

**OAKVIEW VENUE GROUP**  
**SOLICITATION OF BIDS**  
**ATLANTIC CITY CONVENTION CENTER**  
**JIM WHELAN BOARDWALK HALL**

<b>For:</b>	<b>ATLANTIC CITY CONVENTION CENTER</b>
	<b>CONVENTION BOULEVARD</b>
	<b>RESURFACING</b>

Event	Date	Time
<b>Bidder's Question Due Date</b> (Refer to <a href="#">BID Section 1.5</a> for more information.)	DNA	DNA
<b>Response To Questions</b>	DNA	DNA
<b>Pre-bid Conference</b> (Refer to <a href="#">BID Section 1.8</a> for more information.) 2301 Boardwalk, Atlantic City, NJ, 08401. Conference Room 150	DNA	DNA
<b>Site Visit</b> (Refer to <a href="#">BID Section 1.9</a> for more information.) 2301 Boardwalk, Atlantic City, NJ, 08401. Conference Room 150	DNA	DNA
<b>Bid Submission Due Date</b> (Refer to BID Section 1.3 for more information.) 2301 Boardwalk, Atlantic City, NJ, 08401. Conference Room 150	TUESDAY JUNE 9, 2026	11:00 AM 1100 HOURS

Dates are subject to change. All changes will be reflected in Addenda to the bid posted on the Boardwalk Hall/Convention Center website at <http://www.boardwalkhall.com/business-opportunities/rfps>

Issued By

OAKVIEW VENUE GROUP, as operator of Jim Whelan Boardwalk Hall and the Atlantic City Convention Center, as managing agent for Casino Reinvestment Development Authority  
2301 Boardwalk  
Atlantic city, New Jersey 08401  
Phone: 609-348-7026

Date Issued:

(5/28/26)

## NOTICE TO BIDDERS

**PUBLIC NOTICE IS HEREBY GIVEN** that sealed bids will be received by OAKVIEW VENUE GROUP, as operator of Jim Whelan Boardwalk Hall (“Boardwalk Hall”) and the Atlantic City Convention Center (the “Convention Center”), as agent on behalf of the Casino Reinvestment Development Authority (“OAKVIEW VENUE GROUP”) for

### **ATLANTIC CITY CONVENTION CENTER CONVENTION BOULEVARD RESURFACING**

Bid forms, contracts, drawings and specifications can be obtained from the OAKVIEW VENUE GROUP website  
<http://www.boardwalkhall.com/business-opportunities/rfps>

Sealed bids must be mailed, presented or delivered to OAKVIEW VENUE GROUP, 2301 Boardwalk, Atlantic City, New Jersey 08401, Attn. Clark Hughes, Capital Projects/Procurement Manager. OAKVIEW VENUE GROUP accepts no responsibility for the timeliness of any bidder’s delivery, mail, delivery or courier service.

Sealed bids shall be submitted in the manner prescribed in the bid specifications. The sealed envelopes must be labelled **CONVENTION BOULEVARD RESURFACING JIM WHELAN BOARDWALK HALL** and contain the bidder’s name and address and the bid opening date.

Bids will be received, opened and read aloud in public at OAKVIEW VENUE GROUP offices at 2301 Boardwalk, Atlantic City, New Jersey on **June 9, 2026, at 11:00am.** eastern prevailing time.

Bidders are required to comply with the requirements of N.J.A.C. 17:27 (Affirmative Action), Americans with Disabilities Act of 1990 (42 U.S.C. 12101, et.seq.), N.J.S.A. 52:32-44 (Business Registration), and N.J.S.A. 10:5-1 (Law Against Discrimination).

Dated: (5/28/26)

## 1.0 INFORMATION FOR BIDDERS

### 1.1 Background

The Atlantic City Convention Center (“Convention Center”), located at One Convention Boulevard, Atlantic City, NJ, has 486,000 square feet of continuous exhibit space. The exhibit hall is divisible into five separate halls, ranging in size from 29,400 square feet to 199,500 square feet.

The Convention Center’s 45 meeting rooms on the third and fourth level of the Convention Center surround the expansive atrium lobby and total 109,100 square feet. Room dimensions range from 11,800 square feet to 672 square feet. The rooms’ amenities include soundproof panels, assisted lighting systems and voice, video and data communications.

The Convention Center’s ample pre-function space, more than 32,000 square feet, is well suited to registration, retail or dining needs. The building is served by 29 covered loading docks, four drive in roll-up doors, mechanical levelators and 1400 indoor parking spaces. The Convention Center is connected to the Atlantic City Rail Terminal that runs the Atlantic City line from Philadelphia to Atlantic City. A pedestrian bridge links the Convention Center to the adjoining Sheraton Hotel. Located within a few hours’ drive of nearly one-third of the nation’s population and 20 percent of the country’s business addresses, the Convention Center is easily accessible for convention, tradeshow and meeting attendees.

Jim Whelan Boardwalk Hall (“Boardwalk Hall”), located on the boardwalk between Mississippi and Georgia Avenues, Atlantic City, NJ, is a major icon for Atlantic City. Boardwalk Hall has a maximum capacity of approximately 14,000 in the arena and the ballroom which seats up to 3,500. Boardwalk Hall hosts a wide range of events from concerts to family shows like Sesame Street, to sporting events and other entertainment.

The facilities have established as their primary goal the highest level of service to their customers and clients. All operating entities in each facility must adhere to the following objectives:

- a) Offer services according to the highest industry standards and in the best interest of each facility, the community and the State of New Jersey
- b) Operate in a manner consistent with the public interest, providing each facility with full accountability for, and accurate records of all transactions conducted within each venue.
- c) Provide the highest level of safety, service and cooperation to clients and attendees of the facilities.
- d) Hold and maintain in good standing all required applicable local, state and federal licenses and permits for the services required herein. Failure to maintain said licenses and permits may be cause for termination of contract.

### 1.2 Purpose and Intent

OAKVIEW VENUE GROUP is releasing this Bid for Contractors (the “Solicitation”) to solicit bids to engage contractor services for **Convention Boulevard Resurfacing** as more fully set forth in the contract awarded from this Solicitation.

OAKVIEW VENUE GROUP intends to award a contract to the lowest responsible bidder whose bid conforms to these specifications. OAKVIEW VENUE GROUP, however, reserves the right to separately procure individual requirements that are the subject of the contract during the term when deemed by OAKVIEW VENUE GROUP to be in OAKVIEW VENUE GROUP’s best interest. OAKVIEW VENUE GROUP reserves the right to reject any and all bids when it is determined by OAKVIEW VENUE GROUP to be in its best interest.

OAKVIEW VENUE GROUP further reserves the right to waive minor irregularities in bids submitted in response to this Solicitation.

**All capitalized terms not otherwise defined in this Solicitation shall have the meaning ascribed to them in the contract awarded through this Solicitation.**

**IN ADDITION TO MEETING ALL OTHER REQUIREMENTS OF THIS SOLICITATION, ALL BIDDERS MUST MEET THE MINIMUM REQUIREMENTS OUTLINED IN SECTION 1.18 HEREIN.**

### **1.3 Bid Submission**

In order to be considered, a bid must be delivered, in a sealed envelope, to the following:

CLARK HUGHES  
CAPITAL PROJECTS/PROCUREMENT MANAGER  
OAKVIEW VENUE GROUP  
2301 BOARDWALK  
ATLANTIC CITY, NEW JERSEY 08401

by the date and time located on the cover page. Bidders are cautioned to allow adequate delivery time to ensure timely delivery of bids. **THE EXTERIOR OF ALL BID PACKAGES ARE TO BE LABELED, "CONVENTION BOULEVARD RESURFACING at ATLANTIC CITY CONVENTION CENTER."**

**Bids submitted by facsimile or electronically will not be considered.**

### **1.4 Number of Bid Copies**

The bidder must submit **two (2) complete ORIGINAL bids**, clearly marked as the "ORIGINAL" bids. The bidder should submit **three (3) full, complete, and exact copies** of the original bid.

### **1.5 Questions and Answers**

Global Spectrum will accept questions and inquiries pertaining to this bid from all potential bidders electronically. Questions shall be directed to the staff person identified in Section 1.3 above, at the following email address:

[ACRFP-QUESTIONS@GLOBAL-SPECTRUM.COM](mailto:ACRFP-QUESTIONS@GLOBAL-SPECTRUM.COM)  
[DONNA WILLIAMS <DONNA.WILLIAMS@RVE.COM>](mailto:DONNA.WILLIAMS@RVE.COM)

The cut-off date for electronic questions will be as indicated on the cover page.

The subject line of all emailed questions should say "BID FOR (**CONVENTION BOULEVARD RESURFACING at ATLANTIC CITY CONVENTION CENTER.**) - Bid Inquiry".

**Any requested exceptions to the Contract, appended as Exhibit J, shall be raised by the bidder as a question during the Question and Answers period through the same procedure set forth in this provision of the Solicitation. Any amendment to the Contract shall be determined by OAKVIEW VENUE GROUP Venue Management, in its sole and absolute discretion, with such determination to be set forth in the Question and Answer addendum issued, if any, after the Question-and-Answer deadline. OAKVIEW VENUE GROUP reserves the right to reject any and all proposed amendments to the Contract.**

Bidders are not to contact OAKVIEW VENUE GROUP Venue Management directly, in person or by telephone, concerning this bid. All questions and answers will be posted on the Boardwalk Hall/Convention Center's website at [www.boardwalkhall.com/business-opportunities/rfps](http://www.boardwalkhall.com/business-opportunities/rfps), as soon as practicable, after the question and answer deadline.

### **1.6 Addenda: Revisions to this Bid Solicitation**

In the event that it becomes necessary to clarify or revise this Solicitation, such clarification or revision will be by addendum. Any addendum to this bid will become part of this bid and part of any contract award as a result of this bid. ALL BID ADDENDA WILL BE POSTED ON THE BOARDWALK HALL/CONVENTION CENTER WEBSITE at [www.boardwalkhall.com/business-opportunities/rfps](http://www.boardwalkhall.com/business-opportunities/rfps).

It is the sole responsibility of the bidder to be knowledgeable of all addenda related to this bid. There are no designated dates for release of addenda. Therefore interested bidders should check the Boardwalk Hall/Convention Center website on a daily basis from the time of bid issuance through bid opening.

### **1.7 Bidder Responsibility**

The bidder assumes the sole responsibility for the complete effort required in submitting a bid in response to this Solicitation. No special consideration will be given after bids are opened because of a bidder's failure to be knowledgeable as to all of the requirements of this bid. OAKVIEW VENUE GROUP assumes no responsibility and bears no liability for cost incurred by a bidder in the preparation and submittal of a bid in response to this Solicitation.

The bidder will be required to be knowledgeable with respect to the construction industry and existing conditions at the project location, and to take same into account when submitting its bid.

### **1.8 Pre-Bid Conference**

A Pre-bid conference for discussion of the project in general will be held at the date and time indicated on the cover page, in the offices of OAKVIEW VENUE GROUP Venue Management at 2301 Boardwalk, Atlantic City, New Jersey. At that time Global Spectrum and any consultants will provide prospective bidders with an overview of the project.

**1.9 Site Visit** A site visit will be conducted on the date indicated on the cover page, immediately following the Pre-bid Conference. Contractors will be given access to the project area immediately following the pre bid meeting. Bidders are urged to inspect the site where construction services are to be performed and to satisfy themselves regarding all general and local conditions that may affect the cost of contract performance, to the extent that the information is reasonably obtainable. In no event shall failure to inspect the site constitute grounds for a claim after contract award.

### **1.10 Bid Opening**

On the date and time bid are due under this Solicitation, the names of the bidders submitting bids and the amount bid will be publicly announced. The bid opening will take place at the offices of Global Spectrum located at 2301 Boardwalk, Atlantic City, New Jersey 08401.

## **1.11 Price Alterations**

Bid prices must be typed or written in blue ink. Any price change (including "white-outs") must be initialed. Failure to initial price changes shall preclude a contract award from being made to the bidder.

## **1.12 Bid Errors**

A bidder may withdraw its bid as follows:

A bidder may request that its bid be withdrawn prior to bid opening. Such request must be made, in writing, to the staff person identified in Section 1.3 above. If the request is granted, the bidder may submit a revised bid as long as the bid is received prior to the announced date and time for bid opening and at the place specified.

If, after bid opening but before contract award, a bidder discovers an error in its bid, the bidder may make written request to the staff person identified in Section 1.3 above for authorization to withdraw its bid from consideration for award. Evidence of the bidder's good faith in making this request shall be used in making the determination. Some of the factors that may be considered are that the mistake is so significant that to enforce the contract resulting from the bid would be unconscionable; that the mistake relates to a material feature of the contract; that the mistake occurred notwithstanding the bidder's exercise of reasonable care; and that Global Spectrum will not be significantly prejudiced by granting the withdrawal of the bid.

