

**THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY
TWO MONTGOMERY STREET - 1st FLOOR
JERSEY CITY, NJ 07302**

November 18, 2022

ADDENDUM NO. 14

TO PROSPECTIVE BIDDERS ON CONTRACT **PN-654.001** – PORT NEWARK – PORT STREET CORRIDOR IMPROVEMENTS AND CONTRACT **PN-654.001M** – PORT NEWARK – PORT STREET CORRIDOR IMPROVEMENTS – AGREEMENT TO PERFORM LANDSCAPE MAINTENANCE

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 initialled by each bidder before submitting his bid.

In case any bidder fails to conform to these instructions, his Bid will nevertheless be construed as though this communication had been so physically annexed and initialled.

CHANGES IN THE CONTRACT BOOKLET FOR CONTRACT PN-654.001

- | | |
|----------------------------|--|
| Page v – | Delete the entire page and substitute therefor new page v which is attached hereto and made a part hereof. |
| Page 1 – | Delete the entire page and substitute therefor new page 1 which is attached hereto and made a part hereof. |
| Page 19 – | Delete the entire page and substitute therefor new page 19 which is attached hereto and made a part hereof. |
| Pages 104 –
and 105 | Delete these pages in their entireties and substitute therefor new pages 104 and 105 which are attached hereto and made a part hereof. |
| Pages 219 –
through 227 | Delete these pages in their entireties and substitute therefor new pages 219 through 227C (12 pages) which are attached hereto and made a part hereof. |
| Page 280 – | Delete the entire page and substitute therefor new page 280 which is attached hereto and made a part hereof. |

REVISED CONTRACT DRAWINGS

Drawings E204, E213, E215, E216, E217, E231 and E232 have been revised as of 10/31/2022. A copy of these drawings is transmitted herewith (via email or download). Destroy the drawings of these numbers now in your possession and substitute therefor the revised drawings.

THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY

James Starace, P.E.
Chief Engineer/Director

INITIALLED BY THE BIDDER:

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INFORMATION FOR BIDDERS

1. FORM AND SUBMISSION OF BIDS

The Port Authority of New York and New Jersey, hereinafter called the Authority, invites bids (Bids) in the annexed form. Bids will be received until 2:30 PM on Wednesday, January 18, 2023 via digital submission of Bids, using the Bonfire platform, at the link provided below.

Bidders must register and create a free Bonfire account at the provided link in order to log in and download Bid documents and associated information, and in order to upload Bid submissions. Registration on the Bonfire platform requires a registration that is separate and distinct from all other Port Authority software platforms.

Bid submissions must be uploaded, submitted and finalized prior to the Closing Time of 2:30 PM EST. Bidders are strongly urged to allow sufficient time of at least one (1) day prior to Bids Due Date (Close Date) to begin the uploading process and finalizing the Bid submission. Bidders will receive an email confirmation receipt with a unique confirmation number once a Bid submission is finalized.

The Port Authority will accept only those Bids in electronic format for which the submission or submission modification is completed at the time of the Bids Due Date.

The electronic copy of the Contract booklet furnished to each prospective bidder in portable document format (PDF) for the bidder's use shall be filled out and submitted in its entirety to the Authority by the date and time that Bids are due.

Bid submissions will be accepted by upload only, at:

<https://panynj.bonfirehub.com/portal/?tab=login>

and must be uploaded and received by the Port Authority by 2:30 PM EST in order to be considered. Hand deliveries and mailed deliveries (e.g., UPS, USPS) will not be accepted.

Bidders will be permitted to submit modifications to Bids or withdraw previously submitted Bids electronically up to, but not after, the time of the Bid Due Date. The Port Authority may request an original, signed paper submission at any time following the Bid Due Date. If requested, such original, signed paper submission must be identical to the electronic submission. In the event of a discrepancy, the electronic submission shall control.

Bid results will be posted to the Port Authority's website as soon as they are available, at the following link:

<https://www.panynj.gov/port-authority/en/business-opportunities/preliminary-bid-results.html>

Bid submissions must include all required information, as required by the clause hereof entitled "Papers Accompanying Bids".

The Bid must be submitted upon the blank form bound herewith and must give all information required. The Bid must be signed and the acknowledgment taken on the appropriate form following the Bid.

This Contract may be executed in any number of counterparts, and each such counterpart hereof shall be deemed an original instrument, but all such counterparts together shall constitute but one Contract. This Contract may be signed by a party, either by hand, or with an electronic signature affixed digitally and in each case, this Contract may be personally delivered or sent by email or other electronic means after execution. Any such means of execution and transmittal shall have the same binding and legal effect.

- (ii) Hispanic Americans which includes persons of Mexican, Puerto Rican, Cuban, Dominican, Central or South American descent of either Native American or Latin American origin, regardless of race;
- (iii) Native Americans which includes persons who are American Indians, Eskimos, Aleuts or Native Hawaiians;
- (iv) Asian-Pacific Americans which includes persons whose origins are from Japan, China, Taiwan, Korea, Burma (Myanmar), Vietnam, Laos, Cambodia (Kampuchea), Thailand, Malaysia, Indonesia, the Philippines, Brunei, Samoa, Guam, the U.S. Trust Territories of the Pacific Islands (Republic of Palau), the Commonwealth of the Northern Marianas Islands, Macao, Fiji, Tonga, Kiribati, Juvalu, Nauru, Federated States of Micronesia or Hong Kong;
- (v) Subcontinent Asian Americans which includes persons whose origins are from India, Pakistan, Bangladesh, Bhutan, the Maldives Islands, Nepal or Sri Lanka;
- (vi) Women; and
- (vii) Any additional groups whose members are designated as socially and economically disadvantaged by the U.S. Small Business Administration (SBA), at such time as the SBA designation becomes effective.

