



**Sandwich Water District**  
**Rules and Regulations**  
**For**  
**Contractors and Property Owners**

## TABLE OF CONTENTS

	<b>PAGE</b>
Definitions	3
Requirements before starting work	3
General Information	3
Insurance Requirements	4
Easements	4
Connection Fees	5
Engineering Fees	5
Inspection	5
Water Mains and Appurtenances	5
Materials	7
Testing and Chlorination	10
Water Services- Contractors	11
Fire Services	12
Bacteriological	12
As Built Plans	12
Acceptance	13
Guarantee	13
Water Services - Private Property Owners	14
Application	14
General Information	14
Laterals Materials	15
Materials Approved for Water Services	15
Final Inspections	15
Local Contractor's List	16
System Development Fee- Based on Meter Size	17
Ancillary Charges	18
Fire Service Charge	18
Use of Fire Hydrant	19
Acknowledgement	20
Detail Sketches	End of Document

# **SANDWICH WATER DISTRICT RULES, REGULATIONS AND FEES**

## **DEFINITIONS:**

District shall mean Sandwich Water District.

AWWA shall mean American Water Works Association.

A water main will be defined as any pipe approved for use by the Sandwich Water District for the purpose of conveying water from one place to another, which is in excess of 1" (one inch) in diameter.

These Rules, Regulations and Fees are effective January 19, 1995 and are subject to change by the Board of Water Commissioners.

## **1. REQUIREMENTS *BEFORE* STARTING WORK**

- A. All development plans to be approved by the Board of Water Commissioners as outlined in Section 7.
- B. All easements shall be filed and recorded as outlined in section 4.
- C. Twenty-one days advance notice, in writing, shall be given to the District before construction work begins after all other requirements have been met.
- D. The Owner's engineering firm shall check and certify in writing, that the road is to sub grade and all, side line, lot line, and grade stakes are be in place in accordance with plans as approved by the Sandwich Planning Board and Town Engineer.
- E. All contractors shall be approved by the District.
- F. The contractor shall notify the District, in writing of Dig Safe mark out number and maintain current status throughout the project duration as per Massachusetts General Laws.
- G. Insurance requirements must be met as outlined in Section 3.
- H. All applicable fees to be paid in advance.

## **2. GENERAL**

- A. All work must be inspected by the Superintendent or his designee.
- B. All materials to be made in the United States or Canada.
- C. The contractors shall, upon starting work, continue the job (weather permitting) until completion.
- D. No work that will require inspection will be allowed on weekends or holidays.
- E. All grade and location stakes shall be maintained by Owner's engineering firm during construction or the job shall be shut down.
- F. Inspection rate is \$45.00 per hour, per inspector.

### **3. INSURANCE REQUIRMENTS**

- A. Certificates of Insurance shall be filed with the District prior to commencement of any work. These certificates shall contain a 30 (thirty) day written notice of cancellation and shall contain those coverage's that are deemed necessary by the District.
- B. The insurance companies providing said security must have a Best Rating of A+ and must be approved to do business in the Commonwealth of Massachusetts.
- C. The Contractor shall purchase and maintain at his expense such insurance as shall protect him from claims that may result from the Contractor's execution of the work by himself, subcontractor or anyone directly or indirectly employed by them.
- D. General Public Liability (provisions to be included):
  - 1. Broad Form Endorsement
  - 2. Products and Completed Operations
  - 3. Underground Explosion and Collapse
  - 4. Occurrence Form of Policy
  - 5. Minimum Limits of Liability:
    - a. Bodily Injury and Accident Death-General Liability: each person / aggregate \$1,000,000 / \$2,000,000.
    - b. Property Damage-General Liability: each Occurrence / aggregate \$1,000,000 / \$2,000,000. Each person / each occurrence \$1,000,000 / \$2,000,000.
    - c. Property Damage-Automobile Liability: Each Occurrence / aggregate \$1,000,000 / \$2,000,000.
    - d. The Contractor shall provide a Workman's Compensation policy as required per the Commonwealth of Massachusetts. Said policy shall include an increase in coverage to be not less than \$ 1,000,000 each accident.
    - e. Longshoreman and Harbor Workers Compensation Coverage if any.
    - f. Combined single, limit protection (Bodily Injury and Property Damage) \$1,000,000 minimum: including under-insured and uninsured motorist coverage, non- owned auto and hired car and owner of other car coverage.
    - g. The contractor shall hold the Sandwich Water District, its Employees, Commissioners and Representative harmless for all claims arising from Bodily Injury, Property Damage and Death.

