



November 1, 2013

Mr. Cornell Anderson  
Torre, Lentz, Gamell, Gary & Rittmaster, LLP  
100 Jericho Quadrangle, Suite 309  
Jericho, NY 11753

Re: Freedom of Information Reference No. 14362

Dear Mr. Anderson:

This is a response to your October 21, 2013 request, which has been processed under the Port Authority's Freedom of Information Code (the "Code"), for copies of all Forms of Proposal submitted by any contractor in or about September 2010 regarding Contract No. WTC-264.600 - Transit Hall Misc. Metals.

Material responsive to your request and available under the Code can be found on the Port Authority's website at <http://www.panynj.gov/corporate-information/foi/14362-WTC.pdf>.

Certain material responsive to your request is exempt from disclosure pursuant to exemption (1) of the Code.

Please refer to the above FOI reference number in any future correspondence relating to your request.

Very truly yours,



Ann L. Qureshi  
FOI Administrator



**THE PORT AUTHORITY OF NY & NJ**

100 Broadway, 5th Floor  
New York, NY 1000  
Ph: 646-556-6700  
Fax: 646-556-6747

Date: September 21<sup>st</sup>, 2010

**PROPOSAL CLARIFICATION # 1**

TO PROSPECTIVE PROPOSERS ON CONTRACT WTC 264,600, WORLD TRADE CENTER  
TRANSPORTATION HUB - TRANSIT HALL MISCELLANEOUS METALS -BP #08

BEST AND FINAL PROPOSALS MUST BE RETURNED IN A SEALED ENVELOPE WITH ALL  
ATTACHMENTS REQUESTED IN THE FORM OF PROPOSAL NO LATER THAN CLOSE OF  
BUSINESS ON THURSDAY SEPTEMBER 23, 2010.

The following changes are hereby made in the Contract Documents for the subject Contract.

This communication should be physically annexed to back cover of the book and initialed by each proposer before submitting his proposal.

In case any proposer fails to conform to these instructions his Proposal will nevertheless be construed as though this communication had been so physically annexed and initialed.

CHANGE IN FORM OF CONTRACT TABLE OF CONTENTS:

Delete current Table of Contents (page vi) in its entirety and substitute new Table of Contents (page vi), therefor, which is attached hereto and made part hereof.

CHANGES TO THE ATTACHMENTS

Delete Form of Proposal in its entirety (pages 26 through 32) and substitute new Form of Proposal (pages 26 through 32) therefor, which is attached hereto and made part hereof.

Delete Attachment A dated 8/17/10 in its entirety (pages 1 through 13) and substitute new Attachment A dated 9/20/10 (pages 1 through 13) therefor, which is attached hereto and made part hereof.

All other Terms and Conditions shall remain the same.

This communication should be initialed by you and annexed to your proposal upon submission.

In case any proposer fails to conform to these instructions, its proposal will nevertheless be construed as though this communication had been so physically annexed and initialed.

(us) AW



THE PORT AUTHORITY OF NY & NJ

100 Broadway, 5th Floor  
New York, NY 1000  
Ph: 646-556-6700  
Fax: 646-556-6747

Date: September 21<sup>st</sup>, 2010

Larry Boreesen  
Tishman/Turner JV  
100 Broadway, 5<sup>th</sup> Floor  
New York, NY 10005

BIDDER'S FIRM NAME: Hillside Iron Works  
INITIALED: (HW)  
DATE: 09/23/10

QUESTIONS CONCERNING THIS ADDENDUM MAY BE ADDRESSED TO MR. LARRY BORESEN, WHO CAN BE REACHED AT LBORESEN@TCCO.COM.

Form of Proposal  
World Trade Center Site – Transportation Hub  
New York, NY

September 21, 2010

Trade: Transit Hall Miscellaneous Metals  
Contract WTC-264.600  
Proposal Due Date: September 23, 2010, Close of Business

Name of Proposer: HHS WELDON WORKS

To Tishman/Turner, A Joint Venture:  
The undersigned<sup>3</sup>  
PROPOSER'S NAME:

HHS WELDON WORKS

TYPE OF ENTITY (see Note "3" below):

a corporation organized under the laws of the State of New York

(hereinafter called, "the Contractor") hereby offers to perform all the obligations and to assume all the duties and liabilities of the Contractor provided for in the annexed Contract on the terms and conditions contained therein, in all Contract Drawings, Specifications, Attachments, and Exhibits referenced therein and all terms and conditions contained in these Instructions to Proposer Sections 1 through 19, at the price set forth in the attached Form of Proposal.

This offer shall be irrevocable for one hundred eighty (180) days after the date on which the Construction Manager opens this Proposal.

To induce the acceptance of this Proposal, the undersigned hereby makes each and every certification, statement, assurance, representation and warranty made by the Contractor in said Contract. Moreover as a condition to receipt and consideration by the Construction Manager of the Proposal whether or not it is accepted, the undersigned agrees that all information of any nature whatsoever, regardless of the form of the communication, received from the undersigned (including its officers, agents, or employees) by the Construction Manager and the Port Authority of New York and New Jersey, its Directors, officers, agents or employees, and notwithstanding any statement therein to the contrary, has not been given in confidence and may be used or disclosed by or on behalf of the Construction Manager or The Port Authority of New York and New Jersey without liability of any kind except as may arise under letters patent of the undersigned, if any.

Unless expressly stated otherwise, the Instructions for Proposers and Form of Proposal, all papers required by it and submitted in connection herewith at any time, said Form of Contract, and all papers made part of the Contract by the terms of the Form of Contract are made part of this Proposal.

- <sup>3</sup> Insert Proposer's name at the top of the page. After the Proposer's name, insert one of the following phrases:  
If a corporation, give state of incorporation, using the phrase, "a corporation organized under the laws of the State of \_\_\_\_\_,"  
If a partnership, give full names of partners, using also the phrase, "co-partners doing business under the firm name of \_\_\_\_\_,"  
If an individual using a trade name, give individual name, using also the phrase, "an individual doing business under the trade name of \_\_\_\_\_,"  
If a joint venture, give the information required above for each participant in the joint venture.

Form of Proposal

September 21, 2010

World Trade Center Site - Transportation Hub  
New York, NY

Trade: Transit Hall Miscellaneous Metals  
Contract WTC-264.600  
Proposal Due Date: September 23, 2010, Close of Business

Name of

Proposer: LINSIDE Box Corp

In accordance with the Contract Documents listed below and pursuant to the Instructions for Proposers dated June 21, 2010, we submit our Proposal herewith:

- Form of Contract, dated 6/21/2010
- Attachment A - Scope of Work, dated 9/20/2010
- Attachment B - Not Used, not dated
- Attachment C - Scope Limit Drawings, dated 5/3/2010
- Attachment D - Not Used, not dated
- Attachment E - Site Logistics, dated 7/19/2010
- Attachment F - Milestones, dated 4/5/2010
- Attachment G - Temporary Services for Construction Purposes, dated 7/2/2010
- Attachment H - Not Used, not dated
- Attachment I - Contract Drawings (Unrestricted), dated 7/1/2010
- Attachment J - Contract Drawings (C&P), dated 7/1/2010
- Attachment K - Reference Documents (Unrestricted), dated 12/23/2009
- Attachment L - Available Documents (Restricted), dated 12/23/2009
- Attachment M - Contract Specifications (Unrestricted), dated 7/1/2010
- Attachment N - Contract Specifications (C&P), dated 7/1/2010
- Exhibit I - Division I Specs - General Provisions, dated 6/18/2010
- Exhibit II - WTC Site Rules and Regulations, dated 1/1/2006
- Exhibit III - Sales Tax Letter, dated 10/8/2008
- Exhibit IV - Information Security Handbook (with NDA, CA), dated 2/9/2009
- Exhibit V - Background Qualification Questionnaire, dated 2/9/2010
- Exhibit VI - BIM Implementation Plan, dated 2/4/2010
- Exhibit VII - MBW/WBE Participation and Equal Opp. Policy, dated 12/17/2008
- Exhibit VIII - Other WTC Project Conditions, dated 4/8/2010
- Exhibit IX - DRP Safety, Health and Environmental Program, dated 5/3/2010
- Exhibit X - NYC Transit Safety Program, dated 9/23/2009
- Exhibit XI - WTC Site Security, dated 1/28/2010
- Exhibit XII(A) - OCIP Manual, dated 9/30/2009
- Exhibit XII(B) - SAR Form, dated 8/30/2009
- Exhibit XIII - Payment Procedures, dated 7/16/2010
- Exhibit XIV - Environmental Performance Commitments, dated 2/9/2010
- Exhibit XV - PATH Requirements, dated 2/25/2010
- Exhibit XVI - Prevailing Rate Schedule, dated 2/13/2010
- Exhibit XVII - Contractor's Quality Program Requirements, dated 3/11/2010
- Exhibit XVIII - WTC Procedures Cranes & Derricks, dated 3/8/2010
- Exhibit XIX - Material Engineering Unit Submittals, dated 4/2/2010

Form of Proposal  
World Trade Center Site - Transportation Hub  
New York, NY

September 21, 2010

Trade: Transit Hall Miscellaneous Metals  
 Contract WTC-264.600  
 Proposal Due Date: September 23, 2010, Close of Business

Name of Proposer: Hensler Construction

A. Lump Sum Proposal

Perform the following Transit Hall Miscellaneous Metals work in strict accordance with the Contract Documents. The amount of the "Total Base Proposal", including any price adjustment resulting from Proposal Addenda, shall be filled in by the Proposer in Clause 17 of the Contract entitled "General Agreement" and such amount shall be defined as the "Lump Sum" for purposes of this Contract. The amount must be given both in figures and in writing; in case of discrepancy the writing shall control. Lump Sum Proposal shall include all items listed in Section F below.

Total Lump Sum Proposal for Transit Hall Miscellaneous Metals: \$ 6,209,530

Total Lump Sum Proposal in Writing: Six Million Two Hundred Nine Thousand Five Hundred Thirty Dollars

B. Proposed Value Engineering

Proposer to fully describe suggested changes to expedite Project and/or reduce costs. (Reduction on cost to be indicated and not included in Base Bid). (Attach additional sheets as required). Please include any voluntary alternates on a separate sheet with this proposal.

