

APPENDIX A

**APPLICATION
REQUESTS & FORMS**

**KENT COUNTY WATER AUTHORITY
REQUEST FOR PLAN REVIEW
APPLICATION FORM
(ALL APPLICATIONS EXCEPT SINGLE-FAMILY, RESIDENTIAL)**

REVIEW TYPE: Design Review Preliminary _____
Design Review Final _____

Owner: _____
Address: _____

Engineer: _____
Address: _____

Telephone # _____
Contact Person: _____

Telephone # _____
Contact Person: _____

Project Reference Name: _____

Service Location: _____

Plat: _____

Lot: _____

TYPE OF SERVICE:

Residential: _____

(Single Duplex etc.) # Units _____

Condominium: _____

(Single Duplex etc.) # Units _____

*Industrial: _____

(State Type & Uses) _____

*Commercial: _____

(State Type & Uses) _____

**SUBJECT TO 7% SALES TAX UNLESS
EXEMPTION CERTIFICATE IS PROVIDED*

ADDITIONAL SERVICES:

Swimming Pool: _____

Irrigation: _____

Fire Service: _____

Hydrants: _____

Misc.: _____

(State Types)

ROAD SYSTEM:

Public: _____

Private: _____

Other: _____

Engineer shall complete and attach all necessary checklists and supporting data:

- Private pumping booster station
- Design checklist preliminary and final
- Calculation checklists
- 2 Sets of plans
- Design calculations

BASIC INFORMATION ON BACK →

**KENT COUNTY WATER AUTHORITY
APPLICATION FOR NEW SERVICE
BASIC INFORMATION**

REQUIREMENTS FOR SERVICE AND METER INSTALLATION

SERVICES:

All single-family residential units shall be equipped with a minimum of 3/4" service. Single family and commercial units over 200' from the water main shall be equipped with a meter chamber and a minimum of 1" service.

Services shall be copper type K or polyethylene C.T.S. 200PSI rated. If polyethylene is chosen, then a minimum of a 12' copper whip shall be installed just prior to house entry and up to the meter. Stainless steel inserts shall be utilized at all connections for polyethylene pipe.

A ball valve rated for the service pressure shall be installed just prior to the location of the meter coupling and one at the effluent side of the second meter coupling.

Depth of service shall be at a minimum of five feet finished grade throughout installation.

All fittings and pipe shall be swabbed with approvable chlorine solution prior to installation.

Identification tape, as specified in Section 3.21.14 shall be utilized for the full length of services and set to a depth from finished grade of no more than 1' - 0".

From the date of application a waiting period of two weeks can be expected before installation of the service. All meter sizes must be the same size as the service.

The City of Warwick requires K copper tubing for the complete customer side of the service installation.

All service easements are the responsibility of the property owner and not Kent County Water Authority. No services will be installed in private easements by Kent County Water Authority.

METERS:

Refer to Rules and Regulations, Section 4 for the Kent County Water Authority.

All meters shall be read in cubic feet and compatible with the system employed by Kent County Water Authority.

SINGLE UNIT RESIDENTIAL METER PITS:

Residential meter pits shall be used for services that exceed 200' in length from the curb box.

Influent and effluent valves shall be provided inside the pit before and after the meter couplings. Ball valves on either side or ball valve, check valve combination will be acceptable.

Reading devices if needed shall be mounted on a pressure treated 4 x 4 (36" above grade) post or directly under the outermeter pit cover. Owner must provide conduit access for wiring meter.

If polyethylene is chosen, a minimum of a 12' copper whip shall be installed up to the meter.

Vault and ring style pits shall have an access ladder and be the customer's responsibility to maintain safe and dry conditions of the pit.

Vault and ring style pits shall have K copper tubing on the inlet and outlet sides of the pit with a 12' copper whip in each direction.

