FOI # 13541

Duffy, Daniel

From: Samuel Blaustein [sblaustein@dunnington.com]
Sent: Wednesday, October 24, 2012 4:59 PM
To: Duffy, Daniel
Subject: FOI Request

Good afternoon:

The following requests are submitted pursuant to the Port Authority of New York and New Jersey's ("PANYNJ") FOI policy that became effective on or about April 15, 2012. http://www.panynj.gov/corporate-information/pdf/foi-code.pdf

The following documents are sought.

- PANYNJ policy respecting prime contractors' requirements, if any, to maintain bid documents post contract award.
- PANYNJ policy respecting prime contractors' requirements, if any, to maintain documents during and post contract performance including but not limited to change orders submitted on behalf of subcontractors.
- Mr. Wallace Caban's personnel file.
- Ms. Jessamma Vatakencherry's personnel file.
- PANYNJ final or most recent assessment/report concerning the project known as Rehabilitation of the Weather Instrument Panel (WIP) Circuit Contract No. SWF 164.010
- The papers accompanying the proposal submitted by Nagori Contracting Corp. in connection with the contract known as Rehabilitation of the Weather Instrument Panel (WIP) Circuit Contract No. SWF 164.010 including but not limited to its calculation concerning the Estimated Total for Classified Work.

- The "detailed list of all anticipated material suppliers and subcontractors" submitted by Nagori Contracting Corp. in connection with the contract known as Rehabilitation of the Weather Instrument Panel (WIP) Circuit Contract No. SWF 164.010
- The list of DBE firms submitted by Nagori Contracting Corp. in connection with the project known as Rehabilitation of the Weather Instrument Panel (WIP) Circuit Contract No. SWF 164.010 .
- Documents concerning delay or other damages assessed by PANYNJ in connection with the contract known as Rehabilitation of the Weather Instrument Panel (WIP) Circuit Contract No. SWF 164.010
- Documents pertaining to whether the concrete installed with respect to the project known as Rehabilitation of the Weather Instrument Panel (WIP) Circuit Contract No. SWF 164.010; specifically
    - The specifications for the concrete required by Contract No. SWF 164.010;
    - The name of the concrete supplier or suppliers used on Contract No. SWF 164.010;
    - The results of any testing respecting the concrete installed in connection with Contract No. SWF 164.010.
- Any PANYNJ memoranda or other documentation concerning Reliable Enterprises, Inc. work on the project known as Rehabilitation of the Weather Instrument Panel (WIP) Circuit Contract No. SWF 164.010.
- Submittals from Nagori Contracting Corporation to PANYNJ concerning Reliable Enterprises, Inc. in connection with the Rehabilitation of the Weather Instrument Panel (WIP) Circuit Contract No. SWF 164.010
- Documentation submitted to PANYNJ to establish that workers on the project known as Rehabilitation of the Weather

Instrument Panel (WIP) Circuit Contract No. SWF 164.010 were paid the prevailing rate of pay.

- Any settlement agreements or other agreements entered into between the PANYNJ and Nagori Contracting Corporation or its principal, Ishaque Nagori in connection with any PANYNJ project.
- Documentation concerning fines or other financial penalties assessed by PANYNJ against Nagori Contracting Corporation or its principal, Ishaque Nagori in connection with any PANYNJ project.
- Any other documentation pertaining to adverse action taken by PANYNJ against Nagori Contracting Corporation or its principal, Ishaque Nagori in connection with any PANYNJ project.
- Any complaints received by PANYNJ concerning Nagori Contracting Corp.

Thank you for your attention to this matter. If you have any questions or require any clarification, please let me know.

Samuel Blaustein
Associate
DUNNINGTON, BARTHOLOW & MILLER LLP
1359 Broadway, Suite 600
New York, New York 10018
Telephone: 212-682-8811
Facsimile: 212-661-7769
Email: sblaustein@dunnington.com

THE PORT AUTHORITY OF NY & NJ

FOI Administrator

March 11, 2013

Mr. Samuel Blaustein
Dunnington, Bartholow & Miller LLP
1359 Broadway, Suite 600
New York, NY 10018

Re: Freedom of Information Reference No. 13541

Dear Mr. Blaustein:

This is a response to your October 24, 2012 request, which has been processed under the Port Authority's Freedom of Information Code (the "Code") for copies of various records related to the Rehabilitation of the Weather Instrument Panel (WIP) Circuit Contract No. SWF 164.010.

Material responsive to your request and available under the Code can be found on the Port Authority's website at http://www.panynj.gov/corporate-information/foi/13541-C.pdf. Paper copies of the available records are available upon request.

Material responsive to items 3 and 4 of your request is exempt from disclosure pursuant to exemption (1) of the Code.

Certain other material responsive to your request, including tax identification numbers and home addresses is exempt from disclosure pursuant to exemption (1) of the Code.

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

Very truly yours,

Daniel D. Duffy
FOI Administrator

225 Park Avenue South
New York, , NY 10003
T: 212 435 3642 F: 212 435 7555

Nagori

THE PORT AUTHORITY OF NY & NJ

CA06164010
FAA

F.F.
JMcV

STEWART INTERNATIONAL AIRPORT

REHABILITATION OF THE WEATHER INSTRUMENT POWER (WIP) CIRCUIT

CONTRACT SWF-164.010

MAY 2008

This proposal is not complete unless bidder's Signature appears on page 19

5.) Fill in below the name and address of the bidder's chief banking representative handling the bidder's account.

Banking Institution: CITI Bank

Address: 5810 Amboy Rd.

S.I. NY 10309

Bank Representative: Mrs. Diane Delerambo

Telephone Number: 718 966 - 6853

6.) Fill in below the bidder's Federal Employer Identification Number (i.e., the number assigned to firms by the Federal Government for tax purposes); the bidder's Dun and Bradstreet number, if any; the name of any other credit service to which the bidder has furnished information and the number, if any, assigned by such service to the bidder's account.

(Ex. 1)

Federal Employer Identification No.

Dun and Bradstreet No.

Other Credit Service

93-296746

Account No

D. The Form of Contract bound herewith, with the bidder's percentages inserted in the clause thereof entitled "Contractor's Compensation". The percentages must be given both in figures and in writing and, in case of discrepancy, the writing shall control. In addition, bidders shall complete the table in the clause of Information for Bidders entitled "Comparison of Proposals", filling in all spaces and computing the "Weighted Average Fee". One copy of each addendum, if any, issued during the bidding period shall be initialled and attached to the Proposal, but any Proposal submitted without such addendum initialled and attached will nevertheless be construed as though such addendum had been initialled and attached. .

E. A Certification of Nonsegregated Facilities filled in on the form attached hereto in Appendix A.

F. If the bidder cannot make the certification required by the clause of the "Information for Bidders" entitled "Buy American Certificate," submit the statement and listing required by such clause.

3. COMPARISON OF PROPOSALS

Proposals will be compared based on the basis of the total of the following amounts herein referred to as the "Total":

A.	An amount equal to the Estimated Total for Classified Work[2]	A. 10,774,384
B.	An amount equal to the percentage inserted by the bidder in "B"[2] of the clause entitled "Contractor's Compensation" expressed to two decimal places times $1,900,000.00 20 % x $1.900,000.00 =	B. 380,000 —
C.	An amount equal to $1,900,000.00	C. 1,900,000.00
		Total: 13,054,384 —

Such "Total" shall be computed by adding the amounts in A, B and C above whether or not such amounts are correctly shown in the Contractor's Proposal.

Such "Total" is for the purpose of facilitating the comparison of Proposals and of computing damages in the event of a default by the successful bidder in the agreement created by the acceptance of his Proposal.

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[2] The bidder shall insert the same amounts inserted by the bidder in the clauses entitled "Contractor's Compensation" and "Unit Prices" and shall perform the computations to compute the "Total". In case of discrepancy between the amounts inserted by the bidder in the clauses entitled "Contractor's Compensation" and "Unit Prices" and the amounts inserted herein, the amounts in the clause entitled "Contractor's Compensation" and "Unit Prices" shall control. The amounts inserted by the bidder in the clauses entitled "Contractor's Compensation" and "Unit Prices" and amounts computed in accordance with such clauses will be used to determine the Contractor's Compensation.

PROPOSAL

To The Port Authority of New York and New Jersey:

The undersigned[4] Nagon Contracting Corporation a Corporation Organized under the laws of the State of Newyork.

(hereinafter called "the Contractor") hereby offers to perform all the obligations and to assume all the duties and liabilities of the Contractor provided for in the annexed Contract, at the prices inserted by the undersigned in the clause of the Form of Contract entitled "Contractor's Compensation".

This offer shall be irrevocable for ninety (90) days after the date on which The Port Authority of New York and New Jersey opens this Proposal.

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

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[4] Insert bidder's name at the top of the page. After the bidder's name, insert one of the following phrases:

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

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

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

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

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

The undersigned hereby designates the following as the bidders office[5]: 10 Prague el. S.I. NY 10309

The telephone number of the bidder is: 718 966-5431

The fax number of the bidder is: 718 966-0666

The E-Mail address of the bidder is: Mayanec@yahoo.com

5 Insert office address.

SIGNATURE AND CERTIFICATE OF AUTHORITY[6]

PROCUREMENT
2008 MAY 23 AM 9:19

Dated, May 20, 2008

(Signature of individual or name of corporation or partnership) Nagem Contracting Corp

(Signature of agent, partner or corporate officer)

By[7] [8]

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

CERTIFICATE OF AUTHORITY, IF BIDDER IS A CORPORATION

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

(Corporate Seal)

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

7 If Proposal is signed by an officer or agent, give title.

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

ACKNOWLEDGMENT[9]

ACKNOWLEDGMENT OF BIDDER, IF A CORPORATION

State of New York

SS:

County of Richmond

On this 20th day of May, 2008, before me personally came and appeared Ishaya Nigen, to me known, who, being by me duly sworn, did depose and say that he resides at (Ex. 1), that he is the President of Nigen Contracting Corp., the corporation described in and which executed the foregoing instrument; that he knows the seal of said corporation; that one of the seals affixed to said instrument is such seal; that it was so affixed by order of the directors of said corporation; and that he signed his name thereto by like order.

Dawn M. Laviscount
Notary Public - State of New York
Richmond County
Comm #01LA6141564
My Commission Expires
February 27, 2010

(Notary Seal)

Dawn Laviscount

(Notary Signature)

ACKNOWLEDGMENT OF BIDDER, IF A PARTNERSHIP

State of _____

SS:

County of _____

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

(Notary Seal)

_____

(Notary Signature)

ACKNOWLEDGMENT OF BIDDER, IF AN INDIVIDUAL

State of _____

SS:

County of _____

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

(Notary Seal)

_____

(Notary Signature)

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[9] If bidder is a joint venture, insert signature as appropriate for one participant of the joint venture on this page and attach and complete an additional Acknowledgment sheet in the same form as appears on this page for each other participant as required

PROCUREMENT
2018 MAY 23 AM 9:20

ACKNOWLEDGMENT[19]

ACKNOWLEDGMENT OF BIDDER, IF A CORPORATION

State of New York

SS:

County of Richmond

On this 20th day of May, 2018, before me personally came and appeared Ishaya Nagun, to me known. who, being by me duly sworn, did depose and say that he resides at (Ex. 1), that he is the President of Nagun Contracting Corp, the corporation described in and which executed the foregoing instrument; that he knows the seal of said corporation; that one of the seals affixed to said instrument is such seal; that it was so affixed by order of the directors of said corporation; and that he signed his name thereto by like order.

(Notary Seal) Dawn M. Laviscount
Notary Public - State of New York
Richmond County
Comm #01LA6141564
My Commission Expires
February 27, 2019

Dawn Laviscount
(Notary Signature)

ACKNOWLEDGMENT OF BIDDER, IF A PARTNERSHIP

State of _____

SS:

County of _____

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

(Notary Seal) _____

(Notary Signature)

ACKNOWLEDGMENT OF BIDDER, IF AN INDIVIDUAL

State of _____

SS:

County of _____

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

(Notary Seal) _____

(Notary Signature)

AFFIX ACKNOWLEDGMENT AND JUSTIFICATION OF SURETY

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

STATEMENT ACCOMPANYING PROPOSAL[10]

Names and Residences of Officers, If Bidder is a Corporation

Name	Title	Residence[11]
Ishaque Nizam	President/Sec.	(Ex. 1)

Names and Residences of Partners, If Bidder is a Partnership

Name	General or Limited Partner	Residence[12]

Bidder's Residence, If an Individual[13]

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

11 Give Street and Number of Residence. Do not give business address.

12 Give Street and Number of Residence. Do not give business address.

13 Give Street and Number of Residence. Do not give business address.

CHAPTER II

COMPENSATION AND PAYMENTS

26. CONTRACTOR'S COMPENSATION[21]

The Contractor's entire compensation under the Contract shall be sum of the following amounts:

A. An amount equal to the actual Total for Classified Work computed by the Engineer from the actual quantities of the Work performed.

B. An amount equal Twenty percent[22]
(Percentage written in words)
(20 %[25])
(Percentage written in figures)

of the amount of the Net Cost of the Work as identified in C. below.

C. An amount equal to one third (1/3) of the percent inserted in B. above of the sum of the amounts of B.. and C. above for the Work performed by a subcontractor. (Such amount hereinafter called the "Contractor's Fee For Subcontracting Work").

D. An amount equal to the Net Cost of the Work computed by the Engineer in accordance with the clause entitled "Net Cost".

E. The following amounts:

1.) Amounts deemed reasonable by the Engineer for the preparation of working drawings and catalog cuts pursuant to the Section of Division 1 of the Specifications entitled "Shop Drawings, Catalog Cuts and Samples".

2.) Amounts deemed reasonable by the Engineer for the design of temporary structures pursuant to the Section of Division 1 of the Specifications entitled "Temporary Structures".

3.) Amounts deemed reasonable by the Engineer for the preparation of record drawings pursuant to the Section of Division 1 of the Specifications entitled "Utility Record Drawings".

4.) An amount equal to the actual amount paid by the Contractor as the net increase in premiums (in excess of the premiums for insurance coverage normally carried by the Contractor) if any, to provide insurance in accordance with the clause hereof entitled "Insurance Procured by the Contractor".

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21 In addition to the insertions hereof, fill in the table and perform the multiplication and division stipulated in the clause of the Information for Bidders entitled "Comparison of Proposals".

22 Insert the percentage in numbers and in writing, to two decimal places (e.g. Eight and No Hundredths Percent – 8.00%). In case of discrepancy between percentages quoted in writing and those quoted in figures, the writing shall control.

5.) Amounts other than those specified in this clause that are specifically provided for elsewhere in this Contract setting forth actual defined additions to or deductions from the Contractor's compensation provided hereinabove.

The Contractor's Fee provided in B. above shall cover the cost of all expenses other than those compensated as Net Cost and in E. above, for Work performed by the Contractor personally.

In the event the Engineer orders Work which the Contractor elects to have performed by a subcontractor, the Contractor's compensation shall be (a) the Net Cost of the Work, as provided in the clause entitled "Net Cost", plus (b) the Contractor's Fee in B. above, plus (c) the Contractor's Fee For Subcontracting Work in C. above plus (d) the amounts provided for in E. above; and such amounts only, without any additional amounts or percentage increase.

27. UNIT PRICES

The following Schedule of Unit Prices does not constitute an outline of the Work required by the Contract Drawings and Specifications in their present form but is merely a list of the items of Classified Work to be used in computing the Contractor's compensation. It contains all such items. The compensation computed therefrom is full compensation for all Work whatsoever required by the Contract Drawings and Specifications in their present form.

In the case of each item of Classified Work, the Work performed will be measured and the Contractor's compensation will be computed as hereinafter provided in this numbered clause. In case of discrepancy between the prices quoted in writing and those quoted in figures, the writing shall control.

The Estimated Total Contract Price is solely for the purpose of fixing the amount of security to be maintained by the Contractor for the faithful performance of the Work. Prior to the signature of the Contract by the parties, it was for the purpose of facilitating the comparison of Proposals and of computing damages in the event of a default by the successful bidder in the agreement created by the acceptance of his Proposal. The estimated quantities are given solely as a basis for the computation of the Estimated Total Contract Price. The Authority makes no representation as to what the actual quantities will be and shall not be held responsible even though the estimated quantities are not even approximately correct. Insofar as the Contractor's compensation is based upon Classified Work, it will be computed from the actual quantities of Work performed, whether greater or less than the estimated quantities.

I. SCHEDULE OF UNIT PRICES				
Item No.	Estimated Quantities	Items of Classified Work With Unit Prices Written	Figures	
			Unit Prices	Amounts[23]
1A	135 EA.	TYPE B ELECTRICAL OR COMMUNICATIONS MANHOLE, PER EACH (UNRESTRICTED HOURS). Sixteen thousand DOLLARS _____ CENTS	16,000	2,160,000 -

[23] The amount for each item shall be computed by multiplying the estimated quantity of that item by the unit price for the item.

I. SCHEDULE OF UNIT PRICES				
Item No.	Estimated Quantities	Items of Classified Work With Unit Prices Written	Figures	
			Unit Prices	Amounts[23]
1B	23 EA.	TYPE B ELECTRICAL OR COMMUNICATIONS MANHOLE, PER EACH (RESTRICTED HOURS). Saventeen thousand DOLLARS — CENTS	17,000	391,000
2A	30 EA	ELECTRICAL OR COMMUNICATIONS HANDHOLE, PER EACH (UNRESTRICTED HOURS) Six thousand DOLLARS — CENTS	6,000-	180,000
2B	4 EA.	ELECTRICAL OR COMMUNICATIONS HANDHOLE, PER EACH (RESTRICTED HOURS). Saven thousand DOLLARS — CENTS	7,000	28000
3A	26,000 L.F.	TWO 4-4" FRE CONDUIT DUCTBANKS, ONE COMMUNICATIONS AND ONE ELECTRICAL, WITH MINIMUM 6" SEPARATION, PER LINEAR FOOT (UNRESTRICTED HOURS). One hundred Thirty DOLLARS — CENTS	130	3,380,000
3B	5,000 L.F.	TWO 4-4" FRE CONDUIT DUCTBANKS, ONE COMMUNICATIONS AND ONE ELECTRICAL, WITH MINIMUM 6" SEPARATION, PER LINEAR FOOT (RESTRICTED HOURS). One hundred fifty DOLLARS — CENTS	150 -	750,000
3C	6,700 L.F.	TWO 4-4" FRE CONDUIT DUCTBANKS, ONE COMMUNICATIONS AND ONE ELECTRICAL, WITH MINIMUM 6" SEPARATION, PER LINEAR FOOT (48 HOUR CLOSURE) One hundred fifty DOLLARS — CENTS	150	1,005,000

I. SCHEDULE OF UNIT PRICES				
Item No.	Estimated Quantities	Items of Classified Work With Unit Prices Written	Figures	
			Unit Prices	Amounts[23]
3D	1,350 L.F.	TWO 4-4" FRE CONDUIT DUCTBANKS, ONE COMMUNICATIONS AND ONE POWERL, WITH MINIMUM 6" SEPARATION, PER LINEAR FOOT (48 HOUR CLOSURE). One hundered fifty DOLLARS — CENTS	150 -	202,500 -
3E	900 L.F.	TWO 4-4" FRE CONDUIT DUCTBANKS, ONE COMMUNICATIONS AND ONE POWERL, WITH MINIMUM 6" SEPARATION, PER LINEAR FOOT (WEEKENDCLOSURE). One hundered fifty DOLLARS — CENTS	150 -	135,000 -
4A	27,000 L.F.	6-PAIR No. 19 CONTROL CABLE, SUPERIOR CABLE/ESSEX PART NUMBER 04-026-21 OR APPROVED EQUAL, IN CONDUIT, PER LINEAR FOOT (UNRESTRICTED HOURS). Two DOLLARS — CENTS	2 -	54000 -
4B	7,200 L.F.	6-PAIR No. 19 CONTROL CABLE, SUPERIOR CABLE/ESSEX PART NUMBER 04-026-21 OR APPROVED EQUAL, IN CONDUIT, PER LINEAR FOOT (RESTRICTED HOURS). three DOLLARS — CENTS	3 -	21,600 -
5A	6,300 L.F.	25-PAIR No. 19 CONTROL CABLE, SUPERIOR CABLE/ESSEX PART NUMBER 04-031-21 OR APPROVED EQUAL, IN CONDUIT, PER LINEAR FOOT (UNRESTRICTED HOURS). Four DOLLARS — CENTS	4 -	25200 -
5B	1,800 L.F.	25-PAIR No. 19 CONTROL CABLE, SUPERIOR CABLE/ESSEX PART NUMBER 04-031-21 OR APPROVED EQUAL, IN CONDUIT, PER LINEAR FOOT (RESTRICTED HOURS). Four DOLLARS — CENTS	4 -	7200 -