C. Schedule

1. Time required from contract award to start of field work: 60 /wks
2. Time required from start of field work to completion: 90 /wks

D. Proposer is to attach the following items to Proposal

1. Project Staff Organizational Chart
2. Proposed Bar Chart Schedule
3. Completed OCIP Enrollment Form B
4. Completed W/MBE Schedule C
5. EMR for last three years on Insurer's letterhead
6. Completed Section D - Options from Attachment A - Scope of Work

E. Other Items

Any proposed Subcontractors JULCAN INSTALLATIONS (STEEL RECTOR)

F. Lump Sum Proposal Breakdown

	<u>Price</u>	<u>Estimated Quantities</u>
1. Stair Framing (engineer, furnish and install)	\$ <u>666,816</u>	
2. Stair Hand Rails	\$ <u>165,026</u>	_____ lf
3. Bent Metal Plate Risers/ Treads	\$ <u>312,635</u>	
4. Access Hatches, Floor Hatches, Blast Doors	\$ <u>1,010,183</u>	_____ ea
5. Masonry Seismic Clips and Lintels	\$ <u>854,033</u>	
6. Steel Bumper Rails	\$ <u>639.17</u>	

Hw

Form of Proposal  
World Trade Center Site - Transportation Hub  
New York, NY

September 21, 2010

Trade: Transit Hall Miscellaneous Metals  
Contract WTC-264.600  
Proposal Due Date: September 23, 2010, Close of Business

Name of Proposer: AKUSA OF Ironworks

7. Gratings, Platforms, Access Ladders	\$ <u>142,107</u>	
8. Soffits, duct enclosures, suspended framing and metal deck at plenums	\$ <u>1,686,253</u>	_____ lb
9. Utility Tunnel Miscellaneous Metal	\$ <u>12,473</u>	
10. Trapeze Frames	\$ <u>150,305</u>	_____ lb
11. Other	\$ <u>1,145,782</u>	

Other Items Included in the Lump Sum Proposal

12. Option #1: Frames at Typical Doors	\$ - <u>201,620</u>
13. Option #2: Framing at MEP Shafts	\$ - <u>214,511</u>
14. Option #3: Framing at knee walls	\$ - <u>167,246</u>
15. NOT USED	\$ <u>X</u>
16. Option #5: T2, T3, T4 Seismic clips	\$ - <u>382,394</u>
17. Option #6: Stairs 23, 24, 26, 27 and 33	\$ - <u>115,387</u>

Total Lump Sum Proposal: \$ 6,709,530

Note that proposals will be evaluated based on Lump Sum Proposal Amount provided in section 'A' above.

AKUSA

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ATTACHMENT A - SCOPE OF WORK, DATED 9/20/2010	
ATTACHMENT B - NOT USED, NOT DATED	
ATTACHMENT C - SCOPE LIMIT DRAWINGS, DATED 5/3/2010	
ATTACHMENT D - NOT USED, NOT DATED	
ATTACHMENT E - SITE LOGISTICS, DATED 7/19/2010	
ATTACHMENT F - MILESTONES, DATED 4/5/2010	
ATTACHMENT G - TEMPORARY SERVICES FOR CONSTRUCTION PURPOSES, DATED 7/02/2010	
ATTACHMENT H - NOT USED, NOT DATED	
ATTACHMENT I - CONTRACT DRAWINGS (UNRESTRICTED), DATED 7/1/2010	
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ATTACHMENT K - REFERENCE DOCUMENTS (UNRESTRICTED), DATED 12/23/2009	
ATTACHMENT L - AVAILABLE DOCUMENTS (RESTRICTED), DATED 12/23/2009	
ATTACHMENT M - CONTRACT SPECIFICATIONS (UNRESTRICTED), DATED 7/1/2010	
ATTACHMENT N - CONTRACT SPECIFICATIONS (C&P), DATED 7/1/2010	

World Trade Center Site - Transportation Hub  
New York, NY

Trade: Transit Hall Miscellaneous Metals  
Contract WTC-264.600  
Proposal Due Date: September 23, 2010, Close of Business

Name of Proposer: HILLSIDE IronWORKS

SIGNATURE AND CERTIFICATE OF AUTHORITY<sup>3</sup>

Dated, September 23, 2010

(Print legal name of entity submitting Proposal)

HILLSIDE IronWORKS

(Signature of authorized agent, partner or corporate officer)

BY: William M. Bedard

(Print name of authorized agent, partner or corporate officer)

WILLIAM M BEDARD

(Acknowledgment of signature to be taken on proper form on following page(s))

CERTIFICATE OF AUTHORITY, IF BIDDER IS A CORPORATION

I, the undersigned, as Secretary of the corporation submitting the foregoing Proposal, hereby certify that under and pursuant to the by-laws and resolutions of said corporation, each officer who has signed said Proposal on behalf of the corporation is fully and completely authorized so to do.

(Corporate Seal)

William M Bedard

<sup>3</sup> If bidder is a joint venture, insert signatures as appropriate for one participant of the joint venture on this page and attach and complete an additional signature sheet in the same form as appears on this page for each other participant as required.

<sup>4</sup> If Proposal is signed by an officer or agent, give title.

<sup>5</sup> **NOTE:** The foregoing signature shall be deemed to have been provided with full knowledge that the foregoing Proposal, the accompanying Contract booklet, as well as any certification, statement, assurance, representation, warranty, schedule or other document submitted by the bidder with the Proposal will become a part of the records of the Authority and that the Authority will rely in awarding the Contract on the truth and accuracy of such Proposal and each such certification, statement, assurance, representation, warranty and schedule made therein by the Contractor. Knowingly submitting a false statement in connection with any of the foregoing may be the basis for prosecution for offering a false instrument for filing (see, e.g., N.Y. Penal Law, Section 175.30 et seq.).

HW

Form of Proposal

September 21, 2010

World Trade Center Site - Transportation Hub  
New York, NY

Trade: Transit Hall Miscellaneous Metals

Name of

Contract WTC-254.600

Proposer: HILLSIDE Ironworks

Proposal Due Date: September 23, 2010, Close of Business

ACKNOWLEDGMENT<sup>6</sup>

ACKNOWLEDGMENT OF PROPOSER, IF A CORPORATION

State of New York

SS:

County of Saratoga

On this 23<sup>rd</sup> day of Sept, 2010 before me personally came and appeared Arnold M. Hatfield to me known Ex. (1) who, being by me duly sworn, did depose and say that he resides at \_\_\_\_\_, that he is the Sec/Treasurer of Hillside Ironworks, the corporation described in and which executed the foregoing instrument; that he knows the seal of said corporation; that one of the seals affixed to said instrument is such seal; that it was so affixed by order of the directors of said corporation; and that he signed his name thereto by like order.

(Notary Seal)

PATRICIA A. KILMARTIN  
Notary Public, State of New York  
No. 01K16161928  
Qualified in Saratoga County  
Commission Expires February 26, 2011

Patricia A. Kilmartin  
(Notary Signature)

ACKNOWLEDGMENT OF PROPOSER, IF A PARTNERSHIP

State of \_\_\_\_\_

SS:

County of \_\_\_\_\_

On this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, before me personally came and appeared \_\_\_\_\_, to me known and known to me to be one of the members of the firm of \_\_\_\_\_, described in and who executed the foregoing instrument and he acknowledged to me that he executed the same as and for the act and deed of said firm.

(Notary Seal)

\_\_\_\_\_  
(Notary Signature)

<sup>6</sup> If proposer is a joint venture, insert signature as appropriate for one participant of the joint venture on this page and attach and complete an additional Acknowledgment sheet in the same form as appears on this page for each other participant as required. Also attach joint venture agreement.



Form of Proposal  
World Trade Center Site - Transportation Hub  
New York, NY

September 21, 2010

Trade: Transit Hall Miscellaneous Metals  
Contract WTC-264.600  
Proposal Due Date: September 23, 2010, Close of Business

Name of Proposer: HILLSIDE Ironworks

**ACKNOWLEDGMENT OF PROPOSER, IF AN INDIVIDUAL**

State of \_\_\_\_\_

SS:

County of \_\_\_\_\_

On this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, before me personally came and appeared \_\_\_\_\_ to me known and known to me to be the person described in and who executed the foregoing instrument and he acknowledged to me that he executed the same.  
(Notary Seal)

\_\_\_\_\_  
(Notary Signature)

**STATEMENT ACCOMPANYING PROPOSAL<sup>7</sup>**

Names and Residences of Officers, If Proposer Is a Corporation

Name	Title	Residence <sup>8</sup>
<u>Joseph Burch</u>	<u>President</u>	<u>Ex. (1)</u>
<u>Robert McGee</u>	<u>Vice President</u>	<u>Ex. (1)</u>
<u>Harold Hatfield</u>	<u>Secretary/Treasurer</u>	<u>Ex. (1)</u>

Names and Residences of Partners, If Proposer is a Partnership

Name	General or Limited Partner	Residence <sup>9</sup>

Bidder's Residence, If an Individual

<sup>7</sup> If proposer is a joint venture, insert signature as appropriate for one participant of the joint venture on this page and attach and complete an additional Statement Accompanying Proposal sheet in the same form as appears on this page for each other participant as required.

<sup>8</sup> Give Street and Number of Residence. Do not give business address.

<sup>9</sup> Give Street and Number of Residence. Do not give business address.

HWS

Scope Of Work

World Trade Center Site – Transportation Hub  
New York, NY

Trade: Transit Hall Miscellaneous Metals  
Contract No.: WTC-264:600

A. Scope Of Work

Without restricting the generality of Work which shall be performed within the Contract Price, it is clearly understood and agreed that the Contractor shall provide all material, labor, trucking, hoisting, rigging, tools, engineering, scaffolding, power hookups, protection, shop drawings, applicable taxes, permits, layout, equipment, field and office supervision, applicable insurance, etc., necessary for the furnishing and installation of all specified and related Work contained herein in accordance with the Contract Drawings, Specifications, Attachments, and Exhibits, all of which become part of this Contract.

The Scope of Work shall include, but not be limited to, all the Work in the following Specification Section(s) as shown on the Drawings, except such Work as may be specifically excluded in Section B - Work Not In Contract.