C. DBE Goal

The Authority's Office of Business Diversity and Civil Rights has established a goal for DBE participation on this Contract, which the bidder will be required to show how it will meet, if awarded this Contract. This goal, expressed as a percentage of the total Contract price, including any future adjustments to the total Contract price issued pursuant to the Extra Work provisions of the Contract, is:

DBE Participation Goal: 26% for firms owned and controlled by socially and economically disadvantaged individuals (as defined above) and certified as DBEs by the Authority. Eligible DBE firms are listed on the following Unified Certification Programs (UCPs) websites:

New York UCP – <https://nysucp.newnycontracts.com/>

New Jersey UCP – <https://njucp.dbesystem.com/>

In the event the successful bidder's proposed level of DBE participation is less than this prescribed level of DBE participation, to remain eligible for Contract award, the successful bidder must satisfy the good faith efforts requirements set forth in subparagraph I.3.) below.

OBDCR is responsible for determining compliance by the bidder with DBE Program requirements established for this Contract. The bidder shall make all DBE Program submissions required by this Contract. Once awarded, the successful bidder shall make all DBE Program submissions to OBDCR at the following address and email address:

Contract No: PN-654.001
 Name: Ocean Stokes
 Email: ostokes@panynj.gov
 Telephone No.: (212) 435-5874
 Address: The Port Authority of NY & NJ
 2 Montgomery Street, 2nd Floor
 Jersey City, NJ 07302

In addition, the liability policy(ies) shall name the Port Authority of New York and New Jersey, its related entities, their commissioners, directors, officers, partners, employees, agents New Jersey Turnpike Authority, NJDEP, the City of Newark, Conrail, their assigns and successors as additional insureds. The liability policy(ies) and certificate(s) of insurance shall contain separation of insured conditions and severability of interest's clauses for all policies. These insurance requirements shall be in effect for the duration of the Contract and include any warrantee /guarantee period and any maintenance period. An act or omission of one of the insureds shall not reduce or void coverage to the other insureds. Furthermore, the Contractor's insurance shall be primary insurance as respects to the above additional insureds. Any insurance or self-insurance maintained by the above additional insureds shall not contribute to any loss or claim. A waiver of subrogation, as allowed by law, shall be given to the additional insureds. The Contractor and subcontractors shall demonstrate adequate insurance of their own by providing their own certificate of insurance, containing the usual and customary insurance coverages for their trade to include commercial general liability insurance, automobile insurance and workers' compensation with employer's liability insurance to the Authority. Such insurance and limits shall also meet the minimum standards of the Authority but shall not in any way be construed as a limitation and/or representation by the Authority as to the adequacy of the insurance necessary to protect the Contractor and subcontractors against the obligations imposed on it by law or by this or any other contract. The Contractor's and subcontractor's insurance will be reviewed by Risk Financing, The Port Authority of NY & NJ, Treasury Department, 150 Greenwich Street, 19th Floor, Four World Trade Center, New York, NY 10007, or their designee. Work shall not begin until Risk Financing or their designee approves the certificate(s) of insurance. If such certificate is not approved, the Contractor and/or subcontractors must immediately correct for any deficiencies noted and a revised certificate shall be submitted to Risk Financing or their designee for acceptance. The insurance from the Contractor shall not contain any exclusion for wrap up insurance and the Contractor shall cause his subcontractors to delete any exclusion for wrap up insurance from the subcontractors' insurance.

The certificate(s) of insurance and liability policy(ies) must contain the following endorsement for the above liability coverages:

"The Contractor, its subcontractors and its insurers shall not, without obtaining the express advance written permission from the General Counsel of the Port Authority, raise any defense involving in any way the jurisdiction of any court, tribunal, agency, special district, commission or other authority exercising judicial or regulatory functions over the person of the Port Authority, the immunity of the Port Authority, its Commissioners, Directors, officers, agents or employees, their affiliates, successors and/or assigns, the governmental nature of the Port Authority or the provision of any statutes respecting suits against the Port Authority. The Port Authority is an intended third-party beneficiary of the agreement between the Contractor, and each of its respective subcontractors and insurers, with the direct right to enforce the agreement with respect to this provision."

The Contractor shall deliver certified copies of the policy(ies) described above or certificate(s) of insurance evidencing the existence thereof to the Engineer at the location where the Work will be performed, within ten (10) days after the acceptance of his Proposal. Such policy(ies) or certificate(s) shall state the Contract number and shall contain a valid provision or endorsement that the policy(ies) may not be canceled, terminated, changed or modified without giving thirty (30) days written advance notice thereof to the Authority and to Conrail.

