

**THE NEW JERSEY TURNPIKE AUTHORITY
PROCUREMENT AND MATERIALS MANAGEMENT DEPARTMENT**

New Jersey Turnpike Administrative Offices

1 Turnpike Plaza

P.O. Box 5042

Woodbridge, New Jersey 07095-5042

Tel. 732-750-5300 Ext. 8640

REQUEST FOR BID

RE-BID

TITLE: **MAINTENANCE OF HEATING, VENTILATING & AIR CONDITIONING
EQUIPMENT**

BID NO: **RM-156124**

DUE DATE: **12-8-20**

TIME: **11:00 AM**

SUBMIT BIDS BEFORE THE DUE DATE AND TIME STATED ABOVE TO THE ABOVE ADDRESS

BIDDER INFORMATION (PLEASE PRINT)

NAME OF BIDDING ENTITY

ADDRESS

CITY, STATE AND ZIP CODE

E-MAIL ADDRESS

REPRESENTATIVE TO CONTACT-NAME & TITLE

TELEPHONE NO.

FEDERAL TAX I.D. NO. or TAXPAYER I.D. NO.

FAX NO

SECTION I

A. INTRODUCTION

The New Jersey Turnpike Authority (the “Authority”) was created by an act of the New Jersey Legislature in 1948, known as the New Jersey Turnpike Authority Act (as amended and supplemented, “Act”). The Act authorizes the Authority to construct, maintain, repair, and operate the New Jersey Turnpike, to collect tolls, and to issue Turnpike Revenue Bonds or Notes, subject to the approval of the Governor, payable from tolls and other revenues of the Authority. On May 27, 2003, the Act was amended to empower the Turnpike to assume all powers, rights, obligations and duties of the New Jersey Highway Authority (the “Highway Authority”), which owned and operated the Garden State Parkway and PNC Bank Arts Center. On July 9, 2003, the Authority assumed all powers, rights, obligations and duties of the Highway Authority. The Authority currently operates both the Garden State Parkway (“GSP”) and the New Jersey Turnpike (“Turnpike”) (both roads are collectively referred to herein as the (“Roadways”).

The Authority is governed by an eight-member Board of Commissioners (“Board”). The Governor of New Jersey appoints each of its members and has the statutory authority to overturn an action of the Board by vetoing any Board action within 10 days of receiving the minutes of the meeting. The Board authorizes awards of all public contracts over \$100,000, except in cases where it has delegated authority to the Executive Director.

This bid solicitation is being conducted pursuant to the Authority’s enabling statute as found in *N.J.S.A. 27:23-6.1* and Executive Order number 37 (Corzine 2006) and the regulations and policies of the Authority with regard to public bid procurement.

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C. **BIDDER GUIDELINES/CHECKLIST**

BIDS THAT FAIL TO CONFORM TO THE FOLLOWING REQUIREMENTS MAY BE REJECTED:

1. The Request for Bid ("RFB"), including specifications and related bid documents ("Bids") must be received at or before the due date and time stated on the cover page at the following place: New Jersey Turnpike Authority, Administration Building, 1 Turnpike Plaza, Woodbridge, New Jersey 07095. **LATE BIDS WILL BE RETURNED UNOPENED. ELECTRONIC, EMAILED OR FACSIMILE BIDS WILL NOT BE ACCEPTED.**
2. **The entity submitting a Bid ("Bidder") must provide one original and one copy of the Bid.** The Bid must include all price information. Bid prices shall include delivery of all items F.O.B. destination or as otherwise provided. Price quotes must be firm through issuance of contract.
3. All Bid prices must be typed or written in ink. Quote the specified unit of measure. If bidding an alternate, provide detailed specifications on the exception form attached.
4. All corrections, white-outs, erasures, re-striking of type, or other forms of alteration or the appearance of alteration, to unit and/or total prices must be initialed in ink by the Bidder.
5. **The Bidder must read regarding site inspection: SEE PAGE 8**
6. **IF CHECKED, THIS RFB REQUIRES THE FOLLOWING MANDATORY DOCUMENT(S). FAILURE TO COMPLY WILL RESULT IN REJECTION OF THE BID.**
 - (a) Bid Bond, Letter of Surety or a Cashier's Check for 10% of the amount Bid ☒
 - (b) Ownership Disclosure Statement ☒
 - (c) Disclosure of Investment Activities in Iran ☒
 - (d) Vendor Disclosure Form ☒
7. **TO FACILITATE THE CONTRACT AWARD PROCESS, THE FOLLOWING DOCUMENTS SHOULD BE SUBMITTED WITH THE BID. IN THE EVENT THE DOCUMENTS ARE NOT SUBMITTED WITH THE BID, THEY SHALL BE SUBMITTED WITHIN THREE (3) BUSINESS DAYS FOLLOWING A VERBAL OR WRITTEN REQUEST FROM THE AUTHORITY.**
 - (a) Certification of Registration with the Secretary of State (only if non-NJ corporation) ☒
 - (b) Acknowledgement of requirement for Disclosure of Political Contributions (ELEC) ☒
 - (c) SBE/WBE/MBE Certificates and Form ☒
 - (d) Bidder must sign the Bid ☒
8. **SEE THE AUTHORITY'S INSTRUCTION TO BIDDERS (ATTACHED) FOR A COMPLETE LIST OF THE AUTHORITY'S STANDARD CONTRACT TERMS AND CONDITIONS, AS WELL AS OTHER FORMS THAT ARE REQUIRED PRIOR TO THE AWARD OF CONTRACT(S).**
THE RECOMMENDED LOW BIDDER(S) MUST SUBMIT THE FOLLOWING CHECKED DOCUMENTS PRIOR TO CONTRACT AWARD.
 - (a) Mandatory Equal Employment Opportunity Language ☒
 - (b) Affirmative Action Information Sheet with Certificate or Form AA-302 ☒
 - (c) State Contractor Political Contributions Compliance Public Law 2005, Chapter 51 & EO 117 ☒
 - (d) Notice to All Bidders of Set-Off for State Tax ☒
 - (e) Insurance Certificate ☒
 - (f) State of New Jersey Division of Business Registration Certificate ☒
 - (g) Instruction and agreement for Direct Payment (ACH) ☒

D. REQUIRED SUBMITTALS

1. Contractor must be the operator/owner of an HVAC Contracting business for a minimum of five (5) consecutive years and hold a current HVACR license with the State of NJ. **The Authority requests a copy of HVACR license to be included with bid submittal, if license is not included with bid, the bidder must supply within 48 hours upon Authority request.**
2. The Contractor shall be actively and currently engaged in servicing and maintaining 3 comparable facilities for a minimum of 5 years. **The Authority requests the Contractor provide the business name, contact name, email address and phone numbers which have been serviced for five (5) consecutive years of comparable size and magnitude as the Authority.**
3. Contractor shall have a minimum of three (3) S.T.A.R. HVACR Certified Technicians. **The Authority requests the Contractor provide the technicians, "Mastery Certifications" with bid submittal, if "Mastery Certifications" are not included with bid, the bidder must supply within 48 hours upon Authority request.**
4. Technicians must have completed an: Occupational Safety and Health Administration (OSHA) training course or an approved Hazard Communication Training. **The Authority requests the Contractor include Certificates of Proof for all technicians with their bid submittal, if Certificates of Proof are not included with bid, the bidder must supply within 48 hours upon Authority request.**
5. All technicians who service the sites shall be certified to handle refrigerant.
 - a. Technicians must have completed a training course on the handling and Environmental awareness of refrigerant R410A, R123, R134A, R22, and other industry standard types of refrigerate. **The Authority requests the Contractor provide EPA Certification, for all technicians that will be handling the varieties of refrigerate which are to be included with their bid submittal, if EPA Certifications are not included with bid submittal, the bidder must supply within 48 hours upon Authority request.**
6. The Authority requests the Contractor provide documentation with bid submittal for technicians who must be recognized and approved through a National and State HVAC training and testing program. A company that is a signatory to Local 9 Refrigeration and Air Conditioning union is acceptable as documentation for bid submittal. **If documentation is not included with bid, the bidder must supply within 48 hours upon Authority request.**
7. All service calls dispatched shall be tracked through a computerized dispatch system which maintains a complete database of service calls, equipment, parts, history and billings at a minimum. **The Authority shall submit with bid, the Software's name and version which will be utilized. (See Page 13 of this RFB.**
8. Technicians must have completed factory trained courses on the service and maintenance of condensing and non-condensing boilers. **The Authority requests the Contractor provide Manufacturer Training Certificate for all technicians which are to be included with their bid submittal, if not included with bid submittal, the bidder must supply within 48 hours upon Authority request.**

SECTION II

A. INTENTION

1. **Sealed Bids (Paper Submission Only)** for RM-156124 must be received at the New Jersey Turnpike Authority Administrative Offices, 1 Turnpike Plaza, Woodbridge, New Jersey 07095-5042, by the due date and time stated on the cover page of this “RFB”.
2. Bidders mailing Bids should allow for their normal mail delivery time to ensure timely receipt of the Public Bids. **Please be advised that using an overnight/next-day delivery service does not guarantee overnight/next-day deliveries to our location. The Authority will not be responsible for any Bid not being received by the required date and time.**
3. It is the intention of the Authority to issue a Purchase Order/ “NOA” for the **MAINTENANCE OF HEATING, VENTILATING & AIR CONDITIONING EQUIPMENT.**
4. Items purchased under this contract will be delivered as directed by the Authority.
5. The term of the contract shall be for “two (2) years with the option to extend for two additional one-year terms at the Authority’s discretion and the vendor’s concurrence”.
6. Please contact John J. Parmigiani with any questions regarding this procurement contract at jparmigiani@njta.com or 732-750-5300 x 8632.

B. BID SHEET INSTRUCTIONS

1. Bidders must follow all instructions in this RFB and in the Instructions to Bidders issued by the Authority, and any other documents issued by the Authority in connection with this RFB (collectively, “Bid Documents”).
2. Bidders must examine the bid documents carefully before bidding and must ask the Director of Procurement and Materials Management Department (“PMM”) in writing for any interpretation or correction of any apparent ambiguity, inconsistency or apparent error therein. If necessary, an interpretation or correction to the specifications in the form of an addendum shall be issued at least three (3) days prior to the bid opening by the Director of PMM to Bidders who have obtained the Bid Documents in accordance with *N.J.A.C. 19:9-2.2(a)(3)*. **Requests for interpretation or correction shall be considered only if received at least 5 business days prior to the Bid opening date.** Please contact John J. Parmigiani with any questions regarding this procurement contract at jparmigiani@njta.com or 732-750-5300 x 8632.
3. The submission of the Bid is conclusive evidence that the Bidder is fully aware of the conditions, requirements, and details as stated in the Bid Documents. If the Bidder, prior to submitting its Bid, fails to notify the Director of PMM of the existence of an ambiguity or inconsistency in the Bid Documents, a Bid will conclusively be presumed to have been based upon the Authority’s interpretation of such ambiguity or inconsistency.

4. All erasures, interpolations or other physical changes on the Bid form shall be signed or initialed by the Bidder. Bids containing any conditions, omissions, erasure's, alterations, or items not called for in this "RFB" or irregularities of any kind, may be rejected by the Authority, in its sole discretion.
5. The Bidder shall not attach conditions, limitations or provisos to its Bid.
6. **The Authority will accept Approved Equivalent items on this Bid.** If a Bidder is basing the RFB on items other than what is specified, and wishes the items proposed to be considered as an "Approved Equivalent", the Bidder shall enter a price on the Bid sheet then submit on the Exception Form in the exact format of the line item on the RFB contained herein, the item number, an item description including manufacturers name, model number, informational brochure(s), and packaging quantities of those items that the Bidder proposes to substitute.

C. BASIS OF AWARD

1. Bidders must supply a price for every item listed. **Bids not having a price for all listed items may be rejected.**
2. Bidders must quote only one price per line item. **If a Bidder quotes multiple prices per line item, the Bid may be rejected.**
3. The Authority will purchase amounts of any given item as needed, at the sole discretion of the Authority and shall not be bound by any quantities listed. The Authority reserves the right to make reasonable increases to line item quantities.
4. All items are to be Bid FOB Destination. All shipping, handling, and other costs should be considered in the Bid price(s).
5. The Authority is tax exempt from New Jersey Sales and Excise Tax.
6. **Award will be made to the lowest responsible and responsive bidder for the total line items Bid.**

D. MISCELLANEOUS

1. Anticipated Delivery Date: _____
2. **ELECTRONIC PAYMENT: The Vendor will be required to accept payment(s) for goods or services via automatic deposit from the Authority. NO OTHER FORM OF PAYMENT WILL BE PROVIDED. See Exhibit M in the Instructions to Bidders on the Authority's website for the required electronic payment forms: <http://www.njta.com/doing-business/goods-and-services>**
3. Contract Bond: The successful bidder will be required upon award, to provide a contract bond in an amount of: **50 %** of the Contract amount.

E. BID OPENING

PLEASE BE ADVISED THAT THE PUBLIC BID OPENING FOR SOLICITATION RM-156124 WHICH IS SCHEDULED FOR **DECEMBER 8, 2020 AT 11:00 AM** **WILL BE BY CONFERENCE CALL ONLY.**

CONFERENCE CALL DETAILS ARE AS FOLLOWS:

DIAL-IN NUMBER: 732-293-3673

ACCESS CODE: 996 425 143

BIDDERS WHO WISHES TO PARTICIPATE, CONFERENCE CALL ACCESS WILL BE AVAILABLE **5 MINUTES PRIOR** TO THE OPENING OF BID AND REMAIN OPEN UNTIL ALL BIDS HAVE BEEN READ.

F. SITE VISIT

DUE TO COVID-19, SITE VISITS FOR EQUIPMENT LISTED WITHIN THIS RFB WILL NOT BE ACCESSIBLE. THE AUTHORITY HAS LISTED THE INFORMATION WITHIN THIS RFB, ALONG WITH PICTURES/VIDEO OF THE UNITS ON THE AUTHORITY WEBSITE.
<https://www.njta.com/doing-business/current-solicitations>

WE WELCOME ALL QUESTIONS FROM PROSPECTIVE BIDDERS VIA EMAIL AND ARE TO BE SENT TO JOHN PARMIGIANI: JPARMIGIANI@NJTA.COM

G. BID QUOTATION SHEET

| COLUMN A | | | COLUMN B | COLUMN C | |
|----------|-------|-------|---|-----------|-------|
| ITEM | QUAN. | UNIT | DESCRIPTION | UNIT COST | TOTAL |
| 1 | 24 | MONTH | UNIT COST TO MAINTAIN ALL LISTED VENTILATION AND COOLING EQUIPMENT AT THE SITES LISTED IN APPENDIX B AS PER SPECIFICATION SECTION 4.1 | \$ | \$ |
| 2 | 60 | Each | UNIT COST TO SERVICE HEATING EQUIPMENT LISTED IN APPENDIX C (CONDENSING BOILERS) AS PER SPECIFICATION SECTION 4.2 | \$ | \$ |
| 3 | 100 | Each | UNIT COST TO SERVICE HEATING EQUIPMENT LISTED IN APPENDIX D (NON-CONDENSING BOILERS) AS PER SPECIFICATION SECTION 4.3 | \$ | \$ |
| 4 | 50 | Each | UNIT COST TO SERVICE CONDENSING HOT WATER HEATERS LISTED IN APPENDIX E AS PER SPECIFICATION SECTION 4.4 | \$ | \$ |
| 5 | 240 | Each | WATER QUALITY TESTING AND CORRECTIVE TREATMENT FOR ALL BOILERS (APPENDIX C + D) AS PER SPECIFICATION SECTION 4.6 | \$ | \$ |
| 6 | 30 | Each | <u>DAILY COSTS</u> FOR AIR BALANCING, INCLUDING LABOR, EQUIPMENT, AND REPORTING AS PER SPECIFICATION SECTION 4.7 | \$ | \$ |

MULTIPLY COLUMN A X B = C

TOTAL AMOUNT \$ _____

QUANTITY'S ARE BASED ON 2 YEAR CONTRACT

CONTINUED ON FOLLOWING PAGE

CONT'D
BID QUOTATION SHEET

BIDDER MUST QUOTE THE FOLLOWING LINE ITEMS FOR ADDITIONAL EQUIPMENT.

FAILURE TO QUOTE THESE SERVICES MAY RESULT IN REJECTION OF THE BID.

THESE RATES WILL NOT BE FACTORED IN TO THE BASIS OF AWARD.

| COLUMN A | | | COLUMN B | COLUMN C | |
|----------|-------|-------|--|-----------|---------------------|
| ITEM | QUAN | UNIT | DESCRIPTION | UNIT COST | TOTAL |
| 1 | 1 | EACH | HOURLY RATE TO MAINTAIN ADDITIONAL COOLING EQUIPMENT NOT LISTED IN RFB FOR ANY AUTHORITY FACILITY NOT LISTED IN APPENDIX B. | \$ | \$ |
| 2 | 1 | HOURS | HOURLY RATE TO MAINTAIN ADDITIONAL EQUIPMENT (HEATING, CONDENSING & NON - CONDENSING BOILERS, HOT WATER HEATERS, ETC. NOT LISTED IN RFB FOR ANY AUTHORITY FACILITY NOT LISTED IN APPENDIX C & D. | \$ | \$ |
| 3 | ----- | ----- | REPAIR PARTS FOR ADDITIONAL EQUIPMENT NOT LISTED & PARTS NOT COVERED IN RFB FOR ANY AUTHORITY FACILITY NOT LISTED IN THIS RFB. | +25% | COST OF PART + 25 % |

MULTIPLY COLUMN A X B = C TOTAL AMOUNT \$ _____

H. SIGNATURE PAGE

1. **ADDENDA / INQUIRIES:** COMPLETE (if applicable) BEFORE SUBMITTING BID:

Receipt of Addendum / Inquiries # _____ dated _____ is hereby acknowledged.

Receipt of Addendum / Inquiries # _____ dated _____ is hereby acknowledged.

☐ **CHECK BOX IF NO ADDENDA/INQUIRY ISSUED**

(All Addenda / Inquiries must be acknowledged as indicated above.)

2. **BID IRREVOCABLE:** This offer shall be irrevocable for ninety (90) working days after the date on which the Authority publicly opens this Bid except in those instances where an unsuccessful Bidder has filed a bid protest pursuant to *N.J.A.C. 19:9-2.12*. Upon notification of a protest, Bidders are required to hold their prices for an additional 90 days. All Bidders will be notified in writing of the action taken by the Authority.
3. **OFFER/CERTIFICATION:** The undersigned offers and agrees to furnish to the New Jersey Turnpike Authority the services and/or materials in compliance with all terms, conditions, specifications and addenda of the RFB, Bid Documents, and resulting contract. The undersigned further certifies understanding and compliance with the requirements of the standard terms and conditions as stated in the Instructions to Bidders included with the Bid Documents. The undersigned certifies that he or she executes this Bid with full authority so to do; and that all statements contained in this Bid and in this certification, are true and correct, and made with full knowledge that the Authority relies upon the truth of the statements contained herein and in any statements requested by the Authority showing evidence of qualifications in awarding the contract.

I certify that the foregoing statements made by me are true. I am aware that if any of the foregoing statements made by me are willfully false, I am subject to punishment.

4. **AUTHORIZED SIGNATURE:** _____

Print Name and Title: _____

Bidder: _____

Address: _____

City, State, Zip: _____

E-mail address: _____

Telephone #: _____ Fax: # _____

Date: _____

SECTION III

SPECIFICATIONS

1. PURPOSE AND INTENT

The purpose of this Request for Bid (RFB) is to obtain bids from responsible and responsive bidders to furnish all supervision, labor, materials, equipment, certifications and insurance to provide scheduled preventative maintenance and immediate repairs to Heating, Ventilation and Air Conditioning (HVAC) mechanical systems at all Authority owned facilities between Mile 0 and Mile 122 along the New Jersey Turnpike and **AS NEEDED** Mile 0 to Mile 172 along the Garden State Parkway in Salem, Gloucester, Camden, Burlington, Mercer, Middlesex, Union, Hudson, Essex, Bergen, Cape May, Atlantic, Ocean, Monmouth and Passaic Counties, New Jersey as outlined in this specification.

All Service Area Equipment is serviced by Host Marriott Services (HMS) Host and are not in this Contract Scope.

2. CONTRACT TERM

The term of the Contract is for 2 years and shall commence upon receipt of an Authority Notice of Award. The Authority, at its sole discretion with the vendor's concurrence, may choose to extend this Contract for two additional one (1) year terms at the direction of the engineer.

The Authority will notify the Contractor, in writing, thirty (30) days prior to the end of the term of its intent to extend. The Authority reserves the right to terminate said extension at any time by giving the Contractor thirty (30) days' notice, in writing, of its intent to terminate.

The quantities in this RFB are estimated on anticipated usage for a two (2) year period.

3. GENERAL REQUIREMENTS

The Contractor is required to comply with the following requirements:

- A. The Contractor shall have personnel available to respond to service requests 24 hours/day, 7 days/week including weekends and holidays. The Contractor must supply a contact name and phone number to the Authority for any service requests.
- B. The Contractors primary business shall be commercial and industrial HVAC service/ maintenance, with the ability to perform installation and repairs as defined in the RFB. The Contractor shall be licensed in the State of New Jersey to perform the HVAC work listed within this contract. **Failure to be licensed at the time of bid submission may result in bid rejection.**

The Contractor shall be familiar with the maintenance and navigation of NiagaraAX and N4 based Building Management Systems (BMS) including maintenance and control of BACnet field level devices. Controls interface can be limited to Navigation of the Human Machine Interface (HMI)'s for troubleshooting, assessment of equipment, and testing and balancing support.

- C. The Contractor shall have access to a working stock of spare parts for equipment within this contract. The Contractor shall be responsible to replace (but not limited to) the listed equipment and within the timeframes listed below:
- Belts: 1 Day
 - Filters: 1 Day
 - Compressors: 4 Days
 - Fans: 3 Days
 - Motors: 2 Days
 - Damper / Valve Actuators (Equipment Supplied): 2 Days
 - Coils: 10 Days
- D. The Contractor shall be fully capable and able to obtain parts for computerized cooling systems which are used at various facilities.
- E. The Contractor shall remove or dispose of all debris, garbage, equipment and materials from the job site upon completion of the job.
- F. The Contractor shall provide all personal protective equipment (PPE) including, but not limited to, harnesses, hardhats and safety glasses, etc. as required and certify that all service personnel are trained and qualified in their use.
- G. The Contractor shall have a minimum of three (3) full time service technicians available during peak cooling times of May 1st thru October 1st. Upon being notified the contractor shall respond within 2 hours.
- H. The Contractor shall provide a daily report on the status of items on the open HVAC Complaint Forms. Daily Reports shall be provided within a 24-hour time frame. Response shall include schedule of resources to address the issue at hand. A follow up report on identified issue with estimated time to correct shall be submitted at the end of the day of service.
- J. All service calls dispatched, shall be logged through a computerized dispatch system which maintains a complete database of service calls, equipment, parts, history, and billings at a minimum. The Authority requests the contractor submit the Software's name and version which will be utilized for approval from the Engineer.

SOFTWARE NAME & VERSION FOR DISPATCH SERVICE SYSTEM: _____

4. WORK TO BE PERFORMED

The Contractor shall be responsible for the maintenance, service, and repair of HVAC equipment at all facilities as indicated and outlined in the specifications.

The Authority will service (unless otherwise directed by the Engineer) all BOILERS & HOT WATER HEATERS listed in the specification.

4.1

HVAC equipment pertaining to Line Item 1 is to include but is not limited to systems that contain; HVAC units, Direct Expansion (DX) Refrigerant, Electrical Resistance Heating Elements, Fan Motors, VFD's internal to units, Compressors, Coils, and Manufacturer Supplied Dampers and Valve Actuators, etc.; Service to extend to all ancillary support devices within these systems on the Air Side (Fans, Belts, Filters, Energy Recovery Wheels). See Monthly Preventative Maintenance Schedule in Appendix F for required service/maintenance periods.

A. Preparation for Cooling Season

Preventative maintenance for the summer cooling season shall be completed by April 15th with final acceptance by the NJTA on May 1 of each contract year. The Contractor shall submit an execution schedule and plan to NJTA by March 1st outlining the sites visited with the duration list. Each individual system shall be serviced as listed in Appendix F. Test procedures are to be complete, checked off, and documented in a service report. The service report is to include the service technicians contact information, pictures documenting the task at hand, and a copy of the maintenance outline annotated documenting the completed tasks. The service report shall be submitted electronically to the NJTA the following week after work is completed. This shall also include:

- Perform and coordinate start-up as required including specific written procedures published by the respective Original Equipment Manufacturer (OEM).
- Coordinate seasonal changeover with NJTA maintenance personnel on systems with shared heating and cooling components.

B. During Cooling Season

During cooling season, the Contractor shall perform preventative maintenance and inspect each unit to ensure proper operation. The preventative maintenance is outlined within Appendix F; including the frequency of such work. Procedures are to be complete, checked off, and documented in a service report. The service report is to include the Service Technician contact information, pictures documenting the task at hand, and a copy of the maintenance outline annotated documenting the completed tasks. The service report shall be submitted electronically to the NJTA within the next invoice period after work is completed. The Authority reserves the right to have the Contractor increase the frequency of such inspections in certain areas which the Authority deems critical or problematic.

The inspections shall include the following:

- Check for proper refrigerant levels
- Check all electrical components
- Check evaporator and condenser coils and clean when necessary
- Clean entire interior of unit
- Lubricate all moving parts as required
- Check condenser
- Adjust or replace belts as necessary
- Check and clean condensate lines as necessary

C. Shut Down at End of Cooling Season / Heating Inspection

Preventative maintenance for the summer cooling season shall be completed by September 30th with final acceptance by the NJTA on October 15th of each contract year. Contractor shall submit an execution schedule and plan to NJTA by August 15th outlining the sites visited with the duration list. Each individual system shall be serviced as listed in Appendix F. Test procedures are to be complete, checked off, and documented in a service report. The service report is to include the service technicians contact information, pictures documenting the task at hand, and a copy of the maintenance outline annotated documenting the completed tasks. The service report shall be submitted electronically to the NJTA the following week after work is completed.

This shall also include:

- Pump down compressors
- Close Freon valves
- Check for leaks and repair as necessary
- Perform and coordinate start-up as required including specific written procedures published by the respective Original Equipment Manufacturer (OEM). Coordinate seasonal changeover with NJTA maintenance personnel on systems with shared heating and cooling components.
- Freeze stat Functional Check
- Glycol Sampling & Chemical Treatment
- Glycol Tank & Level Control Functionality Check
- Inspection & repair for pipe leaks on Refrigerant Lines
- Inspection and Reporting for Pipe Leaks on Hydronic Systems

NOTE: Cooling equipment in certain areas (i.e. EZ Pass huts, radio rooms, etc.) is required to be operational at all times of the year. These areas shall be treated as if the entire year is the cooling season. Also, all ventilating equipment (blower motors, fans, etc) shall be maintained by the Contractor regardless of its relation to the heating system.

D. Preparation for Heating Season

Preventative maintenance for the winter heating season shall be completed by October 15th with final acceptance by the NJTA on November 1 of each contract year. The Contractor shall submit an execution schedule and plan to NJTA by September 1st outlining the sites visited with the duration list. Each individual system shall be serviced as listed in Appendix F. Test procedures are to be complete, checked off, and documented in a service report. The service report is to include the service technicians contact information, pictures documenting the task at hand, and a copy of the maintenance outline annotated documenting the completed tasks. The service report shall be submitted electronically to the NJTA the following week after work is completed. This shall also include:

- Perform and coordinate start-up as required including specific written procedures published by the respective Original Equipment Manufacturer (OEM).
- Coordinate seasonal changeover with NJTA maintenance personnel on systems with shared heating and cooling components.

E. During Heating Season

During heating season, the Contractor shall perform preventative maintenance and inspect each unit to ensure proper operation. The preventative maintenance is outlined within Appendix F; including the frequency of such work. Procedures are to be complete, checked off, and documented in a service report. The service report is to include the Service Technician contact information, pictures documenting the task at hand, and a copy of the maintenance outline annotated documenting the completed tasks. The service report shall be submitted electronically to the NJTA within the next invoice period after work is completed. The Authority reserves the right to have the Contractor increase the frequency of such inspections in certain areas which the Authority deems critical or problematic.

The inspections shall include the following:

- Check all electrical components
- Check heating coils and furnaces and clean when necessary
- Check for proper Glycol levels
- Clean entire interior of unit
- Lubricate all moving parts as required
- Adjust or replace belts as necessary
- Check, flush and treat condensate lines as necessary

F. Shut Down at End of Heating Season / Cooling Inspection

Preventative maintenance for the winter heating season shall be completed by March 30th with final acceptance by the NJTA on April 15th of each contract year. Contractor shall submit an execution schedule and plan to NJTA by February 15th outlining the sites visited with the duration list. Each individual system shall be serviced as listed in Appendix F. Test procedures are to be complete, checked off, and documented in a service report. The service report is to include the service technicians contact information, pictures documenting the task at hand, and a copy of the maintenance outline annotated documenting the completed tasks. The service report shall be submitted electronically to the NJTA the following week after work is completed.

This shall also include:

- Check for leaks and repair as necessary
- Perform and coordinate start-up as required including specific written procedures published by the respective Original Equipment Manufacturer (OEM). Coordinate seasonal changeover with NJTA maintenance personnel on systems with shared heating and cooling components.
- Glycol Sampling & necessary Chemical Treatment
- Glycol Tank & Level Control Functionality Check
- Inspection and Reporting for Pipe Leaks on Hydronic Systems

4.2

Heating equipment pertaining to Line Item 2 shall be serviced, inspected, and maintained every September, if and where directed by the Engineer and as described below.

Condensing Boiler - Scope of Services

ANNUAL SERVICE (AS) – Performed in September COMPREHENSIVE ANNUAL MAINTENANCE INSPECTION – Heating Cycle

1. Report in with the Authority Representative.
2. Record and report abnormal conditions, measurements taken, etc.
3. Review logs with the Authority Representative for operational problems and trends.

1. General Assembly

- Secure and drain the boiler.
- Open the fire and water side for cleaning and inspection.
- Check the heating surfaces and water side for corrosion, pitting, scale, blisters, bulges and soot.
- Inspect the refractory.
- Check the expansion tank and drain if needed.
- Clean the fire inspection glass.
- Check the blow-down valve packing and lubricate.
- Check and test boiler blow-down valve.
- Perform hydrostatic test, if required.
- GAS TRAIN BURNER ASSEMBLY
 - Check the gas train isolation valves for leaks.
 - Check the gas supply piping for leaks.
 - Check the gas pilot solenoid valve for wear and leaks.
 - Check the main gas and the pilot gas regulators for wear and leaks.
 - Test the low gas pressure switch. Calibrate and record setting.
 - Test the high gas pressure switch. Calibrate and record setting.
 - Verify the operation of the burner fan air flow switch.
 - Inspect and clean the burner assembly.
 - Inspect and clean the pilot igniter assembly.
 - Inspect and clean the burner fan.
 - Run the fan and check for vibration.
 - Inspect the flue and flue damper.
 - Burner Control Panel:
 - Inspect the panel for cleanliness.
 - Inspect wiring and connections for tightness and signs of overheating and discoloration.
- Clean burner fan wheel and air dampers. Check the fan for vibration.
- Verify tightness of the linkage set screws.
- Check the gas valves against leakage (where test cocks are provided).

2. Controls and Safeties

- Disassemble and inspect the low water cutoff safety device.
- Reassemble the boiler low water cutoff safety device with new gaskets.
- Clean the contacts in the program timer, if applicable.
- Check the operation of the low water cutoff safety device and feed controls.
- Verify the setting and test the operation of the operating and limit controls.
- Verify full boiler.

- Test the safety/relief valve after startup (full pressure test).
- Clean or replace the fuel filters.
- Clean the fuel nozzles.
- Inspect, clean and functionally test the flame scanner and flame safeguard relay.
- Clean and adjust the ignition electrode.
- Replace the vacuum tube in flame safeguard control, if applicable.
- Perform pilot turn down test.
- Verify proper water flow through the boiler.
- Perform combustion test and adjust the burner for maximum efficiency.
- Test the following items:
 - Firing rate
 - Fuel/air ratio
 - CO₂
 - CO
 - NOX
 - Perform smoke test.
- Review operating procedures with operating personnel.
- Provide a written report of completed work, operating log, and indicate any uncorrected deficiencies detected.

4.3

Heating equipment pertaining to Line Item 3 shall be serviced, inspected, and maintained every September, if and where directed by the Engineer and as described below.

Cast Iron Sectional Boiler – Scope of Services

ANNUAL SERVICE (AS) – Performed in September **COMPREHENSIVE ANNUAL MAINTENANCE INSPECTION – Heating Cycle**

1. Record and report abnormal conditions, measurements taken, etc.
2. Review logs for operational problems and trends.

1. General Assembly

- Secure and drain the boiler.
- Open the fire and water side for cleaning and inspection.
- Check heating surfaces and water side for corrosion, pitting, scale, blisters, bulges, and soot.
- Inspect refractory.
- Clean fire inspection glass.
- Check blow-down valve packing, and lubricate.
- Check and test boiler blow-down valve.
- Perform hydrostatic test, if required.
- Verify proper operation of the level float.
- GAS TRAIN BURNER ASSEMBLY
 - Check the gas train isolation valves for leaks.
 - Check the gas supply piping for leaks.
 - Check the gas pilot solenoid valve for wear and leaks.

- Check the main gas and the pilot gas regulators for wear and leaks.
- Test the low gas pressure switch. Calibrate and record setting.
- Test the high gas pressure switch. Calibrate and record setting.
- Verify the operation of the burner fan air flow switch.
- Inspect and clean the burner assembly.
- Inspect and clean the pilot igniter assembly.
- Inspect and clean the burner fan.
- Run the fan and check for vibration.
- Inspect the flue and flue damper.
- Burner Control Panel:
 - Inspect the panel for cleanliness.
 - Inspect wiring and connections for tightness and signs of overheating and discoloration.
- Clean burner fan wheel and air dampers. Check fan for vibration.
- Verify tightness on linkage set screws.
- Check gas valves for leakage (where test cocks are provided).
- Verify proper operation of the feed water pump.
- Verify proper operation of the feed water treating equipment.

2. Controls and Safeties

- Disassemble and inspect low water cutoff safety device.
- Reassemble boiler low water cutoff safety device with new gaskets.
- Clean contacts in program timer, if applicable.
- Check the operation of the low water cutoff safety device and feed controls.
- Verify the setting and test the operation of the operating and limit controls.
- Verify the operation of the water level control.

4.4

Domestic Hot Water Heating equipment pertaining to Line Item 4 shall be serviced, inspected, and maintained every November, if and where directed by the Engineer and as described below.

ANNUAL SERVICE (AS) – Performed in November
COMPREHENSIVE ANNUAL INSPECTION

1. Report in with the Customer Representative.
2. Record and report abnormal conditions, measurements taken, etc.
3. Review customer logs with the customer for operational problems and trends.

1. Anode Rods

- Inspect the unit for cleanliness.
- Drain the Tank
 1. Turn off the electrical supply to the water heater.
 2. Turn off the gas supply at the Main Gas Shutoff Valve if the water heater is going to be shut down for an extended period.
 3. Ensure the cold water inlet valve is open.
 4. Open a nearby hot water faucet and let the water run until the water is no longer hot.
 5. Connect a hose to the water heater drain valve and terminate it to an adequate drain.
 6. Close the cold water inlet valve.
 7. Open the water heater drain valve and allow all the water to drain from the storage tank.
 8. Close the water heater drain valve when all water in the storage tank has drained.
 9. Close the hot water faucet opened in Step 4.
- Remove the powered anodes from the water heater by loosening the 3/4" NPT bushing that forms the top of the anodes. Do not disassemble the retaining nut and wire terminal from the top while installed in the water heater, the anode's electrode may fall inside the tank. Remove the entire anode rod from the water heater prior to inspection. Clean the anode rods with a soft cloth and reinstall. After complete re-fill the water heater as outlined below.
- Filling the Water Heater
 1. Close the heater drain valve.
 2. Open a nearby hot water faucet to permit air in system to escape.
 3. Fully open the cold water inlet valve allowing the piping and water heater to fill with water.
 4. Close the hot water faucet opened in Step 2 as water starts to flow

2. Vent System

- Inspect the unit for cleanliness.
- Check for obstructions and/or deterioration of the intake air and/or vent piping and the intake air and vent terminations. Replace immediately where needed.
- The debris screens in the intake air and vent terminations should be cleaned of foreign material and soot. NOTE: Do not reach inside the vent termination when the heater is in operation.
- Check all vent system connections for leakage and repair or reseal as necessary.

