

June 18, 2016

Mr. Timothy Connor, Chemical Engineer, Municipal Support Division
via e-mail to: connor.timothy@epa.gov

Located at:

Office of Wastewater Management
Environmental Protection Agency
cwsrfwaiver@epa.gov
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

Subject: AIS Availability Waiver Request
City of Winston Salem
Kerners Mill Force Main
Engineer: Highfill Infrastructure
Contractor: O'Brien Southern Trenching
SRF Project No. CS370399-13.1

Dear Mr. Connor:

The North Carolina Division of Water Infrastructure (Division) has reviewed the information provided by the Contractor, the Engineer, American Ductile Pipe Co., and the City of Winston Salem for the CWSRF Project CS370487-13.1 submitted on June 17, 2016. The following information is provided to EPA requesting AIS Waiver for the following item(s):

- 24-inch Ductile Iron Pipe Flex Ring Fittings
(approx. 5000 lbs. of mostly 45 and 22.5 deg. bends)

AIS Waivers for similar and identical TR Flex ductile iron pipe fittings have recently been granted for other projects based on lack of availability from domestic suppliers. Market research and documentation provided by the contractor and the supplier indicate that these items are not available from a US/domestic source.

These couplings and fittings were specified by the Engineer and the City due to the nature of the project and the structures, roadways, waterways, and the soils in the project area. These fittings allow the pipe to flex some at the joints and maintain the pressures and water tightness needed for

AIS Waiver Request
for
Winston Salem SRF Project No CS370399-13.1
Kerners Mill Force Main
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6/18/2016
Page No. 2 of 2

conveying wastewater. The selection of these fittings is based on their previous experience on similar projects and their professional judgement.

The schedule for this project and the installation of these fittings has been set and any additional delay would adversely impact the contractor, the city, the residents, the schools, and the business in the area.

If you need any additional information, please let me know. The Division's regular project review and construction inspections of CW and DW SRF Projects cover loan administration, construction, and SRF Requirements, including AIS requirements. If you have any questions or comments, please contact me at (919) 616-4245 or at tom.poe@ncdenr.gov.

Sincerely,



Tom S. Poe
Construction Inspector

tsp

Attachments:

- AIS Waiver Checklist for EPA
- Suppliers / Manufactures' letter stating Non-Availability from domestic sources
- Shop Drawings and Submittal details
- Project Specifications, and Bid Qtys. for these specific item(s)

cc, via e-mail:

Jerry Smith, O'Brien Southern Trenching Co
jerrysmith123@windstream.net

Tyler Highfill, P.E., Highfill Infrastructure
thighfill@hiepc.com

Mr. Mike Patton, PE, City of Winston Salem
mikep@cityofws.org

Seth Robertson, P.E., Anita Reed, P.E. DWI Supervisors
NC-CWSRF Project File and Share Drive



Appendix 1: Information Checklist for Waiver Request

The purpose of this checklist is to help ensure that all appropriate and necessary information is submitted to EPA. EPA recommends that States review this checklist carefully and provide all appropriate information to EPA. This checklist is for informational purposes only and does not need to be included as part of a waiver application.

Items	✓	Notes
<p>General</p> <ul style="list-style-type: none"> • Waiver request includes the following information: <ul style="list-style-type: none"> – Description of the foreign and domestic construction materials – Unit of measure – Quantity – Price – Time of delivery or availability – Location of the construction project – Name and address of the proposed supplier – A detailed justification for the use of foreign construction materials • Waiver request was submitted according to the instructions in the memorandum • Assistance recipient made a good faith effort to solicit bids for domestic iron and steel products, as demonstrated by language in requests for proposals, contracts, and communications with the prime contractor 	✓	
<p>Cost Waiver Requests</p> <ul style="list-style-type: none"> • Waiver request includes the following information: <ul style="list-style-type: none"> – Comparison of overall cost of project with domestic iron and steel products to overall cost of project with foreign iron and steel products – Relevant excerpts from the bid documents used by the contractors to complete the comparison – Supporting documentation indicating that the contractor made a reasonable survey of the market, such as a description of the process for identifying suppliers and a list of contacted suppliers 		
<p>Availability Waiver Requests</p> <ul style="list-style-type: none"> • Waiver request includes the following supporting documentation necessary to demonstrate the availability, quantity, and/or quality of the materials for which the waiver is requested: <ul style="list-style-type: none"> – Supplier information or pricing information from a reasonable number of domestic suppliers indicating availability/delivery date for construction materials – Documentation of the assistance recipient's efforts to find available domestic sources, such as a description of the process for identifying suppliers and a list of contacted suppliers – Project schedule – Relevant excerpts from project plans, specifications, and permits indicating the required quantity and quality of construction materials • Waiver request includes a statement from the prime contractor and/or supplier confirming the non-availability of the domestic construction materials for which the waiver is sought • Has the State received other waiver requests for the materials described in this waiver request, for comparable projects? 		

