has been provided, it appears the City is obligated to continue providing service to those citizens. Because the sewer line has not been completed, however, the City has had to provide a temporary pump and haul permit, and sewage is currently being pumped from an un-lined manhole into a truck periodically for transport to the nearest wastewater treatment plant. The Board recognizes that this is currently damaging the subsurface environment and potentially the receiving waters of Onion Creek.

Because it is the Board's understanding that the City cannot deny service to these customers, the Board considered whether it was more environmentally damaging to allow the continued pumping and hauling of sewage from an un-lined manhole, or to recommend an aerial crossing, which the Board also recognized as having inherent environmental risks as well.

Either way, by providing Certificates of Occupancy to homeowners prior to providing the necessary infrastructure to transport and treat their sewage, the Austin Water Utility has put the environment at risk.

**Vote:** 4-3-0-2

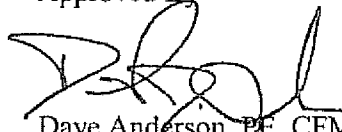
**For:** Anderson, Moncada, Ahart, and Beall

**Against:** Ascot, Jenkins and Dupnik

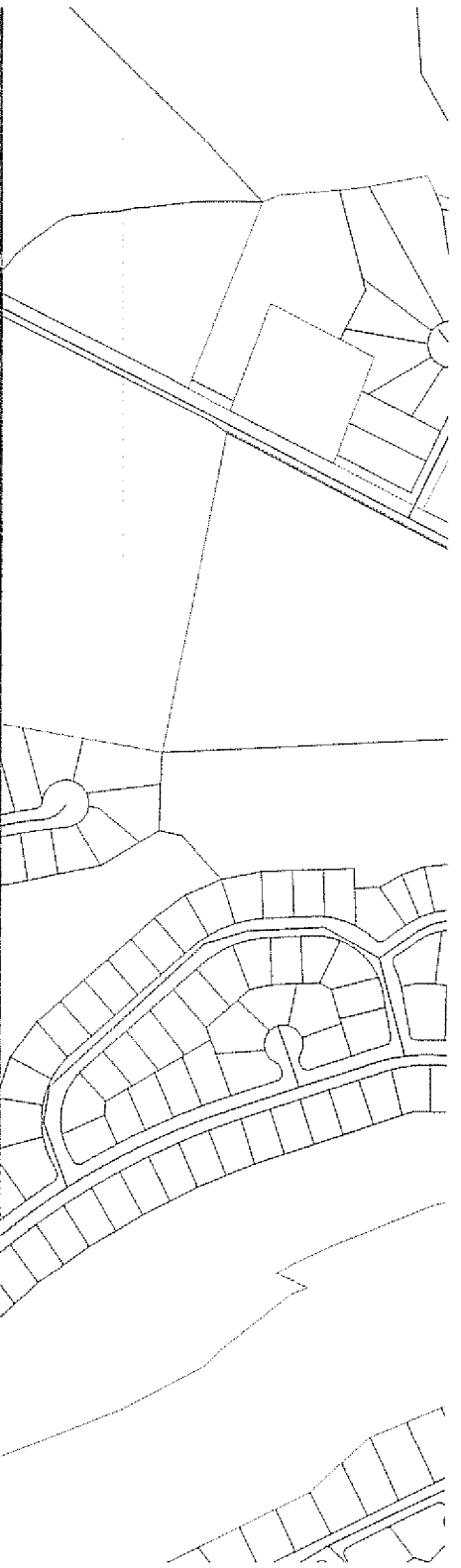
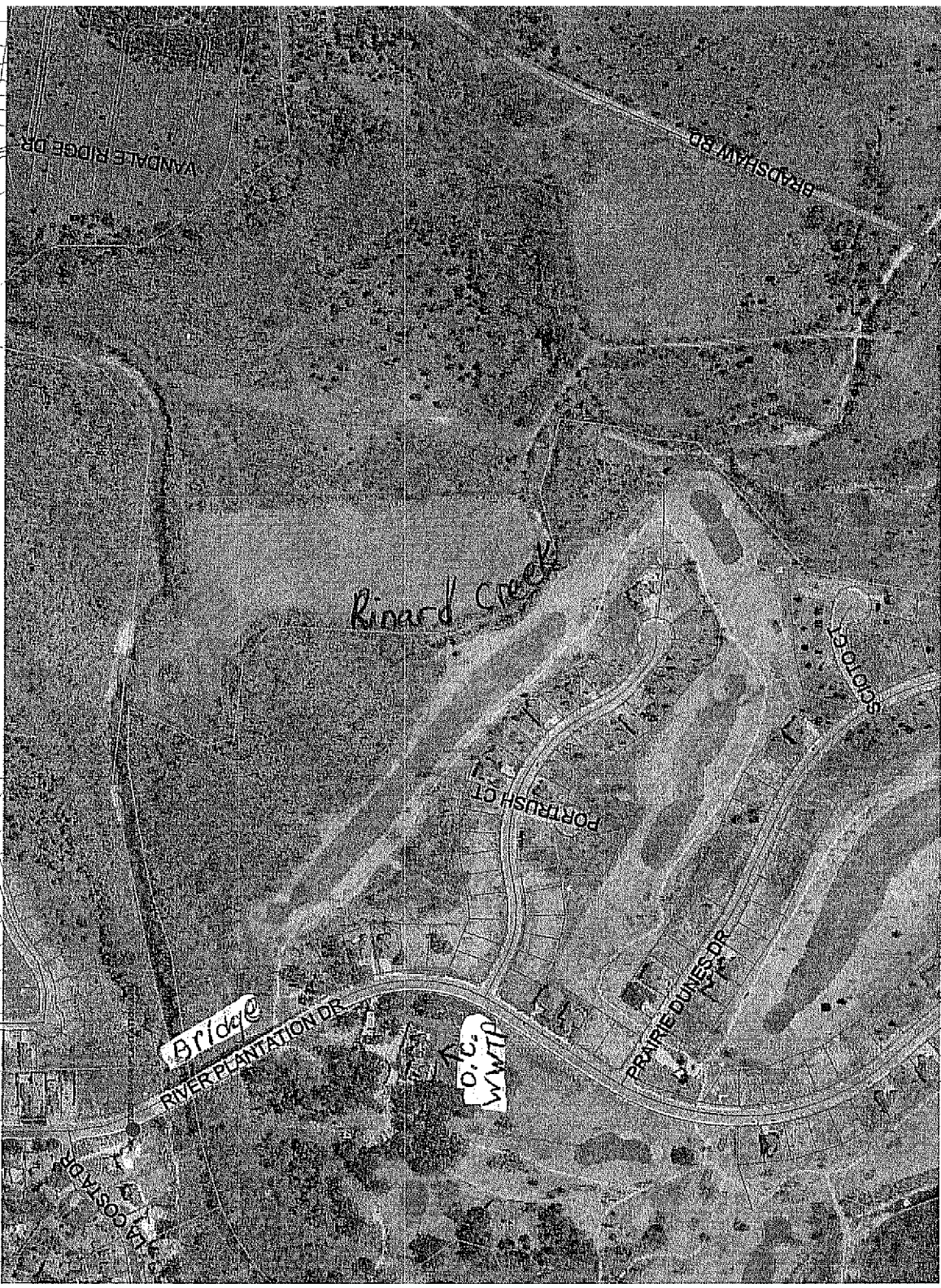
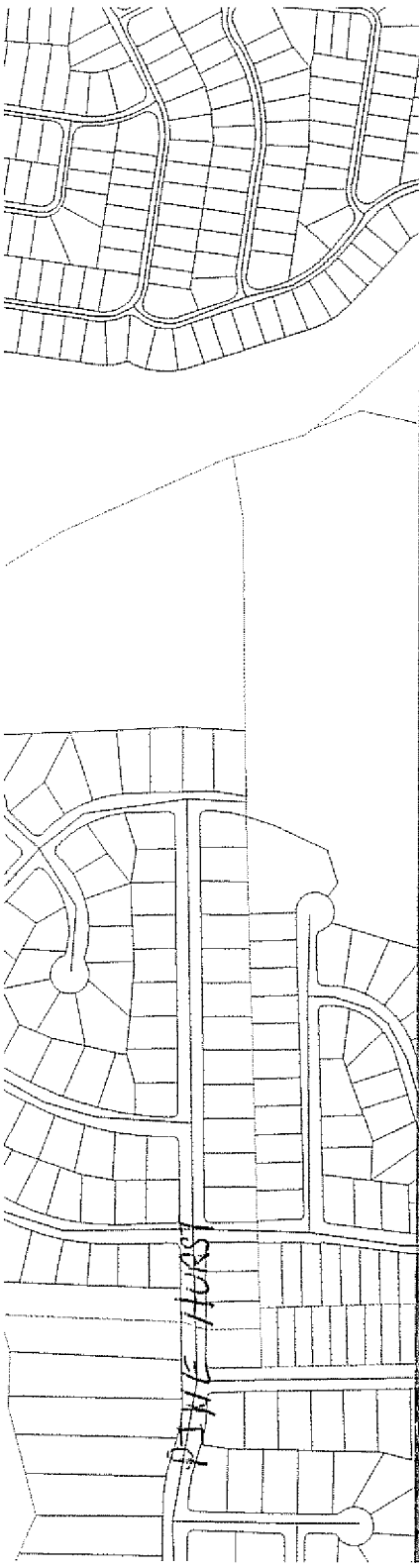
**Abstain:** None

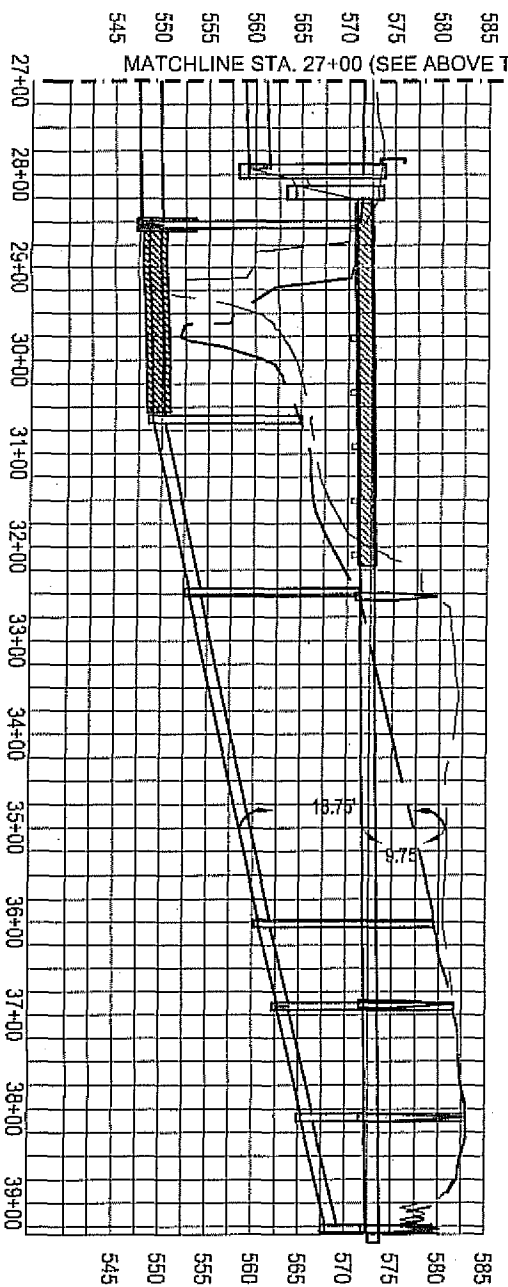
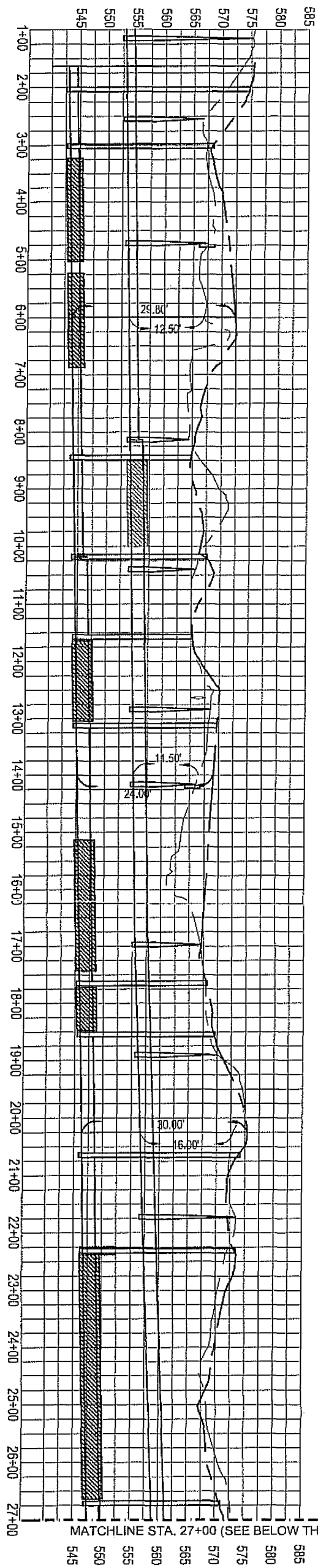
**Absent:** Maxwell and Curra