4.5

Excluded items from this contracts scope are repairs to piping, ductwork, and BMS controls. Contractor are to report on condition of piping, ductwork, and controls at the direction of the Engineer, the contractor may be requested to perform repairs and shall be paid according to the Bid Quotation Sheet.

4.6

Water quality testing pertaining to Line Item 5 shall be performed every August if and where directed by the Engineer and as described below at all locations including, but not limited to, those in Appendix B, C and D.

Condensing Boiler Water Sampling – Scope of Service

A third-party laboratory, accredited by the National Environmental Laboratory Accreditation Conference (NELAC), shall be contracted to sample the Heating Hot Water and reported in accordance with ASTM D596 as follows:

| | |
|-----------------------------|----------------|
| Date of Sample | |
| Temperature | °F |
| Silica (SiO 2) | ppm |
| Insoluble | ppm |
| Iron, Total (Fe) | ppm |
| Aluminum (Al) | ppm |
| Calcium (Ca) | ppm |
| Magnesium (Mg) | ppm |
| Carbonate (HCO 3) | ppm |
| Sulfate (SO 4) | ppm |
| Chloride (Cl) | ppm |
| Nitrate (NO 3) | ppm |
| Turbidity | Ntu |
| pH | |
| Residual Chlorine | ppm |
| Total Alkalinity | ppm |
| Non-Carbonate Hardness | ppm |
| Total Hardness | ppm |
| Dissolved Solids | ppm |
| Conductivity | Micro-ohm / cm |
| Ethylene Glycol Percentage | ppm |
| Propylene Glycol Percentage | ppm |

Cast Iron Sectional Boiler Water Sampling – Scope of Service

A third-party laboratory shall be contracted to sample the Heating Hot Water and reported in accordance with ASTM D596 as follows:

| | |
|--------------------------------|----------------|
| Date of Sample | |
| Temperature | °F |
| Silica (SiO 2) | ppm |
| Insoluble | ppm |
| Iron, Total (Fe) | ppm |
| Aluminum (Al) | ppm |
| Calcium (Ca) | ppm |
| Magnesium (Mg) | ppm |
| Carbonate (HCO 3) | ppm |
| Sulfate (SO 4) | ppm |
| Chloride (Cl) | ppm |
| Nitrate (NO 3) | ppm |
| Turbidity | Ntu |
| pH | |
| Residual Chlorine | ppm |
| Total Alkalinity | ppm |
| Non-Carbonate Hardness | ppm |
| Total Hardness | ppm |
| Dissolved Solids | ppm |
| Conductivity | Micro-ohm / cm |
| Ethylene Glycol Percentage | ppm |
| Propylene Glycol Percentage | ppm |

Reports shall be submitted to the Engineer for review along with the proposed treatment chemicals and methods to bring the system back to a normal operating range and to limit the effects of corrosion, scaling, and fouling.

Chemical Treatment shall be provided that the water composition shall be within the following threshold:

- pH between 8.0 and 9.0
- Corrosion Penetration to be limited to less than: 2 mills maximum for ferrous and 1 mill maximum for brass & copper. Inhibitors shall be stable year to year.
- Fouling to be limited to 0.00025 – 0.0005
- Nitrate treatments are maintained between 600 and 1000 ppm
- Molybdate treatment concentrations are maintained between 100 and 125 ppm
- Copper corrosion inhibitor is maintained between 40-50 ppm

NOTE: All methods, treatments, and ranges above are approximate and are subject to change based on sampling results. The Engineer shall have final authority over allowable water quality conditions, or dual temperature systems, water treatment shall occur once the system is changed over for heating season.

4.7

Air Balancing pertaining to Line Item 6 shall be performed if and where directed by the Engineer and in accordance with Appendix G.

4.8

A. MAINTENANCE RESPONSIBILITIES OF THE CONTRACTOR

1. Parts and Component Replacement

The Contractor shall be solely responsible for repairs or replacement worn parts and components. New parts shall be from the Original Equipment Manufacturer (OEM). Non-OEM parts may only be used with the permission of the Authority.

2. End of Useful Life

If in the opinion of the Contractor, the current equipment can no longer be repaired it will be the responsibility of the Contractor to bring it to the immediate attention of the Authority. The Contractor shall then have five (5) days to provide evidence of this to the Authority. The Director of Maintenance will have final decision whether the equipment shall be replaced by the Authority or the Contractor should continue to make repairs.

Equipment that has not exceeded the ASHRAE Equipment Life Expectancy Chart (Appendix H) median years will not be considered without a valid reason. Review of the premature failure concern will be considered at the Authorities discretion. All requests must be made within the first year of the contract start date and are to accompany an Air and Water Balancing report. Requirements of the testing and balancing are listed within Appendix G. Evidence for consideration of End of Useful life shall include, but is not limited to the following:

- Pictures
- Performance evaluation
- Years of operation
- Description of Deficiencies

3. Limits of Responsibility

The Contractor's limits on the power side start with his/her responsibility for the replacement of fuses in the units' respective disconnect switch. The Contractor shall also be responsible for all equipment and parts for the entire air conditioning and ventilation system regardless of the relation to the heating system (i.e. blower motors, fan motors, etc.). The Contractor shall also be responsible for all temperature controls and control panels contained within the unit itself.

A division of scope line will be at the power disconnect of each mechanical system. All equipment connected to such disconnect is the contractor's responsibility. This includes all control devices, communication wiring, actuators, motors, filters, fans, valves, duct accessories, and piping accessories.

4. Insulation

It shall be the responsibility of the Contractor to maintain the closed cell tubing insulation on all refrigerant piping that is currently installed, including reapplication of UV protective coatings and replacement of cracked or torn insulation as a result of work performed under this contract.

5. Indoor Air Quality Procedure

As part of the Authority's Indoor Air Quality Procedure the Contractor is required to complete the Ventilation Checklist at any time the contractor performs any service (see Appendix A) for each unit serviced or checked during the year. The Contractor is required to submit the completed forms to the Authority on a weekly basis.

6. Communication

The Contractor shall insure all personnel servicing this Contract have a cell phone for onsite contact. Such number shall be provided to the Authority prior to mobilizing to any site.

B. SERVICE CALLS

1. The Contractor will be notified by the Authority for all HVAC complaints. The Contractor is required to respond to the respective location of each complaint within two (2) hours of notification; for all non-critical sites. One (1) hour response time required at the critical sites (NJTA-HQ Building & State Police sites). **This response time is required 24 hours/day, 7 days/week including nights.**
2. The Contractor shall detect the problem systematically using currently acceptable inspection, analytical and troubleshooting methods. **It is understood that all costs including labor, materials and parts associated with these repairs are to be included on the bid quotation sheet. There will be no additional compensation.**
3. All site visits shall be documented with a complete service report that includes the Service Technician contact information, pictures documenting the task, description of the work performed, and itemized list of parts and amount of time needed for repair. The service report shall be submitted electronically to the NJTA with the request for payment. The cost for cooling/ventilation service/maintenance will be paid under Line Item 1. The cost for heating service/maintenance will be paid under Line Items 2,3, or 4.

5. REPORTING & SCHEDULING

The Contractor shall be responsible for, at a minimum, accepting the documented monthly service requirements listed within Appendix F. The contractor is to provide a schedule to inform the Authority of when each facility will be visited. For monthly invoicing the results of such services (including pictures and completed Preventative Maintenance Checklists) are to be provided to the Authority with the monthly invoice.

a. Work Tickets

The Contractor shall provide the Authority with copies of the completed Work Tickets on a weekly basis. The Work Ticket shall provide all pertinent information including date, location, a complaint number provided by the Authority, technician, materials used, type of work performed, before and after photographs, additional materials required for completion, labor hours and any comments or remarks that are necessary. Electronic submittal is acceptable.

b. Monthly Reports

The Contractor, along with his monthly invoice, shall submit a report to the Authority via email describing in detail, all work completed during that payment period. Such a report shall include the Monthly Preventative Maintenance Checklist for all serviced equipment. Include photographs of all completed work.

c. Maintenance Management Report

The Contractor shall provide the Authority with a computerized Maintenance Management Report twice yearly; March 31st and September 30th. The report shall contain a complete inventory of the equipment and its condition. **A CD of the past 6 months of services performed to date shall be mailed to the Authority by such date. This is to include all service records and other documented work. Filenames nomenclature for such services shall be used for ease of locating.**

The report shall show equipment designation (i.e. INT 9 RTU -1), date manufactured, model and serial numbers, CFM, static pressure, RPM, voltage and any other nameplate data available.

Each piece of equipment shall have a repair history showing all work done, components replaced and total man-hours worked. All entries shall be chronological by the date the work was performed.

A written synopsis shall be prepared showing what equipment and/or location is requiring the most repairs. This sheet shall be designed to benefit both the Authority and the Contractor. The report shall be professionally written, organized and formatted into an easily readable printout. All new work tickets and Authority complaint numbers shall be added to the report.

6. QUALITY OF SERVICES

The Contractor agrees that the services must meet the Authority's standards. If the Authority is dissatisfied with the services provided by the Contractor, the Contractor agrees to remedy the area(s) of dissatisfaction within thirty (30) days at the Contractor's sole cost.

7. QUALITY ASSURANCE

The Authority may reject any or all Request for Bids (RFB) for failure to submit documentation as listed and requested by the Authority.

8. PROVISIONS FOR PAYMENT

Invoices shall be submitted for payment on an equal monthly basis covering the duration of the Contract, together with vouchers, required affidavits and monthly reports by the Contractor to the Authority, and must be received by the Authority no later than the end of the succeeding month. Payment will be as bid by the Contractor on the **Bid Sheet**. Monthly Reports are to include all service reports completed within that month. **FOR ADDITIONAL PAYMENT INFORMATION, SEE PAGE 7, SECTION II, D-2 OF THIS "RFB"**

9. ADDITIONAL EQUIPMENT

Any new equipment, installed by the Authority, during this Contract may be added to this Agreement at the request of the Authority. When requested, the Contractor shall maintain the newly installed equipment in the same manner as the pre-existing equipment. Due to the additional maintenance expenditure, the Contractor will be compensated, per the prices submitted on the **Bid Quotation Sheets**.

10. TRAFFIC, TOLLS AND SAFETY

Turnpike passes will not be issued to the Contractor. All mileage, costs and tolls are the responsibility of the Contractor and are not reimbursable. Contractor vehicles will not be permitted to use Z-turns, median U-turns, grade separated U-turns or make U-turns across the median or in any Toll Plaza area. Any vehicle making illegal turns will be subject to a summons by the State Police. Access to the work site in this Contract may be via Turnpike interchanges by means of revenue toll tickets or via local streets. If access is via the Turnpike, egress must also be via the Turnpike. If access is via local streets, egress must also be via local streets. Exiting the Turnpike via an access gate, as at Service Areas or Maintenance Facilities, constitutes an evasion of tolls and is prohibited by Authority regulations, NJAC 19:-1.19.

11. PERSONNEL AND VEHICLES

All personnel servicing this Contract shall be neat in appearance and possess Contractor provided identification cards, which shall be displayed at all times.

Contractor vehicles shall be marked in a prominent location with the company name such that it will be recognizable to the State Police who patrol the Authority's facilities.

Appendix-A

TP-SEM-3

New Jersey Turnpike Authority Ventilation Checklist

| | | | | | |
|---|---|--------------------------|---|--|--|
| Mandatory Info. - All Work | Facility Name: _____ Unit # (AHU#, RTU# etc.): _____ Area Served: _____ Date: _____ Reason for Callout: PM Emergency (circle one) Work Performed: _____ Employer (Company) Name: _____ Inspector Name (Print): _____ Inspector Signature: _____ | | Supply Temp. & Other Info. When Available | Bldg Number: _____ Outside Temp: _____ Inside Temp: _____ Area Setpoint Temp: _____ Supply Duct Temp: _____ Return Duct Temp: _____ Time of Day: _____ | |
| | | | | | |
| Mandatory Info. For all AHU, RTU Work Only | Item Inspected | OK | Needs Attn. | Comment / Unit Information | |
| | TEMPERATURE: | | | | |
| | 1. Area Temperature between 68 to 79° F or system responding after maintenance performed | <input type="checkbox"/> | <input type="checkbox"/> | | |
| | FRESH AIR INTAKE: | | | | |
| | 2. Area near intake free of contaminant sources (leaves, vehicle exhaust, etc.) | <input type="checkbox"/> | <input type="checkbox"/> | | |
| | 3. Bird screen in place and unobstructed | <input type="checkbox"/> | <input type="checkbox"/> | | |
| | 4. Outside / other air damper setting appropriate | <input type="checkbox"/> | <input type="checkbox"/> | | |
| | FANS: | | | | |
| | 5. Motor operating | <input type="checkbox"/> | <input type="checkbox"/> | | |
| | 6. Belts in good condition and adjusted | <input type="checkbox"/> | <input type="checkbox"/> | | |
| | COILS: | | | | |
| | 7. Coil free of significant corrosion or leaks | <input type="checkbox"/> | <input type="checkbox"/> | | |
| | 8. Clean and free of accumulated dust or debris | <input type="checkbox"/> | <input type="checkbox"/> | | |
| | FILTER: | | | | |
| | 9. Filter in place | <input type="checkbox"/> | <input type="checkbox"/> | | |
| | 10. Free of accumulated contaminants | <input type="checkbox"/> | <input type="checkbox"/> | | |
| | CONDENSATE DRAIN PAN: | | | | |
| | 11. Free of significant corrosion | <input type="checkbox"/> | <input type="checkbox"/> | | |
| 12. Draining properly | <input type="checkbox"/> | <input type="checkbox"/> | | | |
| 13. Free of visible biofilm | <input type="checkbox"/> | <input type="checkbox"/> | | | |
| 14. Biocide used (note requires MSDS sheet) | <input type="checkbox"/> | <input type="checkbox"/> | | | |
| VENTS/DUCTING: | | | | | |
| 16. Visually clean and free of accumulated dust | <input type="checkbox"/> | <input type="checkbox"/> | | | |
| 17. Insulation lining intact | <input type="checkbox"/> | <input type="checkbox"/> | | | |
| 18. Free of obstructions | <input type="checkbox"/> | <input type="checkbox"/> | | | |
| Supply Info. When Serviced | ASSOCIATED EQUIPMENT: | | | | |
| | 19. Condensor(s) | <input type="checkbox"/> | <input type="checkbox"/> | | |
| | 20. Compressor(s) | <input type="checkbox"/> | <input type="checkbox"/> | | |
| | 21. Evaporator(s) | <input type="checkbox"/> | <input type="checkbox"/> | | |
| | 22. Control(s) | <input type="checkbox"/> | <input type="checkbox"/> | | |
| | OTHER EQUIPMENT (List All): | | | | |
| 23. | <input type="checkbox"/> | <input type="checkbox"/> | | | |
| 24. | <input type="checkbox"/> | <input type="checkbox"/> | | | |

Appendix-B

**THE UNITS LISTED IN APPENDIX-B MAY NOT BE AN INCLUSIVE LIST
THE AUTHORITY REQUIRES ANY UNIT NOT LISTED TO BE SERVICED**

Appendix B Turnpike Ventilation and Cooling Equipment Table

| | | | | | | Total Units = 495 |
|------------------------------|-------------------------|--------------------|-------------|---------------------|----------------|-------------------|
| Equipment Designation | Location | Area Served | Tons | Manufacturer | Model # | Serial # |
| Package Unit | Administration Building | | 2 | Marvair | Not Legible | Not Legible |
| Condenser | Administration Building | | 3 | Sanyo | C3682 | 33202 |
| Package Unit | Administration Building | | 2 | Marvair | Not Legible | Not Legible |
| Package Unit | Administration Building | | 2 | Bard | WA242-A00 | 140N451921160-02 |
| Package Unit | Administration Building | | 2 | Bard | WA242-A00 | 140N41979339-02 |
| Ductless Split System | Administration Building | | 1.5 | Sanyo | CL1812 | 0000 2112 |
| Ductless Split System | Administration Building | | 1.5 | Sanyo | CL1812 | 0000 3112 |
| Ductless Split System | Administration Building | | 1.5 | Sanyo | CL1812 | 0000 3012 |
| Rooftop Unit | Administration Building | | 50 | Trane | SACB-B506B | C80K08159 |
| Rooftop Unit | Administration Building | | 4 | Carrier | 50LJ-005-521QA | 3293G01636 |

Appendix B Turnpike Ventilation and Cooling Equipment Table

Total Units = 495

| Equipment Designation | Location | Area Served | Tons | Manufacturer | Model # | Serial # |
|-----------------------|--|-----------------|------|--------------|--------------------|-----------------|
| Rooftop Unit # 5 | Administration Building | | 25 | Carrier | 50DJ-028-500AA | 1093F37830 |
| Rooftop Unit # 4 | Administration Building | | 20 | Carrier | 50TJ-024-500AA | 2593F55197 |
| Rooftop Unit # 2 | Administration Building | | 10 | Carrier | 50LJ012510 | 0993G27621 |
| Rooftop Unit # 1 | Administration Building | | 10 | Carrier | 50LJ012510 | 4692G81569 |
| Rooftop Unit # 3 | Administration Building | | 20 | Carrier | 50J-024-500AA | 2593755796 |
| Condenser | Administration Building | | 3 | Sanyo | C3682 | 33202 |
| Rooftop | EZ Pass Bldg. | Snack Bar | 7 | Lennox | GCS169532006Y | 569403201 |
| AHU-2 | Int 1 Toll Plaza, Canopy, Salt Shed, Trailer | Tower Offices | 0 | Carrier | 39MN06A00367113SXS | 0603F15891 |
| SS-1 | Int 1 Toll Plaza, Canopy, Salt Shed, Trailer | Radio Room | 1.5 | Mitsubishi | PU18EK1 | 41D00446B |
| CH-1 | Int 1 Toll Plaza, Canopy, Salt Shed, Trailer | Booths & Tunnel | 155 | Carrier | 30HXA161RA-650AA | 0803Q02472 |
| ACCU-1 | Int 1 Toll Plaza, Canopy, Salt Shed, Trailer | Booths Tunnel | 155 | Carrier | 09AZV162FE-6-B | 201654-0101B03 |
| AHU-1 | Int 1 Toll Plaza, Canopy, Salt Shed, Trailer | Booths & Tunnel | 0 | Carrier | A2D-108/110-DI | 701320-001-H498 |

Appendix B**Turnpike Ventilation and Cooling Equipment Table****Total Units = 495**

| Equipment Designation | Location | Area Served | Tons | Manufacturer | Model # | Serial # |
|------------------------------|---|--------------------|-------------|---------------------|--------------------|------------------|
| Package Unit-2 | Int 10 Toll Plaza, Canopy, ETC Hut, Trailer | ETC HUT | 1.5 | Bard | WA181-A05B | 139K991376527-02 |
| AHU-3 | Int 10 Toll Plaza, Canopy, ETC Hut, Trailer | Radio Room | 0 | Daikin | FTK24NMVJU | G010360 |
| ACCU-2 | Int 10 Toll Plaza, Canopy, ETC Hut, Trailer | Building | 12 | Carrier | 38AUDC16A0M5A0A0C0 | 4613U41376 |
| Package Unit-1 | Int 10 Toll Plaza, Canopy, ETC Hut, Trailer | ETC HUT | 2 | Bard | W24AA-A05BXXXXJ | 314L173477200-02 |
| CU-1 | Int 10 Toll Plaza, Canopy, ETC Hut, Trailer | Radio Room | 2 | Daikin | RK24NMVJU | G010506 |
| AHU-2 | Int 10 Toll Plaza, Canopy, ETC Hut, Trailer | Building | 0 | Carrier | 39LD10MBEBB-BFK-1H | 5013U44337 |
| AHU-1 | Int 10 Toll Plaza, Canopy, ETC Hut, Trailer | Tolls | 0 | Carrier | 39LF18AA-CRBAHP-1H | 5013U44365 |

Appendix B Turnpike Ventilation and Cooling Equipment Table

Total Units = 495

| Equipment Designation | Location | Area Served | Tons | Manufacturer | Model # | Serial # |
|-----------------------|---|-----------------|------|--------------|--------------------|-------------|
| ACCU-1 | Int 10 Toll Plaza, Canopy, ETC Hut, Trailer | Toll Booths | 35 | Carrier | 30RAP0356DA08FHO | 5013Q49594 |
| Package Unit-1 | Int 11 Toll Plaza, 2 Canopies, ETC Hut, Tower | ETC Hut | 1.5 | Bard | W17A1-A05BXXXXXJ | P133082404 |
| CH-1 | Int 11 Toll Plaza, 2 Canopies, ETC Hut, Tower | Toll Booths | 64 | York | YCAL0064EC46XBA | LMMM0069661 |
| CU-1 | Int 11 Toll Plaza, 2 Canopies, ETC Hut, Tower | Electrical Room | 3 | Daikin | RK36NMVJU | G000756 |
| ACCU-1 | Int 11 Toll Plaza, 2 Canopies, ETC Hut, Tower | Building | 25 | Carrier | 38AUDC25AOA5A0A2C0 | 4613U41362 |
| AHU-3 | Int 11 Toll Plaza, 2 Canopies, ETC Hut, Tower | Electrical Room | 3 | Daikin | FTX36NMVJU | E003280 |
| AHU-1 | Int 11 Toll Plaza, 2 Canopies, ETC Hut, Tower | Toll Booths | 0 | York | CP305DWOIAF150208 | AMM13738 |

Appendix B**Turnpike Ventilation and Cooling Equipment Table****Total Units = 495**

| Equipment Designation | Location | Area Served | Tons | Manufacturer | Model # | Serial # |
|------------------------------|---|------------------------|-------------|---------------------|----------------------|------------------|
| AHU-2 | Int 11 Toll Plaza, 2 Canopies, ETC Hut, Tower | Building | 0 | Carrier | 39LD15KA-BX-BFF-1H | 4513U41034 |
| Package Unit-2 | Int 11 Toll Plaza, 2 Canopies, ETC Hut, Tower | ETC Hut | 2 | Bard | W24AA-A05BXXXXJ | 314L173477204-02 |
| AHU-2 | Int 12 Toll Plaza, Canopy | Radio Room | 0 | Carrier | 40QNNQ024---3 | 0908Y41183 |
| CH-1 | Int 12 Toll Plaza, Canopy | Toll Booths & Building | 55 | Carrier | 30RAN055-611DT | 0608Q4268 |
| AHU-3 | Int 12 Toll Plaza, Canopy | ETC Room | 0 | Carrier | 40QAAQ048---3 | 3007V25167 |
| CU-3 | Int 12 Toll Plaza, Canopy | Electrical Room | 1.5 | Carrier | 30QRF018-301 | 0308X92290 |
| CU-2 | Int 12 Toll Plaza, Canopy | ETC Room | 4 | Carrier | 30QRR048-301 | 0308X92290 |
| AHU-1 | Int 12 Toll Plaza, Canopy | Toll Booths & Building | 0 | Carrier | 1P39MN25CO109T711XGS | 0708V05102 |
| CU-1 | Int 12 Toll Plaza, Canopy | Radio Room | 2 | Carrier | 38QRF024-301 | 0208X92152 |
| AHU-4 | Int 12 Toll Plaza, Canopy | Electrical Room | 0 | Carrier | 40QNNQ018---3 | 0908Y40930 |
| AHU-3 | Int 13 Toll Plaza, Canopy, ETC | Electrical Room | 0 | Daikin | FTK24NMVJU | G002085 |

Appendix B**Turnpike Ventilation and Cooling Equipment Table****Total Units = 495**

| Equipment Designation | Location | Area Served | Tons | Manufacturer | Model # | Serial # |
|------------------------------|---|----------------------|-------------|---------------------|--------------------|------------------|
| | Hut,Cinderblock Bld | | | | | |
| CU-1 | Int 13 Toll Plaza, Canopy, ETC Hut,Cinderblock Bld | Electrical Room | 2 | Daikin | RK24NMVJU | G002020 |
| Package Unit-2 | Int 13 Toll Plaza, Canopy, ETC Hut,Cinderblock Bld | ETC Hut | 1.5 | Bard | WA181-A00BXXXXX | 139K991376523-02 |
| Package Unit-1 | Int 13 Toll Plaza, Canopy, ETC Hut,Cinderblock Bld | ETC Hut | 2 | Bard | W24AA-A05BXXXXJ | 314L173477202-02 |
| ACCU-2 | Int 13 Toll Plaza, Canopy, ETC Hut,Cinderblock Bld | Toll Booths/Building | 40 | Carrier | 38AK-044-600 | 2593F55526 |
| AHU-1 | Int 13 Toll Plaza, Canopy, ETC Hut,Cinderblock Bld | Building | 0 | Trane | CSAA006UAL00 | K15H66347 |
| AHU-2 | Int 13 Toll Plaza, Canopy, | Toll Booths | 0 | Carrier | 39MW12D0227D322XCS | 5013U44309 |

Appendix B**Turnpike Ventilation and Cooling Equipment Table****Total Units = 495**

| Equipment Designation | Location | Area Served | Tons | Manufacturer | Model # | Serial # |
|------------------------------|---|-----------------------------|-------------|---------------------|----------------|-----------------|
| | ETC Hut,Cinderblock Bld | | | | | |
| AHU-4 | Int 13-A Toll Plaza, 2 Canopies, ETC Hut | Radio Room- 2 | 0 | Daikin | FTK18NMVJU | G006542 |
| AHU-1 | Int 13-A Toll Plaza, 2 Canopies, ETC Hut | Building | 0 | Trane | CSAA006UALOO | K15H66331 |
| AHU-3 | Int 13-A Toll Plaza, 2 Canopies, ETC Hut | Radio Room- 1 | 0 | Daikin | FTX36NVJU | E003278 |
| AHU-2 | Int 13-A Toll Plaza, 2 Canopies, ETC Hut | Toll Booths | 0 | Trane | CSAA012UALOO | K15H66339 |
| ACCU-2 | Int 13-A Toll Plaza, 2 Canopies, ETC Hut | Toll Booths/Buildi ng | 42 | York | YCAL0042EC | RLMM006849 |
| CU-2 | Int 13-A Toll Plaza, 2 Canopies, ETC Hut | Radio Room- 2 | 1.5 | Daikin | RK18NMVJU | G006826 |

Appendix B Turnpike Ventilation and Cooling Equipment Table

Total Units = 495

| Equipment Designation | Location | Area Served | Tons | Manufacturer | Model # | Serial # |
|-----------------------|--|-------------------------|------|--------------|--------------------------|------------------|
| Package Unit-2 | Int 13-A Toll Plaza, 2 Canopies, ETC Hut | ETC Hut | 2 | Bard | W24AA-A05BXXXXXJ | 314L173477205-02 |
| Package Unit-1 | Int 13-A Toll Plaza, 2 Canopies, ETC Hut | ETC Hut | 2 | Bard | W24AA-A05BXXXXXJ | 314L173477203-02 |
| CU-1 | Int 13-A Toll Plaza, 2 Canopies, ETC Hut | Radio Room-1 | 3 | Daikin | RK36NMVJU | G000725 |
| AHU-2 | Int 14 Toll Plaza, Canopy | Old mechanical room | 0 | Daikin | FTK18NMVJU FTK18NMVJU | G006533 |
| Package Unit-2 | Int 14 Toll Plaza, Canopy | ETC Hut | 2 | Bard | W24A2-A05BXXXXXJ | 314H163336364-02 |
| AHU-4 | Int 14 Toll Plaza, Canopy | Tele-communication room | 0 | Daikin | FTX36NVJU | E003272 |
| AHU-1 | Int 14 Toll Plaza, Canopy | Toll Booths | 0 | Trane | CSAA017UAL00 | K16H64492 |
| AHU-3 | Int 14 Toll Plaza, Canopy | Elevator room | 0 | Daikin | FTK24NMVJU | G010352 |
| Package Unit-1 | Int 14 Toll Plaza, Canopy | ETC Hut | 1.5 | Bard | WA181A00BXXXXX | 139L991391856-02 |
| CU-3 | Int 14 Toll Plaza, Canopy | Elevator room | 2 | Daikin | RK24NMVJU | G010030 |

Appendix B**Turnpike Ventilation and Cooling Equipment Table****Total Units = 495**

| Equipment Designation | Location | Area Served | Tons | Manufacturer | Model # | Serial # |
|------------------------------|--------------------------------------|-------------------------|-------------|---------------------|----------------------------------|------------------|
| ACCU-1 | Int 14 Toll Plaza, Canopy | Toll Booths | 52 | Trane | CGAM052F2M020X02A1A1A1AXXA1C1A4B | U15J51208 |
| Packaged Unit | Int 14 Toll Plaza, Canopy | Building | 40 | Governair | TL10-4028-E | 29381 |
| CU-1 | Int 14 Toll Plaza, Canopy | Old mechanical room | 1.5 | Daikin | RK18NMVJU | G006846 |
| CU-2 | Int 14 Toll Plaza, Canopy | Tele-communication room | 3 | Daikin | RK36NMVJU | G000759 |
| Package Unit-2 | Int 14-B Toll Plaza, Canopy, | ETC Hut | 2 | Bard | W24A2-A05BXXXXJ | 314H163336359-02 |
| AHU-1 | Int 14-B Toll Plaza, Canopy, ETC Hut | Toll Booths | 0 | Trane | CSAA006UAL00 | K17J78573 |
| CU-1 | Int 14-B Toll Plaza, Canopy, ETC Hut | Radio Room | 1.5 | Daikin | RK18NMVJU | G007135 |
| CH-1 | Int 14-B Toll Plaza, Canopy, ETC Hut | Toll Booths | 20 | Trane | CGAM020A2Q02AXD2A1A1A1AX | U17M64842 |
| CU-2 | Int 14-B Toll Plaza, Canopy, ETC Hut | Men's locker/bathroom | 1.5 | Daikin | RK18NMVJU | G007101 |
| CU-3 | Int 14-B Toll Plaza, Canopy, ETC Hut | Bank Room | 1.5 | Daikin | RK18NMVJU | G007129 |

Appendix B Turnpike Ventilation and Cooling Equipment Table

Total Units = 495

| Equipment Designation | Location | Area Served | Tons | Manufacturer | Model # | Serial # |
|-----------------------|--------------------------------------|-----------------------|------|------------------|-----------------|------------------|
| AHU-4 | Int 14-B Toll Plaza, Canopy, ETC Hut | Bank Room | 0 | Daikin | FTK18NMVJU | G006536 |
| AHU-3 | Int 14-B Toll Plaza, Canopy, ETC Hut | Men's locker/bathroom | 0 | Daikin | FTK18NMVJU | G006537 |
| AHU-2 | Int 14-B Toll Plaza, Canopy, ETC Hut | Radio Room | 0 | Daikin | FTK18NMVJU | G006548 |
| Package Unit-1 | Int 14-B Toll Plaza, Canopy, ETC Hut | ETC Hut | 1.5 | Bard | WA181-009XXXX | 139L991399153-02 |
| ACCU-1 | Int 14-C Toll Plaza, Canopy, ETC Hut | Toll Booths | 20 | Trane | RAUCC20GPB03BT | J90F81111 |
| Package Unit-2 | Int 14-C Toll Plaza, Canopy, ETC Hut | ETC Hut | 1.5 | Bard | W17A1-A05BXXXXJ | 313P133082406-02 |
| RTU-1 | Int 14-C Toll Plaza, Canopy, ETC Hut | Building | 5 | Johnson Controls | ZS05C00ATAAA2 | N1A3451780 |
| AHU-1 | Int 14-C Toll Plaza, Canopy, ETC Hut | Toll Booths | 0 | Trane | CCDB12EEOM | K90F19280 |
| SS-1 | Int 14-C Toll Plaza, Canopy, ETC Hut | Electrical Room | 2 | Fujitsu | AOU24RLB | 010785 |

Appendix B**Turnpike Ventilation and Cooling Equipment Table****Total Units = 495**

| Equipment Designation | Location | Area Served | Tons | Manufacturer | Model # | Serial # |
|------------------------------|--|--------------------|-------------|---------------------|-------------------------|------------------|
| Package Unit-1 | Int 14-C Toll Plaza, Canopy, ETC Hut | ETC Hut | 1.5 | Bard | W17A1-A05BXXXXJ | 313P133082401-02 |
| SS-1 | Int 15-E Toll Plaza, Canopy, ETC Hut, Trailers | Electrical Room | 1 | Liebert | | |
| ACCU-2 | Int 15-E Toll Plaza, Canopy, ETC Hut, Trailers | Building | 20 | York | HA120C00A4AAA1A | NOE7782508 |
| ACCU-1 | Int 15-E Toll Plaza, Canopy, ETC Hut, Trailers | Toll Booths | 44 | York | YCAL0034EC46XCAXXTXXX.. | RLMM006908 |
| Package Unit-2 | Int 15-E Toll Plaza, Canopy, ETC Hut, Trailers | ETC Hut | 2 | Bard | W24A2-A05XPXXXJ | 314J153256349-02 |
| Package Unit-1 | Int 15-E Toll Plaza, Canopy, ETC Hut, Trailers | ETC Hut | 2 | Bard | W24A2-A05BXXXXJ | 314H163333660-02 |
| AHU-2 | Int 15-E Toll Plaza, Canopy, ETC Hut, Trailers | Building | 0 | York | XT0-30X039FEGF1461 | CKSMXT020 |
| AHU-1 | Int 15-E Toll Plaza, Canopy, | Toll Booths | 0 | Trane | CSAA008UAL00 | K16L82875 |

Appendix B Turnpike Ventilation and Cooling Equipment Table

Total Units = 495

| Equipment Designation | Location | Area Served | Tons | Manufacturer | Model # | Serial # |
|-----------------------|--------------------------------------|-----------------|------|--------------|--------------------------------|------------------|
| | ETC Hut, Trailers | | | | | |
| AHU-2 | Int 15-W Toll Plaza, Canopy, ETC Hut | Building | 0 | Trane | UCCAP12A0C0RU1300000CJF | K17J78571 |
| Package Unit-1 | Int 15-W Toll Plaza, Canopy, ETC Hut | ETC Hut | 1.5 | Bard | W18A2-A05BXXXXXX | 313J163344136-02 |
| AHU-3 | Int 15-W Toll Plaza, Canopy, ETC Hut | Electrical Room | 0 | Fujitsu | ASU18CL | DCA047936 |
| Package Unit-2 | Int 15-W Toll Plaza, Canopy, ETC Hut | ETC Hut | 1.5 | Bard | WA181-A05BXXXXXX | 139L991396976-02 |
| AHU-1 | Int 15-W Toll Plaza, Canopy, ETC Hut | Toll Booths | 0 | Pace | P-18/ 83478-02 | TANM32664U |
| CU-1 | Int 15-W Toll Plaza, Canopy, ETC Hut | Electrical Room | 1.5 | Fujitsu | AOU18CL | DCN124511 |
| ACCU-2 | Int 15-W Toll Plaza, Canopy, ETC Hut | Building | 20 | Trane | TTA240H300AA | 17391SU3TA |
| ACCU-1 | Int 15-W Toll Plaza, Canopy, ETC Hut | Toll Booths | 35 | Trane | CGAM-035F-2P02-AXBS-A1A1-A1HX- | U16K58228 |
| AHU-2 | Int 15-X Toll Plaza, Canopy | Toll Booths | 0 | Trane | MCCB01OUAOCOUA | KO4L49389A |