Certified copies of all renewal policies or certificates evidencing their existence shall be delivered to the Engineer at the location where the Work will be performed at least ten (10) days prior to the expiration date of each expiring policy and to Conrail's Insurance Department, Attn: Manager-Insurance, 1717 Arch Street, 13th Floor, Philadelphia, PA 19103-2844. If at any time any of the certificates or policies shall be or become unsatisfactory to the Authority or to Conrail, as to form or substance, or if the carrier issuing any such certificate or policy shall be or become unsatisfactory to the Authority or to Conrail, the Contractor shall promptly obtain a new and satisfactory certificate and policy. Upon request of the General Manager, Risk Financing, the Contractor shall furnish the Authority with a certified copy of each policy stated above.

The requirements for insurance procured by the Contractor shall not in any way be construed as a limitation on the nature or extent of the contractual obligations assumed by the Contractor under this Contract. The insurance requirements are not a representation by the Authority as to the adequacy of the insurance to protect the Contractor against the obligations imposed on him by law or by this or any other contract.

Nothing contained herein shall relieve the Contractor from performing the Work in accordance with the Contract Drawings and Specifications nor release the Contractor from any obligations under or upon this Contract.

139. REQUIREMENTS FOR CRANES AND DERRICKS

During the performance of Work at the construction site, either on or adjacent to any Authority or PATH facility, the use by the Contractor or his subcontractors of power operated cranes and derricks for hoisting and/or rigging purposes; or for construction, alteration, demolition, excavation and maintenance purposes, including highways or sewers; or for the installation of piles; or for the hoisting or lowering of any article on the outside of any building or structure shall be subject to the approval of the Engineer in accordance with this Section.

- A. Determinations will be made in writing by the Engineer on whether cranes and other such equipment meeting certain criteria shall be exempt from all or part of the requirements herein. Such determinations shall in no way relieve the Contractor from conformance with all applicable requirements of this Section and governing codes including the possession of a valid operator's license (NCCCO- National Commission for the Certification of Crane Operators license), designation by the Contractor of a Lift Director and Assembly/Disassembly Director, all subject to verification by the Engineer.
- 1.) The following equipment will be considered for full exemption, which means exempt from B., C., D., H., I. and J. below:
 - a. Excavating or earth-moving equipment, except cranes used with clamshells.
 - b. Augurs, churn-drills, and other drilling equipment not used for the hoisting of any objects.
 - c. Mobile cranes, including jibs and any other extensions to the boom, not exceeding 50 feet in length and with a manufacturer's rated capacity of 3 tons or less.
 - d. Hoisting machines permanently mounted on the bed of material delivery trucks that are used exclusively for the loading and unloading of such trucks, provided that the length of boom does not exceed the length of the truck bed by more than 5 feet, and any material transported thereon shall not be raised more than 2 feet in the unloading process.
 - e. Cranes and derricks with a manufacturer's rated capacity of less than 1 ton.
 - f. Mechanics trucks with a hoisting device used in activities associated with the maintenance and repair of construction related equipment.
 - g. Articulating boom cranes that do not have an integral hoisting mechanism and that are used exclusively for the loading and unloading of trucks or trailers, provided that the length of boom does not exceed 135 feet, and that any material transported thereon shall not be raised more than 100 feet in the unloading process.
 - 2.) The following equipment will be considered for Partial Exemption – I, which means exempt from B.4.), C.2.), C.4.) and D. below:
 - a. Cranes with less than 160 feet combined boom/jib length to be used for a period not exceeding 48 hours, operated entirely within Authority property and at a location at least one boom/jib length away from all Authority property.

- b. Service cranes and clamshells with a boom length of 110 feet or less, to be operated entirely within Authority property and at a location that does not require the moving of any load over a roadway or sidewalk.
 - (i) A service crane is defined as a mobile crane utilized exclusively to perform one or more of the following auxiliary tasks at a site: (1) repairing or maintaining construction machinery, (2) delivering material within the confines of the site, (3) moving material within the site to a central location so that it may be lifted to the required areas of construction, or (4) moving within the site matting, dunnage, or equivalent from one location to another. A service crane does not include a crane used to make a delivery to the site by hoisting it into the site from a point external to the site, or a crane used to hoist or lower articles to or from a building or structure during the course of construction or demolition.
 - c. Pile drivers or clamshells operated entirely within Authority property that does not impart a load on the ground in excess of 500 pounds per square foot, including the load of the platform, matting, or dunnage utilized to support the equipment.
 - d. Mobile cranes, including jibs and any other extensions to the boom, exceeding 50 feet but not exceeding 135 feet in length, and with a manufacturer's rated capacity of 3 tons or less used exclusively as a man-basket.
- 3.) The following equipment will be considered for Partial Exemption – II, which means exempt from B., C. 2.), C. 3.), C. 4.), D., H. and I. below:
- a. Articulating/knuckle boom cranes used to hold, support or stabilize material to facilitate construction activity.
 - b. Cranes with a manufacturer's rated capacity of 1 ton or less.
- B. For each crane or derrick not considered fully exempt by the Engineer, submit the following forms to the Engineer prior to delivery of the crane or derrick to the construction site:
- 1.)
- a. For Work performed in New York City: A copy of a current and valid NYC Cranes & Derricks Certificate of Operation, as issued by the New York City (NYC) Department of Buildings (DOB) - Cranes & Derricks Division, hereinafter called "NYCDOB-C&D". The Certificate of Operation shall include an expiration date, a legible CD Number, and an authorized signature from a representative of NYCDOB-C&D.
 - b. For Work performed outside of New York City: A copy of a current and valid NYCDOB-C&D Certificate of Operation or a crane inspection report equivalent to New York City Department of Buildings Cranes & Derricks Division inspection reports (including NYC Local Laws (LL) 3/18 age of crane, LL 13/18 wind measuring requirements, LL 77/17 global positioning system and LL 79/17 crane event recorder) and Magnetic Particle testing requirements of the lattice boom, hook and block. The crane inspection shall be performed by an inspector meeting the following requirements:
 - (i) Five years' experience in the hoist and rigging industry.
 - (ii) Nationally certified as inspector for mobile, tower, rigging and safety.