I. SCHEDULE OF UNIT PRICES				
Item No.	Estimated Quantities	Items of Classified Work With Unit Prices Written	Figures	
			Unit Prices	Amounts[23]
6A	26,000 L.F.	50-PAIR No. 19 CONTROL CABLE, SUPERIOR CABLE/ESSEX PART NUMBER 04-034-21 OR APPROVED EQUAL, IN CONDUIT, PER LINEAR FOOT (UNRESTRICTED HOURS). Seven DOLLARS — CENTS	7-	182,000
6B	6,300 L.F.	50-PAIR No. 19 CONTROL CABLE, SUPERIOR CABLE/ESSEX PART NUMBER 04-034-21 OR APPROVED EQUAL, IN CONDUIT, PER LINEAR FOOT (RESTRICTED HOURS). Seven DOLLARS — CENTS	7-	44100
7A	31,500 L.F.	5kV TRIPLEXED 2/0 AWG FLAT STRAP COPPER CABLE WITH #4 AWG, 600V INSULATED GROUND IN CONDUIT, PER LINEAR FOOT. CABLE TO BE FURNISHED BY THE AUTHORITY (UNRESTRICTED HOURS). Two DOLLARS — CENTS	2	63,000
7B	9,000 L.F.	5kV TRIPLEXED 2/0 AWG FLAT STRAP COPPER CABLE WITH #4 AWG, 600V INSULATED GROUND IN CONDUIT, PER LINEAR FOOT. CABLE TO BE FURNISHED BY THE AUTHORITY (RESTRICTED HOURS). three DOLLARS — CENTS	3	27000 —
8A	63 EA.	STRAIGHT SPLICE FOR 5kV TRIPLEXED 2/0 AWG FLAT STRAP COPPER CABLE WITH #4 AWG, 600V INSULATED GROUND, PER EACH (UNRESTRICTED HOURS). Two thousand five hundred DOLLARS CENTS	2500	157,500
8B	18 EA.	STRAIGHT SPLICE FOR 5kV TRIPLEXED 2/0 AWG FLAT STRAP COPPER CABLE WITH #4 AWG, 600V INSULATED GROUND, PER EACH (RESTRICTED HOURS). three thousand DOLLARS CENTS	3000	54000

I. SCHEDULE OF UNIT PRICES

	Estimated Quantities	Items of Classified Work With Unit Prices Written	Figures: Unit Prices	Figures: Amounts[23]
9A	14 EA.	T-SPLICE FOR 5kV TRIPLEXED 2/0 AWG FLAT STRAP COPPER CABLE WITH #4 AWG, 600V INSULATED GROUND, PER EACH (UNRESTRICTED HOURS). three thousand five hundred DOLLARS — CENTS	3500	49,000
9B	4 EA.	T-SPLICE FOR 5kV TRIPLEXED 2/0 AWG FLAT STRAP COPPER CABLE WITH #4 AWG, 600V INSULATED GROUND, PER EACH (RESTRICTED HOURS). Four thousand DOLLARS — CENTS	4000	16,000
10A	7,500 S.F.	REMOVE TAXIWAY PAVEMENT, PER SQUARE FOOT (48 HOUR CLOSURE). Four DOLLARS — CENTS	4-	30,000
10B	1,000 S.F.	REMOVE TAXIWAY PAVEMENT, PER SQUARE FOOT (WEEKEND CLOSURE). Five DOLLARS — CENTS	5-	5,000
10C	1,700 S.F.	REMOVE RUNWAY PAVEMENT, PER SQUARE FOOT (48 HOUR CLOSURE) Four DOLLARS — CENTS	4-	6800-
11A	5,200 S.F.	REMOVE TAXIWAY SHOULDER PAVEMENT, PER SQUARE FOOT (48 HOUR CLOSURE) Four DOLLARS — CENTS	4-	20,800

I. SCHEDULE OF UNIT PRICES				
Item No.	Estimated Quantities	Items of Classified Work With Unit Prices Written	Figures	
			Unit Prices	Amounts[23]
11B	800 S.F.	REMOVE TAXIWAY SHOULDER PAVEMENT, PER SQUARE FOOT (WEEKEND CLOSURE). Five DOLLARS — CENTS	5	4,000
11C	800 S.F.	REMOVE RUNWAY SHOULDER PAVEMENT, PER SQUARE FOOT (48 HOUR CLOSURE). Five DOLLARS — CENTS	5	4000
11D	12,500 S.F.	REMOVE INFIELD CONCRETE PAVEMENT, PER SQ FT (UNRESTRICTED HOURS) Three DOLLARS — CENTS	3-	37,500
12A	7,500 S.F.	TAXIWAY PAVEMENT RESTORATION, LF (48 HOUR CLOSURE) Twenty four DOLLARS — CENTS	24	180,000
12B	1,000 S.F.	TAXIWAY PAVEMENT RESTORATION, LF (WEEKEND CLOSURE) Fifty DOLLARS CENTS	50	50,000
13A	5,200 S.F.	TAXIWAY SHOULDER PAVEMENT RESTORATION, PER SQUARE FOOT (48 HOUR CLOSURE). Forty DOLLARS CENTS	40-	208,000

I. SCHEDULE OF UNIT PRICES				
Item No.	Estimated Quantities	Items of Classified Work With Unit Prices Written	Figures	
			Unit Prices	Amounts[23]
13B	800 S.F.	TAXIWAY SHOULDER PAVEMENT RESTORATION, PER SQUARE FOOT (WEEKEND CLOSURE). Forty DOLLARS _____ CENTS	40	32,000
13C	800 S.F.	RUNWAY SHOULDER PAVEMENT RESTORATION, PER SQUARE FOOT (48 HOUR CLOSURE). Forty DOLLARS _____ CENTS	40	32000
13D	12,500 S.F.	INFIELD CONCRETE PAVEMENT RESTORATION, PER SQUARE FOOT (UNRESTRICTED HOURS). Sixteen DOLLARS _____ CENTS	16	200,000
14A	3,800 S.F.	GRASS AREA RESTORATION, PER SQUARE FOOT (48 HOUR CLOSURE) One DOLLARS _____ CENTS	1	3800
14B	700 S.F.	GRASS AREA RESTORATION, PER SQUARE FOOT (WEEKEND CLOSURE) Two DOLLARS _____ CENTS	2-	1400
15	120,000 S.F.	GRASS AREA RESTORATION, PER SQUARE FOOT (UNRESTRICTED HOURS). One DOLLARS _____ CENTS	1-	120,000

I. SCHEDULE OF UNIT PRICES				
Item No.	Estimated Quantities	Items of Classified Work With Unit Prices Written	Figures	
			Unit Prices	Amounts[23]
16	30,000 S.F.	GRASS AREA RESTORATION, PER SQUARE FOOT (RESTRICTED HOURS), One DOLLARS ____ CENTS	1	30,000
17A	15,600 SQ FT	PAVEMENT MARKING RESTORATION, PER SQUARE FOOT (48 HOUR CLOSURE). Three DOLLARS ____ CENTS	3	46,800
17B	1,600 SQ FT	PAVEMENT MARKING RESTORATION, PER SQUARE F00T (WEEKEND CLOSURE). Four DOLLARS ____ CENTS	4	6400
18	1,000 L.F.	WATER-FILLED BARRIER, PER LINEAR FOOT. One hundred thirty DOLLARS — CENTS	130	130,000
19	60,000 L.F.	PLACE AND RELOCATE WATER-FILLED BARRIER, PER LINEARFOOT (UNRESTRICTED HOURS). three DOLLARS — CENTS	3-	180,000
20	130 L.F.	TAXIWAY UNDERDRAIN RESTORATION, PER LINEAR F OOT (48 HOUR CLOSURE). Six hundred DOLLARS — CENTS	600	78000

I. SCHEDULE OF UNIT PRICES				
Item No.	Estimated Quantities	Items of Classified Work With Unit Prices Written	Figures	
			Unit Prices	Amounts[23]
21	35 L.F.	RUNWAY UNDERDRAIN RESTORATION, PER LINEAR FOOT (48 HOUR CLOSURE). Six hundred DOLLARS — CENTS	600-	21,000
22	1 EA.	MOBILIZATION AND DEMOBILIZATION, PER EACH. Four hundred forteen thousand seven hundred eighty four DOLLARS — CENTS	414784	414,784-
ESTIMATED TOTAL CONTRACT PRICE[24]				10,774,384

The following provisions are applicable to the Schedule of Unit Prices. The quantity for payment described in the following provisions shall be the quantity of Classified Work furnished, installed, performed and/or placed in accordance with the Specifications, as shown on the Contract Drawings and where ordered by the Engineer.

For purposes of the Schedule of Unit Prices and Classified Work, "Restricted Hours" shall mean the time period of 12:00 AM to 5AM, each day. "48 Hour Closure" shall mean the continuous 48-Hour time period, from 12am to 12am 2 days later. "Weekend Closure" shall mean the continuous 48-Hour time period, from 8am Saturday to 8am Monday. "Unrestricted Hours" shall mean anytime of day, for work outside of Runway and Taxiway Safety Areas.

No quantity of work will be included under more than one item of Classified Work.

In the case of Item Nos. 1A and 1B (TYPE B ELECTRICAL POWER OR COMMUNICATION MANHOLE, unrestricted hours and restricted hours, respectively), the quantity for payment shall be the number of type B manholes actually installed during unrestricted hours and restricted hours, as the case may be, in accordance with the details shown on contract drawing E001.

In the case of Item Nos. 2A and 2B (ELECTRICAL POWER OR COMMUNICATION HANDHOLE, unrestricted hours and restricted hours, respectively), the quantity for payment shall be the number of handholes actually installed during unrestricted hours and restricted hours, as the case may be, in accordance with the details shown on contract drawing E002.

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[24] The Estimated Total Contract Price shall be computed by totaling the amounts inserted in the "Amounts" column.

CONTRACTOR'S CERTIFICATION OF ELIGIBILITY

The Bidder certifies, by submission of this Proposal or acceptance of this Contract, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency. It further agrees by submitting this bid that it will include this Clause without modification in all lower tier transactions, solicitations, bids, proposals, contracts, and subcontracts. Where the Bidder/Offeror/Contractor or any lower tier participant is unable to certify to this statement, it shall attach an explanation to this Solicitation/Proposal.

That, the information above is true and complete to the best of my knowledge.

Ishaque Nagori President

Name and Title (please print)

Signature

5/22/08

Date

NOTE: The penalty for making false statements in offers is prescribed in 19 U.S.C. 1001

The Contractor certifies that it does not maintain or provide for its employees any segregated facilities at any of its establishments, and that it does not permit its employees to perform their services at any location, under its control, where segregated facilities are maintained. The Contractor certifies further that it will not maintain or provide for its employees any segregated facilities at any of its establishments, and that it will not permit its employees to perform their services at any location, under its control, where segregated facilities are maintained. The Contractor agrees that a breach of this Certification is a violation of the equal opportunity clause in this Contract. As used in this Certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms and washrooms, restaurants and other eating areas, timeclocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive or are in fact segregated on the basis of race, color, religion, or national origin, because of habit, local custom, or any other reason. The Contractor agrees that (except where it has obtained identical Certifications from proposed subcontractors for specific time periods) he will obtain identical Certifications from proposed subcontractors prior to the award of subcontracts exceeding $10,000 which are not exempt from the provisions of the Equal Opportunity Clause, and that it will retain such Certifications in its files.

Certification - The information above is true and complete to the best of my knowledge and belief.

Ishaque Nagori President

Name and Title of Signer (Please Print)

Signature

5/22/08

Date

NOTE:The penalty for making false statements in offers is prescribed in 18 U.S.C. 1001.

V. SCHEDULES OF MINIMUM WAGE RATES

The following are the minimum wage rates required by the Secretary of Labor. The classification may be supplemented and the rates for each classification may be changed from time to time in accordance with the revised rates and classifications issued by the Secretary of Labor.

THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY
THREE GATEWAY CENTER - 3rd FLOOR
NEWARK, NJ 07102

May 16, 2008

ADDENDUM NO. 1

TO PROSPECTIVE BIDDERS ON CONTRACT **SWF-164.010** - STEWART INTERNATIONAL AIRPORT – REHABILITATION OF THE WEATHER INSTRUMENT POWER (WIP) CIRCUIT

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

This communication should be physically annexed to back cover of the book and initialled by each bidder before submitting his bid.

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

CHANGES IN CONTRACT DRAWINGS

Dwg G003 - Immediately below the text of General Note 17, insert the following:

"18. Work Order(s) issued by the Engineer will indicate the layout of all manholes and ductbank runs. In general, manhole to manhole distances will be 500 feet or less except for runway and taxiway crossings where manhole to manhole distance will be as much as 700 feet."

2008 MAY 27 AM 9:16
PROCUREMENT

THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY

Francis J. Lombardi, P.E.
Chief Engineer

INITIALLED BY THE BIDDER:

THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY
THREE GATEWAY CENTER - 3rd FLOOR
NEWARK, NJ 07102

May 20, 2008

ADDENDUM NO. 2

TO PROSPECTIVE BIDDERS ON CONTRACT **SWF-164.010** – STEWART INTERNATIONAL AIRPORT – REHABILITATION OF THE WEATHER INSTRUMENT POWER (WIP) CIRCUIT

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

This communication should be physically annexed to back cover of the book and initialled by each bidder before submitting his bid.

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

CHANGES IN THE CONTRACT BOOKLET

Page 34 - In the third line of 26.B. delete "C." and substitute therefor "D.".

CHANGES IN CONTRACT DRAWINGS

Dwg C003 - Delete the Detail entitled "Grass Area Restoration" in its entirety and substitute therefor " Note: Trench excavation after backfilling shall be seeded and mulch applied in accordance with Specification Sections 02920, 02930 and 02960.".

THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY

Francis J. Lombardi, P.E.
Chief Engineer

INITIALLED BY THE BIDDER:

ADVERTISEMENT FORM

Date: _____

Collective: _____

Advertised: (attached)	☒ yes	☐ no
Sole Source:	☐ yes	☒ no
RFP/RFI:	☐ yes	☒ no

PROCUREMENT
2005 MAY 23 AM 9:28

Verified by Bid Custodian: _____

Verified Acknowledgement: _____

Item	Type	Material	Vendor	Name of Text	RFQ date	Mat. group
	Plnt	Quot. date	RFQ quantity	Un	Quot. price	Curr.	per	Un

8000007780 AC 160042 ASCEND CONSTRUCTION 600 05/21/2008
Tgt. val. 0.00
Collective RFQ 0000015693
00010 Rehab of the Weather Instrmt. Power Cir. 91300
D SWF1 05/22/2008 1 PU
Net Value 0.00

8000007790 AC 159827 LANCASTER DEVELOPMENT, INC. 600 05/21/2008
Tgt. val. 0.00
Collective RFQ 0000015693
00010 Rehab of the Weather Instrmt. Power Cir. 91300
D SWF1 05/22/2008 1 PU
Net Value 0.00

8000007791 AC 113750 NAGORI CONTRACTING CORP. 600 05/21/2008
Tgt. val. 0.00
Collective RFQ 0000015693
00010 Rehab of the Weather Instrmt. Power Cir. 91300
D SWF1 05/22/2008 1 PU
Net Value 0.00

8000007798 AC 149896 Tan Electrical Contracting Service 600 05/21/2008
Tgt. val. 0.00
Collective RFQ 0000015693
00010 Rehab of the Weather Instrmt. Power Cir. 91300
D SWF1 05/22/2008 1 PU
Net Value 0.00

PROCUREMENT
2008 MAY 23 AM 9:28

PUBLIC BID OPENING ATTENDANCE RECORD
Procurement Department – Purchasing Services Division PA 1233/07.06

PROPOSAL NUMBER: [illegible] DATE: [illegible]

DESCRIPTION: [illegible]

IN ATTENDANCE

REPRESENTATIVE	COMPANY
[illegible]	[illegible]
Robert Ujokanick	JAP Electric
Talia Niederkorn	Ascend Const
Spyros Manouveles	Perreca Electric
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	PA

PROCUREMENT
2008 MAY 23 AM 9:28

NAGORI CONTRACTING CORPORATION

• 10 Prague Court • Staten Island, NY 10309 •
• Tel: (718) 966-5431 • Fax: (718) 966-0666 • Email: nagoricc@yahoo.com •

Date: November 16, 2008

To: Port Authority of NY & NJ
1180 First St. – Building 138
Stewart International Airport
New Windsor, NY 12553

Attn: Mr. Omar Astacio

Re: Contract SWF 164.010
Rehabilitation of Weather Instrumer Power (WIP) Circuit

Dear Mr. Astacio,

As per our meeting of Friday, November 14, 2008 the following is the breakdown.

MATERIALS COST			
Desciption	Quantity	Unit	
FRE Pipe	320000.00	LF	
Various FRE Elbows	2000.00	Ea	
End Bells	1600.00	Ea	
Sleeves	800.00	Ea	
Spacers	80000.00	Ea	
Concrete	7500.00	CY	
Racks (to support cables)	400.00	Ea	**$ 4,800,000.00**
Manholes	158.00	Ea	
Handholes	34.00	Ea	
Frame & Cover	192.00	Ea	
Barrier	1000.00	LF	
Grounding Rods	192.00	Ea	
Bricks, Mortar, Grout, Drainage Pipe, Rebar Plywood, Jacks, Misc			

EQUIPMENT COST		
Description	Item	
Excavator	Hitachi 700	
Excavator	Hitachi 350	
Excavator	Volvo EC210B	
Loader	CAT 938F	**$ 475,000.00**
Skid Steer w/Sweeper	Bobcat	
Dump Trucks		
Box Truck		
Dozer	CAT D3	
Misc. Equipment		
Fuel & Maintenance of Equipment		**$ 175,000.00**

SUB-CONTRACTORS		
Reliable Enterprises	Installation of Manholes, Handholes, & Ductbank	$ 837,000.00
Promax Electric	Install Electrical Cables	$ 900,000.00
Rockborn Trucking & Excavation or Gardinier Excavating Inc	Asphalt Paving	$ 775,000.00
McCarey Landscaping	Landscaping	$ 165,000.00
ANS Consultants	Density Testing & Inspection	$ 60,000.00
Speedway Trucking	Trucking & Disposal of Asphalt/Concrete	$ 65,000.00
J.P. Hogan or Callahan & Nannini	Sawcutting Asphalt/Concrete	$ 80,000.00
Scott Testing Inc.	Splicing & Testing	$ 198,000.00
Misc. Expenses		$ 300,000.00
Overhead		$ 400,000.00
Contingency		$ 500,000.00
Profit (incl. salary for principles)		$ 1,000,000.00
TOTAL (Approximate)		**$ 10,730,000.00**

Nagori Contracting Corporation is spending between $3 million to $3.5 million within the vicinity of Stewart Airport which includes purchasing of manholes, handholes, concrete, asphalt, fuel, stone, hotels, dumping materials, equipment rental. Also, according to our estimate, some of the quantities will be underrun and we expect the contract amount not to be utilized fully. In addition, most of the sub-contractors have been submitted for approval prior to starting the work.

Should you have any further questions, please contact us.

Very truly,

Ishaque Nagori
President

PA 3749 A/ 5-07

THE PORT AUTHORITY OF NY & NJ
Office of Business and Job Opportunity

CONSTRUCTION
MBE/WBE/DBE PARTICIPATION PLAN
MODIFIED

PAGE _____ OF _____

Contract Number: SWF-164.010
Contractor Name: Nagori Contracting Corp
Mailing Address: 10 Prague court S.I. NY 10309
Telephone Number: 718-966-5431

Contract Description: Rehab. of the Weather Instrument Power (WIP) circuit
Contract Amount: 13,054,384.-
Contract Goals: MBE _____ WBE _____ DBE 13%

Name, Address, Phone Number of PA Certified MBE/WBE/DBE subcontractor (including name of contact person)	Indicate MBE, WBE Or DBE	Description of Work, Services to be provided. Where applicable, specify "supply" or "install or both "supply" and "install."	Anticipated date work will start and finish	*Approximate $ amount of M/W/DBE Subcontract	MBE/WBE/DBE % of Total Contract Amount
D.B.E. Electric Corp. 989 Rockway, ave, Valley Stream, NY 11581 Mr. Janak Shah. 516-825 7878	DBE. MBE.	Supply Electrical items.	Feb 16 09	1,800,000.- X .60 = 1,080,000	13.78
MS Constraction Corp 19 Journeay Street S.I. NY 10303 Madeline Pepe 718-720 0358	DBE WBE	Landscaping, Pavement marking. & misc Material	3/15/09	400,000.-	3.06
			TOTAL:	2,280,000	16.84

Signature of Contractor: [signature]
Print Name: Ishapie Nagori
Title: President Date 2/9/09

FOR OBJO USE ONLY
Contract Goals: ☑ Approved ☐ Waived ☐ Rejected
Reviewed by: [signature]
OBJO Business Development Representative
Print Name: Quinzell McKenzie Date 2/26/09

Distribution: Original – OBJO; Copy 2 – Engineer of Construction; Copy 3 – Contractor; Copy 4 – Line Department
*Please Note: supplies, equipment and material men are only credited 60% towards the M/W/DBE goal. Please adjust calculations accordingly.

CRANESVILLE BLOCK COMPANY, INC.
Lightweight and Concrete Masonry Units
Ready Mixed Concrete – Mason Supplies

1250 Riverfront Center
Amsterdam, NY 12010
(518) 684-6000

July 30, 2008

Nagori Contracting Corp.

Re: Stewart Airport, SWF 164-010

Dear Ishaque Nagori,

We are pleased to submit the following mix design for your work at the above referenced project.