Approved By

  
Dave Anderson, PE, CFM PE  
Chair







SCALE:  
VERT. = 20  
HORZ. = 200

ZACHARY SCOTT WASTEWATER  
ALTERNATIVE DESIGN ANALYSIS  
FOR: LENNAR HOMES & CITY OF AUSTIN

THIS DOCUMENT IS RELEASED  
FOR THE PURPOSE OF INTERIM  
REVIEW UNDER THE  
AUTHORITY OF JOHN A. CLARK,  
P.E. 81398, ON 02/09/07. IT IS  
NOT TO BE USED FOR  
CONSTRUCTION PURPOSES.

**LJA Engineering & Surveying, Inc.**  
5316 Highway 290 West  
Suite 150  
Austin, Texas 78735  
Phone 512.439.4700  
Fax 512.439.4716



## MEMORANDUM

**TO:** Environmental Board Members

**FROM:** Marilla Carter, Environmental Board Liaison  
Watershed Protection and Development Review Department

**DATE:** February 14, 2007

**SUBJECT:** Agenda Item C-1

Austin Water Utility is requesting the Environmental Board and Water & Wastewater Commission to review and consider for approval the RCA pertaining to wastewater line project near Barton Creek... The Boards are being asked to review this because according to Chapter 26 of the Texas Parks and Wildlife Code, any use of parkland for non-park purposes must be approved by Council. Before the item goes to Council we would like the Boards to recommend this RCA and ask any questions during their respective meeting times. If there are questions about Chapter 26, I believe that the Parks Board can assist you in finding a copy of the code.

Respectfully,

Marilla



**Public Hearing SET  
CITY OF AUSTIN  
RECOMMENDATION FOR COUNCIL ACTION**

**AGENDA DATE: 03-08-2007  
PAGE: 1 of 2**

**SUBJECT:** Set a public hearing to consider the use of approximately 0.085 acre for a wastewater line, 0.180 acre for temporary work space and 0.359 acre temporary ingress egress to construct, use, maintain, repair, and replace a wastewater line for construction of a portion of the Govalle 1 – West of Lamar Project through dedicated parkland known as Barton Creek Greenbelt, in accordance with Sec. 26.001 et seq. of the Texas Parks and Wildlife Code. (Suggested date and time: April 5, 2007 at 6:00 p.m., Austin City Hall, Council Chambers, 301 West Second Street, Austin, TX).

**AMOUNT & SOURCE OF FUNDING:** All costs associated with construction, as well as any parkland restoration will be paid by requester.

**FISCAL NOTE:** There is no unanticipated fiscal impact. A fiscal note is not required.

**REQUESTING** Public Works  
**DEPARTMENT:**

**DIRECTOR'S  
AUTHORIZATION:** \_\_\_\_\_

**FOR MORE INFORMATION CONTACT:** Junie Plummer, 974-7085; Roman Grijalva, 479-1622; Laura Bohl, 974-7064

**PRIOR COUNCIL ACTION:** N/A

**BOARD AND COMMISSION ACTION:** Recommended by the Parks Board on October 24, 2006

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Chapter 26 of the Texas Parks and Wildlife Code provides that the use of parkland for non-park purposes may be approved upon a finding that there is no feasible and prudent alternative to the use of this land.

The Austin Clean Water Program, on behalf of the Austin Water Utility and the Department of Public Works, is proposing to install 219 linear feet (LF) of new 8-inch wastewater line on parkland adjacent to Barton Creek. The line will tie into an existing 24-inch wastewater line at a manhole on the hike and bike trail along the north side of Barton Creek approximately 550 feet upstream (southwest) from a northern entrance to the trail at the intersection of Barton Skyway and Spyglass Drive. The new line will replace an existing 8-inch line.

Approval of the use of parkland is made on the condition that all restoration is completed in accordance with the Standard Specifications and Construction Standards of the City of Austin and the Parks and Recreation Department's "Construction in Parks Specifications". Austin Water Utility is required to pay all costs associated with the restoration and tree mitigation, will be included as part of the site restoration process.

**AGENDA ITEM C-1**

There is no feasible and prudent alternative to the use of the dedicated parkland which includes all reasonable planning to minimize harm to such lands. The dates of public notification in the Austin American-Statesman are March 11<sup>th</sup>, 18<sup>th</sup> and 25<sup>th</sup>, 2007.



## ENVIRONMENTAL BOARD MOTION 022107-C1

Date: February 21, 2007

Subject: RCA pertaining to the *Govalle 1 West of Lamar* wastewater retrofit project

Motioned By: Dave Anderson

Seconded by: Rodney Ahart

### Recommendation

The Environmental Board supports the proposed request for council action (RCA) pertaining to the *Govalle 1 West of Lamar* wastewater retrofit project near Barton Creek.

### Staff Conditions

None.

### Board Conditions

None.

### Rationale

This is a temporary use of parkland that will not impact day to day use of the Barton Creek greenbelt. In addition, the improvements to the wastewater line provide additional and necessary environmental protection from sanitary sewer releases to Barton Creek and the Edwards Aquifer.

Vote 6-0-0-3

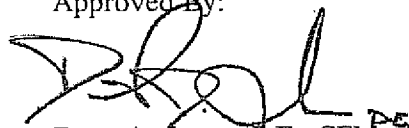
For: Anderson, Ascot, Ahart, Jenkins, Dupnik and Beall

Against:

Abstain:

Absent: \*Moncada, Maxwell and Curra

Approved By:

  
Dave Anderson P.E., CFM  
Environmental Board Chair

\* Phil Moncada was absent due to recusal.



## **Second Briefing for Environmental Board Concerning Certain Lost Creek MUD Issues**

February 21, 2007

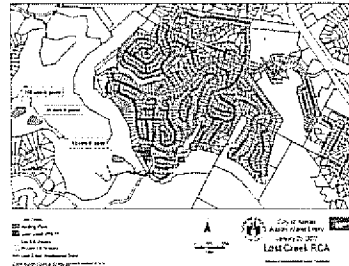
### **Purpose**

- Brief Environmental Board on Lost Creek MUD Issues
  - Wastewater Treatment Facilities and Disposal of Treated Effluent

### **Wastewater Treatment Facilities and Disposal**

- Environmental Representatives Input—September 2006
- Environmental Board Briefing—November 2006
- Environmental Subcommittee Briefing—November 2006
- Contract parties have negotiated and reached agreement on major terms

### **Lost Creek MUD WW Facilities**



### **Background Context**

- Cost to decommission the Lost Creek MUD wastewater treatment plant and construct alternative facilities—approximately \$9.5 million
- Country Clubs have other alternative water sources

### **Proposed Terms**

- **Changes to Wastewater Treatment Plant**
  - Treatment for Phosphorus
  - Permitted Capacity Limitation
  - Effluent Charges
- **Use of Wastewater Treatment Plant**
  - Continue for at least 15 years. Three year notice thereafter
  - Country Clubs —responsible for holding ponds and irrigation equipment

### **City Staff Recommendation to City Council**

- Using Treated Effluent for Irrigation Purposes in Alignment with Water Conservation Policy
- City Historically Improves Wastewater Plant Operations After Acquisition/Annexation
- City Defers Cost of Decommissioning

### **Questions?**





## ENVIRONMENTAL BOARD MOTION 022107-C2

Date: February 21, 2007

Subject: Lost Creek MUD Annexation

Motioned By: Phil Moncada

Seconded by: Julie Jenkins

### Recommendation

The Environmental Board recommends support of the proposed Lost Creek Annexation and recommends that the Austin City Council move forward with Annexation and acquisition of the Lost Creek MUD facilities or a strategic partnership agreement.

### Proposed terms:

1. Treatment for Phosphorus 1 million gallon level.
2. Permitted capacity limitation
3. Effluent changes.

### Rationale

This will allow the City of Austin to continue to operate and monitor these facilities. This will improve protection of the Barton Creek Watershed and continue to centralize wastewater collection facilities for the City of Austin.

Vote 7-0-0-2

For: Anderson, Ascot, Moncada, Ahart, Jenkins, Dupnik and Beall

Against:

Abstain:

Absent: Maxwell and Curra

Approved By

Dave Anderson P.E., CFM  
Environmental Board Chair

This draft policy document is intended as supporting documentation for the briefing on the Water Conservation Task Force recommendations.

DRAFT

Agenda Item C-3

**WATER CONSERVATION STRATEGIES POLICY DOCUMENT  
WATER CONSERVATION TASK FORCE  
AUSTIN, TEXAS**

**February 13, 2007 DRAFT**

**Prepared by: Water Conservation Division of the Austin Water Utility**

**TABLE OF CONTENTS**

**BACKGROUND**

**City Council Resolution  
Water Conservation Task Force**

**PROPOSAL**

**Applicability  
Proposed Code Amendments  
Summary of Proposed Strategies  
Strategies Proposed by Staff but Not Adopted by the Task Force  
Projected Yearly Peak Day Savings**

## **BACKGROUND**

### **City Council Resolution Establishing the Water Conservation Task Force**

The City Council passed Resolution #20060824-061 on August 24, 2006 that:

- Set a goal of reducing peak day water use by 1% per year for 10 years and,
- Created a Water Conservation Task Force with a goal drafting a policy document consisting of strategies and implementation plans for new water conservation initiatives to meet this goal for City Council consideration within 90 days. The policy document is to be used in drafting necessary amendments to the city code and technical manuals, as well as for budgetary considerations
- Named the members of the Task Force
  - Mayor Will Wynn,
  - Councilmember Leffingwell
  - Councilmember Sheryl Cole
  - Environmental Board Member Dave Anderson
  - Planning Commission Member Chris Riley
  - Resource Management Commission Member Chris Herbert
  - Water and Wastewater Commission Member Michael Warner

On September 28, 2006, Council extended the time for the Task Force to report back to the Council from 90 to 120 days (Resolution #20060928-071).

### **Water Conservation Task Force Process**

At the first Task Force meeting, the general process that the Task Force agreed on was as follows:

- The task force will review relevant research, hold discussions with staff, take input from stakeholder groups and individuals, hold public meetings and work sessions, and ultimately produce the policy document.
- The task force will announce and broadly publicize meeting schedules in order to maximize public education and participation. The task force will provide an opportunity for public testimony at each public meeting.
- In addition to public meetings, the task force would need several work sessions to receive briefings and analysis from AWU staff.

The Task Force adopted the following schedule to meet the 120 day timeframe.

