

**SECTION E**

**SCOPE OF WORK/ TECHNICAL SPECIFICATIONS**

**1. INTENT**

The intent of this bid specification is to establish an annual requirements contract for the supply of reinforced plastic water meter boxes and lids for use by the Arlington Water Utilities Department. Products from the manufacturers in the chart in section 2 have been tested and approved by the city. The products listed for each group are those manufacturers’ products that are currently being utilized and on the Arlington Water Utilities Approved Products List, **however alternates may be considered.**

The City of Arlington’s Water Utilities Approved Product list is located at:  
<https://www.arlingtontx.gov/common/pages/DisplayFile.aspx?itemId=16021199>.

The bidder, by quoting an alternate, warrants that the product(s) being bid meets or exceeds all stated specifications of this bid invitation. Evidence of equivalency shall be presented, and the burden of such equivalency is entirely on the vendor.

The City of Arlington shall act as the sole judge in determining equality and acceptability of products offered. Where the apparent low bidder has proposed an alternate product, that bidder shall demonstrate product equivalency to the satisfaction of the City. The product must meet salient physical, functional and/or performance characteristics to be deemed acceptable; once this occurs the product will be added to the approved product list for use.

**2. GENERAL DESCRIPTION**

Reinforced plastic water meter boxes and lids under this specification will include five sizes of a rectangular shape.

Arlington Water Description	DFW Plastics AASHTO H-10 and H-20 Compliant	East Jordan Iron Works	Carson AASHTO H-10 Compliant
<b>Reinforced Meter Box</b>			
¾" Meter Box	DFW36F-12		PMSBC-1015-12
¾"x 18" Deep Meter Box			PMSBC-1015-18
1" Meter Box	DFW37F-12		PMSBC-1118-12
2" Meter Box	DFW65C-14		PMSBCF-1527-12
Dual Meter Box	DFW1324F-12		PMSBC-1324-12
<b>Iron Lid w/ Flip Door</b>			
¾" Meter Box Flip Door Lid		32131001	
1" Meter Box Flip Door Lid		32131138A01	
2" Meter Box Flip Door Lid		32131501	
Dual Meter Box Flip Door Lid		32131301	
<b>Iron Lid-Solid</b>			
¾" Meter Box Solid Iron Lid		32131015	
1" Meter Box Solid Iron Lid		32131118	
2" Meter Box Solid Iron Lid		32131527	
Dual Meter Box Solid Iron Lid		32131324	

Polymer Lid-Solid			
¾" Meter Box Polymer Lid	DFW36C-AF1EQAF-Lid		
1" Meter Box Polymer Lid	DFW37C- AF1EQAF -Lid		
2" Meter Box Polymer Lid	DFW65C- AF1EQAF -Lid		
Dual Meter Box Polymer Lid	DFW1324C- AF1EQAF -Lid		
Polymer Lid-Solid w/ Brass Locking Mechanism			
¾" Meter Box Polymer Lid w/Lock	DFW36C- AF1EQAF -Lid		
1" Meter Box Polymer Lid w/Lock	DFW37C- AF1EQAF -Lid		
2" Meter Box Polymer Lid w/Lock	DFW65C- AF1EQAF -Lid		
Dual Meter Box Polymer Lid W/Lock	DFW1324C- AF1EQAF -Lid		

### 3. REINFORCED PLASTIC METER BOX SPECIFICATION

The meter box shall be constructed of one-piece molded polyethylene. The exterior shall be black to provide UV protection. Boxes shall withstand a minimum vertical load of 8,000 pounds and be AASHTO design load H-10 compliant, these boxes shall be for pedestrian/non-traffic areas only.

Meter boxes compliant with AASHTO design load H-20 are authorized for use in non-deliberate/incidental traffic areas. The meter box exterior shall be free from seams or parting lines and all edges and corners are to be smooth and free from sharp edges so the unit can be handled safely without gloves. These boxes shall not have a foaming agent added that creates air pockets in the plastic walls. Except for the **2" meter box**, all boxes shall have flared bottoms.

The **dual meter box** will not have the ends cut out but shall have both sides cut 14" on center to allow for a u-branch setup and dual meters to be installed.

### 4. METER BOX LID SPECIFICATION

#### IRON LIDS

The meter box lids are to be made of cast iron according to ASTM A48-84, Class 35B or ductile iron according to ASTM A-536. The lids shall withstand a minimum vertical load of 15,000 pounds. Castings are to be coated with bituminous emulsified asphalt unless otherwise specified, ground smooth, and cleaned with shot blasting, to get a uniform quality free from strength defects and distortions. Dimensions shall be within industry standards of plus or minus (+/-) one-sixteenth of an inch per foot. All castings will bear the Manufacturer's ID (name or logo) and Country of Origin. Casting weights may vary plus or minus (+/-) five percent from drawing weight per industry standards.

The solid cover lids provided for under this section must be compatible with bodies as specified above. An access opening hole in the top of the lid must be positioned at either end of the lid and shall be large enough for opening with typical reading tools.

The flip door assembly cover lids provided for under this section must be compatible with bodies as specified above. The lids must have an iron hinged flip door opening in the top of the lid positioned in the center of the cover, the flip door must have an access opening hole positioned on the end opposite the hinge and shall be large enough for opening with typical reading tools.

## **POLYMER LIDS**

The polymer cover lid lids provided for under this section must be compatible with bodies as specified above and be constructed out of HDPE. The polymer covers shall be black in color, anti-float, include a one-piece molded slide mount bracket for AMR/AMI device endpoints and a recessed knockout for optional antenna mounting. Additionally, the lid shall have 2 pieces of ½" rebar installed for detectability and resistance to floating.

The solid polymer lid with a lock shall include all items above as well as a spring-loaded brass locking mechanism.