- (iii) Manufacturers' specific training on crane equipment.
- 2.) For All Work: Statement of ownership on letterhead from crane owner.
- 3.) For Work performed in New York City: A fully executed Form CD-16, Applicants Statement of Notification to Community Boards.
- 4.)
 - a. For Work performed in New York City: A fully executed Form CD-4, entitled "Crane/Derrick/Notice Application", Revised 5/17, as issued by NYCDOB-C&D. Form CD-4 shall be accompanied by drawings and calculations, all signed and sealed by a Professional Engineer licensed in the state of New York. The drawings and calculations shall clearly indicate the following:
 - (i) Location of each crane or derrick.
 - (ii) All pertinent features of the site.
 - (iii) Supporting platforms and structures.
 - (iv) Swing and reach of each crane or derrick.
 - (v) Calculations showing an acceptable factor of safety for overturning for any loading condition.
 - (vi) If either prestressed or non-prestressed soil or rock anchors are required to provide an acceptable factor of safety for overturning:
 - (a.) The calculations shall include the design for the tie-downs prepared.
 - (b.) The drawings shall include the installation and testing requirements for the tie-downs.
 - (c.) The testing of the tie-downs shall be witnessed by the Professional Engineer that prepared the tie-down design. At the completion of the testing, submit a tie-down load test report verifying the capacity of the tie-downs.
 - (vii) Calculations showing that the maximum bearing pressure for the crane under any loading condition is less than the allowable bearing pressure for the soil.
 - (viii) The Contractor's Engineer of Record for the crane shall include information on how the ground loading capacity was determined.
 - (ix) Aircraft warning lights and markings must be indicated on the drawing plan views when such lights and markings are required by the Federal Aviation Administration (FAA).
 - (x) Location of anemometer on the construction site and process of notification of information to the operator.
 - (xi) Wind action plan including load reductions, maximum in-service wind threshold, configurations and procedures, including angles and sequencing, for parking and securing the crane in each applicable out-of-service position. The maximum in-service wind threshold listed in the wind action plan cannot exceed 30 mph (3-second gust) or the threshold specified by the crane manufacturer, whichever is more stringent. Wind measuring shall be in accordance with NYC Local Law 13/18 and RCNY 3319-01.

Exceptions

The 30 mph (3-second gust) criterion does not apply to:

- (a.) A mobile crane where the crane is set up and operated entirely within a safety zone, provided:
 - i. The distance from the crane to the boundary of the safety zone is equal to or greater than the length of the boom, jib, and any other attachments; and
 - ii. All areas and structures within the safety zone are closed to the public.
 - iii. The maximum in-service wind threshold shall never exceed the threshold specified by the manufacturer.
 - (b.) A tower crane, where the crane is set up and operated entirely within a safety zone, provided:
 - i. The distance from the crane to the boundary of the safety zone is equal to or greater than the height of the mast and the length of the boom, jib, and any other attachments; and
 - ii. All areas and structures within the safety zone are closed to the public.
 - iii. The maximum in-service wind threshold shall never exceed the threshold specified by the manufacturer.
- b. For Work performed outside New York City: A fully executed NYCDOB Form CD-4 or a letter signed and sealed by a Professional Engineer licensed in the state where the Work is being performed explaining intent of crane use, designating crane safety coordinator and equipment user and stating that equipment will not be used unless an on-site inspection is performed; such letter shall be accompanied by drawings and calculations as specified in (i) through (viii) above, all signed and sealed by a Professional Engineer licensed in the state where the Work is being performed.
- 5.) If the crane or derrick location is within two hundred feet (200') of an NYC subway line or facility, approval from New York City Transit ("NYCTA") is required prior to the placement, assembly, or erection of the crane or derrick. In such cases, a Certificate of On-Site Inspection cannot be issued without NYCTA written approval.
 - 6.) If the crane or derrick location is within an airport, FAA approval is required prior to the placement, assembly or erection of the crane or derrick.
- Upon the review and acceptance in writing by the Engineer of all of the above submissions, the crane or derrick will be permitted to enter the construction site. Coordinate all such deliveries with the Engineer.
- C. Upon delivery to the construction site for cranes or derricks considered for Full Exemption or Partial Exemption – I or Partial Exemption – II by the Engineer, submit the following to the Engineer in accordance with A. above. For all other cranes or derricks, submit all of the following to the Engineer:
- 1.) Names, classifications and license numbers of each crane or derrick operator and the master, tower or climber crane rigger.