Meeting 1: September 29, 2006 – Organizational Meeting and Overview

- Receive staff reports on suggested conservation strategies
- Adopt timetable for meeting task force milestones
- Public testimony

Meeting 2: October 13, 2006 – Indoor Strategies

- Receive staff reports on conservation strategies relating to plumbing fixtures, metering, cooling towers, etc.
- Invited Testimony
- Public Testimony

Meeting 3: October 27, 2006 – Indoor Strategies

- Deliberation and initial adoption of strategies
- Public Testimony

Meeting 4: November 3, 2006– Landscape Irrigation Strategies

- Receive staff reports on conservation strategies relating to irrigation system efficiency, landscape design, watering schedules, rainwater collection, etc.
- Invited Testimony
- Public Testimony

Meeting 5: November 17, 2006 – Landscape Irrigation Strategies

- Deliberation and initial adoption of strategies
- Public Testimony

Meeting 6: December 8, 2006 – City and Utility Strategies

- Receive staff reports on leak repair, water reuse program, rate structures, public education, etc.
- Invited Testimony
- Public Testimony

Meeting 7: December 15, 2006 – City and Utility Strategies

- Deliberation and initial adoption of strategies
- Public Testimony

Final Meeting: Scheduled for January 12, 2007

- Public Testimony
- Deliberation and Final Adoption of Strategies

### **Peak Day Water Use and Future Water Plant Expansions**

The need for additional water plant treatment capacity is determined by amount of water projected to be demanded by customers during the peak usage days of the year. Since during the peak usage days of the summer approximately 50 percent of water use is for irrigation, there is a substantial opportunity to reduce peak day projected demand in the future, thereby delaying the need for additional water plant capacity.

Other programs such as reducing system water loss, substituting reclaimed water for potable water, and decreasing indoor usage also have a significant impact on peak day water usage.

The graph below shows the projected increase in peak day water use based on current trends and the dotted line indicates the trend if the Task Force goal of reducing peak day water use by 1 percent per year for 10 years is achieved.

### **Environmental Benefits of Conservation**

Water conservation brings a host of environmental benefits as well. When water is conserved, energy needs for treatment and pumping are reduced, which translates into better air quality. Sound landscaping and irrigation practices help water quality by reducing runoff and the need for lawn-care chemicals. Water efficiency keeps more water in the Colorado River, thus supporting riparian and estuarine habitats.

### **Projected Peak Day Savings from the Water Conservation Task Force Recommendations**

The estimated peak day savings from the Task Force recommendations is 34.7 million gallons per day (MGD). These savings numbers have been reviewed and confirmed by the City Auditor's Office. While the 34.7 MGD projected savings is higher than the Task Force goal of achieving 25 MGD, there is a degree of uncertainty in achieving all of the projected savings. Therefore, it would be prudent to implement all the programs as recommended by the Task Force in order to assure that the 25 MGD goal of the Task Force is achieved.

### **Decreasing Peak Day Water Use Extends Austin's Water Supply**

Austin is fortunate to have a dependable long-term water supply through rights on the Colorado River and the 1999 Water Supply Agreement with the Lower Colorado River Authority (LCRA). During the discussions leading up to the 1999 Agreement, the City Council indicated that the quantity of water supply being contracted for was projected to last through 2040 with the expectation that the Austin Water Utility would implement an aggressive conservation and reclaimed water program so that the supply would be extended at least through 2050. The programs that the Water Conservation Task Force recommended, if adopted and implemented with the 19 FTEs\* in additional staff and other funding requirements shown below, will have a significant impact on achieving the extension of Austin's water supply until 2050.

**Summary of Proposed Strategies**

PS #	Description	Applicability	Average year City cost	10-year savings (MGD)	FTEs	Cost per gallon saved	Page #
<b>Indoor Water Conservation Strategies</b>							
IN-1	Require all plumbing fixtures to perform at current plumbing code volumes.	All customers	\$542,500	1.96	2.0	\$2.77	
IN-2	Require the use of submeters to bill for water in multi-family properties.	New and some existing multi-family and mixed-use properties.	\$30,000	0.62	0.5	\$0.48	
IN-3	Make changes to Plumbing Code to prohibit inefficient fixtures.	All customers	\$30,000	0.94	0.5	\$0.32	
IN-4	Establish efficiency requirements for cooling tower management.	Commercial properties with cooling towers.	\$15,000	0.95	0.25	\$0.16	
IN-5	Establish water consumption limits for car wash facilities and equipment.	Commercial car wash facilities	\$15,000	0.15	0.25	\$1.00	
IN-6	Establish efficiency standards for commercial clothes washers.	Commercial laundry facilities	\$15,000	0.43	0.25	\$0.35	
<b>Outdoor Water Conservation Strategies</b>							
OU-1	Expand Water Use Management Ordinance.	All customers	\$187,500	6.16	3.0	\$0.30	
OU-2	Require new residential irrigation systems to meet design standards and permitting requirements.	Residential customers	\$245,000	1.32	4.0	\$1.86	
OU-3	Create additional design requirements for commercial irrigation systems and landscape design.	Commercial and multi-family customers	\$120,000	0.74	2.0	\$1.62	
OU-4	Establish soil-depth requirements for new residential landscapes.	Volume home builders	\$125,000	0.44	2.0	\$2.84	

PS #	Description	Applicability	Average year City cost	10-year savings (MGD)	FTEs	Cost per gallon saved	Page #
OU-5	Require homebuilders to offer a WaterWise landscape option.	Volume home builders	\$15,000	0.21	0.25	\$0.71	
OU-6	Require regular analyses of automatic irrigation systems.	All properties over 1 acre	\$132,000	1.47	2.0	\$0.90	
OU-7	Expand free irrigation audit program for high-volume water users.	Commercial, multi-family; high-volume residential properties	\$137,500	0.63	2.0*	\$2.18	
<b>City and Utility Water Conservation Strategies</b>							
CI-1	Ensure funding for leak detection contract	Austin Water Utility	\$100,000	4.8	0	\$0.21	
CI-2	Assure CIP funding for reclaimed water projects.	Austin Water Utility	\$2,500,000**	5.95	0	\$2.10	
CI-3	Adjust Utility water rates to encourage conservation.	All customers	\$0	5.0	0	\$0	
CI-4	Require conservation by wholesale customers.	Wholesale customers	\$0	TBD	0	TBD	
CI-5	Explore alternative water sources	Commercial customers	TBD	TBD	TBD	TBD	
CI-6	Increase water efficiency in City facilities.	City departments	\$0	0.37	0	\$0	
CI-7	Reduce excessive water use due to high pressure.	Residential customers	\$30,000	0.29	0	\$1.07	
CI-8	Establish program to alert customers to potential leaks during winter months.	Residential customers	\$0	0.31	0	\$0	
CI-9	Expand public education program.	All customers	\$725,000	N/A	0	N/A	

\* 2 FTEs for Strategy OU-7 to expand free irrigation audit program were presented as a budget item to the Task Force on 1/12/07 but due to an oversight, were not included in the total FTE count

\*\*CIP costs of \$2,500,000 a year for five-year period

- All costs are estimates in 2007 dollars.



**INDOOR WATER CONSERVATION****Proposed Code Amendments**

<b>IN-1</b>	<b>Require all plumbing fixtures to perform at current plumbing code volumes.</b>
<b>Applies to:</b>	Commercial and Multi-family customers; Single-family residential properties up for sale.
<b>Implementation Method:</b>	Revisions to City Code, Chapter 6-4

Despite plumbing code changes addressing new fixtures and incentive programs for retrofits, many inefficient plumbing fixtures still exist in Austin. Water savings from fixture retrofits are very reliable, since they require only hardware replacements, not behavioral changes.

1. All plumbing fixtures in multi-family and commercial properties must perform at current plumbing code volumes by December 31, 2011 or upon sale of the property, whichever comes first. Properties will have to certify that they have retrofitted their fixtures. The retrofit will not apply to a property that has replaced its toilets under the City's programs, a property that was built after January 1, 1993, a property that can certify through inspection by a licensed plumber or City inspector that all toilets, showerheads, and faucets on the property meet the plumbing code specifications, or a property that has applied for and received a variance due to it being an existing structure that has been identified by a local, state, or federal government entity as an historical site and a historically accurate water-conserving plumbing fixture is not available.
2. All plumbing fixtures in single-family properties must perform at current plumbing code volumes by December 31, 2009. Enforcement will be triggered by the notification of the transfer of the title. At that time, owners must certify that their properties have fixtures that comply with the current plumbing code. The retrofit will not apply to a property that has replaced its toilets under the City's programs, a property that was built after January 1, 1993, a property that before the sale can certify through inspection by a licensed plumber or City inspector that all toilets, showerheads, and faucets on the property meet the plumbing code specifications, or a property that has applied for and received a variance due to it being an existing structure that has been identified by a local, state, or federal government entity as an historical site and a historically accurate water-conserving plumbing fixture is not available.
  - a. Before transfer of title for a property, seller must present a Certificate of Compliance to confirm fixtures' efficiency. The Certificate requires a verification inspection by Water Conservation staff, and may be applied for at any time. It is recommended that Certificate be obtained prior to listing properties for sale.
  - b. Upon posting of a completion bond with Water Conservation, responsibility for obtaining a Certificate of Compliance may be transferred to the buyer to accommodate remodeling.

<b>Additional FTEs:</b>	2, to inspect and issue Certificates of Compliance
<b>Additional Cost:</b>	\$120,000 for personnel costs each year
	\$25,000 for the cost of one vehicle
	\$4,200,297 for toilet rebates before effective dates
<b>Contract/Commodity Cost:</b>	\$0
<b>Peak-Day Savings:</b>	1.96 MGD over 10 years
<b>Cost per gallon saved:</b>	\$2.77

<b>IN-2</b>	<b>Require the use of submeters or utility meters to bill for water.</b>
<b>Applies to:</b>	All new and some existing mixed-use and multi-family properties.
<b>Implementation Method:</b>	

According to a 2004 joint study by EPA, multi-family associations and water utilities, customers in multi-family properties reduce water use by 15% when billed directly for the water they use. Tenants who pay for their water use through allocated bills or homeowners' associations do not reduce their water use. While new multi-family properties are required to be plumbed for and to install submeters, they are not required to use submetering to bill tenants for water.

All new multifamily properties must bill tenants for individual water use through City meters or privately-owned submeters. Tax credit properties built between the implementation date of this policy and January 1, 2008, will have until December 31, 2016 to bill for water using either individual City meters or submeters. Properties with centralized hot water systems and are above a height to be proposed by staff (such as those over 3 stories) are exempt. The Task Force did not recommend requiring that condominiums be required to bill using submeters or utility meters but did recommend that condominiums do so. Mixed use and multiple use properties must bill for water using either individual City meters or submeters.

Where multiple duplexes, triplexes or fourplexes are constructed on a single commercial lot, individual City meters must be installed for each unit, as is currently required when there is a single structure on a lot.

**Additional FTEs:**

**Additional Cost:**

**Contract/Commodity Cost:**

**Peak-Day Savings:**

**Cost per gallon saved:**

0.5, to monitor program and ensure compliance

\$30,000 for personnel costs each year

\$0

0.62 MGD over 10 years

\$0.48

<b>IN-3</b>	<b>Prohibit inefficient fixtures.</b>
<b>Applies to:</b>	New commercial construction
<b>Implementation Method:</b>	Revisions to plumbing code

Inefficient equipment is still being sold and installed in Austin establishments, creating a missed opportunity for water savings.

The following will apply to new construction:

1. Liquid ring surgical/dental vacuum pumps are prohibited.
2. Steam boilers must have conductivity controllers.
3. Urinals must have a maximum flush volume of 0.5 gallons per flush (gpf).
4. Commercial dishwashers must use no more than 0.9 gallons per rack or 180 gallons per hour.
5. Garbage grinders are prohibited in restaurants and cafeterias.

