

P.O. Box 13231, 1700 N. Congress Ave. Austin, TX 78711-3231, www.twdb.texas.gov Phone (512) 463-7847, Fax (512) 475-2053

October 12, 2020

Andrew Sawyers Director Office of Wastewater Management U.S. EPA, Office of Water 1300 Pennsylvania Ave., NW Washington, DC 20460

Re: American Iron & Steel Public Interest Waiver Request City of Ivanhoe Emergency Egress Safety Enhancement Project

Dear Director Sawyers:

The Texas Water Development Board (TWDB) formally requests a Public Interest Waiver of the American Iron and Steel (AIS) requirements (Section 608(2)(b)(1) of the Clean Water Act) on behalf of the City of Ivanhoe (City), Texas for the use of a recycled railroad tank car in a stormwater safety enhancement project. The TWDB has determined that the City is not seeking to avoid the AIS requirements in its approach to the project. However, due to the innovative use of a recycled railroad tank car, compliance with AIS cannot be demonstrated.

Compliance with the AIS requirements cannot be demonstrated for this unique and innovative sustainability project because the certification documentation for the origin of the steel cannot be obtained for a decades-old railroad car made in the past century. The TWDB requests that the U.S. EPA take into consideration the following: (1) no new foreign iron or steel will be sourced for construction of the railcar; (2) the innovative project will demonstrate the flexibility of CWSRF funding for sustainability goals; (3) the City of Ivanhoe pursued permission for this waiver far in advance of construction, understanding the novel concerns of their unique situation; (4) the City of Ivanhoe put forth significant effort to comply with the AIS requirements and may ultimately utilize domestic steel despite their inability to demonstrate compliance; (5) the City of Ivanhoe will utilize domestic iron and steel for all other project components as required; and (6) all other manufacturing steps (shaping, bending, grinding, coating, etc.) will take place in the U.S.

After the events of Hurricane Harvey, the Lake Ivanhoe Dam was required to be breached by the Texas Commission on Environmental Quality due to its vulnerable condition and to reduce the chance of catastrophic failure during a future significant storm event, thereby compromising the only ingress/egress path for the City of Ivanhoe during flood events. The

#### Our Mission

Leading the state's efforts in ensuring a secure water future for Texas and its citizens

## Board Members

Peter M. Lake, Chairman | Kathleen Jackson, Board Member | Brooke T. Paup, Board Member

Jeff Walker, Executive Administrator

Director Sawyers October 12, 2020 Page 2

natural draining system is also suffering from excessive sediment deposits from flood events. To remedy the critical safety issue, the City of Ivanhoe is planning to rehabilitate and expand the existing culvert crossing along the ingress/egress route. The construction will replace two damaged culverts with two (2) repurposed 42-ft half-tank recycled railroad tank cars with 10-ft diameters, each. The repurposed railroad tank cars are more resistant to bending and cracking than traditional pipe and concrete culverts and offer a greater flow capacity along with an easier installation process.

The City of Ivanhoe has researched sources for recycled railcars extensively. Due to the age of the tank cars (the majority of the stock dates from the 20<sup>th</sup> Century), the pedigree of the steel and the original certificate of origin will not be available. Therefore, it will not be possible for the City of Ivanhoe to affirmatively demonstrate compliance for these tank cars, even in the possible (likely) case that the steel would be of domestic origin. The railroad tank car vendor has provided a statement that indicates they will make a good faith effort to determine the origins of the steel used in the original fabrication of the railroad tank car.

The TWDB believes that EPA has the authority and discretion to provide a Public Interest waiver for this case and that granting of the waiver is warranted. Because the City of Ivanhoe is attempting to comply with the AIS requirements but cannot demonstrate compliance due to the age of the tank cars, there is no attempt by the City to avoid the requirements. The City will not monetarily benefit by utilizing the recycled tank cars in lieu of pursuing new source steel, as the difference in cost is approximately \$26,000.00. In fact, the procedure taken on by the City to design and locate alternative, recycled materials for the sustainability goals of the culvert project will have taken considerable effort and expense. In addition, the City will utilize domestic manufacturing steps on all of the shaping, bending, grinding, coating, and other steps to prepare the recycled cars for use in the unique project.

