

REQUEST FOR QUOTATION

Vendor Name and No.: Buyer: John Santiago/212-435-4613/john.santiago@panynj.gov	Collective/Bid # Bid Due Date 46521 07/22/2016 Bids must be received no later than 11:00 AM on the above Bid Due Date. Deliver Goods/Services To: PATH Consolidated Maintenance Facility 120 Academy Street, Jersey City, NJ 07302
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Quantity	Description	Unit Price	Total
	F21 FASTENER FOR 100# RAIL IN ACCORDANCE WITH THE ATTACHED PATH SPECIFICATION FOR DIRECT FIXATION RAIL FASTENERS Quote fully-delivered prices to above PATH Consolidated Maintenance Facility address. The attached Specifications shall be made part of this contract. Return completed RFQ form and Specifications with your bid. Any exceptions to the Specifications will cause your bid to be deemed non-responsive. A price preference of 10 % is available for NY/NJ Minority and Women Business Enterprises (M/WBE) or 5% for NY/NJ Small Business Enterprises (SBE) certified by the Port Authority (PA) by the day before bid opening for awards not exceeding \$1,000,000. My firm was certified as a _____ on _____.		
	PLEASE QUOTE FULLY DELIVERED PRICES	PAYMENT TERMS	Total Delivered Price

This Quotation is subject to the terms and conditions set forth on the back page hereof. Bidder is advised to read these before signing.

We have read the instructions and, if favored with an order, we agree to furnish the items enumerated herein at the prices and under the conditions indicated.

Signed _____
 Firm Name _____
 Telephone number _____ Date _____
 Fax Number _____
 Federal Taxpayer ID _____

**Bidder
 Must
 Sign
 In
 Two
 Places**

NOTICE TO BIDDERS: Unless the following term of assurance that the above offer is irrevocable is signed, the offer submitted herein shall not be deemed to be complete.

The foregoing offer shall be irrevocable for 90 days after the date on which The PORT AUTHORITY TRANS-HUDSON CORPORATION opens this proposal.

Signed _____ Date _____
 Firm Name _____

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Quantity	Description	Unit Price	Total
	<p>This is a Formal Bid Invitation</p> <p>Bid Submission Instructions:</p> <p>Sealed Bids must be submitted to and received at the following address by the due date and time listed on this Request for Quotation, where they will be publicly opened and read:</p> <p>The Port Authority of NY & NJ Attn: Bid Custodian Procurement Department 4 World Trade Center 150 Greenwich Street, 21st Floor New York, NY 10007</p> <p>Clearly mark the outside of your envelope/package with "BID ENCLOSED", the Collective/Bid Number and Due Date, and your complete company name and address.</p> <p>Bids are only accepted Monday through Friday, excluding Port Authority holidays, between the hours of 8 A.M. & 5 P.M., via regular mail, express delivery service or hand delivery.</p> <p>Express carrier deliveries by commercial vehicles can be made via vendors approved by Silverstein Properties, the 4 World Trade Center (4WTC) Property Manager, through the Vehicle Security Center (VSC). Presently, UPS is the only delivery vendor with approved recurring delivery times.</p>		
	<div style="border: 1px solid black; padding: 5px; display: inline-block;"> PAYMENT TERMS </div>		
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	<p>There is extensive security at the World Trade Center Site. Individuals must present a valid government-issued photo ID to enter 4 WTC. Individuals without packages or carrying small packages or boxes that can be conveyed by hand or on a hand truck may enter through the lobby. All envelopes, packages and boxes may be subject to additional security screening.</p> <p>There is no parking available at 4 WTC/150 Greenwich Street, and parking in the surrounding area is extremely limited. The Port Authority assumes no responsibility for delays, including, but not limited to delays caused by any delivery service, building access procedure or security requirement.</p> <p>A valid government-issued photo ID is required to gain access into the building to attend the bid opening or hand deliver a bid. Bids that are not received by the bid custodian by the scheduled bid opening date will be considered late.</p> <p>If any Addenda are posted or sent as part of this Bid, the Bidder shall complete, sign and include with its Bid the addenda form(s). In the event any Bidder fails to conform to these instructions, its Bid will nevertheless be construed as though the Addenda had been acknowledged. If the Bidder downloaded this solicitation document, it is the responsibility of the Bidder to periodically check the Port Authority website at http://www.panynj.gov/business-opportunities/bid-proposaladvertisements.html and download any addenda that might have been issued in connection with this solicitation.</p>		
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46521	07/22/2016				