All bid withdrawal requests must include the bid title and the final bid opening date and sent to the following address:

OAKVIEW VENUE GROUP  
2301 Boardwalk  
Atlantic City, New Jersey 08401  
Attn: Staff person identified in Section 1.3 above  
**BID WITHDRAWAL REQUEST**

If during a bid evaluation process, an obvious pricing error made by a potential contract awardee is found, OAKVIEW VENUE GROUP shall issue written notice to the bidder. The bidder will have five (5) days after receipt of the notice to confirm its pricing. If the vendor fails to respond, its bid shall be considered withdrawn, and no further consideration shall be given it.

## **1.13 Joint Ventures**

If a joint venture is submitting a bid, the agreement between the parties relating to such joint venture should be submitted with the joint venture's bid. Authorized signatories from each party comprising the joint venture must sign the bid. A separate Disclosure of Investigations and Actions Involving Bidder, Affirmative Action Employee Information Report, Disclosure of Political Contributions (c.51) and Business Registration or Interim Registration must be supplied for each party to a joint venture.

## **1.14 Contents of Bid - Open Public Records Act**

Subsequent to bid opening, all information submitted by bidders in response to the bid solicitation is considered public information, except as may be exempted from public disclosure by the Open Public Records Act, N.J.S.A. 47:1A-1 et seq., and the common law.

A bidder may designate specific information as not subject to disclosure when the bidder has a good faith legal/factual basis for such assertion. CRDA reserves the right to make the determination and will advise the bidder accordingly. The location in the bid of any such designation should be clearly stated in a cover letter.

CRDA WILL NOT HONOR ANY ATTEMPT BY A BIDDER EITHER TO DESIGNATE ITS ENTIRE BID AS PROPRIETARY, CONFIDENTIAL AND/OR TO CLAIM COPYRIGHT PROTECTION FOR ITS ENTIRE BID.

### 1.15 Bid Bond

Any entity submitting a bid in response to this Solicitation must submit a guarantee payable to OAKVIEW VENUE GROUP so that if the contract is awarded to the bidder, the bidder will enter into a contract there for and will furnish any performance bond or other security required. The guarantee shall be in the amount of 10% of the bid amount, but not in excess of \$20,000. The guarantee can be submitted, at the option of the bidder, by certified check, cashier check or bid bond.

The Bid Bond must contain an Affidavit of Surety's Attorney-In-Fact (Power of Attorney). The Attorney-In-Fact must be an authorized agent of the surety to act for the surety and be authorized to bind the surety to pay the bid bond in a penal sum of 10% of the bid amount, not to exceed \$20,000.

Failure to provide a bid bond or a valid power of attorney, as specified, with the bid will result in rejection of the bid for noncompliance.

### 1.16 Payment and Performance Bond

The bidder shall submit with its bid a Consent of Surety or Surety Agreement, from a surety or sureties licensed to do business in the State of New Jersey and acceptable to Global Spectrum, stating that it will provide an **unconditional bond in an amount equal to 100% of the contract price (bid amount)**. Failure to provide the Consent of Surety or Surety Agreement will result in rejection of the bid as non-responsive.

The Consent of Surety or Surety Agreement shall be obtained for a bond for the faithful performance of all provisions of the specifications relating to the performance of the contract. The surety corporation bonds shall be furnished by only those sureties listed in the US Treasury Department Circular 570 and authorized to do business in the State of New Jersey. The bonds shall be accompanied by a certification as to authorization of the attorney-in-fact to commit the surety company, a Surety Disclosure Statement and Certification in compliance with N.J.S.A. 2A:44-143d and a true and correct statement of the financial condition of said surety company.

Failure to provide a Consent of Surety or Surety Agreement, a Surety Disclosure Statement and Certification and a valid power of attorney, as specified, with the bid will result in rejection of the bid for noncompliance.

### 1.17 Standards for Surety Bond Companies

The following requirements must be met for surety companies:

- All surety companies must have the minimum capital and surplus or net cash assets required, pursuant to N.J.S.A. 17:17-6 or N.J.S.A. 17:17-7, whichever is applicable, at the time the invitation to bid is issued. A Financial Statement must be submitted.
- All surety companies must complete a Surety Disclosure Statement and Certification for all **payment and performance bonds**, regardless of project cost, pursuant to N.J.S.A. 2A:44-143d.
- All surety companies must be authorized to transact such business in New Jersey, pursuant to N.J.S.A. 17-17-10 or 17:32-1 et seq., as applicable.

**THE DOCUMENTS REQUIRED TO BE SUBMITTED UNDER THIS PROVISION SHALL BE PLACED IN A SEPARATE SEALED ENVELOPE AND ATTACHED TO THE SEALED ENVELOPE CONTAINING THE BID SUBMISSION.**

**1.18 Minimum Requirements**

- a) **Construction experience involving three (3) related construction projects equal to or greater than the amount bid.**

Project Name & Location: \_\_\_\_\_  
Contract Value for this bidder: \$ \_\_\_\_\_

Project Name & Location: \_\_\_\_\_  
Contract Value for this bidder: \$ \_\_\_\_\_

Project Name & Location: \_\_\_\_\_  
Contract Value for this bidder: \$ \_\_\_\_\_

- b) **Minimum of ten (10) years related construction experience.**

Bidder should provide a company resume to document construction experience.

- c) **Successful completion of at least three (3) substantially similar construction projects for public or private owners, completed in the past five (5) years.**

The Bidder must provide specific information that demonstrates the similarity of the work, and allows for evaluation of the submittal.

Project Name & Location: \_\_\_\_\_

Bidders contract value: \_\_\_\_\_

Bidders scope of work on project: \_\_\_\_\_

Project duration: \_\_\_\_\_

Project completed on: \_\_\_\_\_

Project Reference contact: \_\_\_\_\_

Project Name & Location: \_\_\_\_\_

Bidders contract value: \_\_\_\_\_

Bidders scope of work on project: \_\_\_\_\_

Project duration: \_\_\_\_\_

Project completed on: \_\_\_\_\_

Project Reference contact: \_\_\_\_\_

Project Name & Location: \_\_\_\_\_

Bidders contract value: \_\_\_\_\_

Bidders scope of work on project: \_\_\_\_\_

Project duration: \_\_\_\_\_

Project completed on: \_\_\_\_\_

Project Reference contact: \_\_\_\_\_

- d) **The bidder must participate in an apprenticeship program, registered and approved by the United States Department of Labor, for each separate trade or classification for which it employs craft employees. All bidders and subcontractors must continue to participate in such apprenticeship programs for the duration of the project. In addition, the bidder will be required to show that such apprenticeship programs graduated apprentices to journeyman status for three of the past five years.**

## 1.19 **Balanced Bid**

Each pay item should reflect the actual cost, which the bidder anticipates incurring for the performance of that particular item, together with a proportional share of the bidder's anticipated profit, overhead and costs to perform work for which no Pay Item is provided. In no event will the Project Owner consider any claim for additional compensation arising from the bid on an item or group of items, inaccurately reflecting a disproportionate share of the bidder's anticipated profit, overhead and other costs.

## 2.0 **SCOPE OF WORK**

The work on this project consists of the following:

Refer to plans and specifications created by Remington & Vernick Engineers

## 3.0 **PROPOSAL PREPARATION AND SUBMISSION**

### 3.1 **Contract Schedule**

OAKVIEW VENUE GROUP requires that all construction work undertaken pursuant to a contract award as the result of this bid shall be completed within **(4) work weeks** pending lead time of all critical material from the date of commencement of work as set forth in the Notice to Proceed.

### 3.2 **REQUIRED BID SUBMITTALS AND COMPLIANCE INFORMATION**

#### **A) Signatory page**

The bidder must complete and submit the signatory page attached as **Exhibit A**, which must be signed by an authorized representative of the bidder, evidencing the bidder's concurrence with all of the terms and conditions of this bid. If the bidder is a limited partnership, the signatory page must be signed by a general partner. If the bidder is a joint venture, the signatory page must be signed by a principal of each party to the joint venture. **Failure to comply will result in rejection of the bid.**

#### **B) Disclosure of Investigations/Actions Involving Bidder**

The bidder shall provide a detailed description of any investigation, litigation, including administrative complaints or other administrative proceedings, involving any public sector clients during the past five (5) years including the nature and status of the investigation, and, for any litigation, the caption of the action, a brief description of the action, the date of inception, current status, and, if applicable, disposition. The bidder shall use the Disclosure of Investigations and Actions Involving Bidder form attached as **Exhibit B**.

#### **C) Business registration certificate from the Division of Revenue**

As a condition of entering into a contract, pursuant to an amendment to N.J.S.A. 52:32-44, State and local entities (including the CRDA) are prohibited from entering into a contract with an entity unless the bidder and each subcontractor named in the bid has a valid Business Registration Certificate on file with the Division of Revenue.

The contractor and any subcontractor providing goods or performing services under the contract, and each of their affiliates, shall, during the term of the contract, collect and remit to the Director of the Division of Taxation in the Department of Treasury the use tax due pursuant to the "Sales and Use Tax Act, P.L. 1966, c. 30 (N.J.S.A. 54:32B-1 et seq) on all their sales of tangible personal property delivered into the State.

The bidder must be properly registered to do business with the State of New Jersey as of the date of contract award, and provide a copy of the bidder's NJ Business Registration Certificate with its bid. If not already registered with the New Jersey Division of Revenue, registration can be completed online at the Division of Revenue website: <http://www.state.nj.us/treasury/revenue/index.html>.

**D) New Jersey Prevailing Wage Act, N.J.S.A. 34:11-56.25 et. seq. and Public Works Contractor Registration Act Certificate, N.J.S.A. 34:11-56.48 et seq.**

The New Jersey Prevailing Wage Act requires the payment of minimum rates of pay to laborers, craftsman and apprentices employed on public works projects. Covered workers must receive the appropriate craft prevailing wage rate as determined by the Commissioner of Labor and Workforce Development. Prevailing wage rates are wage rates established for a particular craft or trade in the locality in which the public work is performed. In New Jersey, these rates vary by county and by the type of work performed.

**THIS CONTRACT IS SUBJECT TO THE NEW JERSEY PREVAILING WAGE ACT.** Anyone interested in bidding or engaging in any contract resulting from this bid must register with the Department of Labor and Workforce Development, Division of Wage and Hour Compliance as required by the Public Works Contractor Registration Act, N.J.S.A. 34:11-56.48 et seq. The New Jersey Department of Labor and Workforce Development makes official wage determination and debarment list information available on its website at [www.nj.gov/labor/lssc/lspubcon.html](http://www.nj.gov/labor/lssc/lspubcon.html). By accessing this website official New Jersey Prevailing Wage Rate Determinations may be obtained.

**The bidder and subcontractors must be properly registered with the Department of Labor and Workforce Development under the Public Works Contractor Registration Act, N.J.S.A. 34:11-56.48 et seq., as of the bid opening date, and must submit a copy of the bidder's Public Works Contractor Registration Act certificate with its bid.**

**E) Notice to all Contracts Set-Off for State Tax Notice**

Pursuant to L. 1995, c. 159, effective January 1, 1996, and notwithstanding any provision of the law to the contrary, whenever any taxpayer, partnership or S corporation under contract to provide goods or services or construction projects to the State of New Jersey or its agencies or instrumentalities, including the legislative and judicial branches of State government, is entitled to payment for those goods or services at the same time a taxpayer, partner or shareholder of that entity is indebted for any State tax, the Director or the Division of Taxation shall seek to set off that taxpayer's or shareholder's share of the payment due the taxpayer, partnership, or S corporation. The amount set off shall not allow for the deduction of any expenses or other deductions which might be attributable to the taxpayer, partner or shareholder subject to set-off under this act.

The Director of the Division of Taxation shall give notice of the set-off to the taxpayer and provide an opportunity for a hearing within thirty (30) days of such notice under the procedures for protests established under R.S. 54:49-18. No requests for conference, protest, or subsequent appeal to the Tax

Court from any protest under this section shall stay the collection of the indebtedness. Interest that may be payable by the State, pursuant to P.L. 1987, c. 184 (c. 52-32-32 et seq.), to the taxpayer shall be stayed.

**F) Notice of Intent to Subcontract**

The bidder shall complete the attached Notice of Intent to Subcontract Form (**Exhibit C**) to advise Global Spectrum as to whether or not a subcontractor will be utilized to provide any goods or services under the contract.

**G) Subcontractor Utilization Form**

If the bidder intends to utilize subcontractor(s), the Subcontractor Utilization Form (**Exhibit D**) must be completed and submitted with the bid. The bidder must identify all subcontractors that the bidder intends to utilize to perform work required under this contract.

**H) Affirmative Action**

Each contractor shall submit to Global Spectrum, after notification of award, one of the following:

- Appropriate evidence that the contractor is operating under an existing federally approved or sanctioned affirmative action program.
- A certificate of employee information report approval, issued in accordance with N.J.A.C. 17:27-4
- An employee information report (Form AA201), **Exhibit E**.

**I) Requirements of N.J.S.A. 19:44A-20.13-25 (Formerly Executive Order 134)**

The bidder is required to complete the attached Political Contributions Disclosure form. The requirement is a precondition to entering into a contract with Global Spectrum. The Political Contributions Disclosure form is attached as **Exhibit F**.