The TWDB strongly recommends that EPA utilize its discretion to support this innovative project in its creative, sustainable solution to a critical safety concern in the City of Ivanhoe. The project will be seen by every person who enters and leaves the City, thereby creating an opportunity to market the innovative, sustainability goals of the CWSRF to all passersby.

Sincerely,

Jeff Walker Executive Administrator

Enclosed: Waiver Request Letter: Project Background and Supplier Information Attachment A: Supplier Pricing Attachment B: Railroad Tank Car Culvert Design Specification Attachment C: Railroad Tank Car Culvert Design Drawings Attachment D: Letter from Supplier addressing AIS Requirements



July 14, 2020

Jessica Taylor Project Manager Texas Water Development Board 1700 North Congress Avenue, P.O. Box 13231 Austin, Texas 78711-3231

Re: TWDB CWSRF Project No. 73852 American Iron & Steel Public Interest Waiver Request Emergency Egress Safety Enhancement City of Ivanhoe, Texas

To Whom It May Concern:

LJA Engineering requests on the behalf of the City of Ivanhoe, Texas that an American Iron and Steel (AIS) waiver be applied to the City of Ivanhoe TWDB Project No. 73852 (Emergency Egress Safety Enhancement) for the use of recycled railroad tank cars for the rehabilitation and expansion of a culvert crossing within the City of Ivanhoe, Texas. In accordance with the United States Environmental Protection Agency (USEPA) memorandum, Implementation of American Iron and Steel provisions of P.L. 113-76, Consolidated Appropriations Act, 2014, all necessary information is included within this letter and in the attached documents.

## Project Background

After the events of Hurricane Harvey, the Lake Ivanhoe Dam was discovered to be partially failed once inspected and it was determined by the TCEQ, under the Dam Safety Program, that intentionally breaching the dam structure would prevent an otherwise disastrous failure in the future. Consequentially, by breaching the dam structure, the only ingress/egress path for the City of Ivanhoe, now experiences frequent flooding and becomes impassible during such events due to the loss of the protection offered by the dam structure. In addition to this, the natural drainage system is suffering from the excessive sediment deposits being transported during these flood events.

To remedy this issue, the Ivanhoe Drive Entrance Improvements Project entails the rehabilitation and expansion of the existing culvert crossing along the ingress/egress route by replacing the existing damaged culverts with two (2) 42' half tank recycled railroad tank cars with 10' diameters each. This will increase the amount of floodwater able to travel safely through the crossing and reduce the amount of flooding and erosion at the crossing considerably and allow the residents of the City of Ivanhoe to travel the ingress/egress route during storm events without risk to health or safety.

Due to these railroad tank cars being recycled and repurposed as culverts, acquiring the pedigree of the steel and the original certificate on the origins of the steel will be unlikely. With this in mind, there will be a possibility that they do not meet the requirements of the AIS provisions. These recycled railroad tank

cars do, however meet the requirements of the project scope and fit within the City of Ivanhoe's grant budget.

## **General**

#### Description of the foreign and domestic construction materials:

Typical railroad tank cars are manufactured from steel with varying diameters (usually 8' to 10') and lengths that can be customized. The wall thickness of the tank cars are generally  $\frac{1}{2}$ " thick.

#### Unit of measure:

The unit of measurement is by the linear foot (LF).

### Quantity:

The project calls for two (2) 10-foot diameter half-round railroad tank cars to be used, 42' per railroad tank car for a total length of 84'.

#### Price:

The price for the recycled railroad tank cars is \$380/LF for a total price of \$31,920.00.

#### Time of delivery or availability:

The estimated delivery time is approximately 2-3 weeks after an approved submittal.

### Location of the construction project:

The Emergency Egress Safety Enhancement Project is approximately located at:

140-398 Ivanhoe Dr Woodville, Texas 75979.