### **4. EASEMENTS**

- A. An easement shall consist of a written document and a plan entitled "Water Main Easement" suitable for recording.
- B. The District's Attorney, at the Owner's expense, shall review the documents, plans, and if deemed necessary, any subordination agreements for acceptance by the District.
- C. Upon acceptance by the District, the Owner shall have easement recorded at the Registry of Deeds and original recorded copies shall be submitted to the District.
- D. All review fees to be paid by Owner in advance.

## **5. CONNECTION FEES**

- A. Connection fees shall reflect all costs incurred for the connection (tap) to the District distribution system including, but not limited to, labor, materials, equipment, site restoration, permits and overhead.
- B. After review and acceptance of development plans, an estimate of cost will be sent to Owner to be paid before any work is started.

## **6. ENGINEERING PLANS**

- A. The Developer shall furnish, at no cost to the District, three sets of true and correct (certified as final) copies of any and all project plans, engineering plans, architect plans, drawings, subdivision plans (including topographical and profile with location sizes of all mains, hydrants and services) and any and all other plans, renderings or diagrams which relate to the project, premises or area to be serviced by the District (such documents being hereinafter referred to as the "Development Plans").
- B. Development plans shall be submitted to the District for review by the District Engineers (all costs to be paid in advance by the Owner) and approval by the Board of Water Commissioners at a regularly scheduled Board of Water Commissioners meeting.

## **7. INSPECTION**

- A. All inspection shall be paid by the Owner at an hourly rate of \$ 45.00 (forty-five dollars) per inspector.
- B. All inspections shall be conducted during normal District working hours, 8 AM to 4:30 PM, excluding weekends and holidays.

## **8. WATER MAINS AND APPURTENANCES**

- A. Installation:
  - 1. All mains shall have 4'-6" (four feet six inches) cover as measured from finish grade.
  - 2. Mains shall be 5' (five feet) off the edge of pavement.
  - 3. The developer shall have his electrical contractor install a rigid sleeve at all points crossing the water main. The sleeve shall extend at least 5" (five feet) either side of the center of the main. Acceptable materials are steel or heavy walled PVC (schedule 40 minimum).
  - 4. All hydrants shall be set on cement pads.
  - 5. All hydrants shall have stone drywells around hydrants drains, (minimum, one cubic yard of 1 ½ inch crushed stone).
  - 6. All hydrants, tees, and fittings shall be backed up with concrete thrust blocks.
  - 7. Hydrants to be located at lot corners.
  - 8. Pipes shall be thoroughly cleaned before being laid. Particular attention shall be paid to the proper positioning of the rubber gaskets.
  - 9. Temporary watertight plugs shall be utilized at the end of each working day to prevent the intrusion of silts, debris and water into the mains. When in areas with a high potential for flooding the main from groundwater, teams, storm drains, sewers or other water mains, the temporary plugs shall be provided on each pipe length.
  - 10. In the event of flooding of the main, all pipe laying shall cease until the mains have been thoroughly cleaned and approved by the Superintendent.

11. When joined together, pipes shall form a smooth continuous line and grade on straight Section of the road and on curved sections (both vertical and horizontal) shall have uniform deflections within the required limits and conforming in general to the line and profile of the adjacent roads.
12. Pipe shall be joined and laid in accordance with the manufacture's latest published instructions AWWA C900-16 and ASTM-D 2321 For PVC water mains.
13. Pipe shall not be laid with deflection or more than one- half the maximum deflection as recommended by the manufacturer.
14. Backfill shall be placed on both sides of the pipe and compacted with approved tamping bars for the full length of pipe. Bell or coupling holes shall be excavated as necessary to ensure that the pipe, not the bells or couplings are bearing the weight of backfill and the traffic load.
15. Pipe shall not be laid in areas where excavation has been carried below trench grade, or where water conditions create unstable bottoms, until such time as the trench is excavated, refilled and compacted to the satisfaction of the Superintendent or his designee.
16. Bells or other joints shall not be installed directly under existing utilities or structures.

B. Connections to Existing Mains:

1. No connections during freezing weather will be allowed.
2. All taps shall be made by the District at Owner's expense.
3. Seven (7) days prior to connecting to any existing water main, the Contractor shall, in writing, notify the District.
4. At no time shall the contractors operate any existing valves. All such operations shall be performed by District personnel at Owner's expense.
5. The work shall be coordinated with the Superintendent of the District and such connections that may be required shall be made at such times and in such a manner as to cause as little interference to the existing water system as is practicable.

C. Product Delivery, Storage and Handling:

1. All pipe when shipped shall be packed and separated by wood separators such that pipe
2. To pipe contact is prevented during transit and I or storage.
3. The loading, trucking unloading, and handling of pipe and appurtenant materials shall be done by the Contractor.
4. Care shall be taken so as not to damage the pipe, appurtenant materials or the street surface.
5. Dropping pipe, special castings, valves, hydrants, etc. directly from the trucks upon the ground will not be permitted.
6. The Contractor shall be responsible for any damage done to the pipe or appurtenant materials until they are accepted in the completed work.
7. Distribution of pipeline materials along the line of work will not be permitted, unless approved by the Superintendent or his designee.
8. The Contractor shall not obstruct driveways, sidewalks, etc., not shall pipeline materials be placed on private property without the express written approval of the property owner, and copies to be file with the District.