Quantity	Description	Unit Price	Total
1,300 EA	F21 Fastener for 100# Rail per attached PATH Specification for Direct Fixation Rail Fasteners (6/6/16). Include all hardware (excluding concrete inserts and anchor bolts) Plant manufactured: _____ Lead time after receipt of order: _____ Days		
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TERMS AND CONDITIONS

1. The Port Authority (PA) reserves the right to request information relating to seller's responsibility, experience and capability to perform the work.
2. Unless otherwise provided, complete shipment of all items must be in one delivery FOB delivery point. Payment will not be made on partial deliveries unless authorized in advance by the party to be charged and the discount, if any, will be taken on the total order.
3. PA payment terms are net 30 days. Cash discounts for prompt payment of invoices may be taken but will not be considered in determining award, except in the case of tie bids.
4. Separate unit and total FOB delivered prices must be shown.
5. Sales to the PA and to PATH are currently exempt from New York and New Jersey State and local taxes and generally from federal taxation. The seller certifies that there are no federal, state, municipal or any other taxes included in the prices shown hereon.
6. The PA shall have the absolute right to reject any or all proposals or to accept any proposal in whole or part and to waive defects in proposals.
7. Unless the phrase "no substitute" is indicated, bidder may offer alternate manufacturer / brands, which shall be subject to Port Authority approval. Please indicate details of product being offered with bid.
8. Acceptance of seller's offer will be only by Purchase Order Form signed by the PA. No change shall be made in the agreement except in writing.
9. If the seller fails to perform in accordance with the terms of this purchase order, the PA may obtain the goods or services from another contractor and charge the seller the difference in price, if any, a reletting cost of \$100, plus any other damages to the PA.
10. Upon request, sellers are encouraged to extend the terms and conditions of any terms agreement with the PA to other government and quasi-government entities by separate agreement.
11. By signing this quotation or bid, the seller certifies to all statements on Form PA 3764A regarding non-collusive bidding; compliance with the PA Code of Ethics; and the existence of investigations, indictments, convictions, suspensions, terminations, debarments and other stated occurrences to assist the PA in determining whether there are integrity issues which would prevent award of the contract to the seller. The PA has adopted a policy set forth in full on PA 3764A, that it will honor a determination by an agency of the State of New York or New Jersey that a bidder is not eligible to bid on or be awarded public contracts because the bidder has been determined to have engaged in illegal or dishonest conduct or to have violated prevailing wage legislation. The Terms and Conditions of PA 3764A apply to this order. A copy can be obtained by calling (212) 435-4600 or at <http://www.panynj.gov/business-opportunities/become-vendor.html>
12. The vendor may subcontract the services or use a supplier for the furnishing of materials required hereunder to such persons or entities as the Manager, Purchasing Services may from time to time expressly approve in writing. All further subcontracting shall also be subject to such approval.
13. The successful bidder (vendor) shall not issue nor permit to be issued any press release, advertisement, or literature of any kind, which refers to the Port Authority or that goods will be, are being or have been provided to it and/or that services will be, are being or have been performed for it in connection with this Agreement, unless the vendor first obtains the written approval of the Port Authority. Such approval may be withheld if for any reason the Port Authority believes that the publication of such information would be harmful to the public interest or is in any way undesirable.
14. Neither the Commissioners of the Port Authority, nor Directors of PATH, nor any of them, nor any officer, agent or employee thereof, shall be charged personally by the Contractor with any liability, or held personally liable to the Contractor under any term or provision of this Agreement, or because of its execution or attempted execution, or because of any breach, or attempted or alleged breach, thereof.