**(i) Additional Disclosure Requirement of P.L. 2005, c. 271**

Contractor is required to file an annual disclosure statement on political contributions with the New Jersey Election Law Enforcement Commission (ELEC), pursuant to P.L. 2005, c. 271, section 3 if the contractor receives contracts in excess of \$50,000 from a public entity in a calendar year. It is the contractor's responsibility to determine if filing is necessary. Failure to so file can result in imposition of financial penalties by ELEC. Additional information about this requirement is available from ELEC at 888-313-3532 or at [www.elec.state.nj.us](http://www.elec.state.nj.us).

**J) Insurance Certificates**

The contractor shall provide OAKVIEW VENUE GROUP Venue Management with documentation, including certificates and declaration pages, evidencing its current policies of insurance, and if the bidder is awarded hereunder, such policies of insurance shall name the OAKVIEW VENUE GROUP as an "Additional Insured".

**K) Schedule of Estimated Quantities, Unit Prices, and Lump Sum Items**

The bidder must submit its pricing using the format set forth in the OAKVIEW GROUP supplied Schedule of Estimated Quantities, Unit Prices, and Lump Sum Items attached as **Exhibit G** to this Solicitation. **Refer to attached fee schedule created by Remington & Vernick.**

Failure to submit all information required in the Fee Schedule will result in the bid being considered non-responsive. Each bidder is required to hold its prices firm through issuance of contract.

**L) Affidavit of Non-Collusion, Exhibit H.**

The bidder must submit the affidavit attached as **Exhibit H** with its bid.

**M) Compliance with Executive Order 151, dated August 28, 2009**

Small Business Enterprise Requirement: It is the policy of the CRDA and as required by Executive Order 151 (“EO 151”) that small businesses (each a “small business enterprise” or “SBE”), as determined and defined by the State of New Jersey, Division of Minority and Women Business Development (“Division”) and the New Jersey Department of the Treasury (“Treasury”) in N.J.A.C. 17:14 et seq. or other application regulation, should have the opportunity to participate in CRDA contracts.

To the extent the Contractor engages subcontractors or sub-consultants to perform services for OAKVIEW VENUE GROUP pursuant to this Contract, the firm must demonstrate to the OAKVIEW VENUE GROUP’s satisfaction that a good faith effort was made to utilize subcontractors and sub-consultants who are registered with the Division as SBEs. Be advised that the CRDA shall be evaluated quarterly by the Division, based on its attainment of the Participation Goals set forth in the State of New Jersey Construction Services Disparity Study (October, 2005) and the State of New Jersey Disparity Study of Procurement in Professional Services, Other Services, and Goods and Commodities (June, 2005).

Evidence of a “good faith effort” includes, but is not limited to:

1. The Firm shall request listings of SBEs from the Division (609) 292-2146 and attempt to contact same.
2. The Firm shall keep specific records of its efforts, including records of all requests made to the Division, the names of SBEs contacted, and the means and results of such contacts, including without limitation receipts from certified mail and telephone records.
3. The Firm shall actively solicit and shall provide OAKVIEW VENUE GROUP Venue Management with proof of solicitations of SBEs for the provision of services, including advertisements in general circulation media, professional service publications and small business, minority-owned business or women-owned business focus media.
4. The Firm shall provide evidence of efforts made to identify categories of services capable of being performed by SBEs.
5. The Firm shall provide all potential subcontractors and sub-consultants that the Firm has contacted pursuant to 2 or 3 above with detailed information regarding the scope of work of the subject contract.

6. The Firm shall provide evidence of efforts made to use the goods and/or services of available community organizations, consultant groups, and local, State, and federal agencies that provide assistance in the recruitment and placement of SBEs.

Furthermore, the Firm shall submit proof of its subcontractors' and/or sub-consultants' SBE registrations, and shall complete such other forms as may be required by OAKVIEW VENUE GROUP Venue Management for State reporting as to participation.

Pursuant to Executive Order 151 the participants' goals for this Contract are African-Americans 2.47%, Asian-Americans 1.47%, Hispanics 1.1%, Native Americans .07% and Caucasian Females 3.74%.

#### **N) Contract and Specification**

The bidder shall **review and execute** the Contract and Specification attached hereto as **Exhibit I**. Exceptions taken, during the Question and Answer period, to the Contract may be considered as a factor in evaluating responsiveness of bids. OAKVIEW GROUP reserves all rights to reject any and all bids based upon exceptions taken to the Contract. Execution of the Contract is not to be construed as entering into a contract with OAKVIEW GROUP but rather as a submission of an offer to contract with OAKVIEW GROUP. **Failure to submit a signed contract shall result in the bid being deemed non-responsive.**

#### **4.0 EXHIBITS**

Exhibit A	Signatory Page
Exhibit B	Disclosure of Investigations/Actions Involving Bidder
Exhibit C	Notice of Intent to Subcontract
Exhibit D	Subcontractor Utilization Form
Exhibit E	Affirmative Action Forms
Exhibit F	Political Contributions Disclosure
Exhibit G	Schedule of Estimated Quantities, Unit Prices, and Lump Sum Items
Exhibit H	Affidavit of Non-Collusion
Exhibit I	Contract and Specification

**Exhibit A**  
**SIGNATORY PAGE**

**BID:**                            **CONVENTION BOULEVARD RESURFACING**

**FOR INFORMATION:**        **OAKVIEW GROUP**  
2301 Boardwalk  
Atlantic City, New Jersey 08401  
609-348-7026

**Name, Address, Phone, Facsimile, Email and Contact person for Bidder:**

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**SIGNATURE OF THE BIDDER'S AUTHORIZED REPRESENTATIVE ATTESTS THAT THE BIDDER HAS READ, UNDERSTANDS AND AGREES TO ALL OF THE TERMS AND CONDITIONS SET FORTH IN THE SOLICITATION, INCLUDING ADDENDA. BY SIGNING BELOW, BIDDER AGREES TO HOLD ITS BID FIRM THROUGH THE NOTICE OF CONTRACT AWARD, DURING ANY CHALLENGE TO THE AWARD, AND, IF AWARDED A CONTRACT, FOR THE DURATION OF THE PROJECT THROUGH SUBSTANTIAL COMPLETION. FAILURE OF THE BIDDER TO HOLD PRICES FIRM OR TO MEET OTHER TERMS AND CONDITIONS AS DEFINED IN THE SOLICITATION MAY RESULT IN THE BIDDER BEING SUSPENDED OR DEBARRED FROM CONTRACTING WITH CRDA.**

**Name and Title of Person**  
**Authorized to sign bid:**  
**Signature:**

**Date:**

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**Exhibit B**

**DISCLOSURE OF INVESTIGATIONS AND ACTIONS INVOLVING BIDDER**

The bidder shall provide a detailed description of any investigation, litigation, including administrative complaints or other administrative proceedings, involving any public sector client during the past five (5) years including the nature and status of the investigation, and, for any litigation, the caption and docket number of the action, a brief description of the action, the date of inception, current status, and, if applicable, disposition.

**Investigation(s)**

Indicate "NONE" if no investigations were undertaken. Attach additional pages if necessary.

<b>Person or Entity</b>	<b>Date of Inception</b>	<b>Brief Description</b>	<b>Disposition/Status (if applicable)</b>	<b>Bidder Contact Name and Telephone for additional information</b>
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**Litigation/Administrative Complaints**

Indicate "NONE" if no Litigation/Administrative Complaints. Attach additional pages if necessary.

<b>Person or Entity</b>	<b>Date of Inception</b>	<b>Caption of the Action</b>	<b>Brief Description of the Action</b>	<b>Current Status or Disposition (if applicable)</b>	<b>Bidder Contact Name and Telephone for additional information</b>
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Exhibit C

**NOTICE OF INTENT TO SUBCONTRACT FORM**

THIS FORM MUST BE COMPLETED AND INCLUDED AS PART OF EACH BIDDER'S BID. FAILURE TO SUBMIT THIS FORM MAY BE CAUSE FOR REJECTION OF THE BID AS NON-RESPONSIVE.

SOLICITATION TITLE: \_\_\_\_\_

BID OPENING DATE: \_\_\_\_\_

BIDDERS NAME AND ADDRESS:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

INSTRUCTIONS: PLEASE CHECK ONE OF THE STATEMENTS BELOW

\_\_\_\_\_ If awarded this contract, I will engage subcontractors to provide certain goods and/or services.

**ALL BIDDERS THAT INTEND TO ENGAGE SUBCONTACTORS SHALL ALSO SUBMIT A SUBCONTRACTOR UTILIZATION PLAN FORM WITH THEIR BID.**

\_\_\_\_\_ If awarded this contract, I do not intend to engage subcontractors to provide any goods and/or services.

**ALL BIDDERS THAT DO NOT INTEND TO ENGAGE SUBCONTACTORS CERTIFY AS FOLLOWS:** I hereby certify that if the award is granted to my firm and if I determine at any time during the course of the contract to engage subcontractors to provide certain goods and/or services, I will submit the Subcontractor Utilization Form to OAKVIEW VENUE GROUP Venue Management for approval, in advance of any such engagement.

\_\_\_\_\_  
Authorized Signatory for Bidder

\_\_\_\_\_  
Title

\_\_\_\_\_  
Date

**Exhibit D**

**SUBCONTRACTOR UTILIZATION FORM**

**INSTRUCTIONS**

Any bidder intending to subcontract any parts of a contract with the OAKVIEW GROUP Venue Management must complete a **Notice of Intent to Subcontract** and a **Subcontractor Utilization Form**.

Bidders are instructed to list **all** proposed subcontractors on the Form. Any bidder intending to subcontract that does not complete a Notice of Intent to Subcontract and a Subcontractor Utilization Form may be subject to rejection of its proposal as non-responsive.

IF BIDDER INTENDS TO UTILIZE SUBCONTRACTORS, FAILURE TO COMPLETE AND SUBMIT THIS FORM WITH BID MAY RESULT IN REJECTION OF THE PROPOSAL AS NON-RESPONSIVE.

SOLICITATION TITLE: \_\_\_\_\_

BID OPENING DATE: \_\_\_\_\_

BIDDER NAME & ADDRESS:

\_\_\_\_\_  
\_\_\_\_\_

BIDDER CONTACT PERSON & PHONE:

\_\_\_\_\_

**Instructions: List all businesses to be used as subcontractors. Attach copies for extended lists.**

Subcontractor's Name, Address, Telephone and Vendor ID Number	Type(s) of Goods or Services to be Provided	Estimated Value of Subcontract(s)	Hourly rates for subcontract(s)

I hereby certify that this Subcontractor Utilization Form is being submitted in good faith. I certify that each subcontractor has been notified that it has been listed on this Form and that each subcontractor has consented, in writing, to its name being submitted for this contract. Additionally, I certify that I shall notify each subcontractor listed on this Form, in writing, if the award is granted to my firm, and shall make all documentation available to OAKVIEW VENUE GROUP upon request.

I further certify that all information contained in this Form is true and correct and I acknowledge that OAKVIEW VENUE GROUP will rely on the truth of the information in awarding the contract.

\_\_\_\_\_  
Authorized signatory for Bidder

\_\_\_\_\_  
Title

\_\_\_\_\_  
Date

**Exhibit E**  
**GOODS, PROFESSIONAL SERVICES AND GENERAL SERVICE CONTRACTS**

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

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

The contractor or subcontractor, where applicable, will not discriminate against any employee or applicant for employment because of age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation or sex. Except with respect to affectional or sexual orientation, the contractor will take affirmative action to ensure that such applicants are recruited and employed, and that employees are treated during employment, without regard to their age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation or sex. Such action shall include, but not limited to the following: employment, upgrading, promotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the Public Agency Compliance Officer setting forth provisions of this nondiscrimination clause.

The contractor or subcontractor, where applicable will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation or sex.

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

The contractor or subcontractor where applicable, agrees to comply with any regulations promulgated by the Treasurer pursuant to **N.J.S.A. 10:5-31 et seq.** as amended and supplemented from time to time and the Americans with Disabilities Act.

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

The contractor or subcontractor agrees to inform in writing its appropriate recruitment agencies including, but not limited to, employment agencies, placement bureaus, colleges, universities, labor unions, that it does not discriminate on the basis of age, creed, color, national origin, ancestry, marital status, affectional or sexual orientation or sex, and that it will discontinue the use of any recruitment agency which engages in direct or indirect discriminatory practices.

The contractor or subcontractor agrees to revise any of its testing procedures, if necessary, to assure that all personal testing conforms with the principles of job-related testing, as established by the statutes and court decisions of the State of New Jersey and as established by applicable Federal law and applicable Federal court decisions.

In conforming with the applicable employment goals, the contractor or subcontractor agrees to review all procedures relating to transfer, upgrading, downgrading and layoff to ensure that all such actions are taken without regard to age, creed, color, national origin, ancestry, marital status, affectional or sexual orientation or sex, consistent with the statutes and court decisions of the State of New Jersey, and applicable Federal law and applicable Federal court decisions.