## 9. MATERIALS

### A. Ductile Iron Pipe

1. Pipe shall meet AWWA specifications for C150 Ductile Iron Pipe.
2. Ductile Iron Pipe shall be used for hydrant branches and fire services over 2-inches exclusively.
3. Thickness shall be as specified in ANSI Specifications A21.50 (AWWA C150).
4. The interior of the pipe shall be cement lined to twice the thickness specified in ANSI A21.4 (AWWA C104) and asphalt seal coated twice. Outside of pipe shall be bituminous coated. Asphalt sealcoat shall not impart taste or odor to the water contained therein.

### B. Polyvinyl Chloride Pipe

1. Manufactures shall be Johns Manville, Scepter or approved equal.
2. Polyvinyl Chloride (PCE) pipe shall be class 150, meet the requirements of Dimensions Ration (DR) 18 and conform to AWWA specification C900.
3. Pipe shall be blue in color.
4. The manufacturer shall pressure-test all pipe and couplings as specified in the AWWA C900 Standard.

### C. Fittings

1. Furnish and install all required fittings shown on the drawings or as directed by the Superintendent or designee. Fittings shall be mechanical joint and meet the AWWA C110-12 ductile-iron and gray-iron fittings specification or PVC fittings meeting the AWWA C 900 standard for pressure PVC fittings.
2. Tees for hydrant branches shall be ductile iron and the anchoring type.
3. All fittings shall be cement lined and coated as specified for ductile iron pipe. They shall conform to AWWA C110-12 ductile-iron and gray-iron fittings specification and ANSI specifications A21.10 and A21.11.
4. All fittings with an inside diameter of 12 (twelve) inches or less be class 250 and all Fittings over 12 (twelve) inches diameters shall be Class 150 and shall conform with Weights and dimensions shown in the latest edition of the CIPA Handbook of Ductile Iron Pipe Case Iron Pipe and be provided complete with all joint accessories where required.

### D. Tapping Sleeves

1. Tapping sleeves and Tapping gates shall be purchased and installed by the District at the owner's expense.

### E. Valves

1. All valves shall be Mueller or equal and meet AWWA 509-09 valves for water supply.

### F. Gate Valves

1. Gate valves shall be iron body, bronze mounted, with resilient seat, and with 2-inch Operating nut and mechanical joint hubs. Gate valves shall conform in every respect to all applicable AWWA standards. Valves shall be designed for 200 psi working and 300 psi test pressure and shall open left.

2. Valves shall also conform to the specification of the AWWA as to size of stem, pitch of thread, gasket-seating area shall be fully machined to fixed dimensions and tolerance as per AWWA specifications. All valves shall be provided with "O" rings. The design of the valve shall be such that the seal plate can be fitted with new "O" rings while the valve is under pressure in a fully open position.
3. Valves to have mechanical joint hubs.

#### G. Butterfly Valves

1. Butterfly valves shall comply with the most recent AWWA specifications C504 for class 150. Valves shall have Type 304 stainless steel shafts, pinned to the disk and supported in permanently lubricated bearings, or valve shaft shall be one piece, extended full size through entire valve and operator with no keyways or holes, having 304 stainless steel journals rotating in reinforced Teflon bearings. The seat used in all butterfly valves shall be natural rubber or Buna-N. If the seat is in the body, the body shall be cast iron and the disk shall be Ni-Resist or cast iron with Type 304 stainless steel seating edge. If the seat is in the disk, the body shall be cast iron with Type 304 stainless steel seating edge and the disk shall be permanently centered at the factory. All butterfly valves shall be furnished complete with weatherproof worm gear or traveling nut type operators suitable for submerged service. Valves shall have 2-inch operating nuts as required for the application, and as shown on the plans. All valves shall open left and have mechanical joint hubs.
2. Manual operator shall be submersible, worm and gear type (Philadelphia Gear or equal) rack and pinion type or lead screw type. All operators shall have positive adjustable stops to prevent over-travelling of the disc in the open and closed positions. Operators shall be equipped with a 2-inch square-operating nut fully gasketed and greased for buried service. Gearing shall be totally enclosed, oil tight, permanently sealed.
3. Butterfly valves are allowed or required at the discretion of the Superintendent.

