

*Please return to:*

*Executive Assistant  
Kennewick Irrigation District  
2015 S. Ely Street  
Kennewick, WA 99337*

<p style="text-align: center;"><b>KENNEWICK IRRIGATION DISTRICT RESOLUTION 2016-33</b></p>
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**SOUTHRIDGE EQUIVALENT IRRIGATION UNIT (EIU) SURCHARGES**

A **RESOLUTION** of the Board of Directors of Kennewick Irrigation District (KID), Benton County, Washington, for the purpose of establishing surcharges for service connections in the Southridge Benefit Area.

**WHEREAS**, on April 5, 2016, KID Board approved the Southridge Irrigation Master Plan, establishing the Southridge Benefit Area, and established the equivalent irrigation unit (EIU) base surcharge at \$2,795.25; and

**WHEREAS**, each EIU shall be the equivalent of a one and a quarter inch (1 ¼) service connection providing an instantaneous flow of 15 gallons per minute; and

**WHEREAS**, larger service connections were calculated as a multiple of the base EIU, irrespective of development standards applicable to a property; and

**WHEREAS**, KID Procedure 4.19 Standard Specifications specifies the service connection requirements; and

**WHEREAS**, the surcharge for a one and quarter inch (1-¼) service connection, based on 1 EIU, is set at \$2,795.25; and

**WHEREAS**, Per KID Procedure 4.19 Standard Specifications, available service connections sizes in the Southridge Benefit Area include one and a quarter inch (1-¼), two inch (2.00), four inch (4.00), six inch (6.00), and 8 inch (8.00). The EIUs for each of these connections were calculated based on common engineering design flow properties to limit the amount of head Loss, friction, velocity and/or drop in pressure in a given pipe. Head loss calculations are based on equations developed by hydraulic engineers who have conducted numerous flow tests. One of the most common is the Hazen-Williams which calculates your head loss per 1,000 feet of pipe. For the four inch (4.00), six inch (6.00), and 8 inch (8.00) connections, KID targeted a head loss of 5 feet per 1,000 feet which is within a common range of head loss figures for pipeline design. For the one and a quarter inch (1-¼) and two inch (2.00) service connections, KID attempted to maintain velocities in the service pipeline to

approximately 5 feet per second, which is also within a common range of water velocities in pipeline design.

**WHEREAS**, the surcharge for a two inch (2.00) service connection, based on 4 EIUs and 60 gpm, is set at \$11,181.00; and

**WHEREAS**, the surcharge for a four inch (4.00) service connection, based on 8 EIUs and 120 gpm, is set at \$22,362.00; and

**WHEREAS**, the surcharge for a six inch (6.00) service connection, based on 21 EIUs and 315 gpm, is set at \$58,700.25; and

**WHEREAS**, the surcharge for an eight inch (8.00) service connection, based on 42 EIUs and 630 gpm, is set at \$117,400.50 ; and

**WHEREAS**, the KID will allow a credit towards future EIUs surcharges based on the current property land use and current paid EIU surcharge above the base surcharge. Said credit shall only go toward additional EIU surcharges provided the property subdivides and meets the requirements for additional base connections of one and quarter inch (1-¼). (i.e. one (1) five (5) acre property pays for one (1) two (2.00) inch service connection equivalent to an \$11,181.00 surcharge. One year later, the same property then subdivides into ten (10) properties all requiring one and quarter inch (1-¼) service connections or a total of \$27,952.50 (10 x \$2,795.25 = \$27,952.50). The \$11,181.00 original surcharge will be applied as a credit towards the \$27,952.50 surcharges.

**WHEREAS**, the Board of Directors of Kennewick Irrigation District met in regular session on September 6, 2016, with a quorum present,

**NOW, THEREFORE, BE IT RESOLVED** by the Board of Directors of Kennewick Irrigation District that establishing surcharges for service connections in the Southridge Benefit Area is hereby authorized.

RESOLUTION 2016-33 is hereby adopted by the Board of Directors of Kennewick Irrigation District, Benton County, Washington, at an open public meeting thereof, with a quorum present, this 6<sup>th</sup> day of September 2016.

  
David McKenzie, President

  
Gene Huffman, Vice President

  
Kirk Rathbun, Director

  
Patrick McGuire, Director

  
Dean Dennis, Director