



REQUEST FOR QUOTATION

<p>Contact person/Telephone Larry Waxman/201-395-3451</p>	<p>Collective# 0000033252 Bid Due Date 05/21/2013 Bids must be received no later than 11:00 AM on the above Bid Due Date.</p> <p>Deliver Goods/Services To: Path Consolidated Maintenance Shop Academy Street Jersey City NJ 07302</p>
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Quantity	Description	Unit Price	Total
	<p>PATH RAIL ITEMS SEE ATTACHED SECTION ENTITLED: DIVISION 5, SECTION C05653, BI-METALLIC COMPOSITE CONTACT RAIL AND END APPROACHED DATED C04/08/02 (9 PAGES) AND DRAWING NUMBER C920.</p> <p>NOTE BID RETURN INSTRUCTIONS.</p> <p>QUOTE FOB DELIVERED PRICING ON ALL ITEMS.</p> <p>NOTE THE UNIT OF MEASURE FOR THE ALUMINUM SPLICE BARS IS "PAIRS".</p> <p>THE BIDDER(S) INDICATE WITH BID RESPONSE THE FOLLOWING:</p> <p>DELIVERY IN DAYS FOR SAMPLES AFTER PATH/AWARD NOTICE: _____.</p> <p>DELIVERY IN DAYS FOR MANUFACTURING OF COMPLETE QUANTITIES AFTER PATH APPROVES SAMPLES: _____</p> <p>SUBMITTALS: SECTION 1.03</p>		
	<p>PLEASE QUOTE FULLY DELIVERED PRICES</p>	<p>PAYMENT TERMS</p>	<p>Total Delivered Price</p>

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 _____



REQUEST FOR QUOTATION

Bid Due Date
05/21/2013

Quantity	Description	Unit Price		Total	
	THE SUCCESSFUL BIDDER (VENDOR) SHALL SUBMIT WITHIN 21 DAYS. PART 2-PRODUCTS. SUBMITTALS. UPON REQUEST AND WITHIN 3 BUSINESS DAYS BIDDERS SHALL SUBMIT FOR PORT AUTHORITY/PATH REVIEW AND APPROVAL NECESSARY CATALOG/SPEC SHEETS/DRAWINGS ON THE FOLLOWING ITEMS SER SECTIONS: 2.01 A, 2.01 D, 2.02 A, 2.06 A AND 2.06 B. ---END---				
	<p style="text-align: center;">PLEASE QUOTE FULLY DELIVERED PRICES</p>	PAYMENT TERMS			
		Total Delivered Price			

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Quantity	Description	Unit Price		Total	
	<p>This is a Formal Bid Invitation Mail Sealed Bids to:</p> <p>The Port Authority of NY & NJ Attn: Bid Custodian Procurement Department 2 Montgomery Street, 3rd Floor Jersey City, NJ 07302</p> <p>by the date and time listed above, where it will be publicly opened and read.</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>If you do not use or have an envelope provided, you must clearly mark the outside envelope/package with 'BID ENCLOSED' and show the company name, address, as well as Bid number and Due date as stated on this bid document.</p> <p>A valid photo id is required to gain access into the building, to attend the bid opening or hand deliver a bid.</p>				
290 EA	39'-0" long Contact Rail				
<p>PLEASE QUOTE FULLY DELIVERED PRICES</p>		<p>PAYMENT TERMS</p>		<p>Total Delivered Price</p>	

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 Firm Name _____



REQUEST FOR QUOTATION

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05/21/2013

Quantity	Description	Unit Price		Total	
	of 84C Section conforming to Specification Section CO5653 "BI-METALLIC COMPOSITE CONTACT RAIL AND END APPROACHES" Dated 04-08-02 and PORT AUTHORITY TRANS-HUDSON CORPORATION Drawing No. C920 dated 09-16-08. in the event of an order: Deliver to: Consolidated Maintenance Facility, 120 Academy Street, Jersey City, New Jersey 07302.				
30 EA	7'-6" Bi-Metallic End Approaches as per above Specification and Drawing.				
290 PAA	Aluminum Splice Bars, 22" long for use with 84C composite rail section as per above Specification and Drawing. QUOTE FOB DELIVERED PRICING ON ALL ITEMS. NOTE BID RETURN INSTRUCTIONS: ----- 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				
		PAYMENT TERMS			
PLEASE QUOTE FULLY DELIVERED PRICES				Total Delivered Price	

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

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Signed _____ Date _____
 Firm Name _____



REQUEST FOR QUOTATION

Bid Due Date
05/21/2013

Quantity	Description	Unit Price		Total
	exceeding \$1,000,000. My firm was certified as a _____ on _____			
	PLEASE QUOTE FULLY DELIVERED PRICES	Total Delivered Price		

**PAYMENT
TERMS**

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 Fax Number _____
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In
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Places

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 Signed _____ Date _____
 Firm Name _____

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 (201) 395-3405 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.