- 2.) For cranes or derricks to be operated solely on Authority property:
- a. For Work performed in New York City:
- (i) Form CD-8, entitled "Technical Report – On-Site Crane Inspection", Revised 3/19, as issued by the NYCDOB-C&D. Form CD-8 shall be completed in its entirety and signed and sealed by a Professional Engineer licensed in the state of New York.
 - (ii) Form CD- 8-AD entitled "Technical Report- On-Site Crane Pre-Operation Inspections", Revised 3/19, as issued by NYCDOB- C&D. Form CD 8-AD shall only be completed if the crane or derrick requires assembly or disassembly at the site. Assembly/disassembly is defined as the installation or removal of structural components or attachments to a crane or derrick, or the installation or removal of elements that connect or attach a crane or derrick to a building or structure. The term assembly/disassembly includes the erection, climbing, jumping, or dismantling of a tower crane. The term assembly/disassembly does not include operations exclusive to the installation or removal counterweights, or to the unfolding and pinning of a boom or swing-away jib. The term assembly/disassembly also does not include the setup or breakdown of a self-erecting tower crane provided the setup of the self-erecting tower crane does not require a boom, mast, or jib section, or other attachment, to be installed at the site. CD 8-AD is not required after the final disassembly and removal of the crane or derrick from the site. CD 8-AD is not required once the jumping down/climbing down or dismantling of a tower crane begins, provided the tower crane will not be operated again at the site.
 - (iii) Form CD-8-TR entitled "Technical Report- Identification of Special Inspections", Revised 3/19, as issued by NYCDOB-C&D. Form CD 8-TR shall be completed only if special inspections are specified for structural elements that support the crane or derrick.
- b. For Work performed outside of New York City:
- (i) NYCDOB Form CD-8 or a letter from a Professional Engineer licensed in the state where the Work is being performed stating responsibility for the design of the foundation and certification that an on-site crane inspection will be performed prior to the commencement of Work. Upon completion of the on-site crane inspection, signed and sealed Design Applicant's Statement of Crane and Crane Support Inspection letter shall be submitted.
 - (ii) Form CD- 8-AD entitled "Technical Report - On-Site Crane Pre-Operation Inspections", if applicable as stated above, or a letter from a Professional Engineer licensed in the state where the Work is being performed, that all pre-operation inspections and tests were satisfactorily completed. Pre-operation inspections and tests must meet, at a minimum, those listed on Form CD 8-AD.
 - (iii) Form CD-8-TR entitled "Technical Report- Identification of Special Inspections", if applicable as stated above, or a letter from a Professional Engineering licensed in the state where the Work is being performed, certifying that they have identified all of the special inspections required for compliance and certification from the special inspector, that all work was performed and completed in accordance with the approved construction documents and code requirements.

Upon review and acceptance by the Engineer of all submitted drawings and associated documentation specified above, the Contractor will be permitted to place and/or assemble the crane or derrick at the construction site, with the exception of tower or climber cranes. For tower or climber cranes, additional submittals and inspections shall be required as specified in 4.) below.

- 3.) For cranes or derricks to be operated on other than Authority property:
 - a. For Work performed in New York City: File all forms, drawings and associated documentation directly with NYCDOB-C&D. Upon the submission to the Engineer of a current and valid "Certificate of On-Site Inspection" as issued by NYCDOB-C&D, will the Contractor be permitted to assemble or erect the crane or derrick at the construction site.
 - b. For Work performed outside New York City: File directly with the local municipality and submit proof of such municipality approval to the Engineer prior to erecting the crane or derrick at the construction site.
- 4.) For tower, self-erecting, or climber cranes, in addition to the documentation in B. and C. above, submit the following to the Engineer:
 - a.
 - (i) For Work performed in New York City: A fully executed Form CD-7, entitled "Notification of Erecting, Climbing or Dismantling of Climber or Tower Crane", Revised 5/17. Form CD-7 shall be accompanied by a copy of the license of each master or tower rigger designated to supervise the erection of the crane and all associated documentation required to ensure compliance with the manufacturer's recommendations. Form CD-7 shall also be accompanied by signed and sealed drawings by a Professional Engineer licensed in the state of New York for the erection, jumping, climbing and dismantling of the tower or climber crane. Documentation and drawings shall include the following:
 - (a.) Serial number identification of equipment to be used for all rigging and lifting operations including all machines to be used for erection or dismantling.
 - (b.) Detailed listing of assemblies and components required for erection and dismantling of rigging and lifting equipment, including but not limited to lifting frame, climbing hydraulic cylinders, upper basket, lower basket, outriggers, communication system, tie-downs, dogs, horn, lights and weathervane.
 - (c.) Location of rigging and lifting equipment, assist cranes, sidewalk sheds, surrounding buildings, protection for their roofs and pick-up points, loads, and radius of swing of all loads. In addition, submit to the Engineer the safe load from the crane manufacturer's approved load radius chart for lift radius.
 - (d.) Weight list certified by the crane manufacturer listing all assemblies and components to be lifted. All components shall be clearly marked with their weight painted on the assembly, or stamped on metal tags attached to the assembly. In lieu of an equipment manufacturer's certification, submit documentation signed and sealed by a Professional Engineer licensed in the state of New York certifying the weight list and indicating how such weights were determined.
 - (e.) Locations of the centers of gravity for all asymmetrical components.