Appendix B

Turnpike Ventilation and Cooling Equipment Table

Total Units = 495

| Equipment Designation | Location | Area Served | Tons | Manufacturer | Model # | Serial # |
|-----------------------|--|-----------------------|------|--------------|--------------------------------|------------|
| AHU-1 | Int 15-X Toll Plaza, Canopy | Building | 0 | Trane | MCCB01OUA0C0UB | KO4L49382A |
| SS-1 | Int 15-X Toll Plaza, Canopy | ETC Room Basement | 3 | Carrier | 38HDC036-621 | 2005X37174 |
| Ch-1 | Int 15-X Toll Plaza, Canopy | Building/Toll Booths | 50 | Trane | CGAFC504AHA100CDE0H00N00000W00 | CO4L09887 |
| AHU-3 | Int 16-E & 18-E Toll Plaza, Canopy, ETC Hut, Tower | Computer Room | 0 | Daikin | FTK24NMVJU | G010353 |
| CU-2 | Int 16-E & 18-E Toll Plaza, Canopy, ETC Hut, Tower | Locker/Counting Rooms | 10 | Goodman | GSC101203BA | 1307207076 |
| AHU-2 | Int 16-E & 18-E Toll Plaza, Canopy, ETC Hut, Tower | Tool Booths | 0 | Trane | CSAA017UAL00 | K18E40906 |
| CU-1 | Int 16-E & 18-E Toll Plaza, Canopy, ETC Hut, Tower | Computer Room | 2 | Daikin | RK24NMVJU | G008094 |
| RTU-1 | Int 16-E & 18-E Toll Plaza, Canopy, ETC Hut, Tower | 1st Floor | 3 | Trane | YSCO33G3EH101 | 162010311L |
| ACCU-2 | Int 16-E & 18-E Toll Plaza, | Tool Booths | 45 | Carrier | 38AH-054-521HA | 1414Q63372 |

Appendix B Turnpike Ventilation and Cooling Equipment Table

Total Units = 495

| Equipment Designation | Location | Area Served | Tons | Manufacturer | Model # | Serial # |
|-----------------------|--|-----------------------|------|--------------|--------------------|-------------|
| | Canopy, ETC Hut, Tower | | | | | |
| PTAC | Int 16-E & 18-E Toll Plaza, Canopy, ETC Hut, Tower | | 0.5 | Trane | P9807833R | A89J01192 |
| PTAC | Int 16-E & 18-E Toll Plaza, Canopy, ETC Hut, Tower | | 0.5 | Trane | P9807833R | Not legible |
| AHU-1 | Int 16-E & 18-E Toll Plaza, Canopy, ETC Hut, Tower | Locker/Counting Rooms | 0 | Carrier | 39MW06D022DNZ11XCS | 1414U12809 |
| ACCU-1 | Int 16-E & 18-E Toll Plaza, Canopy, ETC Hut, Tower | 2nd Floor | 15 | Carrier | 30RAP0155FA28FB0 | 1614Q50413 |
| Package Unit-2 | Int 16-E & 18-E Toll Plaza, Canopy, ETC Hut, Tower | ETC Hut | 1.5 | Bard | W17A1-A05BXXXXJ | P133082403 |
| Package Unit-1 | Int 16-E & 18-E Toll Plaza, Canopy, ETC Hut, Tower | ETC Hut | 1.5 | Bard | W17A1-A05BXXXXJ | P133082405 |
| AHU-1 | Int 16-W Toll Plaza, Canopy | Toll Booths | 0 | York | RDS-800 | - |

Appendix B Turnpike Ventilation and Cooling Equipment Table

Total Units = 495

| Equipment Designation | Location | Area Served | Tons | Manufacturer | Model # | Serial # |
|-----------------------|------------------------------------|-----------------|------|-----------------|-------------------------------|-------------------|
| AHU-3 | Int 16-W Toll Plaza, Canopy | Electrical Room | 0 | Fujitsu | ASU18CL | DCA047878 |
| CU-1 | Int 16-W Toll Plaza, Canopy | Electrical Room | 1.5 | Fujitsu | AOU18CL | DCN124735 |
| AHU-2 | Int 16-W Toll Plaza, Canopy | Building | 0 | Trane | UCCAP12A0C0RU01300000CJF | K17J78570 |
| Package Unit-2 | Int 16-W Toll Plaza, Canopy | ETC Hut | 2 | Bard | W24AA-AO5BXXXXJ | 314L173477206-02 |
| Package Unit-1 | Int 16-W Toll Plaza, Canopy | ETC Hut | 2 | Bard | W24A2-A05BXXXXJ | 314H163336362-02 |
| ACCU-2 | Int 16-W Toll Plaza, Canopy | Building | 20 | Trane | TTA240H300AA | 17391NB2TA |
| ACCU-1 | Int 16-W Toll Plaza, Canopy | Toll Booths | 30 | Trane | CGAM-030F-2P02-AXB2-A1A1-A1HX | U16K58227 |
| Split System | Int 17 Toll Plaza, Canopy, ETC Hut | | 1.5 | Heat Controller | A-HNK18AS | |
| ACCU-1 | Int 17 Toll Plaza, Canopy, ETC Hut | Toll Booths | 30 | McQuay | AGZ030BS12-ER10 | STNUO30500017 |
| Package Unit | Int 17 Toll Plaza, Canopy, ETC Hut | | 1 | McLean | 28-U326-026E | |
| CU-1 | Int 17 Toll Plaza, Canopy, ETC Hut | Radio Room | 1.5 | Daikin | RK18NMVJU | G006827 |
| AHU-2 | Int 17 Toll Plaza, Canopy, ETC Hut | Radio Room | 0 | Daikin | FTK18NMVJU | G006545 |
| AHU-1 | Int 17 Toll Plaza, Canopy, ETC Hut | Toll Booths | 0 | McQuay | RD5708B4 | FB0U0304040080503 |
| Package Unit-2 | Int 17 Toll Plaza, Canopy, ETC Hut | ETC Hut | 2 | Bard | W24AA-A05BXXXXJ | 314L173477210-02 |

Appendix B

Turnpike Ventilation and Cooling Equipment Table

Total Units = 495

| Equipment Designation | Location | Area Served | Tons | Manufacturer | Model # | Serial # |
|-----------------------|---|-------------|------|--------------|------------------|------------------|
| SS-1 | Int 17 Toll Plaza, Canopy, ETC Hut | Radio Room | 1 | Sanyo | CL1211 | 0042604 |
| RTU-1 | Int 17 Toll Plaza, Canopy, ETC Hut | Building | 13 | Trane | YSC120F3EHA0000 | 135110249L |
| Package Unit-1 | Int 17 Toll Plaza, Canopy, ETC Hut | ETC Hut | 2 | Bard | W24AA-A05BXXXXJ | 314L173477208-02 |
| Package Unit #2 | Int 18-W Toll Plaza, N&S Canopy, ETC Hut, Tower | ETC Hut | 1.5 | Bard | W17A1-A05BXXXXJ | 313P133082408-02 |
| AHU-2 | Int 18-W Toll Plaza, N&S Canopy, ETC Hut, Tower | Radio Room | 0 | Fujitsu | ASU24RLB | FRA009555 |
| CU-1 | Int 18-W Toll Plaza, N&S Canopy, ETC Hut, Tower | Radio Room | 2 | Fujitsu | AOU24RLB | FRN010737 |
| Package Unit - RTU-2 | Int 18-W Toll Plaza, N&S Canopy, ETC Hut, Tower | Building | 7.5 | Trane | YSC092A3RMA9003Q | 410101720L |
| AHU-1 | Int 18-W Toll Plaza, N&S Canopy, ETC Hut, Tower | Toll Booths | 0 | McQuay | RDS800CL4 | FB0U3040084300 |
| Package Unit #1 | Int 18-W Toll Plaza, N&S Canopy, ETC Hut, Tower | ETC Hut | 1.5 | Bard | W17A1-A05BXXXXJ | 313P133082402-02 |
| Package Unit - RTU-1 | Int 18-W Toll Plaza, N&S | Building | 7.5 | Trane | YSC092A3RMA9003Q | 410101839L |

Appendix B**Turnpike Ventilation and Cooling Equipment Table****Total Units = 495**

| Equipment Designation | Location | Area Served | Tons | Manufacturer | Model # | Serial # |
|------------------------------|---|-----------------------|-------------|---------------------|--------------------|------------------|
| | Canopy, ETC Hut, Tower | | | | | |
| CH-1 | Int 18-W Toll Plaza, N&S Canopy, ETC Hut, Tower | Toll Booths | 55 | McQuay | AGZ055PS27-ER10 | STNV030J001Q |
| Package Unit-1 | Int 2 Toll Plaza, Canopy, ETC Hut | ETC Hut | 1.5 | Bard | WA181-A-009XXXXX | 139N991407932-02 |
| Package Unit-2 | Int 2 Toll Plaza, Canopy, ETC Hut | ETC Hut | 2 | Bard | W24AA-A05BXXXXJ | 314L173477199-02 |
| ACCU-1 | Int 2 Toll Plaza, Canopy, ETC Hut | Tolls | 10 | Carrier | 38AE-012-500 | 2992F10379 |
| AHU-1 | Int 2 Toll Plaza, Canopy, ETC Hut | Tolls | 0 | Carrier | 39MW08D0229XE11XCS | 0514U03361 |
| SS-1 | Int 2 Toll Plaza, Canopy, ETC Hut | Radio Room | 1 | Daikin | RK12NMVJU | G001121 |
| Package Unit | Int 2 Toll Plaza, Canopy, ETC Hut | D.A.T.M Booth | 1 | Dometic | 600315.331C | 73802609 |
| SS-2 | Int 2 Toll Plaza, Canopy, ETC Hut | Building central unit | 5 | Trane | TTA06C300A0 | K432TKFFF |

Appendix B**Turnpike Ventilation and Cooling Equipment Table****Total Units = 495**

| Equipment Designation | Location | Area Served | Tons | Manufacturer | Model # | Serial # |
|------------------------------|-----------------------------------|--------------------|-------------|---------------------|--------------------|------------------|
| ACCU-1 | Int 3 Toll Plaza, Canopy, ETC Hut | Toll Booths | 20 | Carrier | 38AH-024-511AC | 0614Q63267 |
| AHU-1 | Int 3 Toll Plaza, Canopy, ETC Hut | Toll booths | 0 | Carrier | 39MW08D0229XF11XCS | 0514U03362 |
| CU-1 | Int 3 Toll Plaza, Canopy, ETC Hut | Radio Room | 0.75 | Daikin | RKN09NMVJU | G002198 |
| Package Unit-2 | Int 3 Toll Plaza, Canopy, ETC Hut | ETC Hut | 1.5 | Bard | WA181-A009XXXXX | 139K991379549-02 |
| Package Unit | Int 3 Toll Plaza, Canopy, ETC Hut | D.A.T.M Booth | 1 | Dometic | 600315.331C | 80900338 |
| SS-1 | Int 3 Toll Plaza, Canopy, ETC Hut | Building | 5 | Trane | TTA060C300A0 | K432TN9FF |
| AHU-2 | Int 3 Toll Plaza, Canopy, ETC Hut | Radio Room | 0 | Daikin | FTKN09NMVJU | G002693 |
| Package Unit | Int 3 Toll Plaza, Canopy, ETC Hut | D.A.T.M Booth | 1 | Dometic | 600315.331C | 80900337 |
| Package Unit-1 | Int 3 Toll Plaza, Canopy, ETC Hut | ETC Hut | 2 | Bard | W24AA-A05BXXXXJ | 314L173477213-02 |
| CU-1 | Int 4 Toll Plaza, Canopy, ETC | Radio Room | 1.5 | Daikin | RKN08NMVJU | G002188 |

Appendix B

Turnpike Ventilation and Cooling Equipment Table

Total Units = 495

| Equipment Designation | Location | Area Served | Tons | Manufacturer | Model # | Serial # |
|-----------------------|---|---------------|------|--------------|--------------------|------------------|
| | Hut, Storage Shed | | | | | |
| Package Unit-3 | Int 4 Toll Plaza, Canopy, ETC Hut, Storage Shed | D.A.T.M Booth | 1 | Dometic | 600315.331C | 81305676 |
| AHU-1 | Int 4 Toll Plaza, Canopy, ETC Hut, Storage Shed | Tolls | 0 | Carrier | 39MW08D0229XG11XCS | 0514U03363 |
| Package Unit-2 | Int 4 Toll Plaza, Canopy, ETC Hut, Storage Shed | ETC Hut | 2 | Bard | W24AA-A05BXXXXJ | 314L173477212-02 |
| Package Unit-1 | Int 4 Toll Plaza, Canopy, ETC Hut, Storage Shed | ETC Hut | 2 | Bard | W24A2-A05BXXXXJ | 314H163336363-02 |
| Chiller | Int 4 Toll Plaza, Canopy, ETC Hut, Storage Shed | Tolls | 25 | Carrier | 38AK-028500 | 3792F17989 |
| RTU-2 | Int 4 Toll Plaza, Canopy, ETC Hut, Storage Shed | Back office | 10 | Carrier | 50TC-B06A1A5A2FOCO | 0214C88287 |
| RTU-1 | Int 4 Toll Plaza, Canopy, ETC Hut, Storage Shed | Main Building | 10 | Carrier | 50TC-E12A245-2FOCO | 0414P80432 |
| AHU-2 | Int 4 Toll Plaza, Canopy, ETC Hut, Storage Shed | Radio Room | 0 | Daikin | FTKN02NMVJU | G002701 |
| Package Unit-4 | Int 4 Toll Plaza, Canopy, ETC | D.A.T.M Booth | 1 | Dometic | 600315.331C | 81305675 |

Appendix B Turnpike Ventilation and Cooling Equipment Table

Total Units = 495

| Equipment Designation | Location | Area Served | Tons | Manufacturer | Model # | Serial # |
|-----------------------|---------------------------------------|-------------|------|-------------------------|--|------------------------|
| | Hut, Storage Shed | | | | | |
| Package Unit | Int 5 Toll Plaza, Canopy, ETC Hut | | 1 | McLean Midwest Zero co. | 28-0326-023E | 280326-893265 |
| SS-1 | Int 5 Toll Plaza, Canopy, ETC Hut | Radio Room | 1 | Fujitsu | AOU24RLXFW | KTNO 32098 |
| AHU-1 | Int 5 Toll Plaza, Canopy, ETC Hut | Booths | 0 | Carrier | 39MW08D0229XH11XCS 39MW08D0229XH11XCS | 0514U3364 0514U3364 |
| ACCU-1 | Int 5 Toll Plaza, Canopy, ETC Hut | Booths | 15 | Carrier | 30RAP0155DA08110 | 0514Q49840 |
| Package Unit-1 | Int 5 Toll Plaza, Canopy, ETC Hut | ETC Hut | 1.5 | Bard | W18A2-A05BXXXXXX | 313J163344135-02 |
| Package Unit-2 | Int 5 Toll Plaza, Canopy, ETC Hut | ETC Hut | 1.5 | Bard | WA181-A058XXXXXX | 139K991376519-02 |
| AHU-2 | Int 6 Toll Plaza, Canopy, Water Tower | Toll booths | 0 | York | AP-105 | CHHM00655C |
| AHU-3 | Int 6 Toll Plaza, Canopy, Water Tower | ETC Room | 0 | Friedrich | MWM18Y3J | ADCR00173 |

Appendix B**Turnpike Ventilation and Cooling Equipment Table****Total Units = 495**

| Equipment Designation | Location | Area Served | Tons | Manufacturer | Model # | Serial # |
|------------------------------|---|--------------------|-------------|---------------------|-------------------|-----------------|
| AHU-4 | Int 6 Toll Plaza, Canopy, Water Tower | ETC Room | 0 | Fujitsu | ASU12RLF | KRA065069 |
| ACCU-1 | Int 6 Toll Plaza, Canopy, Water Tower | Tolls & Building | 64 | York | YCAI0064SC46XAADT | RGHM9460AA |
| CU-2 | Int 6 Toll Plaza, Canopy, Water Tower | ETC/Radio Room | 2 | Fujitsu | AOU24RLXFZ | LUN029287 |
| AHU-1 | Int 6 Toll Plaza, Canopy, Water Tower | Building | 0 | York | AP-170 | CHHM00654C |
| AHU-5 | Int 6 Toll Plaza, Canopy, Water Tower | Radio Room | 0 | Fujitsu | ASU12RLF | KRA070064 |
| CU-1 | Int 6 Toll Plaza, Canopy, Water Tower | ETC Room | 1.5 | Friedrich | MRM18Y3J | ADCR0022 |
| AHU-1 | Int 6A Toll Plaza, Canopy, Salt Shed, Trailer | Radio Room | 0 | Daikin | FTK18NMVJU | G004563 |
| CU-1 | Int 6A Toll Plaza, Canopy, Salt Shed, Trailer | Radio Room | 1.5 | Daikin | RK18NMVJU | G007107 |
| AHU-4 | Int 6A Toll Plaza, Canopy, | Toll Booths | 0 | York | AP-35 | CHM00657C |

Appendix B

Turnpike Ventilation and Cooling Equipment Table

Total Units = 495

| Equipment Designation | Location | Area Served | Tons | Manufacturer | Model # | Serial # |
|-----------------------|---|------------------|------|--------------|-----------------|--------------------|
| | Salt Shed, Trailer | | | | | |
| AHU-3 | Int 6A Toll Plaza, Canopy, Salt Shed, Trailer | Building | 0 | York | AP-35 | CHM00656C |
| ACCU-1 | Int 6A Toll Plaza, Canopy, Salt Shed, Trailer | Tolls & Building | 14 | York | YCAL0014SC46X | RGHM9470AA |
| CU-2 | Int 6A Toll Plaza, Canopy, Salt Shed, Trailer | Computer Room | 2 | Daikin | RK24NMVJU | G010499 |
| AHU-2 | Int 6A Toll Plaza, Canopy, Salt Shed, Trailer | Computer Room | 0 | Daikin | FTK24NMVJU | G010388 G010388 |
| CU-1 | Int 7 Toll Plaza, Canopy, ETC Hut, 3 Trailers | Recorder Room | 1.5 | Daikin | RK18NMVJU | G000688 |
| Package Unit-1 | Int 7 Toll Plaza, Canopy, ETC Hut, 3 Trailers | ETC Hut | 1.5 | Bard | W30LI-B09EWXXXJ | 299K112834288-02 |
| AHU-3 | Int 7 Toll Plaza, Canopy, ETC Hut, 3 Trailers | Recorder Room | 0 | Daikin | FTK18NMVJU | G004562 |

Appendix B

Turnpike Ventilation and Cooling Equipment Table

Total Units = 495

| Equipment Designation | Location | Area Served | Tons | Manufacturer | Model # | Serial # |
|-----------------------|---|----------------|------|--------------|---|------------------|
| Aircool Water Chiller | Int 7 Toll Plaza, Canopy, ETC Hut, 3 Trailers | Tolls/Building | 45.5 | Trane | CGAM-052F2L02-AXD2-A1A1 | U14K44908 |
| AHU-2 | Int 7 Toll Plaza, Canopy, ETC Hut, 3 Trailers | Building | 0 | Trane | CSAA012UAL00 | K14L94769 |
| AHU-1 | Int 7 Toll Plaza, Canopy, ETC Hut, 3 Trailers | Tolls | 0 | Trane | CSAA008UAL00 | K14L94776 |
| Package Unit-2 | Int 7 Toll Plaza, Canopy, ETC Hut, 3 Trailers | ETC Hut | 1.5 | Bard | W30A1-B06E-WXXXJ | 299K112834284-02 |
| RTU-1 | Int 7A Toll Plaza, Canopy, ETC Hut | Building | 12 | Trane | OAGD144F3-D1A1A0BC-00000AF000-000B1A1A0 | OA257762-1-1 |
| Packaging Unit-2 | Int 7A Toll Plaza, Canopy, ETC Hut | ETC Hut | 2 | Bard | W24AA-A05BXXXXXJ | 314L173477209-02 |
| AHU-2 | Int 7A Toll Plaza, Canopy, ETC Hut | Toll Booths | | York | CP125DWD1AF7-1/2 0208 | AKMM013577 |
| CH-1 | Int 7A Toll Plaza, Canopy, ETC Hut | Toll Booths | 24 | York | YCAL0024EC17XCABXTXXXXS | RKMM006672 |
| AHU-1 | Int 7A Toll Plaza, Canopy, ETC Hut | Radio Room | 0 | Daikin | FTK18NMVJU | G006236 |

Appendix B

Turnpike Ventilation and Cooling Equipment Table

Total Units = 495

| Equipment Designation | Location | Area Served | Tons | Manufacturer | Model # | Serial # |
|-----------------------|------------------------------------|--------------------------|------|----------------|--|-------------------|
| CU-1 | Int 7A Toll Plaza, Canopy, ETC Hut | Radio Room | 1.5 | Daikin | RK18NMVJU | G006825 |
| Packaging Unit-1 | Int 7A Toll Plaza, Canopy, ETC Hut | ETC Hut | 1.5 | Bard | WA181-A05BXXXXX | 139L991394671-02 |
| RTU-2 | Int 8 Toll Plaza, Canopy | Toll Booth #9 | 1 | Coleman Mach 3 | | 031224091 |
| RTU-1 | Int 8 Toll Plaza, Canopy | Toll Booth #8 | 1 | Coleman Mach 3 | | 031224089 |
| RTU-3 | Int 8 Toll Plaza, Canopy | Toll Booth #10 | 1 | Coleman Mach 3 | | 031224336 |
| AHU-1 | Int 8 Toll Plaza, Canopy | First Floor | 0 | Trane | CSAA004UAC00 | K11D35682 |
| SS-2 | Int 8 Toll Plaza, Canopy | Computer Room | 8 | Liebert | PFH096A-AL7 | Y11EG11055 |
| SS-1 | Int 8 Toll Plaza, Canopy | Computer Room | 8 | Liebert | PFH096A-AL7 | Y11EG11031 |
| AHU-2 | Int 8 Toll Plaza, Canopy | Toll Booths & Tunnel | 0 | Trane | CSAA003UAC00 | K11D35692 |
| CH-1 | Int 8 Toll Plaza, Canopy | Building & Booths | 20 | Trane | CGAM020F2C02AXD2A1A1AXXA1CA14XXX XXA1A3A1DXXCXX | U11521330 |
| RTU-1 | Int 8A Toll Plaza, Canopy, ETC Hut | Back section of building | 5 | Carrier | 48HCFA06A3M5A0B0C0 | 4513C85259 |
| CU-1 | Int 8A Toll Plaza, Canopy, ETC Hut | Radio Room | 1.5 | Daikin | RK18NMVJU | G006812 |
| Package Unit-1 | Int 8A Toll Plaza, Canopy, ETC Hut | EZ Pass | 1.5 | Bard | WA181-A05BXXXXX | 139NN991411910-02 |

Appendix B**Turnpike Ventilation and Cooling Equipment Table****Total Units = 495**

| Equipment Designation | Location | Area Served | Tons | Manufacturer | Model # | Serial # |
|------------------------------|------------------------------------|---------------------------|-------------|---------------------|--------------------|------------------|
| AHU-3 | Int 8A Toll Plaza, Canopy, ETC Hut | Radio Room | 0 | Daikin | FTK18NMVJU | G006541 |
| Package Unit-2 | Int 8A Toll Plaza, Canopy, ETC Hut | EZ Pass | 1.5 | Bard | W17A1-AO5BXXXJ | 313P133082407-02 |
| AHU-1 | Int 8A Toll Plaza, Canopy, ETC Hut | Building | 0 | Carrier | 39LD10MBEBB-BFK-AH | 5013U44336 |
| ACCU-2 | Int 8A Toll Plaza, Canopy, ETC Hut | Toll Booths | 20 | Carrier | 38AUDC25AOM5AOAOCO | 4613U41360 |
| ACCU-1 | Int 8A Toll Plaza, Canopy, ETC Hut | Front section of building | 12.5 | Carrier | 38AUDA14AOM5AOAOCO | 4513C93525 |
| AHU-2 | Int 8A Toll Plaza, Canopy, ETC Hut | Inline Fan for booths | 0 | - | - | - |
| AHU-3 | Int 9 Toll Plaza, Canopy, ETC Hut | Radio Room | 0 | Daikin | FTK18NMVJU | G006530 |
| AHU-1 | Int 9 Toll Plaza, Canopy, ETC Hut | Building | 0 | Carrier | 39LD06ACHBH-BFF-1H | 5813U44333 |
| Package Unit-2 | Int 9 Toll Plaza, Canopy, ETC Hut | ETC Hut | 1.5 | Bard | WA181-A00BXXXXXX | 139M991402591-02 |

Appendix B

Turnpike Ventilation and Cooling Equipment Table

Total Units = 495

| Equipment Designation | Location | Area Served | Tons | Manufacturer | Model # | Serial # |
|-----------------------|-----------------------------------|------------------|------|--------------|------------------------------------|------------------|
| RTU-1 | Int 9 Toll Plaza, Canopy, ETC Hut | Kitchen/Hall way | 5 | Carrier | 48DJE006650 | 0592G71490 |
| CU-1 | Int 9 Toll Plaza, Canopy, ETC Hut | Radio Room | 1.5 | Daikin | RK18NMVJU | G006828 |
| CU-2 | Int 9 Toll Plaza, Canopy, ETC Hut | ETC Hut | 1.5 | Daikin | RK18NMVJU | G007136 |
| AHU-4 | Int 9 Toll Plaza, Canopy, ETC Hut | ETC Hut | 0 | Daikin | FTK18NMVJU | G006529 |
| ACCU-1 | Int 9 Toll Plaza, Canopy, ETC Hut | Building | 20 | Carrier | 38AUDC25A0A6A0A2C0 | 4613U41361 |
| CH-2 | Int 9 Toll Plaza, Canopy, ETC Hut | Toll Booths | 34 | York | YCAL0034EC46XCABXTXXXXSLXX XX45 | RKMM006673 |
| AHU-2 | Int 9 Toll Plaza, Canopy, ETC Hut | Toll Booths | 0 | York | CP170DWD1AF150208 | AKMM013578 |
| Package Unit-1 | Int 9 Toll Plaza, Canopy, ETC Hut | ETC Hut | 1.5 | Bard | WA181-A00BXXXXXX | 139M991402590-02 |
| AHU-3 | Interchange 14-A Toll Plaza | Mechanical Room | 0 | Mitsubishi | PKA-A12HA6 | 52A06572B |
| AHU-2 | Interchange 14-A Toll Plaza | Mechanical Room | 0 | Mitsubishi | PKA-A12HA6 | 52A06578B |

Appendix B**Turnpike Ventilation and Cooling Equipment Table****Total Units = 495**

| Equipment Designation | Location | Area Served | Tons | Manufacturer | Model # | Serial # |
|------------------------------|--|--------------------|-------------|---------------------|--------------------------|------------------|
| Package Unit-2 | Interchange 14-A Toll Plaza | ETC Hut | 5 | Bard | W60A2-A0ZWPXXXV | 324F153233165-02 |
| Package Unit-3 | Interchange 14-A Toll Plaza | ETC Hut | 5 | Bard | W60A2-A0ZWPXXXV | 324F153233164-02 |
| Package Unit | Interchange 14-A Toll Plaza | Lane 4 | 4 | Dometic | 600315.331C | 80900345 |
| Package Unit | Interchange 14-A Toll Plaza | Lane 1 | 4 | Dometic | 600315.331C | 80900342 |
| CU-2 | Interchange 14-A Toll Plaza | Mechanical Room | 1 | Mitsubishi | PUY-A12NHA6 | 5XU04739A |
| Package Unit-1 | Interchange 14-A Toll Plaza | ETC Hut | 5 | Bard | W60A2-A0ZWPXXXV | 324F153233163-02 |
| CU-1 | Interchange 14-A Toll Plaza | Mechanical Room | 1 | Mitsubishi | PUY-A12NHA6 | 5XU04740A |
| ACCU-1 | Interchange 14-A Toll Plaza | Toll Booths | 20 | Trane | CGAM020F2N02AXD2B1A1A1AX | U15K51827 |
| AHU-1 | Interchange 14-A Toll Plaza | Toll Booths | 0 | Trane | CCDB12880MV38R11A0AL | K90F19278 |
| RTU-1 | Interchange 14-A Toll Plaza | Building | 6 | Trane | YHC072F3RMAOCGOBOA1B6 | 154612039L |
| Split System | Interchange 16-E & 18-E Recording Room | | 3 | Sanyo | CL3632 | 19202 |
| Cooling Tower | NJTA Headquarters | Building | | Baltimore Aircoil | JE341-2 | |
| Condensing Unit | Radio Comm. | | 3 | Colemen | TCGD3652132A | WOE8904387 |

Appendix B Turnpike Ventilation and Cooling Equipment Table

Total Units = 495

| Equipment Designation | Location | Area Served | Tons | Manufacturer | Model # | Serial # |
|-----------------------|-----------------------|-------------------------|------|--------------|-------------|------------------|
| Ductless Split | Radio Comm. | | 1.5 | Samsung | UH140CAV | F649PA1Q300033 J |
| Air Handling Unit | State Police-Cranbury | | 0 | York | AP305F3AFZM | CGCM003515 |
| AHU-2 | State Police-Cranbury | Main Building 2nd floor | 0 | York | AP305FSAF24 | CGCM-003515 |
| SS-1 | State Police-Cranbury | Conference room | 15 | Airflow | CG-15G4-PC | 014FD068 |
| Split System | State Police-Cranbury | | 4 | Samsung | UH140CAV | F649PA152003L |
| SS-4 | State Police-Cranbury | | 6 | Liebert | BU071WGAAEI | 604676-001 |
| Split System | State Police-Cranbury | | 4 | Samsung | UH140CAV | F649PA152003L |
| Air Handling Unit | State Police-Cranbury | | 0 | York | AP150FSAF16 | CGCM003516 |
| RF-1 | State Police-Cranbury | Main Building 1st floor | 0 | Bayley | SL330 | 568437-00 |
| Split System | State Police-Cranbury | | 6 | Liebert | BU071WGAAE1 | 604676-001 |
| Split System | State Police-Cranbury | | 15 | Airflow | CG-15G4-PC | 014FDD68 |
| Condensing Unit | State Police-Cranbury | Garage Unit | 2.5 | York | HZCA300A46B | NLCM092747 |

Appendix B

Turnpike Ventilation and Cooling Equipment Table

Total Units = 495

| Equipment Designation | Location | Area Served | Tons | Manufacturer | Model # | Serial # |
|-----------------------|-----------------------|-------------------------|------|----------------|--|----------------|
| AHU-1 | State Police-Cranbury | Main Building 1st floor | 0 | York | AP360FSAF27 | CGM-003514 |
| RF-2 | State Police-Cranbury | Main Building 2nd floor | 0 | Bayley | SL365 | 568437-10 |
| Air Handling Unit | State Police-Cranbury | | 0 | York | AP36FSAF27 | CGM-003514 |
| Split System | State Police-Cranbury | | 4 | Samsung | UH140CHV | F649PA1520074F |
| Chiller-1 | State Police-Cranbury | Main Building | 70 | Trane | CGAM-070F-2L02-AXD2-A1A1-A1AX-XA1C-1A4B-XXXX-XA1A-3A1D-1XXF-XX | U15F50088 |
| Chiller-2 | State Police-Cranbury | Main Building | 70 | Trane Trane | CGAM-070F-2L02-AXD2-A1A1-A1AX-XA1C-1A4B-XXXX-XA1A-3A1D-1XXF-XX | U15F50089 |
| Chiller | State Police-Cranbury | | 41 | York | YCA2741LE3-46PC | RGCM758002 |
| Chiller | State Police-Cranbury | | 41 | York | YCA2741LE3-46PC | RGCM758001 |
| Condensing Unit | State Police-Cranbury | | 2 | Heatcraft | PFG-21 | T94H00836 |
| Condensing Unit | State Police-Cranbury | Main Building Hard Deck | 2 | Heatcraft | PFG-2T | T94H00836 |
| Split System | State Police-Cranbury | | 4 | Samsung | UH140CHV | F649PA1520074F |

Appendix B Turnpike Ventilation and Cooling Equipment Table

Total Units = 495

| Equipment Designation | Location | Area Served | Tons | Manufacturer | Model # | Serial # |
|-----------------------|----------------------------------|------------------|------|------------------|---------------------|-------------|
| Condensing Unit-5 | State Police-Cranbury Garage | Garage Unit | 2.5 | York | H2CA300A46B | NLCM092747 |
| RF-3 | State Police-Cranbury Garage | Garage | 0 | Bayley | SL222 | 568437-20 |
| AHU-3 | State Police-Cranbury Garage | Garage | 0 | York | AP150FSAF16 | CGCM-003516 |
| AC-1B | State Police-Moorestown, Trailer | Radio Room | 1.5 | Stulz | VFS180DARUEC | 42333320 |
| CU-3A | State Police-Moorestown, Trailer | UPS Room | 4 | Carrier | 38HDR048-321 | 3313X92329 |
| CU-3B | State Police-Moorestown, Trailer | UPS Room | 4 | Carrier | 38HDR048-321 | 3313X92331 |
| AC-1A | State Police-Moorestown, Trailer | Radio Room | 1.5 | Stulz | VFS018DARUEC | 10021457 |
| RTU-4 | State Police-Moorestown, Trailer | Back of Building | 5 | Johnson Controls | JA5ZJC00B4BZZ50003A | N1N3287666 |
| CU-2 | State Police-Moorestown, Trailer | Serves AHU-2 | 6 | TBD | TBD | |

Appendix B

Turnpike Ventilation and Cooling Equipment Table

Total Units = 495

| Equipment Designation | Location | Area Served | Tons | Manufacturer | Model # | Serial # |
|-----------------------|---|------------------|------|------------------|---------------------|-------------------|
| CU-1 | State Police-Moorestown, Trailer | Serves AHU-1 | 6 | TBD | TBD | |
| AHU-2 | State Police-Moorestown, Trailer | Gymnasium | | Johnson Controls | XTI0472072JJHH046A | CHAMXT0101 |
| AHU-1 | State Police-Moorestown, Trailer | Locker Rooms | | Johnson Controls | XTI036X066JJGG046A | CHAMXT0125 |
| RTU-3 | State Police-Moorestown, Trailer | Detectives Area | 15 | Johnson Controls | J15ZJC00S4BZZ20005A | N1N3285713 |
| RTU-5 | State Police-Moorestown, Trailer | Garage | 5 | Annex Air | ERPE02FPH | 2113030913 |
| RTU-1B | State Police-Moorestown, Trailer | Hard Deck, Lobby | 7.5 | Johnson Controls | J07ZFC00P4BZZ50008A | N1N3287639 |
| RTU-2 | State Police-Moorestown, Trailer | Sally Port | 7.7 | Annex Air | ERPE03EWCHAC | 2113010913 |
| RTU-1A | State Police-Moorestown, Trailer | Hard Deck, Lobby | 7.5 | Johnson Controls | J07ZFC00P4BZZ50008A | N1N3287638 |
| Package Unit | TD1 Swedesboro Mtce Yd - Office& Garage | | 2 | Bard | Not legible | 1.4080519922e+012 |

Appendix B

Turnpike Ventilation and Cooling Equipment Table

Total Units = 495

| Equipment Designation | Location | Area Served | Tons | Manufacturer | Model # | Serial # |
|-----------------------|---|------------------------|------|--------------|----------------|-------------------|
| Package Unit | TD1 Swedesboro Mtce Yd - Office& Garage | | 2 | Bard | Not legible | 1.4080519922e+012 |
| AHU-1 | TD1 Swedesboro Mtce Yd - Office& Garage | Building | | Trane | CSAA012UA | |
| ACCU-1 | TD1 Swedesboro Mtce Yd - Office& Garage | Serves AHU-1 | 25 | Trane | RAUJC254B | |
| AHU-3A | TD1 Swedesboro Mtce Yd - Office& Garage | | | Mitsubishi | PKFY-P24 | |
| AHU-3B | TD1 Swedesboro Mtce Yd - Office& Garage | | | Mitsubishi | PKFY-P24 | |
| ACCU-2 | TD1 Swedesboro Mtce Yd - Office& Garage | Serves AHU-2A, 2B & 2C | 6 | Mitsubishi | PUHY-P72THMU-A | |
| AHU-3C | TD1 Swedesboro Mtce Yd - Office& Garage | | | Mitsubishi | PKFY-P24 | |
| ACCU-3 | TD1 Swedesboro Mtce Yd - Office& Garage | Serves AHU-3A, 3B & 3C | 6 | Mitsubishi | PUHY-P72THMU-A | |
| AHU-2C | TD1 Swedesboro | | | Mitsubishi | PKFY-P24 | |