The contractor shall submit to the public agency, after notification of award but prior to execution of a goods and services contract, one of the following three documents: Letter of Federal Affirmative Action Plan Approval; Certificate of Employee Information Report; or Employee Information Report Form AA302.

The contractor and its subcontractor shall furnish such reports or other documents to the Division of Contract Compliance & EEO as may be requested by the Division from time to time in order to carry out the purposes of these regulations, and public agencies shall

furnish such information as may be requested by the Division of Contract Compliance & EEO for conducting a compliance investigation pursuant to **Subchapter 10 of the Administrative Code at N.J.A.C.17:27.**

**PLEASE CHECK THE APPROPRIATE BOX:**

- I HAVE A CURRENT NJ AFFIRMATIVE ACTION CERTIFICATE (PLEASE ATTACH A COPY TO YOUR BID)**
- I HAVE A VALID FEDERAL AFFIRMATIVE ACTION PLAN APPROVAL LETTER (PLEASE ATTACH A COPY TO YOUR BID)**
- I HAVE COMPLETED AND ENCLOSED THE FORM AA201 INITIAL PROJECT WORKFORCE REPORT**

## Exhibit F

### PUBLIC LAW 2005, CHAPTER 51 AND EXECUTIVE ORDER 117 (2008)

Chapter 51 Instr. - Rev. 4/17/15

Page 1 of 4

#### INFORMATION AND INSTRUCTIONS For Completing the “Two-Year Vendor Certification and Disclosure of Political Contributions” Form

##### Background Information

On September 22, 2004, then-Governor James E. McGreevey issued E.O. 134, the purpose of which was to insulate the negotiation and award of State contracts from political contributions that posed a risk of improper influence, purchase of access or the appearance thereof. To this end, E.O. 134 prohibited State departments, agencies and authorities from entering into contracts exceeding \$17,500 with individuals or entities that made certain political contributions. E.O. 134 was superseded by Public Law 2005, c. 51, signed into law on March 22, 2005 (“Chapter 51”). On September 24, 2008, then-Governor Jon S. Corzine issued E.O. 117 which is designed to enhance New Jersey’s efforts to protect the integrity of procurement decisions and increase the public’s confidence in government. The Executive Order builds upon the provisions of Chapter 51.

##### Two-Year Certification Process

Upon approval by the State Chapter 51 Review Unit, the Certification and Disclosure of Political Contributions form is valid for a two (2) year period. Thus, if a vendor receives approval on January 1, 2014, the certification expiration date would be December 31, 2015. Any change in the vendor’s ownership status and/or political contributions during the two-year period will require the submission of new Chapter 51/Executive Order 117 forms to the State Review Unit. **Please note that it is the vendor’s responsibility to file new forms with the State should these changes occur.**

**State Agency Instructions:** Prior to the awarding of a contract, the State Agency should first send an e-mail to CD134@treas.nj.gov to verify the certification status of the vendor. If the response is that the vendor is NOT within an approved two-year period, then forms must be obtained from the vendor and forwarded for review. If the response is that the vendor is within an approved two-year period, then the response so stating should be placed with the bid/contract documentation for the subject project.

##### Instructions for Completing the Form

**NOTE:** Please refer to pages 3 and 4 “USEFUL DEFINITIONS for the purposes of Chapter 51 and Executive Order 117” for guidance when completing the form.

##### Part 1: BUSINESS ENTITY INFORMATION

**Business Name** – Enter the full legal name of the vendor, including trade name if applicable.

**Address, City, State, Zip and Phone Number** -- Enter the vendor's street address, city, state, zip code and telephone number.

**Vendor Email** – Enter the vendor’s primary email address.

**Vendor FEIN** – Please enter the vendor’s Federal Employment Identification Number.

**Business Type** - Check the appropriate box that represents the vendor's type of business formation.

**Listing of officers, shareholders, partners or members** - Based on the box checked for the business type, provide the corresponding information. (A complete list must be provided.)

Public Law 2005, Chapter 51 and Executive Order 117 (2008)  
Chapter 51 Instr. - Rev. 4/17/15

Page 2 of 4

## **Part 2: DISCLOSURE OF CONTRIBUTIONS**

Read the three types of political contributions that require disclosure and, if applicable, provide the recipient's information. The definition of "Business Entity/Vendor" and "Contribution" can be found on pages 3 and 4 of this form.

**Name of Recipient** – Enter the full legal name of the recipient.

**Address of Recipient** – Enter the recipient's street address.

**Date of Contribution** - Indicate the date the contribution was given.

**Amount of Contribution** - Enter the dollar amount of the contribution.

**Type of Contribution** – Select the type of contribution from the examples given.

**Contributor's Name** - Enter the full name of the contributor.

**Relationship of the Contributor to the Vendor** - Indicate the relationship of the contributor to the vendor. (e.g. officer or shareholder of the company, partner, member, parent company of the vendor, subsidiary of the vendor, etc.)

**NOTE:** If form is being completed electronically, click "Add a Contribution" to enter additional contributions. Otherwise, please attach additional pages as necessary. Check the box under the recipient information if no reportable contributions have been solicited or made by the business entity. **This box must be checked if there are no contributions to report.**

## **Part 3: CERTIFICATION**

Check Box A if the representative completing the Certification and Disclosure form is doing so on behalf of the business entity and all individuals and/or entities whose contributions are attributable to the business entity.

**(No additional Certification and Disclosure forms are required if BOX A is checked.)**

Check Box B if the representative completing the Certification and Disclosure form is doing so on behalf of the business entity and all individuals and/or entities whose contributions are attributable to the business entity with the exception of those individuals and/or entities that submit their own separate form. For example, the representative is not signing on behalf of the vice president of a corporation, but all others. The vice president completes a separate Certification and Disclosure form. **(Additional Certification and Disclosure forms are required from those individuals and/or entities that the representative is not signing on behalf of and are included with the business entity's submittal.)**

Check Box C if the representative completing the Certification and Disclosure form is doing so on behalf of the business entity only. **(Additional Certification and Disclosure forms are required from all individuals and/or entities whose contributions are attributable to the business entity and must be included with the business entity submittal.)**

Check Box D when a sole proprietor is completing the Certification and Disclosure form or when an individual or entity whose contributions are attributable to the business entity is completing a separate Certification and Disclosure form.

### **Read the five statements of certification prior to signing.**

The representative authorized to complete the Certification and Disclosure form must sign and print her/his name, title or position and enter the date.

**Public Law 2005, Chapter 51 and Executive Order 117 (2008)**  
*Chapter 51 Instr. - Rev. 4/17/15*

*Page 3 of 4*

### **State Agency Procedure for Submitting Form(s)**

The State Agency should submit the completed and signed Two-Year Vendor Certification and Disclosure forms either electronically to: [cd134@treas.nj.gov](mailto:cd134@treas.nj.gov) or regular mail at: Chapter 51 Review Unit, P.O. Box 230, 33 West State Street, Trenton, NJ 08625-0230. Original forms should remain with the State Agency and copies should be sent to the Chapter 51 Review Unit.

## **Business Entity Procedure for Submitting Form(s)**

The business entity should return this form to the contracting State Agency.

The business entity can submit the Certification and Disclosure form directly to the Chapter 51 Review Unit only when:

- The business entity is approaching its two-year certification expiration date and is seeking certification renewal;
- The business entity had a change in its ownership structure; OR
- The business entity made any contributions during the period in which its last two-year certification was in effect, or during the term of a contract with a State Agency.

### **Questions & Information**

Questions regarding the interpretation or application of Public Law 2005, Chapter 51 (N.J.S.A. 19:44A-20.13) or E.O. 117 (2008) may be submitted electronically through the Division of Purchase and Property website at:

<https://www.state.nj.us/treas/purchase/eo134questions.shtml>

Reference materials and forms are posted on the Political Contributions Compliance website at:

<http://www.state.nj.us/treasury/purchase/execorder134.shtml>

### **USEFUL DEFINITIONS for the purposes of Chapter 51 and Executive Order 117**

- **“Business Entity/Vendor”** means any natural or legal person, business corporation, professional services corporation, limited liability company, partnership, limited partnership, business trust, association or any other legal commercial entity organized under the laws of New Jersey or any other state or foreign jurisdiction. The definition also includes (i) if a business entity is a for-profit corporation, any officer of the corporation and any other person or business entity that owns or controls 10% or more of the stock of the corporation; (ii) if a business entity is a professional corporation, any shareholder or officer; (iii) if a business entity is a general partnership, limited partnership or limited liability partnership, any partner; (iv) if a business entity is a sole proprietorship, the proprietor; (v) if the business entity is any other form of entity organized under the laws of New Jersey or any other state or foreign jurisdiction, any principal, officer or partner thereof; (vi) any subsidiaries directly or indirectly controlled by the business entity; (vii) any political organization organized under 26 U.S.C.A. § 527 that is directly or indirectly controlled by the business entity, other than a candidate committee, election fund, or political party committee; and (viii) with respect to an individual who is included within the definition of “business entity,” that individual's civil union partner and any child residing with that person. **1**
- **“Officer”** means a president, vice president with senior management responsibility, secretary, treasurer, chief executive officer or chief financial officer of a corporation or any person routinely performing such functions for a corporation. Please note that officers of non-profit entities are excluded from this definition.
- **“Partner”** means one of two or more natural persons or other entities, including a corporation, who or which are joint owners of and carry on a business for profit, and which business is organized under the laws of this State or any other state or foreign jurisdiction, as a general partnership, limited partnership, limited liability partnership, limited liability company, limited partnership association, or other such form of business organization.

**1**Contributions made by a spouse, civil union partner or resident child to a candidate for whom the contributor is eligible to vote or to a political party committee within whose jurisdiction the contributor resides are permitted.

**Public Law 2005, Chapter 51 and Executive Order 117 (2008)**

**Chapter 51 Instr. - Rev. 4/17/15**

**Page 4 of 4**

### **USEFUL DEFINITIONS for the purposes of Chapter 51 and Executive Order 117**

- **“Contribution”** is a contribution, including an in-kind contribution, in excess of \$300.00 in the aggregate per election made to or received by a candidate committee, joint candidates committee, or political committee; or per calendar year made to or received by a political party committee, legislative leadership committee, or continuing political committee or a currency contribution in any amount.
- **“In-kind Contribution”** means a contribution of goods or services received by a candidate committee, joint candidates committee, political committee, continuing political committee, political party committee, or legislative leadership committee, which

contribution is paid for by a person or entity other than the recipient committee, but does not include services provided without compensation by an individual volunteering a part of or all of his or her time on behalf of a candidate or committee.

- **“Continuing Political Committee”** includes any group of two or more persons acting jointly, or any corporation, partnership, or any other incorporated or unincorporated association, including a political club, political action committee, civic association or other organization, which in any calendar year contributes or expects to contribute at least \$4,300 to aid or promote the candidacy of an individual, or the candidacies of individuals, for elective public office, or the passage or defeat of a public questions, and which may be expected to make contributions toward such aid or promotion or passage or defeat during a subsequent election, provided that the group, corporation, partnership, association or other organization has been determined by the Commission to be a continuing political committee in accordance with N.J.S.A. 19:44A-8(b).
- **“Candidate Committee”** means a committee established by a candidate pursuant to N.J.S.A. 19:44A-9(a), for the purpose of receiving contributions and making expenditures.
- **“State Political Party Committee”** means a committee organized pursuant to N.J.S.A. 19:5-4.
- **“County Political Party Committee”** means a committee organized pursuant to N.J.S.A. 19:5-3.
- **“Municipal Political Party Committee”** means a committee organized pursuant to N.J.S.A. 19:5-2.
- **“Legislative Leadership Committee”** means a committee established, authorized to be established, or designated by the President of the Senate, the Minority Leader of the Senate, the Speaker of the General Assembly, or the Minority Leader of the General Assembly pursuant to N.J.S.A. 19:44A-10.1 for the purpose of receiving contributions and making expenditures.
- **“Political Party Committee”** means:
  1. The State committee of a political party, as organized pursuant to N.J.S.A. 19:5-4;
  2. Any county committee of a political party, as organized pursuant to N.J.S.A. 19:5-3; or
  3. Any municipal committee of a political party, as organized pursuant to N.J.S.A. 19:5-2



State of New Jersey  
 Department of the Treasury  
**Division of Purchase and Property**  
 Two-Year Chapter 51/Executive Order 117 Vendor Certification and  
 Disclosure of Political Contributions

Chapter 51 - Rev. 4/17/15

Page 1 of 3

**FOR STATE AGENCY USE ONLY**

Solicitation, RFP, or Contract No. \_\_\_\_\_ Award Amount \_\_\_\_\_

Description of Services \_\_\_\_\_

State Agency Name \_\_\_\_\_ Contact Person \_\_\_\_\_

Phone Number \_\_\_\_\_ Contact Email \_\_\_\_\_

Check if the Contract / Agreement is Being Funded Using FHWA Funds

Please check if requesting  
recertification

**Part 1: Business Entity Information**

Full Legal Business Name \_\_\_\_\_  
 (Including trade name if applicable)

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_ Phone \_\_\_\_\_

Vendor Email \_\_\_\_\_ Vendor FEIN (SS# if sole proprietor/natural person) \_\_\_\_\_

**Check off the business type and list below the required information for the type of business selected.  
MUST BE COMPLETED IN FULL**

- Corporation: LIST ALL OFFICERS and any 10% and greater shareholder
- Professional Corporation: LIST ALL OFFICERS and ALL SHAREHOLDERS
- Partnership: LIST ALL PARTNERS with any equity interest
- Limited Liability Company: LIST ALL MEMBERS with any equity interest
- Sole Proprietor

Note: "Officers" means President, Vice President with senior management responsibility, Secretary, Treasurer, Chief Executive Officer or Chief Financial Officer of a corporation, or any person routinely performing such functions for a corporation.