<b>Additional FTEs:</b>	0.5, to ensure compliance
<b>Additional Cost (per year):</b>	\$30,000 for personnel costs each year
<b>Contract/Commodity Cost:</b>	\$0
<b>Peak-Day Savings:</b>	0.94 MGD over 10 years
<b>Cost per gallon saved:</b>	\$0.32

<b>IN-4</b>	<b>Establish efficiency requirements for cooling tower management.</b>
<b>Applies to:</b>	All customers
<b>Implementation Method:</b>	Ordinance

Cooling towers are a contributor to peak-day water use, yet many are poorly operated. Technology can improve operation, or make it easier for operators to run cooling towers efficiently. Additionally, AC condensate is not always being captured and reused although it is suitable for cooling towers or for landscape irrigation.

1. Cooling towers permitted after the effective date of this requirement must have:
  - a. makeup and blowdown meters,
  - b. conductivity controllers,
  - c. overflow alarms,
  - d. drift eliminators, and
  - e. a minimum of 5 cycles of concentration.
2. Existing cooling towers must install items 1a. through 1e. by December 31, 2010.
3. Rebates will continue to be available to encourage the use of reverse osmosis (RO) technology to increase cycles of concentration where RO reject water can be used for irrigation.
4. New commercial properties must drain condensate from any air conditioning systems to a common drain for beneficial reuse.

<b>Additional FTEs:</b>	0.25, to ensure compliance
<b>Additional Cost:</b>	\$15,000 for personnel costs each year
<b>Contract/Commodity Cost:</b>	\$0
<b>Peak-Day Savings:</b>	0.95 MGD over 10 years
<b>Cost per gallon saved:</b>	\$0.16

<b>IN-5</b>	<b>Establish water consumption limits for car wash facilities and equipment.</b>
<b>Applies to:</b>	Commercial car wash facilities
<b>Implementation Method:</b>	Permitting process

New and existing car washes are required to comply with the following efficiency standards:

1. Conveyor washes are limited to 40 gallons/car or less.
2. In-bay washes are limited to 55 gallons/car or less.
3. Large vehicle (bus or large truck) washes are limited to 75 gallons/vehicle or less.
4. Hand wand nozzles must use 3 gallons per minute or less.

**Additional FTEs:**

**Additional Cost:**

**Contract/Commodity Cost:**

**Peak-Day Savings:**

**Cost per gallon saved:**

0.25, to ensure compliance

\$15,000 for personnel costs each year

\$0

0.15 MGD over 10 years

\$1.00

<b>IN-6</b>	<b>Establish efficiency standards for commercial clothes washers.</b>
<b>Applies to:</b>	Commercial laundry facilities
<b>Implementation Method:</b>	Ordinance

While Department of Energy standards exist for residential clothes washers (single load soft-mount machines), there are no state or federal efficiency standards for hard-mount clothes washers or multi-load soft-mount washers.

1. New clothes washers, with the exception of single-load soft mount machines, must have a water factor no greater than 8.0.
2. All coin-operated commercial laundry equipment must have a water factor no greater than 8.0 by 2011.

**Additional FTEs:**

**Additional Cost:**

**Contract/Commodity Cost:**

**Peak-Day Savings:**

**Cost per gallon saved:**

0.25, to ensure compliance

\$15,000 for personnel costs each year

\$0

0.43 MGD over 10 years

\$0.35

**OUTDOOR WATER CONSERVATION**

<b>OU-1</b>	<b>Expand Water Use Management Ordinance to limit frequency, timing and method of outdoor watering.</b>
<b>Applies to:</b>	All customers
<b>Implementation Method:</b>	Revisions to City Code, Chapter 6-4

Outdoor water use drives peak day use for the City of Austin. Irrigation accounts for more than 50% of Austin's peak-day water use, and for approximately 35% of annual water use. The City's current Water Use Management Ordinance provides for potential fines of \$500 per violation for properties found wasting water (operating sprinkler systems improperly or with broken heads), or for commercial or multi-family properties watering between the hours of 10am and 7pm between May 1<sup>st</sup> and September 30<sup>th</sup>. However, the current ordinance does not restrict properties from over watering, nor does it provide sufficient restrictions on daytime watering, when more water is lost to evaporation and wind. Additionally, the ordinance needs greater enforcement of existing penalties.

The following provisions will be added to expand the current Water Use Management Ordinance:

1. Permanent Water Use Restrictions (§ 6-4-63)
  - a. Limit commercial and multifamily properties to 2 designated watering days a week.
  - b. Automatic irrigation systems may not be operated between 10 a.m. and 7 p.m.
  - c. Require rain shut-off devices on automatic irrigation systems that must be operational at all times and set to turn off the system after 1/8 inch of rainfall.
2. Water Conservation Stage One Regulations (§ 6-4-64), effective May 1<sup>st</sup> to September 30<sup>th</sup>
  - a. Limit residential properties with automatic irrigation systems to 2 designated watering days a week.
  - b. Outdoor watering, except with a hand-held hose or hand-held bucket, is prohibited between 10am and 7pm.
3. The use of timers on hose-end sprinklers will continue to be promoted.

<b>Additional FTEs:</b>	3 for enforcement
<b>Additional Cost:</b>	\$180,000 for personnel costs each year \$75,000 for the cost of 3 vehicles
<b>Contract/Commodity Cost:</b>	\$0
<b>Peak-Day Savings:</b>	6.16 MGD over 10 years
<b>Cost per gallon saved:</b>	\$0.30

<b>OU-2</b>	<b>Require new residential irrigation systems to meet design standards and permitting requirements.</b>
<b>Applies to:</b>	Residential customers
<b>Implementation Method:</b>	Ordinance

Although Texas is one of the only states to license irrigators, there is still a lack of regulation, oversight and enforcement in residential irrigation system design and installation. Inefficient system design can result in water loss of 20 to 50%.

1. Anyone installing a new irrigation system at a residential property must obtain a permit prior to installation. Irrigation systems shall be designed with:
  - a. valves and circuits separated based on water use (hydro-zoned);
  - b. sprinkler heads spaced for head-to-head coverage, or heads spaced according to manufacturer's recommendations and adjusted for prevailing winds;
  - c. a benchmark distribution uniformity percentage of 0.6 or higher;
  - d. no run-off, with no direct over spray onto non-irrigated areas;
  - e. pop-up spray heads set back at least 6 inches from impervious surfaces;
  - f. no spray irrigation included on areas less than 6 feet in width;
  - g. an approved rain shut-off device set to shut off after 1/8" of rainfall and a master valve installed;
  - h. pressure regulation components installed where dynamic pressure exceeds manufacturer's recommended operating range (30-60 psi); and
  - i. a City-approved controller capable of dual or multiple programming, with at least several start times for each irrigation program, a water budgeting feature and programmable to irrigate with a frequency of every one to ten days.
2. Installers must present the owner with, and make available to the City of Austin, a water budget that specifies:
  - a. estimated monthly water use in gallons per application;
  - b. total irrigated area in square feet;
  - c. precipitation rates for each valve circuit;
  - d. monthly irrigation schedule for the plant establishment period (first three months);
  - e. recommended yearly watering schedule, including seasonal adjustments;
  - f. location of emergency irrigation system shut-off valve; and
  - g. the distribution uniformity percentage for the system.
3. Irrigation systems are subject to a final City inspection prior to operation. Staff will continue developing requirements for post-installation documentation.
4. Irrigation submeters with automatic readouts for customer monitoring will be required one year after the other portions of this measure take effect. A rebate program for submeters with readouts for new and existing systems will be developed and will be in place until the requirement takes effect.



<b>Additional FTEs:</b>	4, to evaluate designs, issue permits, and perform post installation inspections
<b>Additional Cost:</b>	\$240,000 for personnel costs each year \$50,000 for the cost of 2 vehicles
<b>Contract/Commodity Cost:</b>	\$0
<b>Peak-Day Savings:</b>	1.32 MGD over 10 years
<b>Cost per gallon saved:</b>	\$1.86

REF

<b>OU-3</b>	<b>Create additional design requirements for commercial irrigation systems and landscapes.</b>
<b>Applies to:</b>	Commercial and multi-family customers
<b>Implementation Method:</b>	Revisions to City Code

Although there is a permitting process for automatic irrigation systems on commercial properties, new systems have the potential to waste a significant amount of water.

In addition to existing permitting and design requirements,

1. New commercial and multi-family irrigation systems must be designed so that:
  - a. the system has zero runoff;
  - b. the sprinkler arc does not pass across a paved area;
  - c. the system does not include spray irrigation on areas less than 6 feet wide (such as medians, buffer strips, and parking lot islands);
  - d. pop-up spray heads are set back at least 6 inches from impervious surfaces;
  - e. the irrigation system has a master valve;
  - f. the irrigation system must have a City approved weather based controller;
  - g. the system meets a minimum distribution uniformity of 0.6.

2. Prior to final inspection, installers must develop an as-built design plan and water budget.

For commercial landscapes, require:

1. a minimum depth of 8" of soil meeting City specifications under all new landscaping; and
2. turfgrasses included in the landscape to meet dormancy requirements.

<b>Additional FTEs:</b>	2, to evaluate designs and issue permits
<b>Additional Cost:</b>	\$120,000 for personnel costs each year
<b>Contract/Commodity Cost:</b>	\$0
<b>Peak-Day Savings:</b>	0.74 MGD over 10 years
<b>Cost per gallon saved:</b>	\$1.62

<b>OU-4</b>	<b>Establish soil-depth requirements for new landscapes.</b>
<b>Applies to:</b>	Volume home builders
<b>Implementation Method:</b>	Revisions to City Code

Native soil depth in Austin is insufficient to support the types of landscape aesthetics homeowners desire, resulting in excessive irrigation. Grasses which are inappropriate for the Austin climate and rainfall pattern continue to be installed in new residential landscape areas, requiring frequent irrigation in the summer months.

1. New homes must have a minimum depth of 6" of soil meeting City specifications.
  - a. A site with 6 inches of existing soil does not need to add any soil.
2. New turf installations must meet dormancy requirements.

**Additional FTEs:**

**Additional Cost:**

**Contract/Commodity Cost:**

**Peak-Day Savings:**

**Cost per gallon saved:**

2, to work with home builders and inspect sites

\$120,000 for personnel costs each year

\$50,000 for the cost of 2 vehicles

\$0

0.44 MGD over 10 years

\$2.84

<b>OU-5</b>	<b>Require homebuilders to offer a WaterWise landscape option.</b>
<b>Applies to:</b>	Volume home builders
<b>Implementation Method:</b>	Legal Dept. is reviewing appropriate implementation method

Prospective homebuyers are not often presented with low-water use landscape options.

1. Homebuilders must offer a WaterWise landscape option in any series of landscape options offered to prospective home buyers. The WaterWise landscape option must:
  - a. be comprised of plants from the City of Austin preferred plant list or other plants with similar drought-tolerant characteristics; and
  - b. have no more than 50% of the landscape area covered in turfgrass, providing that any turfgrass included meets dormancy requirements.

**Additional FTEs:**

**Additional Cost:**

**Contract/Commodity Cost:**

**Peak-Day Savings:**

**Cost per gallon saved:**

0.25, to work with home builders

\$15,000 for personnel costs each year

\$0

0.21 MGD over 10 years

\$0.71

<b>OU-6</b>	<b>Require regular analysis of automatic irrigation systems.</b>
<b>Applies to:</b>	All non-residential properties over 1 acre
<b>Implementation Method:</b>	Revisions to City Code, Chapter 6-4

Large properties with automatic irrigation systems often over-water, especially when irrigation maintenance contracts do not provide for analysis and repair of system inefficiencies or inform property owners and managers of projected water use amounts.

1. Commercial, multi-family, and municipal properties over 1 acre with automatic irrigation systems must submit an irrigation analysis to the Austin Water Utility once every three years according to a staggered schedule.
2. Commercial or multi-family properties that have irrigation meters and use more than 125 percent of the evapotranspiration rate for irrigation must also have an irrigation analysis once every three years.
3. Analyses must be:
  - a. performed by licensed irrigators and show the irrigator's license number on the report;
  - b. submitted to the Austin Water Utility by May 1<sup>st</sup> of the year it is due; and
  - c. signed by the property manager or owner.