"Pumpable - 5" fine"

Materials	4000 PSI	Mix # 300
Cement	520 lbs	
Flyash	91 lbs	
Fine Aggregates	1190 lbs	
Coarse Aggregates #57's	1800 lbs	
Water	32.25 gal	
Water Reducer	12.22 oz	
Entrained Air	4 - 7 %	
Water / Cement Ratio	0.44	
Slump	3+-1"	

Sources
Cement - Holcim Cement Co. Type I/II ASTM C-150
Flyash - Headwaters Resources, Inc. Class F ASTM C-618
Fine Aggregates - Hanson Aggregates Co. ASTM C-33
Coarse Aggregates 57's - Eastern Materials Co. ASTM C-33
Water Reducer - Axim Concrete Technologies 1000N ASTM C-494
Air Entrainment - Axim Concrete Technologies AE260 ASTM C-260

This mix is designed to achieve the design strength when placed, sampled and tested in accordance with all ACI and ASTM applicable standards.

Sincerely,

Steve Dow

Steve Dow
Operations Manager

PA3120/03-04

THE PORT AUTHORITY OF NY & NJ

Engineering Department

Materials Engineering Division

Report of Tests of Concrete

Field ID: 36304
Mix No: 3277
Contract: SWF 164.010

Structure: W/P CIRCUIT DUCT BANK Contractor: Nagori

Pour Location: T/W "A" EAST Pour Date: Tuesday, September 15, 2009

Batched At: Cranesville Block Co First Technician: Dumalag, E. Second Technician: unknown

Batch Time: 01:59 PM Time Specimen Made: 02:45 PM Sample Taken From: Chute

Mixer: Osh Kosh Load: 10.0 c.y. Capacity: 11.0 c.y. Truck: 442 Field Mixing Duration: 4 min Plant Mixing Duration

Consistency: PLASTIC Air C... ◉ ... ASTM C231 ○ Volumetric - ASTM C173 Slump - ASTM C143: 5.00 Inches

Plant Inspector: Construction Inspector: Scott, Morgan Nitrite Test: Not Tested

Weather: Sunny Air Temperature: 76 °F Concrete Temperature - ASTM C1046: 75 °F

Lot #: 0 Sub Lot#: 0 Class: 4000 Water Added After Sampling: No

Curing Box Present in Field: No
Heated No Insulated No Water: No Temp 60-80: No

Mix Description: 03302 Rapid Set 4, 6 hour High early

Remarks: MORGAN SCOTT TEL# 914-490-3480

Wt. Cu. Ft. - ASTM C138 -

Gross Wt (lb): 44.80 Tare Weight (lb): 9.11 Net Weight (lb): 35.69 Calib. Factor (lb): 4.062 PCF (lb/cf): 145.0

	Design	Batch																
Design	658					1350	1715							0.419	3.00	5.5	148.1
Batch															5.00	5.6	145.0

AASHTO T 318 Microwave W/C: 0.000

Type of Fracture: Type 1 to 6

COMPRESSIVE STRENGTH - ASTM C39 ○ Standard 73 M.R. Curing ○ Ambient Atmospheric Curing

Age	Specimen #	Height (in)	Diam (in)	Area (sq in)	Specimen Type	Break Type	Break Load (lb)	Compressive Strength (PSI)	Operator
3 Hours	1	83	8.00	4.00	12.57	Cylinder	Type 4	32,571	2590	Lumour, E.
3 Hours	1	84	8.00	4.00	12.57	Cylinder	Type 4	34,515	2750	Lumour, E.
3 Days	1	85	8.00	4.00	12.57	Cylinder	Type 4	32,571	2590	Lumour, E.
3 Days	1	86	8.00	4.00	12.57	Cylinder	Type 4	34,515	2750	Lumour, E.
28 Day	1	87	8.00	4.00	12.57	Cylinder	Type 4	74,957	5960	Lumour, E.
28 Day	1	88	8.00	4.00	12.57	Cylinder	Type 4	75,970	6040	Lumour, E.
28 Day	1	89	8.00	4.00	12.57	Cylinder	Type 4	77,716	6180	Lumour, E.
28 Day	1	90	8.00	4.00	12.57	Cylinder	Type 4	81,925	6520	Lumour, E.

Age Group	Specimen Type	Avg Comp (PSI)
0	Cylinder	2670
3	Cylinder	2670
28	Cylinder	6175

Report Forwarded by: [signature] Chief of Materials Engineering

Dist. by

PA340/03-04

THE PORT AUTHORITY OF NY & NJ

Engineering Department

Materials Engineering Division

Report of Tests of Concrete

Field ID: 36100
Mix No: 3277
Contract: **SWF 164.010**

Structure: DUCT BANK 9CONDUIT INSTALLATION) Contractor: Nagori

Pour Location: T/W E (END) Pour Date: Thursday, August 20, 2009

Batched At: Cranesville Block Co First Technician: Toussaint, P. Second Technician:

Batch Time: Time Specimen Made: 01:50 PM Sample Taken From: Chute

Mixer: Osh Kosh Load: 10.0 c.y. Capacity: 10.0 c.y. Truck: 493 Field Mixing Duration: 10 min Plant Mixing Duration

Consistency: Good (•) Pressure - ASTM C231 ( ) Volumetric - ASTM C173 Slump - ASTM C143: 2.00 Inches

Plant Inspector: Construction Inspector: Scott, Morgan Nitrite Test: Not Tested

Weather: Sunny Air Temperature: 95 °F Concrete Temperature - ASTM C1046: 88 °F

Lot #: 0 Sub Lot#: 0 Class: 4000 Water Added After Sampling: No

Curing Box Present in Field: Yes
Heated No Insulated No Water: No Temp 60-80: Yes

Mix Description: 03302 Rapid Set 4, 6 hour High early

Remarks:

Wt. Cu. Ft. - ASTM C138 -

	42.40		7.56		34.84		4.015		139.9								
	658					1350	1715							0.419	3.00	5.5	148.1
															2.00	5.0	139.9

AASHTO T 318 Microwave W/C 0.000

Type of Fracture: Type 1 to 6

COMPRESSIVE STRENGTH - ASTM C39

(•) Standard 73 M.R. Curing ( ) Ambient Atmospheric Curing

Age Group	Specimen No.	Diameter (in)	Height (in)	Area (sq in)	Specimen Type	Break Type	Break Load (lbs)	Compressive Strength (PSI)	Operator
	1	9	8.00	4.00	12.57	Cylinder	Type 5	34,173	2720	Lumour, E.
	1	10	8.00	4.00	12.57	Cylinder	Type 5	36,414	2900	Lumour, E.
1 Day	1	11	8.00	4.00	12.57	Cylinder	*			
1 Day	1	12	8.00	4.00	12.57	Cylinder	*			
28 Day	1	13	8.00	4.00	12.57	Cylinder	Type 4	60,670	4830	Lumour, E.
28 Day	1	14	8.00	4.00	12.57	Cylinder	Type 4	65,088	5180	Lumour, E.
28 Day	1	15	8.00	4.00	12.57	Cylinder	Type 4	63,628	5060	Lumour, E.
28 Day	1	16	8.00	4.00	12.57	Cylinder	Type 4	64,799	5160	Lumour, E.

Age Group	Specimen Type	Avg Comp (PSI)
0	Cylinder	2810
1	Cylinder	
28	Cylinder	5057

Report Forwarded by: _____ Chief of Materials Engineering

Dist. by

PA340/03-04

THE PORT AUTHORITY OF NY & NJ

Engineering Department

Materials Engineering Division

Report of Tests of Concrete

Field ID: 36475
Mix No: 3277
Contract: SWF 164.010

Structure: DUCT BANK FOR WEATHER EQUIPMENT Contractor: Nagori

Pour Location: T/W "C" BETWEEN T/W "A" T/W "B" Pour Date: Thursday, October 1, 2009

Batched At: Cranesville Block Co First Technician: Toussaint, P. Second Technician:

Batch Time: Time Specimen Made: 08:30 AM Sample Taken From: Chute

Mixer: Unknown Load: 10.0 c.y. Capacity: 12.0 c.y. Truck: 491 Field Mixing Duration: 15 min Plant Mixing Duration

Consistency: PLASTIC Air Content: 7.50 % (◉) Pressure - ASTM C231 (○) Volumetric - ASTM C173 Slump - ASTM C143: 5.00 Inches

Plant Inspector: Construction Inspector: Scott, Morgan Nitrite Test: Not Tested

Weather: Sunny Air Temperature: 58 °F Concrete Temperature - ASTM C1046: 68 °F

Lot #: 0 Sub Lot#: 0 Class: 4000 Water Added After Sampling: No Curing Box Present in Field: No

Mix Description: 03302 Rapid Set 4, 6 hour High early Heated No Insulated No Water: No Temp 60-80: No

Remarks:

Wt. Cu. Ft. - ASTM C138 -

Gross Weight (lb):	Tare Weight (lb):	Net Weight (lb):	Calib. Factor (lb):	PCF (lb/cf):
42.80	7.56	35.24	4.015	141.5

	Cement 1	Cement 2	Fly Ash	Slag	SilicaF.	Fine Agg	Coarse Agg	AEA	WRed	HR WRed	Accel	Fiber	Latex	W/C	Slump	Air	Unit Wt
Design	658					1350	1715							0.419	3.00	5.5	148.1
Batch															5.00	7.5	141.5

AASHTO T 318 Microwave W/C: 0.000

Type of Fracture: Type 1 to 6

COMPRESSIVE STRENGTH - ASTM C39 ◉ Standard 73 M.R. Curing ○ Ambient Atmospheric Curing

Age Group	On Site (Days)	Specimen #	Height (in)	Diameter (in)	Area (sq in)	Specimen Type	Break Type	Break Load (lb)	Compressive Strength (PSI)	Operator
6 Hours	1	119	8.00	4.00	12.57	Cylinder				
6 Hours	1	120	8.00	4.00	12.57	Cylinder				
28 Day	1	121	8.00	4.00	12.57	Cylinder	Type 4	61,001	4850	Lumour, E.
28 Day	1	122	8.00	4.00	12.57	Cylinder	Type 4	58,882	4680	Lumour, E.
28 Day	1	123	8.00	4.00	12.57	Cylinder	Type 4	59,887	4760	Lumour, E.
56 Day	1	124	8.00	4.00	12.57	Cylinder	Type 5	58,493	4650	Lumour, E.
56 Day	1	125	8.00	4.00	12.57	Cylinder	Type 5	58,499	4650	Lumour, E.
56 Day	1	126	8.00	4.00	12.57	Cylinder	Type 5	57,373	4560	Lumour, E.

Age Group	Specimen Type	Avg Comp (PSI)
0	Cylinder	
28	Cylinder	4763
56	Cylinder	4620

Report Forwarded by: _____ Chief of Materials Engineering

Dist. by

PA340/03-04

THE PORT AUTHORITY OF NY & NJ

Engineering Department

Materials Engineering Division

Report of Tests of Concrete

Field ID: 36337
Mix No: 3277
Contract: SWF 164.010

Structure: T/W A5 Contractor: Nagori

Pour Location: DUCT BANKS & CENTER LINE Pour Date: Thursday, September 17, 2009

Batched At: Cranesville Block Co First Technician: Petruzzella, F. Second Technician:

Batch Time: 02:32 PM Time Specimen Made: 03:15 PM Sample Taken From: Chute

Mixer: Unknown Load: 10.0 c.y. Capacity: 0.0 c.y. Truck: 611 Field Mixing Duration: 1 min Plant Mixing Duration

Consistency: Good Procedure - ASTM C231 Procedure - ASTM C173 Slump - ASTM C143: 5.75 Inches

Plant Inspector: Construction Inspector: Scott, Morgan Nitrite Test: Not Tested

Weather: Clear Air Temperature: 70 °F Concrete Temperature - ASTM C1046: 74 °F

Lot #: 0 Sub Lot#: 0 Class: 4000 Water Added After Sampling: No

Curing Box Present in Field: No

Heated No Insulated No Water: No Temp 60-80: Yes

Mix Description: 03302 Rapid Set 4, 6 hour High early

Remarks:

Wt. Cu. Ft. - ASTM C138 -

Gross Weight (lbs):	42.90	Tare Weight (lbs):	7.60	Net Weight (lbs):	35.30	Cubic Factor (cf):	4.011	PCF (lb/cf):	141.6

	Cement	Cement (2)	Fly Ash	Slag	Silica Fume	Fine Agg	Coarse Agg	ASA	WRA(s)	HRWRA(s)	Accel	Ret	Air	Slump	W/C	Unit Wt.
Lb./Cu. Yd.	658					1350	1715							0.419	5.5	148.1
Batch														5.75	7.0	141.6

AASHTO T 318 Microwave W/C 0.000

Type of Fracture: Type 1 to 6

COMPRESSIVE STRENGTH - ASTM C39

◉ Standard 73 M.R. Curing ○ Ambient Atmospheric Curing

Age	Cr Site Days	Specimen #	Height (in)	Diameter (in)	Area (sq in)	Specimen Type	Break Type	Break Load (lbs)	Compressive Strength (PSI)	Cylinder Supplier
4 Hours	1	97	8.00	4.00	12.57	Cylinder		36,512	2900	Lumour, E.
4 Hours	1	98	8.00	4.00	12.57	Cylinder		32,349	2570	Lumour, E.
28 Day	1	99	8.00	4.00	12.57	Cylinder	Type 4	65,976	5250	Lumour, E.
28 Day	1	100	8.00	4.00	12.57	Cylinder	Type 4	64,290	5120	Lumour, E.
28 Day	1	101	8.00	4.00	12.57	Cylinder	Type 4	60,011	4770	Lumour, E.
28 Day	1	102	8.00	4.00	12.57	Cylinder				

Age	Specimen Type	Adjusted Strength (PSI)
0	Cylinder	2735
28	Cylinder	5046

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Report of Tests of Concrete

Field ID: 36336
Mix No: 3277
Contract: SWF 164.010

Structure: T/W A5 Contractor: Nagori

Pour Location: DUCT BANKS Pour Date: Thursday, September 17, 2009

Batched At: Cranesville Block Co First Technician: Petruzzella, F. Second Technician:

Batch Time: 11:45 AM Time Specimen Made: 12:15 PM Sample Taken From: Chute

Mixer: Unknown Load: 10.0 c.y. Capacity: 0.0 c.y. Truck: 407 Field Mixing Duration: 1 min Plant Mixing Duration

Consistency: Good Slump - ASTM C143: 5.00 Inches

Plant Inspector: Construction Inspector: Scott, Morgan Nitrite Test: Not Tested

Weather: Clear Air Temperature: 70 °F Concrete Temperature - ASTM C1046: 74 °F

Lot #: 0 Sub Lot#: 0 Class: 4000 Water Added After Sampling: No

Mix Description: 03302 Rapid Set 4, 6 hour High early

Curing Box Present in Field: No
Heated No Insulated No Water: No Temp 60-80: Yes

Remarks:

Wt. Cu. Ft. - ASTM C138 -

42.80 | 7.60 | 35.20 | 4.011 | 141.2

																Unit Wt
Design	658					1350	1715							0.419	3.00	5.5	148.1
Batch															5.00	6.8	141.2

AASHTO T 318 Microwave W/C 0.000

Type of Fracture: Type 1 to 6

COMPRESSIVE STRENGTH - ASTM C39

◉ Standard 73 M.R. Curing ○ Ambient Atmospheric Curing

Age Group	Specimen No.	Height (in)	Diameter (in)	Area (sq in)	Specimen Type	Break Type	Break Load (lbs)	Compressive Strength (psi)	Operator
7 Hours	1	91	8.00	4.00	12.57	Cylinder		23,042	1830	Lumour, E.
7 Hours	1	92	8.00	4.00	12.57	Cylinder		29,265	2330	Lumour, E.
28 Day	1	93	8.00	4.00	12.57	Cylinder	Type 4	50,849	4050	Lumour, E.
28 Day	1	94	8.00	4.00	12.57	Cylinder	Type 4	51,144	4070	Lumour, E.
28 Day	1	95	8.00	4.00	12.57	Cylinder	Type 4	50,807	4040	Lumour, E.
28 Day	1	96	8.00	4.00	12.57	Cylinder				

Age Group	Specimen Type	Average PSI
0	Cylinder	2080
28	Cylinder	4053

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Report of Tests of Concrete

Field ID: 36304
Mix No: 3277
Contract: SWF 164.010

Structure: W/P CIRCUIT DUCT BANK
Contractor: Nagori
Pour Location: T/W "A" EAST
Pour Date: Tuesday, September 15, 2009

Batched At: Cranesville Block Co
First Technician: Dumalag, E.
Second Technician: unknown
Batch Time: 01:59 PM
Time Specimen Made: 02:45 PM
Sample Taken From: Chute
Mixer: Osh Kosh
Load: 10.0 c.y.
Capacity: 11.0 c.y.
Truck: 442
Field Mixing Duration: 4 min
Plant Mixing Duration
Consistency: PLASTIC
◉ Pressure - ASTM C231 ○ Volumetric - ASTM C173
Slump - ASTM C143: 5.00 Inches
Plant Inspector:
Construction Inspector: Scott, Morgan
Nitrite Test: Not Tested
Weather: Sunny
Air Temperature: 76 °F
Concrete Temperature - ASTM C1046: 75 °F
Lot #: 0
Sub Lot#: 0
Class: 4000
Water Added After Sampling: No
Curing Box Present In Field: No
Heated No Insulated No Water: No Temp 60-80: No
Mix Description: 03302 Rapid Set 4, 6 hour High early

Remarks: **MORGAN SCOTT TEL# 914-490-3480**

Wt. Cu. Ft. - ASTM C138 - 44.80 | 9.11 | 35.69 | 4.062 | PCF (lb/cf): 145.0

	Coarse Agg																
	656					1350	1715							0.419	3.00	5.5	148.1
Batch															5.00	5.6	145.0

AASHTO T 318 Microwave W/C 0.000

Type of Fracture: Type 1 to 6

COMPRESSIVE STRENGTH - ASTM C39

○ Standard 73 M.R. Curing ○ Ambient Atmospheric Curing

Age Group	Cyl Site	Specimen #	Height (inches)	Diameter (inches)	Area (sq inches)	Specimen Type	Break Type	Break Load (lb)	Compressive Strength (PSI)	Operator
3 Hours	1	83	8.00	4.00	12.57	Cylinder	Type 4	32,571	2590	Lumour, E.
3 Hours	1	84	8.00	4.00	12.57	Cylinder	Type 4	34,515	2750	Lumour, E.
3 Days	1	85	8.00	4.00	12.57	Cylinder	Type 4	32,571	2590	Lumour, E.
3 Days	1	86	8.00	4.00	12.57	Cylinder	Type 4	34,515	2750	Lumour, E.
28 Day	1	87	8.00	4.00	12.57	Cylinder	Type 4	74,957	5960	Lumour, E.
28 Day	1	88	8.00	4.00	12.57	Cylinder	Type 4	75,970	6040	Lumour, E.
28 Day	1	89	8.00	4.00	12.57	Cylinder	Type 4	77,716	6180	Lumour, E.
28 Day	1	90	8.00	4.00	12.57	Cylinder	Type 4	81,925	6520	Lumour, E.

Age Group	Specimen Type	Avg Comp (PSI)
0	Cylinder	2670
3	Cylinder	2670
28	Cylinder	6175

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Report of Tests of Concrete

Field ID: 36100
Mix No: 3277
Contract: SWF 164.010

Structure: DUCT BANK 9CONDUIT INSTALLATION) Contractor: Nagori

Pour Location: T/W E (END) Pour Date: Thursday, August 20, 2009

Batched At: Cranesville Block Co First Technician: Toussaint, P. Second Technician:

Batch Time: Time Specimen Made: 01:50 PM Sample Taken From: Chute

Mixer: Osh Kosh Load: 10.0 c.y. Capacity: 10.0 c.y. Truck: 493 Field Mixing Duration: 10 min Plant Mixing Duration

Consistency: Good ◉ Pressure - ASTM C231 ○ Volu[illegible] Slump - ASTM C143: 2.00 Inches

Plant Inspector: Construction Inspector: Scott, Morgan Nitrite Test: Not Tested

Weather: Sunny Air Temperature: 95 °F Concrete Temperature - ASTM C1046: 88 °F

Lot #: 0 Sub Lot#: 0 Class: 4000 Water Added After Sampling: No

Curing Box Present in Field: Yes
Heated No Insulated No Water: No Temp 60-80: Yes

Mix Description: 03302 Rapid Set 4, 6 hour High early

Remarks:

Wt. Cu. Ft. - ASTM C138 -

42.40	7.56	34.84	4.015	139.9

[redacted]	658					1350	1715							0.419	3.00	5.5	148.1
															2.00	5.0	139.9

AASHTO T 318 Microwave W/C 0.000

Type of Fracture: Type 1 to 6

COMPRESSIVE STRENGTH - ASTM C39

◉ Standard 73 M.R. Curing ○ Ambient Atmospheric Curing

Age Group	Specimen No.	Length (in)	Diameter (in)	Area (sq in)	Specimen Type	Break Type	Load (lbs)	Compressive Strength (PSI)	Operator
	1	9	8.00	4.00	12.57	Cylinder	Type 5	34,173	2720	Lumour, E.
	1	10	8.00	4.00	12.57	Cylinder	Type 5	36,414	2900	Lumour, E.
1 Day	1	11	8.00	4.00	12.57	Cylinder	*			
1 Day	1	12	8.00	4.00	12.57	Cylinder	*			
28 Day	1	13	8.00	4.00	12.57	Cylinder	Type 4	60,670	4830	Lumour, E.
28 Day	1	14	8.00	4.00	12.57	Cylinder	Type 4	65,088	5180	Lumour, E.
28 Day	1	15	8.00	4.00	12.57	Cylinder	Type 4	63,628	5060	Lumour, E.
28 Day	1	16	8.00	4.00	12.57	Cylinder	Type 4	64,799	5160	Lumour, E.