**PORT AUTHORITY TRANS-HUDSON CORPORATION
SPECIFICATION FOR DIRECT FIXATION
RAIL FASTENERS**

June 6, 2016

PART 1 – GENERAL

1.01. DESCRIPTION

This section includes specifications for the manufacture and supply of direct fixation fastener assemblies including fastener bodies, rail clips (Pandrol “e” clip), and all hardware required for full assembly, excluding the concrete inserts and the anchor bolts

1.02. SCOPE

This section applies to direct fixation assemblies that fasten rail directly to concrete decks using anchor bolts as per Model F21 manufactured by L. B. Foster or approved equal

- A. The Manufacturer of the tie plates, whether it be the bidder or not, shall have provided tie plates of the same type and design as those required by this purchase order to at least three (3) Railroads and Transit Agencies operating in the United States of America within the last five (5) years.
- B. The Bidder shall provide with its Bid the plate Manufacturer’s business address, and sufficient information to verify that the requirement in 1.01.A has been met, including but not limited to the names of the three (3) Railroads and Transit Agencies, dates and quantities of the orders.
- C. Hereafter, the term “Bidder”, “Manufacturer”, and “Contractor” shall be interchangeable.

1.03. PREQUALIFICATION

- A. Any direct fixation fastener assembly that has previously been tested and qualified in accordance with this specification or a specification with similar tests and test parameters and has a minimum 2-year full service in a rail operation equal to or more severe than the service environment for this procurement may receive prequalification certification.
- B. The vendor shall submit the following to the Engineer.
 - a. Certification that the fastener design, manufacturing, and materials are identical to those previously tested.
 - b. The prior specification(s) under which the fastener design previously qualified.

- c. The complete independent laboratory's report of the fastener tests, including test data and the laboratory's certification of pass/fail for every requirement.
- C. The Engineer will issue one of the following notices as a result of consideration of the submittals.
 - 1. Prequalification approval. The Engineer approves the fastener as pre-qualified, waiving the qualification testing requirements.
 - 2. Prequalification certification denied. The Engineer denies the request for prequalification certification. The fastener shall be tested to, and successfully pass, these specifications.
- D. All fasteners shall be subject to the production testing and quality control specifications herein.

1.05. SUBMITTALS

A.

Submit design drawings, material specifications, laboratory test results, and fabrication procedures in sufficient detail to demonstrate conformance or equivalence with the Contract requirements herein.

1. Qualification Test Results.

Submit the following for review and approval prior to commencing fastener manufacture.

- 1. Certification of the elastomer samples used in qualification testing as detailed herein.
 - 2. Elastomer qualification test results for each test specified herein.
 - 3. Anchorage assemblies qualification test results for each test specified herein.
 - 4. Fastener body metal qualification test results for each test specified herein.
 - 5. Fastener assembly's qualification test results for each test specified herein.
- 2. Submit qualification test results within 14 days after completion of testing.
Submit elastomer certification with the elastomer qualification test results.
 - 3. Submit sample fasteners for DF and Special Track work of each type and

anchorage assemblies, complete with associated hardware and shims five days prior to commencing qualification testing. Submit direct fixation fasteners and anchorage assemblies, and shims in the quantities indicated herein.

B.

Direct Fixation Fastener Manufacturing Tolerances

DIMENSION	TOLERANCE
Length and width	± 1/16 inch.
Height	± 1/32 inch.
Squareness	All angles shall be within ± 0.5degree.
Centering of holes	± 1/32 inch.
Diameter of holes	± 1/32 inch.
Durometer Shore A	± 5.
Serration depth	± 1/32 inch.
Serration spacing	± 1/32 inch.
Width between shoulders at rail base	± 1/32 inch.
Rail seat area flatness measured from a straight edge placed across the rail seat area	Less than 0.050 inch

Table -1

4. Approval of the fastener design will be dependent upon successful completion of the qualification testing program specified herein.
5. All fastener testing and inspection shall be performed by a qualified, independent testing laboratory approved by the Engineer. The selected laboratory shall use the proper equipment and qualified testing personnel for the testing and inspection described in these Specifications. Fastener testing and inspection equipment and personnel shall be subject to approval by the Engineer. The Engineer, or an independent witness designated by the Engineer, will monitor the operations at the testing laboratory to ensure that the inspections and tests are being performed in accordance with approved procedures and in compliance with these Specifications.