**All Officers of a Corporation or PC**

**10% and greater shareholders of a corporation  
or all shareholder of a PC**


**All Equity partners of a Partnership**

**All Equity members of a LLC**


If you need additional space for listing of Officers, Shareholders, Partners or Members, please attach separate page.

**IMPORTANT NOTE: You must review the definition of "contribution" and "business entity" on the Information and Instructions form prior to completing Part 2 and Part 3. The Information and Instructions form is available at: <http://www.state.nj.us/treasury/purchase/forms.shtml#eo134>**

**Part 2: Disclosure of Contributions by the business entity or any person or entity whose contributions are attributable to the business entity.**

**1. Report below all contributions solicited or made during the 4 years immediately preceding the commencement of negotiations or submission of a proposal to any:**

Political organization organized under Section 527 of the Internal Revenue Code and which also meets the definition of a continuing political committee as defined in N.J.S.A. (See **Information and Instructions form.**)

**2. Report below all contributions solicited or made during the 5 ½ years immediately preceding the commencement of negotiations or submission of a proposal to any:**

Candidate Committee for or Election Fund of any Gubernatorial or Lieutenant Gubernatorial candidate  
State Political Party Committee  
County Political Party Committee

**3. Report below all contributions solicited or made during the 18 months immediately preceding the commencement of negotiations or submission of a proposal to any:**

Municipal Political Party Committee  
Legislative Leadership Committee

Full Legal Name of Recipient	
Address of Recipient	
Date of Contribution	Amount of Contribution
Type of Contribution (i.e. currency, check, loan, in-kind)	
Contributor Name	
Relationship of Contributor to the Vendor	
<b>If this form is not being completed electronically, please attach additional contributions on separate page. Click the "Add a Contribution" tab to enter additional contributions.</b>	

**Check this box only if no political contributions have been solicited or made by the business entity or any person or entity whose contributions are attributable to the business entity.**

**Part 3: Certification**

- i.  I am certifying on behalf of the business entity and all individuals and/or entities whose contributions are attributable to the business entity as listed on Page 1 under **Part 1: Vendor Information.**
- ii.  I am certifying on behalf of the business entity and all individuals and/or entities whose contributions are attributable to the business entity as listed on Page 1 under **Part 1: Vendor Information.** except for the individuals and/or entities who are submitting separate Certification and Disclosure forms which are included with this submittal.
- (C)  I am certifying on behalf of the business entity only; any remaining persons or entities whose contributions are attributable to the business entity (as listed on Page 1) have completed separate Certification and Disclosure forms which are included with this submittal.
- (D)  I am certifying as an individual or entity whose contributions are attributable to the business entity.

I hereby certify as follows:

- 1. **I have read the Information and Instructions accompanying this form prior to completing the certification on behalf of the business entity.**
- 2. **All reportable contributions made by or attributable to the business entity have been listed above.**

**1. The business entity has not knowingly solicited or made any contribution of money, pledge of contribution, including in-kind contributions, that would bar the award of a contract to the business entity unless otherwise disclosed above:**

- a) Within the 18 months immediately preceding the commencement of negotiations or submission of a proposal for the contract or agreement to:
  - (i) A candidate committee or election fund of any candidate for the public office of Governor or Lieutenant Governor or to a campaign committee or election fund of holder of public office of Governor or Lieutenant Governor; **OR**
  - (ii) Any State, County or Municipal political party committee; **OR**
  - (iii) Any Legislative Leadership committee.
- b) During the term of office of the current Governor or Lieutenant Governor to:
  - (i) A candidate committee or election fund of a holder of the public office of Governor or Lieutenant Governor; **OR**
  - (ii) Any State or County political party committee of the political party that nominated the sitting Governor or Lieutenant Governor in the last gubernatorial election.
- c) Within the 18 months immediately preceding the last day of the sitting Governor or Lieutenant Governor's first term of office to:
  - (i) A candidate committee or election fund of the incumbent Governor or Lieutenant Governor; **OR**
  - (ii) Any State or County political party committee of the political party that nominated the sitting Governor or Lieutenant Governor in the last gubernatorial election.

**4. During the term of the contract/agreement the business entity has a continuing responsibility to report, by submitting a new Certification and Disclosure form, any contribution it solicits or makes to:**

- (a) Any candidate committee or election fund of any candidate or holder of the public office of Governor or Lieutenant Governor; **OR**
- (b) Any State, County or Municipal political party committee; **OR**
- (c) Any Legislative Leadership committee.

The business entity further acknowledges that contributions solicited or made during the term of the contract/agreement may be determined to be a material breach of the contract/agreement.

**5. During the two-year certification period the business entity will report any changes in its ownership structure (including the appointment of an officer within a corporation) by submitting a new Certification and Disclosure form indicating the new owner(s) and reporting said owner(s) contributions.**

I certify that the foregoing statements in Parts 1, 2 and 3 are true. I am aware that if any of the statements are willfully false, I may be subject to punishment.

Signed Name \_\_\_\_\_ Print Name \_\_\_\_\_

Title/Position \_\_\_\_\_ Date \_\_\_\_\_

**Procedure for Submitting Form(s)**

The contracting State Agency should submit this form to the Chapter 51 Review Unit when it has been required as part of a contracting process. The contracting State Agency should submit a copy of the completed and signed form(s), to the Chapter 51 Unit and retain the original for their records.

The business entity should return this form to the contracting State Agency. The business entity can submit this form directly to the Chapter 51 Review Unit only when it –

- Is approaching its two-year certification expiration date and wishes to renew certification;
- Had a change in its ownership structure; **OR**
- Made any contributions during the period in which its last two-year certification was in effect, or during the term of a contract with a State Agency.

**Forms should be submitted either electronically to: [cd134@treas.nj.gov](mailto:cd134@treas.nj.gov) , or regular mail at: Chapter 51 Review Unit, P.O. Box 230, 33 West State Street, Trenton, NJ 08625.**

**Exhibit G**

*Schedule of Estimated Quantities, Unit Prices, and Lump Sum Items*

Refer to attached Remington and Vernick Fee Schedule

**Exhibit H**  
**NON-COLLUSION AFFIDAVIT**

STATE OF \_\_\_\_\_ )

: SS:

COUNTY OF \_\_\_\_\_ )

I, \_\_\_\_\_,

of the City of \_\_\_\_\_,

in the County of \_\_\_\_\_,

and the State of \_\_\_\_\_,

of full age, being duly sworn according to law on my oath depose and say that:

I am (Title) \_\_\_\_\_

of (Bidder's name), \_\_\_\_\_,

Making a bid in response to OAKVIEW GROUP's Solicitation of Bids for **CONVENTION BOULEVARD RESURFACING at ATLANTIC CITY CONVENTION CENTER**, and that I executed the said bid with full authority so to do; that the said Bidder has not, directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action, in restraint of free competition, in connection with said bid; and that all statements contained in the said bid and in this Affidavit are true and correct, and made with full knowledge that OAKVIEW GROUP relies upon the truth of the statements contained in the said bid, in this Affidavit and in any statements requested by OAKVIEW GROUP showing evidence of qualifications in awarding a contract based upon said bid.

I further warrant that no person or selling agency has been employed or retained to solicit or secure said bid upon an agreement or understanding for a commission, percentage, brokerage or contingent fee, except bona fide employees or bona fide established commercial or selling agencies maintained by the Bidder.

\_\_\_\_\_  
Authorized Signature

SWORN and SUBSCRIBED to me this  
\_\_\_\_\_ day of \_\_\_\_\_, 2026

\_\_\_\_\_  
NOTARY PUBLIC

\_\_\_\_\_  
COMMISSION EXPIRES

**Exhibit I**

**CONTRACT AND SPECIFICATIONS FOR GENERAL  
CONSTRUCTION**

**PROJECT OWNER:**

OAKVIEW GROUP as operator of Jim Whelan Boardwalk Hall and the Atlantic City  
Convention Center, as managing agent for Casino Reinvestment Development Authority  
2301 Boardwalk  
Atlantic City, New Jersey 08401  
Phone: 609-348-7026

JUNE 28, 2026

# Article I. 00500 Agreement

[INSERT FULL CONTRACTOR NAME AND ADDRESS BELOW:]

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(hereinafter referred to as the “Contractor”)

THIS AGREEMENT (the “Agreement”) is made as of this \_\_\_\_ day of \_\_\_\_\_, 2026, by and between the OAKVIEW GROUP, as agent on behalf of CASINO REINVESTMENT DEVELOPMENT AUTHORITY (“CRDA”), a public body corporate and politic constituting an instrumentality of the State of New Jersey, and the Contractor identified above.

## Recitals

- A. Pursuant to a solicitation of bids issued \_\_\_\_\_ of 2026 (the “Solicitation”) and the Contractor’s response thereto dated \_\_\_\_\_, 2026 (the “Bid”), OAKVIEW GROUP has selected the Contractor to provide construction services, as more fully described in this Contract.
- B. OAKVIEW GROUP desires to engage and the Contractor desires to accept the engagement to perform the Work (as hereinafter defined).

**IN CONSIDERATION** of the foregoing recitals, the mutual promises and agreements set forth herein, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:

1. All capitalized terms not otherwise defined, shall have the meaning ascribed to them in Section 00700.2 herein.
2. The Contractor will commence and complete the Project, and all other necessary and desirable work as approved in accordance with the terms and conditions of the Contract Documents.
3. The Contractor will furnish all of the material, supplies, tools, equipment, labor and other services necessary and desirable for the completion of the Project.
4. The Contractor will commence the work required by the Contract Documents within thirty (30) calendar days after the date of the Notice to Proceed and will substantially complete the same within **(4) work weeks** pending lead time for all critical material, of the date of the Notice to Proceed.
5. The Contractor agrees to perform all of the Work described in the Contract Documents and comply with the terms and conditions herein and therein for the Total Contract Price.
6. The term “Contract Documents” means and includes the following:
  - a. Contract
  - b. General Conditions
  - c. Payment Bond

- d. Performance Bond
- e. Payment Application (as set forth in Attachment “A”)
- f. Notice to Proceed (as set forth in Attachment “B”)
- g. Change Orders (as set forth in Attachment “C”)
- h. Construction Change Directive
- i. Progress Schedule (as amended)
- j. Supplementary Agreements
- k. Drawings prepared by the Engineer
- l. Specifications prepared by the Engineer
- m. Written Addenda or Amendments as executed by the Owner and Contractor
- n. Any other written instructions or interpretations by the Engineer or Owner
- o. Owner’s Bid Documents
- p. Contractor’s bid dated \_\_\_\_\_, except for any provisions inconsistent with the Contract Documents, unless such inconsistency is accepted or waived, in writing, by the Owner.

- 7. In the event of a conflict between the Division 1 and Division 2 terms and conditions set forth in this contract and the Division 1 and Division 2 terms and conditions set forth on the Architect drawings, the Division 1 and Division 2 terms and conditions set forth in this contract shall prevail.
- 8. The Owner will pay to the Contractor in the manner and at such times as set forth in the General Conditions such amounts as required by the Contract Documents.
- 9. This Contract shall be binding upon all parties hereto and their respective successors and permitted assigns.

**IN WITNESS WHEREOF**, the parties hereto have executed, or caused to be executed by their duly authorized representatives, this Contract in four (4) copies each, any of which shall be deemed an original, on the date first above written.

**[SIGNATURES APPEAR ON NEXT PAGE]**

**Witness:**

**OAKVIEW VENUE GROUP**

By: \_\_\_\_\_

By: \_\_\_\_\_

Name: \_\_\_\_\_

Name:

Title: \_\_\_\_\_

Title:

**[CONTRACTOR MUST FILL IN AND SIGN BELOW:]**

**Witness:**

\_\_\_\_\_

By: \_\_\_\_\_

By: \_\_\_\_\_

Name: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_

**ACKNOWLEDGEMENT AS TO CONTRACTOR**

STATE OF \_\_\_\_\_:

COUNTY OF \_\_\_\_\_:

The foregoing instrument was acknowledged before me this \_\_\_\_\_ day of \_\_\_\_\_, 2026, by \_\_\_\_\_, as the \_\_\_\_\_ of \_\_\_\_\_, a \_\_\_\_\_ company, organized under the laws of \_\_\_\_\_, who I am satisfied, is the person who, as such authorized person, signed, sealed and delivered the within instrument made by said company, and he did acknowledge that he/she, as such authorized person, signed and delivered the same on behalf of said company for the uses and purposes therein set forth, and that said instrument is the voluntary act and deed of said company duly authorized by a proper resolution of its governing body.