Appendix B

Turnpike Ventilation and Cooling Equipment Table

Total Units = 495

| Equipment Designation | Location | Area Served | Tons | Manufacturer | Model # | Serial # |
|-----------------------|--|-------------|------|--------------|-------------|------------|
| | Mtce Yd - Office& Garage | | | | | |
| AHU-2B | TD1 Swedesboro Mtce Yd - Office& Garage | | | Mitsubishi | PKFY-P24 | |
| AHU-2A | TD1 Swedesboro Mtce Yd - Office& Garage | | | Mitsubishi | PKFY-P24 | |
| Ceiling Mtd. FCU | TD10 Rutherford Mtce Yd - Offices & Garages | | 3 | Modine | - | - |
| Ceiling Mtd. FCU | TD10 Rutherford Mtce Yd - Offices & Garages | | 3 | Airtherm | C30-2R-41RC | - |
| Ceiling Mtd. FCU | TD10 Rutherford Mtce Yd - Offices & Garages | | 3 | Airtherm | C30-2R-41RC | - |
| Rooftop Unit | TD10 Rutherford Mtce Yd - Offices & Garages | | 7.5 | Luxair | 08HB-T06AC | NCYM012979 |
| Package Unit | TD10 Rutherford Mtce | | 2 | Bard | WA242-A10 | - |

Appendix B**Turnpike Ventilation and Cooling Equipment Table****Total Units = 495**

| Equipment Designation | Location | Area Served | Tons | Manufacturer | Model # | Serial # |
|------------------------------|---|--------------------|-------------|---------------------|----------------|------------------|
| | Yd - Offices & Garages | | | | | |
| Rooftop Unit | TD10 Rutherford Mtce Yd - Offices & Garages | | 7.5 | Carrier | 48TJD008-501 | 4993G02770 |
| Package Unit | TD10 Rutherford Mtce Yd - Offices & Garages | | 2 | Bard | WA242-A10 | - |
| Package Unit | TD10 Rutherford Mtce Yd - Offices & Garages | | 2 | Bard | WA242-A10 | - |
| Package Unit | TD10 Rutherford Mtce Yd - Offices & Garages | | 2 | Bard | WA242-A10 | - |
| Package Unit-1 | TD2 Moorestown Mtce Yd - Trades and Storage | Sleep Trailer | 2 | Bard | WA242A10 | 140A051992206-02 |
| Package Unit-2 | TD2 Moorestown Mtce Yd - Trades and Storage | Ladies Bathroom | 2 | Bard | WA242A05 | 140A051992157-02 |

Appendix B**Turnpike Ventilation and Cooling Equipment Table****Total Units = 495**

| Equipment Designation | Location | Area Served | Tons | Manufacturer | Model # | Serial # |
|------------------------------|---|-----------------------------|-------------|---------------------|----------------|-----------------|
| RTU-1 | TD2 Moorestown Mtce Yd - Trades and Storage | Trades General Forman | 7 | Trane | B12A004 | S86C04017 |
| SS-1 | TD2 Moorestown Mtce Yd - Trades and Storage | Electrical Shop | 2 | Trane | BWH724P100A1 | Y41468832 |
| SS-2 | TD2 Moorestown Mtce Yd - Trades and Storage | Plumbing Shop | 2 | Trane | BWH724P100A1 | S03334273 |
| Condenser | TD2 Moorestown Mtce Yd - Trades and Storage | | 0 | Worthington | UBJ-50101-00 | 9F678-365 |
| SS-4 | TD2 Moorestown Mtce Yd - Trades and Storage | Parts Room | 2 | Daiken | FTK24NMVJU | G002081 |
| SS-3 | TD2 Moorestown Mtce Yd - | Radio Room | 2 | Sanyo | THW4272R | 0005172 |

Appendix B

Turnpike Ventilation and Cooling Equipment Table

Total Units = 495

| Equipment Designation | Location | Area Served | Tons | Manufacturer | Model # | Serial # |
|-----------------------|---|------------------------------|------|--------------|----------------|----------|
| | Trades and Storage | | | | | |
| Chiller | TD2 Moorestown Mtce Yd - Trades and Storage | | 40 | Worthington | 10X70 | O4710 |
| AHU-1 | TD3 Crosswicks Mtce Yd - Main Office & Garage | | | Trane | CSIA012 | |
| ACCU-3 | TD3 Crosswicks Mtce Yd - Main Office & Garage | Serves AHU-3A, 3B & 3C | 6 | Mitsubishi | PUHY-P72THMU-A | |
| ACCU-2 | TD3 Crosswicks Mtce Yd - Main Office & Garage | Serves AHU-2A, 2B & 2C | 6 | Mitsubishi | PUHY-P72THMU-A | |
| AHU-3B | TD3 Crosswicks Mtce Yd - Main Office & Garage | | | Mitsubishi | PKFY-P24 | |
| AHU-3B | TD3 Crosswicks Mtce Yd - Main Office & Garage | | | Mitsubishi | PKFY-P24 | |
| AHU-3A | TD3 Crosswicks Mtce Yd - Main Office & Garage | | | Mitsubishi | PKFY-P24 | |
| AHU-2C | TD3 Crosswicks Mtce Yd - Main Office & Garage | | | Mitsubishi | PKFY-P24 | |

Appendix B Turnpike Ventilation and Cooling Equipment Table

Total Units = 495

| Equipment Designation | Location | Area Served | Tons | Manufacturer | Model # | Serial # |
|-----------------------|---|----------------------|------|--------------|-------------|-----------------|
| AHU-2B | TD3 Crosswicks Mtce Yd - Main Office & Garage | | | Mitsubishi | PKFY-P24 | |
| ACCU-1 | TD3 Crosswicks Mtce Yd - Main Office & Garage | Serves AHU-1 | 21 | Trane | RAUJC254 | |
| Package Unit | TD3 Crosswicks Mtce Yd - Main Office & Garage | | 2 | Bard | WA242-A10 | 140A51994052-02 |
| Package Unit | TD3 Crosswicks Mtce Yd - Main Office & Garage | | 2 | Bard | WA242-A10 | 140052000032-02 |
| Rooftop Unit | TD3 Crosswicks Mtce Yd - Main Office & Garage | Building | 5 | Lennox | CHA9-653-24 | Not legible |
| AHU-2A | TD3 Crosswicks Mtce Yd - Main Office & Garage | | | Mitsubishi | PKFY-P24 | |
| ACCU-4 | TD4 Hightstown Mtce Yd - Offices & Garage | IT Room | 2.5 | Mitsubishi | PUZ-A30NHA6 | 5YU00753A |
| ACCU-2 | TD4 Hightstown Mtce Yd - Offices & Garage | IT Room | 2.5 | Mitsubishi | PUZ-A30NHA6 | 52U01248B |
| Rooftop Unit #1 | TD4 Hightstown Mtce Yd - | Existing Building | 10 | Carrier | 50LJ012510 | - |

Appendix B**Turnpike Ventilation and Cooling Equipment Table****Total Units = 495**

| Equipment Designation | Location | Area Served | Tons | Manufacturer | Model # | Serial # |
|------------------------------|---|--------------------|-------------|---------------------|----------------|-----------------|
| | Offices & Garage | | | | | |
| Rooftop Unit #6 | TD4 Hightstown Mtce Yd - Offices & Garage | Existing Building | 4 | Carrier | 50LJ-005-521QA | 3293G01636 |
| Rooftop Unit #5 | TD4 Hightstown Mtce Yd - Offices & Garage | Existing Building | 25 | Carrier | 50DJ-028-500AA | 1093F37830 |
| Rooftop Unit #4 | TD4 Hightstown Mtce Yd - Offices & Garage | Existing Building | 20 | Carrier | 50TJ-024-500AA | - |
| Rooftop Unit #3 | TD4 Hightstown Mtce Yd - Offices & Garage | Existing Building | 20 | Carrier | 50J-024-500AA | - |
| Rooftop Unit #2 | TD4 Hightstown Mtce Yd - Offices & Garage | Existing Building | 10 | Carrier | 50LJ012510 | - |
| AHU-1 | TD4 Hightstown Mtce Yd - Offices & Garage | New Building | | Trane | B6A083A/A | K16K74813 |
| Split System-2 | TD4 Hightstown Mtce Yd - | Radio Room | 3 | Sanyo | C3682 | 00307 02 |

Appendix B

Turnpike Ventilation and Cooling Equipment Table

Total Units = 495

| Equipment Designation | Location | Area Served | Tons | Manufacturer | Model # | Serial # |
|-----------------------|---|-----------------------|------|--------------|-------------|-----------|
| | Offices & Garage | | | | | |
| AC-2 | TD4 Hightstown Mtce Yd - Offices & Garage | IT Room | | Mitsubishi | PKA-A30KA6 | 62M00441 |
| Split System-1 | TD4 Hightstown Mtce Yd - Offices & Garage | Radio Room | 3 | Sanyo | C3682 | 00332 02 |
| AC-3 | TD4 Hightstown Mtce Yd - Offices & Garage | IT Room | | Mitsubishi | PKA-A30KA6 | 62M00571 |
| AC-4 | TD4 Hightstown Mtce Yd - Offices & Garage | IT Room | | Mitsubishi | PKA-A30KA6 | 62M00228 |
| AC-5 | TD4 Hightstown Mtce Yd - Offices & Garage | IT Room | | Mitsubishi | PKA-A30KA6 | 5ZM01558 |
| ACCU-5 | TD4 Hightstown Mtce Yd - Offices & Garage | IT Room | 2.5 | Mitsubishi | PUZ-A30NHA6 | 5YU00754A |
| AC-6 | TD4 Hightstown Mtce Yd - | Elevator Machine Room | | Mitsubishi | PKA-A12HA6 | 66AD6134C |

Appendix B Turnpike Ventilation and Cooling Equipment Table

Total Units = 495

| Equipment Designation | Location | Area Served | Tons | Manufacturer | Model # | Serial # |
|-----------------------|---|-----------------------|------|--------------|-----------------------|-----------------|
| | Offices & Garage | | | | | |
| ACCU-1 | TD4 Hightstown Mtce Yd - Offices & Garage | Elevator Machine Room | 0.75 | Mitsubishi | PUY-A12NHA6 | 66U09046C |
| ACCU-3 | TD4 Hightstown Mtce Yd - Offices & Garage | IT Room | 2.5 | Mitsubishi | PUZ-A30NHA6 | 51U01207B |
| CU-1 | TD4 Hightstown Mtce Yd - Offices & Garage | New Building | 50 | Trane | RAUJC504BC13ABDF00020 | C16K06990 |
| RF-1 | TD4 Hightstown Mtce Yd - Offices & Garage | New Building | | Greenheck | Reid-24-90-B75-X | 1A754990 16J |
| Package Unit-2 | TD5 Bassett Building | Trailer #2 TEM shop | 1.5 | Bard | WA181-A009XXXX | 139K91899148-02 |
| AHU-2 | TD5 Bassett Building | Office Supply Room | 0 | Diakin | FTQ24PBVJV | A000405 |
| AHU-1 | TD5 Bassett Building | New Ticket Storage | 0 | Liebert | BU042ADCDES5573A | |
| AHU | TD5 Bassett Building | Main building | 0 | Trane | V345L01L0AG | K85C56444 |

Appendix B

Turnpike Ventilation and Cooling Equipment Table

Total Units = 495

| Equipment Designation | Location | Area Served | Tons | Manufacturer | Model # | Serial # |
|-----------------------|---|------------------------|------|--------------|--------------------------|------------------|
| Condensing Unit-3 | TD5 Bassett Building | Main building | 7.5 | Trane | RAUOB756B | C84K-09702 |
| Package Unit-2 | TD5 Bassett Building | Trailer #3 TEM parts | 2 | Bard | WA242-A10 | 225K052082604-02 |
| Package Unit-1 | TD5 Bassett Building | Trailer #3 TEM parts | 2 | Bard | WA242-A10 | 225K052082603-02 |
| ACCU-1 | TD5 Bassett Building | New Ticket Storage | 5.5 | Liebert | MC S028E7YDC464 | Y15HAX0051 |
| Package Unit-1 | TD5 Bassett Building | Trailer #2 TEM shop | 1.5 | Bard | WA181-A009XXXX | 139K91899149-02 |
| Split System-2 | TD5 Bassett Building | Tolls training room | 2 | Mitsubishi | PUGH24AKB | 182304 |
| Package Unit-2 | TD5 Bassett Building | Trailer #1 TEM office | 1.5 | Compac | Bard Type -- Not legible | Not legible |
| ACCU-2 | TD5 Bassett Building | Office Supply Room | 2 | Daikin | RZQ24PVJU9 | A003218 |
| Package Unit-1 | TD5 Bassett Building | Trailer #1 TEM office | 1.5 | Compac | Bard Type -- Not legible | Not legible |
| Split System-1 | TD5 Bassett Building | Tolls training room | 2 | Mitsubishi | PUGH24AKB | 0119005 |
| ACCU-3 | TD5 Milltown Mtce Yd - Offices & Garage | Serves AHU-3A, 3B & 3C | 6 | Mitsubishi | PUHY-P72THMU-A | |

Appendix B

Turnpike Ventilation and Cooling Equipment Table

Total Units = 495

| Equipment Designation | Location | Area Served | Tons | Manufacturer | Model # | Serial # |
|-----------------------|--|-----------------|------|--------------|----------|----------|
| AHU-1 | TD5 Milltown Mtce Yd - Offices & Garage | Building | | Trane | CSIA012 | |
| ACCU-1 | TD5 Milltown Mtce Yd - Offices & Garage | Serves AHU-1 | 21 | Trane | RAUJC254 | |
| AHU-2A | TD5 Milltown Mtce Yd - Offices & Garage | | | Mitsubishi | PKFY-P24 | |
| AHU-2B | TD5 Milltown Mtce Yd - Offices & Garage | | | Mitsubishi | PKFY-P24 | |
| AHU-2C | TD5 Milltown Mtce Yd - Offices & Garage | | | Mitsubishi | PKFY-P24 | |
| AHU-3A | TD5 Milltown Mtce Yd - Offices & Garage | | | Mitsubishi | PKFY-P24 | |
| AHU-3B | TD5 Milltown Mtce Yd - Offices & Garage | | | Mitsubishi | PKFY-P24 | |

Appendix B Turnpike Ventilation and Cooling Equipment Table

Total Units = 495

| Equipment Designation | Location | Area Served | Tons | Manufacturer | Model # | Serial # |
|-----------------------|---|----------------------------------|------|--------------|--------------------|----------------------|
| AHU-3C | TD5 Milltown Mtce Yd - Offices & Garage | | | Mitsubishi | PKFY-P24 | |
| Split System | TD5 Milltown Mtce Yd - Offices & Garage | | 2 | Mitsubishi | PUGH24AKB | 119085 |
| ACCU-2 | TD5 Milltown Mtce Yd - Offices & Garage | Serves AHU-2A, 2B & 2C | 6 | Mitsubishi | PUHY-P72THMU-A | |
| Package Unit | TD5 Milltown Mtce Yd - Offices & Garage | | 2 | Bard | WA242-A00 | 140A051994057-02 |
| Package Unit | TD5 Milltown Mtce Yd - Offices & Garage | | 2 | Bard | WA242-A00 | 140A051994051-02 |
| Rooftop Unit | TD5 Milltown Mtce Yd - Offices & Garage | | 5 | Lennox | 5474B02280 | **Should be replaced |
| Rooftop Unit-2 | TD6 Elizabeth Mtce Yd - Landscaping Shop | Asst. foreman/M ech office | 5 | Carrier | 50TC-A04A2A5A0A0A0 | 3715C50083 |

Appendix B**Turnpike Ventilation and Cooling Equipment Table****Total Units = 495**

| Equipment Designation | Location | Area Served | Tons | Manufacturer | Model # | Serial # |
|------------------------------|--|----------------------------|-------------|---------------------|--------------------|-------------------|
| Package Unit-1 | TD6 Elizabeth Mtce Yd - Landscaping Shop | Ladies sleep trailer | 2 | Bard | WA242-A10 | 140N041979330-02 |
| Package Unit-2 | TD6 Elizabeth Mtce Yd - Landscaping Shop | Training Trailer | 2 | Bard | WA242-A10 | 225A0419222266-02 |
| Rooftop Unit-4 | TD6 Elizabeth Mtce Yd - Landscaping Shop | Break room | 5 | Carrier | 50CH006500 | 3084615-387 |
| Package Unit-1 | TD6 Elizabeth Mtce Yd - Landscaping Shop | Training Trailer | 2 | Bard | W24A2-A05BXXXXJ | 314H163336361-02 |
| Rooftop Unit-1 | TD6 Elizabeth Mtce Yd - Landscaping Shop | Paint Storage | 5 | Daikin | 0AC006GHAC | FB0U160101284 |
| Rooftop Unit-3 | TD6 Elizabeth Mtce Yd - Landscaping Shop | District/Landscape foreman | 5 | Carrier | 50TC-A04A2A5A0A0A0 | 3715C50132 |
| Package Unit-2 | TD6 Elizabeth Mtce Yd - Landscaping Shop | Men's sleep trailer | 2 | Bard | WA242-A10 | 140A051992200-02 |

Appendix B**Turnpike Ventilation and Cooling Equipment Table****Total Units = 495**

| Equipment Designation | Location | Area Served | Tons | Manufacturer | Model # | Serial # |
|------------------------------|--|-----------------------|-------------|---------------------|----------------|-----------------|
| AHU-1 | TD6 Elizabeth Mtce Yd - Offices & Garage | Building | | Daikin | E024742300400 | FBOU160400547 |
| ACCU-2 | TD6 Elizabeth Mtce Yd - Offices & Garage | IT Room | 2.5 | Daikin | RXS30LVJU | E002201 |
| AC-2 | TD6 Elizabeth Mtce Yd - Offices & Garage | IT Room | | Daikin | FTXS30LVJU | E004722 |
| ACCU-6 | TD6 Elizabeth Mtce Yd - Offices & Garage | Elevator Machine Room | 1 | Daikin | RK12NMVJU | G003175 |
| ACCU-1 | TD6 Elizabeth Mtce Yd - Offices & Garage | Building | 40 | Daikin | RCS445DYYYYY | FBOU151101579 |
| AC-3 | TD6 Elizabeth Mtce Yd - Offices & Garage | IT Room | | Daikin | FTXS30LVJU | E004726 |
| ACCU-3 | TD6 Elizabeth Mtce Yd - Offices & Garage | IT Room | 2.5 | Daikin | RXS30LVJU | E002192 |

Appendix B**Turnpike Ventilation and Cooling Equipment Table****Total Units = 495**

| Equipment Designation | Location | Area Served | Tons | Manufacturer | Model # | Serial # |
|------------------------------|---|-----------------------|-------------|---------------------|--------------------|-----------------|
| AC-4 | TD6 Elizabeth Mtce Yd - Offices & Garage | IT Room | | Daikin | FTXS30LVJU | E004711 |
| ACCU-4 | TD6 Elizabeth Mtce Yd - Offices & Garage | IT Room | 2.5 | Daikin | RXS30LVJU | E002194 |
| AC-5 | TD6 Elizabeth Mtce Yd - Offices & Garage | IT Room | | Daikin | FTXS30LVJU | E004704 |
| ACCU-5 | TD6 Elizabeth Mtce Yd - Offices & Garage | IT Room | 2.5 | Daikin | RXS30LVJU | E002193 |
| AC-6 | TD6 Elizabeth Mtce Yd - Offices & Garage | Elevator Machine Room | | Daikin | FTK12NMVJU | G001497 |
| CU-6 | TD6-A Woodbridge Mtce Yd - Offices & Garage | 3rd floor | 7.5 | Carrier | 38AUZB14A0N6A0A0C0 | 4715C90719 |
| CU-4 | TD6-A Woodbridge Mtce Yd - | Mezzanine | 7.5 | Carrier | 38AUZB14A0N6A0A0C0 | 4715C90721 |

Appendix B Turnpike Ventilation and Cooling Equipment Table

Total Units = 495

| Equipment Designation | Location | Area Served | Tons | Manufacturer | Model # | Serial # |
|-----------------------|---|-----------------------------|------|-----------------|--------------------------|----------------------------|
| | Offices & Garage | | | | | |
| AHU-2 | TD6-A Woodbridge Mtce Yd - Offices & Garage | 2nd floor for CU-5 | | Carrier | HDT-08PL | 506950 |
| AHU-3 | TD6-A Woodbridge Mtce Yd - Offices & Garage | 3rd floor for CU-6 | | Carrier | HDT-08PL | 506950 |
| CU-1 | TD6-A Woodbridge Mtce Yd - Offices & Garage | Inventory Manager's Offices | 2 | Carrier | 38GJQD24----3 | 1615V71255 |
| CU-2 | TD6-A Woodbridge Mtce Yd - Offices & Garage | IT Room | 6 | Toshiba-Carrier | MMY-MAP0724HT9UL | 31210021 |
| MUA-1 | TD6-A Woodbridge Mtce Yd - Offices & Garage | Bathrooms | 20 | Modine | MPR20CD1A1A3D16F4WNDNNNN | S11432115102151 15-1431 |
| CU-3 | TD6-A Woodbridge | IT Room | 6 | Toshiba-Carrier | MMY-MAP0724HT9UL | 30910015 |

Appendix B Turnpike Ventilation and Cooling Equipment Table

Total Units = 495

| Equipment Designation | Location | Area Served | Tons | Manufacturer | Model # | Serial # |
|-----------------------|---|--------------------|------|--------------|--------------------|------------|
| | Mtce Yd - Offices & Garage | | | | | |
| RTU-1 | TD6-A Woodbridge Mtce Yd - Offices & Garage | Building | 70 | Carrier | 50P3R070611TFFKJLS | 5115U48796 |
| CU-5 | TD6-A Woodbridge Mtce Yd - Offices & Garage | 2nd floor | 7.5 | Carrier | 38AUZB14A0N6A0A0C0 | 4715C90720 |
| AHU-1 | TD6-A Woodbridge Mtce Yd - Offices & Garage | Mezzanine for CU-4 | | Carrier | HDT-08PL | 506950 |
| Rooftop Unit | TD7 Newark Mtce Yd - Main Garage | Inventory Room | 1.5 | Carrier | 50SS-018-301 | 3696G41444 |
| Fan Coil Units | TD7 Northern Division HQ | | 2 | Nesbit | - | - |
| Fan Coil Units | TD7 Northern Division HQ | | 2 | Nesbit | - | - |
| SS-1 | TD7 Northern Division HQ | Radio Room | 2 | Fujitsu | AOU24RML1 | 003571 |

Appendix B Turnpike Ventilation and Cooling Equipment Table

Total Units = 495

| Equipment Designation | Location | Area Served | Tons | Manufacturer | Model # | Serial # |
|-----------------------|---|------------------------------|------|------------------------|-----------------|--------------------|
| Fan Coil Units | TD7 Northern Division HQ | | 2 | Nesbit | - | - |
| Fan Coil Units | TD7 Northern Division HQ | | 2 | Nesbit | - | - |
| Chiller | TD7 Northern Division HQ | Main Building | 70 | Carrier | 30HR070-A140 | B273873 (R-22 MOD) |
| Package Unit | TD7 Northern Division HQ | | 25 | Governair | TL10-4028-E | 29381 |
| SS-2 | TD7 Northern Division HQ | Upstairs State Police Office | 3 | Friedrich friedrich | MP36UY3J | 404KAWQ00001 |
| Fan Coil Units | TD7 Northern Division HQ | | 2 | Nesbit | - | - |
| AHU-1 | TD7 Northern Division HQ | Main Building | 0 | Trane | CSAA035UAL00 | K16J70253 |
| AHU-7 | TD8 Secaucus Mtce Yd - Offices & Garage | IT Room | 1.5 | Mitsubishi | PKFY-P18NHMU-E2 | 3ZA02057A |
| AHU-1 | TD8 Secaucus Mtce Yd - Offices & Garage | Building | | Trane | CSAA012UAL00 | K15F46573 |
| ACCU-1 | TD8 Secaucus Mtce Yd - Offices & Garage | Building | 20 | Trane | RAUJC204BC13A0D | C15G04970 |

Appendix B**Turnpike Ventilation and Cooling Equipment Table****Total Units = 495**

| Equipment Designation | Location | Area Served | Tons | Manufacturer | Model # | Serial # |
|------------------------------|---|--------------------|-------------|---------------------|-----------------|-----------------|
| AHU-3 | TD8 Secaucus Mtce Yd - Offices & Garage | IT Room | 1.5 | Mitsubishi | PKFY-P18NHMU-E2 | 3ZA02084A |
| AHU-4 | TD8 Secaucus Mtce Yd - Offices & Garage | IT Room | 1.5 | Mitsubishi | PKFY-P18NHMU-E2 | 3YA01915A |
| AHU-5 | TD8 Secaucus Mtce Yd - Offices & Garage | IT Room | 1.5 | Mitsubishi | PKFY-P18NHMU-E2 | 4ZA04021A |
| CU-2 | TD8 Secaucus Mtce Yd - Offices & Garage | | 5 | Mitsubishi | PUMY-P60NKMU | 43U03199B |
| AHU-2 | TD8 Secaucus Mtce Yd - Offices & Garage | IT Room | 1.5 | Mitsubishi | PKFY-P18NHMU-E2 | 4YA03961A |
| AHU-6 | TD8 Secaucus Mtce Yd - Offices & Garage | IT Room | 1.5 | Mitsubishi | PKFY-P18NHMU-E2 | 3ZA02085A |
| CU-1 | TD8 Secaucus Mtce Yd - Offices & Garage | | 5 | Mitsubishi | PUMY-P60NKMU | 43U03186B |

Appendix B**Turnpike Ventilation and Cooling Equipment Table****Total Units = 495**

| Equipment Designation | Location | Area Served | Tons | Manufacturer | Model # | Serial # |
|------------------------------|--|--------------------|-------------|---------------------|----------------|-----------------|
| ACCU-4 | TD9 Jersey City Mtce Yd- Offices& Garage, Old &New | IT Room | 2.5 | Mitsubishi | PUZ-A30NHA6 | FZU01021A |
| AHU-2 | TD9 Jersey City Mtce Yd- Offices& Garage, Old &New | IT Room | | Mitsubishi | PKA-A30KA6 | 5ZM01561 |
| ACCU-1 | TD9 Jersey City Mtce Yd- Offices& Garage, Old &New | Building | 25 | Trane | TTA300J400AA | 16181S7GTA |
| AHU-1 | TD9 Jersey City Mtce Yd- Offices& Garage, Old &New | Building | | Trane | CSAA012UAL00 | K16D34386 |
| HVU-1 | TD9 Jersey City Mtce Yd- Offices& Garage, Old &New | Garage (Heat Only) | | Trane | CSAA012UAL00 | K16D34394 |
| ACCU-2 | TD9 Jersey City Mtce Yd- Offices& | IT Room | 2.5 | Mitsubishi | PUZ-A30NHA6 | 51U01187B |

Appendix B**Turnpike Ventilation and Cooling Equipment Table****Total Units = 495**

| Equipment Designation | Location | Area Served | Tons | Manufacturer | Model # | Serial # |
|------------------------------|--|--------------------|-------------|---------------------|----------------|-------------------|
| | Garage, Old & New | | | | | |
| AHU-3 | TD9 Jersey City Mtce Yd- Offices & Garage, Old & New | IT Room | 2.5 | Mitsubishi | PKA-A30KA6 | 5ZM01648 |
| AHU-4 | TD9 Jersey City Mtce Yd- Offices & Garage, Old & New | IT Room | 2.5 | Mitsubishi | PKA-A30KA6 | 5ZM01566 |
| Package Unit | TD9 Jersey City Mtce Yd- Offices & Garage, Old & New | | 2 | Bard | WA242-A10 | 14A00510222154-02 |
| AHU-5 | TD9 Jersey City Mtce Yd- Offices & Garage, Old & New | IT Room | 2.5 | Mitsubishi | PKA-A30KA6 | 5ZM01565 |
| ACCU-5 | TD9 Jersey City Mtce Yd- Offices & Garage, Old & New | IT Room | 2.5 | Mitsubishi | PUZ-A30NHA6 | 5ZU01022A |
| Package Unit | TD9 Jersey City Mtce Yd- | | 2 | Bard | WA242-A10 | 14A00510225150-02 |

Appendix B Turnpike Ventilation and Cooling Equipment Table

Total Units = 495

| Equipment Designation | Location | Area Served | Tons | Manufacturer | Model # | Serial # |
|-----------------------|--|-----------------|------|--------------|-----------------|----------------------|
| | Offices& Garage, Old &New | | | | | |
| ACCU-3 | TD9 Jersey City Mtce Yd- Offices& Garage, Old &New | IT Room | 2.5 | Mitsubishi | PUZ-A30NHA6 | 52U01247B |
| Rooftop Unit | Trade Shop | | 1.5 | Carrier | 50SS-018-301 | - |
| | Woodbridge Executive Offices | | | | | |
| Condensing Unit | Woodbridge Executive Offices | Battery Bldg | 0 | Liebert | PFHO37A-AL3 | 0503N102672 |
| Split System | Woodbridge Executive Offices | | 0 | Liebert | VH125A-AAEI | 830551-002 |
| Split System | Woodbridge Executive Offices | | 0 | Liebert | VH125A-AAEI | 830551-0U1 |
| Split System | Woodbridge Executive Offices | Battery Bldg | 0 | Liebert | PPA150C | 321266-1 |
| Package Unit | Woodbridge Int 11 | Trailer | | Bard | W18A2-A18XX4XXX | 313L183593897- 02 |
| Package Unit | Woodbridge Int 11 | Trailer | | Bard | W18A2-A18XX4XXX | 313L183593896- 02 |

Appendix B

Turnpike Ventilation and Cooling Equipment Table

| | | | | | | Total Units = 495 |
|-----------------------|-------------------|-------------|------|--------------|-----------------------------|-------------------|
| Equipment Designation | Location | Area Served | Tons | Manufacturer | Model # | Serial # |
| Package Unit | Woodbridge Int 11 | ETC Hut | | Bard | W17A1-A05BXXXXJ | 313P133082404-02 |
| Package Unit | Woodbridge Int 11 | ETC Hut | | Bard | W24AA-A05BXXXXJ | 314L173477204-02 |
| Package Unit | Woodbridge Int 11 | Tower | | Bard | WA6023A05BNXXXXJ | 153H031818311-02 |
| Package Unit | Woodbridge Int 11 | Tower | | Bard | WA6023A05BNXXXXJ | 153H031818855-02 |
| Package Unit | East Brunswick | Tower | | Marvair | AVPA60ACA050CU-A5-100-VAR | DE-F139251-0-18 |
| Package Unit | East Brunswick | Tower | | Marvair | AVPA60ACA050CU-A5-100-VAR | DE-F139251-0-23 |
| Package Unit | East Brunswick | Tower | | Bard | WA6023A05BNXXXXJ | 153F021813148-02 |
| Package Unit | Hightstown | Tower | | Marvair | HSDCA36ACA050C5U-A5-100-VAR | BG-F149654-0-34 |
| Package Unit | Hightstown | Tower | | Marvair | HSDCA36ACA050C5U-A5-100-VAR | BG-F150143-0-5 |
| Package Unit | Cranbury | Tower | | Bard | WL6023A05BNXXXXJ | 153D031807328-02 |
| Package Unit | Cranbury | Tower | | Bard | WL6023A05BNXXXXJ | 153H0318865-02 |
| Package Unit | Teaneck | Tower | | Marvair | AVPA60ACA05CU-1000CI | CL41159 |
| Package Unit | Teaneck | Tower | | Marvair | AVPA60ACA05CU-1000CI | CL41160 |
| Package Unit | Kearny | Tower | | Marvair | AVPA60ACA000CU-100 | AZ-F120314-0-20 |
| Package Unit | Kearny | Tower | | Marvair | AVPA60ACA000CU-101 | AZ-F120314-0-6 |
| Package Unit | Kearny | Tower | | Marvair | AVP36ACC09N-1000BI | DG17438 |
| Package Unit | Kearny | Tower | | Marvair | AVP36ACC09N-1000BI | DG17439 |
| Package Unit | Bayonne | Tower | | Bard | W60A2-A0ZWPXXXXV | 324F153233164-02 |
| Package Unit | Bayonne | Tower | | Marvair | ASDCA48ACA050C-A5-100-VAR | FE-F139753-0-50 |
| Package Unit | Bayonne | Tower | | Marvair | ASDCA48ACA050C-A5-100-VAR | FE-F139753-0-49 |
| Package Unit | Bayonne | Tower | | Bard | W60A2-A0ZWPXXXXV | 324F153233163-02 |

Appendix B

Turnpike Ventilation and Cooling Equipment Table

| | | | | | | Total Units = 495 |
|-----------------------|------------|-------------|------|--------------|-----------------------------|-------------------|
| Equipment Designation | Location | Area Served | Tons | Manufacturer | Model # | Serial # |
| Package Unit | Bayonne | Tower | | Bard | W60A2-A0ZWPXXXV | 324F153233165-03 |
| Package Unit | Secaucus | Tower | | Marvair | ASDCA48ACA050C-A5-100-VAR | FE-F139753-0-XX |
| Package Unit | Secaucus | Tower | | Marvair | ASDCA48ACA050C-A5-100-VAR | FE-F139753-0-XX |
| Package Unit | Bordentown | Tower | | Bard | W60A2-A0ZWPXXXV | 324D133002421-02 |
| Package Unit | Bordentown | Tower | | Bard | W60A2-A0ZWPXXXV | 324D133002422-02 |
| Package Unit | Bordentown | Tower | | Bard | W60A2-A0ZWPXXXV | 324D133002414-02 |
| Package Unit | Florence | Tower | | Bard | W60AB-A05ZP5XXJ | 324A193624176-02 |
| Package Unit | Florence | Tower | | Bard | W60AB-A05ZP5XXJ | 324A193624177-02 |
| Package Unit | Moorestown | Tower | | Bard | W60A2-A0ZWPXXXV | XXXXXXXXXXXXX |
| Package Unit | Moorestown | Tower | | Bard | W60A2-A0ZWPXXXV | XXXXXXXXXXXXX |
| Package Unit | Woodbury | Tower | | Marvair | HSDCA36ACA050C5U-A5-100-VAR | EF-F142754-0-14 |
| Package Unit | Woodbury | Tower | | Marvair | HSDCA36ACA050C5U-A5-100-VAR | EF-F142754-0-12 |
| Split System | Swedesboro | Tower | | Daiken | AKNO9NMVJU | G001048 |
| Package Unit | Moorestown | Tower | | Bard | W60A2-A0ZWPXXXV | XXXXXXXXXXXXX |
| Package Unit | Moorestown | Tower | | Bard | W60A2-A0ZWPXXXV | XXXXXXXXXXXXX |
| Package Unit | Deepwater | Tower | | Bard | W60A2-A0ZWPXXXV | 324K122937204-02 |
| Package Unit | Deepwater | Tower | | Bard | W60A2-A0ZWPXXXV | 324K122937205-02 |

Appendix B**Turnpike Ventilation and Cooling Equipment Table****Total Units = 495**

| Equipment Designation | Location | Area Served | Tons | Manufacturer | Model # | Serial # |
|------------------------------|-----------------|--------------------|-------------|---------------------|-----------------|------------------|
| Package Unit | Deepwater | Tower | | Bard | W60A2-A0ZWPXXXV | 324K122937408-02 |
| Package Unit | Deepwater | Tower | | Bard | W60A2-A0ZWPXXXV | 324K122937209-02 |