#### H. Valves Boxes and Covers

1. Valve boxes shall be Buffalo or Pioneer and shall be furnished and installed for all valves. They shall be cast iron, tar coated, and sliding type adjustable valve boxes together with cast iron covers. Bell end of the lower sections shall in all cases be sufficiently large enough to fit over the stuffing boxes of the valves. (Operating nut shall be centered in the bell end of the valve boxes). The smallest inside dimension of the shaft shall not be less than 5 ¼ inches. Upper section shall have a flange sufficiently strong enough to furnish the bearing for that section so that all weight or jolting from street traffic or the like shall not be transmitted to the valve. Valve box extensions shall be supplied where necessary, but at no time shall the depth exceed 5'-6" (five feet six inches) from the operating nut to the top of the box.

#### I. Hydrants

1. Make and model- Mueller Centurion, Darling, B62B or Dresser 500 (to standardize).
2. Type of Thread- National Standard.
3. No. Outlets: Two (2) 2-1/4-inch hose connections.  
One (1) 4-1/2-inch steamer connection.
4. Diameter Valve Opening- 5 1/4-inch (minimum).
5. Diameter of Barrel-7 inches (minimum).
6. Hub: 6-inch mechanical joint.
7. Direction of opening: Open **Right**.
8. Depth of Bury: five feet six inches.



9. Hydrants shall be designed for 150 pounds per square inch working pressure and shall conform in every respect to the specifications adopted for hydrants by the AWWA.
10. Hydrants shall be painted at completion of project. Color shall be current District specifications.

J. Plugs and / or Caps

1. Furnish and install permanent pipe plugs, caps or blank flanges as shown on the drawings And/ or directed by the Superintendent or his designee.
2. Furnish and maintain on the project site temporary watertight plugs in the various sizes are required for the water mains during installation.

K. Solid Sleeve, Flexible and Transition Couplings

1. Solid sleeves shall be furnished and installed where shown on the drawings or as otherwise directed by the Superintendent or his designee. Sleeves shall be long type cast iron with mechanical joints and complete with all accessories. They shall be as manufactured by Claw Corporation, Dresser Industries, Smith Blair, or equal.
2. Flexible couplings shall be furnished and installed where shown on the drawings or wherever the intent for their use is indicated or may be required by the Engineer. Flexible Couplings shall be cast iron with rubber gaskets. Bolts shall be properly spaced to insure uniform gasket compression. They shall be as manufactured by Clow Corporation, Dresser Industries, Smith Blair or equal.

L. Cement / Concrete

1. Furnish and place concrete in such locations and quantities as shown on the drawings or as required by the Superintendent or his designee.
2. Concrete shall be of proportions, 1-part cement to 2-parts sand and 4-parts coarse aggregate, as approved by the Superintendent or his designee.
3. Care shall be taken to ensure that all concrete thrust blocks bear against undisturbed trench walls, and not to encase flanges and bolts on mechanical joints fittings. Where unsuitable bearing material is encountered, excavate and place sufficient ballast to offset the anticipated thrust.

M. Mechanical Joints

1. Mechanical joints shall be of an approved type with the required joints accessories; gaskets cast iron follower glands with drilled blot holes, cast iron tee-head bolts, hexagonal nuts, etc. Torque wrenches shall be used to take up such joints. Wrenches shall be equipped with adjusting breakable tension gauge, set to break the tension at the tension loading recommended by the manufacturer.
2. Mechanical joints shall be made to secure tight joints, every means being taken to secure this result. Joints shall have a deflection of not more than one-half the recommended maximum deflection allowed by the standards of CIPA.

N. Valve Boxes

1. Valve boxes shall be cut with a wheel cutter or power cutoff saw with abrasive disk, if it becomes necessary to cut them to adjust for height.
2. Valve boxes shall be properly adjusted over the operating nuts of valves and adjusted to the proper height flush with the street or ground finish grade.