\_\_\_\_\_  
Name:

Notary Public of \_\_\_\_\_

(NOTARY SEAL)

My Commission Expires:

**ACKNOWLEDGMENT AS TO OAKVIEW VENUE GROUP**

**STATE OF NEW JERSEY:**  
**COUNTY OF ATLANTIC:**

On this \_\_\_ day of \_\_\_\_\_, 2026 in the County and State aforesaid, before me, the subscriber, a Notary Public authorized to take acknowledgments and proofs in said County and State, personally appeared \_\_\_\_\_, the \_\_\_\_\_ of Global Spectrum, L.P., a Delaware limited partnership, as operator of Jim Whelan Boardwalk Hall and the Atlantic City Convention Center, as managing agent for the Casino Reinvestment Development Authority, who I am satisfied, in the person who, a such officer of said entity, signed, sealed and delivered the within instrument made by said entity, and he did acknowledge that he, as such officer, signed and delivered the same on behalf of said entity for the uses and purposes therein set forth, and that said instrument is the voluntary act and deed of said entity duly authorized by a proper resolution of the entity.

\_\_\_\_\_  
Name:  
Notary Public  
My Commission Expires:

(NOTARY SEAL)

**Attachment "A" Application for Payment (Or Equivalent Owner Approved AIA G702)**

NO. \_\_\_\_\_

To: \_\_\_\_\_ (OWNER)

From: \_\_\_\_\_ (CONTRACTOR)

Contract: \_\_\_\_\_

Project: \_\_\_\_\_

Contract No. \_\_\_\_\_.

For Work accomplished through the date of: \_\_\_\_\_.

1.	Original Contract Price:	\$ _____
2.	Net change by Change Orders and Written Amendments (+ or -):	\$ _____
3.	Current Contract Price (1 plus 2):	\$ _____
4.	Total completed and stored to date (See Invoice Summary):	\$ _____
5.	Retainage (per Contract):	
	_____ % of completed Work:      \$ _____	
	_____ % of stored material:      \$ _____	
	Total Retainage:	\$ _____
6.	Total completed and stored to date less retainage (4 minus 5):	\$ _____
7.	Less previous Application for Payments:	\$ _____
8.	<b>DUE THIS APPLICATION (6 MINUS 7):</b>	\$ _____

**CONTRACTOR'S CERTIFICATION:**

**THE UNDERSIGNED CONTRACTOR CERTIFIES THAT (1) ALL PREVIOUS PROGRESS PAYMENTS RECEIVED FROM OWNER ON ACCOUNT OF WORK DONE UNDER THE CONTRACT REFERRED TO ABOVE HAVE BEEN APPLIED ON ACCOUNT TO DISCHARGE CONTRACTOR'S LEGITIMATE OBLIGATIONS INCURRED IN CONNECTION WITH WORK COVERED BY PRIOR APPLICATIONS FOR PAYMENT NUMBERED 1 THROUGH \_\_\_\_\_ INCLUSIVE; AND (2) ALL WORK COVERED BY THIS APPLICATION FOR PAYMENT IS IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND NOT DEFECTIVE.**

Accompanying this Application for Payment is the duly executed Contractor's Partial Release and Waiver of Liens, the duly executed Partial Release and Waiver of Liens of each of the Contractor's subcontractors and/or suppliers, and all documentation of measurement of unit price Pay Items as required by the Contract Documents and the Engineer.

Dated \_\_\_\_\_ By: \_\_\_\_\_ Contractor

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

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

Subscribed and sworn to before me this \_\_\_\_\_  
day of \_\_\_\_\_, 2026

\_\_\_\_\_  
Notary Public

My Commission expires: \_\_\_\_\_

**Attachment "A" - Continued (Or Equivalent Owner Approved AIA G703)**

**Invoice Summary**

***Section 1.01***

Pay Item	Description	Original Lump Sum	Change Orders	Revised Lump Sum	Percent Completed	Previously Billed	Current Billing	Total Billing
1.								
2.								
3.								
4.								
5.								
6.								
7.								
8.								
9.								
10.								
	SUBTOTAL - Unit Price Items					_____	_____	_____
	SUBTOTAL – Lump Sum Items					_____	_____	_____
	TOTAL – All Items					_____	_____	_____

*Attachment "B" Notice to Proceed*

Dated: \_\_\_\_\_

TO: \_\_\_\_\_  
(Contractor)

ADDRESS: \_\_\_\_\_

Contract: DATED AS OF \_\_\_\_\_

Project: \_\_\_\_\_

You are notified that the Contract Time under the above contract will commence to run on this date. You are now authorized to enter upon the Project site and start performing your obligations under the Contract Documents. The date of Substantial Completion is:

Before you may start any Work at the Site, Section 00620 of this Contract provides that you must deliver to the Owner (with copies to Engineer and other identified additional insureds) certificates of insurance along with the declaration pages, which are required to be purchased and maintained in accordance with the Contract Documents.

**OAKVIEW VENUE GROUP**

By: \_\_\_\_\_

Name: Clark Hughes

Title: Director of Capital Projects

Copy:

## Attachment "C" Change Order

No. \_\_\_\_\_

DATE OF ISSUANCE \_\_\_\_\_ EFFECTIVE DATE \_\_\_\_\_

OWNER \_\_\_\_\_

CONTRACTOR \_\_\_\_\_

Contract: \_\_\_\_\_

Project: \_\_\_\_\_

Contract No. \_\_\_\_\_

ENGINEER \_\_\_\_\_

You are directed to make the following changes in the Contract Documents:

Description:

Reason for Change Order:

Attachments: (List documents supporting change)

CHANGE IN CONTRACT PRICE:
Original Contract Price \$ _____
Net Increase (Decrease) from previous Change Orders No. ___ to ___: \$ _____
Contract Price prior to this Change Order: \$ _____
Net increase (decrease) of this Change Order: \$ _____
Contract Price with all approved Change Orders: \$ _____

CHANGE IN CONTRACT TIMES:
Original Contract Times: Substantial Completion: _____ Ready for final payment: _____ (days or dates)
Net change from previous Change Orders No. ___ to No. ___: Substantial Completion: _____ Ready for final payment: _____ (days)
Contract Times prior to this Change Order: Substantial Completion: _____ Ready for final payment: _____ (days or dates)
Net increase (decrease) this Change Order: Substantial Completion: _____ Ready for final payment: _____ (days)
Contract Times with all approved Change Orders: Substantial Completion: _____ Ready for final payment: _____ (days or dates)

RECOMMENDED:

APPROVED:

ACCEPTED:

By: \_\_\_\_\_  
ENGINEER (Authorized Signature)

By: \_\_\_\_\_  
OWNER (Authorized Signature)

By: \_\_\_\_\_  
CONTRACTOR (Authorized Signature)

Date: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

*Attachment "C" - Continued*

**Partial Release and Waiver of Liens**

WHEREAS, the undersigned is the Contractor furnishing work, services, materials or equipment upon real estate operated by OAKVIEW VENUE GROUP, as operator of Jim Whelan Boardwalk Hall and the Atlantic City Convention Center, as managing agent for the Casino Reinvestment Development Authority in furtherance of that certain **ATLANTIC CITY CONVENTION CENTER CONVENTION BOULEVARD RESURFACING** hereinafter referred to as "Owner").

Receipt is acknowledged of \$ \_\_\_\_\_, which represents partial payment, bringing the total paid to date against our Contract to \$ \_\_\_\_\_ for work, services, materials and/or equipment furnished and installed by us at the above referenced project, the undersigned does hereby waive, release and relinquish the Owner and the Building/Land from any and all claims and/or construction liens pursuant to N.J.S.A. 2A:44A-1 *et seq.* relating to this Project, to the extent of \$ \_\_\_\_\_.

We do not waive or release any future lien rights for additional labor and/or materials furnished hereafter in performance of the project.

We agree to hold the Owner and the Building/Land harmless against any claim made or lien filed by any of our material suppliers and subcontractors who performed work or supplied materials for the Project to-date.

In addition, the undersigned warrants: (a) that any claims for payment for work, services, materials and/or equipment furnished in the construction or repair of the aforesaid real estate and improvements have not been assigned and will not be assigned; (b) that all laborers, subcontractors and suppliers of the undersigned who have or will have furnished work, services, materials and/or equipment in the construction or repair of the aforesaid real estate and improvements have been or will be fully paid and that none of such laborers, subcontractors or suppliers have or will have any claim, demand or lien against the aforesaid real estate and improvements; and (c) that no financing statement, chattel mortgage, security interest, conditional bill of sale or retention of title agreement has been given or executed or will be given or executed for or in connection with any materials, appliances, machinery, fixtures or furnishings placed upon or installed, or to be placed upon or installed, in the aforesaid real estate and improvements by the undersigned.

IN WITNESS WHEREOF, the undersigned has executed and sealed this Partial Release and Waiver of Liens this \_\_\_\_ day of \_\_\_\_\_, 2026.

Paid to date: \$ \_\_\_\_\_

**NAME OF CONTRACTOR:** \_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_

**WITNESS:** \_\_\_\_\_

## **00550 Notice to Proceed**

Upon execution of the Contract by the Owner, a fully executed copy, together with a Notice to Proceed in the form attached hereto as Attachment “B”, will be provided to the Contractor, provided however, that such Notice shall only be issued after Owner’s receipt of all required approvals. Receipt of the executed Contract and Notice to Proceed shall constitute the Contractor’s authority to enter upon the Project site, provided the Contractor has submitted to the Owner, and the Owner has accepted, the insurance certificates and declaration pages required under Subsection 00620 and a preconstruction conference has been held pursuant to Subsection 01310.5(1). Construction operations shall not begin until the Contractor has supplied, and the Engineer and/or Owner has accepted, Insurance Certificates, the Progress Schedule, bonds and certifications, forms, schedules, and any other reasonable request by the Global Spectrum or submittals required by the Contract Documents.

Construction operations shall begin within thirty (30) calendar days of the Notice to Proceed. The Notice to Proceed is the first day of the Contract Time. Failure of the Contractor to begin operations within thirty (30) calendar days for any reason shall constitute a Contractor delay. Failure to begin operations within forty-five (45) calendar days shall constitute a default for which the Owner may take whatever action deemed appropriate under the Contract, in the Owner’s sole and absolute discretion.

The Contractor is not entitled to additional compensation or extension of Contract Time for any delay, hindrance, or interference caused by or attributable to commencement of Work before the twentieth day following the Notice to Proceed.

The Contractor shall give the Engineer at least 72 hours advance notice in writing of its intention to start operations.

## **00600 Bonds, Insurance and Representations**

### ***00610 Performance Bond and Payment Bond***

Within ten (10) business days of the date of the Notice of Proceed, the Contractor shall complete and deliver a Performance Bond and a Payment Bond satisfactory to the Owner.

Each bond shall be the sum of not less than the Total Contract Price less the lump sum bid for the Pay Item “Performance Bond and Payment Bond” and shall be maintained by the Contractor until Acceptance. In the event of the insolvency of the surety or if the Performance Bond and Payment Bond have not been properly authorized or issued by the Surety company, the Contractor shall furnish and maintain, as above provided, other surety satisfactory to the Owner.

All alterations, extensions of Contract Time, extra and additional work, and other changes authorized by the Contract Documents may be made without securing the consent of the surety or sureties of the bonds.

The surety corporation bonds shall be furnished by only those sureties listed in the US Treasury Department Circular 570 and authorized to do business in the State of New Jersey. The bonds shall be accompanied by a certification as to authorization of the attorney-in-fact to commit the surety company and a true and correct statement of the financial condition of said surety company.

Payment for the Performance Bond and the Payment Bond will be made upon commencement of work on the basis of Pay Item No. 1 as set forth in The Fee Schedule or the actual cost (gross premium), whichever is less, upon submission of a paid bill and the report of execution issued by the Surety showing the gross

premium of the bonds and the broker's fee. Upon Completion, the Owner's payment for the Performance and Payment Bond will be adjusted to reflect any increase or decrease in the actual cost of the bonds. Any increase will be based upon the rate schedule certified by the Surety and submitted by the Contractor at the beginning of the Project. If the certified schedule and the paid bill are not submitted at the beginning of the Project, no adjustment will be made. Any increase or decrease in the actual cost of the bonds of less than one hundred dollars will be disregarded. The adjustment will be calculated on whichever of the following methods results in the lowest adjustment:

1. The difference between the actual cost paid by the Contractor before the commencement of work and the paid final bill submitted by the surety company or agent.
2. The difference between the actual cost paid by the Contractor before the commencement of work and the final amount as calculated by using the certified schedule submitted at the beginning of the Project.