**Additional FTEs:**

**Additional Cost:**

**Contract/Commodity Costs:**

**Peak-Day Savings:**

**Cost per gallon saved:**

2, to evaluate and track irrigation

\$120,000 for personnel costs each year

\$12,000 for annual marketing

\$0

1.47 MGD over 10 years

\$0.90

<b>OU-7</b>	<b>Require water audits for high-volume residential customers.</b>
<b>Applies to:</b>	Residential customers with regular use over 35,000 gallons per month
<b>Implementation Method:</b>	Revisions to City Code, Chapter 6-4

Many residential customers are unaware about how much water their landscape requires and could benefit from irrigation audits.

1. Residential properties that exceed 35,000 gallons per month at least once in each of two consecutive calendar years and are under the same ownership for that period are required to have an irrigation analysis once every three years.
4. Analyses must be:
  - a. performed by licensed irrigators and show the irrigator's license number on the report;
  - b. submitted to the Austin Water Utility by May 1<sup>st</sup> of the year it is due; and
  - c. signed by the property manager or owner.

Residential properties with over 25,000 gallons per month at least once in each of two consecutive years will be subject to irrigation analyses.

**Additional FTEs:**

**Additional Cost:**

**Contract/Commodity Costs:**

**Peak-Day Savings:**

**Cost per gallon saved:**

2, to perform audits, as well as evaluate and track irrigation analyses  
 \$120,000 for personnel costs each year  
 \$50,000 for the cost of 2 vehicles  
 \$12,500 for annual marketing  
 \$0  
 0.63 MGD over 10 years  
 \$2.18

## CITY AND UTILITY WATER CONSERVATION

<b>CI-1</b>	<b>Ensure funding for leak detection contract.</b>
<b>Applies to:</b>	Austin Water Utility
<b>Implementation Method:</b>	Council resolution

Water loss could be improved with substantial system benefits. The Austin Water Utility does not currently have a comprehensive leak detection program, so underground leaks that do not surface continue to contribute to overall water loss.

1. Continue annual funding for the Leak Detection Contract approved by Council on October 19, 2006, which includes examining 600 linear miles of pipe, initially focusing on cast iron pipe, to find leaks that have not yet surfaced.
2. Support the Utility's ongoing efforts to repair leaks in a shorter time frame.

<b>Additional FTEs:</b>	0
<b>Additional Cost:</b>	\$0
<b>Contract/Commodity Cost:</b>	\$100,000 contract annually
<b>Peak-Day Savings:</b>	4.8 MGD over 10 years
<b>Cost per gallon saved:</b>	\$0.21

<b>CI-2</b>	<b>Assure CIP funding for reclaimed water projects.</b>
<b>Applies to:</b>	Austin Water Utility
<b>Implementation Method:</b>	Council resolution

To expand the reclaimed water program, a number of large-volume customers need to be converted from potable to reclaimed water, which in turn requires that transmission main extensions are built to bring reclaimed water to these customers.

1. Approve funding for the following projects, which will be started in 2007 and completed by 2011, as part of the Utility's Capital Improvement Plan:
  - a. UT Transmission Main – 13,000 feet of 24" main along Red River (4.0 MGD)
  - b. ABIA Transmission Main – 6,100 feet of 12" main from Hornsby Bend to Bergstrom Airport (0.6 MGD)
  - c. Smith Road Extension – 10,000 feet of 8" and 12" main (0.5 MGD)
  - d. Main to the Roy G. Guerrero Colorado River Park – 16,000 feet of 24" main (1.0 MGD)
  - e. 24" Rehabilitation (0 MGD, but necessary for the main to Guerrero Park and Smith Road Extension)
  - f. 12" Rehabilitation (0.1 MGD)
  - g. 183 Rehabilitation (0 MGD, but necessary for the Smith Road Extension)
2. Require commercial and municipal customers with access to reclaimed water to use it for irrigation, cooling, and other non-potable uses, with exemptions for health, public safety, and capacity availability.

**Additional FTEs:**

0

**Additional Cost:**

\$2,500,000 CIP costs each year for 5 years

**Contract/Commodity Cost:**

\$0

**Peak-Day Savings:**

5.95 MGD over 10 years

**Cost per gallon saved:**

\$2.10



<b>CI-3</b>	<b>Adjust Utility water rates to encourage conservation.</b>
<b>Applies to:</b>	All customers
<b>Implementation Method:</b>	Cost of service study and changes to the rate structure

The Utility's current water rate structure does not provide adequate conservation price signals for high use residential customers, irrigation accounts, or commercial and multi-family customers. Additionally, many customers do not know what level of water use is appropriate for their needs. A cost of service study will be conducted to identify effective conservation strategies, and will recommend a combination of efforts that will result in at least 5.0 MGD savings.

1. Establish a residential fifth tier for use above 25,000 gallons per month.
2. Conduct a cost of service study to evaluate strategies that will reduce water demand by at least 5 MGD, including:
  - a. the level at which to set the fifth tier for residential customers;
  - b. establishing commercial irrigation rates comparable to highest residential tiers;
  - c. water budgeting rates for commercial customers; and
  - d. conservation rate structures for wholesale customers.

It is anticipated that a fifth tier and changes to irrigation rates would be added immediately under the existing billing system. More complex rate changes would not take effect until a new billing system is in place that can accommodate the changes.

<b>Additional FTEs:</b>	0
<b>Additional Cost:</b>	\$0
<b>Contract/Commodity Cost:</b>	\$0
<b>Peak-Day Savings:</b>	5.0 MGD over 10 years
<b>Cost per gallon saved:</b>	\$0

<b>CI-4</b>	<b>Require conservation by wholesale customers.</b>
<b>Applies to:</b>	Wholesale customers
<b>Implementation Method:</b>	Contracts

Wholesale customers who receive water generated by Austin Water Utility are not participating equally in conservation efforts.

1. Follow-up on contracts that require water conservation measures to be implemented.
2. Request customers whose contracts don't require conservation to implement conservation measures.
3. Require any new, amended, or renewed contracts contain conservation measures comparable to what the City has in place.

<b>Additional FTEs:</b>	0
<b>Additional Cost:</b>	\$0
<b>Contract/Commodity Cost:</b>	\$0
<b>Peak-Day Savings:</b>	TBD
<b>Cost per gallon saved:</b>	\$0

<b>CI-5</b>	<b>Explore alternative water sources.</b>
<b>Applies to:</b>	Commercial customers
<b>Implementation Method:</b>	To Be Determined

Stormwater regulations are not optimized for beneficial reuse of stormwater for irrigation, prohibiting storage longer than 72 hours in some cases. Most stormwater ponds are not required to re-irrigate, and as a result water is discharged directly to waterways or to unmaintained land areas that do not need supplemental irrigation.

1. Water Conservation and Watershed Protection staff will meet to explore other opportunities for stormwater reuse and other alternative water sources and report back to Council.

**Additional FTEs:**

**Additional Cost:**

**Contract/Commodity Cost:**

**Peak-Day Savings:**

**Cost per gallon saved:**

TBD

TBD

TBD

TBD

TBD

**DRAFT**

**DRAFT**

<b>CI-6</b>	<b>Increase water-efficiency in City facilities.</b>
<b>Applies to:</b>	All City facilities
<b>Implementation Method:</b>	Council Resolution to set the policy. Performance contract to implement retrofits.

Citizens look to the City to lead by example in conserving water, especially in visible areas like parks and City facilities. Additionally, there is a lack of accountability for water use by youth athletic organizations, since the City currently pays for the water used to irrigate athletic fields.

1. It is recommended that the City:
  - a. require water conservation elements as part of the LEEDs certification program for new City facilities;
  - b. require all athletic fields to pay for water above a pre-determined water budget; and
  - c. follow through with water efficiency recommendations from the current performance contract. These improvements include cooling tower operations, completing the retrofit of plumbing fixtures, and installing weather-based controllers under Parks Department management on athletic fields (39 athletic field properties).

**Additional FTEs:**

**Additional Cost:**

**Contract/Commodity Cost:**

**Peak-Day Savings:**

**Cost per gallon saved:**

0

\$0

\$0

0.37 MGD over 10 years

\$0

<b>CI-7</b>	<b>Reduce excessive water use due to high pressure.</b>
<b>Applies to:</b>	Residential properties with high pressure
<b>Implementation Method:</b>	Plumbing code amendments, incentive program

High water pressure leads to higher water use and a faster deterioration of appliances and fixtures. Current plumbing code requires a pressure reduction valve (PRV) if the pressure exceeds 80 pounds per square inch (psi). However, approximately 13% of new residential water meters are installed in areas of Austin where pressure is between 65 and 80 psi. There are approximately 30,000 residential properties with pressure over 80 psi.

1. Change plumbing code to require pressure reduction valves (PRVs) on new residential properties with pressure above 65 psi, and
2. Offer a \$100 rebate for installing PRVs at existing properties with pressure over 80 psi.
  - a. The amount of and qualifications for rebates will be determined based on a survey of average installation costs and expected water savings.

<b>Additional FTEs:</b>	0
<b>Additional Cost:</b>	\$30,000 per year for rebates
<b>Contract/Commodity Cost:</b>	\$0
<b>Peak- Day Savings:</b>	0.29 MGD over 10 years
<b>Cost per gallon saved:</b>	\$1.07

<b>CI-8</b>	<b>Establish program to alert customers to potential leaks during winter.</b>
<b>Applies to:</b>	All customers
<b>Implementation Method:</b>	Outreach program through direct mail

High winter water use typically signifies one of two things: A customer is continuing to irrigate during the winter, or there is a water leak on the property. Customers who do not carefully read their utility bills may be unaware of the high usage or the possibility of a leak.

1. Contact customers with high winter water use to alert them to the possibility of a leak.

<b>Additional FTEs:</b>	0
<b>Additional Cost:</b>	\$0
<b>Contract/Commodity Cost:</b>	\$0
<b>Peak-Day Savings:</b>	0.31 MGD over 10 years
<b>Cost per gallon saved:</b>	\$0

DRAFT

<b>CI-9</b>	<b>Create comprehensive public education program to promote incentive programs and alert public to new requirements.</b>
<b>Applies to:</b>	All customers
<b>Implementation Method:</b>	Outreach program

Previous marketing efforts have been individual campaigns designed to increase participation in specific programs. Collateral materials, advertisements, and other marketing documents have varied in look and tone. While these often accomplish participation goals, they do not give the impression of a unified City-wide effort to conserve water.

As a result, Water Conservation will implement a marketing strategy designed to build the Water Conservation “brand.” This will include a gradual shift to a uniform look and tone to collateral materials, electronic marketing and other forms of advertising.

Increasing participation in specific programs will remain a primary goal of Water Conservation’s marketing efforts. Current successful efforts will be expanded in scope at the same time that new avenues are explored, including cross-marketing to past participants and target marketing by geographic area and income.

Water Conservation will plan and implement a comprehensive marketing campaign to take effect from May 1<sup>st</sup> through September 30<sup>th</sup> during the summer following Council approval of these policy changes. The campaign will use a variety of media to inform a broad customer base about changes to the Water Use Management restrictions, potential penalties for water waste, and ways to reduce water use. Creative direction and management of the campaign will be the responsibility of in-house staff, with some production elements outsourced as needed.

**Anticipated Campaign Budget:**

	<b>Production</b>	<b>Placement</b>	<b>Total</b>
Newspapers	\$ -	\$ 40,000	\$ 40,000
TV	\$ 25,000	\$ 300,000	\$ 325,000
Radio	\$ 3,000	\$ 90,000	\$ 93,000
Internet	\$ -	\$ 11,000	\$ 11,000
Direct Mail	\$ -	\$ 100,000	\$ 100,000
Billboards & Signs	\$ 6,000	\$ 150,000	\$ 156,000
			<b>\$ 725,000</b>

This campaign will supplement existing outreach efforts, including the joint LCRA/COA Water IQ campaign, utility bill inserts, the [www.WaterWiseAustin.org](http://www.WaterWiseAustin.org) website, elementary education programs, program-specific direct mailing, and the WaterWise e-newsletter.