Included in the Scope of the Contract are the requirements of the following Specification Sections:

05506	Miscellaneous Steel
05507	Miscellaneous Steel Embeds
05510	Metal Stairs
05523	Steel Pipe and Tube Railings
05530	Gratings
05810	Prefabricated Expansion Joints Assemblies
07721	Roof Hatches and Heat/Smoke vents
08346	Floor Hatches
08390	Watertight Doors and Hatches

The Contractor shall be responsible for examining all of the Documents listed on the Attachments I, J, K & L (Contract Drawings and Contract Specifications) and all items related to the Contractor's work, and called for in these Documents, shall be included in the Contract including, but not limited to the requirements of the following specification sections as they pertain to the Contractor's work:

01352	Sustainable Design Requirements
03100	Concrete Formwork
03200	Concrete Reinforcement
03301	Portland Cement Concrete
03303	Placement of Portland Cement Concrete
03350	Concrete Toppings
03602	Grout (Non-Metallic)
04220	Concrete Masonry Units
05120	Structural Steel
05311	Steel Deck
05400	Cold-Formed Metal Framing and Sheathing
05750	Ornamental Metal Panels and Enclosures
08111	Steel Doors and Frames



Scope Of Work

World Trade Center Site – Transportation Hub

New York, NY

Trade: Transit Hall Miscellaneous Metals

Contract No.: WTC-264.600

08112	Stainless-Steel Doors and Frames
08305	Access Doors and Frames
08335	Overhead Colling Doors and Grilles
09250	Gypsum Drywall
09910	Painting
10144	Photoluminescent Markings

In addition to the above Specifications, the Contractor's Work shall include, but not be limited to the following items, clarifications and/or modifications as relates to the Work (Drawings are listed for illustrative purposes only as examples of typical conditions):

I. STAIRS AND RAILS

1. The Contractor shall provide all metal pan and miscellaneous iron stairs and rails shown on Contract Drawings except stair stringers which are fully detailed on the structural drawings for railings which are shown to be stainless steel. See the Stair Schedule on Drawing A8825.
2. The Contractor shall design, furnish, and install stairs and rails as per the Contract Documents including, but not limited to, all related supports, embeds, attachments, manufactured sub-components, fabrication, connections, accessories, metal pan, hardware and engineering including, but not limited to:
  - a. All miscellaneous metal stair framing, railings and bent metal treads including, but not limited to:
    - i. Stairs and railings:
      1. NOT USED.
      2. Stair "215" per Drawing A1304.
      3. Stair "216" per Drawings A1306 and A4243 (include Rails along platform)
      4. NOT USED.
      5. NOT USED.
      6. Stair "56" per Drawings A2208, A2308 and A7581.
      7. Stair "156" per Drawings A4202 and A7691 (include rails and kick plate at platform).
      8. NOT USED.
      9. Stair BJ per RFC TH-00176 response. The Contractor shall include design of steel framing, stringers and connections of stair from level 241'-0" to level 261'-0".
    - ii. Railings and guardrails:
      1. Stair "BA" per Drawings A1104, A1204, A1302, A1502, A7431, and A7481.
      2. Stair "BL" per Drawings A1105, A1205, and A7433.

HW

Attachment A

September 20, 2010

Scope Of Work

World Trade Center Site - Transportation Hub

New York, NY

Trade: Transit Hall (Miscellaneous Metals)

Contract No.: WTC-264.600

3. Stair "BJ" per Drawings A1106, A1206, A1306, A1406, P3/A7432, P6/A7432, and P7/A7432.
  4. Stair "222" per Drawing A1305.
  5. Stair "151" per Drawing A1202.
  6. Stair "235" per Drawing A1304.
  7. NOT USED
  8. At locations where indicated in the Contract Documents in accordance with Attachment "C" Project Limits, including ramps and steps in slabs.
  9. Per RFG TH-00274 response, include hand rails around horizontal shutter per sketch SK-PK20-A8820.
- iii. Stair Framing:
1. Stairs "23", "24", "26", "27", "33", "35" and "42".
  2. Design, furnish and install stair framing including but not limited to: stringers, channels, posts, stiffeners, plates, angles, connections to satisfy the design intent per Contract Documents.
- iv. Bent metal plate risers/treads:
1. Stairs "23", "24", "26", "27", "29", "30", "31E", "31W", "32E", "33", "32W", "35", "36", "37", "38", "39" and "42"
  2. The Contractor shall ensure that bent metal tread plates are fabricated and installed per specifications so that they meet the required tolerances of the stone steps. The Contractor shall allow for 1/2" adjustment based on preliminary test loading of the stair (by others). All connections shall be designed to suit these tolerances/ adjustments:
- v. The Contractor shall provide stringers, treads, risers, landings, handrails, brackets, guardrails, pickets, toe-kicks, nosings, castings, rolled sections, plate sections, bent metal sections, connection materials, grating, posts/hangers, anchors/embeds, grating clips, and connection materials for a complete stair assembly.
- vi. Stairs shall be set true, square, plumb and level. Any corrective work to ensure a proper installation shall be the responsibility of this Contractor.
- vii. All hangers, angles, struts, etc., shall be designed to be within the adjacent partitions. No supporting members shall be exposed without the Engineer's approval.
- viii. Align handrails and guardrails to maintain continuity.
- ix. The Contractor shall furnish nosings for installation by others in concrete for metal pan stairs including photoluminescent markings. Provide 5% replacement photoluminescent strips.



Scope Of Work

World Trade Center Site - Transportation Hub

New York, NY

Trade: Transit Hall Miscellaneous Metals

Contract No.: WTC-264.600

II. MISCELLANEOUS METALS

1. The Contractor shall furnish and install the Items Indicated below as per the Contract Documents, including, but not limited to, all related supports, embeds, grout/epoxy/adhesives, attachments, manufactured sub-components, fabrication, connections, accessories, hardware (Drawing numbers are indicated for illustrative purposes only):
  - a. Miscellaneous steel framing in MEP shafts where shown in Architectural drawings and not specified in Structural drawings. Provide steel framing beams/channels/connections and metal deck. Provide engineering for this item. (See drawings A1304, A1404, A1504, A6120, A6121, A6122 and A6123.) For purposes of pricing assume a nominal beam weight of 40 lb/ft.
  - b. Masonry and concrete seismic clips in accordance with typical details (see Drawing S8502) and as shown on the Drawings. Lateral supports for typical masonry walls shall be engineered by the Contractor for each of the various conditions that are encountered. The Contractor understands this work may vary from the typical conditions shown on the drawings and may include welding, expansion bolting, bent plate, channels and unusual conditions that are not clear from the typical ideal details shown). This work shall be installed after the installation of fireproofing, walls and head of wall fire stopping. The Contractor is to coordinate installation with the concrete and masonry contractors (do not drill through rebar). Per RFC TH-00192, the Contractor shall follow S8502 for support details of CMU and Concrete partition walls.
  - c. Access hatches/doors as noted below including connection to the concrete curbs:
    - i. Watertight hatches similar to those shown on drawings A7501 and A6102; include steel framing, angles, anchors, embeds as required for installation and attachment.
    - ii. NOT USED.
    - iii. Pressure resistant doors:
  - d. Steel support framing for stone knee walls and handrails at stairs including, but not limited to, horizontal and vertical steel tube framing, plates, angles, connections, steel dowels and anchors. See Drawings A4663, A4672, A7020, A7029, A7211, A7212. Provide engineering for these items.
  - e. Steel Bumper Rails at all locations shown; but not limited to, at the 254' parking bays. Provide engineering for this item. Include a minimum wall thickness of 1/2". Refer to drawings A1303, A1304, A6181 and A6182 for extent of bumper rails. Include bumper rails at the easternmost and westernmost sides of the concrete duct enclosure walls shown on drawings A1303 and A1304.

Attachment A September 20, 2010  
Scope Of Work  
World Trade Center Site – Transportation Hub  
New York, NY

Trade: Transit Hall Miscellaneous Metals  
Contract No.: WTC-264.600

- f. Blast plate doors including, but not limited to, engineering design, steel door and frame, hardware, plate sill, embedded wide-flange jambs and headers, embedded solid steel plate sashes, connections, hinges, checkered plate as per design requirements, and structural support steel, welded couplers and connections encased in concrete around blast door frames (see details on J11, H11 and S11 on S8812). Provide temporary spreaders/bracing/supports to install door prior to forming and concrete operations. The contractor shall include all materials required for a complete assembly. See Door schedule for additional information. See details on Drawings A1205, A1306, A1505, D2 on A3025, A8812, A8813 on A6122. Frames are required on site in March 2011. Parts requiring direct crane picking for are required on site in June 2011.
- g. Material lift embeds in slab and walls (see Drawings A8812 and A8814). Lift (with integral railings and guide rails), mesh partition, mesh support bars/ posts and rolling door will be provided by others. Provide engineering for these items as required.
- h. Suspended framing and metal deck for all plenum slabs not shown on the structural drawings including, but not limited to, those shown on Drawings A1503 and A6120, embedded anchors in concrete slab, WT's, hangers, channels, knee braces, metal deck and connections. Provide engineering for this item.
- i. Metal expansion joints at all locations shown including, but not limited to, details on Drawings A4605, A5283, and A6834. Furnish and install stainless steel cover plates over expansion joints. Expansion joint material and assembly shall be by others.
- j. Utility tunnel miscellaneous metal including, but not limited to, ladders and hardware (see Drawing A7501).
- k. Steel tube framing over entrance doors for support of doors, walls and finishes as shown on the Drawings including, but not limited to:
- i. At the East MTA entrances to the R/W and A/C/E (see Drawings A1603, A1703, A4013, A4736, A6805, A6825, A6827, A6831, and A6832)
  - ii. NOT USED.
  - iii. At other entrance doorways at all locations shown (see Drawings A6807, A6809, A6811 and A7301 thru A7355).
  - iv. Work shall include, but not be limited to, hangers, tubes, posts, kickers/bracing, connections, coordination with mechanical work, and engineering design.
  - v. Per RFC TH-00041, all plans, sections and details referencing detail D16/ A6805 shall replace the HSS 6" x 2" x 3/8" steel tube shown for an HSS 6" x 6" x 3/8" tube.

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New York, NY

Trade: Transit Hall Miscellaneous Metals

Contract No.: WTC-264.600

- i. Steel framing for support of special architectural and mechanical elements as shown on the drawings including:
  - i. At West end tied arch to support storefront and metal panels as per details on Drawings A4605, A4608, A4735 (tube and plate per detail D3/ A4735 and horizontal and vertical tubes of detail D2/ A4735), A4736 (metal fab steel tube with hangers) and D9 on A6834.
  - ii. At colling doors as per Drawing A6821 detail D6. Include bent metal angle attached to tubes (to support track installed by others).
  - iii. At smoke baffles at all locations shown including, but not limited to, as per Drawing details D8 on A5914, D9 on A5915, D10 on A5915, A5917, D2 on A5940F, A6023, and S5 on A6031.
  - iv. NOT USED.
  - v. At vending machines as per Drawings A1404, A4157, A4659 and A4661. Include for support of adjacent stone wall.
  - vi. At rated horizontal duct and pipe enclosures at all locations shown. See details D1/ A5983 and D4/ A5983 for applicable rated duct enclosure details. Coordinate locations of ducts and fuel pipe risers with Mechanical drawings. For rated duct enclosures, see Mechanical Drawings M0001 (see note/ legend for 2-hr rated enclosure notation) and M1201 thru M2310. For rated pipe enclosures, see M0408, and coordinate with Mechanical Drawing plans (as an example, see plans MP1205, MP1206, MP1208, MP2208). The Contractor is to use Architectural details D1/ A5983 and D4/ 5983 for the support of rated pipe enclosures.
  - vii. All of the above Work shall include, but not be limited to, hangers, tubes, posts, framing, kickers/bracing, connections, coordination with mechanical work, and engineering design.
- m. Steel tabs/ plates attached to structural steel as connected to base steel structure as indicated in details D6/ A4704, D1/ A4704, D1A/ A4704 and D1B/ A4704.
- n. Grating platforms (removable and permanent) including, but not limited to, gates, gratings, toe-kicks, railings, associated ladders and any required support framing above and beyond what is shown on the structural drawings, at all locations shown, but not limited to, at Drawings A1701, A6102, A7501, A7691, and A7692. Provide engineering for this item and coordination with approved MEP coordination drawings to be provided after award.
- o. Access ladders at all locations shown including, but not limited to, at Drawings A1801 and A6102. Work shall include, but not limited to, abrasive steel rungs set into holes in stringer and welded, angle brackets, galvanized tube bracket welded to ladder and beam, angle clips secured to slab, steel bar cage welded to steel tube, continuous embedded galvanized steel angle with steel studs, galvanized steel grating catwalks,

HW

Scope Of Work

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continuous supporting angles, steel beam for ladder support, expansion anchors, steel landing support beams etc. Access ladder locations to be coordinated with other contractors' work.