#### Name and address of the proposed supplier:

The name and address of the supplier is:

The Railroad Yard, Inc. 5915 S. Perkins Rd. Stillwater, OK 74076 (405) 377-8763

#### Detailed justification for the use of foreign construction materials:

The two 10' diameter half-round by 42' long recycled railroad tank cars will be replacing the existing culverts at the road crossing that have been damaged and inundated with sediment deposits due to the increased flood waters crossing the ingress and egress route. These tank cars are more resistant to bending and cracking than traditional pipe and concrete culverts, are more

easily to install, offer greater flow capacity, and they can last without the need for repairs for extended amounts of time.

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 prime contractor:

LJA Engineering looked at various methods to determine the best storm water drainage products available for the Emergency Egress Safety Enhancement Project that would best benefit the residents of the City of Ivanhoe, Texas. Recycled railroad tank cars are the best match for the project scope that also fits within the projects grant funding. Efforts were made in good faith to locate recycled railroad tank cars that contain all the required information needed to fit the requirements of the AIS.

### **Availability Waiver Request**

Supplier information or pricing information from a reasonable number of domestic suppliers indicating availability/delivery date for construction materials:

LJA Engineering contacted the following manufactures in regard to the availability and qualifications of the recycled railroad tank cars. None of the vendors and manufacturers could provide the pedigree of the steel or the original certificate on the origins of the steel. See the list below for vendors and manufacturers contacted.

- Hasara Contracting Willis, TX (936) 856 5924
- The Railroad Yard Inc. Stillwater, OK (405) 377 8763
- Clark Tank Cars Reynolds, IN (765) 427 9700 / (219) 984 5444

In contacting the above vendors, it was determined that The Railroad Yard, Inc. was the only vendor who could supply half-round tank cars in the size we need for this project. Attachment A is the price quote from The Railroad Yard, Inc.

## 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:

LJA Engineering inquired into the availability of the recycled railroad tank cars that would meet the requirements of the AIS when contacting the following vendors/manufactures. The vendors and manufactures that were contacted could not supply AIS compliant recycled railroad tank cars that meet the needed specifications.

- Hasara Contracting Willis, TX (936) 856 5924
- The Railroad Yard Inc. Stillwater, OK (405) 377 8763
- Clark Tank Cars Reynolds, IN (765) 427 9700 / (219) 984 5444

### **Project schedule:**

The anticipated schedule for the recycled railroad tank cars as they relate to the Emergency Egress Safety Enhancement Project is as follows:

- Once the AIS waiver is granted, the submittal review and approval for the recycled railroad tank cars will take place.
- Procurement and delivery: 2-3 weeks
- Project completion: January 2021

# Relevant excerpts from project plans, specifications, and permits indicating the required quantity and quality of construction materials:

The technical specifications for the recycled railroad tank cars are included as Attachment B. Preliminary plan and profile sheet of the proposed railroad tank car culvert crossing and details of the tank car culverts are included as Attachment C.

# Waiver request includes a statement from the prime contractor and/or supplier confirming the non-availability of the domestic construction material for which the waiver is sought:

A statement from the railroad tank car vendor is included as Attachment D that describes their good faith effort to determine the origins of the steel used in the original fabrication of the railroad tank car.

## Has the State received other waiver requests for the materials described in this waiver request, for comparable projects?

No project using similar materials as in the Emergency Egress Safety Enhancement Project within the state of Texas has been submitted nor approved for a waiver.

However, in reviewing the TWDB-1106 "American Iron and Steel (AIS) Guidance for Clean Water & Drinking Water State Revolving Funds Projects", in a Product Question on page 12, the answer to question 3 states that "Recycled source materials used in the production of iron and steel products do not have to come from the U.S. Iron or steel scrap, for instance, are considered raw materials that that may come from anywhere. While certification is not required for the raw material, EPA does recommend that additional final processing of iron and steel be certified to have occurred in the U.S."

We believe that recycling of a railroad tank car for the use of a drainage culvert would fall into this category and ask that an AIS waiver request be approved.

Please feel free to contact me at (409) 554-8994 should you have any questions.

