

August 10, 2020

Timothy Marshall, Division Administrator
Federal Highway Administration, Iowa Division
105 6th Street
Ames, Iowa 50010

Subject: Buy America Waiver Request for the "I-74 Bridge Recreational Trail Letdown Structure," Project Number IM-074-1(255)5-13-82, Iowa DOT Responses to FHWA Questions regarding waiver letter

Dear Mr. Marshall:

Thank you for your review of the Iowa DOT waiver request letter sent to the FHWA office on March 20, 2020, a copy of which is attached. Our responses to the questions posed are contained in attached Exhibit A-1. For ease and clarity, we have repeated the questions, after which we include our responses to each in italics and different color font.

We are also including attached Exhibit F-1, which is an update of information previously contained in Exhibit F. The updated Exhibit F-1 provides a summary of the correspondence to date with the various elevator contractors/manufacturers located in the geographic region of the project that we would expect to bid on the elevators for the project.

We conducted additional research to better answer your questions and, based on those findings, we have decided to revise our original waiver request. Our addition efforts included conducting further follow-up interviews with elevator manufacturer/contractors, contacting additional elevator contractors/manufacturers and in reaching out to contractors/manufactures/suppliers of the other building components/equipment required to support and house these elevators. Our previous letter requested a waiver for "Elevator components and elevator guide rails". However, as a result of additional due diligence by the design team, we are requesting a waiver for the full Letdown Structure (all components above ground) as a result of the following findings which are summarized in Exhibit F-1. The conclusions are a result of the Iowa DOT disposition to questions raised in the FHWA letter dated April 22, 2020 and updated information in Exhibit F-1.

Executive Summary:

- None of the elevator manufacturers/contractors we contacted, and who responded to our added inquiries, can meet the requirements of Buy America.
- While some provided percentages of domestic steel/iron content, we are skeptical of those percentages based upon lack of requested confirmation and/or supporting information, statements made by them in phone conversations and email, and their ability to certify this since tracking of this information is outside of ordinary business practice for the companies.

- We conducted research for Buy America compliance with suppliers of building components and have found that compliance is questionable for other related building components for many of the same reasons as elevators.
- After further review, compliance with Buy America is not possible for the elevator components or other related building components.
- Redesign of the Letdown Structure does not increase public safety and is not in the best interest of the local public due to increased cost and project delay.
- The current pandemic has resulted in a strain on City of Bettendorf finances and any additional costs will have magnified impacts on the funding of necessary city services.

Other Related Building Components:

After our initial waiver request, we conducted a review of whether other materials and components required to construct the Letdown Structure meet Buy America requirements, because without those components there is no structure and therefore no operational elevator. For many materials and components, we were able to find at least one manufacturer that could likely meet the requirements. However, there are some components, such as mechanical air handling equipment, for which we have not found a manufacturer that can meet Buy America requirements.

Like the elevators, we contacted multiple manufacturers of mechanical HVAC equipment, and have received varying and limited response thus far, depending upon the manufacturer. Like elevator manufacturers, it appears the FHWA requirements are outside of their “normal business” – the majority, if not all, of their business contract work does not include contract requirements to verify origin of source of materials and they do not have that information compiled and at hand. From Craig Sorensen at Trane on June 24, 2020:

“Just a follow-up, our factory is reaching out to our steel providers for the products specified on this project. We need our steel suppliers to certify where they get the steel that they sell to us. Sometimes the suppliers are responsive and sometimes not, but the process has started.” No further information has been received from Trane concerning this request.

Your consideration of the Iowa DOT’s revised waiver request for the full Letdown Structure (all components above ground) as the result of our findings summarized in our responses in attached Exhibit A1 and Exhibit F1 is greatly appreciated.

If you have any questions or concerns, please contact Danielle Alvarez, I-74 Project Manager, Iowa DOT District 6 at 563-823-4373.

Sincerely,

James. R. Schnoebelen, P. E.

District 6 Engineer, Iowa DOT

cc: Micah Loesch, Andy Wilson, FHWA Danielle Alvarez, Iowa DOT

Brent Morlok, Bettendorf City Engineer George Ryan, Wood, plc

Exhibit A-1 – Response to FHWA Questions Pertaining to Waiver Request Letter dated 03-20-2020

1. Regarding the KONE Monospace elevators, Exhibit E explains that steel components in the elevator are manufactured in the United States (34%), Austria (6%), China (47%), and Mexico (13%).

a. For the domestically manufactured components (34%), can you confirm that the original source of steel or iron is also domestic and that all intermediate manufacturing steps occur domestically?

