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 _______________________

C. Engineer/Architect

Contact Person ________________________
Company ______________________________
Mailing Address _______________________


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
- Manufacturing
- Industrial
- Agricultural
- Other

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E. **Number of Buildings**

- Square Footage per Floor
- First Floor Elevation
- Number of Floors
- Basement
- Yes
- No

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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**

<table>
<thead>
<tr>
<th>Service Connection</th>
<th>Check if none</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size</td>
<td>inch</td>
</tr>
<tr>
<td>Existing or Proposed</td>
<td></td>
</tr>
<tr>
<td>Maximum Demand</td>
<td>gpm</td>
</tr>
</tbody>
</table>

**Backflow Preventer**

**Describe Location**

________________________________________________________________________

Device Type

<table>
<thead>
<tr>
<th>Size</th>
<th>inch</th>
</tr>
</thead>
</table>

Make and model

Included in USC FCCCHR Approved Devices List *

Yes No

Upstream Pressure

<table>
<thead>
<tr>
<th>psi</th>
</tr>
</thead>
</table>

Downstream Pressure

| psi |

________________________________________________________________________

I. **Private Fire Protection Service**

<table>
<thead>
<tr>
<th>Service Connection</th>
<th>Check if none</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size</td>
<td>inch</td>
</tr>
<tr>
<td>Existing or Proposed</td>
<td></td>
</tr>
<tr>
<td>Maximum Demand</td>
<td>gpm</td>
</tr>
</tbody>
</table>

**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

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 RPDA

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

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

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

(consider 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                        Date
Seal and Signature