Sincerely,

LJA ENGINEERING, INC.

Dawn Pilcher, P.E. Senior Project Manager



Order Number: 0098872 Order Date: 7/13/2020

Salesperson: 2JTS Customer Number: CITY020

The Railroad Yard PO Box 2283 Stillwater, OK 74076 (405) 377-8763

Sold To:			Ship	o To:		
City of Ivanhoe Ivanhoe, TX 75979		City of Ivanhoe Ivanhoe, TX 75979				
Confirm To:						
Customer P.O.	Ship VIA	F.O.B.		Terms		
42' half tanks				NCA		
Item Code	Unit	Ordered	Shipped	Back Order	Price	Amount
/MISC WELDING Misc. Welding Supply		2.000	0.000	0.000	15,960.0000	31,920.00
2ea 42' haf tank culvert m	ake from domestic steel w	th MTR'S.				
Each one will have 6' tall a	and 10' wide headwall with	a 2 extension that will fold	out on each side.			
making the total width 14'.	. Price is delivered and lea	d time is 2-3 weeks.				

	Net Order:	31,920.00
	Less Discount:	0.00
NONTAY	Freight:	0.00
NONTAX	Sales Tax:	0.00
	Order Total:	31,920.00

1

## ITEM 9000 RAILROAD TANK CAR CULVERT

#### 1. DESCRIPTION

Furnish and install used railroad tank car for the purpose of utilizing it as a drainage culvert.

#### 2. <u>MATERIALS</u>

Railroad tank car must meet the Texas Water Development Board (TWDB) American Iron and Steel (AIS) Requirements. Railroad tank car vendor shall certify the origins of the steel used in the tank car fabrication. If certification can not be obtained, the vendor and/or Contractor shall notify the Engineer immediately so that an AIS Waiver can be requested.

#### 3. <u>CONSTRUCTION</u>

General. Provide the required railroad tank car culvert size as indicated on the construction plans. Railroad tank car culvert shall be delivered in the required length as indicated on the construction plans. Provide steel headwall welded to ends of railroad tank car culvert to the dimensions indicated on the construction plans.

Installation. Install railroad tank car culvert at flowlines indicated on construction plans. Field adjustments may be required. Provide the required bedding and backfill in accordance with the construction plans and specifications. In some instances, the steel headwall will arrive partially welded to the tank car culvert. The Contract will need to complete the welding of the steel headwall to the ends of the tank car culvert.

Unloading. Coordinate with railroad tank car vendor to determine the delivery time of the culvert. In some cases, the vendor may require the railroad tank car culvert to be unloaded by the Contractor.

#### 4. <u>MEASUREMENT</u>

Product. Railroad tank car culvert shall be supplied by the City.

Install. Railroad tank car culvert will be measured by each complete culvert placed.

#### 5. <u>PAYMENT</u>

The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement." This price is for full compensation for offloading the railroad tank car culvert from the vendor trailer, placing the culvert, field adjustment to layout, welding of the steel headwall, shaping the ditch tie in at the steel head wall, bedding and backfill, and equipment, labor, tools and incidentals.



7/15/2020 0:\Proiects 1.14 B

#### CAUTION

EXISTING OVERHEAD UTILITIES IN VICINITY.CONTRACTOR SHALL EXERCISE EXTREME CAUTION WHEN WORKING NEAR ELECTRICAL FACILITIES.

#### WARNING

Ò.

THE ENGINEER ASSUMES NO RESPONS-IBILITY FOR THE ACCURACY OF THE LOCATION OF UNDERGROUND UTILITIES. THE CONTRACTOR SHALL BE RESPONS-IBLE FOR LOCATION AND AVOIDING ALL EXISTING UTILITIES BY CALLING THE "ONE CALL'LOCATOR SERVICE AT LEAST 48 HOURS PRIOR TO CONSTRUCTION.



Know what's below. Call before you dig.