→ YES, and Waivers have been granted.



AMERICAN

DUCTILE IRON PIPE

THE RIGHT WAY

May 23, 2016

Mr. Danny Waldrop
Ferguson Waterworks – Kernersville, NC
444 West Bodenhamer Street
Kernersville, NC 27284

**RE: Imported 24" Flex-Ring Fittings
Kerners Mill Force Main**

Mr. Waldrop,

This purpose of this letter is to state that 24" Flex-Ring fittings are not available from a domestic source. The only sourcing option for these fittings is Metalfit, Inc. located in Mexico.

If you have any further questions on the matter, please don't hesitate to contact me at hbridwell@american-usa.com or 205-307-2961.

Regards,

Hunter Bridwell
Assistant Manager, Customer Service
American Ductile Iron Pipe



AMERICAN Ductile Iron Flex-Ring® and Lok-Ring® Fittings

General Notes Relating to Flex-Ring and Lok-Ring Fittings

1. Fittings in the following tables with the heading "ANSI/AWWA C153/A21.53" are essentially as specified in that standard. Fittings in tables with the heading "AMERICAN Standard" are either not included in the ANSI/AWWA standard or vary therefrom in weights, dimensions, and/or joints.
2. Fittings are manufactured of ductile iron qualified as per grade 70-50-05 (minimum tensile strength: 70,000 psi; minimum yield strength: 50,000 psi; minimum elongation: 5%) as specified in AWWA C153.
3. Weights of accessories are not included in weights of fittings shown in tables unless specifically noted. For weights of accessories, see Section 2 or Section 9.
4. For allowable joint deflection of Flex-Ring and Lok-Ring fitting joints, see Table 4-3.
5. All pressure ratings are for water service.
6. Some fittings are available with body metal thickness and weights other than shown in the tables. Some fittings are available in different sizes and with different size combinations than shown. All sizes and body metal thicknesses listed may not be available due to equipment changes. Check AMERICAN regarding special requirements.
7. See Section 7 for AMERICAN Specials.
8. Fittings may be furnished by AMERICAN that are manufactured by others. Any such fittings will normally be manufactured in accordance with appropriate ANSI/AWWA standards.
9. The 250 psi rating for 54"-64" fittings is an AMERICAN standard, based on performance testing. 54"-64" fittings are rated only 150 psi in AWWA C153, although that standard provides for higher pressure ratings by the manufacturer (AMERICAN).
10. Center-to-socket dimensions, wall thicknesses, and weights may vary from those shown in the following tables depending on foundry practice.
11. The locations of taps, bases, or other special options when available on fittings shall be specified by the Purchaser as shown on page 6-5 for similar body type fittings. Likewise, end types and end sizes used in descriptions must be specified in numbering sequence shown on pages 6-5 and 6-6 and the illustrations in this section.
12. Lateral or wye branch fittings with Flex-Ring and Lok-Ring end connections are not shown in this section. For small-diameter varied angle lateral and tangential connections to larger mains, shop-welded outlet pipes are normally preferable and can be furnished with all joining connections as noted in Section 7. For larger or full-opening requirements, some 45° lateral and true wye configurations can also be furnished with these push-on end connections. (Contact AMERICAN for availability.) These wye fittings are special, and for economy and availability, alternative combinations of other standard fittings may be preferable in some cases. (See alternatives as depicted in Sections 5 and 6, etc.)
13. AMERICAN Flex-Ring fittings will work as push-on unrestrained fittings as long as suitable external restraint [thrust blocks, etc.] is applied. Flex-Ring fittings are thus furnished as "Fastite" fittings in many sizes and configurations, at Foundry option.



AMERICAN Ductile Iron Flex-Ring® and Lok-Ring® Fittings

The principal standards covering fittings are ANSI/AWWA C110/A21.10 and ANSI/AWWA C153/A21.53. The principal standard covering joints is ANSI/AWWA C111/A21.11. These and other standards are referenced throughout this section by the full ANSI/AWWA designation or by only the AWWA numbering, such as AWWA C110 or C153.

AMERICAN furnishes a line of 16"–48" Flex-Ring and 54"–64" Lok-Ring fittings meeting the applicable requirements of AWWA C153. These fittings all employ the standard Fastite or Fast-Grip gasket seal, and the joints meet the applicable requirements of AWWA C111. Many of these fittings are not specifically listed in the AWWA standards because of joints, outlets, or other variations and are designated as "AMERICAN standard."

When welded joint restraint is desired, Flex-Ring or Lok-Ring fittings should also be used, depending on size. These joints are also essentially boltless and use the standard Fastite gasket for joint sealing. In addition, field adaptable joint restraint is available for 14"–36" Flex-Ring pipe or Flex-Ring fittings by use of AMERICAN's Fast-Grip gaskets or Field Flex-Rings, respectively. See Section 9 for more information on Restrained Joints.