DIVISION 5

BID# 33252

SECTION C05653

BI-METALLIC COMPOSITE CONTACT RAIL AND END APPROACHES

C04/08/02

PART 1 – GENERAL

1.01 DESCRIPTION

- A. This Section specifies furnishing all labor, materials, and equipment for the manufacture, fabrication, testing, and delivery of bi-metallic composite contact rail and end approaches for use the Port Authority Trans-Hudson Corporation (PATH) transit system.
- B. Bi-metallic composite contact rail and end approaches shall be manufactured from steel base rail of 84C Section clad with equal amounts of aluminum extrusion on each side of the web, as shown in the Contract Drawings and as specified.

1.02 REFERENCES

- A. The following is a list of publications referred to in this Section:
 - 1. American National Standards Institute ANSI/ASQC Standard C-1, Specification of General Requirements for a Quality Manual, latest revision.
 - 2. American Society for Testing and Materials (ASTM), latest versions:
 - a. ASTM B317-00 Standard Specification for Aluminum-Alloy Extruded Bar, Rod, Tube, Pipe, and Structural Profiles for Electrical Purposes (Bus Conductor)

1.03 SUBMITTALS

- A. Before the start of manufacturing bi-metallic composite contact rail and end approaches submit to the Engineer for approval Shop Drawings and other data including design calculations and catalogue cuts required by the Specifications or necessary to adequately perform the work.

- C. Catalogue cuts shall describe the bi-metallic composite contact rail interface and butt end coating materials.
- D. Furnish Shop Drawings on sheets measuring 22 inches by 34 inches. On each drawing provide a blank area of 5 square-inches located adjacent to the title block. The title block shall display the following:
 - 1. Contract number and name.
 - 2. Number and title of drawing.
 - 3. Date of drawing or revision date and number.
 - 4. Name of Contractor submitting drawing.
- E. Furnish design calculations and other required data on standard 8-1/2 by 11-inch sheets printed on one side only. Each sheet shall bear the information required by paragraph D above except that the 5-square-inch blank space will not be required.
- F. Before the start of manufacturing bi-metallic composite contact rail and end approaches submit to the Engineer for approval not less than two identical samples of the bi-metallic composite contact rail, measuring a minimum of one foot long. Label each sample indicating:
 - 1. Contract number and name.
 - 2. Name of Contractor and Subcontractor.
 - 3. Material or equipment represented.
 - 4. Source.
 - 5. Name of producer and brand.
 - 6. Reference specification section and article numbers.
 - 7. Mill certification for the steel base rail.
 - 8. Foundry certification for the aluminum extrusions.

1.04 QUALITY CONTROL

- A. Establish a Quality Control Program regulating methods, procedures, and processes to ensure compliance with standards of quality required by this Specification. The Quality Control Program will be subject to audit for conformance. The program shall be in accordance with the current ANSI/ASQC Standard C-1.
- B. Records of all inspection and testing by the Contractor shall be kept complete and available to the Engineer for review during the performance of the work and for longer periods required by this Specification.
- C. If the bi-metallic composite contact rail and end approaches manufacturer does not normally prepare materials in its own plant(s) it is acceptable to have proprietary materials prepared at another non-owned facility. This facility shall be subject to the same Quality Assurance procedures and systems the manufacturer uses in its own facilities and shall be subject to audit by the Engineer.
- D. The bi-metallic composite contact rail and end approaches manufacturer will be permitted to conduct testing in-house if the manufacturer's laboratory and testing facility is certified to National Institute of Standards and Technology (NIST) standards.
- E. Products and materials incorporated into the bi-metallic composite contact rail and end approaches will be subject to inspection by the Engineer at the Contractor's facilities, the place of manufacture, the shipping point, and at the shipping destination.
- F. Give the Engineer a minimum of 14 days notice prior to the start of fabrication of bi-metallic composite contact rail and end approaches to make arrangements for inspections. Notice shall include the name and address of the fabrication facility and the name and telephone number of the individual at the facility to be contacted.
- G. Inspection and testing by the Engineer will be performed in such a manner as not to unduly delay the work.
- H. Give the Engineer sufficient notice of when any testing is proposed to have the option of witnessing the tests. Provide the Engineer free entry at all times to the place of manufacture while work on this Contract is being performed.
- I. Whether or not the Engineer inspects or tests any materials, the Contractor will not be relieved from any responsibility regarding defects or other failures to meet the Contract requirements, nor will such inspection or testing be considered as a guarantee of acceptance of any material which may be delivered later.

