



Request for Proposals

2018-2019 Snow Removal, De-icing & Ice Removal

Contracting Agency

**The Parking Authority of the City of Camden
Theodore "Teddy" Hinson Waterfront Garage
10 Delaware Avenue
Camden, NJ 08103**

Phone: 856-757-9300

Facsimile: 856-964-9317

Available: Monday December 24, 2018 at 10:00 AM

Due: Thursday, January 10, 2019 no later than 10:00 AM

Opening: Thursday, January 10, 2019 at 1:00 PM

NOTE: In the event an interested firm has downloaded these specifications from the PACC website, you are responsible for providing the PACC via email at info@camdenparking.net your contact information, including: Firm Name, Contact Person, Address, Email address, phone and fax number, in the event the PACC issues Addendums or extends the time for submissions of Proposals.

ADVERTISEMENT FOR BID

The Parking Authority of the City of Camden (PACC) is soliciting Proposals for Professional Service for the following services pursuant to the "Fair & Open Process" provided by N.J.S.A 19:44A-20.4 ET. Seq. and not as a Competitive Bid.

2018-2019 SNOW REMOVAL CONTRACT

Specifications may be obtained in the Administrative Office located at the Theodore "Teddy" Hinson Waterfront Garage, 10 Delaware Avenue, Camden, New Jersey 08103 beginning Monday December 24, 2018 after 10:00 A.M.

A non-mandatory pre-Bid meeting and site walk-through is scheduled for Thursday January 3, 2019 at 12:00 PM, at the Theodore "Teddy" Hinson Waterfront Garage, 10 Delaware Avenue, Camden, New Jersey 08103.

Bids must be enclosed in a sealed envelope bearing the name and address of the Bidder and the subject of the Bid. The Bids may be presented in person or delivered, at or before Thursday January 10, 2019 by 10:00 AM.

The right to reject any and all Bids or to accept the Bid or any item of any Bid deemed most advantageous to The Parking Authority and to award contracts accordingly is expressly reserved to the authority of the Board of Commissioners of The Parking Authority of the City of Camden.

Note: All Bidders are required to comply with the requirements of N.J.S.A. 10:5-31 ET. Seq. and N.J.A .C. 17:27.

Bids will not be received after the time specified for the opening of the Bids. Bids received after the hour appointed will be deemed invalid and return unopened to the Bidder.

NOTE: In the event an interested firm has downloaded these specifications from the PACC website, you are responsible for providing the PACC via email at info@camdenparking.net or to [Dionne Banks](mailto:Dionne.Banks@camdenparking.net) 10 Delaware Ave Camden NJ 08103 dbanks@camdenparking.net 856-757-9300 Ext .113 Fax: 856-964-9317 in the event the PACC issues Addendums or extends the time for submissions of Proposals.

Willie Hunter
Executive Director

THE PARKING AUTHORITY OF THE CITY OF CAMDEN

GENERAL INSTRUCTIONS AND CONDITIONS FOR BIDDERS

All proposals will be publicly opened on Thursday January 10, 2019 at 1:00 PM in the Administrative Offices of The Parking Authority of the City of Camden, located in the Theodore "Teddy" Hinson Waterfront Garage, 10 Delaware Avenue, Camden, New Jersey 08103. All Bids must be submitted on the form (Exhibit D) of proposal supplied by The Parking Authority. {2018-2019 SNOW REMOVAL CONTRACT}

A non-mandatory pre-Bid meeting and site walk-through has been scheduled for, Thursday January 3, 2019, at 12:00 PM, at the Theodore "Teddy" Hinson Waterfront Garage, 10 Delaware Avenue, Camden, New Jersey 08103.

All proposals must be submitted before or by Thursday January 10, 2019, at 10:00 AM

PUBLIC DISCLOSURE

Chapter 33 of the Public Laws of 1977 provides that no Corporation or Partnership shall be awarded and State, County, Municipal or School District contract for the performance of any work or the furnishing of any materials or supplies, unless prior to the receipt of the Bid or accompanying the Bid of said Corporation or Partnership there shall be submitted a Statement. The Statement shall set forth the names and addresses of all stockholders in the Corporation or Partnership who own ten percent {10%} or more of its stock of any class, or of all individual partners in the Corporation or Partnership who own ten percent {10%} or greater interest therein, failure to supply this information with your form proposal will be just cause to reject the Bid.

RESERVATIONS OF THE BOARD OF COMMISSIONERS

The Board of Commissioners will award the contract to the lowest responsive bidder, but reserve the right to reject any or all proposals and waive any immaterial informality as may be permitted by law.

EXCEPTIONS TO SPECIFICATIONS

If the Bidder's specifications for furnishing products, equipment, or services are in any respect not the equivalent of the detailed Authority specifications, this discrepancy must specifically be called to the attention of the Parking Authority in the Bidder's proposal.

The Parking Authority of the City of Camden shall review the exceptions, if any, as noted and the reasons for those exceptions and reserves the right to either reject or accept the exceptions and reasons as noted, if it proves to be in the best interest of The Parking Authority to do so.

QUANTITY, DELIVERY AND APPROPRIATION

Unless otherwise specified on the form (Exhibit D) of the proposal the quantities listed on the form (Exhibit D) of proposal are estimates only, and The Parking Authority does not guarantee to purchase any definite quantities.

TIME FOR MAKING AWARDS

The Parking Authority of the City of Camden shall award a contract or reject all Bids within sixty {60} days after receipt and opening of Bids or for such other period of time as may be specified elsewhere in the specifications.

PRICE QUOTATIONS

The price quoted on the attached form of proposal must remain firm for a period of sixty {60} days after receipt and opening of Bids or for such other period of time as may be specified elsewhere in the specifications.

METHOD OF SUBMITTING BIDS

Five (5) complete sets of your Bid package may be hand delivered or forwarded by United States Mail, prior to the Bid opening, addressed to

Mr. Willie Hunter, Executive Director
Parking Authority of the City of Camden
10 Delaware Avenue
Camden, NJ 08103

Bid statements must be received by the Parking Authority no later than 10:00 AM on Thursday January 10, 2019 and must be mailed or hand delivered. Bids statements forwarded by facsimile or e-mail will not be accepted. Bids statements received after this time will not be considered. The Parking Authority will not bear responsibility for delays in delivery for any reason.

To be responsive, Bids must provide all requested information, and must be in strict conformance with the instructions set forth herein. Bids and all related information must be bound, and signed and acknowledged by the Respondent.

