



Engineering & Public Works Department

380 E. Levee St.
Brownsville, Texas 78520
Telephone: (956) 547-6810

Bulkhead / Retaining Wall Application

I. Applicant Information / Información del Contratista

Contractor's Name / Nombre del Contratista:		Date / Fecha:
Company Name / Nombre de la Compañía:		
Contractor's Address / Dirección del Contratista:		
City / Ciudad:	State / Estado:	Zip / Código Postal:
E-mail / Correo Electrónico:	Preferred Contact Method /	
Phone Number / Numero Telefónico:	<input type="checkbox"/> Mail	
	<input type="checkbox"/> Email	
	<input type="checkbox"/> Phone	

II. Property Information / Información de la Propiedad

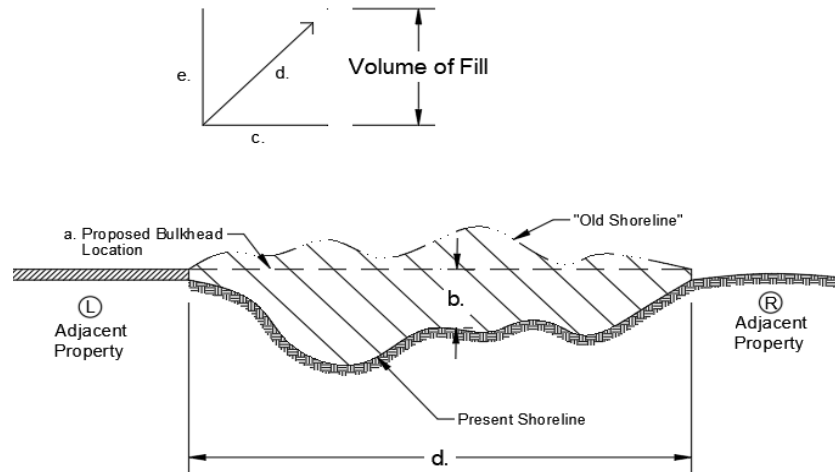
Owner / Nombre del Propietario, Tenant / Inquilino, Business / Negocio:		
Phone Number / Numero Telefónico:		
Subdivision / Subdivisión:	Lot / Lote:	Block / Bloque:
Area / Área de Pies Cuadrados	Property Tax ID / Identificación del impuesto: _____ - _____ - _____ - _____	

III. Required Supporting Documentation / Información del Anuncio

- Scaled Map of proposed Bulkhead placement.
- Bulkhead location relative to present bank line and neighboring properties.
- Linear Distance of fill area (ft./m.) from present bank (fill area width)
- Linear Distance of fill (ft./m.) along edge of water / Resaca (*Bulkhead Length*)
- Average Depth of height of fill (ft./m.)
- Average amount of fill per linear foot of bulkhead length (yd³/ lft)
[Calculation CANNOT exceed 3 yd³/lft as per COB Engineering Requirements]

****Applications will be prepared and sent via preferred method no later than 48 after submission****

IV. Design Example / Información del Anuncio




V. Sample Calculations / Información del Anuncio

lf: b = 5 ft. (wide / out)
 c = 100 ft. (long)
 d = 4 ft. (deep / high)
 $a \times b \times d = \text{Volume (ft}^3 / \text{cu ft.)}$
 $100 \text{ ft.} \times 5 \text{ ft.} \times 4 \text{ ft.} = 2000 \text{ ft}^3$

Unit Conversion
 $\frac{\text{ft}^3}{74} = \text{yd}^3$

$$\frac{2000 \text{ ft}^3}{74} = 74 \text{ yd}^3$$

Unit Conversion II
 $\frac{\text{yd}^3}{100 \text{ ft}} = \frac{\text{yd}^3}{\text{lf}}$


$$\frac{74 \text{ yd}^3}{100 \text{ ft}} = .74 \frac{\text{yd}^3}{\text{lf}} < 3 \frac{\text{yd}^3}{\text{lf}}$$


lf: b = 15 ft. (wide / out)
 c = 100 ft. (long)
 d = 6 ft. (deep / high)
 $a \times b \times d = \text{Volume (ft}^3 / \text{cu ft.)}$
 $100 \text{ ft.} \times 15 \text{ ft.} \times 6 \text{ ft.} = 9000 \text{ ft}^3$

Unit Conversion
 $\frac{\text{ft}^3}{74} = \text{yd}^3$

$$\frac{9000 \text{ ft}^3}{74} = 333 \text{ yd}^3$$

Unit Conversion II
 $\frac{\text{yd}^3}{100 \text{ ft}} = \frac{\text{yd}^3}{\text{lf}}$

$$\frac{333 \text{ yd}^3}{100 \text{ ft}} = 3.33 \frac{\text{yd}^3}{\text{lf}} > 3 \frac{\text{yd}^3}{\text{lf}}$$


VI. Bulkhead Construction Design/ Sólo Para Uso Oficial

I. Bulkhead Construction Design

- a. Listed Bulkhead Construction Material: _____
- b. Listed Bulkhead Fill Material: _____
- c. Cross Sectional detail of Stabilization Mechanism, (i.e. anchoring)

****Note: At no time shall construction debris or rubbish be placed in Resaca/ Waterway****

VII. Bulkhead Application Approval (to be completed by COB Departments)

A. Engineering & Public Works Department

Engineering Review (404 E Washington St. Brownsville, TX)

Signature: _____
 Name: _____ Date: _____

Environmental Review (6035 Jaime Zapata. Brownsville, TX)

Signature: _____
 Name: _____ Date: _____

B. Building Permits Department

Building Review (1034 E. Levee St., 2nd Floor. Brownsville, TX)

Signature: _____
 Name: _____ Date: _____