## **10. TESTING AND CHLORINATION**

- A. The work of this section shall be coordinated with the Superintendent or his designee.
  - 1. Testing and chlorinating of the pipelines shall closely follow pipe-laying work. Pipeline shall be tested approximately every 1000 feet, or distances slightly greater or less, as approved by the Superintendent or his designee, unless otherwise noted, as the pipeline is installed.
  - 2. The Contractor, under the supervision of the District Inspector, shall fill mains as slowly as practicable so as not to cause dirty water and serious pressure drops within the existing system.
  - 3. Vent air from the mains during the filling process and supply adequate manpower and make taps on the mains where directed.
  - 4. After the mains have been filled, the controlling gate valve shall be closed, and the new mains kept isolated from the existing system.
  - 5. Mains shall be filled at least three (3) days before testing.
  - 6. All valves on the existing system shall be closed against the flow of chlorinated water.
- A. Pressure Test
  - 1. All testing to be performed by qualified testing company approved by the District.
  - 2. All new water pipeline construction shall be hydrostatically tested in accordance with Hydrostatic Testing, AWWA C600. The test pressure shall not be less than 150 psi at the highest point. Along the test section, the test pressure shall not exceed pipe or thrust-restraint design pressure, shall be for 90-minute duration and shall not decrease by more than 5 psi during the test.
  - 3. The Inspector shall be present for the test.
- B. Leakage Test
  - 1. The leakage test may be conducted independently of the pressure test, as approved by the Superintendent or his designee and the allowable liquid loss shall not exceed the limits as noted below. The leakage test shall be recorded to one-tenth of a gallon accuracy by means of a test meter or where allowed by the Superintendent or his designee, permission will be given to measure the draw down in the test barrel. If the leakage is more than that specified above or in the table that follow, leak or leaks shall be located, and the necessary repairs made so that the leakage will not exceed the amount specified. The Contractor shall employ qualified personnel throughout the test procedure.
  - 2. Leakage allowable based on gallons per hour 1000 feet of main as per manufacturer's specifications.
  - 3. Results of all tests shall be submitted to the District prior to acceptance of the water main and all records and charts shall become the property of the District.
- C. Chlorination
  - 1. Before starting chlorination, flush all mains to remove all dirt and foreign matter.
  - 2. Use of water will only be allowed when approved by the Superintendent or his designee.
  - 3. A pumping unit or proportionate feeder that delivers a hypochlorite solution to the **isolated** main shall be provided.
  - 4. The hypochlorite solution shall be pumped into the mains in such a manner that the solution will be applied at a uniform rate in proportion to the flow from the effluent hydrant or other discharge point.

5. The unit used **shall not enable the solution to flow back into the existing system.**
6. Under the supervision of the District Inspector, chlorinate the mains with a hypochlorite Solution of a strength that will result in a minimum residual within the system of 50 parts per million (ppm).
7. The advance of the chlorinated water in the mains shall be checked at hydrants or blow offs along the line of work to ensure that the water contained therein has a minimum residual of 50 ppm. If the strength is below that required, adjustments in the rate of flow and injection of the solution shall be made. A chlorine residual of at least 25 ppm be maintained in the section of main being tested after 24 hours.
8. The injection of the chlorine solution into the mains shall not be stopped until time as the desired residual is noted at the end of the pipeline. Closely coordinate closing the effluent hydrant and controlling gate valve, so as not to lose chlorinated water from the mains or to cause a backup of solution into the existing system.
9. At the end of a 24-hour retention period, necessary arrangements shall be made with the Superintendent to flush the mains of chlorinated water. Great care shall be exercised in the selection of the rate of flow and the discharge points, in order to minimize complaints and damage to public or private property.
10. After the mains have been flushed clean, the system shall then be isolated for a 24-hour period. At the end of this period, samples of the water contained in the mains shall be taken and sent to the Department of Environmental Protection-(DEP) or approved laboratory for bacterial analysis. Only after the samples are approved shall the mains be incorporated into the water system. If positive reports of contamination are received, the mains shall be flushed and chlorinated as many times as may be necessary to obtain approved results.
11. The cost to the Owner for the additional water required for flushing if positive contamination. Reports are received will be at the usual consumer rate.

## **11. WATER SERVICES-CONTRACTORS**

### **A. Installation**

1. All services shall be sized by Owner's engineer.
2. Services shall not be installed less than 4 (four) feet or greater than 5 (five) feet deep.
3. Services shall be installed to the center of all lots.
4. Connect all services to the new main as directed by the Superintendent or his designee, and as specified herein. Services shall be connected before the new main has been tested, chlorinated and approved. All services installed must be flushed after approval.
5. Water mains shall be tapped in accordance with the manufacturer's latest published recommendations, i.e. depth of tap, number of threads exposed, allowable sizes, etc., and the Contractors shall adhere strictly to these recommendations.
6. Drills and I or taps shall be inspected for signs of wear and in general, the contractors shall not exceed the number of taps specified by the manufacture before reconditioning or replacement. Service pipe shall be cut only with approved wheel cutters.
7. Condominiums- Individual water services by the Water District to units are not permissible. Meter pits may be required regardless of distance from street for multiple meters.

### **B. Temporary Service**

1. Sample taps shall be provided by Owner for this purpose at each designated location as determined by Superintendent or designee.
2. If test taps are not used to service a lot, they shall be removed at Owner's expense after acceptance of the water installation.