BACKFLOW PREVENTION:

Residential units must be equipped with dual check backflow preventer after the meter and non-removable vacuum breakers on all outside hose bibbs prior to service connection and meter installation. Style shall be non-removable self-draining type Watts No. 8D or equal.

All commercial or residential lawn sprinkler systems must be provided with a positive vacuum breaker or reduced pressure zone type assembly where the system connects to water supply. It shall be in a location that is always free draining and will not be submerged.

RELATED ITEMS:

Customer is referred to the Kent County Water Authority Rules & Regulations and all related policies for proper installation, operation and all governing procedures and policies.

PLEASE REVIEW ATTACHED PACKET IN ITS ENTIRETY

DATE: _____

EMPLOYEE: _____
NO: _____
OFFICE USE

**KENT COUNTY WATER AUTHORITY
APPLICATION FOR WATER SERVICE/METER
(SINGLE FAMILY RESIDENTIAL)**

PRINT NAME: _____

ADDRESS: _____

PHONE# _____

SERVICE LOCATION: _____

LOT# OR DESCRIPTION: _____

SERVICE/METER SIZE: _____

APPLICANT SIGNATURE

DATE

	YES	NO
WATER AVAILABILITY: _____ EMPLOYEE	<input type="checkbox"/>	<input type="checkbox"/>
APPROVED BY KCWA: _____ EMPLOYEE	<input type="checkbox"/>	<input type="checkbox"/>
HIGH SERVICE (SOUTH ONLY) - REQUIRES KCWA BOARD APPROVAL: (LETTER WILL BE SENT TO CUSTOMER RE: BOARD MEETING)	<input type="checkbox"/>	<input type="checkbox"/>
CUSTOMER CONTRACTOR INSTALLING SERVICE: ▪ INSPECTION FEE OF \$5.00 PER LINEAR FT. - FIELD DETERMINED ▪ NOTIFY OFFICE 24 HOURS PRIOR TO WATER SERVICE INSTALLATION FOR INSPECTION APPOINTMENT	<input type="checkbox"/>	<input type="checkbox"/>
LOCAL/STATE PERMIT NEEDED:	<input type="checkbox"/>	<input type="checkbox"/>
KCWA CONTRACTOR INSTALLED: 3/4" AND 1" SERVICE - \$1,500.00	<input type="checkbox"/>	<input type="checkbox"/>
1 1/2" AND 2" SERVICE - \$2,000.00	<input type="checkbox"/>	<input type="checkbox"/>
DEVELOPER INSTALLED (NO COST):	<input type="checkbox"/>	<input type="checkbox"/>
USING EXISTING SERVICE - ACCT. NO. _____ SIZE _____	<input type="checkbox"/>	<input type="checkbox"/>

KCWA COMMENTS: _____

**KENT COUNTY WATER AUTHORITY
REQUEST FOR SERVICEABILITY
APPLICATION FORM
(PROJECTS WITH AVERAGE DAY FLOW OF 500,000 GPD OR GREATER)**

Owner: _____
Address: _____

Engineer: _____
Address: _____

Telephone # _____
Contact Person: _____

Telephone # _____
Contact Person: _____

Project Reference Name: _____
Service Location: _____
Plat: _____ Lot: _____

TYPE(S) OF SERVICE:

Multi-Unit Residential: _____
Condominium: _____
Industrial: _____

Commercial: _____

(Single Duplex etc.) # Units _____
(Single Duplex etc.) # Units _____
(State Type & Uses) _____

(State Type & Uses) _____

ADDITIONAL SERVICES:

Swimming Pool: _____
Irrigation: _____
Fire Service: _____
Hydrants: _____
Misc.: _____

DEMAND FLOWS

Average Day: _____
Maximum Day: _____
Peak Hour: _____
Needed Fire Flow: _____
Computerized Hydraulic Model Attached: _____