Age	Specimen Type	Avg Comp (PSI)
0	Cylinder	2810
1	Cylinder	
28	Cylinder	5057

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Report of Tests of Concrete

Field ID: 36446
Mix No: 3277
Contract: **SWF 164.010**

Structure: DUCT BANK Contractor: Nagori

Pour Location: BEFORE HOLD BAR ALONG T/W "L" & R/W 9-27 Pour Date: Tuesday, September 29, 2009

Batched At: Cranesville Block Co First Technician: Dumalag, E. Second Technician:

Batch Time: 07:12 AM Time Specimen Made: 08:15 AM Sample Taken From: Chute

Mixer: Osh Kosh Load: 10.0 c.y. Capacity: 11.0 c.y. Truck: 605 Field Mixing Duration: 4 min Plant Mixing Duration

Consistency: PLASTIC Air Content - Pressure - ASTM C231 Air Content - ASTM C173 Slump - ASTM C143: 9.00 Inches

Plant Inspector: Construction Inspector: Scott, Morgan Nitrite Test: Not Tested

Weather: Clear Air Temperature: 58 °F Concrete Temperature - ASTM C1046: 68 °F

Lot #: 0 Sub Lot#: 0 Class: 4000 Water Added After Sampling: No

Curing Box Present in Field: No
Heated No Insulated No Water: No Temp 60-80: No

Mix Description: 03302 Rapid Set 4, 6 hour High early

Remarks: **MORGAN SCOTT # 914-490-3480**

Wt. Cu. Ft. - ASTM C138 -

Grake Weight (lbs)	Tare Weight (lbs)	Net Weight (lbs)	Cub. Factor (cf)	Pot Wt. (lbs)
42.40	7.62	34.78	4.038	140.4

	Cement	Ground Slag	Fly Ash	Silica Fume	Sand	Fine Agg.	Coarse Agg.	AEA	Water	Ice Added	Actual	Fiber	Latex	W/C	Slump	Air	Unit Wt.
Design	658					1360	1715							0.419	3.00	5.5	148.1
Batch															9.00	6.2	140.4

AASHTO T 318 Microwave W/C: 0.000

Type of Fracture: Type 1 to 6

COMPRESSIVE STRENGTH - ASTM C39 ○ Standard 73 M.R. Curing ○ Ambient Atmospheric Curing

Age Group	On Site (Days)	Specimen No.	Length (in)	Diameter (in)	Area (sq. in)	Specimen Type	Break Type	Max. Load (lbs)	Compressive Strength (PSI)	Operator
	1	103	8.00	4.00	12.57	Cylinder	Type 4	20,053	1590	Lumour, E.
	1	104	8.00	4.00	12.57	Cylinder	Type 4	21,356	1700	Lumour, E.
	1	105	8.00	4.00	12.57	Cylinder	Type 5	35,147	2800	Lumour, E.
1 Day	1	106	8.00	4.00	12.57	Cylinder	Type 4	55,089	4380	Lumour, E.
1 Day	1	107	8.00	4.00	12.57	Cylinder	Type 4	54,602	4340	Lumour, E.
28 Day	1	108	8.00	4.00	12.57	Cylinder	Type 4	71,491	5690	Lumour, E.
28 Day	1	109	8.00	4.00	12.57	Cylinder	Type 4	71,235	5670	Lumour, E.
28 Day	1	110	8.00	4.00	12.57	Cylinder	Type 4	70,411	5600	Lumour, E.

Age Group	Specimen Type	Avg Comp (PSI)
0	Cylinder	2030
1	Cylinder	4360
28	Cylinder	5653

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Report of Tests of Concrete

Field ID: 36452
Mix No: 3277
Contract: SWF 164.010

Structure: DUCT BANK Contractor: Nagori

Pour Location: T/W "A" & T/W "C" INTERSECTION Pour Date: Wednesday, September 30, 2009

Batched At: Cranesville Block Co First Technician: Toussaint, P. Second Technician:

Batch Time: Time Specimen Made: 08:30 AM Sample Taken From: Chute

Mixer: TMMB Load: 10.0 c.y. Capacity: 12.0 c.y. Truck: 491 Field Mixing Duration: 15 min Plant Mixing Duration

Consistency: PLASTIC Air Content: 8.50 % (●) Pressure - ASTM C231 ( ) Volumetric - ASTM C173 Slump - ASTM C143: 5.50 Inches

Plant Inspector: Construction Inspector: MORGAN Nitrite Test: Not Tested

Weather: Clear Air Temperature: 55 °F Concrete Temperature - ASTM C1046: 70 °F

Lot #: 0 Sub Lot#: 0 Class: 4000 Water Added After Sampling: No

Curing Box Present In Field: No
Heated No Insulated No Water: No Temp 60-80: No

Mix Description: 03302 Rapid Set 4, 6 hour High early

Remarks:

Wt. Cu. Ft. - ASTM C138 -

Gross Weight (lbs): 42.30 Tare Weight (lbs): 7.56 Net Weight (lbs): 34.74 Cal. Factor (ft³): 4.015 PCF (lb/cf): 139.5

	Cement 1	Cement 2	Fly Ash	Slag	Silica	Fine Agg	Coarse Agg	AEA	WRed	HRWRed	Accel	Retar	Latex	W/C	Slump	Air	Cal. Unit Wt.
Design	658					1300	1715							0.419	3.00	5.5	148.1
Batch															5.50	8.5	139.5

AASHTO T 318 Microwave W/C: 0.000

Type of Fracture: Type 1 to 6

COMPRESSIVE STRENGTH - ASTM C39

(●) Standard 73 M.R. Curing ( ) Ambient Atmospheric Curing

Age Group	On Site (Days)	Specimen #	Height (in)	Diameter (in)	Area (sq in)	Specimen Type	Break Type	Break Load (lbs)	Compressive Strength (PSI)	Operator
	1	111	8.00	4.00	12.57	Cylinder	Type 4	54,671	4350	Lumour, E.
	1	112	8.00	4.00	12.57	Cylinder	Type 4	51,936	4130	Lumour, E.
28 Day	1	113	8.00	4.00	12.57	Cylinder	Type 4	64,661	5140	Lumour, E.
28 Day	1	114	8.00	4.00	12.57	Cylinder	Type 4	62,012	4930	Lumour, E.
28 Day	1	115	8.00	4.00	12.57	Cylinder	Type 4	64,419	5130	Lumour, E.
28 Day	1	116	8.00	4.00	12.57	Cylinder	Type 4	65,372	5200	Lumour, E.
28 Day	1	117	8.00	4.00	12.57	Cylinder				Lumour, E.
28 Day	1	118	8.00	4.00	12.57	Cylinder				Lumour, E.

Age Group	Specimen Type	Avg Comp (PSI)
0	Cylinder	4240
28	Cylinder	5100

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Report of Tests of Concrete

Field ID: 36504
Mix No: 3277
Contract: SWF 164.010

Structure: DUCT BANK FOR WEATHER EQUIPMENT ELEC. CONDUITS Contractor: Nagorl

Pour Location: R/W 16-34 BETWEEN A & R/W 9-27 Pour Date: Monday, October 5, 2009

Batched At: Cranesville Block Co First Technician: Toussaint, P. Second Technician:

Batch Time: Time Specimen Made: 11:00 AM Sample Taken From: Chute

Mixer: FMNB Load: 10.0 c.y. Capacity: 12.0 c.y. Truck: 611 Field Mixing Duration: 10 min Plant Mixing Duration

Consistency: Good Air Content: 8.00 % (●) Pressure - ASTM C231 ( ) Volumetric - ASTM C173 Slump - ASTM C143: 5.00 Inches

Plant Inspector: Construction Inspector: Scott, Morgan Nitrite Test: Not Tested

Weather: Sunny Air Temperature: 65 °F Concrete Temperature - ASTM C1046: 70 °F

Lot #: 0 Sub Lot#: 0 Class: 4000 Water Added After Sampling: No

Mix Description: 03302 Rapid Set 4, 6 hour High early

Curing Box Present in Field: No
Heated No Insulated No Water: No Temp 60-80: No

Remarks:

Wt. Cu. Ft. - ASTM C138 -

Weight (lb):	42.80	Tare Weight (lb):	7.66	Net Weight (lb):	35.14	Calib. Factor (lb):	4.012	PCF (lb/cf):	141.0

	Cement	Fly Ash	Slag	Fine Agg	Coarse Agg	AEA	WRed	HR WRed	Accel	Fiber	Latex	W/C	Slump	Air	Unit Wt
Design	658			1350	1715							0.419	3.00	5.5	148.1
Actual													5.00	8.0	141.0

AASHTO T 318 Microwave W/C: 0.000

Type of Fracture: Type 1 to 6

COMPRESSIVE STRENGTH - ASTM C39 (●) Standard 73 M.R. Curing ( ) Ambient Atmospheric Curing

Age Group	On Site (Days)	Specimen #	Height (in)	Diameter (in)	Area (sq in)	Specimen Type	Break Type	Break Load (lb)	Compressive Strength (PSI)	
1 Day	1	127	8.00	4.00	12.57	Cylinder				
1 Day	1	128	8.00	4.00	12.57	Cylinder				
28 Day	1	129	8.00	4.00	12.57	Cylinder	Type 4	68,452	5450	Lumour, E.
28 Day	1	130	8.00	4.00	12.57	Cylinder	Type 4	65,657	5220	Lumour, E.
28 Day	1	131	8.00	4.00	12.57	Cylinder	Type 4	66,043	5250	Lumour, E.
28 Day	1	132	8.00	4.00	12.57	Cylinder				
28 Day	1	133	8.00	4.00	12.57	Cylinder				
28 Day	1	134	8.00	4.00	12.57	Cylinder				

Age Group	Specimen Type	Avg Comp (PSI)
1	Cylinder	
28	Cylinder	5306

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Report of Tests of Concrete

Field ID: 36505
Mix No: 3277
Contract: SWF 164.010

Structure: DUCT BANK FOR WEATHER EQUIPMENT Contractor: Nagori

Pour Location: R/W 16-34 SOUTH OF R/W 9-27 Pour Date: Tuesday, October 6, 2009

Batched At: Cranesville Block Co First Technician: Toussaint, P. Second Technician:

Batch Time: Time Specimen Made: 12:30 PM Sample Taken From: Chute

Mixer: TMMB Load: 10.0 c.y. Capacity: 11.0 c.y. Truck: 611 Field Mixing Duration: 10 min Plant Mixing Duration

Consistency: PLASTIC Air Content: 8.00 % (◉) Pressure ASTM C231 ( ) Volumetric ASTM C173 Slump - ASTM C143: 5.50 Inches

Plant Inspector: Construction Inspector: Scott, Morgan Nitrite Test: Not Tested

Weather: Sunny Air Temperature: 65 °F Concrete Temperature - ASTM C1046: 70 °F

Lot #: 0 Sub Lot#: 0 Class: 4000 Water Added After Sampling: No

Mix Description: 03302 Rapid Set 4, 6 hour High early

Curing Box Present in Field: No
Heated No Insulated No Water: No Temp 60-80: Yes

Remarks:

Wt. Cu. Ft. - ASTM C138 -

Gross Weight (lb: 42.80 Tare Weight (lb): 7.66 Net Weight (lb): 35.14 Calib. Factor (lb): 4.012 PCF: 141.0

	Cement		Fly Ash	Slag	Silicas	Fine Agg	Coarse Agg	AEA	WRed	HR WRed	Accel	Fiber	Latex	W/C	Slump	Air	Unit Wt
Design	658					1350	1715							0.419	3.00	5.5	148.1
Batch															5.50	8.0	141.0

AASHTO T 318 Microwave W/C 0.000

Type of Fracture: Type 1 to 6

COMPRESSIVE STRENGTH - ASTM C39 (◉) Standard 73 M.R. Curing ( ) Ambient Atmospheric Curing

Age Group	On Site (Days)	Specimen #	Height (in)	Diameter (in)	Area (sq in)	Specimen Type	Break Type	Break Load (lb)	Compressive Strength (Psi)	Operator
	1	135	8.00	4.00	12.57	Cylinder	Type 4	48,077	3820	Toussaint, P.
	1	136	8.00	4.00	12.57	Cylinder	Type 5	47,854	3810	Toussaint, P.
28 Day	1	137	8.00	4.00	12.57	Cylinder	Type 4	57,650	4590	Lumour, E.
28 Day	1	138	8.00	4.00	12.57	Cylinder	Type 4	62,941	5010	Lumour, E.
28 Day	1	139	8.00	4.00	12.57	Cylinder	Type 4	59,048	4700	Lumour, E.
28 Day	1	140	8.00	4.00	12.57	Cylinder	Type 4	63,802	5080	Lumour, E.
28 Day	1	141	8.00	4.00	12.57	Cylinder				
28 Day	1	142	8.00	4.00	12.57	Cylinder				

Age Group	Specimen Type	Avg Strength (Psi)
0	Cylinder	3815
28	Cylinder	4845

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DIVISION 3

SECTION 03100

CONCRETE FORMWORK

PART 1. GENERAL

1.01 SUMMARY

This Section specifies requirements for cast-in-place concrete formwork.

1.02 REFERENCES

The following is a listing of the publications referenced in this Section:

American Concrete Institute (ACI)

ACI 347	Guide to Formwork for Concrete
ACI 117	Standard Specifications for Tolerances for Concrete Construction and Materials
ACI 318	Building Code Requirements for Reinforced Concrete

American Society for Testing and Materials (ASTM)

ASTM D 1751	Specification for Preformed Expansion Joint Fillers for Concrete Paving and Structural Construction (Non-Extruding and Resilient Bituminous Types)

National Forest Products Association (NFPA)

National Design Specifications for Wood Construction

West Coast Lumber Inspection Bureau

American Plywood Association (APA)

Douglas Fir Plywood Association (DFPA)

1.03 DESIGN AND PERFORMANCE REQUIREMENTS

A. Design calculations shall be prepared by a Professional Engineer licensed in the State where the Work is to be performed. Design calculations shall be made available to the Engineer to facilitate inspection.

B. For wood products furnished for the Work of this Section, the Contractor shall comply with the applicable provisions of "National Design Specifications for Wood Construction" of the National Forest Products Association (NFPA).

C. For all other products furnished for the Work of this section, the contractor shall comply with the reference standards of the local building code.

D. Shop Drawings

1. All formwork and shoring shop drawings shall be signed and sealed by a Professional Engineer licensed in the State where the Work is to be performed. Shop drawings shall be made available to the Engineer to facilitate inspection.

2. Shop drawings shall indicate:

a. Pertinent dimensions, openings, methods of construction, types of connections, materials, joint arrangement and details, ties and shores, location of framing, studding and bracing, and temporary supports;

b. Means of leakage prevention for concrete exposed to view in the finished construction;

c. Sequence and timing of erection and stripping, assumed compressive strength at time of stripping, height of lift and height of drop during placement;

d. Vertical, horizontal and special loads in accordance with "Loads" of ACI 347 (Section 2.2) and camber diagrams, if applicable;

e. Notes to formwork erector showing size and location of conduits and pipes embedded in concrete according to ACI 318 (Section 6.3).

1.04 SUBMITTALS

For Submittals - see Appendix "A".

PART 2. PRODUCTS

2.01 MATERIALS

A. Earth Forms

Use only for footings where shown on the Contract Drawings.

B. Lumber Forms

Use for edge forms and unexposed finish concrete. Boards shall be 6 inches or 8 inches in width, shiplapped or tongue and groove, "Standard" Grade Douglas Fir, conforming to the "Standard Grading and Dressing Rules No. 17", of the West Coast Lumber Inspection Bureau. Boards shall be four sides surfaced.

C. Plywood Forms

Use for exposed finish concrete. Forms shall conform to U.S. Product Standard PA 1-66. Each panel shall carry the grade trademark of the American Plywood Association along with the Douglas Fir Plywood Association (DFPA) Quality stamp and shall be full size (4-foot x 8-foot) panels.

1. Plywood for surfaces to receive membrane waterproofing shall be a minimum of 5/8 inch thick and shall be "B-B Plyform Class 1 Exterior" grade.

2. Plywood where "Smooth Finish" is required, as shown on the Contract Drawings, shall be "HD Overlay Plyform Class 1 Exterior" grade, a minimum of 3/4 inch thick.

D. Prefabricated Forms

Prefabricated forms shall be as listed below and where shown on the Contract Drawings:

1. Pan Type Void Forms

   Removable steel or reinforced plastic of sizes and profiles required to produce completed Work shown.

2. Tubular Column Type

   Metal, fiberglass-reinforced plastic, or spirally wound laminated fiber materials; inside surface treated with release agent; of sizes required to produce completed Work shown.

E. Steel Forms

Sheet steel, suitably reinforced and designed for the particular use shown on the Contract Drawings.

F. Form Liners

Smooth, durable, grainless and non-staining hardboard, unless otherwise shown on the Contract Drawings.

G. Framing, Studding, and Bracing

Stud or No. 3 Structural Light Framing grade.

H. Form Ties and Spreaders

Standard, non-corrosive metal form clamp assembly, of type acting as spreaders and leaving no metal within 1 inch of concrete face. No wire ties, wood spreaders or through bolts will be permitted.

I. Form Anchors and Hangers

Anchors and hangers used for exposed concrete shall not leave exposed metal at surface. Hangers supporting forms from structural steel shall be symmetrically arranged on supporting members to minimize twisting or rotation of member. Penetration of structural steel members will not be permitted.

J. Form Coating Agent

Provide one of the following unless otherwise shown on the Contract Drawings:

1. "Arcal-80"; Arcal Chemical Corporation
2. "Synthex"; Industrial Synthetics Company
3. "Nox-Crete Form Coating"; Nox-Crete Company

K. Vapor Retarder

Where shown on the Contract Drawings, 8 mil thick poly-ethylene sheet

L. Bituminous Joint Filler: ASTM D 1751

PART 3. EXECUTION

3.01 PREPARATION

A. Earth Forms

Trench earth forms neatly and accurately and at least 2 inches wider than footing widths shown on the Contract Drawings, unless otherwise indicated. Construct wood edge strips at top of each side of trench to secure reinforcing and prevent trench from sloughing. Form sides of footings where earth sloughs. Earth forms shall be tamped firm and cleaned of all debris and loose material before depositing concrete.

B. Formwork – General

Sloped surfaces steeper than 1.5 horizontal to 1 vertical should be provided with a top form to hold the shape of the concrete during placement, unless it can be demonstrated to the engineer that top forms can be omitted. Construct forms to the correct shape and dimensions, mortar tight, of sufficient strength, and so braced and tied together that the movement of men, equipment, materials or the placing and vibrating of the concrete shall not throw them out of line or position. Forms shall be strong enough to maintain their shape under all imposed loads. Camber where necessary to assure level finished soffits unless otherwise shown on the Contract Drawings. Carefully verify the horizontal and vertical positions of forms and correct all inaccuracies to the satisfaction of the Engineer before placing concrete in any form. Complete all wedging and bracing before placing concrete.

C. Forms for "Smooth Finish" Concrete

Use steel, plywood or lined board forms. Plywood and form liners shall be clean, smooth, uniform in size and free from damaged edges and holes. Form lining shall have close-fitting square joints between separate sheets and shall not be sprung into place. Sheets of form liners and plywood shall be full size wherever possible and joints shall be taped to prevent protrusions in concrete. Use special care in forming and stripping wood forms to protect corners and edges. All horizontal joints shall be level and continuous. Wood forms shall be kept wet at all times until stripping.

D. Forms for Surfaces to Receive Membrane Waterproofing

Use plywood or steel forms. After erection of forms, tape form joints to prevent protrusions in concrete.

E. Framing, Studding and Bracing

Space studs at 16 inches on center maximum for boards and 12 inches on center maximum for plywood. Framing, bracing, centering and supporting members shall be of ample size and strength to carry safely, without deflection, all dead and live loads to which forms may be subjected, and shall be spaced sufficiently close to prevent any bulging or sagging of forms. Soffits of all beam forms shall be constructed of material a minimum of two inches thick. Concrete out of line, level or plumb will be cause for rejection by the Engineer of the whole Work affected. Distribute bracing loads over base area on which bracing is erected. When placed on ground, protect against undermining, settlement or accidental impact.

3.02 INSTALLATION

A. Tolerances

Formwork shall be constructed so that concrete surfaces shall be within construction tolerances specified in "Standard Specifications for Tolerance for Concrete Construction and Materials" of ACI 117. Tolerances not met will be corrected to the satisfaction of the Engineer at no cost to the Authority.

B. Chamfered Corners

As shown on the Contract Drawings, provide moldings in forms for all chamfering required. Moldings shall be 45-degree right triangles in profile, of size required, milled from wood free from visible defects.

C. Forms Ties

Form ties shall be of sufficient strength and used in sufficient quantities to prevent spreading of the forms. Place ties at least one inch away from the finished surface of the concrete. Leave inner rods in concrete when forms are stripped. Space all form ties to be equidistant, and symmetrical and lined up both vertically and horizontally unless otherwise shown on the Contract Drawings.