### C. Materials

1. Service pipe shall be minimum 1-inch 200 psi, AWWA approved, blue Endopure or black copper size (CTS) polyethylene pipe.
2. Service boxes shall be Buffalo Type No. 1. They shall be tar coated, cast iron and sliding type with inlaid covers. Cover shall be held in place with bronze bolt. Shaft shall be 2-1/2-inch inside diameter and be extension type extending from 4' (four feet) to 5' (five feet).
3. Required Brass Goods shall include lead-free corporation cocks, curb stops, miscellaneous couplings and fittings. All brass goods shall have compression type connections and meet current AWWA standards.
4. Corporation cocks shall be lead-free Mueller, Catalog No. B-25008N or approved equal.
5. Saddles lead-free bronze, Mueller H-13000 series with AWWA thread (CC thread), Ford Series 70 with AWWA thread (CC thread) or approved equal.
6. Curb stops shall lead-free, Cambridge Brass, Catalog No. 252NL or approved equal with compression male adapters. Curb stops shall have drain and shall open right below 1-1/2- inches.

### D. Materials for Temporary Services

1. Each temporary blow-off shall consist of a 1-inch corporation cock, 1-inch AWWA approved CTS PE pipe and a 1-inch curb stop with valve box.
2. If necessary, a manifold shall be provided by Owner to connect the existing system and the new water main. Each manifold shall consist of 2 (two) 3/4 inch check valves, 2 (two) 3/4 inch ball valves, 1 (one) 5/8 inch by 3/4 inch water meter. 200 lb. test minimum, CTS PE pipe or Type K copper tubing 3/4 inch shall be used and the new main connected to the existing system by tapping into the water main. (See detail Appendix A.)

## **12. FIRE SERVICES**

- A. Prior to installation all fire services must be hydraulically calculated for size by a qualified Engineering Firm and a plan shall be submitted for approval by the Board of Water Commissioners and the Fire Chief.
- B. Pipe larger than 2" in diameter shall be Ductile Iron Class 52 meeting ANSI/AWWA C150/A21.50 standards. Pipe 2" in diameter and smaller shall be AWWA approved 200 psi minimum, blue Endopure or black Copper Tube Size (CTS) Polyethylene pipe.
- C. Ductile Iron pipe (3" and larger) shall be Class 52. Plain end by flanged end shall be installed 10 feet outside the building and joined with a flex coupling. The pipe shall be restrained with a friction clamp installed on the pipe outside the foundation or with 5/8 inch threaded rod to the first flange. The OS&Y valve shall be bolted directly to the flanged end at the entrance point.
- D. Uni-flanges shall not be allowed.

## **13. BACTERIOLOGICAL SAMPLING**

- A. Samples shall be taken by the Sandwich Water District inspector and shall conform to AWWA specifications. 2 samples at each location taken 24 hours apart.
- B. Samples are to be taken at all dead ends and every 1,000' (one thousand feet) of water main.
- C. Sample test expenses shall be the responsibility of the Owner.

## **14. AS BUILT PLANS**

- A. As built plans shall be submitted to the District and approved by the Superintendent or designee prior to final approval.

**15. ACCEPTANCE**

- A. The District will not accept or turn on water until all regulations have been met.
- B. The District reserve the right to accept the mains in sections after the satisfactory tests have been made and approved and to make full use of any part or parts of the system.

**16. GUARANTEE**

- A. The Owner shall be held responsible, for I(one) year from the date the entire project has been accepted by the District to rectify any leaks, errors, or other poor workmanship which may be discovered and shall make any necessary repairs, alterations or adjustments as may be required to properly complete the work, as directed by the Superintendent or his designee.
- B. The District's inspector shall be present for all repairs.



## **WATER SERVICE**

### **RULES AND REGULATIONS FOR PRIVATE PROPERTY HOMEOWNERS/BUILDERS**

#### **APPLICATIONS:**

Applications shall be filled out at the Sandwich Water District office, and all fees are to be paid at the time of application. Fee is based on service size.

You must have a building permit from the Town of Sandwich in order to apply for town water, unless it is an existing dwelling changing over from a well.

Applications shall include the property owner's name, lot#, house#, and street, with new service location clearly marked out; along with a plot plan, as certified by the Town Engineer.

If you need to be hooked up to water in an emergency, due to your well failing, upon filling out the application and paying all fees, please supply a letter from your plumber or well company stating your emergency situation.

#### **GENERAL INFORMATION:**

All individual lots must have individual water services.

The District's installation will include the installation of the water service from the owner's pipe at the property line to the water main, including all fittings required (curb stops), the meter stop, and the water meter.

Note: If service length to a house or other type of building is more than 100 feet from the road, a meter pit must be purchased, installed and maintained by the homeowner.

All meter pits shall be Mueller/McCullough, size ¾" through 2". No precast concrete or block pits will be allowed.

The owner/or builder shall install their water service first from the metering point to the property line at a location agreed upon by the owner and District or at a location determined by the Superintendent or designee before the District will schedule its part of the installation. We can pre-mark the area prior to starting your private installation.

The District shall, upon notice that the owner/builder's installation is complete, make the connection to the main within three weeks, contingent upon Dig Safe requirements, highway requirements, backlogs or inclement weather.