If the amount of this final bill reflects an increase in the cost of the Performance and Payment Bonds, the Owner will pay the Contractor the amount as determined above in the final payment to be made to the Contractor after Acceptance. If the amount of the final bill reflects a decrease in the cost of the Payment and Performance Bonds, the Owner will deduct that amount from the final payment made to the Contractor after Acceptance.

Payment will be made under:

<i>Pay Item</i>	<i>Pay Unit</i>
PERFORMANCE BOND AND PAYMENT BOND	LUMP SUM

**00620 Insurance**

The Contractor shall procure and maintain, until Acceptance and at all times thereafter when the Contractor may be correcting, removing, or replacing defective work, insurance for liability for damages imposed by law and assumed under the Contract, of the kinds and in the amounts hereinafter provided, with insurance companies authorized to do business in the State of New Jersey. Within five (5) business days of the Notice of Award, the Contractor shall furnish to the Owner a certificate or certificates of insurance together with declaration pages, in a form satisfactory to the Owner, showing that the Contractor has complied with this Subsection. Insurance binders are not acceptable as a form of insurance certificate. All of the policies of insurance required to be purchased and maintained and the certificates, declaration pages, or other evidence thereof shall contain a provision or endorsement that the coverage afforded is not to be canceled, materially changed, or renewal refused until at least 30 days prior written notice has been given to the Engineer and Owner by certified mail. All certificates, notices, or declaration pages shall be submitted to the Engineer (**Attention: Donna Williams of Remington & Vernick and Owner Attention: Clark Hughes, OAKVIEW VENUE GROUP, 2301 Boardwalk, Atlantic City, NJ 08401**). Within five (5) days of commencing Work, the Contractor shall furnish the Owner with a certified copy of each policy of insurance, including the provisions establishing premiums.

Contractor shall obtain and maintain the types of insurance and minimum limits of liability as follows:

1. **Comprehensive General Liability Insurance.** The minimum limit of liability shall be \$5,000,000 per occurrence as a combined single limit for bodily injury and property. Any excess or umbrella policy obtained by the Contractor so that the minimum limit of liability is provided shall contain a clause stating that it takes effect (drops down) in the event the primary coverage is impaired or exhausted.

The above-required Comprehensive General Liability policy shall name the Owner, its officers, and employees, Casino Reinvestment Development Authority, its officers and employees, and the Casino Licensees and the City of Atlantic City, New Jersey, and their respective governing bodies, as additional insureds.

The coverage to be provided under this policy shall be at least as broad as that provided by the standard basic, unamended, and unendorsed comprehensive general liability coverage forms currently in use in the State of New Jersey, which shall not be circumscribed by an endorsement limiting the breadth of coverage. Moreover, such policy shall be endorsed so as to delete any exclusions applying to property damage liability arising from explosions or arising from damage to underground utilities and collapse of foundations.

The insurance policy shall be endorsed to include contractual liability coverage, premises/operations coverage, products/completed operations coverage, broad form property damage coverage, independent contractor's coverage, and personal injury coverage.

The Contractor shall provide documentation from the insurance company that indicates the cost, if any, of naming the Owner, its members, officers, employees, and other parties as additional insureds.

2. **Comprehensive Automobile Liability Insurance.** The policy shall cover owned, non-owned, and hired vehicles with minimum limits of liability in the amount of \$1,000,000 per occurrence as a combined single limit for bodily injury and property damage, together with excess coverage or umbrella coverage with the same terms and conditions as the primary underlying coverage (following form) in an amount such that the primary and excess coverage or primary and umbrella coverage together equals or is greater than \$5,000,000. Said excess or umbrella policy shall contain a clause stating that it takes effect (drops down) in the event the primary coverage is impaired or exhausted.
3. **Owner's and Contractor's Protective Liability Insurance.** The Contractor shall provide a separate Owner's and Contractor's Protective Liability Insurance Policy. The minimum limit of liability shall be \$5,000,000 per occurrence as a combined single limit for bodily injury and property damage. The policy is to be written for the benefit of the Owner, its members, directors, officers and employees, and they are to be named as the insured. The Casino Licensees and the City of Atlantic City, New Jersey are to be additional insureds.
4. **Workers Compensation and Employer's Liability Insurance.** Workers Compensation Insurance shall be provided according to the requirements of the laws of the State of New Jersey, and shall include an all states endorsement to extend coverage to any State that may be interpreted to have legal jurisdiction. Employer's Liability Insurance shall be provided with the following minimum limits:
  - a. \$100,000 each accident
  - b. \$100,000 Disease each employee
  - c. \$500,000 Disease aggregate limit

Insurance coverage in the minimum amounts set forth herein shall not be construed to relieve the Contractor for liability in excess of such coverage, nor does it preclude the Owner from taking such other actions as are available to it under any other provisions of this Contract or otherwise at law.

All proof of insurance submitted to the Owner shall clearly set forth all exclusions and deductible clauses. Standard exclusions will be allowed provided they are not inconsistent with the requirements of this Subsection. Allowance of any additional exclusions is at the discretion of the Owner. Regardless of the allowance of exclusions or deductions, the Contractor shall be responsible for the deductible limit of the policy and all exclusions consistent with the risks it assumes under this Contract and as imposed by law.

In the event that the Contractor provides evidence of insurance in the form of certificates of insurance, valid for a period of time less than the period during which the Contractor is required by the terms of the Contract to maintain insurance, said certificates are acceptable, but the Contractor shall be obligated to renew its

insurance policies as necessary and to provide new certificates of insurance so that the Owner is continuously in possession of evidence of the Contractor's insurance according to the foregoing provisions.

In the event the Contractor fails or refuses to renew its insurance policy, or the policy is canceled, terminated, or modified so that the insurance does not meet the requirements of this Subsection, the Owner may refuse to make payment of any further monies due under this Contract or refuse to make payment of monies due or coming due under other contracts between the Contractor and the Owner. The Owner may use monies retained under this paragraph to renew the Contractor's insurance for the periods and amounts referred to above. Alternately, the Owner may default the Contractor and direct the Surety to complete the Project. During any period when the required insurance is not in effect, the Engineer may suspend performance of the Contract. If the Contract is so suspended, additional compensation or extension of Contract Time is not due on account thereof.

Payment for any of the required insurance for this Project is included in the Total Contract Price, and Contractor shall not be entitled to any further or additional compensation in regard to fulfilling the requirements of this Subsection.

### **00630 Representations**

#### **00630.1 RESERVED**

#### **00630.2 Summary of Work.**

The Project consists of the construction of Structural Repairs to Atlantic City Boardwalk Hall.

#### **00630.4 Permits.**

The Contractor shall secure and pay for all permits, approvals, government fees, licenses, and inspections necessary for the proper execution and performance of the Work. Contractor shall deliver to the Engineer all original licenses, permits and approvals obtained by the Contractor in connection with the Work prior to the final payment or upon termination of the Contract, whichever is earlier. (Permits are filed through the New Jersey Department of Community Affairs)

#### **00630.5 Examination of Contract Documents and Site of Project**

The Contractor has examined carefully the site of the proposed Project and the Contract Documents before execution of the Contract. The execution of this Contract is conclusive evidence that the Contractor has made such examination and is fully aware of the conditions to be encountered in performing the Work and is fully aware of the requirements of the Contract Documents and has considered the following:

1. **Investigation of subsurface and Surface Conditions.** Where the Owner has made investigations of subsurface conditions in areas where Work is to be performed under the Contract, or in other areas, some of which may constitute possible local material sources, such investigations are made only for the purpose of study, estimating and design. Where such investigations have been made, the records of the Owner as to such investigations have been made available to the Contractor, subject to and upon the conditions set forth herein. In the event the Contractor's site examination reveals that site conditions are inconsistent with the Contract Documents, the Contractor shall immediately notify the Engineer.

2. **Project Areas and Access Location Availability.** The Contractor shall consider the effect on its work schedule of any delays in Project Area and access availability. The execution of this Contract shall be considered conclusive evidence that the Contractor has considered such delays and made allowance for them in the Progress Schedule.
3. **Utilities.** The Contractor shall consider the effect on its work schedule the existence and requirement to avoid or temporarily relocate utilities. The Contractor shall consider, in its fee schedule submission, the implementation of temporary utilities and permanent utilities required for performance of the Work.
4. **Other Contractors.** The Contractor shall examine the Project site and adjacent areas so as to be fully aware of other contractors working on or adjacent to the site. The Contractor shall become fully aware of the operations of such contractors and how their operations may affect Contractor's progress. The Contractor shall also consider and allow for the right of the Owner at any time to contract for and perform other or additional work in, on or near the Project Area.
5. **Existing Structures.** The Contractor shall be familiar with existing structures located within the Project Area. However, all structures, as identified by the Engineer as "not to be disturbed," shall be avoided and protected by the Contractor in order to complete the Work. The Contractor must cooperate with the Owner of the structure to minimize conflict with the operation of the building. The Contractor must avoid disruption of utility service and life safety systems to the occupants of the building. The Contractor must also protect the owners and patrons of the retail operations within the building from injury resulting from construction operations, equipment installation and demolition activities.

## **00700 General Conditions**

### **00700.1 General**

The titles and headings of the Section, Subsections, and Subparts herein are intended for convenience of reference and shall not be considered as having bearing on their interpretation.

Working titles that have a masculine gender, such as "workman," "foreman," "materialman," and "flagman" are used in the Contract Documents for the sake of brevity, and are intended to refer to persons of either sex.

When a publication is specified, it refers to the most recent date of issue, including interim publications, before the date of the receipt of proposals for the Project unless the issue as of a specific date or year is provided for.

Whenever a slope is indicated in the Specifications, it is given in horizontal to vertical dimensions. The horizontal will be indicated with an "H" and the vertical will be indicated with a "V."

### **00700.2 Terms**

When the following terms are used in the Contract Documents, the intent and meaning shall be as follows:

**ACCEPTANCE.** The term "Acceptance" means the formal written acceptance, by the Owner, of the Project that has been completed in all respects according to the Contract Documents.

**ACCEPTANCE TESTING.** Testing conducted by the Engineer to measure the degree of compliance to the Contract Documents.

**ENGINEER.** The term “Engineer” means SOSH Architects, the Owner’s professional Architect acting directly or through the Engineers’s duly authorized representatives, such representatives acting within the scope of the particular duties delegated to them.

To avoid repetition, unless otherwise stated, whenever the following words are used, it shall be understood as if they were followed by the words “to the Engineer” or “by the Engineer”: “acceptable, accepted, added, allowed, applied, approved, assumed, authorized, awarded, calculated, charged, checked, classified, computed, condemned, conducted, considered, considered necessary, contemplated, converted, deducted, deemed, deemed necessary, deleted, designated, determined, directed, disapproved, divided, documented, established, evaluated, examined, excluded, furnished, given, granted, included, incorporated, increased, indicated, inspected, insufficient, issued, made, marked, measured, modified, monitored, notified, observed, obtained, opened, ordered, paid, paid for, performed, permitted, provided, received, recorded, reduced, re-evaluated, rejected, removed, required, reserved, retested, returned, sampled, satisfactory, scheduled, specified, stopped, submitted, sufficient, suitable, supplied, suspended, taken, tested, unacceptable, unsatisfactory, unsuitable, or used.”

**BY OTHERS.** The term “by others” refers to a person, firm, or corporation other than the Contractor or its surety or persons, firms, or corporations in a contractual relationship with the Contractor or the surety, such as a subcontractor, supplier, fabricator, or consultant at any tier.

**CALENDAR DAY.** Each and every day shown on the calendar.

**CASINO LICENSEE.** The term “Casino Licensee” shall mean all casino licensees that contribute funding to the CRDA, and their respective directors, officers and employees.

**CHANGE ORDER.** The term “Change Order” means a written order issued by the Engineer and the Global Spectrum to the Contractor after execution of the Contract as set forth in Attachment “C” authorizing one or more of the following:

1. Changes in the Work.
2. Adjustments in the basis of payment for the Work affected by the changes.
3. Adjustments in the Contract Time.
4. Adjustments to the Scope of Work

**CITY.** The term “City” shall mean the City of Atlantic City, New Jersey.

**COMPLETION.** The term “Completion” means Completion of the Work. Completion shall occur when:

1. the Work has been satisfactorily completed in all respects according to the Contract Documents and punch list items are finalized and complete;
2. the Contractor has satisfactorily executed and delivered to the Engineer and/or Owner all documents, certificates, and proofs of compliance required by the Contract Documents, it being understood that the satisfactory execution and delivery of said documents, certificates, and proofs of compliance is a requirement of the Contract.

**CONSTRUCTION CHANGE DIRECTIVE.** A construction change directive is a written order prepared by the Engineer and signed by the Owner and Engineer, directing a change in the Work prior to the issuance of a Change Order.

**CONSTRUCTION OPERATIONS.** Construction operations shall include mobilization, movement or installation of utilities, construction, punch list and final clean up of the site.