RESPONSE: After additional follow-up, a copy of which is attached for reference, KONE has indicated in their latest e-mail correspondence with us:

- The 34% spoken of “(from KONE’s Country of Origin document) is manufactured domestically, but the SOURCE OF STEEL CANNOT BE GUARANTEED THAT IT IS FROM THE UNITED STATES.”*
- Kone replied “KONE would not be providing certification that it is US Steel because, quite honestly, it is not relevant to our normal business operations.”*
- Kone replied “Additionally, KONE’s elevator is a “global” product which is sourced and manufactured (globally) and the sourcing could change at a moment’s notice based on a whole variety of factors that we have no control over.”*

b. For the components manufactured internationally (66%), could a Buy America compliant component be used in place of the component that does not comply with Buy America?

RESPONSE: Based on the latest correspondence above from KONE, no.

c. For the components manufactured internationally (66%), what steps were taken by KONE or Bettendorf to identify U.S. manufacturers for the internationally manufactured components? What U.S. manufacturers were contacted? What did the contacts consist in?

RESPONSE: Prior to submitting the waiver request, Shive-Hattery asked KONE to review the potential for assembling non-standard elevators that would have a greater domestic

steel/iron content to meet Buy America requirements. The result was the Design Alternative 2 “Modified SH Design” listed in Exhibit G of the waiver request letter March 20, 2020. The alternative elevator was reported by KONE, at the time, as having a greater percentage of steel and/or iron in its components; however, the anticipated percentage of steel/iron still fell short of the requirements for Buy America. And we have since learned that, as mentioned previously under paragraph 1.a., KONE cannot guarantee or certify domestic content. We should note also this option is very unattractive to the City of Bettendorf because:

- The elevator would not meet project program requirements in terms of size and capacity.*
- The architectural and engineering design of the Letdown Structure would need significant revisions. There would also be significant costs to the city for redesign.*
- The projected construction cost of the project with this elevator would be 35% higher than if their standard elevator were used. A more detailed discussion regarding this point occurs later in this letter.*

Other manufactures contacted are listed in Exhibit F-1, which is attached. Please note this exhibit has been updated from the previous Exhibit F to include only elevator contactors who responded to our inquiry. Elevator contractors are those companies that manufacture, procure, and install the necessary parts and components to produce a fully functional elevator. Some companies previously identified, while being a manufacturer of elevator components, do not manufacture all of the components required for a complete elevator nor do they install them.

d. For the components manufactured internationally (66%), if U.S. manufacturers do not exist, what additional efforts could be undertaken by KONE or Bettendorf to maximize domestic content in the elevators? For example, at least for larger components, has KONE considered acquiring steel and iron domestically and transporting the domestic source materials to Austria, China, or Mexico for use in the manufacturing process? Why or why not? If this has been considered: what steps were taken and what was the result?

RESPONSE: This was not considered:

- As with any building project, we anticipate KONE or any other elevator contractor will be a subcontractor to a general contractor. To either a general contractor or subcontractor, the FHWA requirements are outside of their “normal business” – the majority, if not all, of their business contract work does not include contract requirements to verify origin source of materials.*
- Even if this were possible, because the purchasing and transporting of domestic source materials to potentially multiple component manufacturers for fabrication of*

componentry is outside standard practice for construction operations for building general contractors and subcontractors, they lack the means to verify compliance.

- *Prior to production, the sources and/or origin of many for the necessary parts and components for the elevator(s) on a given project may not be entirely known. While KONE does manufacture some of the components of an elevator, they are an elevator contractor that also buys non-proprietary components from other sources/sub-manufacturers. We expect that the same is true for any elevator contractor. Based on correspondence, the complexity of international coordination, process steps, legal issues, verification, and oversight required will be beyond their willingness to do so.*

2. Regarding the Hollister-Whitney elevators (manufactured in Quincy, Illinois) and the Canton elevators (manufactured in Canton, Ohio), Exhibit F indicates that Hollister-Whitney can manufacture the elevator using “100% domestic steel” except for the guide rails and that Canton can also “do all domestic steel” except for the guide rails. The waiver request does not provide a reason why Bettendorf would not consider the elevators made by Hollister-Whitney or Canton, except for mentioning that these companies do not perform installation or provide guide rails.

a. Why was the domestic elevator from Hollister-Whitney not considered?

b. Why was the domestic elevator from Canton not considered?

RESPONSE: We re-contacted Hollister Whitney and attempted to re-contact Canton for additional information. Hollister Whitney responded while Canton did not. The assertion made in our original waiver request is incorrect; it was later discovered that although Hollister Whitney does use 100% US steel in the components, they do not manufacture 100% of the total elevator components.