AFFIRMATIVE ACTION REQUIREMENTS

The provisions of Chapter 127, Public Laws of 1975, are applicable to this contract. Bidders are required to familiarize and comply with the Statute.

Note Bid Supplement attached

TAXES

No federal, state or local taxes shall be included in any Bid prices or in invoice prices.

INSURANCE (when applicable)

The successful Bidder will be required to submit, at the time the contract is entered into, satisfactory evidence of Worker's Compensation insurance coverage, in accordance with the Statute in such case made and provided, to cover all employees engaged in the work required under these specifications.

The successful Bidder will be required to submit at the time the contract is entered into satisfactory evidence of commercial general liability insurance protection in a responsible company authorized to do business in the State of New Jersey, such coverage to be in limits of not less than \$1,000,000 pre-occurrence, \$2,000,000 general aggregate, \$2,000,000 product/complete operations aggregate and business automobile insurance with a limit not less than \$1,000,000 and combined single limit. The commercial general liability and business automobile insurance will include The Parking Authority of the City of Camden as additional insured.

The contractor shall comply with all requirements of the labor laws of the State of New Jersey, applicable to contracts on behalf of the City Government for Contracting. Alteration, for repair of any building or public work, including particularly, but without limitation of daily wages in the locality where the work is performed shall be paid to mechanics, workmen and laborers employed by contractors or subcontractors or by or in behalf of the State or any County, Municipality or Authority.

Equal employment shall be available without regard to race, creed, color or nationality.

BIDDER CHECKLIST

Each Bidder is reminded that every proposal must be submitted in a sealed envelope with the name of the Contract and Bidder affixed. Each Bid package must include the following documents:

- _____ 1. Bidder Information Statement

- _____ 2. Stockholder Disclosure Certification

- _____ 3. Non-Collusion Affidavit

- _____ 4. Mandatory EEO Language

- _____ 5. Affirmative Action Compliance Notice

- _____ 6. Americans with Disabilities Act

- _____ 6. Bid Proposal on The parking Authority Proposal form (Enclosed)

- _____ 7. New Jersey Business Registration Certificate

In the event that any of the above documentation is not properly completed and enclosed with the Bid package, said shall be rejected.

BIDDER INFORMATION STATEMENT

All vendors or suppliers of goods or services, submitting bids according to specifications contained herein, please fill in information as required.

SECTION A:

If Bidder is incorporated give the following information:

Corporate Name _____

State of Incorporation _____

Date of Incorporation _____

Address of Principal Office _____

Give the name and title of officer or agent in charge of said office, and with the appropriate authority, upon whom notice may be legally served.

Name: _____

Title: _____

Address: _____

Telephone Number: _____

Bidder sign here: _____

Name: _____

Title: _____

STOCKHOLDER DISCLOSURE CERTIFICATION

This Statement Shall Be Included with Bid Submission

Name of Business

I certify that the list below contains the names and home addresses of all stockholders holding 10% or more of the issued and outstanding stock of the undersigned.

OR

I certify that no one stockholder owns 10% or more of the issued and outstanding stock of the undersigned.

Check the box that represents the type of business organization:

Partnership

Corporation

Sole Proprietorship

Limited Partnership

Limited Liability Corporation

Limited Liability Partnership

Subchapter S Corporation

Sign and notarize the form below, and, if necessary, complete the stockholder list below.

Stockholders:

Name: _____

Name: _____

Home Address: _____

Home Address: _____

Name: _____

Name: _____

Home Address: _____

Home Address: _____

Name: _____

Name: _____

Home Address: _____

Home Address: _____

Subscribed and sworn before me this _____ day of

_____, 20____

(Notary Public)

(Affiant)

My Commission expires:

(Print name & title of affiant)
(Corporate Seal)

NON-COLLUSION AFFIDAVIT

State of New Jersey

County of _____

Tax ID: or SS:

I, _____ residing in _____

(Name of Affiant)

(Name of Municipality)

In the County of _____ and State of _____ of full age, being duly sworn according to law on my oath depose and say that:

I am _____ of the firm of _____

(Title or Position)

(Name of Firm)

_____ The Bidder making this Proposal for the Bid entitled _____, and that I executed the Proposal with full

authority (Title of Bid Proposal) to do so 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 above named project, and that all statements contained in said Proposal and this affidavit are true and correct, and made with full knowledge that the _____ relies upon the truth of the statements contained

(Name of Contracting Unit)

In said Proposal and in the statements contained in this affidavit in awarding the contract for the said project.

I further warrant 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

Subscribed and sworn to before me

This ____ Day of _____ 20____.

Signature

Notary Public of

Name (Type or print name of affiant under signature)

My Commission Expires

(Seal)

Address

MANDATORY EQUAL EMPLOYMENT OPPORTUNITY LANGUAGE

N.J.S. A. 10:5-31 et seq. (P.L. 1975, C. 127)

N.J.A.C. 17:27

GOODS, PROFESSIONAL SERVICE AND GENERAL SERVICE CONTRACTS

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

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 take affirmative action to ensure that such applicants are recruited and employed, 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 action shall include, but not be 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.

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.

The contractor or subcontractor, where applicable, will send to each labor union or representative or workers with which it has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the agency contracting officer advising the labor union or workers' representative of the contractor's commitments under this act and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

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.

The contractor or subcontractor agrees to make good faith efforts to employ minority and women workers consistent with the applicable county employment goals established in accordance with N.J.A.C. 17:27-5.2, or a binding determination of the applicable county employment goals determined by the Division, pursuant to N.J.A.C. 17:27-5 .2.

The contractor or subcontractor agrees to inform in writing its appropriate recruitment agencies including, but not limited to, employment agencies, placement bureaus, colleges, universities, labor unions, that it does not discriminate on the basis of age, 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.

The contractor or subcontractor agrees to revise any of its testing procedures, if necessary, to assure that all personnel 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 .

In conforming with the applicable 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.

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:

Letter of Federal Affirmative Action Plan Approval

Certificate of Employee Information Report

Employee Information Report Form AA302

The contractor and its subcontractors shall furnish such reports or other documents to the Division of Contract Compliance & EEO as may be requested by the office 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 Contract Compliance & EEO for conducting a compliance investigation pursuant to **Subchapter 10 of the Administrative Code at N.J.A.C. 17:27.**

MANDATORY AFFIRMATIVE ACTION 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:

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 take affirmative action to ensure that such applicants are recruited and employed, 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 action shall include, but not be 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.

