Form 9-1482
Revised (October 2002)

U.S. DEPARTMENT OF THE INTERIOR
U.S. Geological Survey

Agreement Number 2016-TWSC-01

*AGREEMENT FOR INSTALLATION AND MAINTENANCE OF GAGING STATION**

The easement holder agrees that the U.S. Geological Survey (USGS), Texas Water Science Center may install and maintain a gaging station on the easement holder's property at a mutually agreed-upon site at the location listed below. The easement holder also agrees that the USGS will have access to the site, as it reasonably deems necessary for streamflow measuring and/or water-quality sampling during the life of this agreement.

Description of the gaging station, located at Lat. 29° 40' 33.27" Long. 98° 15' 03.81"
and/or
Schuetz Dam also known as Soil Conservation Service Site Number 2 Reservoir
(Provide other location description and/or attach map, plat, drawings, photographs, or other descriptive information)

Excavation and/or installation of the gaging station, at the USGS's own expense, may begin any time after this agreement is fully executed. The gaging station shall be excavated, installed, and properly maintained by the USGS. This Agreement shall be regarded as granting a license in favor of USGS to enter easement holder's property for the purposes noted herein.

At the expiration of this agreement, the gaging station may be disposed of in one of the following ways:

1 - Removal by the USGS, at its own cost and expense, within a reasonable time after the expiration of this agreement. Upon removal of the station, the USGS shall restore the easement holder's property, also at its own expense, as nearly as possible to the condition when installed, or

2 - Transfer to a state, local, or tribal government agency or Federal Energy Regulatory Commission licensee under a separate written agreement, if approved by the easement holder and the USGS Regional Executive.

During the life of this agreement, the Federal Government will be liable for any loss related to the installation, operation, maintenance, and other activities associated with the gaging station described above in accordance with, and to the extent permitted under, the Federal Tort Claims Act (28 U.S.C. &&1346(b) and 2671 et seq).

This agreement shall become effective when fully executed and shall remain in full force for 50 year(s) 0 month(s) unless terminated earlier by USGS upon 60 days written notice. After 50 year(s) 0 month(s), the agreement will continue in force until terminated by either the USGS or the easement holder upon 60 days written notice to the other party.

* For the purpose of this agreement, "gaging station" includes all stilling wells and structure, including cableways and equipment, used in the operation and maintenance of the monitoring site.

Easement Holder	Comal County
Address	150 N. Seguin Ave, New Braunfels, Texas 78132
Telephone Number	830-221-1100
USGS Water Science Center Director	Joseph, Robert L.
Address	1505 Ferguson Lane, Austin, Texas 78754
Telephone Number	512-927-3502
USGS Project Chief	Nyman, Michael B.
Address	5563 Da Zavala Road, San Antonio, Texas 78249
Telephone Number	210-691-9205

U.S. Geological Survey Signature — Robert L. Joseph — May 25, 2016
Printed Name: Robert L. Joseph — Date

Easement Holder Signature
Printed Name: — Date

USGS GAGING STATION: SCHUETZ DAM ALSO KNOWN AS FLOODWATER RETARDING STRUCTURE SITE NO. 2
NEW BRAUNFELS , TEXAS
GAGE INSTALLATION SPECIFICATIONS
LATITUDE: 29° 40' 33.27" LONGITUDE: 98 ° 15' 03.81"

GAGE SHELTER (LOOK-IN TYPE):

- The data collection platform/satellite transmitter will be installed in a 24" X 36" X 60" look-in type shelter at the top of the rip rap dam structure.
- Gage shelter will be approximately 2' off of the ground and supported by galvanized angle iron steel legs, buried approximately 24" and cemented into the ground.
- Satellite antenna, rain gage, and solar panel will be mounted on a 2" pipe attached to the back of the shelter.

