



AUSTIN WATER UTILITY
Utility Development Services Division
625 East 10th Street
Austin, Texas 78701
(512) 972-0207 fax: (512) 972-0251



July 12, 2011

Ms. Helen Gilbert, Attorney at Law
2206 Greenlee Drive
Austin, Texas 78703

Re: 2700 Edgewater Drive

Dear Ms. Gilbert:

This letter is submitted in response to your request for documentation that explains/justifies why variances to 30 TAC Chapter 285 minimum separation distances were granted by this department for the OSSF at 2700 Edgewater Dr. Specifically, you're inquiry referenced setbacks to surface improvements, public water lines, and slopes where seeps may occur.

Setbacks to surface improvements

The tract at 2700 Edgewater Dr. is a small tract of land that also borders Lake Austin. During the planning and evaluation stage for the On-Site Sewage Facility (OSSF) at the site, the designer of the OSSF communicated to Austin Water Utility staff that the locations for OSSF components at the site were very limited because of the small tract size and also because of the site's proximity to Lake Austin. Indeed, due to these site limitations, a variance request to locate the tank closer than 5 feet to the garage foundation and within 5 feet of surface improvements (Edgewater Dr and the driveway to Edgewater Dr) was submitted by the designer on 3/18/10 (Attachment A). The variance was approved by the Austin Water Utility provided that the tank had high hazard traffic-bearing lid(s) to provide equivalent protection of the public health and environment. These variances have been granted in the past for other OSSF sites in the City of Austin that were subdivided prior to 1988 and that do not meet the current minimum requirements for lot sizes for properties served by OSSF (30 TAC §285.4(b)(1)). In addition, it is standard industry practice to use traffic bearing lids in tight sites where the occurrence of external loading caused by earth fill and additional surface loads cannot be prevented. Finally, structural engineering plans for a driveway spanning the septic tank were submitted to and approved by this department on 5/31/11 (Attachment B). The driveway will span the entirety of the septic tank, ensuring that no weight that is placed on the driveway will be carried by the tank, thereby providing further protection of public health and environment.

Setbacks to public water lines

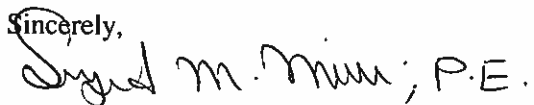
No variance to the 10-foot setback to a public water line has been granted by this department. The public water line located under Edgewater Drive was uncovered by the water provider and inspected by this department on 5/31/11. The distance from this portion of the public water line to both the septic tank and drainfield were measured by this department and the setbacks verified. The service connection portion of the public water line (where the service connection line enters the water meter), however, was measured to be only 9.5 feet from the septic tank. The owner of the public water line, Travis County Water District 18, has agreed to move the water meter over to attain the 10-foot setback. As of 7/8/11, this has not happened. A final approval of the OSSF will not be granted until the water meter and public service connection line have been moved.

Setbacks to slopes where seeps may occur

The house foundation at 2700 Edgewater Dr. extends several feet below grade. A French drain was installed just upslope of the stemwall of the foundation in order to prevent water from seeping through the concrete stemwall. Although Chapter 285 does not explicitly state a setback to French drains, the interface of the natural soil and the gravel media column of the French drain could be considered a slope where seeps may occur, and the required setback from a slope to the drip irrigation drainfield is 25 feet (30 TAC §285.91(10)). A variance request to install a 30 mil plastic liner between the drainfield and the French drain was submitted by the designer on 3/19/10 (Attachment C) and approved by the Austin Water Utility. The liner was proposed to essentially cut off any horizontal migration of the water from the drainfield to the French drain, as the liner is required to extend from the land surface to 24 inches below the French drain. This liner will provide equivalent protection of the public health and environment by ensuring that the effluent emitted from the drip line in the drainfield will not seep into the French drain.