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.

The contractor or subcontractor, where applicable, will send to each labor union or representative or workers with which it has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the agency contracting officer advising the labor union or workers' representative of the contractor's commitments under this act and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

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.

The contractor or subcontractor agrees to make good faith efforts to employ minority and women workers consistent with the applicable county employment goals determined by the Division, pursuant to N.J.A.C. 17:27-5.2.

The contractor or subcontractor agrees to inform in writing its appropriate recruitment agencies including, but not limited to, employment agencies, placement bureaus, colleges, universities, labor unions, that it does not discriminate on the basis of age, 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

The contractor or subcontractor agrees to revise any of its testing procedures, if necessary, to assure that all personnel 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.

In conforming with the applicable 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.

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:

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Print Name of Company/Firm

Print Name

Date

Signature

Note: This statement must be completed, signed and returned with your Bid submission to be complete.

AMERICANS WITH DISABILITIES ACT OF 1990
Equal Opportunity for Individuals with Disabilities

The contractor and the Parking Authority of the City of Camden, {hereafter "owner"} do hereby agree that the provisions of Title 11 of the Americans With Disabilities Act of 1990 (the "Act") (42 U.S.C. 5121 01 et seq .), which prohibits discrimination on the basis of disability by public entities in all services, programs, and activities provided or made available by public entities, and the rules and regulations promulgated pursuant there unto, are made a part of this contract . In providing any aid, benefit, or service on behalf of the owner pursuant to this contract, the contractor agrees that the performance shall be in strict compliance with the Act. In the event that the contractor, its agents, servants, employees, or subcontractors violate or are alleged to have violated the Act during the performance of this contract, the contractor shall defend the owner in any action or administrative proceeding commenced pursuant to this Act. The contractor shall indemnify, protect, and save harmless the owner, its agents, servants, and employees from and against any and all suits, claims, losses, demands, or damages, of whatever kind or nature arising out of or claimed to arise out of the alleged violation . The contractor shall, at its own expense, appear, defend, and pay any and all charges for legal services and any and all costs and other expenses arising from such action or administrative proceeding or incurred in connection therewith. In any and all complaints brought pursuant to the owner's grievance procedure, the contractor agrees to abide by any decision of the owner which is rendered pursuant to said grievance procedure. If any action or administrative proceeding results in an award of damages against the owner, or if the owner incurs any expense to cure a violation of the ADA which has been brought pursuant to its grievance procedure, the contractor shall satisfy and discharge the same at its own expense.


The owner shall, as soon as practicable after a claim has been made against it, give written notice thereof to the contractor along with full and complete particulars of the claim. If any action or administrative proceeding is brought against the owner or any of its agents, servants, and employees , the owner shall expeditiously forward or have forwarded to the contractor every demand, complaint, notice, summons, pleading, or other process received by the owner or its representatives.

It is expressly agreed and understood that any approval by the owner of the services provided by the contractor pursuant to this contract will not relieve the contractor of the obligation to comply with the Act and to defend, indemnify, protect, and save harmless the owner pursuant to this paragraph.

It is further agreed and understood that the owner assumes no obligation to indemnify or save harmless the contractor, its agents, servants, employees and subcontractors for any claim which may arise out of their performance of this Agreement. Furthermore, the contractor expressly understand and agrees that the provisions of this indemnification clause shall in no way limit the contractor's obligations assumed in this Agreement, nor shall they be construed to relieve the contractor from any liability, nor preclude the owner from taking any other actions available to it under any other provisions of the Agreement or otherwise at law.

New Jersey Business Registration Certificate

STATE OF NEW JERSEY BUSINESS REGISTRATION CERTIFICATE FOR STATE AGENCY AND CASINO SERVICE CONTRACTORS		<small>DEPARTMENT OF TREASURY DIVISION OF REVENUE PO BOX 202 TRENTON, NJ 08646-0202</small>
TAXPAYER NAME:	TRADE NAME:	
TAX REGISTRATION TEST ACCOUNT	CLIENT REGISTRATION	
TAXPAYER IDENTIFICATION#:	SEQUENCE NUMBER:	
970-097-392/500	0107510	
ADDRESS:	ISSUANCE DATE:	
847 ROEBLING AVE TRENTON NJ 08611	07/14/04	
EFFECTIVE DATE:	<i>J.P. S. Treally</i> <small>Act. Director</small>	
01/01/04		
FORM BRC(07-01)	<small>This Certificate is not assignable or transferable. It must be conspicuously displayed at above address.</small>	

	STATE OF NEW JERSEY BUSINESS REGISTRATION CERTIFICATE
Taxpayer Name:	TAX REG TEST ACCOUNT
Trade Name:	
Address:	847 ROEBLING AVE TRENTON, NJ 08611
Certificate Number:	1093907
Date of Issuance:	October 14, 2004
For Office Use Only:	
20041014112813533	



The Parking Authority of the City of Camden is seeking proposals for Snow/Ice Removal and De-icing Services for the Parking Areas and Surrounding Sidewalks as follows:

1. Term: The term of this contract shall be January 10, 2019 through April 30, 2019
2. Scope of Work: The Contractor agrees to provide snow/ice removal and de-icing services as per Exhibits attached hereto.
3. Materials and Supplies: The Contractor will furnish all materials and supplies as Necessary to perform its duties as specified in Exhibits attached hereto.
4. Contractor's Equipment: The Contractor shall furnish all labor, equipment and any Subcontractors reasonably necessary to perform its duties as specified in Exhibits attached hereto.
5. Insurance: Contractor shall maintain general liability, property Damage and worker's compensation insurance. Certificate of Insurance shall be furnished upon acceptance of this agreement.
6. Indemnification : Contractor agrees to indemnify and hold harmless the Parking Authority of the City of Camden against any loss, liability, damage, or claims due to property damage, or personal injury resulting from Contractor's failure to fully perform the snow/ice removal and de-icing services as per Exhibits attached hereto.
7. Optional Services: The Contractor agrees to provide snow/ice and de-icing Services of the Parking Areas and Surrounding Sidewalks under two (2") inches upon authorization from the Parking Authority, provided however, that reasonable notice is given to the Contractor.

EXHIBIT A

General Specifications for Snow/Ice Removal & De-Icing Services For the Parking Areas and Surrounding Sidewalks.

