

LAND DEVELOPMENT ENVIRONMENTAL TRANSPORTATION WATER RESOURCES SURVEYING

**TO:** City of San Antonio  
1901 S. Alamo St.  
San Antonio, Texas 78204

**DATE:** 02/27/15

**ATTN:** **Jacob Powell, P.E., C.F.M.**  
Storm Water Engineering

**PROJECT NO.:** 7863-01

**FROM:** Benjamin E. Setterbo, P.E. **BES**

**CC:** File

**RE:** Starbucks at University Park  
A/P# M2008117

Quantity	Description
1	Floodplain Development Permit Application
1	Original Variance Request Application w/ Attachments
1	Variance Request Fee (Check No. 256176)

*If enclosures are not as noted, kindly notify us at once.*

For Approval       For Your Use       As Required       For Review and Comment

**COMMENTS:**

Jake,

Please contact our office if you have any questions.

Thank you.



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LAND DEVELOPMENT ENVIRONMENTAL TRANSPORTATION WATER RESOURCES SURVEYING

February 27, 2015

Variance Request Review  
c/o Floodplain Management  
Transportation & Capital Improvements  
City of San Antonio  
1901 S. Alamo St.  
San Antonio, TX 78204

Re: Starbucks at University Park  
A/P# M2008117  
Variance Request for Floodplain Permit

To whom it may concern:

The purpose of this letter is to request consideration for a Variance to allow work in the Federal Emergency Management Agency (FEMA) 100-year floodplain prior to the Conditional Letter of Map Revision (CLOMR) approval by FEMA.

The project is located on the southwest corner of De Zavala Road and Silicon Drive. Associated work within the floodplain includes installation of the multi-box culvert approved under the Starbucks at University Park Building Permit (A/P# M2008117). Additional sitework construction will occur once the culverts are in place. Per the attached hydraulic calculations, installation of the proposed multi-box culvert will result in reduced water surface elevation in Silicon Drive during peak storm events compared to the existing conditions water surface elevation in the existing earthen channel. This construction will not affect hydraulic flows on Huebner Creek.

In our professional opinion, the proposed Variance remains in harmony with the spirit and intent of the UDC, as it will not adversely affect the health, safety, or welfare of the public. If the applicant complies strictly with the provisions of the UDC regulations, he can make no reasonable use of his property; the hardship relates to the applicant's land, rather than personal circumstance; the hardship is unique, or nearly so, rather than one shared by many surrounding properties; the hardship is not the result of the applicant's own actions; and the granting of the variance will not be injurious to other property and will not prevent the orderly subdivision of other property in the area in accordance with these regulations.

Starbucks At University Park  
A/P# M2008117  
February 27, 2015  
Page 2 of 2

We respectfully request your consideration for this variance. The Variance Request Application is attached as required, along with a check for the required fee and supporting documents. If you have any questions or require additional information, please contact our office.

Sincerely,  
Pape-Dawson Engineers, Inc.  
Texas Board of Professional Engineers, Firm Registration # 470



Song Tan  
Vice President

**Attachments**

P:\78163\01\WORD\LETTERS\VARIANCE REQUEST LETTER\_150227.DOC



# VARIANCE/ TIME EXTENSION APPLICATION

Date Submitted: \_\_\_\_\_

Project ID Number: \_\_\_\_\_

Project Name: Starbucks At University Park

Owner/Agent: Southwest Business Corporation Phone: (210) 321-7370 Fax: \_\_\_\_\_

Address: 9311 San Pedro Ave, Suite 600 Zip Code: 78216

Consultant: Pape-Dawson Engineers, Inc. Phone: (210) 375-9000 Fax: \_\_\_\_\_

Address: 2000 NW Loop 410 - San Antonio, Texas Zip Code: 78213

Email Address: bsetterbo@pape-dawson.com

**BACKGROUND:**

1.  Time Extension  Sidewalk  Floodplain Permit  Other: \_\_\_\_\_
2. City Council District 8 Ferguson Map Grid 548 D1 Zoning District 11
3. San Antonio City Limits -  Yes  No
4. Edwards Aquifer Recharge Zone?  Yes  No
5. Previous/existing landfill?  Yes  No
6. Parkland, greenbelts, or open space? Flood plain?  Yes  No

**VARIANCE APPROVAL CRITERIA:**

As per the UDC, the variance request letter must address the following criteria prior to submission.