The water service shall be installed as straight as possible from the metering point to the curb stop location. The acceptable depth of bury shall be four to five feet below finish grade.

The pipe at the metering point shall be at right angles to wall or floor.

The owner/builder will be responsible for a ball valve to be installed within twelve inches of the discharge side of the meter. Where the meter is to be enclosed (finished room installations) access must be provided to the meter.

The curb stop is the exclusive property of the District and shall be operated only by Water District personnel. Any unauthorized use shall not be tolerated, and any consequential damages shall be the owner's responsibility.

The owner/builder is responsible for the water service; meter, pipe and curb box from damages caused by any of the contractor's or sub-contractors.

Meter and valve shall be protected from freezing; no installations will be done when the ground is frozen.

**LATERALS:**

A "lateral" is a water service that has been previously installed to the property line during water main installation by the developer, with an existing curb stop and curb box. The owner shall install their water service from the metering point to the property line and make the necessary connection to the existing curb stop. The existing curb box shall be installed correctly; it must be straight, centered over the valve and to proper grade upon completion. The owner/builder shall be completely responsible to ensure proper installation in order to receive a final inspection certificate.

**MATERIALS APPROVED FOR WATER SERVICES:**

Pipe: Shall be minimum 1" 200 psi, AWWA approved, blue Endopure or black copper tube size (CTS) polyethylene pipe. All fittings used shall be lead-free brass and meet current AWWA standards. All inserts for compression fittings shall be made of stainless steel.

**\*\*\*\*ATTENTION\*\*\*\***

***FINAL INSPECTION REQUIRED***

Upon approved completion of all requirements, please call the Water District to schedule a final inspection. Once inspected and passed, a final inspection certificate (gold colored sheet) will be issued to you to obtain an occupancy permit by the Building Department.

Without this certificate, the dwelling will not be considered as having a permanent potable supply of town water.

A notice of seventy-two hours is required for inspections. Access is needed to the premises. First inspection shall be at no charge. Any other inspection shall be charged at the rate of \$45.00 per hour; minimum of one hour.

## LOCAL CONTRACTOR'S LIST

This list is for local reference only. We do not give recommendations, as you may hire whomever you wish for your water service and plumbing needs, whether on the list or not. Refer to our Rules and Regulations for our requirements.

### **EXCAVATORS:**

B & B Excavation	508-477-0653	Bob Gilfoy, Title V inspections & Installations
Bortolotti Construction	508-428-8926	
Cardinal Construction	508-420-1295 or 508-364-1259	P. Scott Campbell, Title V inspections
Condon's Excavating	508-776-9963 or 833-5155 (John)	
Crocker, Matt	508-776-4218	
Earle, Dennis	508-888-2859	
Gibbs, Eddie	508-888-5871	
Miranda's Excavation	508-432-2050	Warren Miranda, Title V -Site & Utility Construction
NCS Construction	508-833-5273 (Nick Souke)	
Robert B. Our Co., Inc.	508-432-0530	
Pastore Excavation	508-428-9300 (Nick Pastore)	
Roderick Construction	508-420-1256	
RJ Smith Excavation	508-294-9782 (Ryan J Smith)	
Michael Travers Services	508-958-8354 24 Hr. Service or 508-888-9432	
Northern Paving	508-398-9474 (Ray Catarina)	For New construction and demolitions only

### **RESTORATION SERVICES FOR HOMEOWNER'S LEAK CLEAN UP OR WATER DAMAGE**

Whalen Restoration Services Inc.	508-760-1911 (South Dennis, MA.)
Oceanside Restoration	508-771-3110 (Hyannis, MA.)
Sunrise Restoration	508-833-3911 (East Sandwich, MA.)

### **PLUMBERS:**

Ace Plumbing	508-274-7396 (Ross Donaghy)
Arrowhead Plumbing	508-888-5335
Cape Cod Master Plumbers	508-317-5525 (Tim McElroy)
Chaffee Ellis Plumbing	508-888-4715
Devlin Simmons LLC	774-521-3704 (Jay Devlin & Dave Simmons)
MPF Plumbing &Htg	508-737-5567 (Matt Freitas)
Fagnant, Richard	508-888-6769 (works w/ Nick Souke Contractor)
Fagnant Jr., Walter	508-888-1267
Farnham, Keith J	508-888-7305
Gallagher Plumbing	508-477-6057
Cliff Irving Plumbing	508-888-2225
Kissell, Steve	508-833-9085
Mark Moran	508-477-3354
PS IDEAL/EARLE	508-548-3030
Sylvia, John	508-540-1381
T.E.K. Plumbing & Heating	774-283-5048 (Tom Keir)
Andrew T. Wallace Plumbing	508-292-6747