I hope these explanations/justifications for the granting of variances to 30 TAC Chapter 285 minimum separation distances for the OSSF at 2700 Edgewater Dr. are sufficient and comprehensible to you and your client. Please contact me at 972-0202 should you require any further information regarding these variances.

Sincerely,



Seyed M. Miri, P.E.

Division Manager

Utility Development Services Division

Austin Water Utility

Attachments: 3/18/10 variance request for tank, 5/31/11 engineered driveway plans, 3/19/10 variance request for liner

Cc: Mr. David Juarez, Assistant Director, Austin Water Utility
Mr. Clark Cornwell, Law Department
Mr. David Rodewald

To: The City of Austin

ATTN: Loan T. Nguyen/Richard Price (page 1 of 2)

From: DWR Septic Design / Daniel Redden

Date: 3-17-10

RE: Changes requested for the OSSF Located at 2700 Edgewater Drive

Dear Reviewer,

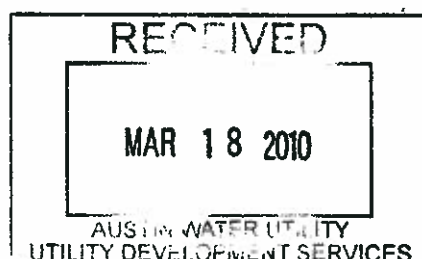
The following comments were made by your office on March 17, 2010. The changes do not affect the system design calculations:

- 1) An access easement of 18' from the South Property line was identified. As described by the revised scale drawing, none of the OSSF components are in the access easement.
- 2) See comments for item #1 above. In addition, a variance request has been provided for the location of the tank to be less than 5' from the surface improvement and the garage foundation. A high hazard traffic bearing tank lid will provide sufficient environmental protection in this area.
- 3) All trees have been described on the revised scale drawing. The Pecan tree > 20" is not located in the drain field.
- 4) A copy of the approved architectural drawings of the house have been provided, showing the floor plan and a side profile of the house. The location of the house and any grade break is not closer than 15' from the drain field, as shown on the revised scale drawing.
- 5) The design calculations have not been affected
- 6) The driveway is shown on the revised scale drawing
- 7) Profile hole #2 and the North arrow are on the revised scale drawing
- 8) The revised scale drawing shows all locations of walkways and decks.
- 9) The house plan has not changed, nor has the location of the house. See the comments for item #4 as well as the revised scale drawing

Respectively,



Daniel Redden
DWR Septic Design
970-3108



To: The City of Austin

ATTN: Loan T. Nguyen/Richard Price

ATTACHMENT A
(page 2 of 2)

From: DWR Septic Design / Daniel Redden

Date: 3-17-10

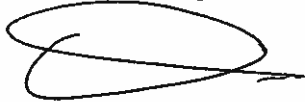
RE: Variance request for proposed OSSF at 2700 Edgewater Drive

Dear Reviewer,

The proposed OSSF tank will be located under a parking area and thus less than five feet from a surface improvement. It has been my experience that a high hazard traffic lid will provide equivalent environmental protection as a standard On-Site Sewage Facility, making this an acceptable location for the tank.

Heavy trucks and equipment are not permitted to park in this area.

Respectively,



Daniel Redden
DWR Septic Design
970-3108



3-18-10

May 31, 2011

Mr. & Mrs. Nathan Chelstrom
1008-B Castile Road
Austin, Texas 78733-2508

RE: Chelstrom House
2700 Edgewater
Austin, Texas

Project Number: 20082710

Dear Client,

On 31 May 2011, it was requested that Steinman Luevano Structures, LLP design a driveway foundation to span a below grade septic tank. This driveway will connect the garage at 2700 Edgewater Drive, Austin, Texas to Edgewater Drive.