PART 2 – PRODUCTS

2.01. PRODUCTS AND MATERIALS

A. General

- All fastener components shall comply with the minimum standards set forth herein.
- All surfaces of materials shall be free of gaps, burrs, sharp edges, wrinkles, waves, blemishes, or other unsightly or unsafe defects that potentially detract from the functionality, durability and neat appearance of the finished product.
- The same brand, type and style of fasteners shall be used throughout.

B. *Fastener Dimensions*

The dimension's specification must be reviewed prior to manufacture.

The criteria for specification dimensions are:

- The dimensions are stated as a maximum envelope reflecting policies and practices of a particular agency. Critical clearances, maintenance equipment constraints, reduced fastener exposure to derailment, and plinth dimensional constraints are among reasons for fastener envelope dimensional constraint.
- When completely assembled with clips and anchors all parts of the fastener above the concrete track bed shall stay within a design envelope 14-1/2 inches long minimum and 16-inches long maximum, measured horizontally perpendicular to the rail; and 7-inches wide minimum and 8-inches wide maximum, measured horizontally parallel to the rail.
- The height of the fastener body in the installed position measured vertically from the base of the fastener body to the base of rail at the rail centerline and excluding shims shall be no greater than 2 inches.
- No portion of the completely assembled fastener, including rail clips and anchor bolts, shall extend any higher than 4 inches measured vertically from the base of rail at the rail centerline.
- The normal-to-rail offset from centerline of anchor bolt to centerline of fastener shall be 5-1/4 inches. The parallel-to-rail offset from centerline of anchor bolt to

centerline of fastener shall be 1-3/4 inches. In addition, the centerline of anchor bolt shall be no closer than 1-1/2 inches from any side.

- When installed, no part of the anchorage insert shall extend into the track concrete deeper than 5-1/2 inches from the concrete track bed surface.
- The diameter of the fastener body and anchorage assembly component holes through which the anchor bolt passes shall be 1"- inch.
- With the rail clips removed from the otherwise assembled fastener, no portion of the fastener shall extend any higher than 1-1/2 inches above the base of rail, as measured vertically from the base of rail at the rail centerline.

The following subparagraphs A through Q are the fastener design criteria.

- Specific Fastener Requirements
- The fasteners shall be for use with #1001b continuously welded running rail, jointed rail, within special track work and insulated rail joints.
- The fastener shall consist of as few components as economically and technically feasible for ease of assembly, disassembly and maintenance in the field.
- When installed in track it shall not be necessary to raise the rail more than 1-1/2 inches to remove or install the fastener.
- Welding shall not be used in the fabrication or assembly of the fastener nor any fastener component.
- Except for fasteners used under switch points and stock rails, there shall be no specific field or gauge side to the fastener.
- Longitudinal restraint properties of the fastener shall be identical in both longitudinal directions. Lateral restraint properties of the fastener shall be identical in both lateral directions.
- Rail fastener shall provide a means of adjusting the rail laterally within a range of plus or minus 1 inch in increments of 1/8-inch or less. The lateral fastener adjustment shall be integral with the fastener anchorage assembly.
- Lateral or longitudinal stability of the rail shall not be reduced in any

adjustment position. All requirements of these specifications shall be satisfied for all increments of adjustment of the fastener. Friction alone shall not be used as a means of adjustment. Lateral adjustment shall be by a method that does not require removal, substitution or addition of any fastener components.

- Fastener Body Requirements
- The rail fastener body shall consist of an elastomeric pad bonded between metal top and base elements. Bonding shall use the vulcanization process.
- The metal top and base elements shall be designed with sufficient material strength, thickness and shape to withstand the loading requirements of the specifications and the transit system.
- The metal top element shall have a flat rail-bearing surface in the center of the fastener that supports the rail directly without intermediate pads or shims beneath the rail. The rail seat area shall be flat to provide a uniform bearing surface within the tolerances of Table 1.
- Shoulders which position and secure the rail against lateral movement, both with and without the rail clips installed, shall be integral with the metal top element along the entire rail bearing surface and shall be set parallel on both sides of the rail base. Width between shoulders at the rail base shall be 5-1/4 inches.
- The bottom of the fastener shall be 1:40 canted
- The bottom of the fastener shall be flat and without any downward projections.
- The fastener's metal top and base elements shall have full bearing on the elastomer pad in all positions of lateral fastener adjustment.
- The fastener design shall be such that the elastomer is fully bonded to all parts except for the detachable components.
- Bonding of any part of the fastener to the rail or track concrete is prohibited
- All metal surfaces of the fastener body's top and bottom elements that are not covered with elastomer shall be coated with the adhesive used to form the bond of elastomer to metal.
- The bottom of the base element shall be free of elastomer except that minimal flashing of bonded elastomer, not exceeding 1/32 inch in thickness, will be acceptable providing it does not interfere with retention of proper anchor bolt tension nor otherwise interfere with the performance of the fastener.