- p. Metal grating and support angles at trenches and elevator sump pits as shown on drawings (A1503, A1703, D20/ A6130). Per RFC TH-00231, the grating indicated in D20/ A6130 shall be galvanized.
  - q. Design, furnish and install fifty (50) trapeze frames for support of various MEP systems in corridors with congested ceilings. Forty (40) frames shall consist of a single WF beam spanning 10', supporting 2,000 pounds, be braced for seismic loading on a 2,000 pound mass, and will have varying support conditions (hangers, posts or end connections to walls). The remaining ten (10) frames shall consist of a single WF beam spanning 10', supporting 5,000 pounds, be braced for seismic loading on a 5,000 pound mass, and will have varying support conditions (hangers, posts or end connections to walls). After MEP coordination the Contractor will be provided with drawings, which contain information concerning imposed gravity and seismic loads and show locations where these trapezes are required to be located.
  - r. Engineer, furnish and install loose lintels for masonry walls at ten (10) locations to be determined later, each weighing nominally 400 pounds. All loose steel lintels shall be provided with 6" long  $\frac{3}{4}$ " diameter headed studs (or threaded rebar couplers) welded 16" on center on the top face to act as dowels for masonry reinforcement and a means for attachment to the adjacent jambs (e/g: anchor bolts or bearing plates).
  - s. Furnish and install intermediate framing and divider beams for elevator shafts in the Transit Hall only where not sized on the structural drawings, including but not limited to divider beams and framing for the Elevators in the S-E corner of Transit Hall (see A1505).
  - t. Engineer, furnish and install miscellaneous steel associated with water tank per drawing A6102, including but not limited to grating, ladders, platforms, beams, knee bracing, angles, railing. Provide galvanized and stainless steel where specified. Per RFC TH-00261 response provide Type 316L stainless steel at T2 Water Tanks.
2. Furnish and deliver the following items (for unloading, handling and installation by others) as per the Drawings including, but not limited to, all related supports, embeds, attachments, manufactured sub-components, fabrications, splices, accessories, finishes, hardware, and anchors/templates/drawings for setting (provide setting drawings that are unique from shop drawings to show only the items to be installed by others dimensioned from column/griddlines):
- a. Miscellaneous Metal at Pits including, but not limited to, all sump pits, ejector pits, silt pits, oil interceptor pits, manholes, electrical duct bank pits, hinged covers, embedded edge angle (for installation by others), ladder rungs, side rails, diamond plate covers and

Scope Of Work

World Trade Center Site – Transportation Hub

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related support framing, (examples: A1104, A1105, A1106, A3023, A6152). Excluding elevator pit ladders and grating.

b. Nosing for cast-in-place concrete stairs.

Any embedded items in the Work of the Contract weighing over 200 pounds shall be installed by the Contractor.

3. Provide the following items not shown on the contract documents:

a. Temporary trolley beams for construction chain falls at three locations. System to be engineered by this contractor for point loads of 8,000 pounds and should span simply up to 12 feet. This Contractor to return for removal of these systems when directed by the Construction Manager.

b. Furnish and install head of wall support kickers for masonry walls obstructed from reaching the underside of structure above at five locations to be determined at a later date. Each location to consist on average of lateral support to brace a 10' long portion of 10" thick fully-grouted masonry 12' high with existing lateral supports on either side; provide two additional points of lateral support braced back to structure above. Include field measurements and engineering; work to be done after all other ceiling work is in place.

3. The following RFC responses and associated sketches are hereby made part of this contract:

- a. RFC TH-00176 including sketches SK-PK20-S4217-001, SK-PK20-S4217-002 & SK-PK20-4217-003.
- b. RFC TH-00194 including sketch SK-PK20-A7013-001
- c. RFC TH-00201 including sketches SK-PK-A7521-001
- d. RFC TH-00238 including Sketch SK-PK20-A7621-001 and SK-PK20-A7013-001
- e. RFC TH-00274 including sketches SK-PK20-A8820.

III. General Items

1. Provide mock-ups where applicable as per specifications.

2. Provide samples as specified for approval.

3. At a minimum, all metals provided under this contract shall be shop primed. Metals exposed to the elements (outside of the envelope of the building, e.g. loading dock, roofs, plenums) or embedded in cast-in-place concrete shall be stainless or galvanized. Dissimilar metals shall be isolated using dielectric separators. The Contractor shall field touch-up paint at field connections.

(HW)

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Trade: Transit Hall Miscellaneous Metals

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4. The Contractor shall remove fireproofing as required to complete the work of this contract. The contractor will be back-charged for the cost of replacing fire proofing only if removal is excessive (more than reasonably warranted for the completion of the Contractor's work).
5. All embedded items to be incorporated into the work of others shall be furnished with templates and location details in advance of the installation, to ensure proper installation of same.
6. With respect to Exhibit 1 - "General Provisions", Section 21 - "Safety Provisions", Paragraphs 5, 6, and 7 (which are mutually exclusive), the Contractor shall comply with Paragraph 6.

B. WORK NOT IN CONTRACT

1. All Work shown on the West Side of the D1 line in Attachment C – Scope Limit Drawings.
2. Stainless steel hand rails.
3. Any structural framing shown on the structural Design Drawings.
4. Blast "Spall" Plates and Shell Column Enclosures shown on the Structural Drawings.
5. Hoist Beams.
6. Sheet metal airflow deflectors
7. Loose Lintels, except as indicated herein.
8. Miscellaneous steel framing related to elevators and escalators including hoist beams, separator, sills, rail supports, pit ladders and gratings, except as specifically indicated herein.
9. Framing at MEP shafts above and beyond framing shown on architectural drawings.
10. The cost of the Performance Bond and the cost of the Payment Bond are not included in the lump sum. A Performance Bond and a Payment Bond are requirements of the Contract but the costs for the bonds will be reimbursed as per Contract Paragraph 25. Performance Bond and Paragraph 26. Payment Bond.
11. Photoluminescent markings, except for nosings
12. Steel framing at Storefront.

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13. Precast concrete stair inserts, dowels, corner angles with welded shear studs and embeds as referenced in contract documents.
14. Embed plates and angles in cast-in-place concrete related to the attachment of precast concrete or structural steel.
15. Clip angles for support of pre-cast concrete walls.
16. Ornamental metals including metal wall panels.
17. Access doors in carpentry or masonry walls.
18. Horizontal fire shutter. See sketch SK-PK20-A8820.

C. SCHEDULE-TIME OF PERFORMANCE

1. Within two (2) weeks of award, the Contractor shall submit the following to the Construction Manager (first payment to Contractor will be withheld until the following is submitted):
  - a. Submittals for Work embedded in the slab on grade.
  - b. Calculations for the fan plant access door.
2. The Contractor shall commence engineering and detailing work immediately after award.
3. The Contractor shall commence field work on or about the 1<sup>st</sup> quarter of 2011, or at such later date as directed by Construction Manager in writing provided that the work of others has advanced sufficiently to permit such a start. The Contractor shall be prepared to complete all field work by the 3<sup>rd</sup> quarter of 2013, or at a later date if required by the progress of other trades at no additional cost to Construction Manager.
4. The Contractor shall provide multiple equipment; work in shifts, weekend work, expedite material procurement, expedite material delivery, shop drawing overtime, and any other cost to accomplish the above dates (durations include days for delays due to precipitation as stipulated in the Contract).
5. The work under this Contract shall be coordinated with the work of other trades in order not to delay the progress of the job or hinder the accomplishment of the Contract Milestones. The Contractor shall follow all interim schedules that may be issued by the Construction Manager as the job conditions require.
6. Installation/ delivery of pipe sleeves, inserts and/or any other items embedded within the concrete structure shall not delay concrete placement. If concrete placement is completed prior

Attachment A

September 20, 2010

Scope Of Work

World Trade Center Site – Transportation Hub

New York, NY

Trade: Transit Hall Miscellaneous Metals

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to the placement of sleeves and inserts, this Contractor shall perform all required core drilling, setting of anchors, etc., as required for the proper completion of its work. If damage to the work of other trades (i.e. conduit, etc.) results, the Contractor shall be responsible for all associated repair costs.

7. The Contractor shall coordinate all Work in Towers 2 and 3 with the Construction Manager so that appropriate arrangements can be made with the those parties affiliated with ongoing work in these areas.

Scope Of Work

World Trade Center Site - Transportation Hub

New York, NY

Trade: Transit Hall Miscellaneous Metals

Contract No.: WTC-264.600

D. OPTIONS

At the Authority's unilateral and sole discretion the Authority may exercise the following Options for additions and/or deletions to the Scope of Work and shall be inclusive of furnishing and installing of all material, labor, trucking, overhead, profit, escalation, equipment, hoisting, rigging, engineering, scaffolding, power hookups, protection, shop drawings, applicable taxes, applicable insurances, permits, appliances, storage, delivery, tools and field and office supervision. Items covered by these prices shall be furnished in accordance with the Contract Drawings and Contract Specifications. All Terms and Conditions of the Contract shall apply to the below Options except as modified below in the descriptions of the Option. Unless stated otherwise below, all Option pricing is valid only if executed within 30 days of award and shall be made with no impact to the Contract Milestone Dates. The Authority reserves the right to incorporate any of these options into the Work prior to award.

Option #1

In the event that the Contractor is directed to exclude work related to frames around typical doors per Scope Item II.1.k.3 noted above:

This price shall be valid only if executed within 120 days of award.

DEDUCT

\$ -201,670

Option #2

In the event that the Contractor is directed to exclude work related to steel framing (beams, channels, tubes, bracing, metal deck and connections) at T3 MEP shaftway shown on drawings A6121, A6122 and A6123:

This price shall be valid only if executed within 90 days of award.

DEDUCT

\$ -214,571

Option #3

In the event that the Contractor is directed to exclude work related to back-up steel for knee walls per Scope of Work Item A.11.d (tubes, plates, angles, anchors and connections) per Drawings A4663, A4672, A7020, A7029, A7211, A7212.