ROAD SYSTEM: PUBLIC: _____ PRIVATE: _____

SUBMISSION REQUIREMENTS

CUSTOMER APPLICATION REQUIREMENTS								
KENT COUNTY WATER AUTHORITY REQUIREMENTS	SINGLE FAMILY HOME	COMMERCIAL SERVICE	MAIN EXTENSION	SUBDIVISION OR CONDOMINIUM	RENOVATION CHANGE IN OCCUPANCY	PRIVATE HYDRANT OR FIRE SERVICE	SUB STANDARD PRESSURE LOW FLOW	REQUEST FOR SERVICEABILITY $\geq 500,000$
APPLICATION FORM		X	X	X	X	X		X
SINGLE RESIDENTIAL SERVICE FORM	X				X			
TEMPORARY SERVICE	X	X						
DESIGN DRAWINGS		X	X	X	X	X		X5
HYDRAULIC CALCULATION		X	X	X	X	X		X
THRUST BLOCK CALCULATION		X1	X	X	X	X		
WATER SYSTEM MODEL		X2	X2	X2	X2	X2	X	X
FIRE FLOW TEST		X	X	X	X	X	X	
FIRE DEPT. REVIEW LETTER		X	X	X	X	X		
EASEMENT DESCRIPTION		X3	X3	X3	X	X3		
KCWA DETAILS		X	X	X	X	X		
PUBLIC UTILITIES REVIEW							X4	

- X1 AS APPLICABLE TO SERVICE SIZE AND PRESSURE
- X2 AS DETERMINED BY GENERAL MANAGER/CHIEF ENGINEER
- X3 AS REQUIRED ON PRIVATE PROPERTY
- X4 PRESSURE LESS THAN 20 PSI UNDER ANY FLOW CONDITION, REQUIRES A SEPARATE REVIEW BY THE DIVISION OF PUBLIC UTILITIES/AND CARRIERS.
- X5 CONCEPTUAL DRAWINGS

**KENT COUNTY WATER AUTHORITY
APPLICATION FOR TEMPORARY SERVICE
BASIC INFORMATION**

BACKFLOW PREVENTION:

All temporary services must be equipped with reduced pressure zone backflow preventer.

RELATED ITEMS:

Customer is referred to the Kent County Water Authority Rules & Regulations and all related policies for proper installation, operation and all governing procedures and policies.

**KENT COUNTY WATER AUTHORITY
APPLICATION FOR WATER IRRIGATION SYSTEM**

KCWA NO. _____

DATE: _____

EMPLOYEE: _____

APPLICANT

NAME: _____

INSTALLER NAME: _____

ADDRESS: _____

BUSINESS NAME: _____

ADDRESS: _____

PHONE: _____

PHONE: OFFICE: _____ CELL: _____

SERVICE LOCATION/ACCOUNT#: _____

AND LOT NUMBER: _____

RESIDENTIAL: _____ COMMERCIAL: _____

SERVICE/METER SIZE: _____

WATER USE CALCULATIONS FROM INSTALLER:

NUMBER OF ZONES: _____ TOTAL AREA TO BE IRRIGATED: _____
(SQUARE FEET)

MINUTES RUNTIME PER ZONE: _____

GALLONS PER MINUTE PER ZONE: _____

TOTAL GALLONS PER DAY: _____

KCWA DISCOURAGES THE USE OF TREATED DRINKING WATER TO IRRIGATE. THE INSTALLATION OF AN IN-GROUND OR AUTOMATIC IRRIGATION SYSTEM DOES NOT ASSURE THE FUTURE USE. IRRIGATION SYSTEMS SHALL BE SHUT OFF DURING WATER SUPPLY EMERGENCIES AND MORATORIUMS IN CONJUNCTION WITH KENT COUNTY WATER AUTHORITY DROUGHT POLICY.