Appendix-C

THE UNITS LISTED IN APPENDIX-C MAY NOT BE AN INCLUSIVE LIST

THE AUTHORITY REQUIRES ANY UNIT NOT LISTED TO BE SERVICED

| Appendix C Turnpike Condensing Boiler Table | | | | | | | | | Total Units 23 |
|---|---|----------|--------------|----------|---------------|-----------|---------------|------|-------------------|
| NJ State ID | Location | Milepost | Manufacturer | Model # | Serial # | Installed | MM Btu per hr | Fuel | Area Served |
| NJ026012-18H | TD1 Swedesboro Mtce Yd - Office& Garage | 13 | Lochinvar | FTX125N | 1606102603964 | 2016 | 0.5 | Gas | Building |
| NJ026011-18H | TD1 Swedesboro Mtce Yd - Office& Garage | 13 | Lochinvar | FTX125N | 1606102603961 | 2016 | 0.5 | Gas | Building |
| | TD2 Moorestown Mtce Yd - Trades and Storage | 37.1 | Fulton | EDR-1500 | 5358-HFTC | 2019 | 1.5 | Gas | Building |
| | TD2 Moorestown Mtce Yd - Trades and Storage | 37.1 | Fulton | EDR-1500 | 5396-HFTC | 2019 | 1.5 | Gas | Building |
| | TD3 Crosswicks Mtce Yd - Main Office & Garage | 56.9 | Fulton | EDR-750 | 4848-HFTC | 2019 | 0.75 | Gas | Building |
| | TD3 Crosswicks Mtce Yd - Main Office & Garage | 56.9 | Fulton | EDR-750 | 4910-HFTC | 2019 | 0.75 | Gas | Building |
| NJ026090-17H | TD4 Hightstown Mtce Yd - Offices & Garage | 67.6 | Fulton | EDR-1500 | 4001-HFTC | 2017 | 1.4 | Gas | Building |

| Appendix C Turnpike Condensing Boiler Table | | | | | | | | | Total Units 23 |
|---|---|----------|--------------|-------------|------------------|-----------|---------------|------|----------------|
| NJ State ID | Location | Milepost | Manufacturer | Model # | Serial # | Installed | MM Btu per hr | Fuel | Area Served |
| NJ026089-17H | TD4 Hightstown Mtce Yd - Offices & Garage | 67.6 | Fulton | EDR-1500 | 3999-HFTC | 2017 | 1.4 | Gas | Building |
| NJ026028-18H | TD5 Milltown Mtce Yd - Offices & Garage | 80.1 | Lochinvar | FBN0751 | 1646103905898 | 2017 | 0.75 | Gas | Building |
| NJ026029-18H | TD5 Milltown Mtce Yd - Offices & Garage | 80.1 | Lochinvar | FBN0751 | 1646103905897 | 2017 | 0.75 | Gas | Building |
| NJ026005-18H | TD6 Elizabeth Mtce Yd - Offices & Garage | 101.4 | Fulton | EDR-1000 | 390364 | 2017 | 1 | Gas | Building |
| NJ026006-18H | TD6 Elizabeth Mtce Yd - Offices & Garage | 101.4 | Fulton | EDR-1000 | 120823 | 2017 | 1 | Gas | Building |
| NJ171087-17H | TD8 Secaucus Mtce Yd - Offices & Garage, Tower | 111.5 | Laars | NTH750NJX 3 | G15345001 | 2016 | 0.75 | Gas | Building |
| NJ171088-17H | TD8 Secaucus Mtce Yd - Offices & Garage, Tower | 111.5 | Laars | NTH750NJX 3 | G15345000 | 2016 | 0.75 | Gas | Building |
| NJ171084-17H | TD9 Jersey City Mtce Yd-Offices& Garage, Old &New | 5.4 | Fulton | ERD0750 | 121282 | 2015 | 0.75 | Gas | Building |
| NJ171083-17H | TD9 Jersey City Mtce Yd-Offices& Garage, Old &New | 5.4 | Fulton | ERD0750 | 121232 | 2016 | 0.75 | Gas | Building |
| | Int 14-A Toll Plaza | 3.5 | Lochinvar | FBN1251 | 184611 | 2019 | 1.25 | Gas | Building |
| | Int 14-C Toll Plaza, Canopy, ETC Hut | 5.9 | Lochinvar | FTX500N | 1842112253603.00 | 2019 | 0.5 | Gas | Building |

| Appendix C Turnpike Condensing Boiler Table | | | | | | | | | Total Units 23 |
|---|---|--------------|------------------|---------|----------------------|---------------|------------------|------|-------------------|
| NJ State ID | Location | Milepos t | Manufacture r | Model # | Serial # | Installe d | MM Btu per hr | Fuel | Area Served |
| | Int 14-C Toll Plaza, Canopy, ETC Hut | 5.9 | Lochinvar | FTX500N | 1842112253605.0 0 | 2019 | 0.5 | Gas | Building |
| | Int 14 Toll Plaza, Canopy | 104.7 | Lochinvar | FTX500N | | 2019 | 0.5 | Gas | Building |
| | Int 14 Toll Plaza, Canopy | 104.7 | Lochinvar | FTX500N | | 2019 | 0.5 | Gas | Building |
| NJ026045 -17H | Central Inventor Facility 6A | 91 | Lochinvar | FBN1001 | 160910266646 | 2016 | 1 | Gas | Building |
| NJ026046 -17H | Central Inventor Facility 6A | 91 | Lochinvar | FBN1001 | 160910266645 | 2016 | 1 | Gas | Building |

Appendix D

THE UNITS LISTED IN APPENDIX-D MAY NOT BE AN INCLUSIVE LIST

THE AUTHORITY REQUIRES ANY UNIT NOT LISTED TO BE SERVICED

Appendix D Turnpike Non-Condensing Boiler Table

Total Units = 37

| NJ State ID | Location | Milepost | Manufacturer | Model # | Serial # | Installed | MM Btu per hr | Fuel |
|--------------|---|----------|--------------|---------|-----------|-----------|---------------|------|
| NJ019060-10H | Int 1 Toll Plaza, Canopy, Salt Shed, Trailer | 2.6 | HB Smith | 28A-W-7 | N2003-170 | 2002 | 1.7 | Gas |
| NJ019061-10H | Int 1 Toll Plaza, Canopy, Salt Shed, Trailer | 2.6 | HB Smith | 28A-W-7 | N2003-171 | 2002 | 1.7 | Gas |
| NJ026034-18H | Int 10 Toll Plaza, Canopy, ETC Hut, Trailer | 88 | Smith | 19HE-09 | 160268 | 2018 | 1.26 | Gas |
| NJ002873-07H | Int 11 Toll Plaza, 2 Canopies, ETC Hut, Tower | 90.6 | Smith | 28HE-8 | 152395 | 2015 | 2.4 | Gas |
| NJ017195-07H | Int 12 Toll Plaza, Canopy | 95 | HB Smith | 28A-5 | N95-922 | 1996 | 1.5 | Gas |
| | Int 13 Toll Plaza, Canopy, ETC Hut, Cinderblock Bld | 99.9 | HB Smith | 19HE-09 | 170260 | 2018 | 1.55 | Gas |
| NJ006844-07H | Int 13-A Toll Plaza, 2 Canopies, ETC Hut | 101.6 | HB Smith | 28-A-6 | HSB-5708 | 1982 | 1.9 | Gas |
| NJ171081-17H | Int 13-A Toll Plaza, 2 Canopies, ETC Hut | 101.6 | Smith | 28HE-4 | 162003 | 2017 | 1.1 | Gas |

Appendix D Turnpike Non-Condensing Boiler Table

Total Units = 37

| NJ State ID | Location | Milepost | Manufacturer | Model # | Serial # | Installed | MM Btu per hr | Fuel |
|--------------|--|----------|--------------|---------|------------|-----------|---------------|------|
| NJ026056-18H | Int 14-B Toll Plaza, Canopy, ETC Hut | 5.5 | HB Smith | MOP770 | DPB-1081 | 1985 | 0.77 | Gas |
| NJ171086-17H | Int 15-E Toll Plaza, Canopy, ETC Hut, Trailers | 106.9 | Smith | 19HE-07 | 160283 | 2017 | 1.13 | Gas |
| NJ205228-14H | Int 15-W Toll Plaza, Canopy, ETC Hut | 108.8 | Weil-McLane | 76-85-E | CP47020886 | 2004 | 1.7 | Gas |
| NJ205121-15H | Int 15-X Toll Plaza, Canopy | 110 | HB Smith | 28-A | N2005-0021 | 2005 | 1 | Gas |
| | Int 16-E & 18-E Toll Plaza, Canopy, ETC Hut, Tower | 112.3 | Smith | 28HE-6 | 172533 | 2018 | 1.77 | Gas |
| NJ169090-11H | Int 16-W Toll Plaza, Canopy | 112.7 | Smith | 19A-10 | 90103 | 2018 | 1.754 | Gas |
| NJ205227-14H | Int 17 Toll Plaza, Canopy, ETC Hut | 112.7 | Smith | 28HE-7 | 162524 | 2017 | 2.1 | Gas |
| NJ006417-07H | Int 18-W Toll Plaza, N&S Canopy, ETC Hut, Tower | 113.8 | Smith | 28HE-07 | 152379 | 2015 | 2.1 | Gas |
| NJ070967-07H | Int 2 Toll Plaza, Canopy, ETC H | 12.9 | HB Smith | 28A-S-4 | N92-260 | 2001 | 1.1 | Oil |
| NJ016870-07H | Int 3 Toll Plaza, Canopy, ETC Hut | 26.1 | HB Smith | 28-A-4 | N95-920P | 8888 | 0.79 | Gas |
| NJ010727-07H | Int 4 Toll Plaza, Canopy, ETC Hut, Storage Shed | 34.5 | Smith | 19HE-3 | 160031 | 2016 | 0.3 | Gas |

Appendix D Turnpike Non-Condensing Boiler Table

Total Units = 37

| NJ State ID | Location | Milepost | Manufacturer | Model # | Serial # | Installed | MM Btu per hr | Fuel |
|--------------|---|----------|--------------|-----------|-----------|-----------|---------------|------|
| NJ008547-07H | Int 5 Toll Plaza, Canopy, ETC Hut | 44 | HB Smith | 28-A-6 | HBS07320 | 1986 | 1.1 | Gas |
| NJ026399-07H | Int 6 Toll Plaza, Canopy, Water Tower | 3.4 | Weil-McLane | 588 | SN88-1 | 1999 | 1.3 | Gas |
| NJ026400-07H | Int 6A Toll Plaza, Canopy, Salt Shed, Trailer | 2.4 | Weil-McLane | PFG-5 | SN-881 | 1999 | 0.26 | Gas |
| NJ026033-18H | Int 7 Toll Plaza, Canopy, ETC Hut, 3 Trailers | 53.3 | Smith | 19HE-07 | 160273 | 2018 | 1.37 | Gas |
| NJ105031-16H | Int 7A Toll Plaza, Canopy, ETC Hut | 60 | Smith | 28HE-4 | 152304 | 2015 | 1.4 | Gas |
| NJ105030-16H | Int 8 Toll Plaza, Canopy | 67.6 | Smith | 488 | 488-1 | 2015 | 1 | Gas |
| NJ105032-16H | Int 8A Toll Plaza, Canopy, ETC Hut | 73.7 | Smith | 28HE-04 | 152328 | 2015 | 1.1 | Gas |
| NJ205226-14H | Int 9 Toll Plaza, Canopy, ETC Hut | 83.3 | HB Smith | 28-HE-6 | 132565 | 2014 | 1.7 | Gas |
| NJ017212-07H | State Police-Cranbury | 71.7 | Burnham | V-908 | 7595993 | 1995 | 1.1 | Gas |
| NJ017211-07H | State Police-Cranbury | 71.7 | Burnham | V-908 | 7598231 | 1995 | 1.1 | Gas |
| NJ164071-10H | State Police-Cranbury Garage | 71.7 | Burnham | V-904 | 7601126 | 1995 | 0.5 | Gas |
| NJ197628-17H | State Police-Moorestown, Trailer | 37.1 | DeDietrich | CRNM727 2 | 512347891 | 2013 | 0.5 | Gas |

Appendix D Turnpike Non-Condensing Boiler Table

Total Units = 37

| NJ State ID | Location | Milepost | Manufacturer | Model # | Serial # | Installed | MM Btu per hr | Fuel |
|--------------|---|----------|----------------|----------|-----------|-----------|---------------|------|
| NJ197627-17H | State Police-Moorestown, Trailer | 37.1 | DeDietrich | CRNM7272 | 512347890 | 2013 | 0.5 | Gas |
| NJ006418-07H | TD10 Rutherford Mtce Yd - Offices & Garages | 112.7 | American Stnd. | G-26 | 7BNRSE-J6 | 1981 | 1.04 | Gas |
| NJ114011-16H | TD2 Moorestown Mtce Yd - Trades and Storage | 37.1 | Smith | 28 HE-7 | 142596 | 2015 | 1.7 | Gas |
| NJ008085-07H | TD5 Bassett Building | 80.1 | HB Smith | 2500L | HSB00079 | 1985 | 1.3 | Gas |
| NJ011591-07H | TD6 Elizabeth Mtce Yd - Offices & Garage | 101.4 | HB Smith | 28-A-6 | N91-496P | 1991 | 1.8 | Gas |
| NJ008190-07H | TD9 Jersey City Mtce Yd-Offices& Garage, Old &New | 5.4 | HB Smith | 28-5 | 556985 | 1992 | 1.8 | Gas |

Appendix-E

THE UNITS LISTED IN APPENDIX-E MAY NOT BE AN INCLUSIVE LIST

THE AUTHORITY REQUIRES ANY UNIT NOT LISTED TO BE SERVICED

Appendix E Domestic Water Heaters Condensing Table

Total Units =
19

| Location | Highway | Milepost | Manufacturer | Model # | Fluid | Function | Type |
|---|----------------|----------|----------------|--------------------|-----------|-----------|------------|
| PD1 Swanton Mtce Yd | Parkway | 13 | Bradford White | EF-100T-300E-3N(A) | Hot Water | Hot Water | Condensing |
| PD2 Whitehorse Mtce Yd | Parkway | 41 | A.O.Smith | BTH-300(A) | Hot Water | Hot Water | Condensing |
| PD3 Ocean Mtce Yd | Parkway | 67.7 | A.O.Smith | BTH-300(A) | Hot Water | Hot Water | Condensing |
| PD4 Herbertsville Mtce Yd | Parkway | 95 | Bradford White | EF-100T-300E-3N(A) | Hot Water | Hot Water | Condensing |
| PD5 Telegraph Hill Mtce Yd | Parkway | 116 | A.O.Smith | BTH-400(A) | Hot Water | Hot Water | Condensing |
| PD7 Clifton Mtce Yd | Parkway | 156 | A.O.Smith | COF-150-540 | Hot Water | Hot Water | Condensing |
| PD8 Paramus Mtce Yd | Parkway | 164.1 | A.O.Smith | Bth-300(A) | Hot Water | Hot Water | Condensing |
| TD1 Swedesboro Mtce Yd - Office& Garage | Turnpike | 13 | A.O.Smith | Bth-300 | Hot Water | Hot Water | Condensing |
| TD2 Moorestown Mtce Yd - Office& Garage | Turnpike | 37.1 | A.O.Smith | Bth-300(A) | Hot Water | Hot Water | Condensing |
| TD3 Crosswicks Mtce Yd - Office& Garage | Turnpike | 56.9 | A.O.Smith | Bth-300(A) | Hot Water | Hot Water | Condensing |

Appendix E

Domestic Water Heaters Condensing Table

Total Units =
19

| Location | Highway | Milepost | Manufacturer | Model # | Fluid | Function | Type |
|--|----------------|----------|--------------|------------|-----------|-----------|------------|
| TD4 Hightstown Mtce Yd - Office& Garage | Turnpike | 67.6 | A.O.Smith | Bth-300(A) | Hot Water | Hot Water | Condensing |
| TD5 Milltown Mtce Yd - Office& Garage | Turnpike | 80.1 | A.O.Smith | Bth-300(A) | Hot Water | Hot Water | Condensing |
| TD6 Elizabeth Mtce Yd - Office& Garage | Turnpike | 101.4 | A.O.Smith | Bth-300(A) | Hot Water | Hot Water | Condensing |
| TD8 Secaucus Mtce Yd - Office& Garage | Turnpike | 111.5 | A.O.Smith | Bth-300(A) | Hot Water | Hot Water | Condensing |
| TD9 Jersey City Mtce Yd - Office& Garage | Turnpike | 5.4 | A.O.Smith | Bth-250(A) | Hot Water | Hot Water | Condensing |
| State Police-Bloomfield | Parkway | 148.1 | Aerco | INN-800SV | Hot Water | Hot Water | Condensing |
| State Police-Newark | Turnpike | 104.7 | Aerco | INN-800SV | Hot Water | Hot Water | Condensing |
| State Police-Galloway | Parkway | 41 | Aerco | INN-800SV | Hot Water | Hot Water | Condensing |
| State Police-Moorestown | Turnpike | 37.1 | Aerco | INN-800SV | Hot Water | Hot Water | Condensing |

APPENDIX F:

PREVENTATIVE MAINTENANCE REQUIREMENT

All service reports shall be filed electronically (as a PDF) with the following designation:
Year,Month,Location,Service,Type,Equipment and Tag

Example:

For Interchange 3 preventative maintenance of AHU-1 in January 2020 shall be filed as such:
2020_01_Int. 3_PM_AHU-1.pdf

Abbreviations:

ACCU – Air Cooled Condensing Unit

AHU – Air Handling Unit

CH – Chiller

GSP – Garden State Parkway

INT – Interchange

MUA – Make-up Air Unit

NJT – New Jersey Turnpike

PM - Preventative Maintenance

RTU – Packaged Rooftop Unit

TMD – Turnpike Maintenance District

WO – Work Order

SS – Split System

New Jersey Turnpike Authority



Preventative Maintenance Requirements

SCOPE OF COVERAGE

1 Select Service Maintenance Program

Routine preventative maintenance inspections are performed throughout the year. The Schedules of Maintenance Form provides a summary of the schedules and types of inspections to be performed. These requirements are based upon the typical type of equipment present at each site. The Contractor shall review the equipment manuals available on-site during the Testing, Adjusting, and Balancing effort within the first three months of a contract period and add additional recommended maintenance as listed within each manual.

2 Written Reports

Written reports will be provided to the customer representative following each regular inspection or emergency call. Reports to include images of work performed, name and contact information for service technician, itemized listed of parts and materials utilized, and description of corrective action.

MONTHLY PREVENTATIVE MAINTENANCE SCHEDULE

| Equipment Type | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---|-----|-----|-----------------|-----|------------|--------|-----|-----|--------|-----|--------------|--------|
| | | | | | | | | | | | | |
| RTU | | | SSUC, CC, FS | | AS | OI, FS | | | FS | | SDCS, SSU | FS |
| Air Cooled Chiller | | WS | AS | | SSU, CC | | OI | | OI | | | |
| AHU, Fan Coil Units, Make Up Air Units & Heating and Ventilation Units | | | CC, FS | | AS | OI, FS | | | OI, FS | | SDCS | AS, FS |
| Ductless Split System | | | SSUC, CC, FS | | | OI, FS | | | FS | | | OI, FS |
| Exhaust Fans – General | | | FS | | | FS | | | FS | | | OI, FS |
| Water Cooled Chillers | | WS | AS | | SSU, CC | | OI | | OI | | | |
| Cooling Towers | | WS | AS | | SSU, CC | | OI | | OI | | SDCS | |
| Pumps* | | | | OI | | | | | | AS | | |
| Glycol Make-up Units* | | | | OI | | | | | | AS | | |

*Dual Temperature Systems (usually at Interchanges)

Inspection Code Key:

AS= Annual Service

OI = Operating Inspection

SSU= Seasonal Start-up

SSUC= Seasonal Start-up Cooling Maintenance Inspection

SDCS= Seasonal Shutdown of Cooling Season / Heating Inspection

CC= Condenser Cleaning

FS= Filter Service

GTS = Grease Trap Service

WS = Water Sampling – Tested by Third Party Agency; Note: Sampling point within the Dual Temperature Loop and within the isolated loop via the change over valve. (ie two samples required to ensure the entire loop is consistent)

Note: As a minimum, quarterly Filter Changes are mandatory for all equipment serviced. These shall be performed in the months of March, June, September, and December.

SCOPE OF MAINTENANCE

Roof Top Unit

ANNUAL SERVICE (AS) – Performed in May COMPREHENSIVE ANNUAL MAINTENANCE INSPECTION – Cooling Cycle

1. Report in with the Customer Representative.
 2. Record and report abnormal conditions, measurements taken, etc.
 3. Review customer logs with the customer for operational problems and trends.
-
1. **General Assembly**
 - Leak-test the unit and report leak check results.
 - Repair minor leaks as required (e.g. valve packing, flare nuts).
 - Calculate the refrigerant loss rate per EPA guidelines and report to the customer.
 - Check sheaves and pulleys for wear and alignment, if applicable.
 - Check belts for tension, wear, cracks, and/or glazing, if applicable.
 - Verify proper damper operation.
 - Check mechanical linkages for wear, tightness, and clearances.
 - Verify clean condenser and evaporator.
 - Verify clean evaporator fan.
 - Verify clean air filters.
 2. **Controls and Safeties**
 - Test the operation of the high condenser pressure safety device. Calibrate, if necessary, and record setting.
 - Test the operation of the low evaporator pressure safety device. Calibrate, if necessary, and record setting.
 - Test the operation of the oil pressure safety device, if applicable. Calibrate, if necessary, and record setting.
 3. **Lubrication**
 - Lubricate fan bearings, if applicable.
 - Lubricate motor bearings, if applicable.
 - Check oil level in the compressor(s), if applicable.
 4. **Motor and Starter**
 - Clean the starter and cabinet.
 - Inspect wiring and connections for tightness and signs of overheating and discoloration.
 - Check the contactors for free and smooth operation.
 - Meg the compressor motor(s) and record readings.
 - Verify the tightness of the compressor motor terminal connections.
 - Verify the operation of the compressor oil heater(s)

SEASONAL START-UP – Performed in March
MID-SEASON COOLING INSPECTION

1. Start the unit.
2. Verify the starter operation.
3. Verify smooth operation of the compressors and fans.
4. Log operating conditions of the unit after the system has stabilized.
5. Review operating procedures with operating personnel.
6. Provide a written report of completed work, operating log, and indicate any uncorrected deficiencies detected.

SHUTDOWN OF COOLING SYSTEM – Performed in November

1. Verify smooth operation of the fans.
2. Check the belts for tension, wear, cracks, and glazing.
3. Verify clean air filters.
4. Verify proper operation of the heating section.
5. Verify the operation of the temperature controls.

SEASONAL START-UP INSPECTION – Performed in November
HEATING INSPECTION

Gas Heat Option

- Visually inspect the heat exchanger.
- Inspect the combustion air blower fan, and clean, if required.
- Lubricate the combustion air blower fan motor, if applicable.
- Verify the operation of the combustion air flow-proving device.
- Test the operation of the high gas pressure safety device, if applicable. Calibrate, if necessary.
- Test the operation of the low gas pressure safety device, if applicable. Calibrate, if necessary.
- Verify the operation of the flame detection device.
- Test the operation of the high temperature limit switch.
- Verify the integrity of the flue system.
- Verify the operation of the operating controls.
- Verify the burner sequence of operation.
- Verify proper gas pressure to the unit and/or at the manifold, if applicable.
- Perform combustion test. Make adjustments as necessary.

AIR COOLED CONDENSER CLEANING – Performed in March

Clean air-cooled condenser, using pressurized water. Coils, casings, control panel enclosure, fan sections and fan screens shall be completely free of three dimensional solid or greasy matter. Comb coils to restore air flow channels in sections that were impacted and dented.

ANNUAL SERVICE – Performed in March
COMPREHENSIVE ANNUAL INSPECTION SERVICE

1. Report in with the Customer Representative.
 2. Record and report abnormal conditions, measurements taken, etc.
 3. Review customer logs with the customer for operational problems and trends.
-
- 1. General Assembly**
 - Inspect for leaks and report results.
 - Calculate refrigerant loss rate per EPA guidelines and report to the customer.
 - Repair minor leaks as required (e.g. valve packing, flare nuts).
 - Visually inspect condenser coils for cleanliness.
 - Grease the condenser fan bearings, if applicable.
 - 2. Controls and Safeties**
 - Inspect the control panel for cleanliness.
 - Inspect wiring and connections for tightness and signs of overheating and discoloration.
 - Verify the working condition of all indicator/alarm lights, if applicable.
 - Test the operation of the low water temperature safety device. Calibrate and record setting.
 - Test the operation of the low evaporator pressure safety device(s). Calibrate and record setting.
 - Check programmed parameters of SCM/SMM control, if applicable.
 - 3. Lubrication System**
 - Check oil level in the compressor(s).
 - Test oil for acid content and discoloration. Make recommendations to the customer based on the results of the test.
 - Verify the operation of the oil heater. Measure amps and compare reading with the watt rating of the heater, if applicable.
 - Grease the condenser fan bearings, if applicable.
 - 4. Motor and Starter**
 - Clean the starter and cabinet.
 - Inspect wiring and connections for tightness and signs of overheating and discoloration.
 - Check the contactors for free and smooth operation.
 - Check the tightness of the motor terminal connections.
 - Meg the motor(s) and record readings.
 - Verify the operation of the electrical interlocks.
 - Measure voltage and record. Voltage should be nominal voltage $\pm 10\%$.

STARTUP / CHECKOUT PROCEDURE – Performed in May

1. Verify the operation of the oil heater(s), if applicable.
2. Verify full evaporator water system.
3. Verify the water flow rate through the evaporator.
4. Start the chiller.
5. Verify the starter operation.

6. Verify smooth operation of the compressors and fans.
7. Verify the operation of all timing devices.
8. Check the setpoint and sensitivity of the chilled water temperature control device.
9. Verify the settings on the UCM, if applicable.
10. Check the superheat and subcooling of the refrigerant circuit(s).
11. Verify full refrigerant circuit(s). Check sight glasses, if applicable.
12. Test the operation of the high condenser pressure safety device. Calibrate and record setting, if applicable.
13. Log the operating conditions after the system has stabilized.
14. Record the accumulated run hours of the compressor(s), if applicable.
15. Review operating procedures with operating personnel.
16. Provide a written report of the completed work, operating log, and indicate any uncorrected deficiencies detected.

SEASONAL START-UP – Performed in July and September
MID-SEASON RUNNING INSPECTION

1. Check the general condition of the unit.
2. Check the operation of the control circuit.
3. Check the operation of the motor(s) and starter(s).
4. Log the operating conditions after the system has stabilized.
5. Analyze the recorded data. Compare the data to the original design conditions.
6. Review operating procedures with operating personnel.
7. Provide a written report of completed work, operating log, and indicate any uncorrected deficiencies detected.

AIR COOLED CONDENSER CLEANING – Performed in May

Clean air-cooled condenser, using pressurized water. Coils, casings, control panel enclosure, fan sections and fan screens shall be completely free of three dimensional solid or greasy matter. Comb coils to restore air flow channels in sections that were impacted and dented.

WATER SAMPLING – Performed in February

A third-party laboratory accredited by the National Environmental Laboratory Accreditation Conference (NELAC) shall be contracted to sample the Chilled Water and reported in accordance with ASTM D596 as follows:

| | |
|-------------------------------|----------------|
| Date of Sample | |
| Temperature | °F |
| Silica (SiO ₂) | ppm |
| Insoluble | ppm |
| Iron, Total (Fe) | ppm |
| Aluminum (Al) | ppm |
| Calcium (Ca) | ppm |
| Magnesium (Mg) | ppm |
| Carbonate (HCO ₃) | ppm |
| Sulfate (SO ₄) | ppm |
| Chloride (Cl) | ppm |
| Nitrate (NO ₃) | ppm |
| Turbidity | Ntu |
| pH | |
| Residual Chlorine | ppm |
| Total Alkalinity | ppm |
| Non-Carbonate Hardness | ppm |
| Total Hardness | ppm |
| Dissolved Solids | ppm |
| Conductivity | Micro-ohm / cm |
| Ethylene Glycol Percentage | ppm |
| Propylene Glycol Percentage | ppm |

ANNUAL SERVICE – Performed in May
COMPREHENSIVE ANNUAL INSPECTION

1. Report in with the Customer Representative.
 2. Record and report abnormal conditions, measurements taken, etc.
 3. Review customer logs with the customer for operational problems and trends.
-
- 1. General Assembly**
 - Inspect the unit for cleanliness.
 - Inspect the fan wheel and shaft for wear and clearance.
 - Check the sheaves and pulleys for wear and alignment.
 - Check the belts for tension, wear, cracks, and glazing.
 - Verify tight bolts, set screws, and locking collars.
 - Check dampers for wear, security and linkage adjustment.
 - Verify clean condensate pan, drain rim invert & trap.
 - Verify proper operation of the condensate drain.
 - Verify clean air filters.
 - Verify clean coils.
 - Verify proper operation of the spray pump, if applicable.
 - Verify smooth fan operation.
 - Log operating conditions after system has stabilized.
 - Provide a written report of completed work, operating log, and indicate any uncorrected deficiencies detected.
 - 2. Lubrication**
 - Lubricate the fan shaft bearings, if applicable.
 - Lubricate the motor bearings, if applicable.
 - 3. Controls and Safeties**
 - Test the operation of the low temperature safety device, if applicable.
 - Test the operation of the high static pressure safety device, if applicable.
 - Test the operation of the low static pressure safety device, if applicable.
 - Check the thermal cutout on electric heaters, if applicable.
 - Check the step controller, if applicable.
 - Check and record supply air and control air pressure, if applicable.
 - Verify the operation of the control system and dampers while the fan is operating.
 - 4. Motor and Starter**
 - Clean the starter and cabinet.
 - Inspect the wiring and connections for tightness and signs of overheating and discoloration. This includes wiring to the electric heat, if applicable.
 - Check the condition of the contacts for wear and pitting.
 - Check the contactors for free and smooth operation.
 - Meg the motor and record readings.

SEASONAL START-UP INSPECTION – Performed in November
HEATING INSPECTION

1. Gas Heat Option

- Visually inspect the heat exchanger.
- Inspect the combustion air blower fan, and clean, if required.
- Lubricate the combustion air blower fan motor, if applicable.
- Verify the operation of the combustion air flow-proving device.
- Test the operation of the high gas pressure safety device, if applicable. Calibrate, if necessary.
- Test the operation of the low gas pressure safety device, if applicable. Calibrate, if necessary.
- Verify the operation of the flame detection device.
- Test the operation of the high temperature limit switch.
- Verify the integrity of the flue system.
- Verify the operation of the operating controls.
- Verify the burner sequence of operation.
- Verify proper gas pressure to the unit and/or at the manifold, if applicable.
- Perform combustion test. Make adjustments as necessary.

OPERATING INSPECTION – Performed in June & September
SCHEDULED RUNNING INSPECTION

1. Check the general condition of the fan.
2. Verify smooth fan operation.
3. Check and record supply and control air pressure, if applicable.
4. Verify the operation of the control system.
5. Log the operating conditions after the system has stabilized.
6. Review operating procedures with operating personnel.
7. Provide a written report of completed work, operating log, and indicate uncorrected deficiencies detected.

AIR COOLED CONDENSER CLEANING – Performed in March

Clean air-cooled condenser, using pressurized water. Coils, casings, control panel enclosure, fan sections and fan screens shall be completely free of three dimensional solid or greasy matter. Comb coils to restore air flow channels in sections that were impacted and dented.

FILTER REPLACEMENT – Evaluated at Each service & Mandatory Quarterly (March, June, Sept, Dec)

1. Replace clogged or dirty filters as necessary.

ANNUAL SERVICE – Performed in March
COMPREHENSIVE ANNUAL MAINTENANCE INSPECTION – Cooling Cycle

1. Report in with the Customer Representative.
2. Record and report abnormal conditions, measurements taken, etc.
3. Review customer logs with the customer for operational problems and trends.
- 2. General Assembly**
 - Leak-test the unit and report leak check results.
 - Repair minor leaks as required (e.g. valve packing, flare nuts).
 - Calculate the refrigerant loss rate per EPA guidelines and report to the customer.
 - Check sheaves and pulleys for wear and alignment, if applicable.
 - Check belts for tension, wear, cracks, and/or glazing, if applicable.
 - Verify proper damper operation.
 - Check mechanical linkages for wear, tightness, and clearances.
 - Verify clean condenser and evaporator coils.
 - Verify clean evaporator fan, condensate pan and drain rim invert & trap.
 - Verify clean air filters.
- 3. Controls and Safeties**
 - Test the operation of the high condenser pressure safety device. Calibrate, if necessary, and record setting.
 - Test the operation of the low evaporator pressure safety device. Calibrate, if necessary, and record setting.
 - Test the operation of the oil pressure safety device, if applicable. Calibrate, if necessary, and record setting.
- 4. Lubrication**
 - Lubricate fan bearings, if applicable.
 - Lubricate motor bearings, if applicable.
 - Check oil level in the compressor(s), if applicable.
- 5. Motor and Starter**
 - Clean the starter and cabinet.
 - Inspect wiring and connections for tightness and signs of overheating and discoloration.
 - Check the contactors for free and smooth operation.
 - Meg the compressor motor(s) and record readings.
 - Verify the tightness of the compressor motor terminal connections.
 - Verify the operation of the compressor oil heater(s)

SEASONAL START-UP – Performed in June & December
MID-SEASON COOLING INSPECTION

1. Start the unit.
2. Verify the starter operation.
3. Verify smooth operation of the compressors and fans.
4. Log operating conditions of the unit after the system has stabilized.
5. Review operating procedures with operating personnel.
6. Provide a written report of completed work, operating log, and indicate any uncorrected deficiencies detected.

AIR COOLED CONDENSER CLEANING – Performed in March

Clean air-cooled condenser, using pressurized water. Coils, casings, control panel enclosure, fan sections and fan screens shall be completely free of three dimensional solid or greasy matter. Comb coils to restore air flow channels in sections that were impacted and dented.

FILTER REPLACEMENT – Evaluated at Each service & Mandatory Quarterly (March, June, Sept, Dec)

1. Replace clogged or dirty filters as necessary.

Exhaust Fans – General (All Service Area Fans to be maintained by HMS Host)

ANNUAL INSPECTION – Performed in December **COMPREHENSIVE ANNUAL MAINTENANCE INSPECTION**

1. Report in with the Customer Representative.
 2. Record and report abnormal conditions, measurements taken, etc.
 3. Review customer logs with the customer for operational problems and trends.
-
1. **General Assembly**
 - Check sheaves and pulleys for wear and alignment, if applicable.
 - Check belts for tension, wear, cracks, and/or glazing, if applicable.
 - Verify proper damper operation.
 - Check mechanical linkages for wear, tightness, and clearances.
 - Verify clean air filters.
 2. **Controls and Safeties**
 - Test the start/stop command.
 3. **Lubrication**
 - Lubricate fan bearings, if applicable.
 - Lubricate motor bearings, if applicable.
 4. **Motor and Starter**
 - Clean the starter and cabinet.
 - Inspect wiring and connections for tightness and signs of overheating and discoloration.
 - Check the contactors for free and smooth operation.

FILTER REPLACEMENT – Evaluated at Each service & Mandatory Quarterly (March, June, Sept, Dec)

1. Replace clogged or dirty filters as necessary.

ANNUAL SERVICE – Performed in March
COMPREHENSIVE ANNUAL INSPECTION SERVICE

1. Report in with the Customer Representative.
2. Record and report abnormal conditions, measurements taken, etc.
3. Review customer logs with the customer for operational problems and trends.

1. General Assembly

- Inspect for leaks and report results.
- Calculate refrigerant loss rate per EPA guidelines and report to the customer.
- Repair minor leaks as required (e.g. valve packing, flare nuts).
- Visually inspect condenser coils for cleanliness.
- Grease the condenser fan bearings, if applicable.

2. Controls and Safeties

- Inspect the control panel for cleanliness.
- Inspect wiring and connections for tightness and signs of overheating and discoloration.
- Verify the working condition of all indicator/alarm lights, if applicable.
- Test the operation of the low water temperature safety device. Calibrate and record setting.
- Test the operation of the low evaporator pressure safety device(s). Calibrate and record setting.
- Check programmed parameters of SCM/SMM control, if applicable.

3. Lubrication System

- Check oil level in the compressor(s).
- Test oil for acid content and discoloration. Make recommendations to the customer based on the results of the test.
- Verify the operation of the oil heater. Measure amps and compare reading with the watt rating of the heater, if applicable.

4. Motor and Starter

- Clean the starter and cabinet.
- Inspect wiring and connections for tightness and signs of overheating and discoloration.
- Check the contactors for free and smooth operation.
- Check the tightness of the motor terminal connections.
- Meg the motor(s) and record readings.
- Verify the operation of the electrical interlocks.
- Measure voltage and record. Voltage should be nominal voltage $\pm 10\%$.

STARTUP / CHECKOUT PROCEDURE – Performed in May

1. Verify the operation of the oil heater(s), if applicable.
2. Verify full evaporator water system.
3. Verify the water flow rate through the evaporator.
4. Start the chiller.
5. Verify the starter operation.
6. Verify smooth operation of the compressors and fans.
7. Verify the operation of all timing devices.
8. Check the setpoint and sensitivity of the chilled water temperature control device.
9. Verify the settings on the UCM, if applicable.
10. Check the superheat and subcooling of the refrigerant circuit(s).
11. Verify full refrigerant circuit(s). Check sight glasses, if applicable.
12. Test the operation of the high condenser pressure safety device. Calibrate and record setting, if applicable.
13. Log the operating conditions after the system has stabilized.
14. Record the accumulated run hours of the compressor(s), if applicable.
15. Review operating procedures with operating personnel.
16. Provide a written report of the completed work, operating log, and indicate any uncorrected deficiencies detected.