This price shall be valid for the duration of the Contract.

DEDUCT

\$ -167,246

Option #4

In the event that the Contractor is directed to furnish and install steel framing for Stairs 151 and 222.

This price shall be valid only if executed within 90 days of award.

ADD

\$ X

Option #5

In the event that the Contractor is not required to furnish and install masonry seismic clips for Masonry walls in Towers 2, 3 and 4.

This price shall be valid only if executed within 90 days of award.

DEDUCT

\$ -382,394

(Handwritten initials)

Attachment A September 20, 2010  
Scope Of Work  
World Trade Center Site – Transportation Hub  
New York, NY

Trade: Transit Hall Miscellaneous Metals  
Contract No.: WTC-264.600

Option #6

In the event that the Contractor is not required to furnish and install Stairs "23", "24", "26", "27" and "33". The Contractor shall install the bent metal tread plates, where applicable, for these stairs.

This price shall be valid only if executed within 120 days of award;

DEDUCT

\$ - 115,387





THE PORT AUTHORITY OF NY & NJ

100 Broadway, 5th Floor  
New York, NY 10005  
Ph: 646-556-6700  
Fax: 646-556-6747

Date: September 21<sup>st</sup>, 2010

PROPOSAL CLARIFICATION # 1

TO PROSPECTIVE PROPOSERS ON CONTRACT WTC 264.600, WORLD TRADE CENTER  
TRANSPORTATION HUB – TRANSIT HALL MISCELLANEOUS METALS -BP #08

BEST AND FINAL PROPOSALS MUST BE RETURNED IN A SEALED ENVELOPE WITH ALL  
ATTACHMENTS REQUESTED IN THE FORM OF PROPOSAL NO LATER THAN CLOSE OF  
BUSINESS ON THURSDAY SEPTEMBER 23, 2010.

The following changes are hereby made in the Contract Documents for the subject Contract.

This communication should be physically annexed to back cover of the book and Initialed by each proposer before submitting his proposal.

In case any proposer fails to conform to these instructions his Proposal will nevertheless be construed as though this communication had been so physically annexed and initialed.

CHANGE IN FORM OF CONTRACT TABLE OF CONTENTS:

Delete current Table of Contents (page vi) in its entirety and substitute new Table of Contents (page vi), therefor, which is attached hereto and made part hereof.

CHANGES TO THE ATTACHMENTS

Delete Form of Proposal in its entirety (pages 26 through 32) and substitute new Form of Proposal (pages 26 through 32) therefor, which is attached hereto and made part hereof.

Delete Attachment A dated 8/17/10 in its entirety (pages 1 through 13) and substitute new Attachment A dated 9/20/10 (pages 1 through 13) therefor, which is attached hereto and made part hereof.

All other Terms and Conditions shall remain the same.

This communication should be initialed by you and annexed to your proposal upon submission.

In case any proposer fails to conform to these instructions, its proposal will nevertheless be construed as though this communication had been so physically annexed and initialed.



THE PORT AUTHORITY OF NY & NJ

100 Broadway, 5th Floor  
New York, NY 1000  
Ph: 646-556-6700  
Fax: 646-556-6747

Date: September 21<sup>st</sup>, 2010

Larry Boreesen  
Tishman/Turner JV  
100 Broadway, 5<sup>th</sup> Floor  
New York, NY 10005

BIDDER'S FIRM NAME: Globe Gates Inc  
INITIALED: [Signature]  
DATE: 9-22-2010

QUESTIONS CONCERNING THIS ADDENDUM MAY BE ADDRESSED TO MR. LARRY BORESEN, WHO CAN BE REACHED AT [LBORESEN@TCCO.COM](mailto:LBORESEN@TCCO.COM).

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ATTACHMENT A - SCOPE OF WORK, DATED 9/20/2010	
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ATTACHMENT M - CONTRACT SPECIFICATIONS (UNRESTRICTED), DATED 7/1/2010	
ATTACHMENT N - CONTRACT SPECIFICATIONS (C&P), DATED 7/1/2010	



Form of Proposal  
World Trade Center Site -- Transportation Hub  
New York, NY

September 21, 2010

Trade: Transit Hall Miscellaneous Metals  
Contract WTC-264.600  
Proposal Due Date: September 23, 2010, Close of Business

Name of  
Proposer: Globe Gates Inc

To Tishman/Turner, A Joint Venture:

The undersigned<sup>5</sup>

PROPOSER'S NAME:

Globe Gates Inc

TYPE OF ENTITY (see Note "3" below):

A "Corporation" organized under the laws of the State of NY

(hereinafter called, "the Contractor") hereby offers to perform all the obligations and to assume all the duties and liabilities of the Contractor provided for in the annexed Contract on the terms and conditions contained therein, in all Contract Drawings, Specifications, Attachments, and Exhibits referenced therein and all terms and conditions contained in these Instructions to Proposer Sections 1 through 19, at the price set forth in the attached Form of Proposal.

This offer shall be irrevocable for one hundred eighty (180) days after the date on which the Construction Manager opens this Proposal.

To induce the acceptance of this Proposal, the undersigned hereby makes each and every certification, statement, assurance, representation and warranty made by the Contractor in said Contract. Moreover as a condition to receipt and consideration by the Construction Manager of the Proposal whether or not it is accepted, the undersigned agrees that all information of any nature whatsoever, regardless of the form of the communication, received from the undersigned (including its officers, agents, or employees) by the Construction Manager and the Port Authority of New York and New Jersey, its Directors, officers, agents or employees, and notwithstanding any statement therein to the contrary, has not been given in confidence and may be used or disclosed by or on behalf of the Construction Manager or The Port Authority of New York and New Jersey without liability of any kind except as may arise under letters patent of the undersigned, if any.

Unless expressly stated otherwise, the Instructions for Proposers and Form of Proposal, all papers required by it and submitted in connection herewith at any time, said Form of Contract, and all papers made part of the Contract by the terms of the Form of Contract are made part of this Proposal.

<sup>5</sup> Insert Proposer's name at the top of the page. After the Proposer's name, insert one of the following phrases:

If a corporation, give state of incorporation, using the phrase, "a corporation organized under the laws of the State of \_\_\_\_\_."

If a partnership, give full names of partners, using also the phrase, "co-partners doing business under the firm name of \_\_\_\_\_."

If an individual using a trade name, give individual name, using also the phrase, "an individual doing business under the trade name of \_\_\_\_\_."

If a joint venture, give the information required above for each participant in the joint venture.



Form of Proposal  
World Trade Center Site – Transportation Hub  
New York, NY

September 21, 2010

Trade: Transit Hall Miscellaneous Metals  
Contract WTC-264.600  
Proposal Due Date: September 23, 2010, Close of Business

Name of Proposer: Globe Gates Inc

In accordance with the Contract Documents listed below and pursuant to the Instructions for Proposers dated June 21, 2010, we submit our Proposal herewith:

- Form of Contract, dated 6/21/2010
- Attachment A - Scope of Work, dated 9/20/2010
- Attachment B - Not Used, not dated
- Attachment C – Scope Limit Drawings, dated 5/3/2010
- Attachment D – Not Used, not dated
- Attachment E - Site Logistics, dated 7/19/2010
- Attachment F – Milestones, dated 4/5/2010
- Attachment G – Temporary Services for Construction Purposes, dated 7/2/2010
- Attachment H – Not Used, not dated
- Attachment I - Contract Drawings (Unrestricted), dated 7/1/2010
- Attachment J - Contract Drawings (C&P), dated 7/1/2010
- Attachment K - Reference Documents (Unrestricted), dated 12/23/2009
- Attachment L - Available Documents (Restricted), dated 12/23/2009
- Attachment M - Contract Specifications (Unrestricted), dated 7/1/2010
- Attachment N - Contract Specifications (C&P), dated 7/1/2010
- Exhibit I - Division I Specs - General Provisions, dated 6/18/2010
- Exhibit II - WTC Site Rules and Regulations, dated 1/1/2006
- Exhibit III - Sales Tax Letter, dated 10/8/2008
- Exhibit IV - Information Security Handbook (with NDA, CA), dated 2/9/2009
- Exhibit V – Background Qualification Questionnaire, dated 2/9/2010
- Exhibit VI - BIM Implementation Plan, dated 2/4/2010
- Exhibit VII - MBW/WBE Participation and Equal Opp. Policy, dated 12/17/2008
- Exhibit VIII – Other WTC Project Conditions, dated 4/8/2010
- Exhibit IX – DRP Safety, Health and Environmental Program, dated 5/3/2010
- Exhibit X - NYC Transit Safety Program, dated 9/23/2009
- Exhibit XI - WTC Site Security, dated 1/28/2010
- Exhibit XII(A) - OCIP Manual, dated 9/30/2009
- Exhibit XII(B) - SAR Form, dated 8/30/2009
- Exhibit XIII - Payment Procedures, dated 7/16/2010
- Exhibit XIV - Environmental Performance Commitments, dated 2/9/2010
- Exhibit XV - PATH Requirements, dated 2/25/2010
- Exhibit XVI - Prevailing Rate Schedule, dated 2/13/2010
- Exhibit XVII - Contractors Quality Program Requirements, dated 3/11/2010
- Exhibit XVIII - WTC Procedures Cranes & Derricks, dated 3/8/2010
- Exhibit XIX – Material Engineering Unit Submittals, dated 4/2/2010



Trade: Transit Hall Miscellaneous Metals Name of Proposer: Globe Gates Inc  
 Contract WTC-264.600  
 Proposal Due Date: September 23, 2010, Close of Business

**A. Lump Sum Proposal**

Perform the following Transit Hall Miscellaneous Metals work in strict accordance with the Contract Documents. The amount of the "Total Base Proposal", including any price adjustment resulting from Proposal Addenda, shall be filled in by the Proposer in Clause 17 of the Contract entitled "General Agreement" and such amount shall be defined as the "Lump Sum" for purposes of this Contract. The amount must be given both in figures and in writing; in case of discrepancy the writing shall control. Lump Sum Proposal shall include all Items listed in Section F below.

Total Lump Sum Proposal for Transit Hall Miscellaneous Metals: \$ 14,368,974

Total Lump Sum Proposal In Writing: Fourteen Million Threehundred Sixty Eight thousand nine hundred seventy four dollars.

**B. Proposed Value Engineering**

Proposer to fully describe suggested changes to expedite Project and/or reduce costs. (Reduction on cost to be indicated and not included in Base Bid). (Attach additional sheets as required). Please include any voluntary alternates on a separate sheet with this proposal.