We discovered that Hollister Whitney is a components manufacturer, not an elevator contractor. As such, they do not build and install elevators, but supply components to elevator contractors such as KONE, Schindler, ThyssenKrupp, Otis, and Schumacher. These elevator contractors, and others like them, will assemble elevators using their own proprietary components and other components from Hollister Whitney and other suppliers for any given project.

Additionally, based on our follow-up with Hollister Whitney’s representative, we understand that while the components they manufacture are domestically produced, Hollister Whitney does not manufacture all the necessary components for a complete elevator. An elevator contractor purchasing components from them will still need to acquire components from other sources to be able to assemble functioning elevators for the project. As such, there is no way of knowing ahead of time what the domestic steel/iron content of the elevators might be.

3. The waiver request explains that the “main component ... not produced domestically are the elevator guide rails.” Could it be possible to maximize domestic content in guide rails produced in other countries? For example, could steel and iron acquired in the United States be transported internationally for use in the manufacturing process? Why or why not? If this has been considered: what steps were taken and what was the result?

RESPONSE: The elevator guide rails are typically provided and installed by the elevator contractor. The same issues outlined under item 1.d. would be encountered in the purchasing and transporting of domestic source materials to a manufacturer located in a different country for fabrication of the guide rails.

Iowa DOT, the City of Bettendorf, and Contractors either do not or would not consider this approach appropriate because there are much less complicated and/or risky alternatives.

4. It is unclear how the cost estimate in the request letter corresponds to Exhibit D. It is also unclear the extent to which the components addressed in Exhibit E correspond to the cost estimate sheet (Exhibit D).

a. Please clarify the relationship between the amounts asserted in the request letter (\$427,500 for elevators, \$2.42M for contract) and in Exhibit D (\$362,883 for elevators; \$1.941M for contract).

RESPONSE: The opinion of probable elevators construction costs of \$362,883 and the opinion of probable total construction cost of \$1,941,000 listed in Exhibit D were developed in 2017. The costs of \$427,500 and \$2,242,852.68, respectively, are the same costs with construction cost escalation added for construction starting in 2020.

b. Given some of the assertions about guide rails, it would be helpful to clarify why the cost estimate sheet (Exhibit D) does not include guide rails. Are those within another line item (e.g., “structural steel and elevator support”)? That will help clarify the proportion of overall cost attributable to guide rails (which the request states are not available from domestic manufacturers).

RESPONSE: The elevator guide rails are typically provided and installed by the elevator contractor with the rest of components of the elevator. The cost of the guiderails is included in Exhibit D with line item code 2599-9999005, referred to under the bid item description as “Elevator”. Because this bid item is intended as a lump sum cost for labor and materials provided by the elevator contractor to the Prime/General Contractor, individual components of the elevator are not broken out. Furthermore, the elevator contractor will be responsible for selection of the elevator components/manufacturers in compliance with the specifications.

c. Please clarify the cost of individual components listed in Exhibit E (or indicate if they directly correspond to a line in Exhibit D).

RESPONSE: The individual components listed in Exhibit E are included in Exhibit D as line item code 2599-9999005, under the bid item description "Elevator".

5. Regarding the Buy America-compliant rack and pinion elevator design discussed in the waiver request:

a. Bettendorf maintains this option is more expensive. Exhibit F indicates that, if manufactured by USA Hoist, each rack and pinion elevator would cost around \$1 million and thus cost \$2 million total for two elevators (compared to the estimate of \$427,500 for two elevators from KONE). Did Bettendorf obtain cost information from any other companies for rack and pinion elevators?

RESPONSE: Four companies were contacted; only one responded – USA Hoist. There were several more attempts to reach the other three companies, however, no additional responses were received.

Only the anticipated costs of \$2 million for the rack and pinion elevators were mentioned because we have no developed design for even a minimal pier or other structural elements to support the walkway from the bridge multi-use walkway to the rack and pinion elevators, lateral support for the elevators, necessary elements, systems, and components needed for a complete revised Letdown Structure to use as a basis to develop probable construction costs for the entire building/structure. These elements will add additional costs to the \$2 million for the rack and pinion elevators. Also, the yet-to-be designed building enclosing these elevators, though not required for rack and pinion elevators, is desired based on public expectations due to renderings presented at public hearings. Also, the City of Bettendorf prefers the building as it was designed to accompany the surrounding park and recreational trail design. The building enclosing the rack and pinion elevators will add significantly to the overall cost. The rack and pinion design is used primarily as a freight elevator, which is not conducive to the desired characteristics of the project's elevator function of passenger transport.

As a means for direct comparison, the stated cost of \$427,500 for the KONE elevators, likewise, does not include the cost of the building housing the elevators and walkway from the bridge multi-use walkway to the elevators.

b. Bettendorf also explains that this option would not meet the needs of the project. Bettendorf explains that the rack and pinion elevator would not fit public perception of what is needed for the project and the aesthetic qualities desired because it is a larger freight elevator that would be noisier and less smooth for pedestrians. Are these project needs recorded in NEPA documents for the project or in other public records? If so, in what documents?