1. If the applicant complies strictly with the provisions of these regulations, he/she can make no reasonable use of his/her property; and
2. The hardship relates to the applicant's land, rather than personal circumstance; and
3. The hardship is unique, or nearly so, rather than one shared by many surrounding properties; and
4. The hardship is not the result of the applicant's own actions; and
5. The granting of the variance will not be injurious to other property and will not prevent the orderly subdivision of other property in the area in accordance with these regulations.

**FEES** (please refer to the current fee schedule)

Variance Request \$ 350.00

OR Time Extension \$ \_\_\_\_\_ *EL*

Print Name: David Horne

Signature: *David Horne*

Date: 2/20/15  Owner  Agent (Checking this requires a notarized Letter of Agent.)

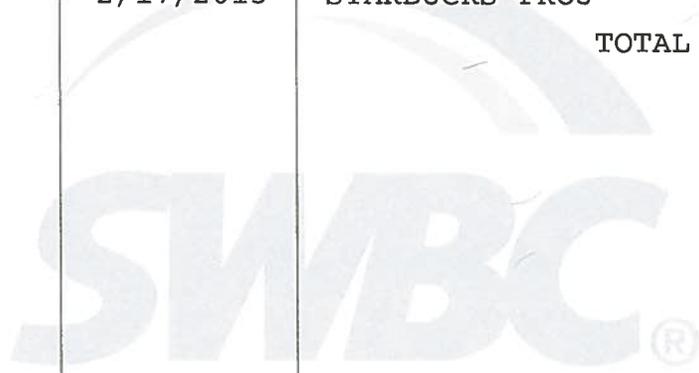
\*NOTE: Please attach this application with your submittal to the reviewing agencies. In addition, if the letter does not address the above mention criteria your variance may be subject to disapproval. If the variance is being made in regards to a Certificate of Determination request, the Director of Development Services shall make a determination within 20 days after the date it receives the request before placing it on the Planning Commission agenda under subsection 35-430(d) of the UDC and shall issue the Certificate, if appropriate, within 10 days after the date of Planning Commission approval. Additional fees may apply. please see fee schedule.

**SOUTHWEST BUSINESS CORPORATION**

VENDOR NUMBER	CHECK NUMBER	CHECK DATE
04505	256176	2/19/2015

THE CITY OF SAN ANTONIO

REFERENCE NUMBER	REF. DATE	INVOICE DESCRIPTION	AMOUNT
PERMIT0215	2/17/2015	STARBUCKS PROJ	350.00
		TOTAL	\$350.00



INSURANCE | MORTGAGES | INVESTMENTS

SOUTHWEST

BUSINESS

CORPORATION

www.swbc.com



P.O. Box 795027  
San Antonio, Texas 78279-5027

**Broadway National Bank**  
P.O. Box 17001, San Antonio, Texas 78286

CHECK #: 256176

DATE: 2/19/2015

Operating Account

VOID AFTER 90 DAYS

PAY  
THREE HUNDRED FIFTY AND 00/100

**\$350.00**  
DOLLAR THREE FIVE ZERO PERIOD ZERO ZERO

TO THE  
ORDER OF

THE CITY OF SAN ANTONIO  
1901 S. ALAMO  
SAN ANTONIO, TX 78204

*Charles E. [Signature]*  
AUTHORIZED SIGNATURE

*Gary Dudley*  
AUTHORIZED SIGNATURE



SECURE FEATURES INCLUDE INVISIBLE FIBERS • MICROPRINTING • VOID FEATURE PANTOGRAPH • ENDORSEMENT BACKER • BROWNSTAIN CHEMICAL REACTANT