These specifications have the following objectives:

- I. To explain clearly the services to be furnished and those to be executed.
- II. To include these specifications with the contract and by reference make them part of The contract.
- III. To spell out additional services requested by the Parking Authority, if any.
 - a. Snow/Ice clearing of the Parking Areas and their Surrounding Sidewalks shall commence once two inches (2") of snow/ice has accumulated, with notification from the Parking Authority. Contractor agrees to contact the Parking Authority representative listed below if less than two inches (2") to make the determination of snow/ice removal or de-icing services.

Willie Hunter, Executive Director
Phone: 856-757-9300
 - b. For clearing specified sidewalks, the Contractor reserves the right to use whatever device is appropriate (i.e., snow blower, blades, snow shovels) to perform tasks.
 - c. For de-icing of the Parking Areas, the Contractor may apply salt to aid in de-icing when conditions dictate. Salting may occur before, during or after a storm event. For even application, salt should be applied by a mechanical spreader.
 - d. For de-icing of the sidewalks, the Contractor may apply calcium chloride to aid in de-icing when conditions dictate. An application of calcium chloride may occur before, during or after a storm event. Due to the more restricted area of the sidewalks, calcium chloride may be applied by either hand or a walk behind spreader.
 - e. The sites to be included in the proposal for snow/ice removal and de-icing are shown on Exhibit C and Exhibit C-1 attached hereto. Please note that the Parking Authority reserves the right to exclude lot 1 from snow/ice removal as the lot is only used during the BB&T Pavilion events which are minimal in the winter months. If these lot is to be included for snow/ice removal during a particular storm, the Contractor will be notified prior to starting the job.
 - f. Space will be provided by the Parking Authority of the City of Camden to the Contractor for equipment to be moved on site for stand-by as this will aid the Contractor in providing quick response time at each site.

g. Attention must be paid to keep dumpsters, walkways, handicap cutouts, fire hydrants, drive -in ramps and loading docks clear of snow/ice if applicable.

h. Contractor is responsible for marking out any islands, curb cuts, parking bumpers or any other protruding area located within the parking site prior to snow removal to avoid any damage to these areas.

i. Every reasonable effort must be made to out load snow/ice on the low side of the site to prevent melt off from freezing on cleared parking areas or sidewalks.

j. Every reasonable effort must be made to open all streets, sidewalks and parking areas by 7:00 AM to provide opening of business. There are instances, however, that this policy will not be able to be carried out due to the late completion or continuation of a storm.

k. Fees will be charged on a "Per Inch" basis. Fees to clear snow/ice from parking areas and their surrounding specific sidewalks are to be included. The Fees (to clear and de-ice) need to be broken out by individual sites using the fee schedule, Exhibit D attached hereto.

l. Depth of snow/ice will be determined by the U.S. Weather Service. Reported depths from areas near the snow/ice site will be used. In some cases, depth will be interpolated between two known areas to insure more accuracy in determining depth of snow.

m. If the Parking Authority is not satisfied with any of the services provided by the Contractor, the Parking Authority may terminate the agreement at any time during the term of the contract.

Exhibit B

Snow Plowing and Snow Removal

Technical Specifications

1 Scope of Work

The plowing of the Parking Authority (PA) parking lots set out in Exhibit C, followed by the immediate removal of all snow from the specified lots, when requested by the PA. The Contractor shall provide all personnel, equipment, and materials required to provide these services as set out herein and for any additional or extra work that may be required. All services shall be provided 24 hours a day, seven days a week, including statutory holidays for the term of the Contract.

2 Work to Be Performed

1. Clearing and removal of snow and ice from the Premise.
2. Clearing of snow and ice to provide unobstructed access to fire hydrants, and entrance gates located along the areas to be cleared of snow or ice. All parking facility signage is to be kept free of obstructions due to snow or ice removal operations.
3. The annual date of commencement may, in the event of an early or late winter storm, be advanced or the completion date extended for any year during the Contract as requested by the PA.

3 Method of Execution

1. The Contractor shall start snow clearing operations for PA parking facilities when snow fall has reached 2.0" inches. The contractor shall start snow operations promptly and carry them out in a continuous operation utilizing all dedicated equipment until the work is completed following each snowfall. On all lots and driveways included under the Contract, snow shall be cleaned and removed so that the accumulation shall not promote unsafe driving conditions. Upon completion of the snowfall, the snow shall be promptly cleaned and removed to the bare pavement level in accordance with the priorities established by the PA.
2. Contractor shall be available and report to the PA's administrative office, ready to work, at a designated time with 8 hours advance notice provided by the PA's staff.
3. Contractor shall be available and report to work to the PA's administrative office, ready to work, within 2 hours of a designated time, when given less than 8 hours advance notice provided by the PA's staff.
4. The Contractor shall give special consideration to the maintenance of dangerous areas and narrow access/exit ways, curves, etc. to prevent accidents.
5. Immediately after the end of a snowfall the Contractor shall complete the snow clearing to the pavement, including driveways, access/exit roads, intersections, etc. to ensure normal safe traffic and pedestrian conditions

6. The Contractor shall prioritize the clearing of snow in the following order:
 - Driveways/Entrance & Exits to parking facilities
 - Drive Aisles
 - Parking Stalls
 - Parking Meters & Equipment
 - Drainage Basins
 - Signage

7. All plowing equipment shall be used until pavements are free of snow, unless otherwise directed. Once plowing has started, the pavement at any location shall be salted immediately afterward at that location. Clean up and push back of snow shall be done all in one operation. Under no circumstances should any snow be ploughed onto sidewalks.

8. All snow plowing will be complete within 8 hours of the end of any snowfall.

9. Snow piling is to be performed in such a manner so as not to occupy or block driveways or pathways. PA staff shall designate the appropriate on-site areas for snow piling.

10. In the event of a continuing snowfall, the Contractor shall clear and remove snow so that the accumulation shall at no time exceed 3.5 inches during a snowfall, the Contractor shall clear to the base pavement to ensure at all times normal vehicular traffic conditions, by plowing and banking of the snow alongside the curb. No portion of the Premises shall be permitted to become unusable or impassable except as directed by the PA.

11. In the event of drifting snow (including blowing snow with no actual precipitation) that impedes the flow of traffic, the Contractor shall clear and remove snow immediately from the Premise's driveways, access/exit roads and drive aisles so as to ensure normal traffic conditions to vehicles and pedestrians. Snow shall be permitted to accumulate only in those areas as designated by the PA.

12. When directed by PA staff, snow removal will begin within 24 hours after plowing on all Premises so owned by the Authority. The Contractor shall load by mechanical means all banked up snow and transport to the dumping area provided by the Contractor or the PA. No snow shall be left on the pavement so as to create the formation of hardened snow or icy conditions.