**C. Schedule**

1. Time required from contract award to start of field work: 4-6 /wks
2. Time required from start of field work to completion: 150 /wks

**D. Proposer is to attach the Following Items to Proposal**

1. Project Staff Organizational Chart
2. Proposed Bar Chart Schedule
3. Completed OCIP Enrollment Form 3
4. Completed W/MBE Schedule C
5. EMR for last three years on Insurer's letterhead
6. Completed Section D – Options from Attachment A – Scope of Work

**E. Other Items**

Any proposed Subcontractors N/A

**F. Lump Sum Proposal Breakdown**

	<u>Price</u>	<u>Estimated Quantities</u>
1. Stair Framing (engineer, furnish and install)	<u>\$ 166,648</u>	
2. Stair Hand Rails	<u>\$ 140,021</u>	<u>940</u> lf
3. Bent Metal Plate Risers/ Treads	<u>\$ 1,231,197</u>	
4. Access Hatches, Floor Hatches, Blast Doors	<u>\$ 1,918,892</u>	<u>11</u> ea
5. Masonry Seismic Clips and Lintels	<u>\$ 6,095,370</u>	<u>30,000</u> lf
6. Steel Bumper Rails	<u>\$ 103,880</u>	



Form of Proposal  
World Trade Center Site – Transportation Hub  
New York, NY

September 21, 2010

Trade: Transit Hall Miscellaneous Metals  
Contract WTC-264.600  
Proposal Due Date: September 23, 2010, Close of Business

Name of Proposer: Joe Gustis Inc

7. Gratings, Platforms, Access Ladders	\$ <u>102,820</u>	
8. Soffits, duct enclosures, suspended framing and metal deck at plenums	\$ <u>2,713,899</u>	<u>560,000</u> lb
9. Utility Tunnel Miscellaneous Metal	\$ <u>34,174</u>	
10. Trapeze Frames	\$ <u>225,250</u>	<u>45,000</u> lb
11. Other	\$ <u>1,636,823</u>	

Other Items Included in the Lump Sum Proposal

12. Option #1: Frames at Typical Doors	\$ <u>311,406</u>
13. Option #2: Framing at MEP Shafts	\$ <u>1,031,228</u>
14. Option #3: Framing at knee walls	\$ <u>96,884</u>
15. NOT USED	\$ <u>-</u>
16. Option #5: T2, T3, T4 Seismic clips	\$ <u>39,000</u>
17. Option #6: Stairs 23, 24, 26, 27 and 33	\$ <u>299,978</u>

Total Lump Sum Proposal: \$ 12,590,478

Note that proposals will be evaluated based on Lump Sum Proposal Amount provided in section 'A' above.

Form of Proposal  
World Trade Center Site – Transportation Hub  
New York, NY

September 21, 2010

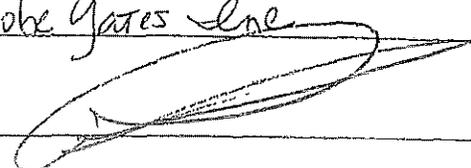
Trade: Transit Hall Miscellaneous Metals  
Contract WTC-264.600  
Proposal Due Date: September 23, 2010, Close of Business

Name of Proposer: Globe Gates Inc

**SIGNATURE AND CERTIFICATE OF AUTHORITY<sup>3</sup>**

Dated, Sept 22, 2010

(Print legal name of entity submitting Proposal)

Globe Gates Inc  
BY<sup>4 5</sup> 

(Signature of authorized agent, partner or corporate officer)

(Print name of authorized agent, partner or corporate officer)

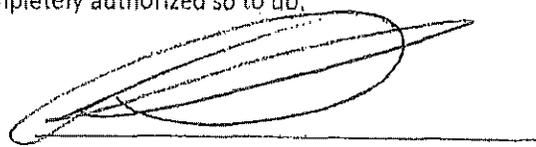
Agostinho Tome

(Acknowledgment of signature to be taken on proper form on following page(s))

**CERTIFICATE OF AUTHORITY, IF BIDDER IS A CORPORATION**

I, the undersigned, as Secretary of the corporation submitting the foregoing Proposal, hereby certify that under and pursuant to the by-laws and resolutions of said corporation, each officer who has signed said Proposal on behalf of the corporation is fully and completely authorized so to do,

(Corporate Seal)



<sup>3</sup> If bidder is a joint venture, insert signatures as appropriate for one participant of the joint venture on this page and attach and complete an additional signature sheet in the same form as appears on this page for each other participant as required.

<sup>4</sup> If Proposal is signed by an officer or agent, give title.

<sup>5</sup> **NOTE:** The foregoing signature shall be deemed to have been provided with full knowledge that the foregoing Proposal, the accompanying Contract booklet, as well as any certification, statement, assurance, representation, warranty, schedule or other document submitted by the bidder with the Proposal will become a part of the records of the Authority and that the Authority will rely in awarding the Contract on the truth and accuracy of such Proposal and each such certification, statement, assurance, representation, warranty and schedule made therein by the Contractor. Knowingly submitting a false statement in connection with any of the foregoing may be the basis for prosecution for offering a false instrument for filing (see, e.g., N.Y. Penal Law, Section 175.30 et seq.).

Form of Proposal  
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New York, NY

September 21, 2010

Trade: Transit Hall Miscellaneous Metals  
Contract WTC-264.600  
Proposal Due Date: September 23, 2010, Close of Business

Name of Proposer: Globe Gates Inc

ACKNOWLEDGMENT<sup>6</sup>

ACKNOWLEDGMENT OF PROPOSER, IF A CORPORATION

State of New York

SS:

County of Bronx

On this 22<sup>nd</sup> day of Sept, 2010 before me personally came and appeared Agostinho Tom, to me known, who, being by me duly sworn, did depose and say that he resides at Ex. (1), that he is the President of Globe Gates Inc, the corporation described in and which executed the foregoing instrument; that he knows the seal of said corporation; that one of the seals affixed to said instrument is such seal; that it was so affixed by order of the directors of said corporation; and that he signed his name thereto by like order.

(Notary Seal)

ELIZABETH FERREIRA  
Notary Public, State of New York  
No. 01FE5001798  
Qualified in Westchester/NY County  
Commission Expires Sept. 14, 2014

[Signature]  
(Notary Signature)

ACKNOWLEDGMENT OF PROPOSER, IF A PARTNERSHIP

State of \_\_\_\_\_

SS:

County of \_\_\_\_\_

On this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, before me personally came and appeared \_\_\_\_\_, to me known and known to me to be one of the members of the firm of \_\_\_\_\_, described in and who executed the foregoing instrument and he acknowledged to me that he executed the same as and for the act and deed of said firm.

(Notary Seal)

\_\_\_\_\_  
(Notary Signature)

<sup>6</sup> If proposer is a joint venture, insert signature as appropriate for one participant of the joint venture on this page and attach and complete an additional Acknowledgment sheet in the same form as appears on this page for each other participant as required. Also attach joint venture agreement.



Trade: Transit Hall Miscellaneous Metals  
 Contract WTC-264,600  
 Proposal Due Date: September 23, 2010, Close of Business

Name of Proposer: Globe Gates Inc

**ACKNOWLEDGMENT OF PROPOSER, IF AN INDIVIDUAL**

State of \_\_\_\_\_

SS:

County of \_\_\_\_\_

On this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, before me personally came and appeared \_\_\_\_\_ to me known and known to me to be the person described in and who executed the foregoing instrument and he acknowledged to me that he executed the same.

(Notary Seal)

\_\_\_\_\_  
 (Notary Signature)

**STATEMENT ACCOMPANYING PROPOSAL<sup>7</sup>**

Names and Residences of Officers, If Proposer is a Corporation

Name	Title	Residence <sup>8</sup>
<u>Agostinho Tome</u>	<u>President</u>	<u>Ex. (1)</u>

Names and Residences of Partners, If Proposer is a Partnership

Name	General or Limited Partner	Residence <sup>9</sup>
<u>N/A</u>		

Bidder's Residence, If an Individual

<sup>7</sup> If proposer is a joint venture, insert signature as appropriate for one participant of the joint venture on this page and attach and complete an additional Statement Accompanying Proposal sheet in the same form as appears on this page for each other participant as required.

<sup>8</sup> Give Street and Number of Residence. Do not give business address.

<sup>9</sup> Give Street and Number of Residence. Do not give business address.



Attachment A  
Scope Of Work  
World Trade Center Site - Transportation Hub  
New York, NY

September 20, 2010

Trade: Transit Hall Miscellaneous Metals  
Contract No.: WTC-264,600

A. Scope Of Work

Without restricting the generality of Work which shall be performed within the Contract Price, it is clearly understood and agreed that the Contractor shall provide all material, labor, trucking, hoisting, rigging, tools, engineering, scaffolding, power hookups, protection, shop drawings, applicable taxes, permits, layout, equipment, field and office supervision, applicable insurance, etc., necessary for the furnishing and installation of all specified and related Work contained herein in accordance with the Contract Drawings, Specifications, Attachments, and Exhibits, all of which become part of this Contract.

The Scope of Work shall include, but not be limited to, all the Work in the following Specification Section(s) as shown on the Drawings, except such Work as may be specifically excluded in Section B - Work Not in Contract.

Included in the Scope of the Contract are the requirements of the following Specification Sections:

05506	Miscellaneous Steel
05507	Miscellaneous Steel Embeds
05510	Metal Stairs
05523	Steel Pipe and Tube Railings
05530	Gratings
05810	Prefabricated Expansion Joints Assemblies
07721	Roof Hatches and Heat/Smoke vents
08346	Floor Hatches
08390	Watertight Doors and Hatches

The Contractor shall be responsible for examining all of the Documents listed on the Attachments I, J, K & L (Contract Drawings and Contract Specifications) and all items related to the Contractor's work, and called for in these Documents, shall be included in the Contract including, but not limited to the requirements of the following specification sections as they pertain to the Contractor's work:

01352	Sustainable Design Requirements
03100	Concrete Formwork
03200	Concrete Reinforcement
03301	Portland Cement Concrete
03303	Placement of Portland Cement Concrete
03350	Concrete Toppings
03602	Grout (Non-Metallic)
04220	Concrete Masonry Units
05120	Structural Steel
05311	Steel Deck
05400	Cold-Formed Metal Framing and Sheathing
05750	Ornamental Metal Panels and Enclosures
08111	Steel Doors and Frames

Attachment A  
Scope Of Work  
World Trade Center Site – Transportation Hub  
New York, NY

September 20, 2010

Trade: Transit Hall Miscellaneous Metals  
Contract No.: WTC-264.600

08112	Stainless-Steel Doors and Frames
08305	Access Doors and Frames
08335	Overhead Colling Doors and Grilles
09250	Gypsum Drywall
09910	Painting
10144	Photoluminescent Markings

In addition to the above Specifications, the Contractor's Work shall include, but not be limited to the following items, clarifications and/or modifications as relates to the Work (Drawings are listed for illustrative purposes only as examples of typical conditions):

I. STAIRS AND RAILS

1. The Contractor shall provide all metal pan and miscellaneous iron stairs and rails shown on Contract Drawings except stair stringers which are fully detailed on the structural drawings or railings which are shown to be stainless steel. See the Stair Schedule on Drawing A8825.
2. The Contractor shall design, furnish, and install stairs and rails as per the Contract Documents including, but not limited to, all related supports, embeds, attachments, manufactured sub-components, fabrication, connections, accessories, metal pan, hardware and engineering including, but not limited to:
  - a. All miscellaneous metal stair framing, railings and bent metal treads including, but not limited to:
    - i. Stairs and railings:
      1. NOT USED.
      2. Stair "215" per Drawing A1304.
      3. Stair "216" per Drawings A1306 and A4243 (include Rails along platform)
      4. NOT USED.
      5. NOT USED.
      6. Stair "56" per Drawings A2208, A2308 and A7581.
      7. Stair "156" per Drawings A4202 and A7691 (include rails and kick plate at platform).
      8. NOT USED.
      9. Stair BJ per RFC TH-00176 response. The Contractor shall include design of steel framing, stringers and connections of stair from level 241'-0" to level 261'-0".
    - ii. Railings and guardrails:
      1. Stair "BA" per Drawings A1104, A1204, A1302, A1502, A7431, and A7481.
      2. Stair "BL" per Drawings A1105, A1205, and A7433.