0000 256 176 11 1140 21933 00 10027 746 011

CITY OF SAN ANTONIO  
FLOOD PLAIN DEVELOPMENT PERMIT APPLICATION

FOR OFFICE USE ONLY

Application Number \_\_\_\_\_

Date \_\_\_\_\_

1. APPLICANT DATA (Owner)

Company Name: SOUTHWEST BUSINESS CORPORATION  
Name (F) DAVID (MI.) \_\_\_\_\_ (Last) HORNE  
Address: 9311 SAN PEDRO AVE, SUITE 600 City: SAN ANTONIO  
State: TX Zip Code: 78216 Phone: (210) 321-7370

2. LOCATION

Subdivision: FARINON SUBDIVISION Number: 050318  
Lot Number: 8 Blk.: 1 N.C.B.: 14876 Tract: \_\_\_\_\_  
Location-Description (If not in a Subdivision): \_\_\_\_\_

3. TYPE OF PROPOSED CONSTRUCTION

( ) Residential (  ) Non-Residential\*  
( ) Mobile Home ( ) Other\*

\*If non-residential or other checked complete the following:

Type of use proposed: COFFEE SHOP  
Name of Occupant: STARBUCKS  
Phone: (\_\_\_\_) \_\_\_\_\_

4. TYPE OF PROPOSED DEVELOPMENT

( ) Subdivision ( ) Mobile Home Park  
(  ) Fill-Permanent ( ) Fill-Temporary  
(  ) Other (Describe): INSTALL MULTI-BOX CULVERT IN PLACE OF EARTHEN CHANNEL.

NOTE: Applicant shall provide two sets of plans of the proposed construction or development.

FOR OFFICE USE ONLY

Is additional information required?

Are other Federal, State, or Local Permits required?

Permit Application - Reviewed by: \_\_\_\_\_

Approved ( ) By: \_\_\_\_\_ Date \_\_\_\_\_

FLOOD PLAIN ADMINISTRATOR (DIR. OF PUBLIC WORKS)

DATE \_\_\_\_\_

STARBUCKS AT UNIVERSITY PARK

	EXISTING EARTHEN CHANNEL	PROP 2 ~ 6'x3' BOX CULVERT
$Q_{25}$ (CFS)	187.66	187.66
FLOW AREA (SF)	36.49	36.00
MANNING'S (n)	0.035	0.013
FLOW LINE - DS (FT)	961.40	961.40
FLOW LINE - US (FT)	964.50	962.45
* HEADWATER (FT)	966.59	965.93

\* CALCULATIONS PREVIOUSLY PROVIDED AND APPROVED DURING BUILDING PERMIT STAGE. SEE ATTACHED FOR CALCULATIONS.

STARBUCKS  
= 970.00

PROPOSED 2 ~ 6'X3'  
MULTI-BOX CULVERT  
(SEE C1.20 FOR DETAILS)

LIMITS OF WATER SURFACE  
ELEVATION (Q25)

SILICON DRIVE  
(86' ROW)

### NOTES

WATER SURFACE ELEVATION (Q25) = 965.93  
MAXIMUM PONDING (Q25) = ±0.29' (3.48")  
(965.93 - 965.64 = 0.29')

SCALE: 1" = 20'



JOB NO. 7863-01  
DATE OCTOBER 2014  
DESIGNER BES  
CHECKED ST DRAWN BES  
SHEET 1 of 1

STARBUCKS AT UNIVERSITY PARK  
SAN ANTONIO, TEXAS  
MBC IMPACT EXHIBIT

**PAPE-DAWSON**  
**ENGINEERS**

555 EAST RAMSEY | SAN ANTONIO, TEXAS 78216 | PHONE: 210.373.9000  
FAX: 210.373.9010  
TEXAS BOARD OF PROFESSIONAL ENGINEERS, FIRM REGISTRATION # 470