APPLICANT/OWNER SIGNATURE

DATE

KCWA REVIEW

	YES	NO
PLAN OF SYSTEM AND/OR MANUFACTURER'S DOCUMENTATION ATTACHED	<input type="checkbox"/>	<input type="checkbox"/>
RAIN SWITCH SENSORS (PROHIBIT OPERATION DURING RAIN EVENTS)	<input type="checkbox"/>	<input type="checkbox"/>
DRIP IRRIGATION (PLANTS, BEDS & SHRUBBERY)	<input type="checkbox"/>	<input type="checkbox"/>
TIMERS - TO ENSURE COMPLIANCE ODD/EVEN OUTSIDE WATERING POLICY	<input type="checkbox"/>	<input type="checkbox"/>
BACK FLOW PREVENTER	<input type="checkbox"/>	<input type="checkbox"/>
SOIL MOISTURE SENSORS - THAT PROHIBIT OPERATION OF THE SYSTEM WHEN SOIL MOISTURE CONTEXT DOES NOT REQUIRE IT.	<input type="checkbox"/>	<input type="checkbox"/>

APPROVED: _____ DISAPPROVED: _____

SIGNATURE KCWA REPRESENTATIVE

DATE

**KENT COUNTY WATER AUTHORITY
DESIGN CHECK LIST
FOR REVIEW**

PROJECT REFERENCE NAME: _____

SERVICE LOCATION: _____

PREPARED BY: _____ RIPE# _____

INSTRUCTIONS:

All applicable items to be initialed by preparer as completed prior to submission. Preparer shall be a Registered Professional Engineer in the State of Rhode Island. All non-applicable items please designate as N/A.

Item #:	Initials of preparer	Date
1. Is in conformity with all Rules and Regulations of Kent County Water Authority?	<input type="text"/>	<input type="text"/>
2. Complete hydraulic flow and design calculations included in design review package. (Two copies of each to be submitted)	<input type="text"/>	<input type="text"/>
3. Complete thrust block or restrained joint pipe calculation included in design review package.	<input type="text"/>	<input type="text"/>
4. Drawings meet all requirements of KCWA and have been prepared by and stamped by Rhode Island Professional Engineer. A statement shall be placed on the cover sheet of the drawing above. The professional engineer stamp stating as follows: "The attached drawing numbers ____ to ____ have been prepared by me or under my direct supervision and have been thoroughly checked by me." _____	<input type="text"/>	<input type="text"/>
(Signature with PE#)		
5. All details and proposed materials are in conformity with all prescribed requirements of KCWA, AWWA and Rhode Island Department of Health.	<input type="text"/>	<input type="text"/>
6. Location of all water lines have been checked to see if there is any conflict with existing and proposed utilities for this project.	<input type="text"/>	<input type="text"/>

Item #:	Initials of preparer	Date
7. Required mandated horizontal and vertical distances between water lines, sewer lines, catch basins and any other line or structure that could damage or contaminate the water system have been met.	<input type="text"/>	<input type="text"/>
8. Proper valve spacing and sufficient number of valves for isolation of lines meet or exceed KCWA requirements.	<input type="text"/>	<input type="text"/>
9. All valve location accessible.	<input type="text"/>	<input type="text"/>
10. Fire hydrant locations and spacing have been accepted by local jurisdiction fire chief. Letter of approval attached from fire chief.	<input type="text"/>	<input type="text"/>
11. Automatic air-release manholes comply with KCWA regulations and are accessible at all times.	<input type="text"/>	<input type="text"/>
12. All manual style blow off comply with KCWA regulation and are accessible at all times.	<input type="text"/>	<input type="text"/>
13. All valves and fittings are provided to simplify future expansion of the proposed system.	<input type="text"/>	<input type="text"/>
14. Water lines crossing roads, sewer lines, culverts, ditches, brooks and all other potential conflicts are shown in the respective profiles and details.	<input type="text"/>	<input type="text"/>
15. Chlorination specification complies with all requirements of AWWA and KCWA.	<input type="text"/>	<input type="text"/>
16. Chlorination ports have been located and designed to facilitate proper chlorination and indicated in the construction sequence or general notes.	<input type="text"/>	<input type="text"/>
17. Copies of any deed restrictions are included and will be attached to plat plans and deeds as required for special conditions as set forth by KCWA.	<input type="text"/>	<input type="text"/>
18. All easements on real estate for ownership of water lines has been written and approved by KCWA's legal counsel and executed by a representative of KCWA.	<input type="text"/>	<input type="text"/>
19. "General Notes" specifically refer contractor to KCWA Rules and Regulations for service installation and extensions for proper review and installation requirements.	<input type="text"/>	<input type="text"/>