D. Cleanouts and Access Panels

Provide removable cleanout sections or access panels at the bottoms of all forms to permit inspection and effective cleaning of loose dirt, debris, and waste material. Clean all forms and surfaces against which concrete is to be placed of all chips, sawdust, and other debris and thoroughly blow out with compressed air just before concrete is placed.

E. Arrangement

Arrange formwork to allow proper erection sequence and to permit form removal without damage to concrete.

F. Construction Joints

Provide a surfaced pouring strip where construction joints intersect exposed surfaces to provide a straight line at joints. Just prior to subsequent concrete placement, remove strip and tighten forms to conceal shrinkage. Construction joints shall show no overlapping of concrete and shall, as closely as possible, present the same appearance as butted plywood joints. Joints in a continuous line shall be straight, true, and sharp.

G. Embedded Items

Make provisions for pipes, sleeves, anchors, inserts, reglets, anchor slots, nailers, waterstops and other features. No wood or uncoated aluminum shall be embedded in concrete. Obtain any required information pertaining to embedded items to be furnished for the Work specified in other Sections. Securely anchor all embedded items in correct location and alignment prior to placing concrete. Conduits and pipes, including those made of coated aluminum, must meet the requirements of ACI 318 (Section 6.3). Approved coatings for aluminum shall be as follows unless otherwise shown on the Contract Drawings:

1. Conlux

   Primer - Bond Plex 46 or 66 (water borne urethane)
   Topcoat - Epolon Multi-Mil 39 (epoxy polyamide)

2. Sherwin Williams

   Topcoat - Heavy Duty Epoxy B67/B60B3 (epoxy polyamide)
   Note: self-priming

3. Benjamin Moore

   Primer - Epoxy Rust Inhibitive Primer (epoxy polyamide)
   Topcoat - Epoxy Enamel (epoxy polyamide)

H. Openings for Items Passing Through Concrete

Frame openings in concrete where shown on the Contract Drawings. Establish exact locations, sizes, and other conditions required for openings and attachment of Work specified under other Sections. Coordinate all Work of this nature in order that there shall be no unnecessary cutting and patching of concrete. Perform any cutting and repairing of concrete required as a result of failure to provide for such openings at no cost to the Authority.

I. Screeds

Set screeds and establish levels for tops of concrete slabs and levels for finish on slabs. Slope slabs to drain where required or as shown on the Contract Drawings. Before depositing concrete, remove all debris from the space to be occupied by the concrete and thoroughly wet all forms. Remove freestanding water.

J. Screed Supports

For concrete over waterproof membranes and vapor barrier membranes, use screed supports of a cradle, pad or base type which shall not puncture the membrane. Staking through the membrane will not be permitted.

K. Shores and Falsework

Provide shores and falsework of adequate strength to protect persons and adjacent structures. Falsework and supports shall be adequate in size and strength to resist the loads imposed upon them without deformation, deflection, or settlement. All members must be straight and true without twists or bends. Use wedges in pairs or jacks where required to bring forms, shoring, or falsework for beams, girders, slabs, and other parts of the structure to the necessary elevations and uniform bearing before placing concrete. Do not use single wedges. Vertical and lateral loads shall be carried to ground by the formwork system or by bracing. Where shores rest on ground, provide adequate mud sills or other bases. Construct forms to permit their removal without disturbing the original shoring. Ensure that there is no movement of shores, braces or other supports during placement of concrete.

L. Reuse and Coating of Forms

Thoroughly clean forms and reapply form coating before each reuse. For exposed Work, do not reuse any form which cannot be reconditioned to "like new" condition. Discard forms considered unsatisfactory by the Engineer. Apply form coating to all forms in accordance with the manufacturer's specifications, except where "Scored Finish" is required as shown on the Contract Drawings. Do not coat forms for concrete that is to receive a "Scored Finish". Apply form coatings before placing reinforcing steel.

M. Inspection

Notify the Engineer after placement of reinforcing steel in the forms, but prior to placing any concrete, so that his inspection may be made.

3.03 REMOVAL OF FORMS AND SHORES

A. The forms and supporting shoring shall not be removed until the members have acquired sufficient strength to support their weight and the loads superimposed thereon safely and until the time and sequence of removal have been approved by the Engineer. Formwork shall be removed without damage to the concrete, in a sequence that does not allow the members to be subject to impact or loading eccentricities. Any repair required as a result of damage to the concrete shall be made to the satisfaction of the Engineer at no cost to the Authority.

B. Except when otherwise approved by the Engineer, or when minimum attained concrete strengths are specified on the Contract Drawings, forms shall be left in place for not less than the total number of days as specified in ACI 347.

END OF SECTION

SECTION 03100

CONCRETE FORMWORK

SUBMITTALS

APPENDIX "A"

The following items shall be submitted to the Engineer for approval, except as otherwise noted.

A. Shop Drawings

1. As per Division 1, "Shop Drawings, Catalog Cuts and Samples";
2. Formwork and shoring shop drawings for areas accessible to the public and/or concrete exposed to view in the finished construction shall be submitted to the Engineer (as indicated in Section 1.03 D) at least 21 days prior to ordering any material or constructing any formwork;
3. Provide a layout of all embedded items, including electrical and telephone conduit and plumbing and drainage pipes, at least 15 days prior to concrete placement.

B. Catalog Cuts, Material Certification and Test Results

1. As per Division 1, "Shop Drawings, Catalog Cuts and Samples";
2. Material certifications, brand names and test results (where required) for all formwork materials. Submit at least 35 days prior to concrete placement.

C. Samples

1. As per Division 1, "Shop Drawings, Catalog Cuts and Samples";
2. Form ties and spreaders with manufacturer's specifications, submit at least 21 days prior to ordering any material;
3. Tapes for form joints with manufacturer's literature;
4. Waterstops and premolded expansion joint filler;
5. Form liners with manufacturer's specifications, submit at least 21 days prior to ordering any material;
6. Form coating agent with manufacturer's literature.

D. Design Computations

Design computations for areas accessible to the public and/or concrete exposed to view in the finished construction shall be submitted to the Engineer (as indicated in Section 1.03 A) at least 21 days prior to ordering any material or constructing any formwork.

END OF APPENDIX "A"

DIVISION 3

SECTION 03200

CONCRETE REINFORCEMENT

PART 1. GENERAL

1.01 SUMMARY

This Section specifies requirements for furnishing and installing concrete reinforcement.

1.02 REFERENCES

The following is a listing of the publications referenced in this Section:

American Association of State Highway and Transportation Officials (AASHTO)

AASHTO M32	Steel Wire, Plain, for Concrete Reinforcement
AASHTO M55	Steel Welded Wire, Fabric, Plain, for Concrete Reinforcement
AASHTO M221	Welded Deformed Steel Wire Fabric for Concrete Reinforcement
AASHTO M31	Deformed and Plain Billet-Steel Bars for Concrete Reinforcement
AASHTO M284	Epoxy-Coated Reinforcing Steel Bars

American Concrete Institute (ACI)

ACI 315	Details and Detailing of Concrete Reinforcement
ACI 318	Building Code Requirements for Reinforced Concrete

American Society for Testing and Materials (ASTM)

ASTM A 82	Steel Wire, Plain, for Concrete Reinforcement
ASTM A 184	Fabricated Deformed Steel Bar Mats for Concrete Reinforcement
ASTM A 185	Steel Welded Wire, Fabric, Plain, for Concrete Reinforcement
ASTM A 497	Welded Deformed Steel Wire Fabric for Concrete Reinforcement
ASTM A 615	Deformed and Plain Billet-Steel Bars for Concrete Reinforcement
ASTM A 767	Zinc-Coated (Galvanized) Steel Bars for Concrete Reinforcement
ASTM A 775	Epoxy-Coated Reinforcing Steel Bars

American Welding Society (AWS)

AWS D 1.4	Structural Welding Code - Reinforcing Steel

Concrete Reinforcing Steel Institute (CRSI)

Manual of Standard Practice Placing Reinforcing Bars

1.03 BRIDGE WORK

For Work of this Section involving bridges, the Contractor shall comply with the applicable provisions of "Standard Specifications for Highway Bridges" of the American Association of State Highway and Transportation Officials (AASHTO). Materials shall be in accordance with AASHTO designations where shown after the ASTM designation in parenthesis. Where not shown, comply with ASTM Designation.

1.04 DELIVERY, STORAGE, AND HANDLING

A. Deliver concrete reinforcement in bundles marked with metal tags indicating size, length and mark number.

B. Store and handle materials to prevent corrosion, damage to coating or contamination that could impair bond.

1.05 SUBMITTALS

For submittals see Appendix "A".

PART 2. PRODUCTS

2.01 MATERIALS

A. Reinforcing Bars: ASTM A 615 (AASHTO M31), deformed, Grade 60, unless otherwise shown on the Contract Drawings.

Coated bars where shown on the Contract Drawings shall comply with the following:

1. Galvanized Reinforcing Bars

ASTM A 767, Class-I hot-dip galvanized, after fabrication and bending.

Repair sheared and cut ends and damaged coating with a zinc-rich formulation conforming to ASTM A 767 in accordance with the material manufacturers' recommendations.

2. Epoxy-coated Reinforcing Bars: ASTM A 775 (AASHTO M284)

Repair sheared and cut ends and damaged coating with an epoxy patching material conforming to ASTM A 775 (AASHTO M284) in accordance with the patching material manufacturers recommendations.

B. Welded Wire Fabric

Types shall be as shown on the Contract Drawings and shall comply with the following:

1. Plain, ASTM A 185 (AASHTO M55), flat sheets for size W5 and larger and coiled rolls for sizes below W5.

2. Deformed, ASTM A 497 (AASHTO M221), flat sheets for sizes D5 and larger and coiled rolls for sizes below D5.

C. Fabricated Steel Bar Mats

Fabricated steel bar mats shall be in accordance with ASTM A 184, when shown on the Contract Drawings, and as follows:

1. Bar grade, size and spacing as shown on the Contract Drawings.
2. Welded connections, unless otherwise shown on the Contract Drawings.

D. Steel Wire

Steel wire shall comply with ASTM A 82 (AASHTO M32), plain finish, unless otherwise shown on the Contract Drawings.

2.02 ACCESSORIES

A. Tie Wire

Provide minimum 16-gage, annealed type. Provide nylon, plastic or epoxy-coated wire for use with epoxy-coated and galvanized reinforcing bars, if any.

B. Supports for Reinforcement

Provide bolsters, chairs, spacers, and other devices for spacing, supporting and fastening reinforcing bars and welded wire fabric in place. Use galvanized steel wire bar type supports complying with CRSI standards and as follows:

1. For supporting epoxy-coated reinforcing bars, use plastic coated supports, or supports fabricated from or coated with a dielectric material.
2. For slabs-on-grade, use supports with horizontal plate runners.
3. For exposed-to-view concrete surfaces, where legs of supports are in contact with forms, use supports with plastic capped legs (CRSI, Class 1).
4. Where architectural concrete is shown on the Contract Drawings, use plastic side form spacers.

2.03 FABRICATION

A. Fabricate concrete reinforcement as shown on the Contract Drawings and on approved shop drawings, in accordance with ACI 315 "Tolerances".

B. Bend all concrete reinforcement cold. Heating of bars or wire fabric is prohibited.

C. Where welding of concrete reinforcement is shown on the Contract Drawings, weld in accordance with AWS Dl.4.

PART 3. EXECUTION

3.01 INSTALLATION

A. Place concrete reinforcement as shown on the Contract Drawings and on approved shop drawings. Where not shown on the Contract Drawings, comply with CRSI "Placing Reinforcing Bars".

B. Clean concrete reinforcement of loose rust, mill scale, earth, ice, and other materials that reduce or destroy bond with concrete.

C. Accurately position, support and secure concrete reinforcement against displacement by formwork, construction, or concrete placement operations. Locate and support concrete reinforcement by chairs, runners, bolsters, spacers, and hangers in accordance with CRSI Manual of Standard Practice". Do not interfere with placement of embedded items.

D. When a vapor barrier is shown on the Contract Drawings, do not cut or puncture during concrete reinforcement placement.

E. Place concrete reinforcement to obtain covers shown on the Contract Drawings for concrete protection, or in accordance with ACI 318 "Concrete Protection for Reinforcement", if not shown on the Contract Drawings. Arrange, space and securely tie bars and bar supports to hold concrete reinforcement in position during concrete placement operations. Set ties so ends are directed into concrete, not toward exposed concrete surfaces.

F. Install welded wire fabric in lengths as long as practical. Lap adjoining pieces at least one full mesh and lace splices with wire, but in no case shall lap be less than requirements of ACI 318 "Splices of Welded Deformed Wire Fabric in Tension" or "Splices of Welded Plain Wire Fabric in Tension". Offset end laps in adjacent widths to prevent continuous laps in either direction.

G. After concrete placement, do not field bend partially embedded concrete reinforcement except as shown on the Contract Drawings.

H. Repair damaged bars and welds, if any, in accordance with 2.01A.

END OF SECTION

SECTION 03200

CONCRETE REINFORCEMENT

SUBMITTALS

APPENDIX "A"

The following items shall be submitted to the Engineer, except as otherwise noted.

A. Shop Drawings

1. As per Division 1, "Shop Drawings, Catalog Cuts and Samples".
2. Details indicating placement, cover, splice locations, lap lengths, mechanical splice hardware, grade, bar size, length, mark number, bending schedule, bending diagram, weld designations, type of coating, material used to repair coating, and types of chairs, spacers, hangers and tie wire for all concrete reinforcement.
3. All proposed changes to the size, spacing or arrangement of the reinforcing steel shown on the Contract Drawings shall be clearly flagged as such on the shop drawings.

B. Catalog Cuts, Material Certification and Test Results

1. As per Division 1, "Shop Drawings, Catalog Cuts and Samples".
2. Catalog cuts for chairs, spacers, hangers and mechanical splices.
3. Certification from the applicator of epoxy that the epoxy-coated reinforcing bars meet the requirements of ASTM A 775 (AASHTO M284).
4. Test results and certification from the galvanizer that the weight, application and testing of zinc coating conforms with specifications and ASTM A 767.
5. Certified mill test reports for all concrete reinforcement.

C. Samples

1. As per Division 1, "Shop Drawings, Catalog Cuts and Samples".
2. Mechanical Splice Hardware.
3. Material used to repair coating.

D. Design Computations

1. Design computations for all proposed changes to the size, spacing or arrangement of the concrete reinforcement shown on the Contract Drawings.

END OF APPENDIX "A"

DIVISION 3

SECTION 03302

PORTLAND CEMENT CONCRETE, SHORT FORM

PART 1. GENERAL

1.01 SUMMARY

This Section and its appendices specify requirements for Portland Cement Concrete mix proportions, materials used in concrete mixes, and curing.

For requirements for furnishing Portland cement concrete, see Section 03303, entitled PLACEMENT OF PORTLAND CEMENT CONCRETE, SHORT FORM.

1.02 REFERENCES

The following is a listing of the publications, standards and codes referenced in this Section, of which the latest edition shall govern:

American Association of State Highway and Transportation Officials (AASHTO):

Standard Specifications for Highway Bridges

M 182	Burlap Cloth Made From Jute or Kenaf
TP 26	Quality of Water to be Used in Concrete

American Concrete Institute (ACI)

Standard Practice for Selecting Proportions for Normal, Heavyweight and Mass Concrete

301	Specifications for Structural Concrete for Buildings
304R	Guide for Measuring, Mixing, Transporting and Placing Concrete
305R	Hot Weather Concreting
306R	Cold Weather Concreting
308	Standard Practice for Curing Concrete
318	Building Code Requirements for Reinforced Concrete

American Society for Testing and Materials (ASTM):

C 31	Practice for Making and Curing Concrete Test Specimens in the Field
C 33	Specification for Concrete Aggregates
C 39	Test Method for Compressive Strength of Cylindrical Concrete Specimens
C 94	Specification for Ready-Mixed Concrete
C 138	Test Method for Unit Weight, Yield, and Air Content (Gravimetric) of Concrete
C 143	Test Method for Slump of Hydraulic Cement Concrete
C 150	Specification for Portland Cement

C 171	Specification for Sheet Materials for Curing Concrete
C 172	Practice for Sampling Freshly Mixed Concrete
C 173	Test Method for Air Content of Freshly Mixed Concrete by the Volumetric Method
C 231	Test Method for Air Content of Freshly Mixed Concrete by the Pressure Method
C 260	Specification for Air Entraining Admixtures for Concrete
C 309	Standard Specification for Liquid Membrane-Forming Compounds for Curing Concrete
C 311	Test Method for Sampling and Testing Fly Ash or Natural Pozzolans for Use as a Mineral Admixture in Portland Cement Concrete
C 494	Specifications for Chemical Admixtures for Concrete
C 618	Specification for Coal Fly Ash and Raw or Calcined Natural Pozzolan for Use as a Mineral Admixture in Portland Cement Concrete
C 989	Specification for Ground Granulated Blast Furnace Slag for Use in Concrete and Mortars
C 1064	Test Method for Temperature of Freshly Mixed Portland cement Concrete
C 1315	Specification for Liquid Membrane-Forming Compound Having Special Properties for Curing and Sealing Concrete
D 3665	Practice for Random Sampling of Construction Materials
D 5199	Test Method for Measuring Nominal Thickness of Geotextiles and Geomembranes

1.03 ENVIRONMENTAL REQUIREMENTS

A. Cold Weather Requirements

1. Cold weather concrete construction shall conform to ACI 306R.
2. Do not mix or place concrete when the ambient temperature is below 35°F, or when conditions indicate that the temperature will fall below 35°F within 72 hours, unless the areas to receive fresh concrete are insulated or enclosed and heated to maintain 50°F as approved by the Engineer.
3. Reinforcement, forms and soils with which concrete will be in contact shall be completely frost-free. If required, apply heat to raise their temperature to a minimum of 35°F. The use of chemicals to eliminate frost shall not be permitted.

B. Hot Weather Requirements

1. Hot weather concrete construction shall conform to ACI 305R.
2. Do not place concrete for pavements, overlays, bridge decks or ramps when the ambient temperature exceeds 90°F or the rate of evaporation exceeds 0.2 lbs/ft2/hr, in accordance with ACI 305R, Figure 2.1.5. Schedule Work so that concrete can be placed during the coolest part of the day (late afternoon or at night).
3. If the concrete temperature reaches 92°F as measured in accordance with ASTM C 1064, it shall be rejected.

1.04 QUALITY CONTROL

A. General

1. Maintain a level of Quality Control sufficient to consistently provide the end result performance properties specified herein. In addition:

a. Supply the approved mix proportions. Forward to the Engineer all delivery tickets, which shall carry an automated, time-date stamp and shall indicate the batch weights of all batching constituents.

b. Ensure that all plant mixing equipment and trucks are calibrated and New Jersey or New York State Department of Transportation approved.

c. Ensure that all personnel performing concrete testing are, at a minimum, certified ACI Grade I Concrete Laboratory Testing Technicians or Concrete Field Testing Technicians, as appropriate.

1.05 SUBMITTALS

A. For submittals see Appendix "A".

B. Do not deliver any concrete to the construction site until all approvals have been obtained.

PART 2. PRODUCTS

2.01 MANUFACTURERS AND SOURCES OF SUPPLY

A. Do not use cement, fly ash and slag or fine or coarse aggregates, that have not been approved by either the New Jersey or New York State Department of Transportation.

2.02 MATERIALS

A. Cement: Conforming to ASTM C 150, Type I and II; conforming to Type III where early strength gain is required and permitted; or others as may be specified on the Contract Drawings.

B. Fly Ash: Conforming to ASTM C 311 and ASTM C 618, Class F or Class C, except the maximum loss on ignition shall be less than 4%.

C. Slag: Conforming to ASTM C 989, Grade 120.

D. Fine and coarse aggregates shall conform to ASTM C 33.

E. Water: Conforming to AASHTO TP 26. Clean and potable for both mixing and curing concrete.

F. Air Entraining Agent: Conforming to ASTM C 260.

G. Admixtures: All admixtures shall conform to ASTM C 494. They shall not contain more than 0.05% chloride ions, and shall be used in accordance with the manufacturer's recommendations. Dosage charts, including the effects of concrete temperatures from 50°F to 90°F, shall be submitted to the Engineer. All admixtures shall be manufactured by one of the following:

1. Euclid Chemical Company
2. W.R. Grace & Company
3. Master Builders Technologies
4. Sika Corporation

H. Curing Materials:

1. Liquid Membrane Forming Curing Compound shall be one of the following:
   a. "DOT Resin Cure (Type II)" as manufactured by Conspec Marketing & Manufacturing Company, Inc.
   b. "Euco Kurez Vox (White)" as manufactured by Euclid Chemical Company
   c. "1200 White" as manufactured by W.R. Meadows
   d. or an approved equal meeting the requirements specified in 2.02.H.2.
2. Liquid Membrane Forming Curing Compound: conforming to ASTM C 1315 and to the following:
   a. For horizontal exterior applications, curing membranes are restricted to ASTM C309 Type 2, Class B materials. ASTM C 309 Type 1 D, Class B membranes are acceptable for other exterior applications. ASTM C309 Type 1, Class B membranes are acceptable for interior applications only.
3. Burlap: Conforming to AASHTO M 182, Class 3, weighing approximately 9 oz./sq. yd. dry.
4. Sheet Material: Conforming to ASTM C 171.
   a. Polyethylene Film:
      (1) White opaque, where curing surface is exposed to sun
      (2) Clear, for other applications
         (a.) White Burlap Polyethylene Sheet.
5. Cotton Mats: conforming to ASTM D 5199 with a minimum thickness of 40 mils, ASTM C 156 with a maximum water loss of 0.0065 oz./in.2, ASTM D 4833 with a minimum puncture strength of 70 pounds, and ASTM E 1347 with a minimum reflectance of 75%. The following cotton mats may be used in lieu of burlap for wet curing operations:
   a. "Transguard 4000" as manufactured by Reef Industries, Inc., Houston, Texas.
   b. Or an approved equal conforming to the requirements specified in 2.02.R.5.