- (f.) Sequence of operation detailing erection, jumping, climbing and dismantling, along with the rigging materials to be used in such operations.
 - (g.) Written certification by a Professional Engineer licensed in the state of New York that all safety devices on each crane to be used in the erection, jumping, climbing and dismantling operations have been calibrated in accordance with the crane manufacturer's recommendations.
 - (h.) Names, license numbers (as applicable) and contact information for each licensed rigger, rigger foreman, site safety manager, crane safety coordinator and entity performing the erection, jumping, climbing, and/or dismantling Work.
 - (i.) Load test procedure signed and sealed by a Professional Engineer licensed in the state of New York identifying the weights to be used and the load moment and line pull testing to be conducted in accordance with b. below.
 - (ii) For Work performed outside New York City: A fully executed NYCDOB Form CD-7 or a letter from a Professional Engineer licensed in the state where the Work is being performed documenting the date of the erection/jump/lowering or dismantling of a climber or tower crane. Such letter shall include rigger's information and equipment user stating responsibility and conforming to manufacturer's procedures and be accompanied by documentation and drawings listed in (a.) through (i.) above.
- b. A load test shall be conducted on each tower or climbing crane by a Professional Engineer licensed in the state where the Work is being performed in accordance with the load test procedure submitted under (i.) above. Self-erecting crane test requirements shall meet the New York City DOB Code. Tower crane load tests shall be in accordance with New York Codes, Rules and Regulations Part 23 Subpart 23-8.3 which states prior to initial use, a newly erected tower crane shall undergo a static overload test in the direction of least stability. Such test shall consist of suspending a load at the rated load and at the maximum radius for a period of at least one hour, unless otherwise waived by the Engineer in writing. Upon completion of the load test and determination that the results are satisfactory, submit to the Engineer the signed and sealed report certifying acceptance of the results by the Professional Engineer licensed in the state where the Work is being performed.
- c.
- (i) For Work performed in New York City: A fully executed Form CD-12, entitled "Designation of Primary Lift Director" Revised 8/17, as issued by NYCDOB-C&D.
 - (ii) For Work performed outside New York City: A fully executed NYCDOB Form CD-12 or a letter designating the name of the Designated Primary Lift Director for the crane and stating responsibility for the control of pedestrian and vehicular traffic in the hoisting area.
- d. A signed and sealed report documenting the results of the field inspection of the crane in the "unassembled state (for cranes delivered in the unassembled state)" performed by a Professional Engineer licensed in the state of where the Work is being performed and certifying that all crane parts are in satisfactory condition, and acceptable for assembly and erection.

- e.
 - (i) For Work performed in New York City: A copy of the Safety Coordination Meeting Log as stipulated in Section BC 3319 entitled "Cranes and Derricks" of the Building Code for the City of New York (BCCNY) (3319.8.1 through 3319.8.8, and 3319.10.2). Conduct the safety coordination meeting in accordance with NYC LL 14/18 (all in attendance) within the week prior to the erection, jumping, climbing, or dismantling of a tower, self-erecting or climber crane in accordance with BCCNY and notify the Engineer one week prior to the meeting.
 - (ii) For Work performed outside New York City: Conduct a safety coordination meeting within the week prior to the erection, jumping, climbing, or dismantling of a tower, self-erecting or climber crane, notify the Engineer one week prior to the meeting and submit a copy of the Safety Coordination Meeting Log along with the rigging crews' licenses.

Upon review and acceptance by the Engineer of all documentation in B. and C. above, the Contractor will be permitted to erect the tower or climber crane at the construction site.

- D. Prior to the use and/or operation of each crane or derrick, including tower, self-erecting or climber cranes, at the construction site when the crane or derrick will be operated solely on Authority property, complete the following:
 - 1.)
 - a. For Work performed in New York City: Performance of a field inspection of the crane or derrick in the "assembled state" by a Professional Engineer licensed in the state of New York in accordance with BCCNY Reference Standard RS 19-2 and Section 3319 including the verification, inspection, and certification of the following:
 - (i) That the crane or derrick has a current and valid NYCDOB-C&D Certificate of Operation as issued by NYCDOB-C&D for the configuration to be used at the construction site.
 - (ii) That the support, dunnage, configuration and location of the crane or derrick have been constructed and positioned in accordance with the drawings and calculations submitted to the Engineer with Form CD-4.
 - (iii) That the crane or derrick is in working order and there is no visible damage including, but not limited to, the following items:
 - (a.) Bent or missing lacings.
 - (b.) Pins are properly installed and have no visible fatigue.
 - (c.) Maladjustment of control mechanisms interfering with proper operation.
 - (d.) Excessive wear of control mechanisms components and contamination by lubricants or other foreign matter.
 - (e.) Malfunction of operational aids.
 - (f.) Hydraulic hoses.
 - (g.) Deformation, chemical damage, cracks and wear of hooks and latches.
 - (h.) Rope reeving for compliance with crane manufacturer's specifications.

- (i.) Malfunction and excessive deterioration of electrical apparatus and accumulation of dirt and moisture.
- (j.) Hydraulic system for proper oil level.
- (k.) Tires for recommended inflation pressure.

