FIRE HYDRANT FLOW TEST FORM

NEW BRAUNFELS UTILITIES

355 FM 306, NEW BRAUNFELS TX 78130

I. PROJECT INFORMATION (TO BE COMPLETED BY APPLICANT)

Name: _____ Phone: (_____) _____

Company Address: _____

Project Name: _____

Address (Lot / Block): _____

Nearest Cross Street / Distance (ft): _____

II. FLOW TEST DATA (TO BE COMPLETED BY APPLICANT)

FLOW HYDRANT:

Plan Sheet: _____ Hydrant #: _____ Outlet Diameter: 5"_____ 2-½"_____

Size and Material of Main:_____

Static PSI:_____ Residual PSI: _____ Pitot (PSI): _____ Pitot 2(PSI): _____

Observed Flow (GPM): _____

Calculated Fire Flow @ 20 PSI: _____ Duration of Flow: _____ Date and Time: _____

TEST (STATIC) HYDRANT:

Plan Sheet: _____ Hydrant #: _____

Size and Material of Main: _____Static PSI: _____ Residual PSI: _____

TEST (STATIC) HYDRANT:

Plan Sheet: _____ Hydrant #: _____

Size and Material of Main: _____Static PSI: _____ Residual PSI: _____

III. NBFD FIRE HYDRANT FLOW REQUIREMENTS (TO BE COMPLETED BY FIRE DEPARTMENT)

_____ _____

Signature of FIRE DEPARTMENT REVIEWER

Please Print Name

Date: _____/_____/_____ Title: _____

Time: _____(am / pm) Accept: _____ Decline: _____

Comments (if applicable): _____

IV. TESTER / COMPANY INFORMATION (TO BE COMPLETED BY APPLICANT)

Flow Test Conducted by: _____Phone: (_____) _____

Company Name

Texas Dept. of Insurance State Fire Marshal's Office License #: _____

Company Address: _____

Date: _____/_____/_____ Signature: _____

FIRE HYDRANT FLOW TEST FORM

NEW BRAUNFELS UTILITIES

355 FM 306, NEW BRAUNFELS TX 78130

V. CALCULATIONS AND SKETCH (TO BE COMPLETED BY APPLICANT)

EQUATIONS:

Following equations should be used to determine the Residual and Fire Flows

Residual Flow	**Fire Flow**
$Q_r = 29.83 \times c_d \times D^2 \sqrt{P_p} \times H_f$ *Where* : Q_r = the residual flow at the pitot pressure measured in gpm c_d = the friction loss coefficient (usually 0.9 for a smooth 2-½" opening) D = the diameter of the opening in inches P_p = the pitot pressure in psi H_f = the number of hydrants flowed	$Q_f = Q_r \times ((P_s\text{-}20 / (P_s - P_r))^{0.54}$ *Where* : Q_f = the Fire Flow in gpm at 20 psi P_s = the static pressure in psi P_r = the residual pressure in psi

CALCULATIONS:

Residual Flow:	**Fire Flow:**

SKETCH (LOCATION OF RESIDUAL AND FIRE FLOW HYDRANTS):

Label Hydrant #'s and Street Name(s)

Indicate North