STAGE SENSOR ORIFICE LINE:

- Two stage sensor orifice lines will be installed to observe high and low flow conditions. Each stage sensor orifice line will be encased in ¾" rigid galvanized conduit beginning at the gage shelter on the top of the rip rap dam structure, then extending down the rip rap to the inflow/outflow structure at the base of the rip rap dam.. One stage sensor orifice will terminate on the rip rap to observe high flow conditions and the other will terminate at the base of the rip rap dam to observe low flows. Conduit will be secured to the rip rap and the inflow/outflow structure using 3" X 3/8" galvanized concrete wedge anchors and conduit clamps approximately every seven feet.

CREST STAGE GAGE PIPE:

- One crest stage gage will be installed, near the termination point of the low flow orifice line on the inflow/outwill structure. The crest stage gage will be attached to the inflow/outflow structure using a minimum of four 3/8" X 3 ½" galvanized concrete wedge anchor bolts.

USGS TYPE ENAMEL STAFF PLATES:

- Several USGS enamel type graduated staff plates will be installed. One will be installed near the termination point of the low flow orifice line on the inflow/outflow structure. The plate will be mounted on pressure treated 2"X 6" wood backing, which will then be attached to 6" galvanized channel iron. The staff plate will be attached to the inflow/outflow structure using a minimum of four 3/8" X 3" galvanized concrete wedge anchor bolts. The remaining staff plates will be installed beginning near the inflow/outflow structure and extend parallel to the rip rap wall, terminating near the access road to the rip rap dam. The location and number of USGS staff plates will be left to the discretion of the installation crew, based on the elevation difference between the inflow/outflow structure and the top of the rip rap dam. The plates will be mounted on pressure treated 2"X 6" wood backing, which will then be attached to 6" galvanized channel iron. The staff plates will not be attached to any structure, they will be buried to a minimum of 24" and cemented into the ground.

USGS BRASS TABLETS:

- Three USGS Brass Tablets will be installed at the site to establish gaging elevation. One will be installed on the top of the inflow/outflow structure. Another will be installed to the far left of the inflow/outflow structure, on top of the spillway. The third will be installed in a limestone outcrop to the far right of the inflow/outflow structure. A 1/2" X 3" hole will be drilled and filled with epoxy for all tablets.

GENERAL NOTES:

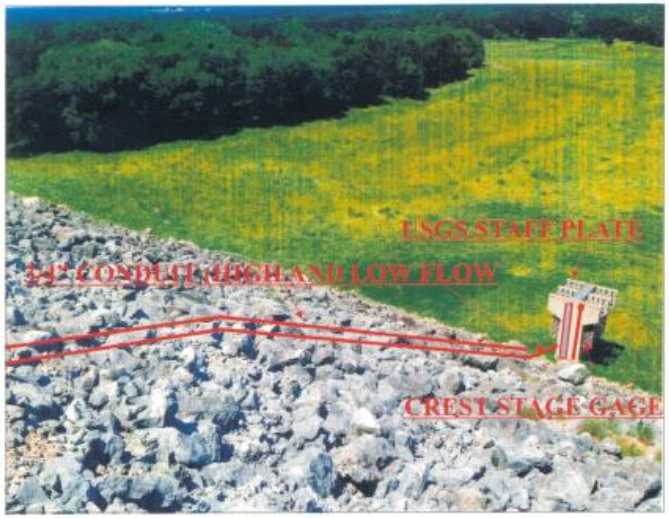
- Staff plate and crest stage gage will not extend above the elevation of the inflow/outflow structure.

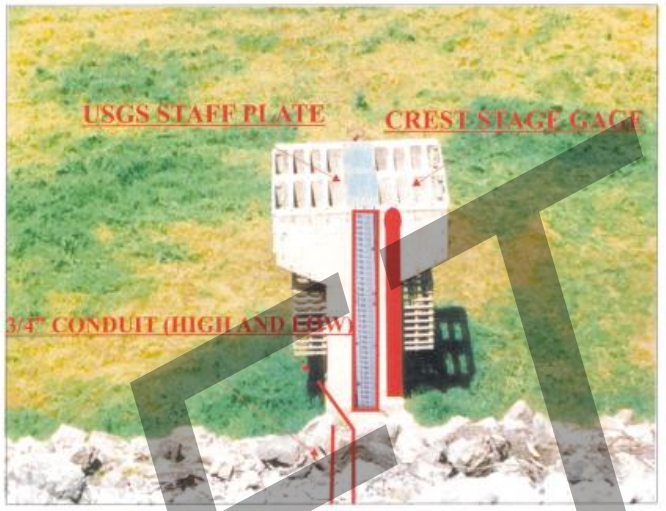
Proposed location of streamgage at Floodwater Retarding Structure Site No.2, near New Braunfels, Comal County, Texas