<b>Additional FTEs:</b>	0
<b>Additional Cost:</b>	\$0
<b>Contract/Commodity Cost:</b>	\$725,000
<b>Peak-Day Savings:</b>	N/A drives participation in other programs with associated savings
<b>Cost per gallon saved:</b>	N/A

## **STRATEGIES PROPOSED BY STAFF BUT NOT ADOPTED BY THE TASK FORCE**

The following are strategies proposed by staff and discussed at Task Force meetings, but not adopted by the Task Force.

- Change the plumbing code to require high efficiency toilets, efficient showerheads and aerators in new installations beginning in 2009. The effective date was to be delayed until 2009 to allow time for manufacturers to get more products on the market and for the EPA's Water Sense specifications to be developed.
- Require condominiums to use submeters or utility meters for billing individual units
- Limit car washes constructed after 2009 to using 40 gallons per car wash or less.
- Require charity car washes to be held at existing car wash establishments.
- Require all hose-end sprinklers to use a hose timer.
- Require new residential irrigation systems to install City approved weather based controllers capable of dual or multiple programming, with at least three start times for each irrigation program, a water budgeting feature, and programmable to irrigate with a frequency of every one to ten days. Require the submission of a design plan before installation.
- Require a minimum soil depth of 8" for new homes in the Drinking Water Protection Zone and areas with similar soil profiles. A site with 8 inches of existing soil would not need to add any soil. (This was amended by Task Force members to require 6" and adopted in that form.)
- Fund an annual contract for large meter testing and repair.
- Fund an annual contract for small meter exchanges.
- Prohibit the use of potable water to maintain new commercial ornamental ponds.
- Require new wet ponds to have alternative sources of non-potable water to use during extended dry periods.
- Require that green roofs capture rainwater from roofs to reuse for irrigation or use an alternative, non-potable water source.



## Yearly Peak Day Savings in Millions of Gallons per Day

		FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
<b>Strategy Indoor Measures</b>											
IN-1	Single family retrofit on resale	0.00	0.22	0.35	0.45	0.54	0.61	0.67	0.71	0.73	0.73
IN-1	Multi family toilet retrofit	0.18	0.34	0.48	0.63	0.79	0.79	0.79	0.79	0.79	0.79
IN-1	ICI toilet retrofit	0.11	0.21	0.32	0.44	0.58	0.58	0.58	0.58	0.58	0.58
IN-2	Submetering	0.00	0.00	0.06	0.10	0.15	0.20	0.25	0.30	0.35	0.40
IN-3	Plumbing code changes	0.00	0.00	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
IN-4	Cooling towers	0.00	0.47	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
IN-5	Car washes	0.00	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
IN-6	Commercial clothes washers	0.00	0.00	0.10	0.20	0.30	0.40	0.41	0.41	0.42	0.43
Subtotal		0.28	1.39	3.35	3.86	4.39	4.62	4.73	4.83	4.90	4.96
<b>Outdoor Measures</b>											
OU-1	Enhanced water use management	0.00	2.67	5.43	5.53	5.63	5.73	5.83	5.94	6.05	6.16
OU-2	Residential irrigation standards	0.13	0.25	0.37	0.50	0.63	0.77	0.90	1.04	1.18	1.32
OU-3	Commercial irrigation standards	0.07	0.14	0.21	0.28	0.36	0.43	0.51	0.58	0.66	0.74
OU-4	Residential landscape ordinance	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.36	0.41	0.44
OU-5	WaterWise landscape option	0.00	0.04	0.06	0.08	0.10	0.12	0.15	0.17	0.19	0.21
OU-6	Annual irrigation analysis	0.45	0.91	1.37	1.39	1.40	1.42	1.43	1.44	1.46	1.47
OU-7	Enhanced irrigation audit program	0.21	0.42	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63
Subtotal		0.86	4.47	8.18	8.56	8.95	9.35	9.75	10.16	10.58	10.97
<b>City &amp; Utility Measures</b>											
CI-1	Reducing water loss	0.00	1.20	2.40	3.60	4.80	4.80	4.80	4.80	4.80	4.80
CI-2	Reclaimed water use	0.00	0.00	0.00	2.30	5.10	5.85	5.95	5.95	5.95	5.95
CI-3	Utility water rates	0.00	0.96	1.94	1.94	2.94	5.00	5.00	5.00	5.00	5.00
CI-6	City facility conservation	0.00	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37
CI-7	Pressure reduction program	0.03	0.06	0.09	0.12	0.15	0.18	0.21	0.25	0.28	0.29
CI-8	Winter leak detection	0.00	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31
CI-9	Enhanced public education program	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Subtotal		0.03	2.90	5.11	8.64	13.67	16.51	16.64	16.68	16.71	16.72
<b>Total Peak Day Savings</b> (in millions of gallons per day)		1.17	8.77	16.65	21.06	27.02	30.48	31.13	31.66	32.19	32.65



## MEMORANDUM

**TO:** David Anderson, P.E., Chair and Members of the Environmental Board

**FROM:** Patrick Murphy, Environmental Officer  
Watershed Protection and Development Review Department *JPM*

**DATE:** February 15, 2007

**SUBJECT:** Environmental Board Agenda Item C-4  
Briefing on Proposed Amendment of Interlocal Agreement between the City of Austin and the City of Lago Vista re: ETJ Release

We have placed the above item on the Environmental Board Agenda for your February 21, 2007 meeting. This is a courtesy presentation to inform the board of the existing agreement and the proposed amendments to the agreement. The briefing is intended to provide an opportunity for the board to understand what is proposed and to forward a recommendation to Council if desired.

Staff is recommending the proposed amendments after working with the City of Lago Vista to ensure that the requirements will protect water quality in Lake Travis and will meet the intent of the City's regulations and will reduce on-site sewage facilities.

I have attached a copy of the existing agreement, a map of the ETJ release area and a summary of the proposed amendments for your consideration. Please let me know if you have any questions or need additional information.

Sincerely,

Patrick Murphy  
Environmental Officer  
Watershed Protection and Development Review Department

JPM:jpm

cc: Victoria Hsu, Director, Watershed Protection and Development Review

# **Proposed Amendments to Lago Vista ETJ Release Interlocal**

## **Background**

On April 15, 2004, the City of Austin and Lago Vista entered into an interlocal agreement that described the conditions under which the City of Austin would release 4,000 acres of its ETJ.

In general, the interlocal reflected the City of Austin code. Specifically, it called for 1-acre average minimum single-family lots with on-site sewage facilities and 20% impervious cover on a net site area basis for commercial development with on-site sewage facilities. It also called for on-site water quality controls and other environmental protection measures.

## **Today's Request**

Lago Vista is seeking an amendment to that agreement that would increase densities within the release area in exchange for providing centralized wastewater service.

Here are the basic provisions of the proposal:

- Lago Vista agrees to comply with 2006 LCRA Highland Lakes Ordinance, which includes:
  - Superior water quality controls
  - Erosion and sedimentation controls
- Lago Vista has two options for development with on-site sewage facilities:
  - Existing Agreement—1-acre average minimum single-family lots with on-site sewage facilities
  - Amendment—1 single-family unit per acre with clustering and 40% natural area with on-site sewage facilities
- Lago Vista has options for development with central sewer:
  - 1.5 single-family units per acre if connected to central wastewater system, or
  - 2 single-family units per acre by allowing one additional unit for each:
    - 2 acres of wastewater irrigation area provided to treat development OR
    - 1 acre of permanently preserved mitigation landOR
  - LUE of additional wastewater capacity for development that is used to disconnect existing on-site sewage facilities
- Lago Vista has option for commercial development with central sewer:
  - Existing Agreement—20% impervious cover on a net site area with on-site sewage facilities
  - Amendment—25% impervious cover on a gross site area basis if connected to central wastewater system




# Lago Vista ETJ Release Area



 ETJ Release Area

0 0.5 1 1.5 2 Miles



February 14, 2007

# PROPOSED AMENDMENTS TO LAGO VISTA ETJ RELEASE AGREEMENT SUMMARY

## OVERALL REQUIREMENTS

<u>GIVES</u>	<u>GETS</u>	<u>JUSTIFICATION</u>
	Compliance with 2006 LCRA Highland Lakes Ordinance requirements, which includes stream buffers for 5-acre and larger drainage areas, enhanced water quality and erosion controls	Limited additional commercial impervious cover through transfers of development intensity.
	Lake Travis Critical Water Quality Zone setback	Provides equivalent or better protection than City Code.

## OPTIONS FOR SINGLE-FAMILY DEVELOPMENT WITH ON-SITE SEWAGE FACILITIES

<u>GIVES</u>	<u>GETS</u>	<u>JUSTIFICATION</u>
Allow residential density to be calculated based on gross site area instead of net site area.	Generally equivalent to City Code on an overall basis.	Provides for simplified compliance. Net site area deductions are not significant on an overall basis.
Allow 1 SF unit per acre density instead of requiring 1 acre average minimum lots	Equivalent to City Code if the development is clustered with 40-50% common open space.	Consistent with City Code for clustered development with offsetting open space.

## OPTIONS FOR SINGLE-FAMILY DEVELOPMENT WITH CENTRALIZED WASTEWATER FACILITIES

<u>GIVES</u>	<u>GETS</u>	<u>JUSTIFICATION</u>
1.5 single family units per acre if development is connected to a centralized wastewater system.	Provides an incentive for connection to centralized wastewater treatment instead of individual/owner-maintained on-site systems	Avoids potential, long-term risk of pollutant loading to Lake Travis from reliance on individual/owner-individual on-site sewage facilities
2 single family units per acre by allowing one additional unit for each: a. 2 acres of wastewater irrigation area provided to treat development b. 1 acre of permanently preserved mitigation land c. LUE of wastewater capacity provided by additional wastewater system capacity used to disconnect existing on-site sewage systems	Provides an incentive to preserve undeveloped open space and to cluster development on an overall basis.	Setting aside undeveloped permanent open space will result in overall compliance with agreement

## COMMERCIAL DEVELOPMENT OPTIONS

<u>GIVES</u>	<u>GETS</u>	<u>JUSTIFICATION</u>
20% impervious cover with on-site sewage facilities (part of existing interlocal)		
25% impervious cover if connected to central wastewater system	Provides an incentive for connection to centralized wastewater treatment instead of owner-maintained sewage facilities	Avoids potential, long-term risk of pollutant loading to Lake Travis from reliance on owner-maintained, individual on-site sewage facilities

## INTERLOCAL COOPERATION AGREEMENT

This **Interlocal Cooperation Agreement** ("Agreement") is made and entered into effective as of this the 15<sup>th</sup> day of APRIL 2004 by and between the **City of Austin**, Texas ("Austin"), a Texas home rule municipal corporation, and the **City of Lago Vista**, Texas ("Lago Vista"), a Texas general law municipal corporation, acting by and through their authorized representatives.

### Recitals.

**Whereas**, Austin and Lago Vista (sometimes hereinafter collectively referred to as the "cities" or "parties") recognize that both the public interest and good government are best served by long-term, mutually cooperative relationships between neighboring cities;

**Whereas**, agreements that establish boundaries within which specific duties are performed and standards are applied in a convenient and cost effective manner to assure quality urban planning and development serve the best interests of all citizens;

**Whereas**, agreement regarding areas adjacent to the cities' respective corporate limits or extraterritorial jurisdiction ("ETJ") will assist and enhance the planning and development of capital improvement programs and services, and result in meaningful protection for the environment and valuable natural resources; and

**Whereas**, this Agreement will accomplish legitimate public purposes of both cities and will permit dependable urban planning that will benefit the environment and the public health, safety and welfare of our respective present and future citizens;

**NOW, THEREFORE**, pursuant to *Chapter 791, Texas Government Code*, and *Chapter 42, Texas Local Government Code*, and as otherwise authorized and permitted by the City Charter of Austin and the laws of the State of Texas, for and in consideration of the covenants, conditions and undertakings hereinafter described, and the benefits to accrue to the citizens of the cities, and subject to each and every term and condition of this Agreement, the parties contract, covenant and agree as follows:

### Article One Findings and Declarations.

**Section 1.1. Fact Findings.** The recitals hereinabove set forth are incorporated herein for all purposes and are found by the respective city councils of Austin and Lago Vista to be true and correct. It is further found and determined that both the governing body of the City of Austin and the City of Lago Vista have authorized and approved this Agreement by resolution duly adopted by such respective governing body, and such resolutions provide that the terms, provisions and conditions of such resolutions and this Agreement will be and become in full force and effect upon the execution of this Agreement by both of their respective Mayors.