Upon the completion of the field inspection and the determination that the crane or derrick is sound and has been assembled and positioned in accordance with the drawings and calculations submitted to the Engineer with Forms CD-4 and CD-7, submit to the Engineer both a signed and sealed inspection report certifying conformance by the Professional Engineer licensed in the state of New York and a fully executed Form CD-8, signed and sealed in Box #6B.

- b. For Work performed outside New York City: A Professional Engineer licensed in the state where the Work is being performed shall perform a field inspection of the crane or derrick in the "assembled state" including the verification, inspection, and certification of the following:
 - (i) That the crane or derrick has a current and valid inspection report in accordance with B.1.) above.
 - (ii) That the support, dunnage, configuration and location of the crane or derrick have been constructed and positioned in accordance with the drawings and calculations submitted with the letter outlining the intended use of the crane.
 - (iii) That the crane or derrick is in working order and there is no visible damage including, but not limited to, the items listed in D.1.a.(iii) above.
 - (iv) Submit a letter to the Engineer stating that the Professional Engineer licensed in the state where the Work is being performed has completed the foundation inspection, the foundation conforms to the approved drawings and there are no hazardous conditions.
- 2.) For tower, self-erecting or climber cranes, in addition to the above, perform the following:
 - a. For performance of Work in New York City: Procure the services of a land surveyor licensed in the state of New York to perform a plumbness survey, a licensed testing laboratory to perform anchor bolt pull-out testing, and a licensed rigger to certify compliance with the manufacturers bolt torque values connecting sections. Submit to the Engineer a fully executed Form CD-8-AD, entitled "Technical Report - On-Site Crane Pre-Operation Inspections", Revised 3/19, as issued by NYCDOB-C&D.
 - b. For performance of Work outside New York City: Submit to the Engineer a fully executed NYCDOB Form CD-8-AD or procure the services of a land surveyor licensed in the state where the Work is being performed to perform a plumbness survey, a licensed testing laboratory to perform anchor bolt pull-out testing, and a licensed rigger to certify compliance with the manufacturers bolt torque values connecting sections.

Upon the review and acceptance by the Engineer of all documents required above, the Contractor will be permitted to use and operate the crane or derrick at the construction site.

- E. Requirements for inspection and operation of cranes at the construction site:
- 1.) Monthly inspections and reports shall be performed, prepared and signed by a competent person as defined in Federal Register Part II, Department of Labor, Occupational Safety and Health Administration, 29 CFR Part 1926 Cranes and Derricks in Construction; Final Rule (OSHA), and a copy of each inspection report shall be store in the crane cab for three months.
 - 2.) Maintain securing and shift inspection logs in the cab. Monthly reports shall be signed by the crane or derrick operator.
 - 3.) Pre-lift meetings shall be held as outlined in Federal Register Part II, Department of Labor, Occupational Safety and Health Administration, 29 CFR Part 1926 Cranes and Derricks in Construction, Final Rule (OSHA). Submit pre-lift meeting minutes to the Engineer.
 - 4.) No crane or derrick operator shall start an operation when the wind speed exceeds 30 miles per hour or the wind speed is forecast to reach 30 miles per hour before the operation can be completed, unless exempted in item B.4.a. (xi) herein.
Tower cranes shall not be raised to new operating levels when the wind speed exceeds 20 miles per hour.
 - 5.) All cranes operated at the construction site shall be equipped with a crane event recorder in accordance with NYC LL 79/17. Information tracking ability shall include configuration, overload, limit switch and operator override.
 - 6.) All cranes operated at the construction site shall be equipped with an anemometer in accordance with NYC LL 13/18 measuring wind table 3319.13.
 - 7.) Inspections of cranes shall include the following:
 - a. Historical information and maintenance.
 - b. Inspection equivalent to NYCDOB-C&D inspection requirements including NYC LL 77/17 for global positioning system and NYC LL 3/18 for age of crane.
 - (i) Only cranes and associated parts having an age of less than 25 years from the manufacture date may be used.
- F. Requirements for Use of Mini Cranes
- 1.) Mini Cranes are defined as a mobile crane (wheel or tread mounted) with a boom length, inclusive of jibs and extensions, not exceeding 50 feet, and with a manufacturer's rated capacity of 3 tons or less.
 - 2.) For all Work: Signed and sealed drawings by a Professional Engineer licensed in the state in which the Work is being performed that include the following:
 - a. Machine make and model.
 - b. Capacity.
 - c. Pertinent site conditions.
 - d. Location and configuration of crane.
 - e. Maximum and minimum swing radius and load path of boom and load.
 - f. Minimum clearance for the boom.
 - g. Pick and landing zones and applicable pedestrian and traffic control.
 - h. Loads imposed, and any reinforcements needed to support the crane.
 - i. Tiebacks to secure the machinery.