A 6" concrete slab with #5 reinforcing bars at 12" O.C. spanning across the septic tank in the direction shown on SK-1 shall suffice. Provide #4 reinforcing bars in the opposite direction at 16" o.c. to satisfy temperature reinforcing requirements. A grade beam 24" deep x 12" wide shall be continuous at the entire perimeter of the slab with (2) #5 bars top and bottom continuous and #3 concrete ties at 12" o.c., as shown in detail 1/SK-1. At the existing garage foundation, provide dowels top and bottom as shown in detail 2/SK-1. See sketch SK-1 for additional information. All plan dimensions shall be field verified.

At opening for access to the septic tank in the driveway, use detail 1/SK-2. Coordinate location and dimensions of all openings with manufacturer.

Based on the information provided, this slab and grade beam foundation shall span the existing septic tank. Should any questions arise concerning this matter please call this office.

Sincerely,



Richard Luevano, Jr., P.E.
Partner
Steinman Luevano Structures, LLP
TBPE Registration No. 1624

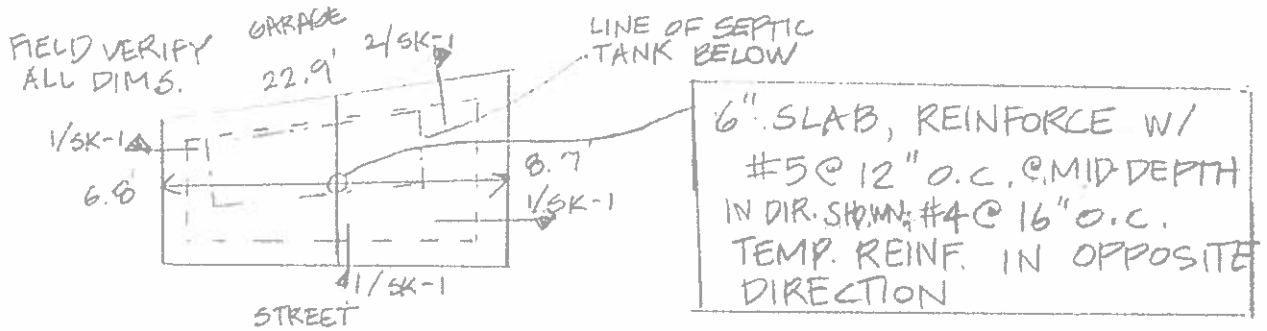


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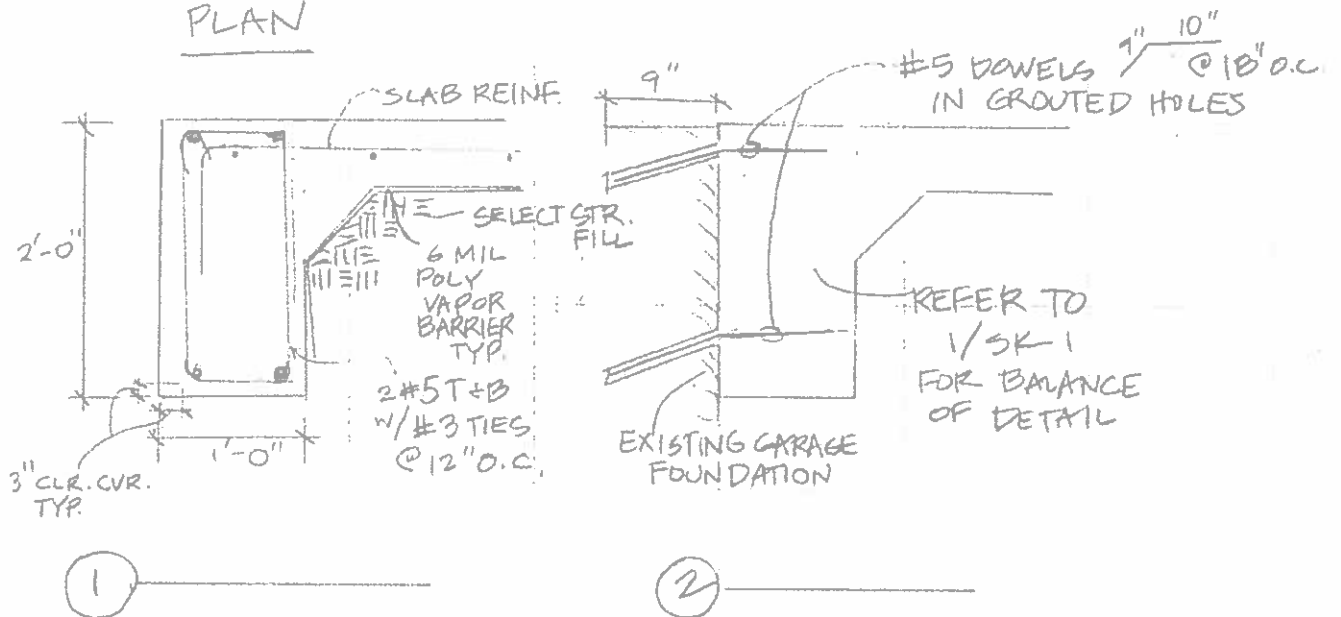
5-31-11