Attachment A  
Scope Of Work  
World Trade Center Site – Transportation Hub  
New York, NY

September 20, 2010

Trade: Transit Hall Miscellaneous Metals  
Contract No.: WTC-264.600

3. Stair "BJ" per Drawings A1106, A1206, A1306, A1406, P3/A7432, P6/A7432, and P7/A7432.
  4. Stair "222" per Drawing A1305.
  5. Stair "151" per Drawing A1202.
  6. Stair "235" per Drawing A1304.
  7. NOT USED
  8. At locations where indicated in the Contract Documents in accordance with Attachment "C" Project Limits, including ramps and steps in slabs.
  9. Per RFC TH-00274 response, include hand rails around Horizontal shutter per sketch SK-PK20-A8820.
- iii. Stair Framing:
1. Stairs "23", "24", "26", "27", "33", "35" and "42".
  2. Design, furnish and install stair framing including but not limited to stringers, channels, posts, stiffeners, plates, angles, connections to satisfy the design intent per Contract Documents.
- iv. Bent metal plate risers/treads:
1. Stairs "23", "24", "26", "27", "29", "30", "31E", "31W", "32E", "33", "32W", "35", "36", "37", "38", "39" and "42"
  2. The Contractor shall ensure that bent metal tread plates are fabricated and installed per specifications so that they meet the required tolerances of the stone steps. The Contractor shall allow for 1/8" adjustment based on preliminary test loading of the stair (by others). All connections shall be designed to suit these tolerances/ adjustments.
- v. The Contractor shall provide stringers, treads, risers, landings, handrails, brackets, guardrails, pickets, toe-kicks, nosings, castings, rolled sections, plate sections, bent metal sections, connection materials, grating, posts/hangers, anchors/embeds, grating clips, and connection materials for a complete stair assembly.
- vi. Stairs shall be set true, square, plumb and level. Any corrective work to ensure a proper installation shall be the responsibility of this Contractor.
- vii. All hangers, angles, struts, etc., shall be designed to be within the adjacent partitions. No supporting members shall be exposed without the Engineer's approval.
- viii. Align handrails and guardrails to maintain continuity.
- ix. The Contractor shall furnish nosings for installation by others in concrete for metal pan stairs including photoluminescent markings. Provide 5% replacement photoluminescent strips.



Attachment A  
Scope Of Work  
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II. MISCELLANEOUS METALS

1. The Contractor shall furnish and install the items indicated below as per the Contract Documents, including, but not limited to, all related supports, embeds, grout/epoxy/adhesives, attachments, manufactured sub-components, fabrication, connections, accessories, hardware (Drawing numbers are indicated for illustrative purposes only):
  - a. Miscellaneous steel framing in MEP shafts where shown in Architectural drawings and not specified in Structural drawings. Provide steel framing beams/channels/connections and metal deck. Provide engineering for this item. (See drawings A1304, A1404, A1504, A6120, A6121, A6122 and A6123.) For purposes of pricing assume a nominal beam weight of 40 lb/ft.
  - b. Masonry and concrete seismic clips in accordance with typical details (see Drawing S8502) and as shown on the Drawings. Lateral supports for typical masonry walls shall be engineered by the Contractor for each of the various conditions that are encountered. The Contractor understands this work may vary from the typical conditions shown on the drawings and may include welding, expansion bolting, bent plate, channels and unusual conditions that are not clear from the typical ideal details shown). This work shall be installed after the installation of fireproofing, walls and head of wall fire stopping. The Contractor is to coordinate installation with the concrete and masonry contractors (do not drill through rebar). Per RFC TH-00192, the Contractor shall follow S8502 for support details of CMU and Concrete partition walls.
  - c. Access hatches/doors as noted below including connection to the concrete curbs:
    - i. Watertight hatches similar to those shown on drawings A7501 and A6102; include steel framing, angles, anchors, embeds as required for installation and attachment.
    - ii. NOT USED.
    - iii. Pressure resistant doors.
  - d. Steel support framing for stone knee walls and handrails at stairs including, but not limited to, horizontal and vertical steel tube framing, plates, angles, connections, steel dowels and anchors. See Drawings A4663, A4672, A7020, A7029, A7211, A7212. Provide engineering for these items.
  - e. Steel Bumper Rails at all locations shown, but not limited to, at the 254' parking bays. Provide engineering for this item. Include a minimum wall thickness of 1/2". Refer to drawings A1303, A1304, A6181 and A6182 for extent of bumper rails. Include bumper rails at the easternmost and westernmost sides of the concrete duct enclosure walls shown on drawings A1303 and A1304.



Attachment A  
Scope Of Work

September 20, 2010

World Trade Center Site -- Transportation Hub  
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Trade: Transit Hall Miscellaneous Metals

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- f. Blast plate doors including, but not limited to, engineering design, steel door and frame, hardware, plate sill, embedded wide-flange jambs and headers, embedded solid steel plate sashes, connections, hinges, checkered plate as per design requirements, and structural support steel, welded couplers and connections encased in concrete around blast door frames (see details on J11, H11 and S11 on S8812). Provide temporary spreaders/bracing/supports to install door prior to forming and concrete operations. The contractor shall include all materials required for a complete assembly. See Door schedule for additional information. See details on Drawings A1205, A1306, A1505, D2 on A3025, A8812, A8813 on A6122. Frames are required on site in March 2011. Parts requiring direct crane picking for are required on site in June 2011. } 10/10
- g. Material lift embeds in slab and walls (see Drawings A8812 and A8814). Lift (with integral railings and guide rails), mesh partition, mesh support bars/ posts and rolling door will be provided by others. Provide engineering for these items as required.
- h. Suspended framing and metal deck for all plenum slabs not shown on the structural drawings including, but not limited to, those shown on Drawings A1503 and A6120, embedded anchors in concrete slab, WT's, hangers, channels, knee braces, metal deck and connections. Provide engineering for this item.
- i. Metal expansion joints at all locations shown including, but not limited to, details on Drawings A4605, A5283, and A6834. Furnish and install stainless steel cover plates over expansion joints. Expansion joint material and assembly shall be by others.
- j. Utility tunnel miscellaneous metal including, but not limited to, ladders and hardware (see Drawing A7501).
- k. Steel tube framing over entrance doors for support of doors, walls and finishes as shown on the Drawings including, but not limited to:
- i. At the East MTA entrances to the R/W and A/C/E (see Drawings A1603, A1703, A4013, A4736, A6805, A6825, A6827, A6831, and A6832)
  - ii. NOT USED.
  - iii. At other entrance doorways at all locations shown (see Drawings A6807, A6809, A6811 and A7301 thru A7355).
  - iv. Work shall include, but not be limited to, hangers, tubes, posts, kickers/bracing, connections, coordination with mechanical work, and engineering design.
  - v. Per RFC TH-00041, all plans, sections and details referencing detail D16/ A6805 shall replace the HSS 6" x 2" x 3/8" steel tube shown for an HSS 6" x 6" x 3/8" tube.

Attachment A  
Scope Of Work  
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- i. Steel framing for support of special architectural and mechanical elements as shown on the drawings including:
  - i. At West end tied arch to support storefront and metal panels as per details on Drawings A4605, A4608, A4735 (tube and plate per detail D3/ A4735 and horizontal and vertical tubes of detail D2/ A4735), A4736 (metal fab steel tube with hangers) and D9 on A6834.
  - ii. At colling doors as per Drawing A6821 detail D6. Include bent metal angle attached to tubes (to support track installed by others).
  - iii. At smoke baffles at all locations shown including, but not limited to, as per Drawing details D8 on A5914, D9 on A5915, D10 on A5915, A5917, D2 on A5940F, A6023, and S5 on A6031.
  - iv. NOT USED.
  - v. At vending machines as per Drawings A1404, A4157, A4659 and A4661. Include for support of adjacent stone wall.
  - vi. At rated horizontal duct and pipe enclosures at all locations shown. See details D1/ A5983 and D4/ A5983 for applicable rated duct enclosure details. Coordinate locations of ducts and fuel pipe risers with Mechanical drawings. For rated duct enclosures, see Mechanical Drawings M0001 (see note/ legend for 2-hr rated enclosure notation) and M1201 thru M2310. For rated pipe enclosures, see M0408, and coordinate with Mechanical Drawing plans (as an example, see plans MP1205, MP1206, MP1208, MP2208). The Contractor is to use Architectural details D1/ A5983 and D4/ 5983 for the support of rated pipe enclosures.
  - vii. All of the above Work shall include, but not be limited to, hangers, tubes, posts, framing, kickers/bracing, connections, coordination with mechanical work, and engineering design.
- m. Steel tabs/ plates attached to structural steel as connected to base steel structure as indicated in details D6/ A4704, D1/ A4704, D1A/ A4704 and D1B/ A4704.
- n. Grating platforms (removable and permanent) including, but not limited to, gates, gratings, toe-kicks, railings, associated ladders and any required support framing above and beyond what is shown on the structural drawings, at all locations shown, but not limited to, at Drawings A1701, A6102, A7501, A7691, and A7692. Provide engineering for this item and coordination with approved MEP coordination drawings to be provided after award.
- o. Access ladders at all locations shown including, but not limited to, at Drawings A1801 and A6102. Work shall include, but not limited to, abrasive steel rungs set into holes in stringer and welded, angle brackets, galvanized tube bracket welded to ladder and beam, angle clips secured to slab, steel bar cage welded to steel tube, continuous embedded galvanized steel angle with steel studs, galvanized steel grating catwalks,



Attachment A  
Scope Of Work  
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continuous supporting angles, steel beam for ladder support, expansion anchors, steel landing support beams etc. Access ladder locations to be coordinated with other contractors' work.