- The elastomer pad shall not be thinner than 5/8 inch.
- No mechanical metal distortion during the molding process is allowed.
- Fastener Anchorage Assembly Requirements
- DF fastener bodies shall be secured to the track concrete with a minimum of two anchorage assemblies, with an equal number on each side of the rail. Each anchorage assembly shall consist of an anchor bolt, anchorage insert, lock washers, washers and other components required for adjustment of the fastener.
- The anchorage assembly shall anchor the metal base element to the track concrete, with a 1-inch diameter anchor bolt.
- The anchorage assembly shall not permit more than 1/8-inch total lateral movement of the fastener relative to the concrete track bed when the anchor bolts are finger tight.

C. Electrical Insulation Requirements

- The fastener design shall provide a 3/4-inch minimum electrical leakage distance under all load and adjustment conditions. The electrical leakage distance shall be measured from any grounded portion of the fastener to any charged portion of the fastener by the most direct path that does not pass through insulating material. The leakage distance path shall exclude recesses and other geometric configurations that are susceptible to collecting and holding moisture, dust, and other electrically conductive materials.
- Recesses or notches which penetrate the metal top element and expose the elastomer shall be free draining at all values of track superelevation from 0 to 8-1/4 inches if draining in a direction perpendicular to the rail and at all values of track profile grade from 0 to 4 percent if draining in a direction parallel to the rail.
- Fastener surfaces shall be resistant to conductive oil and dirt buildup and facilitate effective periodic cleaning by track maintenance equipment and personnel.

D. Vibration Isolation Requirements

- The rail fastener shall be designed to attenuate vibration forces transmitted to the concrete track bed by vehicle operation on the rail.
- The elastomer used to attenuate vibration forces shall be fully bonded to both the metal top element and the metal base element. Separate resilient pads placed between rail base and the fastener rail seat is prohibited. The fastener static and dynamic stiffness requirements shall be met without supplemental resilient pads.

E. Metal Components

- The metal top and base elements shall each be one-piece rolled, forged or cast steel or ductile iron.
- The rail seat and clip mating surfaces of the top element shall be smooth, free from injurious warp and other imperfections in surface and projecting fins of metal caused during forming.
- Ductile iron castings shall be minimally Grade 65-45-12 in accordance with ASTM A536. The chemical composition shall meet the acceptable level per SAE J434. The Brinell hardness in accordance with ASTM E10 shall be within the limits set by SAE J434. The microstructure shall be within the limits set by SAE J434. The fracture energy at 21.1 degrees C in accordance with ASTM E23 shall be equal to or greater than 3 foot-pounds.
- Rolled steel plate shall be minimally ASTM A36/A36M steel. The fracture energy at 21.1 degrees C in accordance with ASTM E23 shall be greater than 15 foot-pounds.
- Direct fixation fasteners shall have provisions for installing two resilient rail clips, one on each side of each rail, for securing the running rail to the metal top element of the fastener body. The clip holder shall be a permanent and integral part of the metal top element.
- The rail clips shall be held by a clip holder that does not allow lateral rail adjustment on the metal top element.

F. Elastomer

- The elastomer shall be natural rubber based as defined in ASTM D1566 or polychloroprene (neoprene). A blend shall have more than 50 percent of natural rubber or neoprene. The manufacturer shall formulate the elastomer based on successful long-term case histories in service conditions similar to those at the Engineer.
- Except as required to meet the requirements for identification markings, exposed elastomer surfaces of the finished fastener shall be smooth with a finish and appearance equal to or better than an F-3 designation in accordance with RMA Rubbers Handbook.