PART 2 – PRODUCTS

2.01 BI-METALLIC COMPOSITE CONTACT RAIL

- A. Bi-metallic composite contact rail and end approaches shall consist of 84C section steel base rail with aluminum extrusions fastened on both sides of the web as manufactured by Atlantic Track & Turnout Co., 270 Broad Street, Bloomfield, New Jersey 07003, or approved equal.
- B. 84C steel base rail and aluminum extrusions shall be fastened together at intervals not to exceed 18 inches
- C. The bi-metallic composite contact rail fastening system shall maintain the aluminum extrusions and the steel base rail in intimate, stable electrical contact over a temperature range of –25 degrees F to 220 degrees F. Thermal expansion or contraction within this temperature range shall not exceed yield points of any of the composite rail or fastener components.
- D. If the bi-metallic composite contact rail fastening system is to be a tension lock type, it shall be Huck Bolt and Collar, all galvanized, or approved equal.

2.02 STEEL BASE RAIL

- A. Steel base rail for bi-metallic composite contact rail and end approaches shall be 84C section manufactured by Steel of West Virginia, Inc., 17th Street and 2nd Avenue, Huntington, West Virginia 25703, or approved equal.
- B. 84C Section steel base rail shall be new No. 1 rail free of all injurious imperfections.
- C. Chemical composition of steel base rail shall be:
 - 1. Carbon: 0.64 to 0.77 percent
 - 2. Manganese: 0.60 to 0.90 percent
 - 3. Phosphorus: 0.04 percent, maximum
 - 4. Sulphur: 0.05 percent, maximum
 - 5. Silicon: 0.10 to 0.35 percent
 - 6. Copper: 0.50 percent, maximum
- D. Brinell hardness of steel base rail shall be 220 or higher.

- E. Marking and stamping on the web of steel base rail will not be allowed.
- F. Control cooling of steel base rail will not be required.
- G. Steel base rail shall be free of shatter cracks
- H. Steel base rails shall be 39 feet in length when measured at a temperature of 60 degrees F with a tolerance of plus 1/2-inch.
- I. Steel base rail shall have an upsweep limited to 3/4-inch in 39 feet with no down sweep allowed and a deviation from straightness of less than 1/8-inch in 10 feet.
- J. All rails after finishing shall be smooth on heads and bases, straight in line and in surface, without twists, kinks or waves.

2.03 ALUMINUM EXTRUSION

- A. Aluminum extrusion shall be of uniform dimension and shall be a high mechanical strength/high electrical conductivity 6101-T6 alloy conforming to ASTM B317.
- B. Aluminum extrusions shall be so formed as to:
 - 1. Discourage water ingress to the interface between the aluminum extrusion and the steel base rail.
 - 2. Permit intimate contact with web of the steel base rail or with the fillets of the head and the base of the steel base rail and assure a positive electrical connection for current flow between the steel base and aluminum extrusion.
 - 3. Permit standard rail tongs to grasp the head of the composite rail for lifting the composite rail without damage to the aluminum extrusion.
 - 4. Provide adequate cross sectional area to meet the specified electrical requirements.

2.04 ELECTRICAL REQUIREMENTS

- A. Composite contact rail shall be a low-resistance conductor with a resistance not greater than 0.002 ohms per 1,000 feet at 20 degrees C. The current distribution between the steel and the aluminum shall be inversely proportional to their respective resistivities.

- B. Composite contact rail shall be able to withstand a fault current of 200,000 amps DC for 100 milliseconds with no mechanical or thermal damage.
- C. Composite contact rail shall be capable of carrying a minimum of 5,000 amps continuous current without exceeding a temperature rise of 40 degrees C above 40 degrees C ambient in still air.

2.05 END APPROACHES

- A. Contact rail end approach shall consist of sections of the steel base rail as shown in the Contract Drawings and as specified cut and welded to provide a smooth transition for the collector shoe onto the composite contact rail.
- B. End approaches shall be supplied in 7-foot 6-inch lengths, or to length shown on the Contract Drawings.
- C. The mating end of each end approach shall be drilled as shown in the Contract Drawings.
- D. The mating end of each end approach shall be provided with sufficient lengths of aluminum extrusion fastened to the web to allow the attachment of a splice joint assembly.