Date: Oct 15, 2014, 10:31am User: ID: BSletterbo  
File: P:\28\63\10\Design\Exhibits\Multi-Box Culvert Impact Exhibit\_141015.dwg

# Channel Report

Hydraflow Express by Intelsolve

Wednesday, Aug 13 2014

## EXISTING CHANNEL AT SIDEWALK BOX (25-YR)

### Trapezoidal

Bottom Width (ft) = 15.00  
Side Slopes (z:1) = 5.00, 5.00  
Total Depth (ft) = 2.00  
Invert Elev (ft) = 965.00  
Slope (%) = 1.20  
N-Value = 0.035

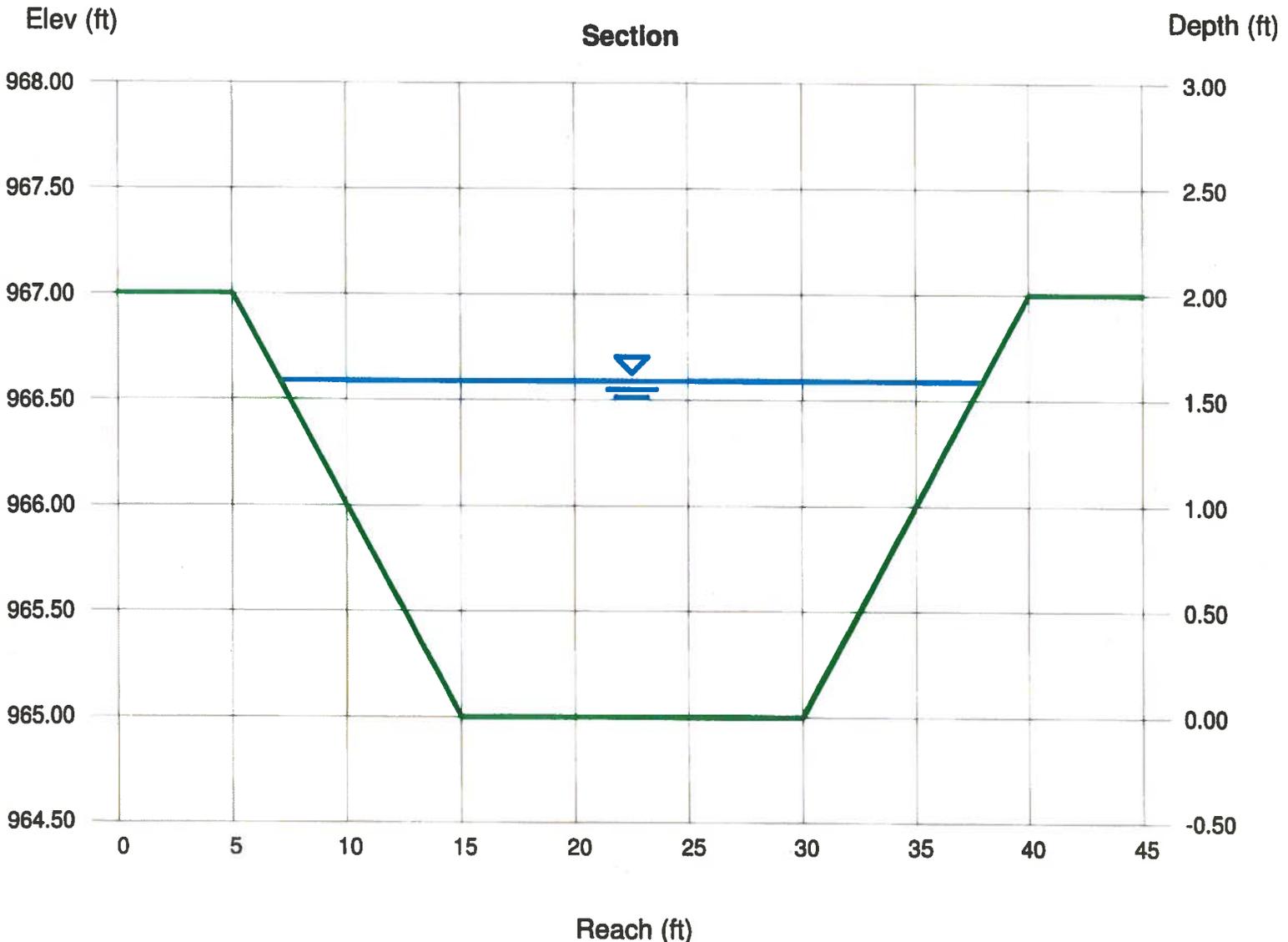
### Highlighted

Depth (ft) = 1.59  
Q (cfs) = 187.66  
Area (sqft) = 36.49  
Velocity (ft/s) = 5.14  
Wetted Perim (ft) = 31.21  