**Section 1.2. Water Protection Requirements.** The application and enforcement of the Water Quality Regulations within the Lago Vista Release Area, as those terms are hereinafter defined, are reasonable and necessary for the preservation and protection of water quality, the watersheds of both Lago Vista and Austin, and valuable natural resources.

## **Article Two**

### **Term and Nature of Agreement.**

**Section 2.1. Term of Agreement.** The original term of this Agreement shall commence on the Effective Date and continue in full force and effect for one (1) year (the "Original Term"). The Original Term and each subsequent one (1) year term thereafter, if any, shall be automatically renewed and extended for an additional one (1) year term (the "Extended Term") without the necessity of any action by the parties, unless a party gives notice of non-renewal. Either party may elect not to renew this Agreement by giving written notice of non-renewal to the other party at least thirty (30) days prior to the end of the Original Term or any Extended Term.

**Section 2.2. Termination by Parties.** Notwithstanding any other term or condition herein, this Agreement may be terminated by either party by giving thirty days (30) written notice of intent to terminate the Agreement to the other party. Any notice of intent to terminate must be delivered by deposit in the U.S. Mail, certified, return receipt requested.

**Section 2.3. Intent and Purpose.** The intent and purpose of this Agreement is to provide for the effective and efficient urban planning, the review and approval of land development, and the planning of future municipal services, for the geographic area described as follows:

(a) all the land area that is within Austin's ETJ and that is located between the northernmost corporate limits of the City of Pointe Venture and a line north of Lago Vista that is generally described as follows: Beginning near the Little Devil's Hollow of Lake Travis at the southeast corner of the property annexed by Jonestown on January 22, 1999; thence generally in a westerly direction and then northeasterly direction with the meanders of the corporate boundary of Jonestown (as established by the January 22, 1999 annexation) and the boundary line of the Marshall's Point Subdivision (hereinafter "MPS") to a point for corner; thence with the northernmost boundary of the MPS to the northeast corner of the MPS; thence in a northwesterly direction with the northerly boundary of a 533.382 acre tract of land described in a deed, dated September 3, 1987, to George K. Marshall Trust and George K. Marshall III, of record at Volume 10402, Page 572, Official Records of Real Property of Travis County, Texas, to the northwest corner of said 533.382 acre tract; thence in a north, northeasterly direction with the easterly boundary line of Travis Hollow Subdivision, Section 3, as shown on the plat of record at Book 78, Page 394-397, Plat Records of Travis County, Texas, to the most north, northeasterly, corner of Travis Hollow, Section 3; thence with the easterly boundary line of Travis Hollow Subdivision, Section 1, as shown on the plat of record at Book 76, Page 141, Plat Records of Travis County, Texas, and an

extension of said line beyond the most north, northeasterly, corner of Travis Hollow, Section 1, to a point of intersection with the south right-of-way ("ROW") line Adrian Way Street; thence westerly with the meanders of the south ROW line of Adrian Way Street to a point of intersection with the most easterly ROW line of F.M. 1431; and

(b) all that certain area of Lake Travis that is within Austin's ETJ, that abuts or is adjacent to the geographic area that is between the northernmost corporate boundary of the City of Pointe Venture and the above described northerly line, and that is within one thousand one hundred feet (1,100') of the 681 elevation contour line above mean sea level (as established by the United States Geological Survey in effect as of the date hereof).

**Section 2.4. Map.** It is the stated intent and agreement of the parties that all references to any geographic areas described in Section 2.3 above (collectively the "Lago Vista Release Area" as used in this Agreement) refer to areas named and shown on the Map attached hereto as Exhibit "A" and incorporated herein for all purposes. If there is a conflict between the Map and word descriptions in this Agreement, the parties agree and intend that the Map designation shall control over any and all word descriptions; provided that to the fullest possible extent the Map and the word descriptions shall be construed and interpreted in a manner to give effect to both consistent with the law applicable to ascertaining the boundaries of political subdivisions.

**Section 2.5. Legal and Equitable Remedies.** The terms, conditions and provisions of this Agreement may be enforced by either city, either at law or in equity. If this Agreement is terminated by Austin due to a default or non-performance by Lago Vista, then, in that event, as of the effective date of the termination of this Agreement: (a) that part or portion of the Lago Vista Release Area previously annexed by Lago Vista (if any) shall be and remain within and a part of the corporate limits of Lago Vista; (b) all of the Lago Vista Release Area, if any, that has been released from Austin's ETJ to Lago Vista's ETJ pursuant to this Agreement (and not subsequently annexed by Lago Vista) shall revert to the ETJ of Austin; and (c) Lago Vista shall execute a written instrument documenting the release of the Lago Vista Release Area and ETJ described in (b) from Lago Vista to Austin.

### **Article Three Actions By Lago Vista.**

**Section 3.1. Ordinance Amendments.** Lago Vista has amended its Subdivision Ordinance and its Site Development Ordinance to include the conditions and requirements that are hereinafter set forth in Section 3.2(c) (the "Water Quality Regulations") as requirements for the approval of subdivisions and land development in the Lago Vista Release Area.

**Section 3.2. Urban Planning.** Lago Vista will provide urban planning and will enforce the following requirements within the Lago Vista Release Area, will review, provide oversight and inspect subdivisions and land development within the Lago Vista Release Area, and will only approve subdivisions and land developments that are in compliance



with the following requirements:

- (a) Application and enforcement of the Lago Vista Subdivision Ordinance;
- (b) Application and enforcement of the Lago Vista Site Development Ordinance;
- (c) The Water Quality Regulations, as follows:
  - (1) All single family development will be set back at least 75 feet from the 681-foot contour line above mean sea level, as established by the United States Geological Survey in effect as of the date hereof. All condominium units, apartments and commercial buildings (excluding any marinas) will be set back at least 100 feet from said 681-foot contour line.
  - (2) Temporary erosion and sedimentation controls as required by the LCRA under Section 5(c) of the Lake Travis Nonpoint Source Pollution Control Ordinance in effect as of the date hereof, and those controls of the City of Austin as provided in Section 25-8-181 of the City of Austin Land Development Code in effect as of the date hereof, will be implemented.
  - (3) Permanent water quality controls equivalent to or better than that required under the City of Austin Land Development Code in effect as of the date hereof will be implemented, designed, constructed and maintained according to the City of Austin Environmental Criteria Manual as determined by comparing calculations under the City of Austin's requirements with those under the proposed controls.
  - (4) Impervious cover will be limited to twenty percent (20%) of the net site area, as defined by City of Austin Land Development Code Section 25-8-62 over the Property for any lot developed with any retail, condominiums, apartments or office commercial uses.
  - (5) A minimum average lot size of one acre shall be maintained on all residential lots in the Lago Vista Release Area.
  - (6) Cut and fill is limited to four feet (4') maximum, provided that cut and fill over four feet (4') shall be permitted if the cut/fill slope is terraced to control erosion and sedimentation.
  - (7) Detention of the 2-year storm for erosion control or, as an alternative, non-erosive conveyance of storm water to Lake Travis, will be provided as required under City of Austin Land Development Code Chapter 25-7 (drainage) and the City of Austin Drainage Criteria Manual.
  - (8) A building envelope that encompasses the limits of building disturbances will be established and required for residential construction on any lot.

area included in any such annexation shall be as shown and represented on a map attached to the annexation ordinance provided to Austin.

**Section 3.6. Enforcement and Compliance.** The standards, regulations and conditions set forth in this Agreement for the review and approval of development within the Lago Vista Release Area shall be applied and enforced by Lago Vista, its officers, employees, agents and representatives, in a manner consistent with the wording and intent of this Agreement. They shall remain development regulations and requirements of Lago Vista in the Lago Vista Release Area. If Lago Vista contracts with Travis County, pursuant to *Chapter 242, Texas Local Government Code*, or otherwise, for Travis County to review and approve land development within Lago Vista's ETJ, it shall be an event of default under this Agreement unless the standards and regulations set forth in this Agreement are applied and enforced in a manner consistent with the intent of this Agreement. The Lago Vista Release Area shall be treated as part of Lago Vista's ETJ for purposes of Chapter 242, Texas Local Government Code.

#### **Article Four Actions By Austin.**

**Section 4.1. Urban Planning.** Austin authorizes Lago Vista to provide urban planning, land development review and approval, and enforcement of the Water Quality Regulations within the Lago Vista Release Area for and on behalf of Austin. During the Term and any Extended Term of this Agreement, Austin will refer to Lago Vista all persons making application for subdivision or land development approval or permits for land within the Lago Vista Release Area. All costs and fees charged and collected by Lago Vista for the review, approval and inspection of subdivisions and land development within the Lago Vista Release Area may be retained by Lago Vista.

**Section 4.2. Extraterritorial Jurisdiction.** Notwithstanding that the Lago Vista Release Area is within the ETJ of Austin, Austin hereby agrees to transfer from the ETJ of Austin to the ETJ of Lago Vista those tracts and parcels of land within the Lago Vista Release Area that hereafter would, but for the Austin ETJ, be or become within the statutory ETJ of Lago Vista, or for which Lago Vista receives a valid petition for such tract or parcel to be included within Lago Vista's ETJ. Provided that the City Council of Lago Vista: (a) accepts the tract or parcel into the ETJ of Lago Vista by a resolution; (b) the resolution finds the land is within Lago Vista's statutory ETJ or is otherwise eligible to be included within Lago Vista's ETJ under this Agreement and State law; (c) the resolution finds that Lago Vista is actively enforcing the Water Quality Regulations within the Lago Vista Release Area; (d) the resolution finds that Lago Vista intends to continue to enforce the Water Quality Regulations with respect to such parcel that is being taken into the Lago Vista ETJ; (e) Lago Vista provides a copy of each such resolution to Austin after its adoption; (f) Lago Vista attaches a map to the resolution showing the land area to be released; and (g) Lago Vista has not been notified that it is not in compliance with this Agreement, the administrative officer designated by the city manager of Austin shall execute a written release documenting the release by Austin and transferring the land from the ETJ of Austin to the ETJ of Lago Vista effective as of the date of such written statement of release given by Austin as provided above in this Section 4.2.

**Section 4.3. Annexation Jurisdiction.** Notwithstanding that the Lago Vista Release Area is within the ETJ of Austin, the City Council of Lago Vista may annex land that is within the Lago Vista Release Area into the corporate limits of Lago Vista; provided Lago Vista otherwise has the legal authority to annex such land; and provided further that the Service Plan for each such annexation shall list the Water Quality Regulations and provide that Lago Vista will continue to apply and enforce such requirements with respect to the land being annexed. Upon Lago Vista annexing a tract or parcel of the Lago Vista Release Area in compliance with this Section, providing Austin with a copy of the annexation ordinance, providing a true and accurate map attached showing the area annexed to be as represented in the map, and obtaining preclearance (if required) by the Department of Justice, the annexation of such tract or parcel shall be in full force and effect as of the date Austin signs the release.

## **Article Five General and Miscellaneous.**

**Section 5.1. Exceptions to Release.** Notwithstanding any other term or provision of this agreement, no tract or parcel of land will be released to the ETJ of Lago Vista or to be annexed by Lago Vista at a time when such release will result in any other tract, parcel or area of land becoming discontinuous to the ETJ of Austin. If a proposed release of ETJ to Lago Vista or a release of land to be annexed by Lago Vista will result in any other land becoming discontinuous to the ETJ of Austin, Lago Vista will not request the area be released until the area that would become discontinuous is also eligible for release to Lago Vista under this agreement.