2.06 RUST INHIBITING COATINGS

- A. Bi-metallic composite contact rail interface coating shall be NO-OX-ID Type A-Special manufactured by Sanchem, Inc., 1600 S. Canal Street, Chicago, Illinois 60616, or approved equal.
- B. Bi-metallic composite contact rail butt end butt coating shall be NO-OX-ID Type A manufactured by Sanchem, Inc., 1600 S. Canal Street, Chicago, Illinois 60616, or approved equal.

PART 3 – EXECUTION

3.01 STEEL BASE RAIL

- A. Steel base rail shall be sandblasted its entire length on both sides prior to application of aluminum extrusions. The surfaces of the steel base rail that mate with the aluminum extrusion shall be cleaned to a bright finish, free of all rust and scale. This operation must be performed no more than 12 hours prior to assembly.

- B. All steel base rail interface surfaces shall be liberally coated with NO-OX-ID Type A-Special oxide inhibiting compound.

3.02 PUNCHING AND DRILLING

- A. Bi-metallic composite contact rail and end approaches shall be drilled and punched as shown in the Contract Drawings and as specified.
- B. Punching of fastener holes in the steel base rail and aluminum extrusions, except for the splice plate holes at each end of each composite contact rail length, will be permitted under the following conditions:
 - 1. The manufacturer shall demonstrate that the punching operation will have no detrimental effect on aluminum extrusion to steel base rail contact resistance.
 - 2. The manufacturer shall demonstrate that the punching operation will cause no detrimental deformation of the aluminum extrusion at the interface with the steel base rail that will interfere with proper functioning of any part of the fastening system or encourage ingress of water.
- C. Splice plate holes at the end of each composite contact rail length shall be drilled after assembly of the aluminum extrusions to the base rail to assure exact alignment of the holes.
- D. The manufacturer shall prove exact alignment of the splice plate holes by pushing through each hole a mandrill of diameter no more than 0.005 inches smaller than the hole diameter and certify that this test was successful on all rail lengths shipped.
- E. Punching or drilling of the composite rail sections after assembly of the aluminum extrusion to the base rail will not be permitted.

3.03 BUTT END COATING

- A. After completion of drilling the splice plate holes, completely fill holes and coat the bi-metallic composite contact rail butt ends with NO-OX-ID Type A oxide inhibiting compound.

3.04 TESTING

- A. Prior to shipment of any bi-metallic composite contact rail test two pieces of fully assembled contact rail, each piece not less than 4 feet in length, to demonstrate adequacy and stability of electrical contact between the aluminum extrusions and the steel base rail.

- B. The test procedure on each test piece of bi-metallic composite contact rail shall be as follows:
1. At a constant ambient temperature accurately measure the electrical resistance of the full length of the test piece.
 2. Lower the rail temperature to -25 degrees F for 30 minutes and measure the electrical resistance of the test piece.
 3. Raise the rail temperature to 220 degrees F for 30 minutes and measure the electrical resistance of the test piece.
 4. Separate chambers shall be used for the extreme temperature conditions. The air temperature of the two chambers shall be held at each of the extreme temperatures by means of circulation and sufficient hot or cold-chamber thermal capacity so that the ambient temperature shall reach the specified temperature within 2 minutes after specimens have been transferred to the appropriate chamber.
 5. This procedure shall be repeated for a minimum of 10 cycles.
- C. If any measurement of electrical resistance on either of the two test pieces does not conform to the specified electrical requirements adjusted for temperature the Contractor shall provide two additional test pieces and perform the full test procedure on each of them.
- D. If a second measurement of electrical resistance on any test piece does not conform to the specified electrical requirements adjusted for temperature the entire lot of manufactured bi-metallic composite contact rail will be rejected.
- E. Submit to the Engineer for approval a written proposal for modifying the design or manufacturing process to meet the specified requirements.
- F. Prior to shipment of any modified bi-metallic composite contact rail test two pieces of fully assembled contact rail, each piece not less than 4 feet in length, in accordance with the above test procedure
- G. Three certified copies of all tests, including original data calculations and interpretation of results, shall be furnished to the Engineer.