SEASONAL START-UP – Performed in July and September **MID-SEASON RUNNING INSPECTION**

1. Check the general condition of the unit.
2. Check the operation of the control circuit.
3. Check the operation of the motor(s) and starter(s).
4. Log the operating conditions after the system has stabilized.
5. Analyze the recorded data. Compare the data to the original design conditions.
6. Review operating procedures with operating personnel.
7. Provide a written report of completed work, operating log, and indicate any uncorrected deficiencies detected.

WATER SAMPLING – Performed in February

A third-party laboratory accredited by the National Environmental Laboratory Accreditation Conference (NELAC) shall be contracted to sample the Chilled Water and reported in accordance with ASTM D596 as follows:

| | |
|-------------------------------|----------------|
| Date of Sample | |
| Temperature | °F |
| Silica (SiO ₂) | ppm |
| Insoluble | ppm |
| Iron, Total (Fe) | ppm |
| Aluminum (Al) | ppm |
| Calcium (Ca) | ppm |
| Magnesium (Mg) | ppm |
| Carbonate (HCO ₃) | ppm |
| Sulfate (SO ₄) | ppm |
| Chloride (Cl) | ppm |
| Nitrate (NO ₃) | ppm |
| Turbidity | Ntu |
| pH | |
| Residual Chlorine | ppm |
| Total Alkalinity | ppm |
| Non-Carbonate Hardness | ppm |
| Total Hardness | ppm |
| Dissolved Solids | ppm |
| Conductivity | Micro-ohm / cm |
| Ethylene Glycol Percentage | ppm |
| Propylene Glycol Percentage | ppm |

ANNUAL SERVICE – Performed in March **COMPREHENSIVE ANNUAL INSPECTION SERVICE**

1. Report in with the Customer Representative.
 2. Record and report abnormal conditions, measurements taken, etc.
 3. Review customer logs with the customer for operational problems and trends.
-
1. **General Assembly**
 - Inspect and clean basin, fill media section, casings, control panel enclosure, fan sections and fan screens so that they are completely free of three dimensional solid or greasy matter.
 - Inspect for leaks and report results.
 - Repair minor leaks as required (e.g. valve packing, flare nuts).
 - Visually inspect fill media for damaged areas.
 - Grease the cooling tower fan bearings, if applicable.
 - Provide water treatment for biological and corrosion / scaling control.
 2. **Controls and Safeties**
 - Inspect the control panel for cleanliness.
 - Inspect wiring and connections for tightness and signs of overheating and discoloration.
 - Verify the working condition of all indicator/alarm lights, if applicable.
 - Test the operation of the low water temperature safety device. Calibrate and record setting.
 - Test the operation of the low water level safety device(s). Calibrate and record setting.
 3. **Motor and Starter**
 - Clean the starter and cabinet.
 - Inspect wiring and connections for tightness and signs of overheating and discoloration.
 - Check the contactors for free and smooth operation.
 - Check the tightness of the motor terminal connections.
 - Meg the motor(s) and record readings.
 - Verify the operation of the electrical interlocks.
 - Measure voltage and record. Voltage should be nominal voltage $\pm 10\%$.

STARTUP / CHECKOUT PROCEDURE – Performed in May

1. Verify full evaporator water system.
2. Verify the water flow rate through the tower.
3. Inspect cold and hot water basins
4. Flush water distribution system / Inspect spray nozzles
5. Drain Basin and Piping
6. Inspect Air intake louvers / Combined inlet shields
7. Check and adjust water level in cold water basin
8. Check operation of make-up valve
9. Check and adjust bleed rate
10. Start the cooling tower.
11. Verify the starter operation.

12. Verify smooth operation of the pumps and fans.
 - a) Check belt condition
 - b) Check belt tension
 - c) Lubricate fan shaft bearing
 - d) Lubricate motor base adjusting screw
13. Verify the operation of all timing devices.
14. Check the setpoint and sensitivity of the condenser water temperature control device.
15. Log the operating conditions after the system has stabilized.
16. Review operating procedures with operating personnel.
17. Provide a written report of the completed work, operating log, and indicate any uncorrected deficiencies detected.

SEASONAL START-UP – Performed in July and September
MID-SEASON RUNNING INSPECTION

1. Check the general condition of the unit.
2. Check the operation of the control circuit.
3. Check the operation of the motor(s) and starter(s).
4. Log the operating conditions after the system has stabilized.
5. Analyze the recorded data. Compare the data to the original design conditions.
6. Review operating procedures with operating personnel.
7. Provide a written report of completed work, operating log, and indicate any uncorrected deficiencies detected.

SHUTDOWN OF COOLING SYSTEM – Performed in November

1. Verify smooth operation of the fans.
2. Check the belts for tension, wear, cracks, and glazing.
3. Drain basin and piping.
4. Lubricate fan shaft bearings
5. Lubricate motor base adjusting screw.
6. Check Drive alignment

WATER SAMPLING – Performed in February

A third-party laboratory accredited by the National Environmental Laboratory Accreditation Conference (NELAC) shall be contracted to sample the Chilled Water and reported in accordance with ASTM D596 as follows:

| | |
|-------------------------------|----------------|
| Date of Sample | |
| Temperature | °F |
| Silica (SiO ₂) | ppm |
| Insoluble | ppm |
| Iron, Total (Fe) | ppm |
| Aluminum (Al) | ppm |
| Calcium (Ca) | ppm |
| Magnesium (Mg) | ppm |
| Carbonate (HCO ₃) | ppm |
| Sulfate (SO ₄) | ppm |
| Chloride (Cl) | ppm |
| Nitrate (NO ₃) | ppm |
| Turbidity | Ntu |
| pH | |
| Residual Chlorine | ppm |
| Total Alkalinity | ppm |
| Non-Carbonate Hardness | ppm |
| Total Hardness | ppm |
| Dissolved Solids | ppm |
| Conductivity | Micro-ohm / cm |
| Ethylene Glycol Percentage | ppm |
| Propylene Glycol Percentage | ppm |

SEMI-ANNUAL SERVICE – Performed in April & October
COMPREHENSIVE ANNUAL INSPECTION SERVICE

1. Report in with the Customer Representative.
 2. Record and report abnormal conditions, measurements taken, etc.
 3. Review customer logs with the customer for operational problems and trends.
-
- 1. General Assembly**
 - Inspect for leaks and report results.
 - Repair minor leaks as required (e.g. valve packing, flare nuts).
 - Grease the fittings. Fill both grease cavities through the fittings until the fresh grease comes out of the relief holes.
 - Check the pump alignment
 - 2. Controls and Safeties**
 - Inspect the control panel for cleanliness.
 - Inspect wiring and connections for tightness and signs of overheating and discoloration.
 - Verify the working condition of all indicator/alarm lights, if applicable.
 - 3. Motor and Starter**
 - Clean the starter and cabinet.
 - Inspect wiring and connections for tightness and signs of overheating and discoloration.
 - Check the contactors for free and smooth operation.
 - Check the tightness of the motor terminal connections.
 - Meg the motor(s) and record readings.
 - Verify the operation of the electrical interlocks.
 - Measure voltage and record. Voltage should be nominal voltage $\pm 10\%$.

SEMI-ANNUAL SERVICE – Performed in April & October
COMPREHENSIVE ANNUAL INSPECTION SERVICE

1. Report in with the Customer Representative.
 2. Record and report abnormal conditions, measurements taken, etc.
 3. Review customer logs with the customer for operational problems and trends.
-
- 1. General Assembly**
 - Inspect for leaks and report results.
 - Repair minor leaks as required (e.g. valve packing, flare nuts).
 - Grease the fittings.
 - Check the pump alignment
 - Record Original Glycol Levels and refill with inhibited pre-mixed 40% Propylene Glycol.
 - 2. Controls and Safeties**
 - Inspect the control panel for cleanliness.
 - Inspect wiring and connections for tightness and signs of overheating and discoloration.
 - Verify the working condition of all indicator/alarm lights, if applicable.
 - 3. Motor and Starter**
 - Clean the starter and cabinet.
 - Inspect wiring and connections for tightness and signs of overheating and discoloration.
 - Check the contactors for free and smooth operation.
 - Check the tightness of the motor terminal connections.
 - Meg the motor(s) and record readings.
 - Verify the operation of the electrical interlocks.
 - Measure voltage and record. Voltage should be nominal voltage $\pm 10\%$.

Appendix-G

TESTING, ADJUSTING, AND BALANCING

New Jersey Turnpike Authority



Testing, Adjusting, & Balancing Requirements

Testing, Adjusting, & Balancing

Within the first three months of contract the Contractor is to hire an approved subcontractor with the approval of the Authority Representative that is an AABC or NEBB member to balance all Air Systems (Fans, Air Outlets, Duct Leakage, and Space Leakage) in accordance with AABC or NEBB National Standards. All final readings shall be within 5% of the drawing quantities. The contract shall use the attached sheets for balancing requirements. Proof of Certification of either AABC or NEBB must be available upon request to the Authority.

In addition, the Contractor is to test the heating hot water and chilled water in accordance with ASTM E202-05 Standard Test Methods for Analysis of Ethylene Glycols and Propylene Glycols. Test to include at a minimum:

- Color of Fluid
- Clarity of Fluid
- Sediment Levels (over 5% is no longer suitable as a heat transfer fluid)
- Propylene Glycol Percentage (Desired Quantity 30 – 40%)
- Fluid Freeze Point
- Iron Inhibitor Concentration
- Copper Inhibitor Concentration
- Fluid pH
- Reserve Alkalinity
- Chloride Concentration
- Sulfate Concentration
- Hardness
- Presence of Nitrite or Nitrate

After this is complete the Contractor shall hire an approved subcontractor with the approval of the Authority Representative that is an AABC member to balance all Water Systems (Pumps, Coils, Piping, Valves, Heating Hot Water Systems, and Chilled Water Systems) in accordance with AABC National Standards. All final readings shall be within 5% of the drawing quantities. The contract shall use the attached sheets for balancing requirements.

The Balancing Turn-Over Documentation to include:

- Submit four certified test reports signed by Test and Balance Supervisor who performed TAB work.
- Include identification and types of instruments used and their most recent calibration date with submission of final test report. Provide copies of calibration certificates.
- Pressure profiles through all system components, including plenums, coils, filters, etc. with a system sketch indicating locations where readings were taken.
- Actual pressure difference manometer readings with corresponding Static pressure sensor readings taken simultaneously by Controls Contractor.
- Maintenance data: Include in maintenance manuals, copies of certified test reports.
- Space pressurization test reports shall include blower door reports for air quantities at positive and negative pressures.
- Duct leakage reports shall indicate percentage according to pressure class in accordance with ASHRAE.

Pre-TAB Checklist

Project Number
Building
System

Date Checklist Completed
Scheduled TAB Start Date

| Item | Description | Complete/ Ready? | | Initial/ Date |
|------|-------------|------------------|----|------------------|
| | | Yes | No | |

- 1) System installation complete.
- 2) System is constructed and sealed in accordance with specifications .
- 3) System is accessible for testing.
- 4) As built drawings available for review.

Form completed by

Print Name

Company

Sign/ Date

Approved by

Print Name

Company

Sign/ Date

Print Name

Company

Sign/ Date

Send a copy of this form along with a copy of the as-built drawings showing the duct sections that have been tested to the TAB contractor.

1. HVAC Units & Built-Up Units

Ready
Yes No

Date / By

a) GENERAL

Louvers installed
Manual dampers adjusted and locked
Automatic dampers operating, stroke set, positive shutoff checked
Housing construction complete, all penetrations sealed
Access doors installed and closed, (checked for leakage)
Condensate drain piping and pan checked, "P" trap sized properly
Unit is clean and free of dirt, debris, & shipping blocks

b) FILTERS

Type and size
Number of filters
Clean pressure drop () Dirty pressure drop () Use
manufacturers data
Frame type
Temporary filters installed (construction filters)

c) COILS (HYDRONIC)

Size and rows
Fin spacing and condition
Obstruction and / or debris are cleared
Airflow and direction
Piping connected and tested for leakage
Correct piping connections and flow direction
All isolation and control/balance valves open
Air vents installed and tested
All air vented
Provisions made for TAB measurements Per specifications and TAB
contractors direction

d) COILS (ELECTRIC)

Sizes and construction
Airflow direction
Duct connections
Safety switches
Contactors and disconnect switches
Electrical service and connections
Obstruction and / or debris

e) FANS

Rotation
Wheel clearance and balance
Bearing and motor lubrication
Drive alignment
Belt tension
Drive package set screws tight
Belt guard in place
Flexible duct connector alignment
Starters and disconnect switches correct
Electrical service and connections checked

f) VIBRATION ISOLATION

Spring height set

Shipping blocks removed
Base level and free

2 DUCT SYSTEMS

Ready
Yes NO

Date / By

a) GENERAL

Manual dampers open and locked
Access doors closed and tight
Fire dampers open and accessible
Terminal units open or set
Registers and diffusers open and pattern set
Turning vanes is square elbows
Provisions made for TAB measurements
Ductwork sealed and pressure tested as required

b) ARCHITECTURAL

Windows installed and closed
Doors closed as required
Ceiling plenums installed and sealed
Access doors closed and tight
Air shafts and openings as required

3 PUMPS

Ready
Yes NO

Date / By

a) MOTORS

Rotation
Lubrication
Alignment
Set screws tight
Guards in place
Starters and disconnect switches
Electrical service and connections
Variable speed drives programmed and started

b) PIPING

Correct flow and connections
Leakage
Isolation, control, and balance valves open
Strainer clean and construction screen removed
Air vented
Flexible connectors installed and aligned
System static pressure set (note value) ()PSI

c) BASES

Vibration isolation
Grouting
Leveling

4 HYDRONIC EQUIPMENT

Ready
Yes NO

Date / By

a) BOILERS

Operating controls and devices
Safety controls and devices
Lubrication of fans and pumps
Draft controls and devices
Piping connections and flow
Valves open or set
Water make-up provisions
Blow-down provisions
Electrical connections

b) HEAT EXCHANGERS

Correct flow and connections
Valves open or set
Air vents or steam traps installed and tested
Pressure tested
Provisions made for TAB measurements

c) COOLING TOWERS AND EVAPORATIVE CONDENSERS

Correct flow and connections
Isolation, balance, and control valves open
Leakage
Provisions made for TAB measurements
Sump water level set
Spray nozzles correct size and location
Fan rotation tested
Motor and or gear box lubrication
Drives and alignment
Belt guards in place
Starters and disconnect switches
Electrical connections
Variable speed drives properly programmed and started

5 REFRIGERATION EQUIPMENT

Ready
Yes NO

Date / By

Crankcase heaters energized for a minimum of 24 hours
Operating and safety controls and devices installed and tested
Valves open
Piping and connections leak checked
Flexible connectors
Oil level and lubrication
Guards in place
Vibration isolation
Starters, contactors and disconnect switches
Electrical connections

6 HYDRONIC PIPING SYSTEMS

Ready
Yes NO

Date / By

Hydrostatic testing complete and passed
System static pressure set
Relief or safety valve settings
Make-up pressure set
Compression tanks / air vented
Steam traps and connections
Strainers clean
All valves open
Provisions made for TAB measurements

7 CONTROL SYSTEMS

Ready
Yes NO

Date / By

Data centers operating
Outdoor / return dampers set
Economizer controls set
Static pressure control set
Space controls operating
Complete system operating
All sensors and transmitters calibrated

8 OTHER CHECKS

Ready
Yes NO

Date / By

- a) Other trade or personnel notified of TAB work requirements
- b) Preliminary data complete
- c) Test report forms prepared

NOTES:

Chiller Balancing Form

| | | | | | | | | | |
|----------------------------|-------|-----------|----------|-----------|----------|---------------------|----------|------------|----------|
| Chiller Number | | | | | | | | | |
| Location | | | | | | | | | |
| Fluid Type | | | | | | | | | |
| Date | | | | | | | | | |
| Technician | | | | | | | | | |
| Evaporator Data | | Submitted | Measured | Submitted | Measured | Submitted | Measured | Submitted | Measured |
| GPM | | | | | | | | | |
| Entering Water Pressure | | | | | | | | | |
| Leaving Water Pressure | | | | | | | | | |
| Water ΔP | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Entering Water Temperature | | | | | | | | | |
| Leaving Water Temperature | | | | | | | | | |
| Water ΔT | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | | | | | | | | | |
| MBH Total | Water | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | | | | | | |
| Condenser Data | | Submitted | Measured | Submitted | Measured | Submitted | Measured | Submitted | Measured |
| GPM | | | | | | | | | |
| Entering Water Pressure | | | | | | | | | |
| Leaving Water Pressure | | | | | | | | | |
| Water ΔP | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Entering Water Temperature | | | | | | | | | |
| Leaving Water Temperature | | | | | | | | | |
| Water ΔT | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | | | | | | | | | |
| MBH Total | Water | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | | | | | | |
| Test Instruments Used | | | | | | | | | |
| Description | | Model No. | | Asset No. | | Date Of Calibration | | Technician | |
| Hydronic Data Multimeter | | | | | | | | | |
| Hydrodata Meter | | | | | | | | | |
| Temperature Instrument | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| NOTES: | | | | | | | | | |

Hydronic Pump Test Sheet

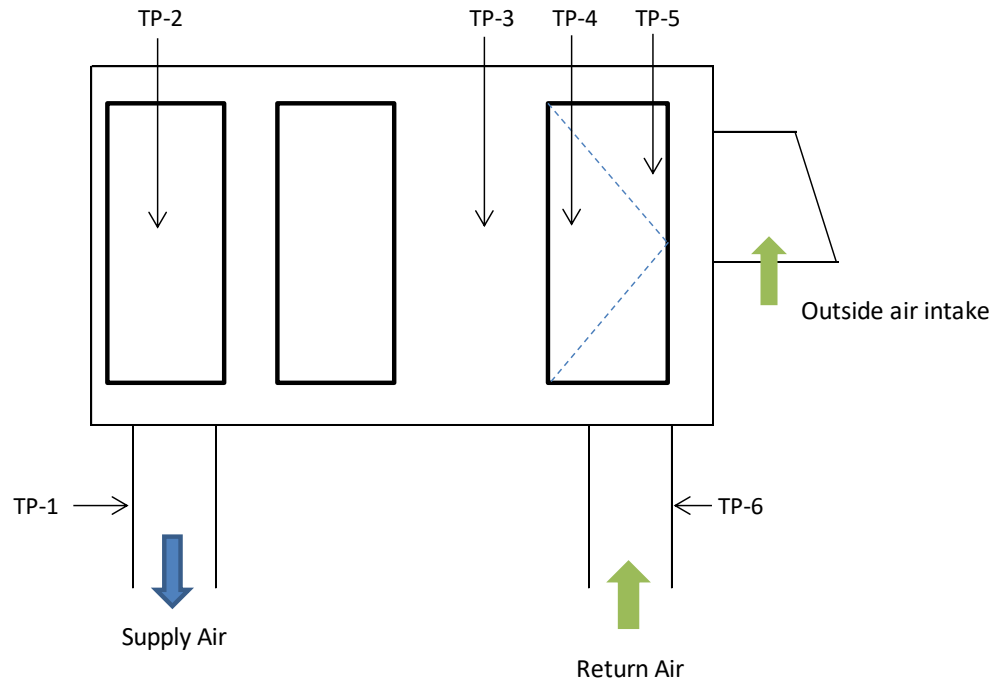
| | | | | | | | |
|-------------------------------|--------------------|------------|-----------|---------------------|------|------------|--|
| System: | | Mechanical | Approved | As Found | | As Left | |
| | | Schedule | Submittal | | | | |
| Serves: | | Data | Data | | | | |
| Pump | Manufacturer | | | | | | |
| | Model Number | | | | | | |
| | Serial Number | | | | | | |
| | Size / Type | | | | | | |
| | Volume Control | | | | | | |
| | Impeller Size | | | | | | |
| Motor | Manufacturer | | | | | | |
| | Serial Number | | | | | | |
| | Frame / Horsepower | | | | | | |
| | RPM / Phase / HZ | | | | | | |
| | Nameplate Voltage | | | | | | |
| | Nameplate Amperage | | | | | | |
| | SF | PF | NomEff | | | | |
| | Size / Overloads | | | | | | |
| Starter | | | | | | | |
| System Static Pressure | | | | | | | |
| Discharge Shut | Discharge | | | | | | |
| | Suction | | | | | | |
| | Ft. of Head | | | | 0.00 | 0.00 | |
| Discharge Open | Discharge | | | | | | |
| | Suction | | | | | | |
| | Ft. of Head | | | | 0.00 | 0.00 | |
| | Curve GPM / % | | | | | | |
| | Main GPM / % | | | | | | |
| Voltage | T1-2 | T1-3 | T2-3 | | | | |
| Amperage | T1 | T2 | T3 | | | | |
| Corrected FLA. | | | | | | | |
| Final Data | Discharge | | | | | | |
| | Suction | | | | | | |
| | Ft. of Head | | | | 0.00 | 0.00 | |
| | Curve GPM | | | | | | |
| | Main GPM / % | | | | | | |
| | Voltage | T1-T2 | T1-T3 | T2-T3 | | | |
| Amperage | T1 | T2 | T3 | | | | |
| Corrected FLA. | | | | | | | |
| Brake Horsepower | | | | 0 | 0 | | |
| Test Instruments Used | | | | | | | |
| Description | | Model No. | Asset No. | Date Of Calibration | | Technician | |
| Air Data Multimeter | | | | | | | |
| Volt / Amp. Meter | | | | | | | |
| Tachometer | | | | | | | |
| NOTES: | | | | | | | |

Hydronic Coil Test Sheet

| | | | | | | | | |
|----------------------------|----------|-----------|----------|-----------|----------|---------------------|----------|------------|
| Coil Number | | | | | | | | |
| Location | | | | | | | | |
| Coil Type | | | | | | | | |
| Date | | | | | | | | |
| Technician | | | | | | | | |
| | | Submitted | Measured | Submitted | Measured | Submitted | Measured | Submitted |
| Air flow, CFM | | | | | | | | |
| Entering Air Pressure | | | | | | | | |
| Leaving Air Pressure inwc. | | | | | | | | |
| Air ΔP | | | | | | | | |
| | | | | | | | | |
| Entering Air | Dry Bulb | | | | | | | |
| | Wet Bulb | | | | | | | |
| Leaving Air | Dry Bulb | | | | | | | |
| | Wet Bulb | | | | | | | |
| Air ΔT | Dry Bulb | | | | | | | |
| Return Air | Dry Bulb | | | | | | | |
| | Wet Bulb | | | | | | | |
| Outside Air | Dry Bulb | | | | | | | |
| | Wet Bulb | | | | | | | |
| | | | | | | | | |
| GPM | | | | | | | | |
| Entering Water Pressure | | | | | | | | |
| Leaving Water Pressure | | | | | | | | |
| Water ΔP | | | | | | | | |
| Entering Water Temperature | | | | | | | | |
| Leaving Water Temperature | | | | | | | | |
| Water ΔT | | | | | | | | |
| | | | | | | | | |
| MBH Sensible | Air | | | | | | | |
| MBH Total | Air | | | | | | | |
| MBH Total | Water | | | | | | | |
| | | | | | | | | |
| Test Instruments Used | | | | | | | | |
| Description | | Model No. | | Asset No. | | Date Of Calibration | | Technician |
| Air Data Multimeter | | | | | | | | |
| Hydrodata Meter | | | | | | | | |
| Temperature Instrument | | | | | | | | |
| | | | | | | | | |
| NOTES: | | | | | | | | |
| | | | | | | | | |

Packaged Rooftop Unit / Make-up Air Unit

****Diagram to be modified to match System As-Built Configuration***



| Location | As Found | As Left |
|-----------------|----------|---------|
| Supply air duct | TP-1 | |
| Fan inlet | TP-2 | |
| Between coils | TP-3 | |
| Filter leaving | TP-4 | |
| Filter Entering | TP-5 | |
| Return air duct | TP-6 | |

Heating Coil

Cooling Coil

Filters -----

Packaged Rooftop Unit / Make-up Air Unit – Continued

***Provide One Form per Fan.**

| | | | | | | | | | | |
|------------------------------|-------------------------|-------|-----------|------------|---------------------|--|---------|------------|--|--|
| System: | | | | Mechanical | As Found | | | As Left | | |
| | | | | Schedule | | | | | | |
| Serves: | | | | Data | | | | | | |
| Unit | Manufacturer | | | | | | | | | |
| | Model Number | | | | | | | | | |
| | Serial Number | | | | | | | | | |
| | Size / Type | | | | | | | | | |
| Motor | Manufacturer | | | | | | | | | |
| | Serial Number | | | | | | | | | |
| | Frame / Horsepower | | | | | | | | | |
| | RPM / Phase / HZ | | | | | | | | | |
| | Nameplate Voltage | | | | | | | | | |
| | Nameplate Amperage | | | | | | | | | |
| | SF | PF | NomE | | | | | | | |
| Starter | Size / Heaters | | | | | | | | | |
| Sheaves | Motor Sheave | | | | | | | | | |
| | Hub / Shaft Size | | | | | | | | | |
| | Sheave Adjustment | | | | | | | | | |
| | Fan Sheave | | | | | | | | | |
| | Hub / Shaft Size | | | | | | | | | |
| | Belts - Size / Quantity | | | | | | | | | |
| | Shaft Center Line | | | | | | | | | |
| | Base Adjustment | | | | | | | | | |
| Data | SA / % Design | | | | | | #DIV/0! | | | |
| | RA / % Design | | | | | | #DIV/0! | | | |
| | Outlet Total | | | | | | #DIV/0! | | | |
| | OSA / % Design | | | | | | #DIV/0! | | | |
| | Discharge Sp -Tp | | | | | | | | | |
| | Suction Sp - Tp | | | | | | | | | |
| | Measured Fan SP/TP | | | | | | | | | |
| | RPM - Fan | | | | | | | | | |
| | RPM - Motor | | | | | | | | | |
| Voltage | T1-T2 | T1-T3 | T2-T3 | | | | | | | |
| Amperage | T1 | T2 | T3 | | | | | | | |
| Corrected Full Load Amperage | | | | #DIV/0! | | | #DIV/0! | | | |
| Approximate BHP | | | | 0.00 | | | 0.00 | | | |
| Test Instruments Used | | | | | | | | | | |
| Description | | | Model No. | Asset No. | Date Of Calibration | | | Technician | | |
| Air Data Multimeter | | | | | | | | | | |
| Volt / Amp. Meter | | | | | | | | | | |
| Tachometer | | | | | | | | | | |
| Comments | | | | | | | | | | |
| | | | | | | | | | | |

Room Air Balance Summary

[illegible]

Duct Traverse (Rectangular)

| | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------|-----------|---|---|-----------|---|----------------|---------------------|---|---|------------|----|-------------------------|--|--|--|--|--|-------------------------|--|--|--|--|--|
| TRAVERSE NUMBER: | | | | | | DATE: | | | | | | TECHNICIAN: | | | | | | | | | | | |
| SYSTEM / UNIT: | | | | | | SERVICE: | | | | | | LOCATION: | | | | | | | | | | | |
| STATIC PRESSURE: | | | | | | AIR TEMP. | | | | | | BAROMETRIC P.: | | | | | | | | | | | |
| DUCT SIZE: | | | | | | AREA in Sq.Ft. | | | | | | | | | | | | | | | | | |
| DESIGN FPM: #DIV/0! | | | | | | DESIGN CFM: | | | | | | MEASURED FPM: #DIV/0! | | | | | | MEASURED CFM: #DIV/0! | | | | | |
| NUMBER OF READINGS | | | | | | TOTAL FPM | | | | | | 0 | | | | | | | | | | | |
| TIP LOCATION | | | | | | | | | | | | | | | | | | | | | | | |
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | | | | | | | | | | | | |
| | 1 | | | | | | | | | | | | | | | | | | | | | | |
| | 2 | | | | | | | | | | | | | | | | | | | | | | |
| | 3 | | | | | | | | | | | | | | | | | | | | | | |
| | 4 | | | | | | | | | | | | | | | | | | | | | | |
| | 5 | | | | | | | | | | | | | | | | | | | | | | |
| | 6 | | | | | | | | | | | | | | | | | | | | | | |
| | 7 | | | | | | | | | | | | | | | | | | | | | | |
| | 8 | | | | | | | | | | | | | | | | | | | | | | |
| | 9 | | | | | | | | | | | | | | | | | | | | | | |
| | 10 | | | | | | | | | | | | | | | | | | | | | | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | | | |
| Comments: | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | |
| Test Instruments Used | | | | | | | | | | | | | | | | | | | | | | | |
| Description | Model No. | | | Asset No. | | | Date Of Calibration | | | Technician | | | | | | | | | | | | | |
| Air Data Multimeter | | | | | | | | | | | | | | | | | | | | | | | |
| Pitot Tube | | | | | | | | | | | | | | | | | | | | | | | |
| Velocity Grid | | | | | | | | | | | | | | | | | | | | | | | |

Duct Traverse (Round)

[illegible]

Appendix-H

ASHRAE HVAC LIFE EXPECTANCY CHART

ASHRAE Equipment Life Expectancy chart

ASHRAE is the industry organization that sets the standards and guidelines for most all HVAC-R equipment.
For additional info about ASHRAE the website is www.ashrae.org.

| Equipment Item | Median Years | Equipment Item | Median Years | Equipment Item | Median Years |
|-------------------------------------|--------------|-----------------------------------|--------------|-------------------------------|--------------|
| Air conditioners | | Air terminals | | Air-cooled condensers | 20 |
| Window unit | 10 | Diffusers, grilles, and registers | 27 | Evaporative condensers | 20 |
| Residential single or Split Package | 15 | Induction and fan coil units | 20 | Insulation | |
| Commercial through-the wall | 15 | VAV and double-duct boxes | 20 | Molded Blanket | 20 |
| Water-cooled package | 15 | Air washers | 17 | | 24 |
| Heat Pumps | | Ductwork | 30 | Pumps | |
| Residential air-to-air | 15 | Dampers | 20 | Base-mounted | 20 |
| Commercial air-to-air | 15 | Fans | | Pipe-mounted | 10 |
| Commercial water-to-air | 19 | Centrifugal | 25 | Sump and well | 10 |
| Roof-top air conditioners | | Axial | 20 | Condensate | 15 |
| Single-zone | 15 | Propeller | 15 | Reciprocating engines | 20 |
| Multi-zone | 15 | Ventilating roof-mounted | 20 | Steam turbines | 30 |
| Boilers, hot water (steam) | | Coils | | Electric motors | 18 |
| Steel water-tube | 24 (30) | DX, water, or steam | 20 | Motor starters | 17 |
| Steel fire-tube | 25 (25) | Electric | 15 | Electric transformers | 30 |
| Cast iron | 35 (30) | Heat Exchangers | | Controls | |
| Electric | 15 | Shell-and-tube | 24 | Pneumatic | 20 |
| Burners | 21 | Reciprocating compressors | 20 | Electric | 16 |
| Furnaces | | Packaged chillers | | Electronic | 15 |
| Gas- or oil-fired | 18 | Reciprocating | 20 | Valve actuators | |
| Unit heaters | | Centrifugal | 23 | Hydraulic | 15 |
| Gas or electric | 13 | Absorption | 23 | Pneumatic | 20 |
| Hot water or steam | 20 | Cooling towers | | Self-contained | 10 |
| Radiant Heaters | | Galvanized metal | 20 | | |
| Electric | 10 | Wood | 20 | | |
| Hot water or steam | 25 | Ceramic | 34 | | |

SECTION IV

NO RESPONSE BID SURVEY

BID REQUISITION NUMBER: RM # 156124

**PROPOSAL TITLE: MAINTENANCE OF HEATING, VENTILATING, & AIR CONDITIONING
EQUIPMENT**

If you do not choose to respond to this Bid, please complete the form below:

Name of Company _____

Reason you did not respond (Check all that apply)

_____ Cannot supply product or service

_____ Cannot meet technical specifications

_____ Cannot meet delivery specifications

_____ Cannot meet legal requirements
(i.e. Bid/performance/security/insurance, etc.)

_____ Cannot provide a competitive price at this time

_____ Interested in receiving specifications for informational
purposes only

_____ Insufficient lead time to respond

_____ Other:(please be specific) _____

Do you wish to remain on our mailing list?

_____ Yes

_____ No

Additional comments: _____

Signed :(optional) _____

Company: _____

Notice Of Electronic Bidding

In an effort to make the bid solicitation process more efficient and cost effective for both vendors and the “Authority”, the “PMM” Department has adopted an electronic bidding process for the majority of its public bids. Receipt of bids via the electronic format will be required for designated procurement contracts. For these contracts, notifications, including advertisement to bidders, will state bids that will **only** be received electronically. The mandatory electronic bidding on selected contracts will commence in the spring of 2020.

In those instances, where electronic bids are required, the bidder must submit the bids to **bidexpress.com**. It is recommended that all vendors become familiar with the process to prepare for the Authority contracts that require electronic submission. All electronic bidders must **register on bidexpress.com and create a Free “Digital ID”** to the vendor and may take up to five (5) business days to process and an additional 48 hours once approved by Bid Express before bid submittal, the Authority recommends that a Digital ID be processed in advance, should a Digital ID not be established at the time of bid submission, electronic submittal may not be possible.

In lieu of paying the overnight delivery costs, Bid Express charges a fee of \$25.00 on a pay-per solicitation basis. Alternatively, you can participate in Bid Express’ monthly subscription (\$50.00) program (nationally) for unlimited electronic bid submission to all entities that post solicitations on the **bidexpress.com** website which gets daily email notifications by your companies commodity codes. Furthermore, Bid Express provides alerts to errors and omissions and not being able to submit an incomplete or inaccurate bid. Bid Express also has an optional electronic bid bond submission program, which the bid express team can guide you along with assistance from your insurance carrier; this service shall verify accurate bid bond submittal.

For additional information on electronic bidding and FAQs, go to the <https://bidexpress.com> or contact the Bid Express team toll free at (888) 352-2439 (select option 1).

NEW JERSEY TURNPIKE AUTHORITY

DRAFT AGREEMENT

FOR

MAINTENANCE OF HEATING, VENTILATION, & AIR CONDITIONING EQUIPMENT

RM # 156124

THIS AGREEMENT, dated and effective _____, by and between the New Jersey Turnpike Authority, a body corporate and politic of the State of New Jersey having its principal office at 581 Main Street, Woodbridge, New Jersey (the "Authority") and _____, a corporation of the State of _____ having principal offices located at _____ (the "Contractor").

WITNESSETH, that the said Contractor, for and in consideration of the payments hereinafter specified, hereby covenants, and agrees to furnish the labor, materials, equipment, and insurance to provide for the services of **Maintenance of Heating, Ventilation & Air Conditioning Equipment** specified in this Agreement in strict conformance with the Invitation to Bid/Request for Bids and the Instruction to Bidders attached hereto and made a part hereof.

The term of this Agreement shall commence on the effective date and terminate two (2) years there-from, unless earlier terminated as provided in the Invitation to Bid/Request for Bids. The Authority may opt, at its sole discretion, to renew this Agreement for two (2) additional one (1) year terms.

The Contractor agrees to make payment of all proper charges for labor and materials required in the aforementioned work, and to defend, if so directed by the Authority, and to indemnify and save harmless the Authority, its officers, employees and agents against and from all damages and liabilities, threatened, pending or completed actions, proceedings or suits of every kind and all costs incurred in the defense, settlement or satisfaction thereof (including attorney's fees and court costs), including damages and liabilities, actions, proceedings, suits, costs, claims and judgments of officers, employees or agents of the Contractor and of its subcontractors, and all damages, liabilities, actions, proceedings, suits costs, claims or judgments to which the Authority or any of its officers, employees, or agents may be subjected by reason of injury to the person or property of others resulting from the performance of the services, or the acts or omissions, whether negligent or not, of the Contractor, its officers, employees, or agents, servants, and subcontractors; or of the Authority, its officers, employees and agents, or of third persons, or through any improper or defective machinery, implements or appliances used in the services; and the Contractor shall further defend, if so directed by the Authority, indemnify and save harmless the Authority, its officers, employees and agents from all damages, liabilities, actions, proceedings, suits, costs, claims or judgment of any kind, which may be brought or instituted by any subcontractor, material man, or laborer who has performed work or furnished materials in or about the services or by, or on account of, any claims or amount recovered for any infringement or patent, trademark or copyright.