**Section 5.2. Development Approval and Policy Making Authority.** Lago Vista shall have exclusive responsibility for urban planning within the Lago Vista Release Area that is consistent with this Agreement, and the approval of land development and subdivisions within the Lago Vista Release Area in compliance with this Agreement. Lago Vista shall further have control, supervision and policy making authority for and with respect to city services and future services within the Lago Vista Release Area, to the fullest extent authorized by State law and not inconsistent with this Agreement.

**Section 5.3. Other Services.** Nothing in this Agreement shall be deemed to create, by implication or otherwise, any duty or responsibility of either of the cities to undertake any other action or to provide any service within the Lago Vista Release Area, except as specifically set forth in this Agreement.

**Section 5.4. Jurisdiction.** This Agreement shall not be deemed to extend or increase the jurisdiction or authority of either of the cities except as necessary to implement and give effect to this Agreement. All governmental and proprietary functions and services to be performed and provided by Lago Vista within the Lago Vista Release Area shall, except as provided otherwise by State law and in this Agreement, be and remain in the sole discretion of Lago Vista. Nothing in this Agreement shall be deemed to be applicable to, or an attempt to limit or restrict, the legal rights, authority or jurisdiction of any other governmental entity.

**Section 5.5. Governmental Immunity.** Nothing in this Agreement shall be deemed to waive, modify or amend any legal defense available at law or in equity to either of the cities nor to create any legal rights or claims on behalf of any third party. Neither Austin nor Lago Vista waives, modifies, or alters to any extent whatsoever the availability of the defense of governmental immunity under the laws of the State of Texas.

**Section 5.6. Quality of Service.** Except that Lago Vista will review and approve or disapprove subdivisions and land development within the Lago Vista Release Area in compliance with the requirements set forth in Section 3.2, this Agreement is not intended to and shall not be deemed to establish any additional requirement for, or any specific or implied additional standard or quality for, any level of planning or service to be provided by Lago Vista within the Lago Vista Release Area. Provided that Lago Vista shall enforce the planning and land development standards set forth in Section 3.2, the level and quality of urban planning and services to be provided within the Lago Vista Release Area shall be established by Lago Vista's budgets, appropriations, resolutions and ordinances adopted by its governing body in the exercise of its legislative discretion.

**Section 5.7. Effective Date.** This Agreement shall be in full force and effect on the date above first written, from and after its execution by the parties as hereinafter provided, but not before the effective date of an Interlocal Cooperation Agreement, pursuant to § 242.001, *Texas Local Government Code*, between Lago Vista and Travis County providing that neither Lago Vista or Travis County will take any action or grant any approval within the Lago Vista Release Area or Lago Vista's ETJ that is inconsistent with this Agreement and that is not in compliance with the requirements set forth in Section 3.2 above.

**Section 5.8. Amendments and Modifications.** This Agreement may not be amended or modified except in writing executed by both Austin and Lago Vista and authorized by their respective governing bodies.

**Section 5.9. Severability.** In the event any provision of this Agreement shall be held invalid or unenforceable by any court of competent jurisdiction, such holding shall not invalidate or render unenforceable any other provision hereof, but rather this entire Agreement will be construed as if not containing the particular invalid or unenforceable provision or provisions, and the rights and obligations of the parties hereto shall be construed and enforced in accordance therewith. The parties hereto acknowledge that if any provision of this Agreement is determined to be invalid or unenforceable, it is their desire and intention that such provision be reformed and construed in such a manner that it will, to the maximum extent practicable, be deemed to be validated and enforceable.

**Section 5.10. Gender, Number and Headings.** Words of any gender used in this Agreement shall be held and construed to include any other gender, and words in the singular number shall be held to include the plural, unless the context otherwise requires. The headings and section numbers are for convenience only and shall not be considered in interpreting or construing this Agreement.

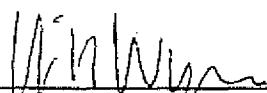
**Section 5.11. Execution in Counterparts.** This Agreement may be simultaneously executed in several counterparts, each of which shall be an original and all of which shall be considered fully executed when all parties have executed an identical counterpart, notwithstanding that all signatures may not appear on the same counterpart.

**Section 5.12. Termination By Performance.** If not earlier terminated by Austin or Lago Vista as provided in Article 2 above, this Agreement shall automatically terminate and expire upon all of the land area that is within the Lago Vista Release Area being included within the ETJ or the corporate limits of Lago Vista, by the City Council of Lago Vista acting in strict compliance with the terms and provisions of this Agreement and State law.

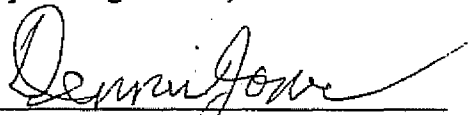
**IN WITNESS WHEREOF**, the parties have executed and attested this Agreement by their officers thereunto duly authorized as of the date first written above.

Executed this the 15<sup>th</sup> day of APRIL 2004.

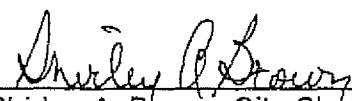
**City of Austin, Texas**

  
\_\_\_\_\_  
Will Wynn, Mayor

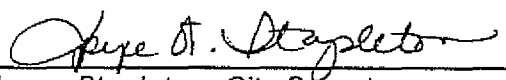
**City of Lago Vista, Texas**

  
\_\_\_\_\_  
Dennis Jones, Mayor

**Attest:**

  
\_\_\_\_\_  
Shirley A. Brown, City Clerk

**Attest:**

  
\_\_\_\_\_  
Joyce Stapleton, City Secretary



**CITY OF AUSTIN  
RECOMMENDATION FOR COUNCIL ACTION**

**AGENDA ITEM NO:** \_\_\_\_\_  
**AGENDA DATE:** 03/22/07  
**RCA TYPE:** Res  
**PAGE 1 of 1**

**SUBJECT:** Approve an amendment to the Interlocal Agreement between the City of Austin and the City of Lago Vista dated April 15, 2004 regarding a process for the release of territory to the jurisdiction of the City of Lago Vista.

**AMOUNT & SOURCE OF FUNDING:** NA

**REQUESTING DEPT:** TPSD

**DIRECTOR'S SIGNATURE:** \_\_\_\_\_

**FOR MORE INFORMATION CONTACT:** Virginia Collier 974-2022

**PRIOR COUNCIL ACTION:** NA

**BOARD AND COMMISSION ACTION:** Reviewed by the Environmental Board 02/21/07

-----**REQUIRED AUTHORIZATION**-----

**LAW:** \_\_\_\_\_ **FINANCE:** \_\_\_\_\_  
**SMBR:** \_\_\_\_\_ **OTHER:** \_\_\_\_\_

The current Interlocal Agreement between the City of Austin and the City of Lago Vista provides a comprehensive approach to ETJ releases on the north shore of Lake Travis for territory that is not contiguous by land with the balance of the City's ETJ. The City's primary motive for retaining this ETJ has been enforcement of its water quality ordinances. Over the years, the City has released ETJ in this area on a case by case basis to Lago Vista. These releases have been conditioned on the execution of restrictive covenants by property owners subjecting the released territory to water quality related development standards similar to what is required under the City's regulations. Lago Vista amended its subdivision and site development ordinances to include requirements for development in the proposed release that go beyond the restrictive covenant conditions required in previous ETJ releases. As envisioned by the interlocal agreement, all of the land shown on the attached map will be released to Lago Vista and will be subject to Lago Vista's water quality regulations.

It is anticipated that future development will utilize centralized wastewater treatment facilities instead of individual/owner-maintained on-site systems. The proposed amendment allows for simplified compliance in calculating single-family residential density consistent with the development requirements outlined in the current interlocal agreement and City Code. The proposed amendment also provides incentives for connection to centralized wastewater treatment systems. All other terms and conditions outlined in the original agreement will remain the same.

The product of several months of discussions and meetings with representatives from Lago Vista, city staff recommends approval of these amendments at this time.

(9) All of the 100-year flood plain located within the Lago Vista Release Area shall be dedicated to the Lago Vista as a drainage easement in accordance with the City of Lago Vista's development rules. For the purpose of this paragraph, the 100-year floodplain shall be determined based on fully developed conditions.

(10) Lago Vista shall provide notice of all site plan or subdivision plat approvals by the City of Lago Vista to the City of Austin within 72 hours of such approval.

**Section 3.3. Extraterritorial Jurisdiction.** Notwithstanding that the land within the Lago Vista Release Area is within the ETJ of Austin, at anytime after the City Council of Lago Vista finds that were such a parcel of land not within the ETJ of Austin it would be within the statutory ETJ of Lago Vista, or that Lago Vista has received a valid petition for such tract or parcel to be included within Lago Vista's ETJ, the City Council of Lago Vista may by a resolution adopted and forwarded to Austin as provided in Section 4.2 of this Agreement obtain a written release of such land and thereafter include such parcel or tract of land within the ETJ of Lago Vista. The land that is described in such resolution that is within the Lago Vista Release Area shall transfer from the ETJ of Austin to the ETJ of Lago Vista effective as of the date of the written statement of release given by Austin as provided in Section 4.2. The land area to be released shall be as shown and represented on a map attached to the resolution provided to Austin by Lago Vista.

**Section 3.4. Annexation Jurisdiction.** Notwithstanding that the Lago Vista Release Area is within the ETJ of Austin, Austin hereby authorizes Lago Vista to annex land that is within the Lago Vista Release Area into the corporate limits of Lago Vista; provided that Lago Vista otherwise has the legal authority to annex such land; and provided further that the Service Plan for each such annexation shall list the Water Quality Regulations and provide that Lago Vista will continue to apply and enforce such requirements with respect to the land being annexed.

**Section 3.5. Extension of Jurisdiction.** Lago Vista will not extend its corporate limits or extraterritorial jurisdiction to include any part of the Lago Vista Release Area at anytime that Lago Vista is not actively applying and enforcing the Water Quality Regulations in such area. Lago Vista intends to continue applying and enforcing the Water Quality Regulations within any part of the Lago Vista Release Area that is subsequently included within the ETJ or corporate limits of Lago Vista. Lago Vista will provide a copy of each such annexation ordinance to Austin within thirty (30) days after its adoption by Lago Vista. Land that is described in such ordinance and that is within the Lago Vista Release Area shall transfer from the ETJ of Austin to within the corporate boundaries of Lago Vista effective as of the date of the written release signed by Austin. Notwithstanding that land abutting such annexed land may be within the ETJ of Austin, each such annexation ordinance that is authorized by State law, that adopts and annexes a portion of the Lago Vista Release Area in conformance with this Agreement, shall extend the ETJ of Lago Vista to abutting lands within the Lago Vista Release Area, as provided in *Chapter 42, Texas Local Government Code*. The land



## ENVIRONMENTAL BOARD MOTION 022107 C-4

**Date:** February 21, 2007

**Subject:** First Amendment to the Interlocal Agreement between the City of Austin and the City of Lago Vista regarding the ETJ release.

**Motioned By:** Phil Moncada

**Seconded By:** Julie Jenkins

### **Recommendation:**

The Environmental Board recommends adoption of the proposed amendment, and that the Austin City Council moves forward with the amendment to the 2004 Interlocal agreement.

### **Rationale:**

The Amendments will allow for the centralized collection of wastewater and removing old outdated septic systems. The 2006 LCRA Highland Lake Ordinance Superior Water Quality and Erosion and sedimentation controls.

**Vote:** 7-0-0-2

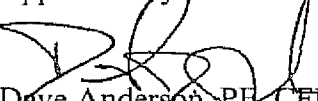
**For:** Anderson, Ascot, Moncada, Ahart, Jenkins, Dupnik and Beall

**Against:** None

**Abstain:** None

**Absent:** Maxwell and Curra

**Approved By:**

  
Dave Anderson, PE, CFM P.E.  
Chair