I. Evaporation Retardant: This material shall not be used as a finishing tool. Use one of the following:

1. "Euco-Bar" as manufactured by Euclid Chemical Company
2. "E-Con" as manufactured by L&M Construction Chemicals, Inc.
3. "Confilm" as manufactured by Master Builders Technologies
4. "SikaFilm" as manufactured by Sika Corporation
5. "Aquafilm" as manufactured by Conspec Marketing & Manufacturing Company, Inc.

2.03 MIX PROPORTIONS

A. Develop mixes in accordance with the latest editions of ACI 211, ACI 301 and ACI 318 to produce design performance criteria in accordance with the Contract documents, with a degree of excess as determined by Chapter 5 of ACI 318, and to meet all of the applicable performance criteria as specified in the Contract documents. Prior to concrete construction and after approval of all materials to be used in the concrete, submit a mix proportion showing that all performance criteria have been met. Mix proportions submitted shall be based upon laboratory trial mix test results and/or mixes successfully used within the two years preceding the date of the submittal of the mix for the Work of this Section. Verify that the independent testing laboratory used to develop the mix proportions and to perform testing has AASHTO Accreditation for all test methods required to be performed and for development of the required mix. Ensure that the technical staff preparing the mix proportions and performing the associated testing is certified by ACI for all the tests being performed. Submit to the Engineer proof of certifications prior to the start of development of the mix proportion and testing. The mix shall include copies of test reports, including test dates, and a complete list of materials, including type, brand, and source. The mix proportion shall also conform to the following:

1. Substitute either fly ash or slag at the minimum rate of 15% by weight of cement. The maximum rates of substitution shall be 30% for fly ash and 40% for slag. Fly ash and slag substitution up to 50% in the same mix may be permitted upon approval by the Engineer.
2. Compute water to cement ratio by all the water in the mix that is from admixtures and aggregates, plus added water, divided by the weight of cementitious material that is equal to the total weight of cement plus fly ash, or slag. In order to meet the specified water to cement ratio, account for any admixtures which increase the water to cement ratio by 0.01 or greater.
3. Do not add High Range Water Reducer to the concrete mix at the plant. Deliver High Range Water Reducer to the site in a tank fixed to the truck such that the tank discharges directly into the mixing drum, or add High Range Water Reducer to the drum from a calibrated dispensing unit. A calibrated dispensing unit shall be defined as a manufactured dispenser with clear volume indications marked on the outside of the unit. It shall be available at all times during the concrete placement for re-dosing purposes. Submit a re-dosing chart showing the dosages necessary to increase the slump, in inches per cubic yard of concrete remaining in the drum, over the range of concrete temperatures from 50° to 90° F. If re-dosing occurs, the re- dosing chart shall be used, but under no circumstances shall the total dosage exceed the maximum dosage recommended by the manufacturer. The truck shall mix the load for a minimum of an additional 5 minutes prior to releasing the load.
4. The percentage of air in the mix shall fall within the range as outlined in the table shown in 2.04.A.2. entitled, "Air Content Target Range for Freshly Mixed Concrete." Determine air content by testing in accordance with ASTM C 231 for normal and heavyweight concrete mixes.

2.04 QUALITY ACCEPTANCE LIMITS

A. Develop mixes to meet the following performance criteria Quality Acceptance Limits unless otherwise noted on the Contract Drawings:

1. Compressive Strength (ASTM C 39): The design compressive strength at 28 days.

2. Air Content (ASTM C 138, ASTM C 173 or ASTM C 231): The minimum and the maximum limits shall be as specified in the table below:

AIR CONTENT TARGET RANGE FOR FRESHLY MIXED CONCRETE

MAXIMUM SIZE AGGREGATE (SIZE #)	AIR CONTENT		
	Min.		Max.
2" or above (# 467 and above)	3.5%	-	7.5%
1 ½" (# 57)	4.0%	-	8.0%
1" (# 67)	4.5%	-	8.5%
½" (# 8)	5.5%	-	9.5%
3/8"	6.0%	-	10.0%

Note: For a specified compressive strength greater than 5000 psi, the minimum and maximum air content, as indicated above, shall both be reduced by 1.0%. For all concrete applications not exposed to freeze-thaw cycling or deicing chemicals, no air entrainment is required.

PART 3. EXECUTION

3.01 BATCHING AND MIXING CONCRETE

A. Measurement of Proportions

1. All concrete batching shall be in conformance with ASTM C 94 and ACI 304R.
2. For very high early strength concrete requiring 2000 psi or greater in 6 hours or less time, the method of batching shall be restricted to a calibrated mobile mixer, or from a transit mixer that is loaded on site with bulk bags of the very high early strength cement. Bulk bags shall contain sufficient very high early strength cement by weight to batch for a minimum of 3 cubic yards of concrete.

B. Mixing Concrete

1. Plants and truck mixers shall conform to ASTM C 94, and shall be either New Jersey or New York State Department of Transportation inspected and approved. Documentation of such conformance shall be available to the Engineer at all times.
   a. Measure water and cement accurately to within 1% of the required amounts before loading into the mixer. Accurately measure fine and coarse aggregate to within 2% of the required amounts before loading into the mixer.
   b. Mixers which are found to be mechanically unsatisfactory shall be immediately repaired or withdrawn from use.
2. The Engineer may permit one re-tempering of the concrete subject to the following:
   a. The addition of water to the concrete mix at the construction site shall not be permitted for mix designs with a water to cement ratio of 0.40 or less. For all other mixes, water may be added, but the total amount of water shall not exceed the mix proportion water to cement ratio.
   b. High range water reducer redosing shall conform to the manufacturer's approved redosage chart and shall not exceed the recommended manufacturer's limitation, nor shall it retard the initial set of the concrete by more than 30 minutes.

c. Concrete that is re-mixed or re-tempered after it has partially hardened or has attained its initial set will be rejected.

d. The Engineer reserves the right to reject concrete that has not been placed within 90 minutes from the time the cement had first contact with water, or if the concrete temperature reaches 92°F as measured in accordance with ASTM C 1064.

3.02 PRE-PLACEMENT FIELD REQUIREMENTS

A. Prior to any construction site delivery of concrete, furnish, deliver and maintain insulated curing boxes of sufficient size and strength to contain all the specimens (cylinders and beams) made by the Engineer in any two (2) consecutive Work periods. Such boxes shall be equipped to regulate the temperature in the range of 60°F to 80°F, and to provide the moisture to maintain the curing conditions specified in ASTM C 31. Locate the boxes where directed by the Engineer. Protect the boxes from vibration and other disturbances during specimen curing.

B. Pump Concrete

1. Grout used to prime the pump line shall not be included in the placement. Make provisions for the disposal of the grout at the end of the pump line outside Authority property and at no cost to the Authority. Placement shall not begin until concrete is visible at the end of the pump line.

2. Permit no water to enter the pump hopper at any time during placement operations.

Submit written procedures for pumping to the Engineer for approval. The procedures shall contain, but not be limited to, pumping scheme, pump description, line diameter, line length, and the number of turns and line offsets.

3.03 CURING

A. Give careful attention to the curing of all concrete. Submit to the Engineer for approval a curing procedure plan prior to placing any fresh concrete. Cure concrete in accordance with ACI 308 and the following specifications. Commence curing procedures immediately after the fresh concrete has been placed.

1. Provide suitable means, such as insulating blankets or heated enclosures, for maintaining a concrete temperature of at least 50°F after placement, until it has attained 4,000 psi. At the end of this period, remove protection in such a manner that the drop in temperature of any portion of concrete shall be gradual and not exceed the provisions of ACI 306R Table 3.1 during the first 24 hours after removal of protection.

2. Allow all concrete to attain 4,000 psi compressive strength or the specified design compressive strength, whichever is lower, before being exposed to freeze-thaw cycles.

B. Liquid Membrane Forming Curing Compounds and Sheet Materials for curing

1. Immediately after placing or finishing, commence the curing process of concrete not covered by forms. Avoid loss of moisture by placing a curing membrane on the surface. Use one of the curing materials listed in 2.02.H., which may be supplemented by initially using an evaporation retardant listed in 2.02.I., as long as wet curing is not required, subject to the following:

   a. Polyethylene film or burlap polyethylene sheet, if used, shall be lapped at edges and ends at least 1-foot and shall have all ends and edges taped to adjacent sheets or surfaces to completely seal areas to be cured. Secure in a sufficient manner that will not allow the film, the sheets, or the securing mechanism to be removed by wind forces, resulting in fresh concrete exposure without protection. Burlap, in conformance with AASHTO-M182, shall be broken and presoaked for 24 hours prior to use.

   b. Liquid membrane forming curing compound, if used, shall beapplied by approved pressure spraying or distributing equipment in two uniform full applications perpendicular to each other as recommended by the manufacturer. Allow the first coat to become tacky before applying the second coat. Each application shall be the full quantity recommended by the manufacturer.

2. Recoat areas subjected to heavy rainfall within 3 hours of such occurrence.

3. Follow manufacturer's recommendations for agitation during application and warming where necessary during cold weather.

4. Do not use liquid membrane forming curing compound where the surface being cured is to receive a finish that will be bonded to the concrete surface or where a floor hardener is to be applied, unless a certification of compatibility and a minimum five year performance record is submitted in advance to the Engineer for approval. The Engineer will check for uniformity through random sampling and testing. Testing may include determination of membrane infrared spectrum, pH, specific gravity and solids content.

3.04 QUALITY ASSURANCE TESTING, SAMPLING, AND INSPECTIONS

A. The Engineer will perform Quality Assurance testing during mixing and placing of concrete on samples taken from the end of the line or at the point of discharge in accordance with ASTM C 172. The Engineer will take samples of concrete from each Work period based on random sampling procedures described in ASTM D 3665.

1. The Engineer may perform the following quality assurance tests: slump, air content, compressive strength, unit weight, temperature and water to cement ratio. If any of these tests indicate results out of tolerance with those specified herein, or on the Contract Drawings, or as given in the approved mix proportion, the concrete may be rejected.

   a. Compressive strength: A minimum of six cylinders will be made for each 50 cubic yards or a portion thereof in accordance with ASTM C 31 and tested at the time requirements specified in accordance with ASTM C 39.

   b. Slump test: Performed during the placement in accordance with ASTM C143. The Engineer will perform one test for each set of test specimens.

   c. Unit Weight: The plastic unit weight of concrete will be determined in accordance with ASTM C 138. The Engineer will perform one test for each set of test specimens.

d. Air Content Test: Performed during the placement in accordance with ASTM C 138, ASTM C 231 or ASTM C 173. The Engineer will perform one test for each set of specimens.

B. In accordance with the Section of Division 1 entitled, "Inspections and Rejections," provide labor and means for obtaining all samples required for trial batches and field-testing performed by the Engineer, at no additional cost to the Authority.

1. Provide a representative sample, in the quantity requested by the Engineer, of all cement, fly ash, slag, fine and coarse aggregate, admixtures, evaporation retardant, and liquid membrane forming curing compound during any day of production when the Engineer requests a sample. Take samples in the presence of the Engineer at the point of storage, at either the concrete producer's plant or the construction site, that will be used for the Work of this Contract. For cement, fly ash, and slag samples, either use a sampling port on the silo, drop material in a loader bucket between loads or take samples from the boot using a "Sample Thief" during loading.

3.05 CORRECTION OF DEFICIENCIES

If concrete is found to be deficient as defined below, follow Engineer's directions at no additional cost to the Authority:

A. Strength Deficiency: If any individual compressive strength test result of cylinders falls below the specified compressive strength by more than 500 psi, investigate the in-place compressive strength of the concrete using cores in accordance with ACI 318-02, Section 5.6.5. If the average of the compressive strength test results of the cores is less than 85% of the specified compressive strength or if the compressive strength of a single core is less than 75% of the specified compressive strength the concrete shall be considered deficient. At Engineer's direction, either remove and replace concrete or accept a 50% reduction in payment for the in-place cost of the concrete.

B. Cracking Deficiency: Concrete slabs or structures that exhibit any cracks prior to opening to vehicular operations or loading shall be considered deficient. At Engineer's direction either remove and replace deficient concrete or seal cracks in accordance with Specification Section 03734, "Concrete Crack Repair."

END OF SECTION

DIVISION 3

SECTION 03302

PORTLAND CEMENT CONCRETE SHORT FORM

SUBMITTALS

APPENDIX "A"

Submit the following in accordance with the requirements of "Shop Drawings, Catalog Cuts and Samples" of DIVISION 1 – GENERAL PROVISIONS:

A. List of materials for Work of this Section.

B. Shop Drawings of forms and test pour details at least 15 calendar days before the test.

C. Catalog Cuts, Material Certification and Test Results:

1. At least 35 calendar days prior to concrete placement, the following:

   a. Name and address of proposed concrete Supplier, type of plant, documentation of State Certification for plant and ready mix trucks, AASHTO Accreditation certification for the independent testing laboratory (required after January 1, 2003), and a certification for an on-site individual in a supervisory capacity from one of the programs specified in 2.03.A.

   b. Material certifications, source, brand name and test results (where required) of cement, fine and coarse aggregate, fly ash, slag and concrete admixtures following guidelines of Appendix "B".

   c. Brand name and chemical composition of form oil or release agents, evaporation retardant and liquid membrane curing compounds.

   d. Certification that admixtures conform to the requirements of 2.02.F & G. submitted with Appendix "B," "Concrete Materials and Mix Proportion Data". Include dosing and re-dosing charts, which shall demonstrate the effects of concrete temperatures from 50°F and 90°F.

D. Samples :

1. Cement, stone, sand, fly ash, slag, admixtures, evaporation retardant, curing compound. Furnish these to the Engineer in whatever quantities he may require. This applies to all mix proportions, including changes to an approved mix proportion.

2. At the request of the Engineer, provide cement, fly ash and/or slag Mill Certifications at any time.

E. Construction Procedures and Quality Control Documents and Plans:

1. At least 35 calendar days prior to concrete placement, the following:

   a. Cold and Hot Weather Concreting Plans to the Engineer in accordance with 1.03 of the Specification. Materials and methods for protecting concrete from freezing.

   b. Pumping Procedure Plan, including, at a minimum, the pumping scheme, pump description, line diameter, line length, and the number of turns and line offsets.

c. Method and sequence (timing) of adding concrete admixtures, high range water reducers, non chloride accelerators.

d. Mixing and placement procedures and methods, as well as, catalog cuts of equipment for installation. For hand mixes, provide the methods of proportioning, mixing (including minimum time requirements), transferring, and placing the concrete.

e. Curing Procedure Plan in accordance with 3.03 A, including the method and materials for curing.

f. Materials and procedures for filling cracks and patching honeycombs and/or spalls.

2. Daily copy of batch records in accordance with 1.04.A.1.a of the Specification.

F. Concrete Mix Proportion:

1. Appendix "B," "Concrete Materials and Mix Proportion Data" at least 35 calendar days prior to concrete placement in accordance with 2.03.A of the Specification. To substantiate the mix proportion, submit all data and field results in accordance with 2.03.A. of the Specification.

2. ACI Grade I or II Field and/or Laboratory certification for all personnel performing concrete testing.

3. Written request to the Engineer for approval if a change in the weights of fine and coarse aggregate and cement is required in the approved mix proportion.

4. AASHTO accreditation for all testing to be performed by the independent laboratory in the formulation and testing of mix proportion to be submitted.

END OF APPENDIX "A"

SECTION 03302

PORTLAND CEMENT CONCRETE SHORT FORM

APPENDIX "B"

CONCRETE MATERIALS AND MIX PROPORTION DATA

A. Materials

1. Cement: Type..... Source/Brand .....
2. Sand: Fineness ..... | Modulus..... Source.....
3. Stone: Size ..... Class..... | Source.....
4. Fly Ash: Type..... | Source.....
5. Slag: Grade Source.....
6. Admixtures (Source/Brand):.....
7. Air Entraining Agent .....
8. Non Chloride Accelerator.....
9. Retarder.....
10. Water Reducer .....
11. Water Reducer Retarder.....
12. High Range Water Reducer .....
13. High Range Water Reducer Retarder .....

B. Mix Proportion

1. Proposed method of placement: Transit Mixer/Portable Mixer/ Pumping/Pipe Diameter:.....
2. Proportion of Ingredients

Cement ..... lbs./cu. yd.

Fly Ash ..... lbs./cu. yd.

Slag ..... lbs./cu. yd.

Stone ..... lbs./cu. yd.

Sand ..... lbs./cu. yd.

Water ..... lbs./cu. yd..... gallons

Air Entraining Agent: ..... ounces/cu. yd.

Admixtures (specify type and amount):

..... at ..... ounces/cu. yd.

..... at ..... ounces/cu. yd.

..... at ..... ounces/cu. yd.

..... at ..... ounces/cu. yd.

3. Mix Properties:

Compressive Strength: f'c = ... psi at ..... days/hours

Slump: ..... inches

Water to Cementitious Ratio: .....

Air Entrainment: ..... %

Sand/Stone Ratio:

Combined aggregate gradation chart (% retained on each sieve)

Unit Weight: ..... lbs./cu. ft.

C. Conformance with ACI 318:

Attach a report on mix design and test/statistical data documenting conformance with ACI 318, Chapter 5, or ACI 304R, Chapter 8, as they apply to the Work of the Contract.

D. Concrete Supplier/Batch Plant

1. Name: .....
2. Address: .....
3. Contact Name: .....
4. Telephone number/Fax number/E-mail address:

.....

5. Quality Control technician(s):

Name(s): .....

.....

.....

Telephone number(s):

.....

.....

END OF APPENDIX "B"

DIVISION 3

SECTION 03303

PLACEMENT OF PORTLAND CEMENT CONCRETE, SHORT FORM

PART 1. GENERAL

1.01 SUMMARY

This Section specifies requirements for casting Portland cement concrete.

For requirements for furnishing Portland cement concrete see Section 03302, entitled PORTLAND CEMENT CONCRETE, SHORT FORM.

1.02 REFERENCES

The following is a listing of the publications referenced in this Section:

American Society for Testing and Materials (ASTM)

ASTM D 1751	Preformed Expansion Joint Fillers for Concrete Paving and Structural Construction (Non-Extruding and Resilient Bituminous Types)
ASTM D 1752	Preformed Sponge Rubber and Cork Expansion Joint Fillers for Concrete Paving and Structural Construction

New Jersey Department of Transportation (NJDOT)

Standard Specification for Road and Bridge Construction - 2001

1.03 ENVIRONMENTAL REQUIREMENTS

A. For Cold Weather Requirements see Section 03302, entitled PORTLAND CEMENT CONCRETE, SHORT FORM.

B. Reinforcement, forms and soils with which concrete will be in contact shall be completely frost-free.

C. Comply with all provisions of this Section for placing and curing.

D. For Hot Weather Requirements see Section 03302, entitled PORTLAND CEMENT CONCRETE, SHORT FORM.

1.04 QUALITY ASSURANCE

A. A pre-concrete construction meeting will be conducted at the construction site by the Engineer at least 10 days prior to the first pour to review the Contractor's submitted mix proportion and to discuss the methods and procedures to achieve the required concrete quality.

B. For concrete where riding surface tolerances are required, as indicated on the Contract Drawings, the following requirements shall be met:

1. Surface smoothness deviations shall not exceed 1/8 inch in 10 feet. Any deficiencies shall be corrected as specified in 3.05A and 3.05B.

2. Vertical deviation from the grade shown on the Contract Drawings shall not exceed plus or minus 0.04 foot at any point.

C. Specified concrete finishes, as shown on the Contract Drawings, shall conform to the requirements set forth in 3.02D.2. Deficiencies shall be corrected as specified in 3.05 C.

1.05 SUBMITTALS

A. For submittals - see Appendix "A".

B. Do not deliver any concrete to the construction site until all approvals as required in this Section, and as required by Section 03302, have been obtained.

PART 2. PRODUCTS

2.01 MATERIALS

A. Expansion Joints (Except For Bridge Decks), Contraction Joints and Waterstops:

1. Waterstops shall be of types and sizes shown on the Contract Drawings.
2. Premoulded expansion joint filler, when shown on the Contract Drawings:
   a. Cork type shall be ASTM D 1752, Type II;
   b. Bituminous type shall be ASTM D 1751.
3. Joint Sealant when shown on Contract Drawings: Federal Specification SS-S-1401, latest revision.

B. For Curing Materials see 2.02H, Section 03302, entitled PORTLAND CEMENT CONCRETE, SHORT FORM.

C. For Evaporation Retardant see 2.02I, Section 03302, entitled PORTLAND CEMENT CONCRETE, SHORT FORM.

PART 3. EXECUTION

3.01 PREPARATION

A. Construction Joints

1. Number, locations and details shall be as shown on the approved shop drawings.
2. Planes of joints shall be normal to direction of pressure and shall include suitable keys and dowels.
3. Avoid lips and other irregularities between adjoining sections of concrete. Secure forms tightly against previously placed concrete.