STATION	HMAC WIDTH	BASE WIDTH	SUBGRADE WIDTH
0+00	24.0'	24.0'	N/A
0+50	24.0'	24.0'	N/A
1+00	24.0'	24.9'	N/A
1+50	24.0'	26.0'	32.0'
2+00	24.0'	26.0'	32.0'
2+50	24.0'	26.0'	32.0'
3+00	24.0'	25.6'	N/A
3+50	24.0'	25.2'	N/A
4•00	24.0'	24.8'	N/A
4•50	24.0'	24.4'	N/A
5+00	24.0'	24.0'	N/A

			196
			10.0
			192
5+00.0 PROJE( H EXIS	0 CT T PVMT		188
			184
			-
			180
			176
			172
			170
			., 0



THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY

OF: VICTORIA T. DAI P.E.# 100240 DATE: 06-01-2020

DATE: 06-01-2020

IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.

Revision By Crik. Appr. Date CITY OF IVANHOE, TEXAS IVANHOE DRIVE ENTRANCE IMPROVEMENTS

#### PLAN & PROFILE SHEET IVANHOE DRIVE

LJA Englneering, Inc.				
Public Infrastructure	Phone 409.833.3363			
2615 Calder Avenue, Suite 50	0 Fax 409.833.0317			
Beaumont, Lexas 77702	IBPE - F-1386			
design: V.T.D.	JOB No. B1039-1007			
DRAWN: V.T.D.	DATE: JUL 2020			
CHECKED:	SCALE: 1" = 30'			
10000150	21/557 N 00 0/ 47			



RE: City of Ivanhoe, Texas Emergency Egress Safety Enhancement TWDB CWSRF Project No. 73852

As per the American Iron and Steel (AIS) compliance requirements, <u>The Railroad Yard, Inc.</u>, certifies the following statement:

The Railroad Yard, Inc. acknowledges to and for the benefit of the Owner ("City of Ivanhoe, Texas") and the Texas Water Development Board (TWDB) that it understands the goods and services under this Agreement are being funded with monies made available by the Clean Water State Revolving Fund that have statutory requirements commonly known as "American Iron and Steel" that requires all of the iron and steel products used in the project to be produced in the United States ("American Iron and Steel Requirement") including iron and steel products provided by the Contactor pursuant to this Agreement. The Railroad Yard, Inc. hereby represents and warrants to and for the benefit of the Owner and the TWDB that (a) The Railroad Yard, Inc. has reviewed and understands the American Iron and Steel Requirement, (b) all of the iron and steel products used in the project will be and/or have been produced in the United States in a manner that complies with the American Iron and Steel Requirement, unless a waiver of the requirement is approved, and (c) The Railroad Yard, Inc. will provide any further verified information, certification or assurance of compliance with this paragraph, or information necessary to support a waiver of the American Iron and Steel Requirement, as may be requested by the Owner or the TWDB. Notwithstanding any other provision of this Agreement, any failure to comply with this paragraph by The Railroad Yard, Inc. shall permit the Owner to enforce this Agreement and recover as damages against The Railroad Yard, Inc. any loss, expense, or cost (including without limitation attorney's fees) incurred by the Owner resulting from any such failure (including without limitation any impairment or loss of funding, whether in whole or in part, from the TWDB or any damages owed to the TWDB by the Owner). Mile The Railroad Yard, Inc. has no direct contractual privity with the TWDB, as a lender to the Owner for the funding of its project, the Owner and The Railroad Yard, Inc. agree that the TWDB is a thirdparty beneficiary and neither this paragraph (nor any other provision of this Agreement necessary to give this paragraph force or effect) shall be amended or waived without the prior written consent of the TWDB.

The City of Ivanhoe intends to utilize cleaned and repurposed railroad tanker cars as culverts. Because the tanker cars could have a history that goes back to 30 years of its original date of manufacturing, there is a possibility that a complete pedigree of the tanker cars will not be available. However, a good faith effort will be made by The Railroad Yard, Inc. to identify the history of the tanker cars and will notify the Owner should The Railroad Yard, Inc. not be able to certify the origins of the steel used in the original fabrication of the car.

THE RAILROAD YARD, INC.

Neil Smith Vice President