ENGINEERS REPORT
FOR APPROVAL OF
BACKFLOW PREVENTION DEVICES

ERIE COUNTY WATER AUTHORITY
3030 UNION ROAD
CHEEKTOWAGA, NY 14227-1097
(716) 684-1510 (Phone
(716) 684-3937 (Fax)

A. Facility/Project

Name: _____

Mailing Address: _____

_____

Town/Village/City: _____

B. Customer/Owner

Contact Person _____

Company _____

Mailing Address _____

_____

Phone Number _____

Email _____

C. Engineer/Architect

Contact Person _____

Company _____

Mailing Address _____

_____

Phone _____

Email _____

D. **Facility/Project Type**
(Check all that apply)

- ☐ Apartments
- ☐ Retail Stores(s)
- ☐ Professional/Office
- ☐ Restaurant
- ☐ Laundromat/Dry Cleaner
- ☐ Hotel/Model
- ☐ Car Wash
- ☐ Medical/Dental
- ☐ Hospital
- ☐ Warehouse/describe: _____
- ☐ Manufacturing/describe: _____
- ☐ Industrial/describe: _____
- ☐ Agricultural/describe: _____
- ☐ Other/describe: _____

- ☐ Funeral Home
- ☐ Public School
- ☐ Private School
- ☐ Church
- ☐ Automotive Sales/Service
- ☐ Patio Homes
- ☐ Condominiums
- ☐ Nursery
- ☐ Veterinarian

E. **Number of Buildings** _____ Number of Floors _____
Square Footage per Floor _____ Basement Yes ___ No ___
First Floor Elevation _____

F. **List all Uses of Public Water** _____

_____

_____

_____

_____

G. List all water services to the site. Describe the size, type (domestic, private fire protection, combination), location, and whether the service is proposed or exiting. The Engineer's Report must address all water serves.

_____

_____

_____

_____

H. **Domestic Service** _____ Check if none

Service Connection

Size _____ inch

Existing or Proposed _____

Maximum Demand _____ gpm

Backflow Preventer

Describe Location _____

_____

_____

Device Type RPZ

Size _____ inch

Make and model _____

Included in USC FCCCHR Approved Devices List * Yes _____ No _____

Upstream Pressure _____ psi

Downstream Pressure _____ psi

I. **Private Fire Protection Service** _____ Check if none

Service Connection

Size _____ inch

Existing or Proposed _____

Maximum Demand _____ gpm

Backflow Preventer

Describe Location _____

_____

_____

Device Type (RPDA, RPZ, DCDA, DCVA)
Size _____ inch
Make and Model _____
Included in USC FCCCHR Approved Devices List * Yes _____ No _____
Upstream Pressure _____ psi
Downstream Pressure _____ psi

J. **Combination Service** _____ Check if none

Service Connection
- Size _____ inch
- Existing or Proposed _____
- Maximum Demand _____ gpm

Backflow Preventer

Describe Location _____

_____

_____

Device Type RPZ
Size _____ inch
Make and Model _____
Included in USC FCCCHR Approved Devices List * Yes _____ No _____
Upstream Pressure _____ psi
Downstream Pressure _____ psi

* List of Approved Backflow Prevention Assemblies University of Southern California Foundation For Cross Connection Control and Hydraulic Research

K. Will the facility/project receive water supply from an auxiliary water source such as a well, cistern, spring, or other municipal water supply? Yes _____ No _____

L. Does the facility/project require dual backflow preventers to allow for a continuous water supply? Yes _____ No _____

M. Is the facility located within the 100 year flood plan? Yes _____ No _____

N. Will the area where the backflow preventer is located be adequately heated to prevent freezing? Yes _____ No _____

O. Will the area where the backflow preventer is located be adequately lighted to allow for maintenance and testing? Yes _____ No _____

P. RPZs and RPDAs _____ Check if none

Where does the discharge for the relief port drain to? (Check all that apply)

- ☐ Sanitary Sewer
- ☐ Storm Sewer
- ☐ Sump Pump
- ☐ Other/describe _____
- ☐ Floor
- ☐ Outside Grade
- ☐ Septic System

Is the drain system adequately sized to accommodate the maximum discharge without flooding the area: Yes _____ No _____

Is the relief port provided with a suitable air gap" Yes _____ No _____

Is the relief port at least 12 inches above the 100 year flood elevation?
(_____check if not applicable) Yes _____ No _____

If the relief port drains to a storm sewer, is the connection equipped with a backwater valve?
(_____check if not applicable) Yes _____ No _____

If the relief port drains to a sanitary sewer, is the connection equipped with a trap and a backwater valve?
(_____check if not applicable) Yes _____ No _____

If the relief port drains to a sump pump, is it provided with emergency power and a water level alarm?
(_____check if not applicable) Yes _____ No _____

If the RPZ/RPDA is located in a basement, is there sufficient volume below the relief port?
(_____check if not applicable) Yes _____ No _____

Q. **Private Fire Protection Services** _____ Check if none

Fire Suppression System

_____ Dry Pipe

_____ Wet Pipe

Provision for Chemical Addition
(fire retardants, corrosion, inhibitors, antifreeze, etc.) Yes _____ No _____

Private fire hydrants Yes _____ No _____

Connections to a secondary water supply? Yes _____ No _____

If the facility within 1,700 feet of an alternative source of water such as a pond, lake, river, or retention pond, are there provisions to "draft" this water for fire fighting purposes?
(_____check if not applicable) Yes _____ No _____

R. Booster Pump System _____ Check if none

_____ Domestic Service

_____ Private Fire Protection Service

_____ Combination Service

Include a separate sheet with the Engineers Report describing all existing and proposed booster pump systems which addresses net positive suction head for the booster pumps, pressure cutoff switch settings, and operating pressures in both, the public water distribution system and in the facility internal plumbing. Refer to NYS DOH "Guidelines for Designing Backflow Prevention Assembly Installations", Supplement to the 1981 Cross Connection Control Manual.

S. **Comments**

_____

_____

_____

_____

_____

_____

T. Signatures

Engineer/Architect Seal and Signature	Date