B. Expansion and Contraction Joints

1. After curing concrete, clean grooves or saw cuts to receive joint sealant by scrubbing with a mechanical wire brush to loosen dirt and other foreign matter. Blow out loose matter with filtered compressed air.
2. Install joint sealant to finish flush with concrete surface, except where otherwise shown on the Contract Drawings.

C. Preparation for Placing Concrete

1. Straighten bent dowels, whether placed under this Contract or by others, using tools approved by the Engineer. Do not apply heat to dowels.
2. Clean all dowels and all steel that will be embedded in concrete of all loose rust, scale, paint, grease and other objectionable materials.

3. Examine coated reinforcement for integrity of coating. Repair all damaged areas in accordance with the requirements of Specification Section 03200 entitled CONCRETE REINFORCEMENT. The repair crew shall be available at the time of examination.

4. Check all locking devices for formwork to ensure that they are in place and properly secured.

5. For preparation of surfaces to receive concrete, conform to 3.02 A and the Contract Drawings for all procedures, equipment limitations, and requirements to be performed prior to placing concrete.

6. Provide vent holes (1/4 inch diameter, minimum) in edge angles and embedded plates at joints where vibrating alone will not ensure elimination of voids. Submit to Engineer for review with shop drawings all vent hole locations and procedures for placement of concrete at joints.

3.02 APPLICATION

A. Bonding New Concrete to Existing Concrete:

Where new concrete will be placed against existing concrete surfaces:

1. Before starting concrete placement, abrasive blast or shot blast existing concrete surfaces. Abrasive blasting shall conform to Section 02574, entitled ABRASIVE BLASTING OF PAVEMENTS.

2. Thoroughly clean existing concrete surfaces of dust, concrete particles and other debris to the satisfaction of the Engineer.

3. Immediately prior to placing concrete, moisten existing concrete with water. Remove puddles of standing water.

4. Broom a thin layer of material from the leading edge of the concrete being placed into the wetted surfaces. Do not allow broomed material to dry before covering it with additional material as required for final grade.

B. Placing Concrete:

1. Place concrete only in the presence of the Engineer and by methods approved by him.

2. For concrete cast against earth or an approved compacted subgrade, and for concrete overlays, place concrete against surfaces in a saturated surface dry condition.

3. Prior to placing concrete remove all standing water or puddles.

4. Do not place concrete on or next to frozen surfaces.

5. Transfer concrete from mixer to place of deposit rapidly to prevent formation of cold joints.

6. Use equipment and methods for placing that shall permit rapid placement of fresh concrete of the required consistency and shall preclude segregation.

7. The method and equipment used to transfer concrete from mixer to forms will be subject to prior approval by the Engineer.

8. Subject to the foregoing requirements, convey concrete by approved means to its final position.

9. Except where otherwise approved by the Engineer, consolidate concrete by internal mechanical vibration subject to the following:

   a. Type, number and method of application of vibrators will be subject to prior approval by the Engineer.

b. In locations where spading is approved in lieu of mechanical vibration, spade coarse aggregate away from the forms and into the plastic mass; rod concrete around embedded materials and into corners and spaces to be filled.

10. Avoid formation of laitance and accumulation of excessive water on surface of concrete as it is deposited. Remove any accumulated bleed water by approved means before placing other concrete.

11. Place concrete so as to require as little rehandling as possible.

12. Deposit concrete as near to joints as possible without disturbing them.

13. Thoroughly consolidate concrete.

14. Screed and float concrete for riding surfaces as it is placed and use an approved evaporation retardant or fog spray.

C. Concrete Placing and Finishing Equipment for slab and other Riding Surfaces:

1. For slab or overlays less than 8 inches thick, vibrating surface pans or screeds will be allowed.

2. Manual tools, such as bull floats, trowels, brooms and other similar hand tools are acceptable.

D. Consolidation and Finishing

1. Slabs and other Riding Surfaces

a. Machine finishing shall conform to NJDOT Standard Specifications Subsection 405.13, Item B.

b. Finishing at and adjacent to joints shall conform to NJDOT Standard Specifications Subsection 405.13, Item C.

c. Strike off and screed concrete as soon as it is placed. Use an approved portable screed.

d. After the concrete has been struck off and consolidated, further finish it by means of a longitudinal float. After floating, any excess water and laitance in excess of 1/8 inch thick shall be removed and disposed of outside of Authority property.

e. While the concrete is still in a workable condition, immediately fill, strike off, consolidate, and refinish any depressions with freshly mixed concrete.. Cut down and refinish high areas.

2. Specified concrete finishes, as shown on the Contract Drawings, shall be in accordance with the following requirements:

a. "Smooth Finish" shall be a surface of concrete obtained by the use of special forms as specified in the Section entitled "Concrete Formwork". All fins and other irregularities in the exposed surfaces of concrete shall be removed by rubbing the irregularities with a carborundum brick and clean fresh water. Any mortar patches shall be rubbed with a carborundum brick as above specified.

b. "Scored Finish" shall be a surface of concrete obtained by roughening in an approved manner or by etching with sharp-pointed steel tools to key or otherwise improve the mechanical bond of the surface. Such scoring shall roughen at least ten percent of the area so scored.

c. "Float Finish" shall be a surface of concrete obtained by the use of a wood float. A float finish shall be applied to horizontal surfaces immediately after screeding and before initial setting has begun.

d. "Trowel Finish" shall be a surface of concrete obtained by the use of a steel trowel, after screeding and floating the surface of the concrete to produce a dense, smooth, even surface suitable for painting or the application of floor covering. The troweling shall not take place until the surfaces have set sufficiently to sustain knee boards without damage. Troweling shall eliminate all irregularities and leave the concrete surface with a smooth, hard finish, free from marks and blemishes to the satisfaction of the Engineer.

e. "Traction Finish" shall consist of a monolithic layer of abrasive concrete having a minimum thickness of 3/4 inch and which shall be Emericrete, as manufactured by the Walter Maguire Company, Inc., or approved equal. Prepare the base and install the monolithic finish in accordance with the recommendations of the manufacturer of the abrasive concrete. The surface shall be given a wood float finish. The sides and edges of pavement slabs shall be rounded with an approved edging tool to the minimum radius obtainable in the sole opinion of the Engineer.

f. "Burlap Finish" shall be a surface of concrete obtained by the use of a burlap drag, after screeding and floating the surface of the concrete. The burlap shall be dragged in one direction in a straight line before initial setting has begun and in such a manner that the full width of the slab being finished is dragged in one operation. Burlap shall be rinsed or washed as often as is necessary to prevent the presence of hardened particles and consequent scarring of the concrete.

g. Stair treads and platforms of steel stairs shall be filled with mortar mixed in the proportions of one part Portland cement to three parts of fine aggregate, mixed with water to a satisfactory consistency. Coat the surface of the mortar with three pounds of aluminum oxide crystals per square yard of surface, uniformly applied, and trowel the surface to a smooth hard finish. Aluminum oxide crystals shall be grade AL203 crystals ranging from No. 12 to No. 30 in size and shall contain not more than six percent of iron or other impurities.

h. "Broom Finish" shall be achieved as follows:

(1) Finish the concrete when the water sheen has practically disappeared. Use push broom or floor brush type, not less than 18 inches wide and made of good quality bass or bassine fibers not more than 4-1/2 inches long and with handles longer than half the width of the slab.

(2) Use an adequate number of brooms to keep up with other operations. Proper finish shall be achieved prior to initial set of the concrete.

(3) Wash and thoroughly dry brooms at frequent intervals and remove worn or damaged brooms from the construction site.

(4) Draw broom across previously finished surface from the centerline to each edge of the slab with a slight overlap of strokes.

(5) Corrugations made in surface shall be uniform, approximately 1/16 inch in depth, and not more than 1/8 inch in depth.

(6) Complete brooming before concrete is in a condition such that the surface will be torn or unduly roughened and before initial set of concrete.

(7) Immediately following brooming, carefully finish the edges of slab along sides and at joints with an approved edging tool to form a smooth rounded surface of required radius and subject to the following:

(a.) Where corners or edges of slabs have crumbled and at any areas which have leaked sufficient mortar to make proper finishing difficult, remove loose fragments and soupy mortar, fill solidly with a mixture of correct proportions and consistency and finish.

(b.) Edges shall be smooth, true to line and free of unnecessary tool marks.

i. "Tine finish" and acceptance criteria for "Tine finish" shall conform to the requirements of the NJ DOT Standard Specifications, Subsection 405.13, Item G.

j. "Saw Cut Grooved Surface" shall conform to the requirements of the NJ DOT Standard Specifications, Division 500. For deck slabs, conform to Subsection 501.15, Item 3. For overlays, conform to Subsection 518.06, Item C13.

k. Concrete Curbs and Sidewalks

(1) Give sidewalks a "Float Finish," tool edges and joints for a width of two inches and round corners to a radius of 1/4 inch with an approved edging tool.

(2) Install expansion joints at not more than 20-foot intervals in sidewalks with matching joints in curbs. Use 1/4-inch bituminous joint filler.

(3) Score sidewalks in squares as approved by the Engineer.

3. Removal of Forms

Removal of forms shall be subject to the following:

a. Remove forms in accordance with the requirements of Specification Section 03100 entitled CONCRETE FORMWORK.

b. After removal of forms, patch areas of concrete which, in the opinion of the Engineer show excessive honeycomb by cutting out defective areas, keying and refilling them with a mortar of cement and sand in the same proportions as those in the approved concrete mix design.

c. After forms are removed, cure sides of slabs greater than 12 inches in thickness in accordance with 3.03.

d. Immediately after removal of forms, holes and voids in the surfaces of concrete, resulting from bolts and ties, shall be wetted and filled with a mortar containing cement and fine aggregate in the same proportions as in the approved concrete mix design, and utilizing cement which shall produce mortar of the same color as the concrete. Exposed mortar surfaces shall then be finished smooth and even with a wood float, except that those surfaces exposed to view in the finished structure shall be finished with a steel trowel to match adjacent surfaces. All fins and other surface irregularities shall be removed promptly by chipping, grinding or other methods approved by the Engineer to give a uniform finish. Where no specific surface finish for formed concrete surfaces is indicated on the Contract Drawings, no further finishing will be required.

3.03 JOINTS

A. Saw Cut Control Joints

1. The Contractor shall attempt to saw cut each control joint at the point when a thumb print can not be made on the surface and as soon as the concrete can support the weight of the saw and the operator without marring the surface or disturbing the final finish. At a minimum, these two checks shall be performed by the Contractor every hour until the control joints can be cut. Unless otherwise shown on the Contract Drawings, saw cut depth shall be the greater of 10% of the slab thickness or one inch. Saw shall produce a cut that does not ravel or damage the concrete. If approved for use, a liquid membrane forming curing compound must be applied prior to cutting. In general, control joints for standard concrete should be cut within 6 to 8 hours of concrete placement, and within 2 to 4 hours for very high early strength concrete. However, the timing of cuts will ultimately depend on the mix proportion and the ambient temperature.

3.04 For CURING requirements, see 3.04, Section 03302, entitled PORTLAND CEMENT CONCRETE SHORT FORM. For exterior slab and overlay work, perform wet-curing procedures immediately after the concrete has been finished.

3.05 CORRECTION OF DEFICIENCIES

A. Diamond Grinding and Partial Depth Removal

1. Cured riding surfaces that do not meet the smoothness or finished grade requirements set forth in 1.04B shall be corrected, to obtain the specified smoothness deviation, as follows:

a. High spots between 1/8" and 1/2" and surfaces that exceed the finished grade requirements shall be identified and ground with diamond grinding equipment.

b. Low spots between 1/8" and 1/2" and surfaces that are below the finished grade requirements shall be corrected by partial depth removal of the entire slab to 1" below rebars by hydrodemolition or approved means and constructing an overlay in conformance with these specifications.

2. The diamond grinding equipment shall be subject to approval by the Engineer and shall have a minimum grinding head of 36 inches.

3. Where grinding is required, the entire width of the riding surface by the length of defective area shall be ground. In the sole opinion of the Engineer, if the deficiencies are closely spaced and grinding individual areas will adversely affect ride, the entire surface shall be ground.

4. Slurry produced from grinding operations shall be disposed of outside of Authority property.

5. Diamond grinding, partial depth removal and construction of an overlay, if required to correct deficiencies, shall be performed at no additional cost to the Authority.

B. If the slab concrete is found to have developed any plastic shrinkage cracks prior to being loaded by traffic, the Contractor shall repair it at his cost with an approved epoxy or methacrylate repair system or remove as directed by the Engineer.

C. If concrete finishes do not meet the requirements set forth for the specified finishes, re-finish or remove as directed by the Engineer, at no additional cost to the Authority.

END OF SECTION

SECTION 03303

PLACEMENT OF PORTLAND CEMENT CONCRETE, SHORT FORM

SUBMITTALS

APPENDIX "A"

Submit the following in accordance with the requirements of "Shop Drawings, Catalog Cuts and Samples" of DIVISION 1 – GENERAL PROVISIONS:

A. Shop Drawings for number, location and details of contraction, control, expansion and construction joints at least 15 days prior to concrete placement.

B. Catalog Cuts, Material Certification and Test Results

C. Construction Procedures, and Quality Control and Assurance Documents

1. At least 35 days prior to concrete placement, the following:

   a. Surface Preparation Plan for surfaces on which concrete will be placed.

   b. Type, number and method of application of concrete vibrators.

   c. Method of concrete placement and consolidation adjacent to joint assemblies and embedded hardware.

   d. Control Joint Location Plan.

   e. Method of curing and curing and materials.

D. Design Computations

1. If required by the Engineer or noted on the Contract Drawings, design computations shall be signed and sealed by a Professional Engineer licensed in the state where Work is being done.

END OF APPENDIX "A

DIVISION 3

SECTION 03602

GROUTING (NON-METALLIC)

PART 1. GENERAL

1.01 SUMMARY

This Section specifies requirements for non-metallic, non-shrink, cement-based grouting.

1.02 REFERENCES

The following is a listing of the publications referenced in this Section:

American Society for Testing and Materials (ASTM)

ASTM C 109	Test Method for Compressive Strength of Hydraulic Cement Mortars
ASTM C 191	Test Method for Time of Setting of Hydraulic Cement by Vicat Needle
ASTM C 827	Test Method for Early Volume Change of Cementitious Mixtures

1.03 JOB CONDITIONS

Do not mix or place grout when the ambient temperature is below 40 degrees F or conditions indicate that the ambient temperature will fall below 40 degrees F within 72 hours, unless the areas to be grouted are enclosed and heated in an approved manner or otherwise approved by the Engineer.

1.04 DELIVERY, STORAGE, AND HANDLING

A. Deliver grout in the manufacturer's sealed original bags or containers bearing the manufacturer's name and product identification, in a manner to prevent damage by breakage, water or moisture.

B. Store all material on platforms and cover as necessary to protect it from water and moisture.

C. Deliver, protect and handle all tools and equipment in a manner to prevent damage that may make them defective for the purpose for which they are intended.

1.05 SUBMITTALS

See Appendix "A" for Submittal Requirements.

PART 2. PRODUCTS

2.01 MATERIALS

A. Grout shall be one of the following:

1. "Masterflow 713" - manufactured by Master Builders
2. "Five Star Grout" - manufactured By U.S. Grout Corporation
3. "Euco N-S Grout" - manufactured by Euclid Chemical Co.

B. Grout shall be premeasured and prepacked by the manufacturer, requiring only addition of potable water for mixing.

PART 3. EXECUTION

3.01 PREPARATION

Areas to be grouted as shown on the Contract Drawings shall be cleaned of all foreign materials, to the satisfaction of the Engineer.

3.02 MIXING AND PLACING

A. Use only the crew trained by the manufacturer's representative.

B. Mix and place the grout in accordance with manufacturer's methods approved by the Engineer.

C. Placement shall be continuous to avoid cold joints and voids. Grout shall be rodded or spaded to prevent the formation of air pockets.

3.03 FIELD TESTS

A. The Engineer may take and test samples of the grout being placed in accordance with ASTM C 109, C 191 and C 827.

B. In the event that tests of the grout placed reveal any failure to meet requirements of this Section, the Engineer will require removal and replacement of all portions of grout from the batch from which the sample was taken and the discontinuance of grouting until the Contractor has demonstrated to the satisfaction of the Engineer that the causes for failure have been corrected.

END OF SECTION

SECTION 03602

GROUTING (NON-METALLIC)

APPENDIX "A"

SUBMITTALS

A. Submit to the Manager, Materials Engineering Division, Port Authority Technical Center, 241 Erie Street, Jersey City, NJ 07310-1397, a sample of the grout material for approval.

B. Submit manufacturer's instructions and methods for handling, storage, mixing and placing of the grout, for approval.

END OF APPENDIX "A"

THE PORT AUTHORITY OF NY & NJ

SUBCONTRACTOR'S REQUEST FOR APPROVAL

Contract No: SWF 164.010

1 [ ] NO PERFORMANCE AND PAYMENT BOND IS REQUIRED TO BE PROVIDED BY THE GENERAL CONTRACTOR
2 [X] A PERFORMANCE AND PAYMENT BOND IS REQUIRED TO BE PROVIDED BY THE GENERAL CONTRACTOR
3 [ ] PARTICIPATION IN NEW YORK STATE APPRENTICESHIP PROGRAM IS REQUIRED for Subcontracts over $1million

Part One: (To be completed by General Contractor)

Prime Contractor's Name: Nagori Contracting Corporation Telephone No. (718) 966 - 6431
Address: 10 Prague Court, Staten Island, NY 10309

Facility: Stewart International Airport
Contract Title: Rehabilitation of Weather Instrument Power (WIP) Circuit

Request Approval of:
Subcontractor's Name: Reliable Enterprise
Address: 23 Seagate Rd S.I. NY 10305
Telephone No: 718 948-8153
Type of Work: Excavation of Trench, Installing M.H, H.H. and backfill.

Amount of Sub-Contract
Materials $ — 0 —
Labor $ 837,000 —
Total $ 837,000 —

Has the Subcontractor done work under a Port Authority contract? [ ] Yes [X] No

Est. Start Date	Actual Start Date
10/6/08	

Part Two (To Be Completed by General Contractor)

Subcontractor References:
PA Contract Nos. or Three References (including Name and Telephone Numbers of Owner Rep, Contract Numbers and Estimate of Work Performed).

Bobby Palmarie - 1-917 299 5751
Block # 6787 Realty $ 1,100,000 -
28 Industrial Loop
S.I. NY 10309

Castle Building LLC
112 Berg Landing
S.I. NY 10314
718-948 1246
300,000.00±

DOYA Homes
115 Seguine ave.
S.I. NY 10309
Otto Savo - 718 312-6444
$ 4,500.00 per 15 yrs.

Ishaque Nagori — President — 10/6/08
Signature of Prime Contractor's Officer — Print Name — Title — Date

Part Three (To Be Completed by Subcontractor)

Notification To Contractor:

The Subcontractor should note that it has no recourse against the Port Authority for payments due from the General Contractor under the subcontract.

If box 1 is checked the Subcontractor should also note that the General Contractor has NOT been required to furnish a Performance Bond in connection with the contract.

If box 2 is checked the Subcontractor should also note that the General contractor has been required to furnish a Performance Bond in connection with the contract. A copy of such Bond is on file in the Office of the Secretary of the Port Authority.

Subcontractor Certification:

By executing this form you certify that you have not been indicted or convicted in any jurisdiction or suspended, debarred or otherwise disqualified from entering into contracts with any governmental agency or had a contract terminated by any governmental agency for breach of contract or for any cause related directly or indirectly to an indictment or conviction; and further, that you have not taken any action which would be proscribed by the current Port Authority Code of Ethics or entered into any arrangement for the payment of a fee of any kind to any person or agency (other than a bona fide established commercial or selling agency maintained by you for the purpose of securing business) to solicit or secure the Authority's approval of you as a subcontractor. This Certification shall be deemed, if made by a corporation, to include the officers, directors and shareholders with an equity interest in excess of 10% and to have been authorized by your Board of Directors and, if a partnership, to be made by each partner. If you cannot so certify, then you shall submit to the contractor submitting this Request an explanatory statement directed to the Port Authority setting forth in detail why the certification cannot be made. The foregoing certification or signed statement shall be deemed to have been made by you with full knowledge that it would become a part of the records of the Authority and that the Authority will rely on its truth and accuracy in approving you as a subcontractor. Knowingly providing a false certification or statement pursuant hereto may be the basis for prosecution for offering a false instrument for filing (see e.g., N.Y. Penal Law, Section 175.30 et seq.)

Kenneth Otten — 10-1-08
Signature of Subcontractor's Officer — Date
KENNETH OTTEN
Print Name
OWNER
Title

Part Three A (To Be Completed by Subcontractor only if box 3 is checked for New York State Apprenticeship program *AND* in addition to certification at left)

Subcontractor Certification:

You participate in a State registered apprenticeship program unless you are certified by the Port Authority as a Minority Business Enterprise, Women-Owned Business Enterprise, Small Business Enterprise (a firm that is located in New York and New Jersey and whose average gross income for the past three years did not exceed $5 million annually) or Disadvantaged Business Enterprise and the value of the subcontract is less than $1 million. Participation in such an apprenticeship program shall mean that you either (i) are signatory to a collective bargaining agreement with a labor organization which sponsors an apprenticeship program registered in New York State or (ii) individually sponsors an apprenticeship program registered in New York State.