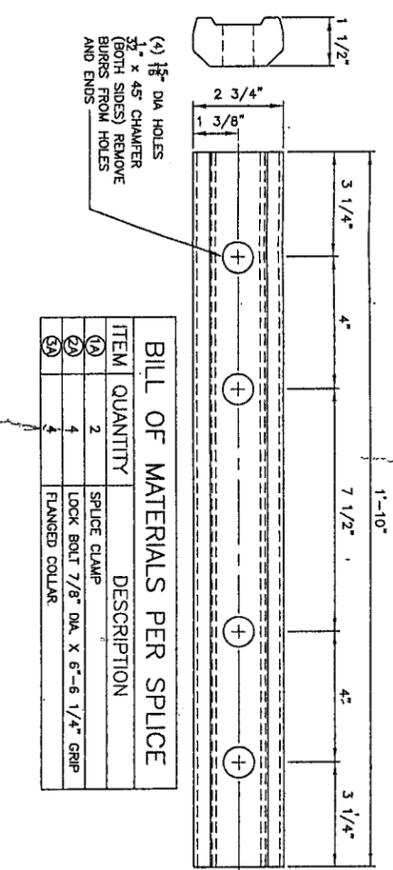
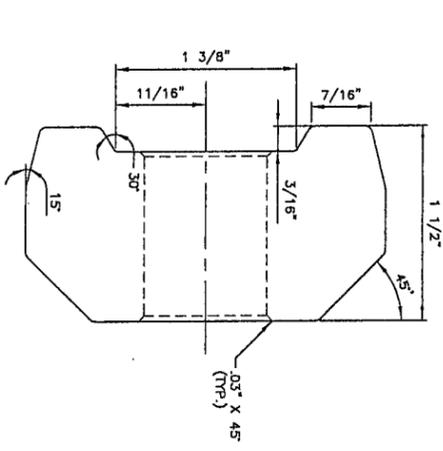
3.05 MARKING

- A. Each length of composite contact rail and each end approach shall have the manufacturer identification and date of manufacture (month and year) permanently die stamped on the outer face of the aluminum extrusion outside of the splice joint area.

3.06 DELIVERY, HANDLING AND STORAGE

- A. Composite contact rails shall be loaded with heads up with all Huck collars facing the same direction and with a minimum of five 2-inch x 6-inch common stock wood separators placed between tiers. The wood separators shall be placed 5 feet from the each end, at the center, and the equidistant between the center and end separators of each composite contact rail length.
- B. Composite contact rail shall arrive at the project site in the same condition as when loaded at the manufacturer's plant.
- C. End approaches shall be banded with 1-inch steel banding on wooden pallets with separators between tiers. Pallets shall have only two tiers.
- D. End approaches shall arrive at the project site in the same condition as when loaded at the manufacturer's plant.

END OF SECTION C05653



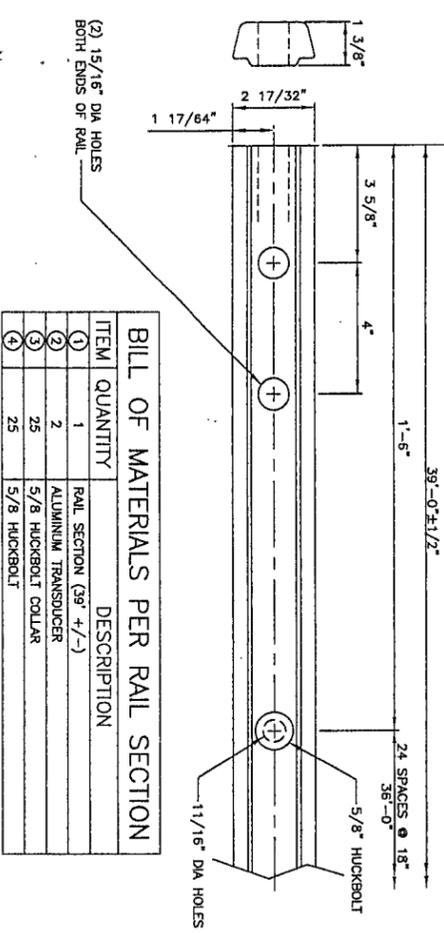
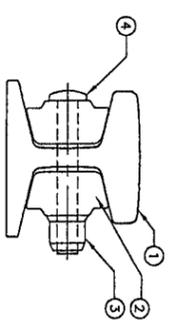
BILL OF MATERIALS PER SPLICE

ITEM	QUANTITY	DESCRIPTION
1	2	SPLICE CLAMP
2	4	LOCK BOLT 7/8" DIA X 6"-6 1/4" GRIP
3	4	FLANGED COLLAR

SPLICE JOINT BAR - END VIEW
N.T.S.