Crit Depth, Yc (ft) = 1.44  
Top Width (ft) = 30.90  
EGL (ft) = 2.00

### Calculations

Compute by: Known Q  
Known Q (cfs) = 187.66

$$\text{EXISTING BACKWATER} = 965.00 + 1.59' = \underline{\underline{966.59}}$$



# Culvert Report

## PROPOSED MULTI-BOX CULVERT (25-YR) - W/ TAILWATER

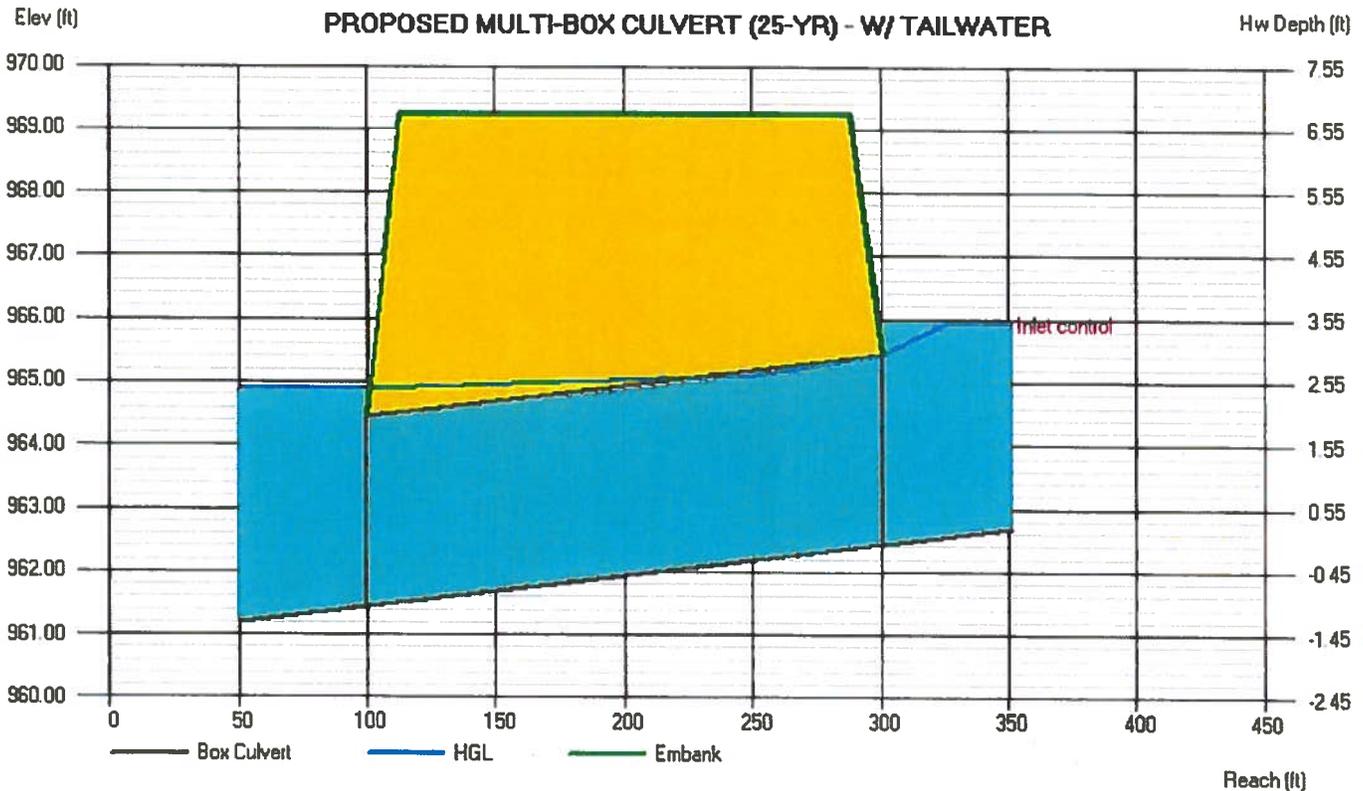
Invert Elev Dn (ft) = 961.45  
 Pipe Length (ft) = 201.00  
 Slope (%) = 0.50  
 Invert Elev Up (ft) = 962.45  
 Rise (in) = 36.0  
 Shape = Box  
 Span (in) = 72.0  
 No. Barrels = 2  
 n-Value = 0.013  
 Inlet Edge = Sq Edge  
 Coeff. K,M,c,Y,k = 0.061, 0.75, 0.04, 0.8, 0.5