RESPONSE: The NEPA document does not contain discussion of the use of an elevator for the project. The NEPA documents approved in Preliminary Engineering (Phase I) showed a ramp structure from the proposed urban park to the multi-use path located on the

proposed I-74 EB viaduct. During the Final Design Phase (late 2010) the Benesch Design Team met with the City of Bettendorf to explore options to perform similar function as the ramp structure presented in the approved Phase I NEPA documents. The Letdown Structure with elevators was the City of Bettendorf's preferred option; this option was presented to the Advisory Committee which took no issue with this option. Shive-Hattery developed this option further and prepared preliminary plans and images to further develop costs. These images of the Letdown Structure were shared with the public during the April 2014 Public Meetings which were held to inform the public of the change in staging for constructing the I-74 corridor as result of the DOT's decision to move forward with Concept 3B; and later shared again at the July 2017 Public Meetings. Additionally, the letdown structure and elevators, included in the aesthetic design, which has been presented to the public on multiple occasions. Since April 2014, Iowa DOT staff has provided this presentation to various organizations (city councils, Kiwanis, Rotary, Bi-State MPO, APWA...etc) well over 100 times.

6. The waiver request also discusses traction elevators using domestic components except guide rails and concludes they are not viable because of higher cost, a wider hoist way, larger elevator controllers, greater overhead clearance, larger building footprint, and uncertainty of obtaining maintenance for these components. Please elaborate on these findings. For example:

a. What components are foreign and what are domestic under the alternate designs?

RESPONSE: We currently do not have this information, nor are we qualified to select the necessary components, nor their supply source, for the elevators. Final selection of those components is the responsibility of the elevator contractor.

b. What is the cost difference between the options?

RESPONSE: The difference between our opinion of probable total construction cost for the Letdown Structure utilizing standard KONE elevators and that for the Letdown Structure utilizing the Modified SH Design KONE elevators is \$798,099.91 in year 2020 dollars. However, comparison of anticipated total construction costs for the Letdown Structure utilizing either of these elevator options and a Letdown Structure utilizing rack and pinion elevators is not possible due to the extensive redesign of the Letdown Structure that would be required, which has not been commissioned nor completed.

As mentioned earlier in this response letter, the quoted anticipated cost for the rack and pinion elevators alone is \$2 million. For a direct comparison of the cost of the elevators alone, the anticipated cost for (2) standard KONE elevators is \$427,500; that for the (2) non-standard elevators that would be utilized in the Modified SH Design is \$787,500.

c. How do the alternate options meet (or fail to meet) the technical necessities of the project?

RESPONSE: All the options meet the technical aspect of an elevator vertically transferring the public from the bridge to ground level. The Buy America criteria is an administrative

requirement and is unrelated to technical aspects of how the elevator functions. Dependent on component origin from multiple suppliers the elevator manufacturers could not guarantee a percentage of American steel and therefore the administrative aspect of the Buy America requirement cannot be achieved. The original assumption that only guide rails could not meet "Buy America" was determined to not be the case based on further investigation.

d. What is the problem with a wider hoist way, larger elevator controllers, greater overhead clearance, and larger building footprint? Is higher cost the primary concern?

RESPONSE: Both higher construction cost and significant redesign (and therefore additional design and engineering fees, and an extended project timeline) are concerns. In addition, the current pandemic has resulted in a strain on City of Bettendorf finances, and any additional costs will have magnified impacts on the funding of necessary city services. A Memorandum of Understanding (MOU) was presented to the council that outlines costs and has been included in current Capital Improvement Plans, so an increase in costs would therefore need to be revised and passed before council again.

e. Why is future maintenance less certain under this option?

RESPONSE: Future maintenance could be negatively impacted due to customization and varying sources of componentry from a typical installation.

f. What does "not viable" mean? Would the city or IDOT suspend the I-74 bridge project or contract 255? Would it be delayed? Would a re-design occur?

RESPONSE: The statement "not viable" means that currently, we know of no manufacturer standard, traction type elevator that will meet the requirements of Buy America. We can see a potential for delaying the 255 project but not the I-74 bridge project. As stated in the waiver request letter dated March 20, 2020, the letdown structure provides additional safety for pedestrians, bicyclists, and improves ADA accessibility for those with physical disabilities trying to access the recreational river trail network in Bettendorf from the I-74 River Bridge. Inclusion of elevators other than the original Kone Monospace elevator likely may require redesign of the letdown structure. Potential implications of redesign are covered under 6d.