G. Shims

- Polyethylene Pads
 - Polyethylene shims shall conform to ASTM D1248, Type III, Class C, Grade W8 for high-density polyethylene plastic with a durometer hardness of 60 to 65D. The hardness shall be stable between + 140 degrees F and – 40 degrees F.
 - The nominal thickness of the pad shall be 3/8 inch. The Contractor may vary pad thickness from a minimum of 1/8 inch to a maximum of 1/2 inch in 1/16inch increments. Test shims shall be 3/8 inch thick.
 - The shims shall provide a ½ inch projection beyond the sides of the fastener perpendicular to the rail and a one-inch projection beyond the sides of the fastener parallel to the rail. Anchor bolt holes in the shim shall be located at each bolt location. The hole shall be one inch in diameter.

H. Metal Protective Coatings

- The following coating shall be used for metal components when specified.
 - Hot dip galvanizing in accordance with ASTM A153.
 - Mechanical zinc galvanizing in accordance with ASTM B695, Class 55-110.

I. Rail Fasteners

- The rail fastener system includes rail clips and rail clip fasteners
- The rail clips shall be designed to be easily installed and removed by one person with standard, readily available hand tools, but not able to vibrate loose under load. Clip installation and removal shall not damage the fastener body, clip holder, clip, or rail. The rail clip shall not notch nor otherwise damage the rail base during installation or removal.
- The rail clips shall be held to the metal top direct fixation element by shoulder aligned with the rail base.
- Neither the rail clip nor the clip shoulder shall make point contact with the rail. The rail clip contact area with the rail shall not be shorter than one inch measured along the rail and not smaller than 5/32 square inch in area.

- The clip action in track shall be such that longitudinal rail slippage can occur without denting, carving, or scoring the rail flange and without permanently stressing, bending, twisting, or otherwise damaging the clip, or clip shoulders.
- The fastener shall permit removal of the rail clips so that the rail may be removed by lifting it vertically until it is completely free of the fastener without disturbing the horizontal and vertical alignment of the fastener.
- The modal frequencies of the spring clip and the metal top element shall be different by such a factor that the spring clip will not vibrate loose from the metal top element.
- The rail clip assembly shall not include any elastomeric components.

2.02 TIE PLATE DESIGN

- A. The tie plates shall conform to Direct Fixation Rail Fastener Model F21, manufactured by L.B. Foster or approved equal. subject to permissible variations shown in Table 1 of Section 1.05.B

2.03 QUALITY ASSURANCE

- A. The Manufacturer shall perform all testing required by the specifications at no cost to PATH. PATH reserves the right to perform any of the inspections necessary to ensure that testing requirements are met.
- B. Steel chemical composition analysis shall be made in accordance with Section 6 of the ASTM Designation A 67-00. Material that does not meet the requirements of this Section as shown in Table 1 "Chemical Requirements" will not be accepted.
- C. The Bend Test shall be performed in conformance with Section 7 of the ASTM Designation A 67-00. At the option of the Manufacturer, the "Optional Bend Test" of Section 7.2 will be acceptable as a substitute for the Bend Test described in Section 7.1 of the Standard. For the material to be acceptable, the specimens must withstand the bend test without cracking on the outside of the bent portion.
- D. At its discretion, PATH may choose to inspect any or all of the manufacturing processes necessary to produce the tie plates. The Manufacturer shall afford the PATH inspector all reasonable facilities necessary to satisfy him that the material is being produced and furnished in accordance with these specifications.
- E. The Manufacturer shall provide test results and a written certification stating that the material furnished meets the specifications. The certification shall be the basis

for acceptance that the material purchased and delivered meets the specifications requirements for design, manufacture, and testing.

3.0 MARKING AND DELIVERY

- A. Tie plates shall be furnished with lettering to include the following information: the year of manufacture, the rail section, the name PATH, and the name of the Manufacturer. The height of the lettering shall be 3/8" or 1/2".
- B. Tie plates shall be stacked flat on pallets and securely banded with metallic straps. Each pallet shall contain a maximum of 100 plates. Plates for different rail sections shall not be banded on the same pallet.
- C. Tie plate pallets shall be delivered on flatbed trucks for removal by overhead crane or forklifts.
- D. Damaged materials or material not meeting the requirements of the specifications shall be rejected and returned at the expense of the Bidder/Manufacturer.

END OF SECTION