**Embankment**  
 Top Elevation (ft) = 969.25  
 Top Width (ft) = 175.00  
 Crest Width (ft) = 50.00

**Calculations**  
 Qmin (cfs) = 187.66  
 Qmax (cfs) = 187.66  
 Tailwater Elev (ft) = 964.90

**Highlighted**  
 Qtotal (cfs) = 187.66  
 Qpipe (cfs) = 187.66  
 Qovertop (cfs) = 0.00  
 Veloc Dn (ft/s) = 5.21  
 Veloc Up (ft/s) = 5.73  
 HGL Dn (ft) = 964.90  
 HGL Up (ft) = 965.18  
**Hw Elev (ft) = 965.93**  
 Hw/D (ft) = 1.16  
 Flow Regime = Inlet Control

**PROPOSED BACKWATER = 965.93**



# Culvert Report

## PROPOSED MULTI-BOX CULVERT (25-YR) - NO TAILWATER

Invert Elev Dn (ft) = 961.45  
 Pipe Length (ft) = 201.00  
 Slope (%) = 0.50  
 Invert Elev Up (ft) = 962.45  
 Rise (in) = 36.0  
 Shape = Box  
 Span (in) = 72.0  
 No. Barrels = 2  
 n-Value = 0.013  
 Inlet Edge = Sq Edge  
 Coeff. K,M,c,Y,k = 0.061, 0.75, 0.04, 0.8, 0.5

**Embankment**  
 Top Elevation (ft) = 969.25  
 Top Width (ft) = 175.00  
 Crest Width (ft) = 50.00

**Calculations**  
 Qmin (cfs) = 187.66  
 Qmax (cfs) = 187.66  
 Tailwater Elev (ft) = Normal

**Highlighted**  
 Qtotal (cfs) = 187.66  
 Qpipe (cfs) = 187.66  
 Qovertop (cfs) = 0.00  
 Veloc Dn (ft/s) = 8.69  
 Veloc Up (ft/s) = 7.96  
 HGL Dn (ft) = 963.25  
 HGL Up (ft) = 964.42  
 Hw Elev (ft) = 965.82  
 Hw/D (ft) = 1.12  
 Flow Regime = Inlet Control