- j. Wind thresholds and plan.
- 3.) Operator Qualifications
 - a. For Work performed in New York City: NYC Hoisting Machine Operator license.
 - b. For Work performed outside of New York City: NYC Hoist Machine Operator or a valid certification of operation of the crane issued by the manufacturer of the crane for the specific make and model of crane to be operated. Acceptable manufacturer certification programs are the following, unless otherwise approved by the Engineer:
 - (i) Spydercrane.
 - (ii) Jekko Mini Crane.
 - (iii) Valla.
- 4.) Rigging
 - a. For Work performed in New York City: If the mini crane has a manufacturer's rated capacity in excess of 1 ton, the rigging crew and rigging supervisor must be trained and certified in accordance with Section 3316.9.2 of the NYC Building Code.
 - b. For Work performed in Outside of New York City: If the mini crane has a manufacturer's rated capacity in excess of 1 ton, the rigging crew and rigging supervisor must be trained and certified in accordance with Section 3316.9.2 of the NYC Building Code or minimum equivalent.
- G. If a crane is being utilized on a barge, the following items shall be submitted in addition to those required above. Additionally, if the crane boom crosses land, all safety precautions for pedestrian protection must be implemented.
 - 1.) Annual barge inspection report in accordance with 29 CFR 1926.1437(h)(4).
 - 2.) 4-year internal barge inspection report in accordance with 29 CFR 1926.1437(h)(5).
 - 3.) United States Coast Guard Certificate of Documentation.
 - 4.) Crane and barge stability analysis performed by a licensed Professional Engineer in the state in which the Work is being performed.
- H. If the inspection date expires while the crane or derrick is in use at the construction site on Authority property, the Contractor shall remove the crane from the site. The crane shall not return to the site until proof of any such renewals or extensions are provided to the Engineer. Tower crane inspections shall be performed on site.
- I. The estimated review time for all crane and derrick submissions to the Engineer is five (5) business days. If the Contractor has not received any reply by the fourth day of the review, contact the Engineer.
- J. If any governing agency issues a letter of deficiency to Authority or stop work order to the Contractor while the crane or derrick is on Authority property, the Contractor shall cooperate fully with all governing agencies to ensure that all acceptable corrective actions will be taken immediately. Keep the Engineer advised during the performance of all remedial Work.
- K. If any governing agency issues a cease use order for a crane, that crane is prohibited from use on Authority property.

- L. The Contractor's Lift Director is responsible for pre-shift meetings, traffic and pedestrian controls and monitoring weather conditions and forecasts. The Contractor's Assembly/Disassembly Director is responsible for supervision of the assembly and disassembly operation for a mobile crane.

140. TEMPORARY UTILITY SERVICES

Operate and maintain temporary services and facilities in a safe and efficient manner. Modify as required throughout progress of the Contract, and remove from Authority property when no longer required, or replaced by the use of completed permanent facilities as approved by the Engineer.

Make arrangements for securing, and pay all costs for heat, light, power, water, and other services which may be required for the performance of the Contract.

- b. Do not place traffic control signs under an overpass or elevated building, or within overpass or building shadow areas, unless otherwise shown on the Contract Drawings.
 - c. On Roadways passing below an overpass or elevated building, do not begin or end traffic cone or other delineation and guiding devices under or less than 100 feet from an overpass or building. Extend delineation and guiding devices as required to comply with this requirement.
 - d. The work for installation and removal of temporary traffic control devices shown on the Contract Drawings shall be completed utilizing a moving maintenance and protection of traffic operation having a back-up vehicle with impact attenuator and FASU spaced a short distance from the operation (approximately 50 feet) as approved by the Engineer. Devices shall be installed in the direction of traffic. Devices shall be removed as approved by the Engineer.
- 6.) Where excavations within pedestrian walkways including Traffic Lane crosswalks will be open to walkway pedestrian traffic prior to completion of construction, provide appropriate pedestrian railings and steel plate, wood plank or plywood covers surfaced with an approved heavy-duty non-skid paint coating containing a grit additive. Temporary walkway covers over excavations shall be a minimum of 4-feet wide, designed and constructed to carry a minimum of 150 psf. Railings shall be approximately 3 feet 6 inches above the walkway cover and consist of a 2-inch by 4-inch wood top rail, 1-inch by 4-inch intermediate rail and a toe board 5-1/2 inches high all securely fastened to 2-inch by 4-inch wood posts spaced not more than 8 feet apart. Securely fasten wood walkway covers and posts to wood sleepers spanning excavation trench. Chamfer or asphalt ramp exposed edges and secure against displacement. Where applicable, Contractor's installations shall meet the requirements of the ADA laws in all respects.
- 7.) Use Vehicle-strong Barriers where the Work Area contains open excavations or when materials and/or equipment are left in the Work Area without the presence of workers, unless otherwise shown on the Contract Drawings. Flare exposed ends of the barriers away from the Active Roadway by extending and terminating the barriers beyond the clear zone, in accordance with AASHTO's "Roadside Design Guide". Where flaring of the barriers beyond the clear zone cannot be achieved, protect the barrier end with Portable Impact Attenuators. Tapered barrier end section shall not be used unless approved by the Engineer.
- 8.) Each Work Area not protected by Vehicle-strong Barriers shall be protected by a back-up truck when workers are present, unless otherwise shown on the Contract Drawings.
- 9.) Vehicles used by the Contractor during performance of Work shall be considered as equipment vehicles and when not protected by a Vehicle-strong Barrier, said vehicle shall be protected by a back-up truck, unless otherwise shown on the Contract Drawings.
- 10.) Construction material and equipment shall not be stored outside the Work Area, without approval by the Engineer.
- 11.) Slow-Moving Vehicles traveling on a Roadway outside of demarcated protected Work Areas shall be followed (approximately 50 feet behind) by a vehicle displaying the same flashing hazard signal lights and sealed beam rotating yellow warning light as required for back-up trucks.