- p. Metal grating and support angles at trenches and elevator sump pits as shown on drawings (A1503, A1703, D20/ A6130). Per RFC TH-00231, the grating indicated in D20/ A6130 shall be galvanized.
  - q. Design, furnish and install fifty (50) trapeze frames for support of various MEP systems in corridors with congested ceilings. Forty (40) frames shall consist of a single WF beam spanning 10', supporting 2,000 pounds, be braced for seismic loading on a 2,000 pound mass, and will have varying support conditions (hangers, posts or end connections to walls). The remaining ten (10) frames shall consist of a single WF beam spanning 10', supporting 5,000 pounds, be braced for seismic loading on a 5,000 pound mass, and will have varying support conditions (hangers, posts or end connections to walls). After MEP coordination the Contractor will be provided with drawings, which contain information concerning imposed gravity and seismic loads and show locations where these trapezes are required to be located.
  - r. Engineer, furnish and install loose lintels for masonry walls at ten (10) locations to be determined later, each weighing nominally 400 pounds. All loose steel lintels shall be provided with 6" long  $\frac{3}{4}$ " diameter headed studs (or threaded rebar couplers) welded 16" on center on the top face to act as dowels for masonry reinforcement and a means for attachment to the adjacent jambs (e/g: anchor bolts or bearing plates).
  - s. Furnish and install intermediate framing and divider beams for elevator shafts in the Transit Hall only where not sized on the structural drawings, including but not limited to divider beams and framing for the Elevators in the S-E corner of Transit Hall (see A1505).
  - t. Engineer, furnish and install miscellaneous steel associated with water tank per drawing A6102, including but not limited to grating, ladders, platforms, beams, knee bracing, angles, railing. Provide galvanized and stainless steel where specified. Per RFC TH-00261 response provide Type 316L stainless steel at T2 Water Tanks.
2. Furnish and deliver the following items (for unloading, handling and installation by others) as per the Drawings including, but not limited to, all related supports, embeds, attachments, manufactured sub-components, fabrications, splices, accessories, finishes, hardware, and anchors/templates/drawings for setting (provide setting drawings that are unique from shop drawings to show only the items to be installed by others dimensioned from column/gridlines):
- a. Miscellaneous Metal at Pits including, but not limited to, all sump pits, ejector pits, silt pits, oil interceptor pits, manholes, electrical duct bank pits, hinged covers, embedded edge angle (for installation by others), ladder rungs, side rails, diamond plate covers and



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Attachment A  
Scope Of Work  
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related support framing, (examples: A1104, A1105, A1106, A3023, A6152). Excluding elevator pit ladders and grating.

- b. Nosings for cast-in-place concrete stairs.

Any embedded items in the Work of the Contract weighing over 200 pounds shall be installed by the Contractor.

3. Provide the following items not shown on the contract documents:
- a. Temporary trolley beams for construction chain falls at three locations. System to be engineered by this contractor for point loads of 8,000 pounds and should span simply up to 12 feet. This Contractor to return for removal of these systems when directed by the Construction Manager.
  - b. Furnish and install head of wall support kickers for masonry walls obstructed from reaching the underside of structure above at five locations to be determined at a later date. Each location to consist on average of lateral support to brace a 10' long portion of 10" thick fully-grouted masonry 12' high with existing lateral supports on either side: provide two additional points of lateral support braced back to structure above. Include field measurements and engineering; work to be done after all other ceiling work is in place.
3. The following RFC responses and associated sketches are hereby made part of this contract:
- a. RFC TH-00176 including sketches SK-PK20-S4217-001, SK-PK20-S4217-002 & SK-PK20-4217-003.
  - b. RFC TH-00194 including sketch SK-PK20-A7013-001
  - c. RFC TH-00201 including sketches SK-PK-A7521-001
  - d. RFC TH-00238 including Sketch SK-PK20-A7621-001 and SK-PK20-A7013-001
  - e. RFC TH-00274 including sketches SK-PK20-A8820.

III. General Items

1. Provide mock-ups where applicable as per specifications.
2. Provide samples as specified for approval.
3. At a minimum, all metals provided under this contract shall be shop primed. Metals exposed to the elements (outside of the envelope of the building, e.g. loading dock, roofs, plenums) or embedded in cast-in-place concrete shall be stainless or galvanized. Dissimilar metals shall be isolated using dielectric separators. The Contractor shall field touch-up paint at field connections.



Attachment A  
Scope Of Work  
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4. The Contractor shall remove fireproofing as required to complete the work of this contract. The contractor will be back-charged for the cost of replacng fire proofing only if removal is excessive (more than reasonably warranted for the completion of the Contractor's work).
5. All embedded items to be incorporated into the work of others shall be furnished with templates and location details in advance of the installation, to ensure proper installation of same.
6. With respect to Exhibit 1 - "General Provisions", Section 21 - "Safety Provisions", Paragraphs 5, 6, and 7 (which are mutually exclusive), the Contractor shall comply with Paragraph 6.

**B. WORK NOT IN CONTRACT**

1. All Work shown on the West Side of the D1 line in Attachment C – Scope Limit Drawings.
2. Stainless steel hand rails.
3. Any structural framing shown on the structural Design Drawings.
4. Blast "Spall" Plates and Shell Column Enclosures shown on the Structural Drawings.
5. Hoist Beams.
6. Sheet metal airflow deflectors
7. Loose Lintels, except as indicated herein.
8. Miscellaneous steel framing related to elevators and escalators including hoist beams, separator, sills, rail supports, pit ladders and gratings, except as specifically indicated herein.
9. Framing at MEP shafts above and beyond framing shown on architectural drawings.
10. The cost of the Performance Bond and the cost of the Payment Bond are not included in the lump sum. A Performance Bond and a Payment Bond are requirements of the Contract but the costs for the bonds will be reimbursed as per Contract Paragraph 25. Performance Bond and Paragraph 26. Payment Bond.
11. Photoluminescent markings, except for nosings
12. Steel framing at Storefront.



Attachment A  
Scope Of Work  
World Trade Center Site – Transportation Hub  
New York, NY

September 20, 2010

Trade: Transit Hall Miscellaneous Metals  
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13. Precast concrete stair inserts, dowels, corner angles with welded shear studs and embeds as referenced in contract documents.
14. Embed plates and angles in cast-in-place concrete related to the attachment of precast concrete or structural steel.
15. Clip angles for support of pre-cast concrete walls.
16. Ornamental metals including metal wall panels.
17. Access doors in carpentry or masonry walls.
18. Horizontal fire shutter. See sketch SK-PK20-A8820.

C. SCHEDULE-TIME OF PERFORMANCE

1. Within two (2) weeks of award, the Contractor shall submit the following to the Construction Manager (first payment to Contractor will be withheld until the following is submitted):
  - a. Submittals for Work embedded in the slab on grade.
  - b. Calculations for the fan plant access door.
2. The Contractor shall commence engineering and detailing work immediately after award.
3. The Contractor shall commence field work on or about the 1<sup>st</sup> quarter of 2011, or at such later date as directed by Construction Manager in writing provided that the work of others has advanced sufficiently to permit such a start. The Contractor shall be prepared to complete all field work by the 3<sup>rd</sup> quarter of 2013, or at a later date if required by the progress of other trades at no additional cost to Construction Manager.
4. The Contractor shall provide multiple equipment, work in shifts, weekend work, expedite material procurement, expedite material delivery, shop drawing overtime, and any other cost to accomplish the above dates (durations include days for delays due to precipitation as stipulated in the Contract).
5. The work under this Contract shall be coordinated with the work of other trades in order not to delay the progress of the job or hinder the accomplishment of the Contract Milestones. The Contractor shall follow all interim schedules that may be issued by the Construction Manager as the job conditions require.
6. Installation/ delivery of pipe sleeves, inserts and/or any other items embedded within the concrete structure shall not delay concrete placement. If concrete placement is completed prior



September 20, 2010

Attachment A  
Scope Of Work  
World Trade Center Site – Transportation Hub  
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to the placement of sleeves and inserts, this Contractor shall perform all required core drilling, setting of anchors, etc., as required for the proper completion of its work. If damage to the work of other trades (i.e. conduit, etc.) results, the Contractor shall be responsible for all associated repair costs.

7. The Contractor shall coordinate all Work in Towers 2 and 3 with the Construction Manager so that appropriate arrangements can be made with the those parties affiliated with ongoing work in these areas.



Attachment A  
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D. OPTIONS

At the Authority's unilateral and sole discretion the Authority may exercise the following Options for additions and/or deletions to the Scope of Work and shall be inclusive of furnishing and installing of all material, labor, trucking, overhead, profit, escalation, equipment, hoisting, rigging, engineering, scaffolding, power hookups, protection, shop drawings, applicable taxes, applicable insurances, permits, appliances, storage, delivery, tools and field and office supervision. Items covered by these prices shall be furnished in accordance with the Contract Drawings and Contract Specifications. All Terms and Conditions of the Contract shall apply to the below Options except as modified below in the descriptions of the Option. Unless stated otherwise below, all Option pricing is valid only if executed within 30 days of award and shall be made with no impact to the Contract Milestone Dates. The Authority reserves the right to incorporate any of these options into the Work prior to award.

Option #1

In the event that the Contractor is directed to exclude work related to frames around typical doors per Scope Item II.1.k.3 noted above:

This price shall be valid only if executed within 120 days of award.

DEDUCT

\$ 311,406

Option #2

In the event that the Contractor is directed to exclude work related to steel framing (beams, channels, tubes, bracing, metal deck and connections) at T3 MEP shaftway shown on drawings A6121, A6122 and A6123:

This price shall be valid only if executed within 90 days of award.

DEDUCT

\$ 1,031,228

Option #3

In the event that the Contractor is directed to exclude work related to back-up steel for knee walls per Scope of Work Item A.II.d (tubes, plates, angles, anchors and connections) per Drawings A4663, A4672, A7020, A7029, A7211, A7212.

This price shall be valid for the duration of the Contract.

DEDUCT

\$ 96,884

Option #4

In the event that the Contractor is directed to furnish and install steel framing for Stairs 151 and 222.

This price shall be valid only if executed within 90 days of award.

ADD

\$ 21,450

Option #5

In the event that the Contractor is not required to furnish and install masonry seismic clips for Masonry walls in Towers 2, 3 and 4.

This price shall be valid only if executed within 90 days of award.

DEDUCT

\$ 39,000



Attachment A  
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Option #6

In the event that the Contractor is not required to furnish and install Stairs "23", "24", "26", "27" and "33". The Contractor shall install the bent metal tread plates, where applicable, for these stairs. This price shall be valid only if executed within 120 days of award.

DEDUCT

\$ 299,978