**KENT COUNTY WATER AUTHORITY
CALCULATION CHECK LIST
FOR REVIEWS**

PROJECT REFERENCE NAME: _____

SERVICE LOCATION: _____

PREPARED BY: _____ RIPE# _____

INSTRUCTIONS:
Prior to submission, all applicable items are to be initialed by preparer. Preparer shall be a Registered Professional Engineer in the State of Rhode Island. All non-applicable items please designate as N/A.

Item #:	Initials of preparer	Date
1. All calculations have been prepared under my supervision by me for this project.	<input type="text"/>	<input type="text"/>
2. Fire flow calculations attached.	<input type="text"/>	<input type="text"/>
3. Fire flow test completed.	<input type="text"/>	<input type="text"/>
4. Average day, maximum day and peak hourly flows provided.	<input type="text"/>	<input type="text"/>
5. All flows calculated by the Hazen Williams formula using "C" Values of 100, 120, 140.	<input type="text"/>	<input type="text"/>
6. Thrust blocks or restrained joint pipe calculated and designed meet all requirements of Kent County Water Authority.	<input type="text"/>	<input type="text"/>
7. All commercial and industrial calculations are accompanied by printed back-up literature or other supporting documentation.	<input type="text"/>	<input type="text"/>
8. All irrigation flows calculated in accordance with regulations.	<input type="text"/>	<input type="text"/>
9. All restraining calculations provided for all bends, fittings and transitions.	<input type="text"/>	<input type="text"/>
10. Fire flows determined by discussion with local fire chief and use of Insurance Services Offices calculations tables.	<input type="text"/>	<input type="text"/>
11. All model assumptions listed and described.	<input type="text"/>	<input type="text"/>
12. All model runs provided for "C" values of 80, 100, 120 and 140.	<input type="text"/>	<input type="text"/>
13. All model calculations explained and graphically shown via road maps.	<input type="text"/>	<input type="text"/>

**KENT COUNTY WATER AUTHORITY
COMMERCIAL PUMPING BOOSTER STATION
CHECK LIST FOR REVIEWS**

GENERAL:

For all commercial private booster stations, the engineer shall complete the check list below, in addition to the standard requirements of submission, and provide all additional data requested.

1. Project name and location _____

2. Manufacturer _____

3. Style below or above grade _____

4. # Pumps, style, manufacturer _____

5. Pump Data (GPM)

Pump Data	Q-Design	Q-Maximum	Q-Minimum	Q-Fire
1)				
2)				
3)				

6. Static head _____ (ft)

7. Maximum service grade elevation _____ (ft msl)

8. Pumping head _____ (ft) From model Manual Calculation

9. Suction manifold size _____ (in)

10. Discharge manifold size _____ (in)

11. Surge suppression valves Yes No

 If yes Type _____ Size _____

 Manufacturer _____ (provide cut sheets)

12. Sump pump provided Yes No

13. Emergency generator provided Yes No

 If yes Type _____ Size _____

 Manufacturer _____ (provide cut sheets)

14. Alarms Yes No

 Provide information where alarms are to notify and types available

15. Details of meter installation (attach separate sheet)

16. References - Provide five (5) references of other booster stations similar to this that have been in operation for at least two (2) years, by same manufacturer.