Any such money due to the Contractor under and by virtue of the Agreement as shall be considered necessary by the Authority may be retained by the Authority and held until such suits, proceedings, actions, claims or amounts shall have been settled, and suitable evidence to that effect furnished to the Authority. The obligations of this paragraph shall survive the expiration, termination, or rescission of this Agreement.

In consideration of the premises, the Authority hereby agrees to pay, as sole compensation for the performance of the services, payments for the actual quantity of authorized work performed, as provided in the Invitation to Bid/Request for Bids, at the prices for the services in the proposal.

This Agreement is to be binding upon the Authority, its successor or successors, and upon the Contractor and its heirs, executor, administrators, successor or successors, and is voidable and may be terminated by the Authority, in accordance with the terms of the Invitation to Bid/Request for Bids, or upon violation by the Contractor of any statute relative thereto.

IN WITNESS WHEREOF, the parties have caused their duly authorized representatives to execute this Agreement and to affix their respective corporate seals thereto on the day and year first above written.

ATTEST:

NEW JERSEY TURNPIKE AUTHORITY

Kim Schurman
Secretary to the Authority

BY _____
John M. Keller
Executive Director

[Corporate Seal]

ATTEST:

Company Name

Name
Title

BY _____
Name
Title

[Corporate Seal]



NEW JERSEY TURNPIKE AUTHORITY

P.O. Box 5042
Woodbridge, New Jersey 07095
or
1 Turnpike Plaza
Woodbridge, New Jersey 07095
Tel. – 732-750-5300
Fax – 732-750-5399

INSTRUCTIONS TO BIDDERS

PLEASE READ THE INSTRUCTIONS CAREFULLY
BEFORE SUBMITTING YOUR BID

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INSTRUCTIONS TO BIDDERS FOR SUBMISSION OF BIDS STANDARD TERMS AND CONDITIONS

The following Standard Terms and Conditions apply to all contracts, purchase agreements or purchase orders with the New Jersey Turnpike Authority unless specifically stated otherwise in the Invitation to Bid/Request for Bids (“RFB”). Bidders are hereby notified that all Terms and Conditions contained herein will become a part of any contract(s) awarded or order(s) placed as a result of any RFB fully and to the same extent as if copied at length therein. In the case of a conflict between these general Terms and Conditions and the specific provisions of the RFB, the RFB shall control. Failure to comply with each and every one of the below Terms and Conditions, as well as the specific requirements set forth in the RFB, may be grounds for rejection of the bid.

I. DEFINITIONS

The following definitions will be a part of any RFB issued by the New Jersey Turnpike Authority, and any contract(s) awarded or order(s) placed as a result of such documents.

- a. “Authority” shall mean the New Jersey Turnpike Authority.
- b. “Bidder” shall mean any potential vendor submitting a response to an RFB issued by the Authority.
- c. “Contract” shall mean the RFB (including these Standard Terms and Conditions), the response thereto submitted by the bidder, and the Authority’s Notice of Award.
- d. “Director” shall mean the Director of Procurement & Materials Management Department of the Authority.
- e. “Vendor” shall mean the successful bidder who is awarded the contract at issue.

II. STATE LAWS REQUIRING MANDATORY COMPLIANCE BY ALL BIDDERS

A. DIVISION OF REVENUE REGISTRATION-Pursuant to the terms of *N.J.S.A. 52:32-44*, bidders are required to submit to the Authority proof of valid business registration with the New Jersey Division of Revenue in the Department of Treasury, prior to entering into a contract with the Authority. No contract shall be entered into by the Authority unless the bidder first provides proof of valid business registration. In addition, bidders are required to provide to the Authority proof of valid business registration with the Division of Revenue for any and all subcontractors that will be used to provide goods or services under the contract. A copy of the bidder’s and any subcontractor’s valid Certificate of Registration should be included with the bid submission and must be in effect prior to the contract award.

All questions regarding this requirement should be referred to the Division of Revenue hotline at (609)-292-9292 or/online: <http://www.nj.gov/treasury/revenue/forms/njreg.pdf>

B. EQUAL EMPLOYMENT OPPORTUNITY COMPLIANCE - Bidders must agree not to discriminate in employment and are required to comply with all applicable anti-discrimination laws, including those contained within *N.J.S.A. 10:2-1 through 10:2-4, N.J.S.A. 10:5-1, et seq., and N.J.S.A. 10:5-31, et seq., P.L. 1975, c. 127*. The mandatory language required by *P.L. 1975, c. 127*, as set forth in Exhibit A, shall be deemed a material term of any and all contracts, purchase agreements, and purchase orders entered into by the Authority. Bidders must acknowledge their agreement with the terms set forth in Exhibit A by signing where indicated and returning the exhibit with the bid. In addition, Bidders must affirmatively demonstrate compliance with *P.L. 1975, c. 127* by submitting with the bid the completed Affirmative Action Information Sheet, set forth in Exhibit B, and any required attachments.

- 1) Anti-discrimination provision required by *N.J.S.A. 10:2-1* In the hiring of persons for the performance of work under this contract or any subcontract hereunder, or for the procurement, manufacture, assembling or furnishing of any such materials, equipment, supplies or services to be acquired under this contract, no contractor, nor any person acting on behalf of such contractor or subcontractor, shall, by reason of race, creed, color, national origin, ancestry, marital status, gender identity or expression, affectional or sexual orientation or sex, discriminate against any person who is qualified and available to perform the work to which the employment relates.
- 2) No contractor, subcontractor, nor any person on his behalf shall, in any manner, discriminate against or intimidate any employee engaged in the performance of work under this contract or any subcontract hereunder, or engaged in the procurement, manufacture, assembling or furnishing of any such materials, equipment, supplies or services to be acquired under such contract, on account of race, creed, color, national origin, ancestry, marital status, gender identity or expression, affectional or sexual orientation or sex.
- 3) There may be deducted from the amount payable to the contractor by the contracting public agency, under this contract, a penalty of \$ 50.00 for each person for each calendar day during which such person is discriminated against or intimidated in violation of the provisions of the contract; and
- 4) This contract may be canceled or terminated by the contracting public agency, and all money due or to become due hereunder may be forfeited, for any violation of this section of the contract occurring after notice to the contractor from the contracting public agency of any prior violation of this section of the contract.

B-1 Equal Pay Reporting Requirement Pursuant to N.J.S.A. 34:11-56.1 et seq.

Pursuant to the Diane B. Allen Equal Pay Act (*N.J.S.A. 34:11-56.1 et seq.*), any employer, regardless of the location of the employer, that enters into a contract with the Authority to provide any service that is not a public work as defined by *N.J.S.A. 34:11-56.25 (5)* must file annual Equal Pay Reports with the New Jersey Commissioner of Labor and Workforce Development, including information regarding the compensation and hours worked by employees categorized by gender, race, ethnicity and job category. Forms and instructions for Equal Pay Reports have been adopted for services contractors, which forms must be filed annually by March 31 for the preceding year, using employment figures from any period in October through December. See <https://nj.gov/labor/equalpay.html>.

C. OWNERSHIP DISCLOSURE FORM-Bidders who are corporations, partnerships or limited liability companies must comply with P.L. 1977, c. 33, *N.J.S.A. 52:25-24.2*, by completing the Ownership Disclosure Form, set forth in Exhibit C, and submitting it with the bid. Failure to do so shall result in rejection of the bid.

D. POLITICAL CONTRIBUTIONS COMPLIANCE-To be eligible for an award, bidders must comply with the requirements of P.L. 2005, c. 51, *N.J.S.A. 19:44 A-20.13 et seq.*, and with the requirements of Executive Order 117 (Corzine). No award may be made to a bidder who has not complied with these laws regarding political contributions. A more detailed explanation of these requirements is set forth in Exhibit D.

1. ADDITIONAL DISCLOSURE REQUIREMENTS OF P.L. 2005, C. 271

Bidders are advised of their responsibility to file annual disclosure statements on political contributions with the New Jersey Election Law Enforcement Commission (ELEC), pursuant to P.L. 2005, c. 271, section 3, if they receive contracts in excess of \$50,000 from any public entity in a calendar year. It is the bidder's responsibility to determine if filing is necessary. Failure to so file can result in the imposition of financial penalties by ELEC. Bidders must include with their bid a statement acknowledging this requirement, on the form set forth in Exhibit E. Additional information about this requirement is available from ELEC at 888-313-3532 or at www.elec.state.nj.us.

E. PREVAILING WAGE ACT-The New Jersey Prevailing Wage Act, *N.J.S.A. 34:11-56.26 et seq.*, is hereby made a part of every contract entered into on behalf of the Authority, except those contracts which are not within the contemplation of the Act. The bidder's signature on its bid is its guarantee that neither it nor any subcontractors it might employ to perform the work covered by the contract has been suspended or debarred by the New Jersey Department of Labor and Workforce Development for violation of the provisions of the Prevailing Wage Act and/or the Public Works Contractor Registration Act. The bidder's signature on its bid is its guarantee that both it and any subcontractors it might employ to perform the work covered by the contract will comply with the provisions of the Prevailing Wage and Public Works Contractor Registration Acts, where required.

F. PUBLIC WORKS CONTRACTOR REGISTRATION ACT-The New Jersey Public Works Contractor Registration Act requires all contractors, subcontractors and lower tier subcontractors who bid on or engage in any contract for "public work," as defined in *N.J.S.A. 34:11-56.51*, to be first registered with the Department of Labor and Workforce Development. No vendor or subcontractor, including lower tier subcontractors, shall engage in the performance of any public work subject to the contract unless they are registered pursuant to this Act. Bidders can submit a valid copy of their Public Works Contractor Registration Certificate and valid copies of the Registration Certificates for all subcontractors along with the bid, but the certificate(s) must be submitted prior to contract award. The Registration Certificate(s) shall be maintained at the worksite and shall be made readily available for inspection at any time. Pursuant to *N.J.S.A. 34:11-56.55* applications for registration shall not be accepted as a substitute for a Registration Certificate for subcontractors.

Any questions regarding this requirement should be directed to the Division of Wage and Hour Compliance, Department of Labor and Workforce Development at (609) 292-9464.

G. FOREIGN CORPORATION-If applicable, the bidder shall register as a “Foreign Corporation” with the Secretary of the State of New Jersey, designating a resident agent for the service of process. Foreign corporations must obtain a certificate of authority to do business in NJ pursuant to *N.J.S.A. 14A:13-3*. Written proof of such registration must be included with the bid submission.

H. SMALL BUSINESS ENTERPRISE SET-ASIDE CONTRACT FOR GOODS AND SERVICES

It is the policy of the Authority that small business enterprises (“SBE”) as determined and defined by the State of New Jersey, Division of Revenue and Enterprise Services (“Division”) in the Department of the Treasury (*N.J.A.C. 17:13-1.2*) have the opportunity to compete for and participate in the performance of contracts and subcontract for construction and for the purchase of goods and services. The Authority further requires that its contractors/vendors agree to take all necessary and responsible steps, in accordance with *N.J.S.A. 52:32-17 et seq.* and *N.J.A.C. 17:13-1 et seq.* to ensure that SBE’s have these opportunities, as an aid in meeting the commitment of its SBE Programs. When applicable the Authority will designate the contract as a SBE Set-Aside Contract. In such cases requests for bid proposals shall be confined to businesses registered with the Division as an SBE in either Category 1, 2, or 3. Bid proposals from businesses not designated as an SBE, when applicable, will be rejected.

I. CODE OF ETHICS: Bidders are advised that the Authority has adopted the New Jersey Uniform Code of Ethics, a copy of which can be viewed by going to the following web site: <http://nj.gov/ethics/docs/ethics/uniformcode.pdf> By submitting a bid, bidders agree to be subject to the intent and purpose of said Code and to the requirements of the New Jersey State Ethics Commission.

- 1) No vendor shall pay, offer to pay, or agree to pay, either directly or indirectly, any fee, commission, compensation, gift, gratuity, or other thing of value of any kind to any State officer or employee or special State officer or employee, as defined by *N.J.S.A. 52:13D-13b.* and e., in the Department of the Treasury or any other agency with which such vendor transacts or offers or proposes to transact business, or to any member of the immediate family, as defined by *N.J.S.A. 52:13D-13i.*, of any such officer or employee, or any partnership, firm, or corporation with which they are employed or associated, or in which such officer or employee has an interest within the meaning of *N.J.S.A. 52:13D-13g.*
- 2) The solicitation of any fee, commission, compensation, gift, gratuity or other thing of value by any State officer or employee or special State officer or employee from any State vendor shall be reported in writing forthwith by the vendor to the Attorney General and the Executive Commission on Ethical Standards.
- 3) No vendor may, directly or indirectly, undertake any private business, commercial or entrepreneurial relationship with, whether or not pursuant to employment, contract or other agreement, express or implied, or sell any interest in such vendor to, any State officer or employee or special State officer or employee having any duties or responsibilities in connection with the purchase, acquisition or sale of any property or services by or to any State agency or any instrumentality thereof, or with any person, firm or entity with which he is employed or associated or in

which he has an interest within the meaning of *N.J.S.A. 52:13D-13g*. Any relationships subject to this provision shall be reported in writing forthwith to the Executive Commission on Ethical Standards, which may grant a waiver of this restriction upon application of the State officer or employee or special State officer or employee upon a finding that the present or proposed relationship does not present the potential, actuality or appearance of a conflict of interest.

- 4) No vendor shall influence, or attempt to influence or cause to be influenced, any State officer or employee or special State officer or employee in his official capacity in any manner which might tend to impair the objectivity or independence of judgment of said officer or employee.
- 5) No vendor shall cause or influence, or attempt to cause or influence, any State officer or employee or special State officer or employee to use, or attempt to use, his official position to secure unwarranted privileges or advantages for the vendor or any other person.
- 6) The provisions cited shall not be construed to prohibit a State officer or employee or special State officer or employee from receiving gifts from or contracting with vendors under the same terms and conditions as are offered or made available to members of the general public subject to any guidelines the Executive Commission on Ethical Standards may promulgate as stated above.

J. VENDOR LOCATION DISCLOSURE-Pursuant to *N.J.S.A. 52:34-13.2*, every contract entered into by the Authority primarily for the performance of services shall specify that all services performed under the contract or performed under any subcontract awarded under the contract shall be performed within the United States. The statute requires all bidders to disclose the origin and location of the performance of their services, including any subcontracted services that are the subject matter of the contract. Bidders must include with their bid a completed Vendor Disclosure Form, attached hereto as Exhibit G.

J-1 DISCLOSURE OF INVESTMENT ACTIVITIES IN IRAN- Pursuant to *N.J.S.A. 52:32-58*, the bidder must certify that neither the bidder, nor one of its parents, subsidiaries, and/or affiliates (as defined in *N.J.S.A. 52:32-56(e)(3)*), is listed on the Department of the Treasury's List of Persons or Entities Engaging in Prohibited Investment Activities in Iran and that neither is involved in any of the investment activities set forth in *N.J.S.A. 52:32-56(f)*. If the bidder is unable to so certify, the bidder shall provide a detailed and precise description of such activities. Bidders must include with their bid a completed Disclosure of Investment Activities in Iran, attached hereto as Exhibit G-1.

K. SET-OFF FOR OUTSTANDING TAX LIABILITY-Bidders are advised that pursuant to P.L. 1995, c. 159, effective January 1, 1996, and notwithstanding any provision of the law to the contrary, the State of New Jersey has the right to set-off any tax indebtedness from payments made under contracts with the Authority. The State's rights are explained in more detail in Exhibit H, attached. Bidders must provide a copy of Exhibit H acknowledging that they have received notice of the State's right of set-off prior to contract award.

- L. MSDS REQUIREMENTS**-Any vendor, Vendor, or subcontractor who provides the Authority materials in the form of a single chemical substance or a mixture containing two or more chemical substances, or who delivers to or stores such materials at an Authority facility, must provide the Authority with a clear, legible copy of the manufacturer's most recent Material Safety Data Sheet (MSDS) for each and every one of those materials, pursuant to *N.J.A.C. 8:59-2.2(i)*.
- M. LABELING REQUIREMENTS**-Any vendor, Vendor or subcontractor who provides the Authority materials which fall under the purview of the New Jersey Worker and Community Right-to-Know-Act, *N.J.S.A. 34:5A-1 et seq.*, or who stores any such materials at an Authority facility, shall ensure that each and every container of those materials is labeled in accordance with the Act and its regulations.
- N. VOC REQUIREMENTS**-Any architectural coating, as defined by *N.J.A.C. 7:27-23.2*, provided to the Authority for its use or used and applied by any vendor or subcontractor in conjunction with an Authority project must comply with each and every requirement of the New Jersey Department of Environmental Protection's Volatile Organic Compounds in Consumer Products (VCC) regulations, *N.J.A.C. 7:27-23.1 et seq.*
- O. COMPLIANCE WITH STATE AND FEDERAL LAWS**-The vendor must comply with all local, state and federal laws, rules and regulations applicable to the contract at issue and to the work to be done thereunder.
- P. SAFETY & HEALTH REQUIREMENTS**-The goods, services and/or equipment provided through the contract at issue shall be so designed and installed to meet all applicable federal and state safety and health regulations and national consensus standards including, but not limited to US DOL-OSHA, NJ LWD-PEOSHA, NFPA and ANSI standards
- Q. CHOICE OF LAW**-It is agreed and understood that any contract entered into and/or purchase orders placed as a result of any RFB issued by the Authority shall be governed and construed and the rights and obligations of the parties thereto shall be determined in accordance with the laws of the STATE OF NEW JERSEY.

III. BID PREPARATION

- A. BID SUBMISSION**-Unless the Authority has made provision for bids to be submitted online, bids must be submitted in paper format, in ink or typewritten. If space is provided on the RFB for bid details, bids must be submitted using that document. Paper bids must be signed and returned in a sealed envelope addressed to the New Jersey Turnpike Authority with the bid opening date, time and bid identification on the outside of the envelope. Bidders shall state on such form a unit price for each item, and extend such unit price by multiplying same by the indicated quantities on the bids solicited by the Authority.

All bids must be received in the Authority's Purchasing Department on or before the date and time specified on the RFB. Bids received after the time indicated shall be rejected and returned to the bidder(s) unopened after being processed in accordance with established Authority procedures. The Authority will not be responsible for late postal or delivery service.

- B. CORRECTIONS**-Any correction of an entry made on the bid should be initialed by a duly authorized representative of the bidder. If the total price is found to be incorrectly computed, discrepancies will be corrected by the Authority on the basis of the written unit prices, and determination of the low bidder will be made on the basis of the correct total price so determined.
- C. BID PRICES**-All prices quoted shall be firm and not subject to increase during the term of the contract, unless otherwise specified in the RFB. Prices shall include transportation and delivery to the site designated by the Authority in the RFB. All delivery charges shall be borne by the vendor.
- D. PAYMENT TERMS**-The bidder shall state the terms, if any, requested for the Authority to make payment within a certain period of time after receipt of the bidder's invoice.
- E. ALTERNATES**-All items are to be quoted as specified in the RFB or as an approved equivalent. In those cases when an alternate product is offered, it is the bidder's responsibility to provide detailed specifications, brand, make and model of the alternate offered, in the bidder's response/bid submission. In the event a bidder fails to take exception to the published bid specifications, the Authority shall evaluate the bid as offering the specified product/service. The Authority shall determine, at its sole discretion, if any alternate product offered is acceptable as an approved equivalent.

In the event the Authority specifies a model number or item that has been replaced/superseded by another model number or item, the bidder may quote the replacement item as an alternate. In this case, the bidder must specify the manufacturer and model number of the replacement item on the response/bid submission and must supply detailed descriptive literature and/or prints with that submission. The Authority will evaluate the proposed item to determine, in its sole discretion, whether it is an approved equivalent.

IV. BIDDER GUARANTEES AND MISCELLANEOUS CONTRACT REQUIREMENTS

- A. WARRANTY**-The bidder hereby represents and warrants that the equipment offered is standard new equipment, latest model of regular stock product, with parts regularly used for the type of equipment offered, that such parts are all in production and none likely to be discontinued; also, that no attachment or part has been substituted or applied contrary to manufacturer's recommendations and standard practice.

The bidder shall unconditionally guarantee all new equipment for a term of one year from time of acceptance by the Authority unless specified otherwise in the RFB, and shall render prompt service of such equipment without charge, regardless of geographic location. The bidder shall maintain sufficient quantities of parts necessary for proper service to equipment at distribution points and service headquarters.

- B. BID SECURITY**-Bidder shall submit with its bid proposal, fully executed by its bonding company and itself, either: (1) the standard form Authority Letter of Surety (attached hereto as Exhibit I), or (2) the standard form Authority Proposal Bond (attached hereto as Exhibit J), in the amount of 10% of its bid price. In lieu of the Letter of Surety or Proposal Bond, the bidder may elect to furnish with its bid proposal a Cashier's check in the amount of 10% of the bid price as a performance warranty deposit. This bid surety will be held by the Authority until award of the contract to insure compliance by the successful bidder with the terms and obligations of the bid including, but not limited to, delivery date.
- C. CONTRACT BOND**-The vendor shall, within ten (10) calendar days of receipt of the Notice of Award, furnish and deliver the Contract Bond on the standard form of the Authority, attached hereto as Exhibit K. The Contract Bond shall be in a sum of up to 100% of the total amount bid for the contract, as specified in the RFB, and shall be maintained by the vendor until final payment is made. In the event of insolvency of the Surety, the vendor shall forthwith furnish and maintain other Surety satisfactory to the Authority.
- D. ELECTRONIC PAYMENT** - With the award of this contract, the successful vendor(s) will be required to receive their payment(s) electronically and invoices should be emailed to; invoicefb@njta.com In order to receive your payments via automatic deposit from the Authority, complete and return the "Authorization Agreement for Direct Payments (ACH Credits)" Form with an **original voided check or bank letter**. The form must include ABA number (routing or transit number), bank account number and if the bank account is a checking or savings account. The form and instructions are located in the Instruction to Bidders on the Authority's website <http://www.state.nj.us/turnpike/purchasing.html>. The completed form along with the required voided check or bank letter should be emailed to achvendor@njta.com

E. NON-COLLUSION- The bidder's signature on its bid is its guarantee that said bidder has not, directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free, competitive bidding in connection with the referenced contract; and that all statements contained in the bid and any additional statements requested by the Authority are true and correct, and made with full knowledge that the Authority relies upon the truth of the statements contained therein in awarding the contract.

The bidder's signature on its bid is its guarantee, in accordance with *N.J.S.A. 52:34-15*, that no person or selling agency has been employed or retained to solicit or secure such contract upon an agreement or understanding for a commission, percentage, brokerage or contingent fee, except bona fide employees or bona fide established commercial or selling agencies maintained by the bidder for the purpose of securing business.

V. INSURANCE AND INDEMNIFICATION

A. INSURANCE-The bidder shall procure and maintain at its own expense for the entire term of the contract insurance for liability for damages imposed by law and assumed under this contract, of the kinds and in the amounts hereinafter provided. All insurance companies used must be authorized to do business in the State of New Jersey and must carry an A.M. Best Rating of A-/VII or better. Before commencing any services hereunder, the bidder shall furnish to the Authority a certificate(s) of insurance (together with declaration pages if requested by the Authority) showing that it has complied with this Section. All certificate(s) and notices of cancellation or change shall be mailed to: Director, Purchasing Department, New Jersey Turnpike Authority, P.O. Box 5042, Woodbridge, New Jersey 07095. Upon request, the bidder shall furnish the Authority with a certified copy of each policy itself, including the provision establishing premiums.

The type and minimum limits of insurance shall be:

1. **Commercial General Liability Insurance.** The minimum limits of liability for this insurance per accident shall be as follows:

- | | |
|--|----------------|
| • Bodily injury and property damage each occurrence combined single limit | \$2,000,000.00 |
| • Personal injury each occurrence | \$2,000,000.00 |
| • General Aggregate | \$2,000,000.00 |
| • Products Aggregate | \$2,000,000.00 |
| • Fire Damage Legal Liability | \$100,000.00 |
| • Medical Payments | \$5,000.00 |

The above required Commercial General Liability Insurance shall name the Authority, its Commissioners, officers, employees, and agents as additional insureds. The coverage to be provided under this policy shall be at least as broad as the standard basic unamended and unendorsed Commercial General Liability Policy. The insurance policy shall be endorsed to include Personal Injury, Broad Form Property Damage, Contractual Liability (including the deletion of the coverage restriction related to work conducted within fifty (50) feet of a railroad), Products/Completed Operations, Independent Consultants and XCU if applicable. Products/Completed Operations coverage shall remain in force for a period of two (2) years following the completion and/or termination of the contract.

2. **Business Automobile Liability Insurance.** The Comprehensive Automobile Liability policy shall cover owned, non-owned, and hired vehicles with minimum limits as follows:

Combined Single Limit of Liability for Bodily Injury or Property Damage for any one accident: \$2,000,000.

This policy shall name the Authority, its Commissioners, officers, employees and agents as additional insured.

3. **Workers Compensation and Employers' Liability Insurance.** Workers Compensation Insurance shall be provided in accordance with the requirements of the laws of the State of New Jersey and shall include an All-States endorsement or similar statement in the policy declarations, extending coverage to any state which may be interpreted to have legal jurisdiction. Employers' Liability Insurance shall be provided with a limit of liability of not less than \$1,000,000 for each accident.

4. **Certificate and Endorsement Requirements**

Each of the above required policies shall contain the endorsements as stated below:

- (a) Thirty (30) days notice of cancellation or any restriction in coverage by registered mail to the Authority.
- (b) All policies, except Workers Wage and Employers' Liability Insurance, shall contain a waiver of subrogation clause in favor of the Authority.
- (c) With respect to Commercial General Liability and Automobile Liability policies, the other insurance clause under each policy shall be amended to read as follows: "This policy will act as primary insurance and not contribute with policies issued to the Authority."

The vendor shall also require that all of its contracting parties comply with the insurance requirements stated above including providing evidence of such insurance coverages in the same manner as stated above.

Due to future changes in economic financial and/or insurance market conditions the Authority at its discretion may modify the above stated insurance requirements.

NOTWITHSTANDING THAT MINIMUM AMOUNTS OF INSURANCE COVERAGE CARRIED OR REQUIRED TO BE CARRIED BY THE BIDDER ARE SPECIFIED HEREIN, THE LIABILITY OF THE BIDDER SHALL NOT BE LIMITED TO THE AMOUNTS SO SPECIFIED AND SHALL EXTEND TO ANY AND ALL LIABILITY IN EXCESS OF THE INSURANCE COVERAGES SO PROVIDED NOR SHALL THESE MINIMUM LIMITS PRECLUDE THE AUTHORITY FROM TAKING ANY ACTION AVAILABLE TO IT UNDER THE PROVISIONS OF THE CONTRACT OR OTHERWISE IN LAW.

- B. INDEMNIFICATION-**Vendor agrees to defend, indemnify and save harmless the Authority, its Commissioners, officers, employees, and agents and each and every one of them against and from all liabilities, judgments, threatened, pending or completed actions, suits, demands for damages or costs of every kind and description actually and reasonably incurred (including attorney's fees and costs and court costs) (collectively "Liabilities") including, without implied limitations, Liabilities for damage to property or Liabilities for injury or death of the officers, agents and employees of either the vendor or the Authority, resulting from any act or omission or willful misconduct of the vendor or any of its officers, agents, sub-consultants, or employees

in any manner related to the subject matter of the contract. In the event that the vendor fails to defend, indemnify and save harmless the Authority, its Commissioners, officers, employees, and agents, and each and every one of them, in accordance with this Section, any money due to the vendor under and by virtue of the contract as shall be considered necessary by the Authority may be retained by the Authority and held until any and all liabilities shall have been settled and suitable evidence to that effect furnished to the Authority. The obligations in this Section shall survive the termination, expiration or rescission of the contract.

- C. PATENT INDEMNIFICATION**-The vendor hereby agrees that it will indemnify, defend and save harmless the Authority, its Commissioners, officers, agents and servants from all suits, actions, claims and judgments of any kind or character whatsoever for infringement of patent, trademark or copyright regarding the items bid herein that may be brought by any person, corporation or firm.

VI. DELIVERY REQUIREMENTS

- A. DELIVERY DATE**-A FIRM delivery date must be stated on the bid. Statements such as “stock” or “immediate” are not acceptable. Where the RFB calls for delivery within a specified time, it shall be indicated in the bid whether delivery will be made within the time specified.
- B. F.O.B.**-Price shall include delivery to the Authority F.O.B. destination, freight paid to any destination on the New Jersey Turnpike or Garden State Parkway. No additional charge will be allowed for any transportation cost resulting from partial shipments made at vendor’s convenience when a single shipment is ordered. Prices quoted are firm throughout the term of the contract for complete delivery of quantities specified.

Bids submitted on an F.O.B. destination basis are mandatory; however, in instances where customs of the trade or unusual circumstances dictate F.O.B. shipping point, an estimate of the shipping charges must be noted on the bid and may be accepted in the Director’s sole discretion. In such cases, actual shipping charges are to be prepaid and added to the invoice.

C. DELIVERY-Upon award of the contract:

1. Deliveries shall be made at such time and in such quantities as ordered in strict accordance with conditions stated in the RFB.
2. Deliveries may be set on a scheduled basis as arranged between the Authority and the vendor. It shall be the responsibility of the vendor to maintain an adequate supply stock.
3. The vendor will be responsible, at the point of delivery, for the delivery of material in such quality and condition as required by Paragraph IV.A. hereof and in accordance with good commercial practice.
4. Items delivered must be strictly in accordance with those bid upon.
5. As applicable, bidders must state in the space provided on the RFB/bid solicitation documents the number of days required to make delivery after notification to ship.
6. In the event delivery is not made within the number of days stipulated, the Authority may purchase the required material from any available source. The difference in price, if any, will be paid by the vendor failing to meet its commitments.

VII. OTHER TERMS AND CONDITIONS

- A. CONTRACT PERIOD-** Except as otherwise stated in the RFB, the term of the contract shall be for one (1) year, with the option to extend for two (2) one-year options, at the Authority's discretion, and with vendor's concurrence.
- B. EXTENSION OPTION-**If, in the opinion of the Director, it is in the best interest of the Authority to extend any contract beyond the original term, for a period of all or any part of a year, the vendor will be so notified of the Director's intent, prior to the expiration date of the existing contract. The Authority reserves the right to make up to two extensions of this contract for not more than one year each. If the extension is acceptable to the Authority at the original prices and on the original terms, notice will be given to the vendor by the Director in writing. If the original contract required a Contract Bond, a new Contract Bond must be submitted to cover the period of the extension. The same insurance requirements will be required for each extension period.
- C. TERMINATION OF CONTRACT-**The contract awarded may be terminated by the Authority at any time for inadequate or improper performance, or for breach of any terms, conditions, or obligations of the contract by the vendor, as determined by the Authority, or if the vendor shall make an assignment for the benefit of creditors, or file a voluntary petition in bankruptcy, or if an involuntary petition in bankruptcy is filed against the vendor and the act of bankruptcy therein alleged is not denied by the vendor, or if denied, is found by a court or jury. Further, the Authority reserves the right to terminate any contract for any reason provided written notice has been given by the Director to the vendor at least thirty (30) days prior to such proposed termination date.

The notice of termination shall be in writing, and shall be effective upon receipt by the vendor. Upon termination, the Authority shall be liable only for payment for goods or services properly delivered or performed in accordance with the contract. The Authority shall have the right to purchase non-delivered goods, to replace defective goods or services on the open market and hold the vendor liable for the difference between the price set forth in the contract for such goods or services and the prices paid on the open market, or pursue any other right available by law. In addition, the Authority shall have the right, without the necessity of court proceedings, to recover all equipment, material or supplies that are the property of the Authority and have been entrusted with the vendor to be used in the performance of said contract. Nothing in this paragraph is intended to limit the Authority's right to legally pursue all costs which exceed the amount due and owing the vendor under said contract. The list of remedies in this paragraph is not exclusive.

- D. SCOPE**-The total quantities of any contract are estimated. There is no guarantee of any minimum quantity. It is understood and agreed that contract prices shall cover the quantities actually required and ordered by the Authority during the term of the contract, whether more or less than the approximate quantity stated.
- E. BIDDERS FACILITIES**-The Authority reserves the right to inspect the bidder's establishment before making an award.
- F. TESTING**-The Authority reserves the right to have the material tested prior to the award and during the contract by an independent testing laboratory, to determine if the material meets the specifications of the RFB. If required for testing purposes, the low bidder shall submit a reasonable quantity of the product as samples. If these samples prove satisfactory, the contract shall be awarded. If they do not prove satisfactory, a test shall be made of the next low bidder's sample, until satisfactory products are found to meet requirements. Should the laboratory find that any shipment does not meet specifications, the Authority shall have the right to reject same.
- G. INSPECTION**- All work done and supplies furnished shall be subject to inspection, testing and rejection by the Authority, or its representatives, at all times and places, both during manufacture and at destination. After award of the contract, should the result of any test or inspections show that the material supplied fails to meet the requirements of the Authority, the material shall be rejected and immediately replaced by the vendor. Rejected supplies or materials will be returned at the vendor's risk, and all inspection, handling and transportation charges to and from the Authority's delivery site will be assumed by the vendor. The vendor shall bear any and all expenses resulting from delay caused by failure to meet test or inspection standards. Should the Authority for any reason decide to accept any shipment which fails to meet specifications, the Authority may make an appropriate price adjustment with regard to same.

- H. AWARDS-**Comparison of bids will be based on the total price stated in the bid and an award will be based on the total price, terms and delivery date given by the bidder. If the total price is found to have been incorrectly computed, discrepancies will be corrected by the Authority on the basis of the unit prices and a determination of the low bidder will be made on the basis of the corrected total price. The Authority shall not be liable for any failure on its part to detect or correct errors, and the Authority's action in connection therewith shall not give rise to any rights to the bidder.
- I. NOTICE TO VENDORS AND AUTHORITY DEPARTMENTS-**The Authority is authorized to order, and vendors are authorized to ship only those items covered by the contract. If a review of orders placed by the Authority reveals that material other than that covered by the contract has been ordered and delivered, the Director will take such steps as are necessary to have the material returned regardless of the time elapsed between the date of delivery and discovery of the violation. A full refund to the Authority by the vendor will be required.
- J RIGHT TO AUDIT-**Vendor shall keep and maintain proper and adequate books, records and accounts accurately reflecting all costs and amounts billed to Authority under the contract at issue. Authority, its employees, officers, or representatives shall have the right upon written request and reasonable notice, to inspect and examine all of the vendor's books and records related to the contract. Such records shall be retained by vendor for at least five (5) years from the termination of the contract. In no event shall books and records be disposed of or destroyed of prior to five (5) years from the termination of the contract or during any dispute or claim between the Authority and vendor with regard to the contract at issue.
1. In accordance with the New Jersey Office of the State Comptroller ("OSC") document retention policy *N.J.A.C. 17:44-2.2* - The vendor shall maintain all documentation related to products, transactions or services under this contract for a period of five years from the date of final payment. Such records shall be made available to the OSC upon request.
- K. TAXES-**The Authority is exempt from Federal Excise Tax, New Jersey State Sales and Use Tax and other tax as applicable.
- L. TRANSFER OF BUSINESS-**It is understood by all parties that, if, during the term of the contract, the vendor disposes of its business by sale, transfer or by any means to another party, all obligations are transferred to such purchaser.

M. INTERAGENCY COOPERATIVE PURCHASING-Pursuant to *N.J.S.A. 27:23-6.1(a)*, vendors may receive inquiries by the entities listed below, with respect to extending this contract to them based upon the same prices, terms and conditions:

South Jersey Transportation Authority
New Jersey Sports & Exposition Authority
New Jersey Meadowlands Commission
New Jersey Water Supply Authority
Port Authority of New York & New Jersey
Delaware River Port Authority
Higher Education Student Assistance Authority

N. CONTRACT CHANGES-During the term of contract, no change will be permitted in any of its conditions and specifications unless the vendor receives written approval from the Director.