13. The Contractor shall be available when requested by the PA to provide knowledgeable representation in, property damage, slip and fall claims, settlements or other causes of actions at law, resulting from the snow removal activities of the Contractor (e.g. Examination for Discovery, Deposition, Interrogatories and Testimony at Trial).

14. Parking stall measurements are as follows, however, dimensions may vary slightly from lot to lot:

Length	18-20 feet
Width	8.5-9.5 feet
Driveway width	20-24 feet

The PA also reserves the right to change the scope of the work to any of the locations listed in the Request for Proposal. Billing will be based on the work performed, and at the prices offered in the Price Schedule.

4. **Equipment Specifications**

1. The Contractor shall ensure that it at all times has and maintains sufficient equipment (trucks, plows, pay loaders, etc.) to allow it to promptly perform the Work of the Contract and ensure normal traffic conditions on the Premises.
2. All the equipment used by the Contractor for the performance of the Work shall be maintained in good working order and mechanical condition. All equipment used for snow plowing shall include head and tail lights, a flasher and or rotating beacon as well as working windshield wipers, window defroster and heater. All plowing equipment shall have a set of skid chains available to be mounted onto the power wheels when conditions require their use or as directed by the PA. All equipment shall be subject to the approval of the Director of the PA. In the event of a dispute concerning the condition of equipment, the opinion of the Director shall be final and binding. Unsatisfactory equipment shall be immediately repaired or replaced as required by the Director.
3. The Contractor shall submit and maintain a list of the minimum required equipment to be used in performing the Work. Complete equipment specifications including: quantity, year, make, model, class, GVW, and body capacity are to be submitted, for the approval of the Director.

5. **Contractor's Workforce:**

1. The Contractor shall ensure that it at all times Contractor has and maintains sufficient personnel to allow it to promptly perform the Work of the Contract.
2. All equipment operators shall have a valid State of New Jersey driver's license commensurate with the class of vehicle operated.
3. The Contractor shall ensure that all equipment operators have a minimum operating experience on snow plowing and removal equipment of one year.
4. The Contractor's staff shall be able to speak and understand the English language intelligently and be able to take verbal direction from PA staff.

6. **Care of Traffic**

All equipment must be equipped and operated in accordance with the requirements of the State of New Jersey Departments of Transportation Highways, and care and courtesy must be observed by the Contractor's crews at Motor Vehicle and all times and under all circumstances. The Contractor at its own expense shall provide signs and other devices concerned with plowing operations for the care and convenience of traffic.

7. **Inspection of Premises**

The Contractor shall inspect all Premises covered by the Contract and mark all protruding maintenance holes, catch basins, culvert ends, curbing ends, light standards, guide rails, end

treatments, steel plates, etc. to ensure that no damage is caused to installations or equipment during plowing operations. The Contractor, in each year of the contract prior to November 1, shall inspect each parking lot, prepare a list of deficiencies, i.e. broken fences, sign post, walls, etc. and submit the list to the Director prior to December 1. This list will form the basis for the determination of damages as set out in Section 11- Damage to Facilities.

8. Communication and Co-ordination:

1. The Contractor shall notify all Contractor's snowplow operators when a major storm warning {3" or greater) has been broadcast by Camden County Road Department or the Delaware Valley weather forecast system and place Contractor's operators on standby.
2. The Contractor shall have available 24 hours per day, 7 days per week, including statutory holidays, a contact person that will receive direction from and provide information to the PA during a snowstorm.

9. Snow Dumps:

The Contractor shall, at no cost to the PA, provide a "snow dump" with a capacity sufficient to meet the anticipated snow removal demand of the Parking Authority's facilities. The Contractor may be requested to provide details of the off-property site to which snow may be dumped, to ensure that it is lawful and performed in an environmentally friendly manner.

10. Utilization of Parking Lots:

1. The contractor is hereby advised that the PA's parking facilities are in use 24 hours a day, 7 days per week. While the Contractor is expected, whenever, possible, to perform its responsibilities under this Contract while the parking lots are vacant or during periods of lower occupancy (i.e. at night), operations under this Contract shall be performed as and when weather conditions dictate, irrespective of the number of vehicles occupying or moving in or out of the parking facilities.
2. After any snowfall, it may be necessary for the Contractor to continue work in vacant spots as they become available in a parking facility or to return at frequent intervals.
3. The Contractor shall investigate the condition of each parking lot very carefully prior to tendering a bid to enter into this Contract. The Authority shall not be responsible for any claims by the Contractor due to obstructions, delays or other hindrances existing on the Premises.

11. Damage to Facilities:

1. The Contractor shall be responsible for all damage caused to fences, barrier curbs, booths, pay-stations, gate arms or other fixtures during the process of snow and ice clearing operations.
2. The Contractor shall familiarize itself with the type and nature of above ground utilities and street furniture in the vicinity of and within the Parking Authority's parking facilities and provide care when removing snow from and working around these structures. If damage occurs to utility plant and street furniture, the Contractor shall notify the PA immediately for an assessment of damage and repair of utility plant, if required. These structures include, but are not restricted to, junction boxes, hydro poles, street lights, fire hydrants, bus shelters and benches. The Contractor will also make the PA aware of all incidents in this regard.

3. An assessment of the cost of repair of damage will be determined by the City and/or the Parking Authority as the case may be, and its decision shall be final and binding on the Contractor. This assessment will be forwarded to the Contractor that shall pay the repair cost within the time period requested. Upon failure to pay, funds will be deducted from the payment to be made to the Contractor under this Contract, including any late charges and assessed City costs.
4. At the discretion of the PA, in the case of its facilities, the Contractor will be required to repair said damages as soon as possible, or the PA may elect to repair said damages and charge-back the repairs to the Contractor. The Contractor shall have in force general liability insurance with limits of no less than one million dollars.
4. Contractor is encouraged to perform mark outs of the facilities with poles and orange flags to identify driveways, curbs, catch basins, fire hydrants, parking equipment and other relevant features of the parking facilities in advance of snow season.

12. Snow Removal Loading and Hauling Operations:

The Contractor shall supply all labor, material and equipment to complete snow removal and hauling operations. Extra equipment and labor, when necessary, shall be supplied within 24 hours of a request from the PA at any time during the term of the Contract.