SPLICE CLAMP FOR 84C TRANSDUCER
N.T.S.

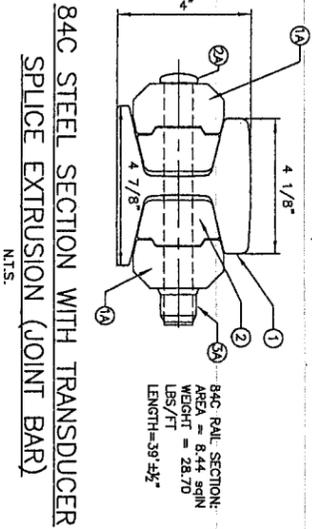
84C STEEL SECTION ASSEMBLY
N.T.S.



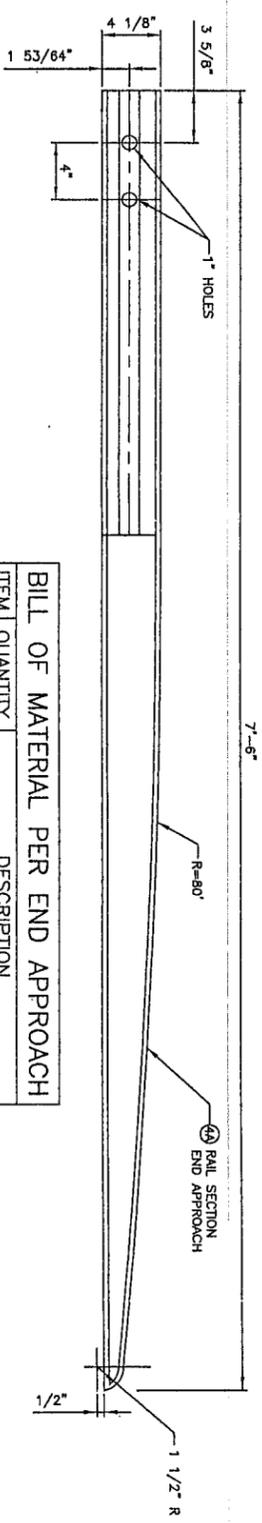
BILL OF MATERIALS PER RAIL SECTION

ITEM	QUANTITY	DESCRIPTION
1	1	RAIL SECTION (39' +/-)
2	2	ALUMINUM TRANSDUCER
3	25	5/8 HUCKBOLT COLLAR
4	25	5/8 HUCKBOLT

84C TRANSDUCER
N.T.S.



84C STEEL SECTION WITH TRANSDUCER
SPLICE EXTRUSION (JOINT BAR)
N.T.S.



BILL OF MATERIAL PER END APPROACH

ITEM	QUANTITY	DESCRIPTION
1	2	SPLICE CLAMP
2	4	LOCK BOLT 7/8" DIA X 6"-6 1/4" GRIP
3	4	FLANGED COLLAR
4	1	RAIL SECTION END APPROACH

84C CONTACT RAIL END APPROACH
N.T.S.

Bill # 33252

The drawing is intended to describe the location, quantity, and dimensions of the materials to be used in the construction of the project. It is not intended to be a substitute for the specifications and standards of the materials to be used. The contractor is responsible for providing the materials and labor necessary to complete the project. The contractor is also responsible for obtaining all necessary permits and approvals. The contractor is to be held responsible for the accuracy of the drawing and for any errors or omissions. The contractor is to be held responsible for the safety of the project and for any accidents or injuries. The contractor is to be held responsible for the quality of the work and for any rework or repairs. The contractor is to be held responsible for the completion of the project on time and within budget. The contractor is to be held responsible for the maintenance of the project and for any future repairs or improvements. The contractor is to be held responsible for the overall success of the project.

Contract Number: C920
Date: SEPTEMBER 15, 2008
Designed by: L. CHAN
Drawn by: K. POLLARD
Checked by: K. POLLARD

No.	Date	Revision	Approved
1			

ENGINEERING DEPARTMENT

PATH

Item	Description	Quantity	Unit
1	RAIL SECTION (39' +/-)	1	SECTION
2	ALUMINUM TRANSDUCER	2	TRANSDUCER
3	5/8 HUCKBOLT COLLAR	25	COLLAR
4	5/8 HUCKBOLT	25	HUCKBOLT

CIVIL

Title: PATH STANDARD DETAILS

84C CONTACT RAIL