Should the vendor find at any time that existing conditions make modification in requirements necessary, the vendor shall promptly report such matter to the Director for consideration and decision.

O. SUBCONTRACTING OR ASSIGNMENT-The contract may not be subcontracted or assigned by the vendor, in whole or in part, without the prior written consent of the Director. In the event that bidder proposes to subcontract some or all of the services to be provided under the contract, it shall state so in its bid and attach for approval a list of said subcontractors and an itemization of the goods and/or services to be supplied by them.

P. REJECTION OF BIDS-Failure to comply with mandatory requirements of the bid shall be considered grounds for rejection. The Authority retains the right to reject any or all bids, to waive informalities and minor irregularities and to rebid the entire contract.

Q. LIABILITIES OR DEBTS OWED TO THE AUTHORITY- The failure by any Contractor or subcontractor during the term of the Contract to satisfy in a timely manner any outstanding debts or fees owed to the Authority, whenever incurred, including but not limited to those related to nonpayment of tolls or administrative fees, as required by *N.J.A.C. 19:9-1.19* and *N.J.A.C. 19:9-9.2*, shall be grounds for suspension or termination of the Contract, in the sole discretion of the Authority.

EXHIBIT A
MANDATORY EQUAL EMPLOYMENT OPPORTUNITY LANGUAGE
N.J.S.A. 10:5-31 et seq., N.J.A.C. 17:27

GOODS, PROFESSIONAL SERVICES AND GENERAL SERVICE CONTRACTS

During the performance of this contract, the contractor agrees as follows:

- A. The Contractor or Subcontractor, where applicable, will not discriminate against any employee or applicant for employment because of age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex. Except with respect to affectional or sexual orientation and gender identity or expression, the contractor will ensure that equal employment opportunity is afforded to such applicants in recruitment and employment and that employees are treated during employment without regard to their age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex. Such equal employment opportunity shall include, but not limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the Public Agency Compliance Officer setting forth provisions of this nondiscrimination clause.
- B. The Contractor or Subcontractor, where applicable will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity, or expression, disability, nationality or sex.
- C. The Contractor or Subcontractor will send to each labor union with which it has a collective bargaining agreement a notice, to be provided by the agency contracting officer, advising the labor union of the Contractor's commitments under this chapter and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- D. The Contractor or Subcontractor, where applicable, agrees to comply with any regulations promulgated by the Treasurer pursuant to *N.J.S.A. 10:5-31 et seq.*, as amended and supplemented from time to time, and the Americans with Disabilities Act.
- E. The Contractor or Subcontractor agrees to make good faith efforts to meet targeted county employment goals established in accordance with *N.J.A.C. 17:27-5.2*.
- F. The Contractor or Subcontractor agrees to inform in writing its appropriate recruitment agencies including, but not limited to, employment agencies, placement bureaus, colleges, universities and labor unions, that it does not discriminate on the basis of age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex, and that it will discontinue the use of any recruitment agency which engages in direct or indirect discriminatory practices.

- G. The Contractor or Subcontractor agrees to revise any of its testing procedures, if necessary, to assure that all personal testing conforms with the principles of job-related testing, as established by the statutes and court decisions of the State of New Jersey and as established by applicable Federal law and applicable Federal court decisions.
- H. In conforming with the targeted employment goals, the Contractor or Subcontractor agrees to review all procedures relating to transfer, upgrading, downgrading and layoff to ensure that all such actions are taken without regard to age, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex, consistent with the statutes and court decisions of the State of New Jersey, and applicable Federal law and applicable Federal court decisions.
- I. The Contractor shall submit to the public agency, after notification of award but prior to execution of a goods and services contract, one of the following three documents:
 - i. LETTER OF FEDERAL AFFIRMATIVE ACTION PLAN APPROVAL
 - ii. CERTIFICATE OF EMPLOYEE INFORMATION REPORT
 - iii. EMPLOYEE INFORMATION REPORT FORM AA302

The Contractor and its Subcontractors shall furnish such reports or other documents to the Division of Public Contracts Equal Employment Opportunity Compliance as may be requested by the Division from time to time in order to carry out the purposes of these regulations, and public agencies shall furnish such information as may be requested by the Division of Public Contracts Equal Employment Opportunity Compliance for conducting a compliance investigation pursuant to **Subchapter 10 of the Administrative Code at N.J.A.C. 17:27**

Submitted by:

Firm Name: _____

Signature: _____

Print Name: _____

Title: _____

Date: _____

EXHIBIT B
AFFIRMATIVE ACTION INFORMATION SHEET

BIDDERS ARE REQUIRED TO SUBMIT ONE OF THE FOLLOWING FORMS RELATING TO COMPLIANCE WITH AFFIRMATIVE ACTION REGULATIONS. **PLEASE COMPLETE AND RETURN THIS FORM AND ANY REQUIRED DOCUMENTS WITH THE BID.**

1. The bidder has a Federal Affirmative Action Plan Approval which consists of a valid letter from the United States Department of Labor Office of Federal Contract Compliance Programs (Good for one year of the date of letter).

YES_____ NO_____

If Yes, a photocopy of the Letter of Approval is to be submitted with the bid.

(OR)

2. The bidder has submitted an Affirmative Action Employee Information Report (Form AA302) to the State Treasurer, and the State Treasurer has approved said report pursuant to *N.J.A.C. 17:27-4.6*.

YES_____ NO_____

If Yes, a photocopy of the Certificate of Employee Information Report is to be submitted with the bid. (Expiration Date on Certificate)

Certificate Number _____

(OR)

3. The bidder has submitted an Employee Information Report (Form AA302) to the State Treasurer, and the State Treasurer has not yet approved said report.

YES_____ NO_____

If Yes, a photocopy of the Form AA302 is to be submitted with the bid.

If you are the successful Proposer and have none of the above, please contact the Procurement and Materials Management Department at **(732) 750-5300 ext. 8628** within five (5) days of notification of award for AA-302 Form. This AA-302 Form must be forwarded to the States' Affirmative Action Office with a copy returned to the Authority's Procurement and Materials Management Department.

The signature below certifies that one of the above forms of Affirmative Action evidence has been submitted, and all information contained above is correct to the best of my knowledge.

Signed_____ Date Signed _____

Print Name and Title _____

Bidder's Company Name _____

Address_____

Telephone Number _____ Fax Number _____

EXHIBIT C
OWNERSHIP DISCLOSURE FORM

BID SOLICITATION: _____ BIDDER/PROPOSER: _____

PART 1

PLEASE COMPLETE THE QUESTIONS BELOW BY CHECKING EITHER THE “YES” OR “NO” BOX. ALL PARTIES ENTERING INTO A CONTRACT WITH THE NEW JERSEY TURNPIKE AUTHORITY ARE REQUIRED TO COMPLETE THIS FORM PURSUANT TO N.J.S.A. 52:25-24.2

PLEASE NOTE THAT IF THE BIDDER/PROPOSER IS A NON-PROFIT ENTITY, THIS FORM IS NOT REQUIRED.

1. Are there any individuals, corporations, partnerships, or limited liability companies owning a **10% or greater** interest in the Bidder/Proposer?

YES ☐ NO ☐

IF THE ANSWER TO QUESTION 1 IS “NO”, PLEASE SIGN AND DATE THE FORM.

IF THE ANSWER TO QUESTION 1 IS “YES”, PLEASE ANSWER QUESTIONS 2-4 BELOW.

2. Of those parties owning a 10% or greater interest in the Bidder/Proposer, are any of those parties individuals?

YES ☐ NO ☐

3. Of those parties owning a 10% or greater interest in the Bidder/Proposer, are any of those parties **corporations, partnerships, or limited liability companies**?

YES ☐ NO ☐

4. If your answer to Question 3 is “YES”, are there any parties owning a **10% or greater** interest in the corporation, partnership, or limited liability company referenced in Question 3?

YES ☐ NO ☐

IF ANY OF THE ANSWERS TO QUESTIONS 2-4 ARE “YES”, PLEASE PROVIDE THE REQUESTED INFORMATION IN PART 2.

PART 2

PLEASE PROVIDE FURTHER INFORMATION RELATED TO QUESTIONS 2-4 ANSWERED AS “YES”.

If you answered “YES” for questions 2, 3, or 4 you must disclose identifying information related to the individuals, corporations, partnerships, and/or limited liability companies owning a 10% or greater interest in the Bidder/Proposer. Further, if one or more of these entities is itself a corporation, partnership, or limited liability company, you must also disclose all parties that own a 10% or greater interest in that corporation, partnership, or limited liability company. This information is required by statute.

INDIVIDUALS

| | |
|------------------------|-------------------------------------|
| NAME _____ | DATE OF BIRTH _____ |
| ADDRESS 1 _____ | |
| ADDRESS 2 _____ | |
| CITY _____ | STATE _____ ZIP _____ |

| | |
|------------------------|-------------------------------------|
| NAME _____ | DATE OF BIRTH _____ |
| ADDRESS 1 _____ | |
| ADDRESS 2 _____ | |
| CITY _____ | STATE _____ ZIP _____ |

| | |
|------------------------|-------------------------------------|
| NAME _____ | DATE OF BIRTH _____ |
| ADDRESS 1 _____ | |
| ADDRESS 2 _____ | |
| CITY _____ | STATE _____ ZIP _____ |

Attach Additional Sheets if Necessary.

PART 2 continued

PARTNERSHIPS/CORPORATIONS/LIMITED LIABILITY COMPANIES

| | | |
|---------------------------|--------------------|------------------|
| ENTITY NAME _____ | | |
| PARTNER NAME _____ | | |
| ADDRESS 1 _____ | | |
| ADDRESS 2 _____ | | |
| CITY _____ | STATE _____ | ZIP _____ |

| | | |
|---------------------------|--------------------|------------------|
| ENTITY NAME _____ | | |
| PARTNER NAME _____ | | |
| ADDRESS 1 _____ | | |
| ADDRESS 2 _____ | | |
| CITY _____ | STATE _____ | ZIP _____ |

| | | |
|---------------------------|--------------------|------------------|
| ENTITY NAME _____ | | |
| PARTNER NAME _____ | | |
| ADDRESS 1 _____ | | |
| ADDRESS 2 _____ | | |
| CITY _____ | STATE _____ | ZIP _____ |

Attach Additional Sheets if Necessary.

In the alternative, to comply with the ownership disclosure requirement, a Bidder/Proposer with any direct or indirect parent entity which is publicly traded may submit the name and address of each publicly traded entity and the name and address of each person that holds a 10% or greater beneficial interest in the publicly traded entity as of the last annual filing with the federal Securities and Exchange Commission or the foreign equivalent, and, if there is any person that holds a 10% or greater beneficial interest, also shall submit links to the websites containing the last annual filings with the federal securities and Exchange Commission or the foreign equivalent and the relevant page number(s) of the filings that contain the information on each person that holds a 10 percent or greater beneficial interest. *N.J.S.A 52:25-24.2.*

CERTIFICATION

I, the undersigned, certify that I am authorized to execute this certification on behalf of the Bidder/Proposer, that the foregoing information and any attachments hereto, to the best of my knowledge are true and complete. I acknowledge that the New Jersey Turnpike Authority is relying on the information contained herein, and that the Bidder/Proposer is under a continuing obligation from the date of this certification through the completion of any contract(s) with the New Jersey Turnpike Authority to notify the New Jersey Turnpike Authority in writing of any changes to the information contained herein; that I am aware that it is a criminal offense to make a false statement or misrepresentation in this certification. If I do so, I will be subject to criminal prosecution under the law, and it will constitute a material breach of my agreement(s) with the New Jersey Turnpike Authority, permitting the New Jersey Turnpike Authority to declare any contract(s) resulting from this certification void and unenforceable.

Signature

Date

Print Name and Title

FEIN/SSN

EXHIBIT D
State Contractor Political Contributions Compliance
Public Law 2005, Chapter 51 and Executive Order 117

In order to safeguard the integrity of State government procurement by imposing restrictions to insulate the award of State contracts from political contributions that pose the risk of improper influence, purchase of access, or the appearance thereof, Executive Order 134 (McGreevey) was signed on September 22, 2004 and became effective October 15, 2004. EO134 was applicable to all State agencies, the principal departments of the executive branch, any division, board, bureau, office, commission within or created by a principal executive branch department, and any independent State authority, board, commission, instrumentality or agency. EO134 was superseded by P.L. 2005, c. 51, signed into law on March 22, 2005 (“Chapter 51”). In September 2008, Executive Order 117 (Corzine) was signed and became effective November 15, 2008. EO117, which applies only prospectively, extends Chapter 51’s political contribution restrictions by expanding the definition of “business entity” to include, for example, more corporate shareholders and sole proprietors. EO117 and Chapter 51 contain restrictions and reporting requirements that will necessitate a thorough review of their provisions by bidders.

Pursuant to the requirements of Chapter 51 and EO117, the terms and conditions set forth in this Exhibit are material terms of any contract entered into by the Authority.

DEFINITIONS

For the purpose of this Exhibit, the following shall be defined as follows:

a) “**Contribution**” – means a contribution reportable by the recipient under the New Jersey Campaign Contributions and Expenditures Reporting Act, P.L. 1973, c. 83, N.J.S.A. 19:44A-1 et seq., and implementing regulations set forth at N.J.A.C. 19:25-7 and N.J.A.C. 19:25-10.1 et seq., made on or after October 15, 2004. As of January 1, 2005, contributions in excess of \$300 are reportable.

b) “**Business Entity**” – means any natural or legal person; business corporation (and any officer, person, or business entity that owns or controls 10% or more of the corporation’s stock); professional services corporation (and any of its officers or shareholders); limited liability company (and any members); general partnership (and any partners); limited partnership (and any partners); in the case of a sole proprietorship: the proprietor; a business trust, association or any other legal commercial entity organized under the laws of New Jersey or any other state or foreign jurisdiction, including its principals, officers, or partners. The definition of a business entity also includes (i) all principals who own or control more than 10 percent of the profits or assets of a business entity; (ii) any subsidiaries directly or indirectly controlled by the business entity; (iii) any political organization organized under section 527 of the Internal Revenue Code that is directly or indirectly controlled by the business entity, other than a candidate committee, election fund, or political party committee; and (iv) if a business entity is a natural person, that person’s spouse, civil union partner or child, residing in the same household, except for contributions by spouses, civil union partners, or resident children to a candidate for whom the contributor is eligible to vote, or to a political party committee within whose jurisdiction the contributor resides.

PROHIBITION ON CONTRACTS/BREACH OF EXISTING CONTRACT

As set forth in Chapter 51 and EO117, the Authority shall not enter into a contract to procure from any Business Entity services or any material, supplies or equipment, or to acquire, sell or lease any land or building, where the value of the transaction exceeds \$17,500, if that Business Entity has solicited or made any contribution of money, or pledge of contribution, including in-kind contributions, to a candidate committee and/or election fund of any candidate for or holder of the public office of Governor or Lieutenant Governor, or to any State, county or municipal political party committee, or legislative leadership committee during specified time periods.

Further, it shall be a breach of the terms of any contract with the Authority for any Business Entity who has been awarded the contract, during the term of the contract or any extension thereof, to:

- (i) make or solicit a contribution in violation of Chapter 51 or EO117;
- (ii) knowingly conceal or misrepresent a contribution given or received;
- (iii) make or solicit contributions through intermediaries for the purpose of concealing or misrepresenting the source of the contribution;
- (iv) make or solicit any contribution on the condition or with the agreement that it will be contributed to a campaign committee or any candidate of holder of the public office of Governor or Lieutenant Governor, or to any State, county or municipal party committee, or legislative leadership committee;
- (v) engage or employ a lobbyist or consultant with the intent or understanding that such lobbyist or consultant would make or solicit any contribution, which if made or solicited by the Business Entity itself, would subject that entity to the restrictions of Chapter 51 or EO117;
- (vi) fund contributions made by third parties, including consultants, attorneys, family members, and employees;
- (vii) engage in any exchange of contributions to circumvent the intent of Chapter 51 or EO117; or
- (viii) directly or indirectly through or by any other person or means, do any act which would subject that entity to the restrictions of Chapter 51 or EO117.

CERTIFICATION AND DISCLOSURE REQUIREMENTS

Prior to the award of any contract or agreement, the Authority shall notify any Business Entity to which it intends to award a contract of the need to submit to the Authority a completed Certification and Disclosure of Political Contributions form, as issued by the State Treasurer. **The intended awardee will receive the applicable form from the Authority's Purchasing Department to be completed and returned to the Authority for submission to the State Treasurer.**

In completing this form, the Business Entity must certify that no contributions prohibited by Chapter 51 or EO117 have been made by the Business Entity and must report all contributions the Business Entity made during the preceding four years to any political organization organized under 26 U.S.C. § 527 of the Internal Revenue Code that also meets the definition of a "continuing political committee" within the meaning of *N.J.S.A. 19:44A-3(n)* and *N.J.A.C. 19:25-1.7*. Failure to submit the required forms will preclude award of the contract at issue, as well as future contract opportunities.

Upon approval by the State Treasurer, the Authority will issue a contract. However, if the State Treasurer determines that any contribution or action by a Business Entity poses a conflict of interest in the awarding of the contract or agreement at issue, the State Treasurer shall disqualify the Business Entity from award of such contract.

Once approved by the State Treasurer, a Business Entity's Political Contributions Certification is valid for a two (2) year period from the date of approval. If, prior to the award of a contract, the State Treasurer confirms to the Authority that the intended awardee has an approved Certification that will remain valid for the term of the contract, the Authority may waive the requirement that the awardee complete an additional Certification and Disclosure of Political Contributions form.

Any Business Entity entering into a contract with the Authority is required, on a continuing basis, to report to the Authority any contributions it makes during the term of the contract, and any extension(s) thereof, at the time any such contribution is made. Such reports shall be subject to review by the Authority and the State Treasurer. If the State Treasurer determines that any such contribution poses a conflict of interest, such contribution shall be deemed a material breach of the contract or agreement at issue.

EXHIBIT E
NEW JERSEY ELECTION LAW ENFORCEMENT COMMISSION
REQUIREMENT FOR DISCLOSURE OF POLITICAL CONTRIBUTIONS

All business entities are advised of their responsibility to file on annual disclosure statement of political contributions with the New Jersey Election Law Enforcement Commission (ELEC) pursuant to N.J.S.A. 19:44A-20.27 if they receive contracts in excess of \$50,000.00 from public entities in a calendar year. Business entities are responsible for determining if filing is necessary. Additional information on this requirement is available from ELEC at 888-313-3532 or at www.elec.state.nj.us

**DISCLOSURE OF CONTRIBUTIONS TO NEW JERSEY ELECTION LAW
ENFORCEMENT COMMISSION IN ACCORDANCE WITH N.J.S.A. 19:44A-20.27**

The undersigned Bidder submitting the bid for the goods/services herein hereby acknowledges its responsibility to file an annual disclosure statement of political contributions with the New Jersey Election Law Enforcement Commission (ELEC) pursuant to N.J.S.A. 19:44A-20.27 if in receipt of contracts in excess of \$50,000.00 from public entities in a calendar year. Bidder further acknowledges that business entities are solely responsible for determining if filing is necessary and that all statements contained in said bid and in this certification, are true and correct, and made with full knowledge that the New Jersey Turnpike Authority relies upon the truth of the statements contained in said bid and in statements contained in this certification in awarding the contract at issue.

I certify that I am authorized to make the foregoing statements on behalf of the Bidder and that the foregoing statements made by me are true. I am aware that if any of the foregoing statements made by me are willfully false, I am subject to punishment.

AUTHORIZED SIGNATURE: _____

Print Name and Title: _____

Bidder : _____

Date: _____

EXHIBIT F
SMALL/MINORITY/WOMAN OWNED BUSINESS ENTERPRISE

If your firm is registered with the State of New Jersey as a Small Business Enterprise (SBE) and/or certified as a Woman Business Enterprise (WBE), a Minority Business Enterprise (MBE), a Veteran Owned Business (VOB) or as a Disabled Veteran Owned Business (DVOB), you must send a copy of the Registration/Certification Form(s) with your quotation.

Please check off the gross receipt category of your business if registered as an SBE

SBE CATEGORY 1 \$0- \$500,000 _____

SBE CATEGORY 2 \$500,001 thru \$5,000,000 _____

SBE CATEGORY 3 \$5,000,001 thru \$12,000,000 _____

NOT APPLICABLE _____

SBE Registration # _____

Please check below if applicable

W B E _____ M B E _____ VOB _____ DVOB _____

COMPANY _____

SIGNATURE _____

NAME _____

TITLE _____

DATE _____

EXHIBIT G
VENDOR DISCLOSURE FORM

Please be advised that in accordance with *N.J.S.A.52:34-13.2*, the New Jersey Turnpike Authority has developed this form under the policy and procedures directed under this Order. In entering into contracts, the State contracting agencies must consider the requirements of New Jersey's contracting laws, the best interests of the State of New Jersey and its citizens, as well as applicable federal and international requirements.

The State contracting agencies shall ensure that all vendors seeking to enter into any contract in which services are procured on behalf of the State of New Jersey must disclose:

- A. The location by country where services under the contract will be performed; and
- B. Any subcontracting of services under the contract and the location by country where any subcontracted services will be performed.

THE LOCATION BY COUNTRY WHERE SERVICES UNDER THIS CONTRACT WILL BE PERFORMED:

Contractor Name: _____

Address: _____

Country: _____

Subcontractor #1 Name: _____

Address: _____

Country: _____

Subcontractor #2 Name: _____

Address: _____

Country: _____

(For additional subcontractors, attach additional copies of this form)

I certify that all information is true and correct to the best of my knowledge.

Signature: _____

Print Name: _____ Title: _____

EXHIBIT G-1
NEW JERSEY TURNPIKE AUTHORITY
DISCLOSURE OF INVESTMENT ACTIVITIES IN IRAN

NAME OF CONTRACTOR /BIDDER: _____

PART 1: CERTIFICATION

CONTRACTORS/BIDDERS **MUST COMPLETE** PART 1 BY CHECKING **EITHER BOX**.

FAILURE TO CHECK ONE OF THE BOXES SHALL RENDER THE PROPOSAL NON-RESPONSIVE.

Pursuant to Public Law 2012, c. 25, any person or entity that submits a bid or proposal or otherwise proposes to enter into or renew a contract must complete the certification below to attest, under penalty of perjury, that neither the person or entity, nor any of its parents, subsidiaries, or affiliates, is identified on the Department of Treasury's Chapter 25 list as a person or entity engaging in investment activities in Iran. The Chapter 25 list follows this certification and can also be found on the State of New Jersey, Department of Treasury, Division of Purchase and Property website at <http://www.state.nj.us/treasury/purchase/pdf/Chapter25List.pdf>. Contractors/Bidders **must** review this list prior to completing the below certification. **FAILURE TO COMPLETE THE CERTIFICATION WILL RENDER A CONTRACTOR'S/BIDDER'S PROPOSAL NON-RESPONSIVE.** If the Authority finds a person or entity to be in violation of law, it shall take action as may be appropriate and provided by law, rule or contract, including but not limited to, imposing sanctions, seeking compliance, recovering damages, declaring the party in default and seeking debarment or suspension of the party.

PLEASE CHECK THE APPROPRIATE BOX:

☐ **I certify, pursuant to Public Law 2012, c. 25, that neither the contractor/bidder listed above nor any of the contractor's/bidder's parents, subsidiaries, or affiliates is listed on the N.J. Department of the Treasury's list of entities determined to be engaged in prohibited activities in Iran pursuant to P.L. 2012, c. 25 ("Chapter 25 List"). I further certify that I am the person listed above, or I am an officer or representative of the entity listed above and I am authorized to make this certification on its behalf. **I will skip Part 2 and sign and complete the CERTIFICATION below.****

OR

☐ **I am unable to certify as above because the contractor/bidder and/or one or more of its parents, subsidiaries, or affiliates is listed on the Department's Chapter 25 list. I will provide a detailed, accurate and precise description of the activities in Part 2 below and sign and complete the CERTIFICATION below. Failure to provide such will result in the proposal being rendered a non-responsive and appropriate penalties, fines and/or sanctions will be assessed as provided by law.**

**Part 2: PLEASE PROVIDE FURTHER INFORMATION RELATED TO
INVESTMENT ACTIVITIES IN IRAN**

You must provide a detailed, accurate and precise description of the activities of the bidding person/entity, or one of its parents, subsidiaries or affiliates, engaging in the investment activities in Iran outlined above by completing the requested information below. Please provide thorough answers to each question. If you need to make additional entries, provide the requested information on a separate sheet

Name _____ Relationship to Contractor/Bidder _____

Description of Activities

Duration of Engagement _____ Anticipated Cessation Date _____

Contractor/Bidder Contact Name _____ Contact Phone Number _____

**CERTIFICATION
MUST BE SIGNED BY BIDDER**

I being duly sworn upon my oath, hereby represent and state that the foregoing information and any attachments thereto to the best of my knowledge are true and complete. I attest that I am authorized to execute this certification on behalf of the above referenced person or entity. I acknowledge that the New Jersey Turnpike Authority ("Authority") is relying on the information contained herein and thereby acknowledge that I am under a continuing obligation from the date of this certification through the completion of any contracts with the Authority to notify the Authority in writing of any changes to the answers of information contained herein. I acknowledge that I am aware that it is a criminal offense to make a false statement or misrepresentation in this certification, and if I do so, I recognize that I am subject to criminal prosecution under the law and that it will also constitute a material breach of my agreement(s) with the Authority and that the Authority at its option may declare any contract(s) resulting from this certification void and unenforceable.

FULL NAME (print): _____ SIGNATURE _____

TITLE: _____ DATE: _____

EXHIBIT H
NOTICE TO ALL BIDDERS
SET-OFF FOR STATE TAX

Please be advised that pursuant to P.L. 1995, c. 159, effective January 1, 1996 and notwithstanding any provision of the law to the contrary, whenever any taxpayer, partnership, or S corporation under contract to provide goods or services or construction projects to the State of New Jersey or its agencies or instrumentalities, including the legislative and judicial branches of State government, is entitled to payment for those goods or services or construction projects and at the same time the taxpayer, or the partner or shareholder of that entity, is indebted for any State tax, the Director of the Division of Taxation shall seek to set-off that taxpayer's, partner's or shareholder's share of the payment due to the taxpayer, partnership, or S corporation. The amount of set-off shall not allow for the deduction of any expenses or other deductions which might be attributable to a partner or shareholder subject to set-off under this act. No payment shall be made to the taxpayer, the provider of goods or services, or the contractor or subcontractor of construction projects pending resolution of the indebtedness.

The Director of Division of Taxation shall give notice of the set-off to the taxpayer, the provider of goods or services, or the contractor or subcontractor of construction projects and provide an opportunity for a hearing with thirty (30) days of such notice under the procedures for protests established under *N.J.S.A. 54:49-18*. No requests for conference, protest or subsequent appeal to the Tax Court from any protest under this section shall stay the collection of the indebtedness. Interest that may be payable by the State pursuant to P.L. 1987, c. 184, *N.J.S.A. 52:32-32 et seq.* to the taxpayer, the provider of goods or services, or the contractor or subcontractor of construction projects shall be stayed.

"I HAVE BEEN ADVISED OF THIS NOTICE."

COMPANY _____

SIGNATURE _____

NAME _____

TITLE _____

DATE _____

EXHIBIT I
LETTER OF SURETY

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned

_____ as PRINCIPAL: and

_____ as Surety and duly qualified to transact business in the State of New Jersey, are hereby held and firmly bound unto the New Jersey Turnpike Authority in the sum by which the amount of the Contract, covering the attached proposal, properly and lawfully executed by and between the New Jersey Turnpike Authority and some third party, may exceed the amount bid by the Principal for the payment of which, well and truly to be made, we hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors and assigns.

Signed, this _____ day of _____ A.D.

Two Thousand and _____.

THE CONDITION OF THE ABOVE OBLIGATION IS SUCH that whereas the Principal has submitted to the New Jersey Turnpike Authority a certain Proposal, attached hereto and hereby made a part hereof, to enter into a Contract in writing for Contract No. _____ of the New Jersey Turnpike Authority;

NOW, THEREFORE,

(a) If said Proposal shall be rejected by the New Jersey Turnpike Authority, or in the alternative,

(b) If said Proposal shall be accepted by the New Jersey Turnpike Authority, and the Principal shall duly execute the Contract Agreement and furnish the required Contract Bond, within the stipulated time,

Then this obligation shall be void, otherwise the same shall remain in force and effect; it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall, in no event, exceed the amount of this obligation as herein stated.

The Surety, for value received, hereby stipulates and agrees that the obligation of said Surety and its bond shall be in no way impaired or affected by any extension of the time within which the Authority may accept such Proposal; and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers, the day and year first set forth above.

[Corporate Seal]

WITNESS OR ATTEST:

Principal

[Corporate Seal]

WITNESS OR ATTEST:

Surety

EXHIBIT J
PROPOSAL BOND

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned

_____ as PRINCIPAL: and

_____ as Surety and duly qualified
to transact business in the State of New Jersey, are hereby held and firmly bound unto the New
Jersey Turnpike Authority in the sum of

_____ Dollars and

_____ Cents \$_____ for the payment of
which, well and truly to be made, we hereby jointly and severally bind ourselves, our heirs,
executors, administrators, successors and assigns.

Signed, this _____ day of _____ A.D.

Two Thousand and _____.

THE CONDITION OF THE ABOVE OBLIGATION IS SUCH that whereas the Principal
has submitted to the New Jersey Turnpike Authority a certain Proposal, attached hereto and hereby
made a part hereof, to enter into a Contract in writing for Contract No. _____ of the
New Jersey Turnpike Authority;

NOW, THEREFORE,

- (a) If said Proposal shall be rejected by the New Jersey Turnpike Authority, or in the alternative,
- (b) If said Proposal shall be accepted by the New Jersey Turnpike Authority and the Principal
shall duly execute the Contract Agreement and furnish the required Contract Bond, within the
stipulated time,

Then this obligation shall be void, otherwise the same shall remain in force and effect; it being
expressly understood and agreed that the liability of the Surety for any and all claims hereunder
shall in no event, exceed the amount of this obligation as herein stated.

The Surety, for value received, hereby stipulates and agrees that the obligation of said Surety and
its bond shall be in no way impaired or affected by any extension of the time within which the
Authority may accept such proposal; and said Surety does hereby waive notice of any such
extension.

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers, the day and year first set forth above.

[Corporate Seal]

WITNESS OR ATTEST

Principal

[Corporate Seal]

WITNESS OR ATTEST:

Surety

EXHIBIT K
CONTRACT BOND

KNOW ALL MEN BY THESE PRESENTS:

That we, _____

Duly organized under the Laws of the _____

(An individual, a partnership, a corporation)

State of _____ and having a usual place of _____

_____ at _____ as

Principal, and _____ a

corporation duly organized under the Laws of the State of _____ and duly authorized to do business in the State of New Jersey and having a usual place of business at _____

as Surety, are holden and stand firmly bound and obligated unto the New Jersey Turnpike Authority, as Obligee, in the sum of _____ lawful money of the United States of America, to and for the true payment whereof we bind ourselves and each of us, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

The condition of the above obligation is such that whereas, the above named Principal did on the _____ day of _____, 201_____, enter into a contract with the Obligee, New Jersey Turnpike Authority generally described as follows: _____ which said contract is made part of this Bond the same as though set forth herein.

Now, if the said Principal shall well and faithfully do and perform the things agreed by the Principal to be done and performed according to the terms of said contract, and shall pay all lawful claims of laborers and other beneficiaries as defined by *N.J.S.A 2A:44-143* for labor performed or materials, provisions, provender of other supplies, or teams, fuels, oils, implements or machinery furnished, used or consumed in the carrying forward, performing or completing of said contract, we agreeing and assenting that this undertaking shall be for the benefit of laborers and any beneficiary as defined in *N.J.S.A 2A:44-143* having a just claim, as well as, for the Obligee herein, then this obligation shall be void; otherwise, the same shall remain in full force and effect; it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall in no event exceed the penal amount of this obligation as herein stated.

The said Surety hereby stipulates and agrees that no modifications, omissions or additions in or to the terms of the said contract or in or to the plans or specifications therefore shall in anywise affect the obligation of said Surety on its bond, and the Surety hereby waives notice of same.

IN WITNESS WHEREOF, we have hereunto set our hands and seals

this _____ day of _____ in the year 201_____.

WITNESS OR ATTEST

[CORPORATE SEAL]

PRINCIPAL

WITNESS OR ATTEST:

[CORPORATE SEAL]

SURETY

EXHIBIT L
CERTIFICATION AND REQUEST FOR WAIVER
OF THE COMPREHENSIVE AUTOMOBILE LIABILITY INSURANCE
REQUIREMENT

Purchase Requisition # _____

I hereby request an exemption from the New Jersey Turnpike Authority's Comprehensive Automobile Liability Insurance policy for the above reference Purchase Requisition. I certify that if the company referenced below (hereinafter, "the Company") is the successful low bidder the Company will utilize a recognized, commercial third party shipper (i.e. UPS, Federal Express, DHL, U.S. Postal Service, Air Borne Express, etc..) to deliver all Goods to the New Jersey Turnpike Authority. By signing this certification, a representation is made that no vehicle either owned, rented or leased by the Company will be used for the delivery of any goods to the New Jersey Turnpike Authority, and that, any delivery made will be restricted to the use of third parties providing package delivery service in the ordinary course of business. Accordingly, a waiver of Comprehensive Automobile Liability Insurance is hereby requested.

The Company (insert name of Company)

By: _____
(print and sign name)

Title

Date

\$2MM WAIVER

EXHIBIT M

INSTRUCTIONS FOR DIRECT PAYMENTS (ACH CREDITS)

PLEASE PRINT ALL ENTRIES (except for signature)

COMPANY NAME – Enter your company's name as registered with the New Jersey Turnpike Authority

NJTA VENDOR ID NUMBER – Enter the number assigned to your company by the New Jersey Turnpike Authority*

TELEPHONE NUMBER - Enter your telephone number, including area code

EMAIL ADDRESS - Enter your email address. You will receive detailed notification of ACH payment

DEPOSITORY NAME – Enter the name of your depository bank/financial institution

BRANCH - Enter the name of your bank's branch office/location

CITY/STATE/ZIP CODE – Enter your bank's address

ROUTING NUMBER (DFI ID) – Enter your bank's routing number. This is your bank's nine position American Banking Association number, also known as the bank transit code

ACCOUNT NUMBER – Enter your checking or savings account number. This is a variable length field

NAME AND TITLE– Enter the name and title of the person who has the authority to accept ACH payment as an alternative to receiving check payment for your company

AUTHORIZED SIGNATORY – Enter your signature

If you require assistance, please call Carol Sabanos at (732) 750-5300, ext. 8149 or email her at achvendor@njta

Following completion, forward the form (attached with the required **original** voided check or bank letter) to: New Jersey Turnpike Authority, ATTN: Accounts Payable, Finance Department/AP, PO Box 5042, Woodbridge, NJ 07095-5042 **or** you may scan and email the completed form (with the required **original** voided check or bank letter) to achvendor@njta

New Jersey Turnpike Authority
ATTN: Accounts Payable, Finance Department
PO Box 5042
Woodbridge, NJ 07095-5042

AUTHORIZATION AGREEMENT FOR DIRECT PAYMENTS (ACH CREDITS)

Company Name _____ NJTA Vendor ID _____

Telephone Number _____ Email Address _____

I (we) hereby authorize New Jersey Turnpike Authority (NJTA) to initiate ACH credit entries to my (our) ☐ Checking Account / ☐ Savings Account (select one) indicated below at the depository financial institution named below, hereafter called DEPOSITORY.

I (we) acknowledge that that origination of ACH transactions to my (our) account must comply with the provisions of U.S. law.

Depository Name _____ Branch _____

City _____ State _____ Zip _____

Routing Number (DFI ID) _____ Account Number _____

This authorization is to remain in full force and effect until New Jersey Turnpike Authority (NJTA) has received written notification from me (or either of us) of its termination in such time and in such manner so as to afford New Jersey Turnpike Authority and DEPOSITORY a reasonable opportunity to act on it.

Name(s) _____ Title _____
(please print)

Date _____ Authorized Signatory _____

PLEASE INCLUDE AN ORIGINAL VOIDED CHECK OR BANK LETTER WITH THIS FORM.

For NJTA use only:

Received by: _____ Date: _____