13. Utilization and Record Keeping:

1. The Contractor must track and keep detailed service records for all work performed under this contract to support work performed and potential claims. The reports shall include calls by the PA including, name, location, time, date and transcript of call. The Contractor shall submit via fax and mail within 48 hours following the completion of a snow removal operation a report including but not exclusive to a listing of work performed, outlining: lot, date, time arrived and work completed, equipment type, service provided, site inspection and weather conditions, including number of inches of snow fall.
2. The Contractor shall keep and submit to the PA a record of all equipment usage within 24 hours of completion of work after every snow or ice removal operation.
3. No payment will be made for the time involved in traveling to and from the contractor's yard or garage to the PA's parking facilities. Utilization time will commence when the contractors snow plowing or removal equipment with an operator arrives at PA facilities ready to work.
4. The PA will not pay contractor for equipment down time or while repairs are being performed to the contractors equipment.
5. The PA will only pay for "working supervisors". That is supervisors that are actively plowing or transporting snow, salting and sanding, or are otherwise operating a piece of snow removal equipment.
6. Contractor shall report to the PA administrative office at the start and the finish of all snow removal operations for Contractor's personnel to punch in and out, and for the PA to verify and sign *off* on the paper work for the services and equipment provided by the Contractor for snow removal.

7. A STOP WORK ORDER may be issued by the PA at any time that contractor is on the job, and the PA will only be responsible to pay for the time and materials utilized until the time the "STOP WORK ORDER" was given.

14. Term of Contract

This Request for Proposal requests pricing for service commencing January 10, 2019 and ending April 30, 2019.

15. Authority's Services

The PA shall provide the following available information and services to the Contractor as required:

- a) Access to the property; and
- b) Administrative direction and review from time to time during the term of the Contract.

Any services provided by the Contractor from information supplied by the PA, will be undertaken on the basis that it is the best information available, however, the Contractor shall immediately notify the PA in writing of any condition or information known or discovered by the Contractor which conflicts with the information supplied by the PA. In any event, the Contractor shall not be liable for any loss or damage arising from any inaccuracy in such information. This exclusive does not alter or modify in any manner the Contractor's liability for negligence.

16. Insurance

1. Workman's Compensation Insurance

The contractor shall take out and maintain during the life of the contract workmen's compensation insurance for all his employees working under this contract, and in any case when work is sublet, the contractor shall require the subcontractor to similarly provide workmen's compensation insurance for all the employees unless such employees are covered by the protection afforded by the contractor.

2. Public Liability Insurance

The contractor shall take out and maintain during the life of the contract such public liability (Bodily Injury, and Property Damage) insurance shall protect him or her and any sub-contractor performing work covered by the contract, from claims for damages for personal injury, including accidental death. As from claims for property damage, which may arise from operations under the contract, whether such operations be by himself, by any subcontractor, or any one directly or indirectly employed by either of them. The contractor shall maintain minimum coverage of the types and in the amounts herein specified either by furnishing insurance policies naming the Parking Authority as the insured or by having a certificate of insurance executed by the insurance company and delivered to the Chief Operating Officer at the Parking Authority's administrative offices.

The minimum amount of such insurance shall be as follows:

Bodily Injury Liability		Property Damage Liability	
Each Person	\$1,000,000.00	Each Accident	\$1,000,000.00
Each Accident	\$3,000,000.00		

Such insurance shall remain in full force and effective during the term of the contract.

Insurance may not be changed or canceled unless the insured and the PA are notified in writing, not less than ten (10) business days prior to such changes or cancellations. If any part of the contractor is responsible for the part sublet, being adequately covered by the insurance herein above described.

3. Proof of Insurances

The contractor shall furnish prior to the commencement of the contract a certificate of insurance naming The Parking Authority of the City of Camden as an additional insurance.

4. Indemnity Against All Suits

The contractor further agrees that he or she will indemnify and save harmless the Parking Authority, from suits or actions of every nature and description brought against it for or on account of any injuries or damages received or sustained by any party or parties. By or from any the acts or anything of said contractor, his or her servants, or agents in the prosecution of the work under contract.

17. Miscellaneous

1. Expenses for the operation, care, repair and replacement of contractor 's vehicles or equipment, as well as labor cost, insurances and other expenses, including but not limited to meals, gas, motor oil, etc., are to be borne by the contractor and are included in the hourly fee bid by contractor for the use of each vehicle or snow removal equipment.
2. In the event of a dispute regarding the depth of snow the PA and the contractor accept the depth of snow as determined by the US Weather Service.
3. Bidders are required to comply with the requirements of N.J.S.A. 10:5 -31 et seq. and N.J.A.C. 17 :27

EXHIBIT C

Parking Locations for Snow/Ice Removal

Lots Open Monday through Friday from 7:00 AM to 5:00 PM

- Lot 6 Third St. & Mickle Blvd. 250 spaces Asphalt & Stone surface
- Lot 13 Delaware Ave. & Cooper St. 225 spaces /sidewalks Asphalt surface
- Lot 45 Mickle Blvd. & West St. 150 spaces Asphalt surface
- Lot 48 Federal St. & Fifth St. 25 spaces Asphalt & Stone surface
- Lot 49 Federal St. & Fifth St. 55 spaces Stone surface
- Lot 50 Federal St. & Fifth St. 85 spaces Asphalt & Stone surface
- Theodore Teddy Waterfront Garage: 10th Delaware Ave, Camden NJ.(SEE GARAGE INSTRUCTIONS)
- Walter Rand Garage: located at Transportation Center, Doctor Martin Luther King Blvd.(SEE GARAGE INTSTRUCTIONS.)
- Block N: Stone Lot located at, 1 Broadway Camden NJ Clean sidewalks