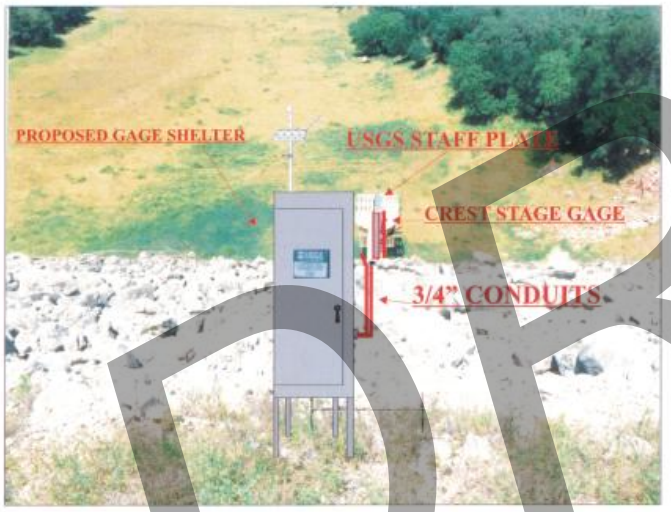
Typical view inside a Look-In Type Gage Shelter

GAGE INSTALLATION SPECIFICATIONS,
FLOODWATER RETARDING STRUCTURE, SITE NO.2, NEAR NEW BRAUNFELS, COMAL COUNTY, TEXAS

Drawn by: SEN
May 4, 2016



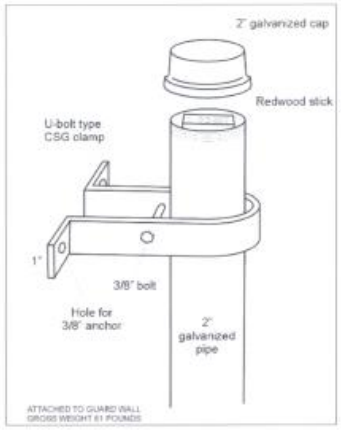




NOTES: DRAWING SHOWN FOR REFERENCE ONLY. NOT TO SCALE.

GAGE INSTALLATION SPECIFICATIONS,
FLOODWATER RETARDING STRUCTURE, SITE NO.2, NEAR NEW BRAUNFELS, COMAL COUNTY, TEXAS

Drawn by: SEN
May 4, 2016

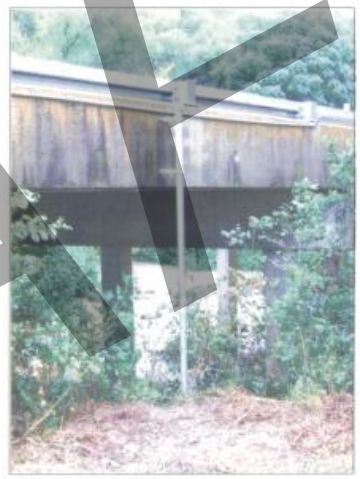


Detail of a Crest Stage Gage

Typical termination point of an orifice line

Typical installation of a USGS Staff Plate

Typical installation of an orifice line



Typical installation of a Crest Stage Gage

GAGE INSTALLATION SPECIFICATIONS,
FLOODWATER RETARDING STRUCTURE, SITE NO.2, NEAR NEW BRAUNFELS, COMAL COUNTY, TEXAS

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