**SYSTEM DEVELOPMENT FEE- BASED ON METER SIZE**

<b>Size (inches)</b>	<b>Gallons per Minute (GPM)</b>	<b>System Development Fee</b>	<b>Connection Fee</b>	<b>Total</b>
3/4 (5/8 X 3/4) Lateral	20. =X 1	\$900.	\$300.	\$1,200.
1 (3/4x1) Lateral	30. =X 1.5	\$1,350.	\$400.	\$1,750.
3/4 (5/8 X 3/4)	20. =X 1	\$900.	\$2,100.	\$3,000.
1 (3/4 X 1)	30. =X 1.5	\$1,350.	\$2,100.	\$3,450.
1 (Straight)	50.= X 2.5	\$2,250.	*Cost Plus	
1 1/2	100. =x 5	\$4,500.	*Cost Plus	
2	160.=x 8	\$7,200.	*Cost Plus	
3	320. =x 16	\$14,400.	*Cost Plus	
4	500. =X 30	\$22,500.	*Cost Plus	
6	1250. =X 62.5	\$56,250.	*Cost Plus	
8	1800. =X 90	\$81,000.	*Cost Plus	
12	4300. =X 215	\$193,500.	*Cost Plus	

\*The above charges *do not include Fire Services* which are listed separately in the Schedule Fees

## ANCILLARY CHARGES

Returned Check	\$20.00
Cross Connection Permit Plan Review	\$25.00 + Engineering if required
Cross Connection Test (\$ 50.00 per test, semi-annual)	\$100.00
Water Turn On	\$20.00
Water Turn Off	\$20.00
Termination Procedure	\$53.50
Fire Flow Test (per test-2 hydrants)	\$125.00
Inspection Rate (Developments, Water Services, etc.)	\$45.00/hr.
Frozen Meter Replacement	Meter Cost
Final Meter Read	\$30.00
Emergency Service Call (First call is free)	\$45.00/hr.
Contractor's Water Use	\$40.00

## FIRE SERVICE-ANNUAL CHARGE

<b><u>Residential:</u></b>	<b><u>Charge</u></b>
1 - inch	\$100.
2-inch	\$100.
<b><u>Commercial:</u></b>	<b><u>Charge</u></b>
6 - inch	\$400.
8-inch	\$600.
10-inch	\$800.
12-inch	\$1,000.
16-inch	\$1,200.

Note: All installation will require the installation of backflow devices; see the Cross Connection Control By- Law and Fee Schedule.

All Fire Services will require plans approved by the Town of Sandwich Fire Chief and designed **by a professional registered engineer or an approved fire protection sprinkler company.**

Fire Services are billed semi-annually.

## USE OF FIRE HYDRANTS

The use of a fire hydrant, or fire hydrants, for any purpose other than for the extinguishment of fires by the Sandwich Fire Department shall be prohibited except as further stated. Swimming pools are **exempt**.

Upon written request to the Superintendent, which shall contain the following information:

1. The location of the fire hydrant to be used including the hydrant number (see tag on hydrant).
2. The time of day to be used.
3. The house to be used.
4. The number of days to be used.
5. The gallons per minute requested.
6. The total gallons used.

The Superintendent or designee will, after review of the information supplied, as mentioned above determine whether said fire hydrant can be used as requested. If the use is approved, the following Charges shall apply and **shall** be paid in advance:

1. Fire hydrants use charge shall be \$500.00.
2. Water use charge (District's current water rate) based on estimate.
3. Cost for a District Inspector, for the entire period of operation. (District's Inspectors rate of \$45.00 per hour)
4. The District will provide a water meter and appropriate backflow device.
5. The user of the water supply shall provide any and all hoses, pipes or connections from the discharge side of the backflow device to the point of use.
6. Water service will be terminated when the estimated gallonage has passed through the water meter unless prior arrangements have been made.

**ACKNOWLEDGE RECEIPT OF SANDWICH WATER DISTRICT RULES,  
REGULATIONS AND FEES**

**DATE:** \_\_\_\_\_

The undersigned hereby submits the accompanying plan entitled; \_\_\_\_\_

**DATE:** \_\_\_\_\_

to the Board of Water Commissioners for approval. The undersigned hereby acknowledges that I/We have read and understand the Rules, Regulations and Fee of the Sandwich Water District and further agree to the fees and to follow the rules and regulations attached hereto.

DEVELOPER'S NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

OWNER'S NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

PLAN APPROVED BY:  
BOARD OF WATER COMMISSIONERS: \_\_\_\_\_  
Meeting Date

SANDWICH WATER DISTRICT: \_\_\_\_\_  
Superintendent or designee

DATE: \_\_\_\_\_

SIGNATURE OF OWNER: \_\_\_\_\_

DATE: \_\_\_\_\_