Lots Open Monday through Sunday (Every Day) from 9:00 AM to 6:00 PM

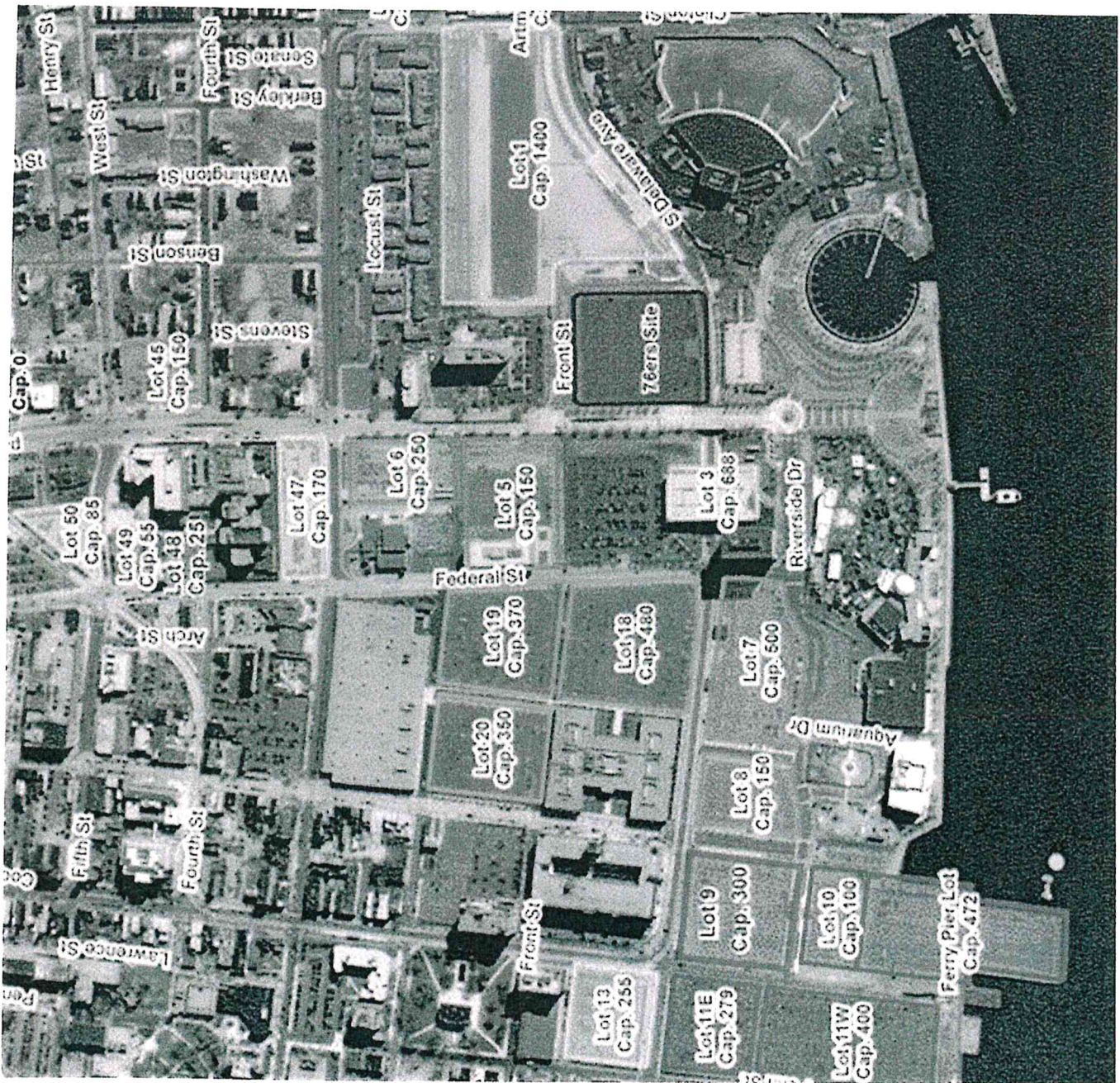
- Lot 7 Riverside Dr. & Federal St. 424 spaces /sidewalks Asphalt surface
- Lot 8 Riverside Dr. & Arch St. 150 spaces /sidewalks Asphalt surface

- Lot 10 Aquarium loop Drive and Riverside. 100 spaces/ sidewalk Asphalt surface
- Lot 11 Aquarium loop Drive and Riverside. 66 spaces/ sidewalk Asphalt surface

Lots Open Only during BB&T Pavilion - Hours vary (Usually evenings)

- Lot 1 Delaware Ave.& Clinton St. 1,400 spaces Asphalt surface

Please see Exhibit C-1 for a map of locations



The Parking Authority of the City of Camden
 2018-2019 Snow/Ice Removal and De-Icing
 Exhibit D - Bid Form

Contractor Name: _____

Total Depth of Snow/Ice Accumulation	Service	Snow Removal and De-Icing Fees per Location (\$)															
		Lot #1	Lot #6	Lot#6 Sidewalk	Lot #7	Lot#7 Sidewalk	Lot #8	Lot #8 Sidewalk	Lot #13	Lot #13 Sidewalk	Lot #45	Lot#45 Sidewalk	Lot #48	Lot#48 Sidewalk	Lot# 49	Lot #49 Sidewalk	Lot #50 lot 50 sidewalk
2	Snow Removal De-Icing																
3	Snow Removal De-Icing																
4	Snow Removal De-Icing																
5	Snow Removal De-Icing																
6	Snow Removal De-Icing																
7	Snow Removal De-Icing																
8	Snow Removal De-Icing																
9	Snow Removal De-Icing																
10	Snow Removal De-Icing																
11	Snow Removal De-Icing																
12	Snow Removal De-Icing																
1 inch increment above 12 inches	Snow Removal De-Icing																

Fee for hauling and dumping in Lot 1 \$ - per cubic yard of snow/ice
 Fee for hauling and dumping at a Contractor provided snow dump - \$ - per cubic yard of snow/ice
 Snow and Ice Hauling/Dumping Fees (fee for hauling and lawfully dumping in an environmentally friendly manner)

TO
DATE

Parking Authority of the City of Camden
September 5, 2018

PARKING GARAGE SNOW REMOVAL AND ICE CONTROL

1. Winterization

Winterize the facility before cold weather. After performing a wash-down, the fire protection system and hose-bib system must be winterized based on the operation and maintenance manual to prevent ice buildup in and bursting of the pipes. Flush drainage and underground piping to check for blockages.

2. Snow Plowing and Ice Control

Snow removal may be required due to parking demands as well as weather conditions that create significant buildup of heavy saturated snow. There are three main options regarding snow removal. These include the use of a portable snow melt machine, hauling the snow out of the garage or dumping the snow at a properly designed snow dump zone. A structural engineer should be consulted to assure that the selected snow removal option does not exceed the capacity of the structure.

Snow is normally plowed downhill using a vehicle with a gross vehicle weight rating not more than 8,000 pounds. The snowplow blade should be modified with a heavy rubber or polyurethane cutting edge attached to the bottom and with tires designed to keep the blade from contacting the concrete floor surface. Keep the blade one-half inch above the floor surface to avoid damage to concrete, expansion joint systems, joint sealants and traffic topping systems. Plowing should be done away from joints, not across them. The snow plow operator must be familiar with the structure and the elements that are susceptible to damage. Permanent or temporary signs are recommended at critical locations, such as the expansion joints, to notify the snow plow operation to take caution.