Project: CHELSTROM HOUSE	Engineer:
Job No: 20082710	Date: 5/31/11
	Page: SK-1



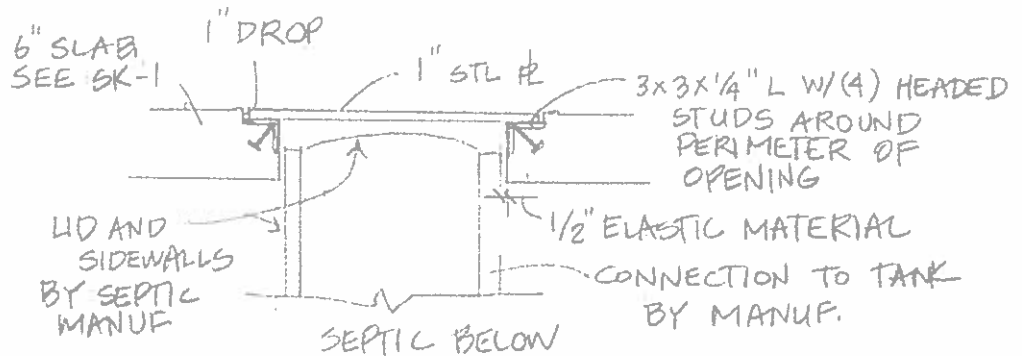
PLAN





Project: CHELSTROM HOUSE	Engineer:
Job No: 20082710	Date: 5/31/11
	Page: SK-2

COORDINATE ALL SEPTIC SYSTEM DIMENSIONS
AND LOCATION OF OPENINGS W/ MANUFACTURER

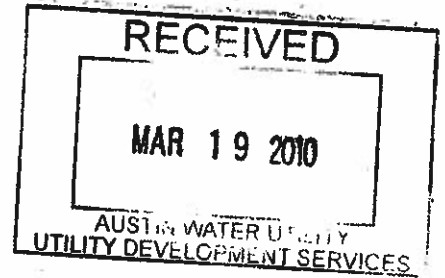


TO: THE CITY OF AUSTIN

FROM: DAN REDDEN

DATE: 3-19-10

RE: EDGEWATER DRIVE



MR. BALBOA,

THE SYSTEM AT THE ABOVE STATED ADDRESS will come within 15' of a SUBSURFACE BREAK IN GRADE (FRENCH DRAIN). A PLASTIC LINER IS REQUIRED Between the septic DRAINFIELD AND THE FRENCH DRAIN AND THE PLASTIC LINER IS REQUIRED TO BE 30 mil. THE LINER IS TO EXTEND A MINIMUM 24" IN DEPTH FROM THE BOTTOM OF THE FRENCH DRAIN. THIS MODIFICATION WILL PROVIDE EQUIVELANT ENVIRONMENTAL PROTECTIC AS A STANDARD ON-SITE SEWAGE FACILITY.

THANK-YOU

DAN REDDEN

30 mil LINER REQUIRED