If you cannot so certify, then you shall submit to the contractor submitting this Request an explanatory statement directed the Port Authority setting forth in detail why the certification cannot be made. The foregoing certification or signed statement shall be deemed to have been made by you with full knowledge that it would become part of the records of the Authority and that the Authority will rely on its truth and accuracy in approving you as a subcontractor. Knowingly providing a false certification or statement pursuant hereto may be the basis for prosecution for offering a false instrument for filing (see e.g., N.Y. Penal Law, Section 175.30 et seq.)

Signature of Subcontractor's Officer — Date
Print Name
Title

Part Four: (To be Completed by Port Authority)

[ ] Subject to the provisions of subject contract, the subcontractor submitted for approval on this application is hereby disapproved

[X] Subject to the provisions of the subject contract, the subcontractor submitted for approval on this application is hereby approved for performance of work at the site only. Any materials to be furnished by this subcontractor shall be subject to inspection and approval as by the contract.

11/6/08 — Date
Signature
Engineer of Const. — Title

Part Five: (For Port Authority Use Only)

Initial/Date _____

Subcontractor Certification/Status (check all that applies)

[ ] MBE [ ] DBE [ ] LBE
[ ] WBE [ ] SBE [ ] NONE

FORM A

Reliable Enterprises
23 Seagate Rd.
Staten Island, NY 10305

ASSIGNMENT BY SUBCONTRACTOR

The undersigned, hererinafter called Sub-Contractor under Contract No. **SWF 164.010-56909** dated **8/6/08** between the Port Authority of New York and New Jersey and its subsidiary and affiliated companies, and **Nagori Contracting Corporation** (The "Contractor"), in consideration of the agreement of The Port Authority of N.Y. and N.J. to arrange insurance as provided in the Contract for the Contractor, and for each Sub-Contractor, thereunder, and for other good return premiums, premium refunds, dividends and any monies due or to become due to the undersigned in connection with said insurance as procured by The Port Authority of N.Y. and N.J. and referred to in said Contract.

Date: 11-10-08

(Name of Sub-Contractor): Reliable Enterprises

(Authorized Signature): [signature]

(Please Print Name and Title): [signature]

AON Form-3

ENROLLMENT APPLICATION

The Port Authority of NY & NJ
Port Combined

Examine your current Workers Compensation and General Liability Policies or contact your Insurance Agent to assist you with completing this form. *** NOTICE *** Enrollments not automatic and require the satisfactory completion of all of Form-A and Form-3. Please refer to the Insurance Manual for coverage requirements.

A. Contractor Information:

Federal ID # or Soc. Sec. #: 1

	Business Information (Insured)	Contact Information (Address if different)
Company Name & dba: Contact Name & Title:	2 Reliable Enterprises	3
Address:	23 Seagate Rd.	
City, State Zip Code:	Staten Island. NY 10305	
Telephone:	718-948-8153	
Fax:		
E-mail Address:		

Indicate your Organization's Structure: 4 ☐ Corporation ☐ Partnership ☐ S-Corporation ☐ Joint Venture ☐ Sole Proprietor ☐ Other Corporation

B. Contract Information:

Contract No.: 1 SWF164010-56909

Description of Work: 2 REHABILITATION OF THE WIP CIRCUITS

Proposed Contract Price $: 3

Port Authority Line Number: 4 56909

State Where Work Performed: 5

Start Date: 6 08/06/2008 ☐ Actual ☐ Estimated

Completion Date: 7 08/06/2009 ☐ Actual ☐ Estimated

C. Contacts: *(Complete If Applicable)*

Position	Name & Title	Telephone	Fax	E-mail Address
Program Mngr:	Kenny Otten Jr President	917-709 2605		
Res. Engineer:				
Insurance:				
Contract Admin:				
Payroll:				
Claims:				
Safety Rep:				

D. Workers Compensation Insurance Information for Work Described Above: *(attach a separate sheet if necessary)*

	State	Class Code	Description of Operations	Payroll
1	NY		Operators	140,000.-
2	NY		Laborers.	110,000.-
3	NY		Truck Driver	30,000.-
4				
5				
			Totals	$ 280,000.-

E. Provide your current Workers Compensation Information:

Your WC Insurance Carrier: 1

Policy #: 2 Effective Date: 3 Expiration Date: 4

5 Experience Modification: Expiration Date: 6

(You may attach a photocopy of your policy and experience modification endorsement)

AON Form-3	ENROLLMENT APPLICATION	The Port Authority of NY & NJ Port Combined Page 2 of 2

F. Enrollment Questions: *Answer* each question. Use additional paper if necessary.

1. Unemployment ID # _____
2. State Board Number _____
3. Employer Number (for NJ Contractors only) _____
4. Location of Work Stewart International Airport Newburgh, NY 12553

G. Other Insurance Information

Current General Liability Carrier: _____

Policy Number: _____

Effective Date: _____ Expiration Date: _____

Current Auto Liability Carrier: National Continental Insurance Co

Policy Number: 06664453-0

Effective Date: 11/17/08 Expiration Date: 11/17/09

Insurance Broker: Tilman Brokerage Inc

Address: 260 Christopher Lane

City, State ZipCode: S.I. NY 10314

Phone Number: 718 981 4700

H. Signature Block; I verify the information presented above and attachments are correct.

Name: Kenneth Otley (please print) Date: 4/17/08

Title: President Signature: Kenneth D Otley

Fax or Mail to:

Michael Berger
Aon Risk Services Northeast, Inc.
Jericho Ny Office, 300 Jericho Quadrangle Ste.300
Jericho, New York 11753

Phone: (516) 342-2703
Fax: (516) 342-2727

NAGORI CONTRACTING CORPORATION

10 Prague Ct, Staten Island, NY 10309 Phone: (718) 966-5431 Fax: (718) 966-0666

October 18, 2008

Resident Engineer's Office
The Port Authority of NY & NJ
New Jersey Marine Terminal
274 Kellogg Street
Port Newark, NJ 07114

Re: **Contract SWF 164.010**
Rehabilitation of Weather Instrument Power (WIP) Circuit
Stewart International Airport

Gentlemen:

Nagori Contracting Corporation certifies that it paid or provided, (and caused all subcontractors to pay or provide) to his/her or their workmen, laborers and mechanics (who are employed by us or them to work on an hourly or daily basis at any trade or occupation at or about the construction site) for Contract – **SWF 164.010**, AT LEAST THE PREVAILING RATE OF WAGE AND SUPPLEMENTS, for others engaged in the same trade or occupation in the locality in which the work is being performed as determined.

Ishaque Nagori
President

NICOLE FLORIDA
Notary Public, State of New York
No. 01FL6187685
Qualified in Richmond County
Commission Expires May 27, 2012

Contract Enumerated Official

NAGORI CONTRACTING CORPORATION

• 10 Prague Court • Staten Island, NY 10309 •
• Tel: (718) 966-5431 • Fax: (718) 966-0666 • Email: nagoricc@yahoo.com •

December 2, 2008

Resident Engineer's Office
The Port Authority of NY & NJ
New Jersey Marine Terminal
274 Kellogg Street
Port Newark, NJ 07114

Re: **Contract SWF 164.010**
Rehabilitation of Weather Instrument Power (WIP) Circuit
Stewart International Airport

Gentlemen:

Nagori Contracting Corporation certifies that it paid or provided, (and caused all subcontractors to pay or provide) to his/her or their workmen, laborers and mechanics (who are employed by us or them to work on an hourly or daily basis at any trade or occupation at or about the construction site) for Contract – **SWF 164.010**, AT LEAST THE PREVAILING RATE OF WAGE AND SUPPLEMENTS, for others engaged in the same trade or occupation in the locality in which the work is being performed as determined.

Ishaque Nagori
President

NICOLE FLORIDA
Notary Public, State of New York
No. 01FL6187685
Qualified in Richmond County
Commission Expires May 27, 2012

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NAGORI CONTRACTING CORPORATION

• 10 Prague Court • Staten Island, NY 10309 •
• Tel: (718) 966-5431 • Fax: (718) 966-0666 • Email: nagoricc@yahoo.com •

April 20, 2009

Resident Engineer's Office
The Port Authority of NY & NJ
New Jersey Marine Terminal
274 Kellogg Street
Port Newark, NJ 07114

Re: **Contract SWF 164.010**
Rehabilitation of Weather Instrument Power (WIP) Circuit
Stewart International Airport

Gentlemen:

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Ishaque Nagori
President

Contract Enumerated Official

EMILY B DEVLIN
Notary Public - State of New York
NO. 01DE6161894
Qualified in Richmond County
My Commission Expires 2.26.11

Notary Public - State of New York
NO. 01DE6161894
Qualified in Richmond County
My Commission Expires 2.26.11

NAGORI CONTRACTING CORPORATION

• 10 Prague Court • Staten Island, NY 10309 •
• Tel: (718) 966-5431 • Fax: (718) 966-0666 • Email: nagoricc@yahoo.com •

July 17, 2009

Resident Engineer's Office
The Port Authority of NY & NJ
New Jersey Marine Terminal
274 Kellogg Street
Port Newark, NJ 07114

Re: **Contract SWF 164.010**
Rehabilitation of Weather Instrument Power (WIP) Circuit
Stewart International Airport

Gentlemen:

Nagori Contracting Corporation certifies that it paid or provided, (and caused all subcontractors to pay or provide) to his/her or their workmen, laborers and mechanics (who are employed by us or them to work on an hourly or daily basis at any trade or occupation at or about the construction site) for Contract – **SWF 164.010**, AT LEAST THE PREVAILING RATE OF WAGE AND SUPPLEMENTS, for others engaged in the same trade or occupation in the locality in which the work is being performed as determined.

Ishaque Nagori
President

Contract Enumerated Official

NAGORI CONTRACTING CORPORATION

• 10 Prague Court • Staten Island, NY 10309 •
• Tel: (718) 966-5431 • Fax: (718) 966-0666 • Email: nagoricc@yahoo.com •

February 4, 2010

Resident Engineer's Office
The Port Authority of NY & NJ
New Jersey Marine Terminal
274 Kellogg Street
Port Newark, NJ 07114

Re: **Contract SWF 164.010**
Rehabilitation of Weather Instrument Power (WIP) Circuit
Stewart International Airport

Gentlemen:

Nagori Contracting Corporation certifies that it paid or provided, (and caused all subcontractors to pay or provide) to his/her or their workmen, laborers and mechanics (who are employed by us or them to work on an hourly or daily basis at any trade or occupation at or about the construction site) for Contract – **SWF 164.010**, AT LEAST THE PREVAILING RATE OF WAGE AND SUPPLEMENTS, for others engaged in the same trade or occupation in the locality in which the work is being performed as determined.

Ishaque Nagori
President

Contract Enumerated Official

NAGORI CONTRACTING CORPORATION
• 10 Prague Court • Staten Island, NY 10309 •
• Tel: (718) 966-5431 • Fax: (718) 966-0666 • Email: nagoriec@yahoo.com •

February 4, 2010

Resident Engineer's Office
The Port Authority of NY & NJ
New Jersey Marine Terminal
274 Kellogg Street
Port Newark, NJ 07114

Re: **Contract SWF 164.010**
Rehabilitation of Weather Instrument Power (WIP) Circuit
Stewart International Airport

Gentlemen:

Nagori Contracting Corporation certifies that it paid or provided, (and caused all subcontractors to pay or provide) to his/her or their workmen, laborers and mechanics (who are employed by us or them to work on an hourly or daily basis at any trade or occupation at or about the construction site) for Contract – **SWF 164.010**, AT LEAST THE PREVAILING RATE OF WAGE AND SUPPLEMENTS, for others engaged in the same trade or occupation in the locality in which the work is being performed as determined.

Ishaque Nagori
President

Contract Enumerated Official

NAGORI CONTRACTING CORPORATION

• 10 Prague Court • Staten Island, NY 10309 •
• Tel: (718) 966-5431 • Fax: (718) 966-0666 • Email: nagoricc@yahoo.com •

July 11, 2011

Resident Engineer's Office
The Port Authority of NY & NJ
New Jersey Marine Terminal
274 Kellogg Street
Port Newark, NJ 07114

Re: **Contract SWF 164.010**
Rehabilitation of Weather Instrument Power (WIP) Circuit
Stewart International Airport

Gentlemen:

Nagori Contracting Corporation certifies that it paid or provided, (and caused all subcontractors to pay or provide) to his/her or their workmen, laborers and mechanics (who are employed by us or them to work on an hourly or daily basis at any trade or occupation at or about the construction site) for Contract – **SWF 164.010**, AT LEAST THE PREVAILING RATE OF WAGE AND SUPPLEMENTS, for others engaged in the same trade or occupation in the locality in which the work is being performed as determined.

Ishaque Nagori
President

Contract Enumerated Official

NAGORI CONTRACTING CORPORATION

• 10 Prague Court • Staten Island, NY 10309 •
• Tel: (718) 966-5431 • Fax: (718) 966-0666 • Email: nagoricc@yahoo.com •

January 9, 2012

Resident Engineer's Office
The Port Authority of NY & NJ
1180 First St. – Building 138
Stewart International Airport
New Windsor, NY 12553

Re: **Contract SWF 164.010**
Rehabilitation of Weather Instrument Power (WIP) Circuit
Stewart International Airport

Gentlemen:

Nagori Contracting Corporation certifies that it paid or provided, (and caused all subcontractors to pay or provide) to his/her or their workmen, laborers and mechanics (who are employed by us or them to work on an hourly or daily basis at any trade or occupation at or about the construction site) for Contract – **SWF 164.010**, AT LEAST THE PREVAILING RATE OF WAGE AND SUPPLEMENTS, for others engaged in the same trade or occupation in the locality in which the work is being performed as determined.

Ishaque Nagori
President

Contract Enumerated Official

State of New York
County of Richmond.

Sworn to before me this 9th day of January 2012

ANGELA KOSPETAS
Notary Public - State of New York
NO. 01KO6091026
Qualified in Kings County
My Commission Expires 4/24/15

NAGORI CONTRACTING CORPORATION

• 10 Prague Court • Staten Island, NY 10309 •
• Tel: (718) 966-5431 • Fax: (718) 966-0666 • Email: nagoricc@yahoo.com •

March 6, 2012

Resident Engineer's Office
The Port Authority of NY & NJ
1180 First St. – Building 138
Stewart International Airport
New Windsor, NY 12553

Re: **Contract SWF 164.010**
Rehabilitation of Weather Instrument Power (WIP) Circuit
Stewart International Airport

Gentlemen:

Nagori Contracting Corporation certifies that it paid or provided, (and caused all subcontractors to pay or provide) to his/her or their workmen, laborers and mechanics (who are employed by us or them to work on an hourly or daily basis at any trade or occupation at or about the construction site) for Contract – **SWF 164.010**, AT LEAST THE PREVAILING RATE OF WAGE AND SUPPLEMENTS, for others engaged in the same trade or occupation in the locality in which the work is being performed as determined.

Ishaque Nagori
President

Contract Enumerated Official

JOSEPHINE COGNATO
Notary Public - State of New York
NO. 01CO6253255
Qualified In Richmond County
My Commission Expires 12-19-15

NAGORI CONTRACTING CORPORATION

• 10 Prague Court • Staten Island, NY 10309 •
• Tel: (718) 966-5431 • Fax: (718) 966-0666 • Email: nagoricc@yahoo.com •

April 25, 2012

Resident Engineer's Office
The Port Authority of NY & NJ
1180 First St. – Building 138
Stewart International Airport
New Windsor, NY 12553

Re: **Contract SWF 164.010**
Rehabilitation of Weather Instrument Power (WIP) Circuit
Stewart International Airport

Gentlemen:

Nagori Contracting Corporation certifies that it paid or provided, (and caused all subcontractors to pay or provide) to his/her or their workmen, laborers and mechanics (who are employed by us or them to work on an hourly or daily basis at any trade or occupation at or about the construction site) for Contract – **SWF 164.010**, AT LEAST THE PREVAILING RATE OF WAGE AND SUPPLEMENTS, for others engaged in the same trade or occupation in the locality in which the work is being performed as determined.

Ishaque Nagori
President

Contract Enumerated Official

Angela Kospetas
on 4/26/2012

ANGELA KOSPETAS
Notary Public - State of New York
NO. 01KO6091026
Qualified in Richmond County
My Commission Expires 4/2/15

451A Little Britain Road
Newburgh, NY 12550

Phone (845)565-2737
Fax (845)565-3099

Hudson Valley Building and Construction Trades Council

BUILD IT RIGHT — BUILD IT UNION

November 11, 2008

The Port Authority of NY and NJ
225 Park Avenue South
New York, N.Y. 10003

ATTN: Chris Ward
Diane Ehler

Dear Sir/Madam:

Please be advised the Port Authority of NY and NJ has awarded contract SWF164010 at Stewart International to Nagori Contracting Corporation. This $13,064,384 contract was awarded despite the fact that the contractor does not have a certified Apprentice Program, a requirement in the bid specs on this project.

This bid was not protested earlier due to the fact that Nagori Contracting Corporation's principal claimed they would be signing collective bargaining agreements with the local trades, in which this would allow him to meet his apprenticeship requirement.

Your timely response is greatly appreciated to avoid a legal action or labor dispute at the airport. I can be reached by cell at (914) 474-6222.

I look forward to working together to resolve this issue and the future of Stewart Airport.

Sincerely,

L. Todd Diorio
President

16. CONSTRUCTION SKILLS 2000 - APPRENTICESHIP PROGRAM

The Port Authority is a participant in Construction Skills 2000, a cooperative program involving New York City schools, unions and public agencies. Construction Skills 2000 creates career opportunities in the construction industry for high school graduates by providing a systematic pathway to registered, skilled trade apprenticeship programs. The Port Authority encourages contractors and subcontractors to maximize the use of apprentices under the applicable collective bargaining agreements or as contained in the applicable program approved by the New York State Department of Labor. The Contractor's plan for utilizing apprentices will be discussed at the pre-construction meeting.

Each subcontractor proposed for approval under the Contract whose total amount payable under this contract is greater than $1Million Dollars and each bidder (except as set forth in the paragraph below) will be required to certify as to their participation in a New York State registered apprenticeship program.

17. CERTIFICATION OF PARTICIPATION IN A STATE-REGISTERED APPRENTICESHIP PROGRAM

By bidding on this Contract, each bidder and each person signing on behalf of any bidder certifies, and in the case of a joint bid each party thereto certifies as to its own organization, that it participates in an apprenticeship program registered by the New York State Department of Labor. Participation in such an apprenticeship program shall mean that the bidder either (a) is a signatory to a collective bargaining agreement with a labor organization which sponsors an apprenticeship program registered with the New York State Department of Labor or (b) individually sponsors an apprenticeship program registered by the New York State Department of Labor and, in the case of both (a) and (b) above, such apprenticeship program shall be in the trade(s) in which Work is to be performed. This clause shall not apply to bidders who will perform all Work at the construction site through the use of subcontractors.

The foregoing certification, if made by a corporate bidder, shall be deemed to have been authorized by the Board of Directors of the bidder, and such authorization shall be deemed to include the signing and submission of the bid and the inclusion therein of such certification as the act and deed of the corporation.

In any case where the bidder cannot make the foregoing certification, the bidder shall so state and shall furnish with the signed bid a signed statement which sets forth in detail the reasons therefor. If the bidder is uncertain as to whether it can make the foregoing certification, it shall so indicate in a signed statement furnished with its bid, setting forth an explanation for its uncertainty.

Notwithstanding that the certification may be an accurate representation of the bidder's status with respect to the enumerated circumstances provided for in this clause as requiring disclosure at the time that the bid is submitted, the bidder agrees to immediately notify the Authority in writing of any change in circumstances during the period of irrevocability, or any extension thereof.

CRANESVILLE BLOCK COMPANY, INC.

Lightweight and Concrete Masonry Units
Ready Mixed Concrete – Mason Supplies

Michelle M. Shaw
Asst. Credit Manager / Paralegal
mshaw@cranesville.com

1250 Riverfront Center
Amsterdam, NY 12010
(518) 684-6158
Fax: (518) 684-6042

October 21, 2009

Port Authority of NY & NJ
1180 1st Street
Bldg. 138
New Windsor, New York 12253

Attention: Omar Astacio, Resident engineer
oastacio@panynj.gov

Re: **Nagori Contracting Corporation**
Project: **Contract Bid # SWF-164.010**

Dear Mr. Astacio,

Cranesville Block Company, Inc. was the concrete supplier on the above referenced project. At this time, we have made several attempts to collect our remaining payment in the sum of $28,246.09 from Mr. Nagori for deliveries made between 11/11/2008 thought 09/23/2009. The payment terms of our contract with Mr. Nagori are net 30days. We have enclosed hereto a copy of our bill along with copies of the open invoices and tickets for the above referenced project. Also, we have enclosed a copy of our contract with Mr. Nagori.

We hereby request your assistance in collecting the amount owed to Cranesville Block Company. We also respectfully request that a hold be placed on any remaining monies due to Mr. Nagori until this matter as been resolved.

Thank you for your assistance in this matter. Should you have any further questions or concerns, please feel free to contact us at 518-684-6158.

Sincerely,

Michelle M. Shaw
Paralegal / Assistant Credit Manager
ms

Cc: *Wally Caban – wcaban@panynj.com*