Flex-Ring and Lok-Ring fittings are normally furnished complete with standard Fastite plain rubber gaskets and a sufficient supply of Fastite joint lubricant. Restraining elements for Flex-Ring or Lok-Ring fittings may be shipped either with the fittings or joining pipe, dependent on joint type, fitting configuration, etc. See Section 9.

Flex-Ring and Lok-Ring fittings are furnished of ductile iron only. Fittings for pressure ratings of 250 and 350 psi are furnished as shown in the tables in this Section. Fittings for pressure ratings higher than shown are available for special applications.

Fittings are normally furnished with cement lining in accordance with AWWA C104 and with an outside asphaltic coating. They can also be furnished asphaltic coated or uncoated inside. For special conditions, other types of coatings and linings may be available. See Section 11.



AMERICAN Ductile Iron Flex-Ring® and Lok-Ring® Fittings
ANSI/AWWA C153/A21.53 and AMERICAN Standard

Flex-Ring and Lok-Ring Fittings Joint Dimensions

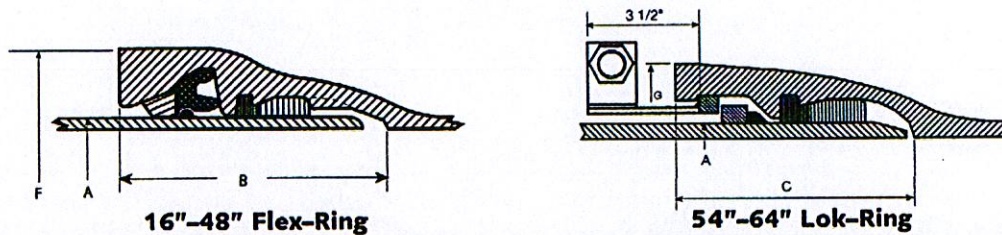


Table No. 4-1

Size in.	Dimensions in Inches				
	A Outside Diameter	B Socket Depth Flex-Ring	C Socket Depth Lok-Ring	D* Bell O.D. Flex-Ring	E* Bell O.D. Lok-Ring
16	17.40	7.38	—	21.49	—
18	19.50	8.20	—	23.71	—
20	21.60	8.20	—	25.83	—
24	25.80	8.96	—	30.70	—
30	32.00	9.63	—	37.04	—
36	38.30	9.63	—	43.54	—
42	44.50	10.84	—	50.62	—
48	50.80	12.37	—	56.98	—
54	57.56	—	10.07	—	62.14
60	61.61	—	10.57	—	66.27
64	65.67	—	10.57	—	70.45

*Dimensions subject to change at our option.
For Fastite pipe dimensions, see Section 2.
For Flex-Ring and Lok-Ring pipe dimensions, see Section 9.

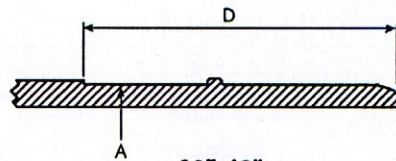


AMERICAN DUCTILE IRON PIPE

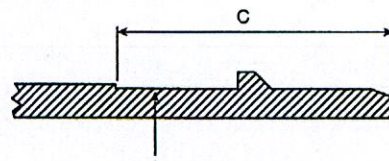
**AMERICAN Ductile Iron Flex-Ring® and
Lok-Ring® Fittings**
ANSI/AWWA C153/A21.53 and AMERICAN Standard

Flex-Ring End and Lok-Ring End

Standard Dimensions



**30"-48"
Flex-Ring End**



54"-64" Lok-Ring End

Table No. 4-2

Size in.	A Outside Diameter in.	B Flex-Ring Minimum Gauge Length in.	C Lok-Ring Minimum Gauge Length in.
30	32.0	10	-
36	38.3	10	-
42	44.5	11 1/2	-
48	50.8	13	-
54	57.56	-	12
60	61.61	-	13
64	65.67	-	13

Quantities of fittings and date needed:

7 – 24” P401 Flex ring 45 bend
1 – 24” P401 Flex ring 11.25 bend
5 – 24” P401 Flex ring 22.5 bend
3 – 24” P401 Flex ring 90 bend
1 – 24”x 16” P401 Flex ring Tee
1 – 16” P401 Flex ring Plug
3 – 24” Flex ring 45 bend
1 – 24” Flex ring 11.25 bend

TOTAL Flex Ring fittings = 22 each

Delivery date: 7/8/16.

NOTE: The referenced attachments with project diagrams, schedules, and supplier correspondence are in formats that do not meet the Federal accessibility requirements for publication on the Agency’s website. Hence, these exhibits have been omitted from this waiver publication. They are available upon request by emailing SRF_AIS@epa.gov