Snow dump zones are the most common snow removal option. Snow is plowed to specific locations within the facility that have been designed to pile snow adjacent to the snow dump zone. A "Bobcat" or industrial snow blower can be used to throw/dump the snow over the side. Take care with a "Bobcat" or snow blower to avoid damage to concrete panels, connection hardware and expansion joints. Dumping the snow over the side of the garage is acceptable if it is done safely and provisions are made to prevent snow from falling into the garage. The dumping zone should be fenced off and able to drain freely when the snow melts.

DO NOT pile snow within the garage unless the structure has been designed for this type of loading. If snow is piled and then becomes saturated, the load capacity of the structure can be exceeded, creating a potential structural failure or collapse. The top tiers of parking structures, in the Washington to NYC region, are typically designed for a combination of live loads and snow loads that sum to 65 to 75 pounds per square foot. Therefore, if cars are removed from the top tier, the structure can withstand the following snow loading:

- o Over 10 feet of light dry snow with a snow to water ratio of 10:1 or greater
- o 2.5 feet (30 inches) of compacted snow that has reached the maximum saturation prior to melting (i.e. a heavy wet snow followed by heavy rain that further compacts the snow)

- o 1.2 feet (14.5 inches) of heavily compacted snow or solid ice (snow that is piled using a snow plow is considered "heavily compacted snow")

Off-peak snow removal operation may be required to deal with heavy snowfalls effectively and safely.

Snow can also be quickly brushed away with a rotary broom mounted in front of a utility vehicle. Clearing snow with a rotary broom is typically efficient only for light snowfalls. Steel or other metallic bristles on rotary brooms can damage traffic topping and must not be used under any circumstances.

Studded snow tires and tire chains cause damage to concrete and traffic topping and should be prohibited.

The slope of the floors is designed to drain surface water as quickly as possible. Certain areas, primarily entrance/exit lanes and the top level, are particularly vulnerable to icing when water drains from sun-warmed surfaces into shaded areas. Be aware of these areas and control icing as it occurs.

All deicing compounds, including road salt, do not work in extremely cold temperatures. Ice buildup can be controlled by using hot sand or a mixture of sand and approved deicing agents. Do not apply deicing chemicals containing chloride directly to the concrete unless extreme ice conditions exist. Drain systems should be protected against runoff-related sand accumulation during ice control operations. Use temporary burlap or straw filters to prevent drain clogging and possible damage to drain systems. The use of sand requires additional sweeping and cleaning maintenance.

Minimize the use of deicing chemicals during the first two years of concrete curing. Properly designed, air-entrained and cured concrete is required to provide a durable concrete structural system, but concrete curing is an ongoing process.

Most common chemical deicers can have major chemical and physical effects on reinforced concrete systems. Several deicers are listed below with a general description of the common effects on materials typically found in and around a parking facility. Although a deicer may affect one type of material (such as metals and steel reinforcing, or steel connections), and have little effect on other materials (such as concrete), the effect on the single material may progressively affect the entire reinforced concrete system. When such deicers, in solution with water, reach steel via cracks, serious deterioration of structural components can result.

The following summarizes common deicing agents:

- o *Sodium Chloride* (halite, table salt, or rock salt) has little chemical effect on concrete, but will damage lawns and shrubs. It promotes metal corrosion. Do Not Use.
- o *Calcium Chloride*, a major active component of many proprietary deicers, has little chemical effect on concrete, lawns, and shrubs, but it causes corrosion of metal. It is particularly hazardous to prestressing steel. Do Not Use.
- o *Calcium Magnesium Acetate* (CMA) is available as "CMA", manufactured by Cryotech. Solid CMA pellets help break up the bond between the ice and the driving surface. It acts similarly to salt, but is slower-acting - typically 10 to 15 minutes. CMA has no known adverse effects on concrete or embedded reinforcement. CMA will not damage lawns or shrubs.
- o *Potassium Acetate* is available as "CF? ®", manufactured by Cryotech. It is a non-chloride based clear liquid deicer that is effective at -25°F. Potassium Acetate is best used as an anti-icer, sprayed on the pavement before precipitation starts but can also be used as a deicer. It is very effective as a prewetting agent for solid deicers such as CMA.

- o Sodium Acetate is available as "NAAC", manufactured by Cryotech. NAAC is a biodegradable & low toxicity material which contains no chlorides. This product effective at - 0°F and approved for use at airports and commercial facilities.
- o *Ammonium Nitrate or Ammonium Sulfate* is beneficial to most vegetation, but may lead to complete destruction of concrete because of direct chemical attack on concrete reinforcement. Do Not Use.
- o *Prilled Urea* does not damage concrete, lawns, shrubs or metal. Prilled urea does not behave the same as common road salts. Our reports are as follows:
 - Attracts moisture or stays "mushy" longer than salted areas.
 - Takes longer (than salt) to penetrate ice.
 - Will work best at breaking up ice with solar action. Tends to have little effect after dark or at temperatures below 24° F.
 - Use urea to break up ice and then shovel.
- o *Ethylene Glycol*, or a solution of ethylene glycol and urea, is used by many airports for ice control on runways and planes. While effective to -40° F and non-damaging, it is considerably more expensive than urea.
- o *Sand*, or a mixture of sand and deicers, may be used to eliminate or reduce the use of deicers.

Recommended deicing measures, in order of decreasing preference, are:

- 1) Clean, plow, scrape off ice and snow. Use no deicing agents.
- 2) Use Calcium Magnesium Acetate (CMA) when concrete is less than a year old. Apply CMA at the application rate recommended by the manufacturer.
- 3) Use Sodium Acetate (NAAC) when concrete is more than a year old or is protected by a traffic membrane. Apply NAAC at the application rate recommended by the manufacturer.
- 4) For increased effectiveness, spray apply liquid Potassium Acetate (CF7) before precipitation starts, followed by solid deicers (CMA or NAAC) after precipitation starts.
- 5) Use sand to increase traction. When washing down, place burlap or straw filters over floor drains to keep sand out of drainage systems.
- 6) Never use Calcium Chloride, Sodium Chloride, Ammonium Nitrate or Ammonium Sulfate.

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0 0.25 0.5 miles

11 (mm)

PHC

W.C. Cooperated

PHC Development

Camden Parking Inventory Map

2018