**CONTRACT.** The term “Contract” means the entire and integrated agreement between the parties there-under and supersedes all prior negotiations, representations, or agreements, either written or oral. The Contract Documents form the Contract between the Owner and the Contractor setting forth the obligations of the parties there-under, including, but not limited to, the performance of the Work and the basis of payment.

**CONTRACT DOCUMENTS.** The term “Contract Documents” consist of the Contract between Owner and Contractor, Conditions of the Contract, Drawings, Specifications, Addenda issued prior to execution of the Contract, other documents listed in the Contract and Modifications issued after execution of the Contract.

**CONTRACT TIME.** The term “Contract Time” means the number of Calendar Days including authorized adjustments allowed for Completion. This Calendar Day Contract shall be completed on or before the day indicated even when that date is a Saturday, Sunday, or holiday.

**CONTRACTOR.** The term “Contractor” means the individual, firm, partnership, corporation, or any acceptable combination thereof contracting with the Owner for performance of the prescribed Work. Throughout the Contract Documents, the Contractor is referred to as if singular in number. The term “Contractor” means the Contractor or the Contractor’s authorized representative.

**COUNTY.** The term County means the County of Atlantic, New Jersey.

**CRDA.** The term “CRDA” shall mean the Casino Reinvestment Development Authority.

**CURRENT CONTROLLING OPERATION OR OPERATIONS.** The current controlling operation or operations is to be construed to include any feature of the Work, which, if delayed at the time in question, delays the overall time of Completion.

**DAYS.** Unless otherwise designated, days, as used in the Contract Documents, means Calendar Days.

**DISPUTE.** The term dispute is defined as a disagreement between the Owner and the Contractor with regard to the Work or Contract Documents.

**DRAWINGS.** The Drawings are the graphic and pictorial portions of the Contract Documents prepared by the Engineer and Architect, showing the design, location and dimensions of the Work, generally including plans, elevations, sections, details, schedules and diagrams.

**EQUIPMENT.** Equipment means all machinery and equipment, together with the necessary supplies for upkeep and maintenance, and also tools and apparatus necessary for the proper construction of the Work.

**EXTRA WORK.** The term “Extra Work” means new and unforeseen work found essential to the satisfactory completion of the Project, as determined by the Engineer, and not covered by any of the various Pay Items set forth in Exhibit “G”. In the event portions of such work are determined by the Engineer to be covered by one of the various Pay Items set forth in Exhibit “G” or combinations of

such items, the remaining portion of such work will be designated as Extra Work. Extra Work also includes work specifically designated as Extra Work in the Contract Documents.

**EXTREME WEATHER CONDITIONS.** When, solely as a result of adverse weather, the Contractor is not able to work, the Contractor is entitled to claim that progress of the Work has been affected by extreme weather conditions and may seek an extension of Contract Time consistent with the provisions of Subsection 01310.11A.

**HOLIDAYS.** The following days shall be considered holidays for use in determination of Working or Business Days:

New Year's Day	Thanksgiving Day
Memorial Day	Christmas Day
Independence Day	President's Day
Labor Day	

**INSPECTOR.** The Engineer's authorized representative assigned to inspect contract performance, methods, and materials related to the Work both on and off the site of the Project.

**ITS OWN ORGANIZATION.** The term "Its Own Organization" shall be construed to include only workers customarily employed and paid directly by the Contractor and equipment owned or rented by the Contractor, with or without operators.

**MAJOR PAY ITEM.** The term "Major Pay Item" means the following categories of the Work: payment and performance bond, site-work, general construction work, roofing and flashing, masonry, tile work, mechanical and electrical work.

**MATERIALS.** Any substances specified, and approved, for use in the performance of the Project.

**MINOR PAY ITEM.** The term "Minor Pay Item" includes all categories of the Work that are not defined as a Major Pay Item.

**MODIFICATION.** A modification is (1) a written amendment to the Contract signed by both parties; (2) a Change Order; (3) a Construction Change Directive or (4) a written order for a minor change in the Work issued by the Engineer.

**NOTICE TO PROCEED.** The term "Notice to Proceed" means the written notice to the Contractor to begin Work, as set forth in Attachment "B".

**NIC.** The term "NIC" means work that is not included in the contract. The work will be furnished and installed by the Owner.

**OWNER.** The term "Owner" means the Global Spectrum L.P. as operator of Boardwalk Hall and the Atlantic City Convention Center, as managing agent for the CRDA, acting directly or through duly authorized representatives, such representatives acting within the scope of the particular duties delegated to them.

**PAY ITEM.** The term "Pay Item" means a specifically described item of Work for which there is a per unit or lump sum price, as set forth in Exhibit "G".

**PERFORMANCE BOND AND PAYMENT BOND.** The term “Performance Bond and Payment Bond” means the approved form of security, executed by the Contractor and its surety or sureties, guaranteeing complete performance of the Contract in conformity with the Contract Documents and the payment of all legal debts pertaining to the construction of the Project.

**PLANS.** The approved plans, profiles, typical sections, cross-sections, working drawings, and supplemental drawings, or exact reproductions thereof, which show the location, character, dimensions, quantities, and details of the Work to be done.

**POLICE.** The term “police” shall mean a person authorized to enforce the laws of the State of New Jersey and its political subdivisions, who has jurisdiction at the Project site or elsewhere.

**PRECONSTRUCTION MEETING AND PROJECT MEETINGS.** The initial Project and on-going meetings conducted by the Engineer, held before the start of Work, and during the conduct of the Work, from time to time, as called for.

**PROGRESS SCHEDULE.** The term “Progress Schedule” means the schedule or timeline prepared by the Contractor to conduct the Work, and which details the periods and milestones for completing the Work, as amended and as approved as provided in the Contract.

**PROJECT.** The term “Project” means the construction of the Skylight Gutter Renovations Atlantic City Convention Center and all other necessary and desirable work as approved in accordance with the terms and conditions of the Contract.

**PROJECT AREA.** {Atlantic City Convention Center Atrium Roof}. The Project may include work by others under other contracts.

**PROJECT ACCESS LOCATION(S).** The specific access points or locations identified on the Project Plans for ingress and egress to the Project Area.

**PROPERTY.** The specific block and lot identified and as otherwise further delineated in the Specifications and Project Plans.

**RETAINAGE.** The term, “Retainage” means from the total amounts ascertained as payable in accordance with the Contract, an amount equivalent to ten percent (10%) of the amount due under Contractor’s invoice and Application for Payment deducted and retained by the Owner pending Final Payment.

**RIGHT-OF-WAY (ROW).** A general term denoting all of the land, property, or interest therein, usually in a strip, acquired for or devoted to transportation purposes or construction of a public improvement.

**ROADWAY.** The portion of the highway, street, or road within the City that is used by the Contractor to haul, transport materials and equipment to/from the Project Area.

**SHALL.** Designates an obligation of the Contractor, unless otherwise indicated.

**SHOP DRAWINGS.** The drawings, diagrams, schedules and other data specifically prepared for the Work by the Contractor or a subcontractor, sub-subcontractor, manufacturer, supplier or distributor to illustrate some portion of the Work.

**SPECIFICATIONS.** The compilation of provisions and requirements for the performance of prescribed work , or other information giving interpretations or revisions to them, any and all Supplementary Agreements, and whether expressly incorporated by reference or not, all applicable regulatory requirements, and best manufacturing practice standards.

**STANDARD WORKING HOURS.** The term “Standard Working Hours” means Monday through Friday and times of 7:00 am to 5:00 pm eastern prevailing time.

**STATE.** The “State” means the State of New Jersey.

**SUBCONTRACTOR.** Subcontractor means an individual, firm, partnership, corporation, or any acceptable combination thereof, to which the Contractor subcontracts part of the Work.

**SUBMITALS.** The documents required to be provided to the Engineer and/or Owner prior to and during the performance of the Work.

**SUBSTANTIAL COMPLETION.** The term “Substantial Completion” means the point at which the performance of all Work on the Project has been completed but excluding final cleanup and repair of unacceptable Work, and provided the Owner and Engineer have solely determined that:

- (i). the Project is safe and convenient for use by the public, and
- (ii). failure to complete the Work and repairs excepted above does not result in the deterioration of other completed Work.

**SUPPLEMENTARY AGREEMENT.** The term “Supplementary Agreement” means a bilateral agreement between the Owner and the Contractor, executed on a Change Order form, setting forth the negotiated terms and conditions whereunder changes are to be accomplished, including negotiated adjustments in compensation and time of Completion. The Supplementary Agreement shall be conclusive as to all questions of compensation and extensions of Contract Time relative to the subject of the agreement excepting only those instances wherein the agreement recites specific exceptions.

**SURETY.** The corporate body bound with and for the Contractor for the full and complete performance of the Contract and for the payment of all debts and obligations pertaining to the Work.

**TOTAL ADJUSTED CONTRACT PRICE.** The term “Total Adjusted Contract Price” means the Total Contract Price as it is adjusted through the issuance of Change Orders and Construction change directives and the calculation of as-built quantities, if applicable.

**TOTAL CONTRACT PRICE.** The term “Total Contract Price” means the correctly determined summation of lump sum amounts and products of all quantities of unit price Pay Items multiplied by the unit prices set forth in Exhibit “G.”

**TOWN, TOWNSHIP, CITY.** A subdivision of the County used to designate or identify the location of the Project.

**TRAVELED WAY.** The portion of the roadway for the movement of vehicles exclusive of shoulders and auxiliary lanes.

**UTILITY.** A publicly, privately, or cooperatively owned agency or agencies operated by one or more persons or corporations for public service.

WILL. Designates an action to be taken by the Owner, the Engineer, or any authorized representative, unless otherwise indicated.

WORK. The term "Work" means the furnishing of any and all labor, services, materials, equipment, tools, transportation, supplies, and other incidentals necessary or convenient for the successful completion by the Contractor of the construction described in the Contract Documents and the carrying out of any and all duties and obligations imposed by the Contract Documents on the Contractor.

WORKING OR BUSINESS DAY. Any Calendar Day, exclusive of:

1. Saturdays, Sundays, and holidays;
2. Days on which the Contractor is specifically required by the Contract Documents to suspend construction operations; and
3. Days on which the Contractor is prevented by inclement weather or conditions resulting immediately there-from adverse to the current controlling operation or operations, as determined by the Engineer, from proceeding with at least 75 percent of the normal labor and equipment force engaged on such operation or operations for at least 60 percent of the total daily time being currently spent on the controlling operation or operations.

Should the Contractor prepare to begin work at the regular starting time in the morning of any day on which inclement weather, or the conditions resulting from the weather, prevent the work from beginning at the usual starting time, and the crew is dismissed as a result thereof, and the Contractor does not proceed with at least 75 percent of the normal labor and equipment force engaged in the current controlling operation or operations for at least 60 percent of the total daily time being currently spent on the controlling operations or operations, the Contractor will not be charged for a Working Day whether or not conditions should change thereafter during said day and the major portion of the day could be considered to be suitable for such construction operations.

### **00700.3 Intent**

The intent of the Contract Documents is to describe a functionally complete and aesthetically acceptable Project to be constructed and completed by the Contractor in every detail according to the Contract Documents. Any Work that may be reasonably inferred from the Contract Documents as being required to produce the intended result shall be supplied whether or not specifically called for. Where the Contract Documents describe portions of the Work in general terms, but not in complete detail, it is understood that only the best construction practice is to prevail and only materials and workmanship of the first quality are to be used. Only where the Contract Documents specifically describe a portion of the Project as being performed by others is the Work deemed not to constitute construction of the entire Project.

### **00700.4 Changes**

The Owner, through the Engineer, reserves the right to make, in writing, at any time during the Work, such changes in quantities and such alterations in the Work as are necessary to satisfactorily complete the Project. Such changes in quantities and alterations do not invalidate the Contract nor release the surety, and the Contractor agrees to perform the work as altered.

If the alterations or changes in quantities significantly change the character of the Work under the Contract, whether such alterations or changes are in themselves significant changes to the character of the Work or, by affecting other work, cause such other work to become significantly different in character, an adjustment, excluding loss of anticipated profits, will be made to the Contract.

The adjustment to the cost resulting from a change in Work shall be determined by the lesser of:

1. By unit prices stated in the Contract Documents; or

2. By cost, defined below, properly itemized and supported by sufficient substantiating documentation to permit evaluation, plus a profit or no more than five percent (5%) of items 'a' through 'e' described below. Such costs shall be itemized by crafts as defined in the schedule of values and limited to the following items directly allocable to the change in the Work:
  - a. Costs of materials, including cost of delivery;
  - b. Fully-burdened cost of labor, including but not limited to, payroll taxes, social security, old age and unemployment insurance, vacation, fringe benefits required by agreement or routinely paid by Contractor, and worker's or workman's compensation insurance;
  - c. Contractor Supervision/Overhead allowance not to exceed ten percent (10%) of 'a' plus 'b'; the parties agree that this mark-up shall fully cover all Contractor overhead;
  - d. Rental value of equipment and machinery to be established by rental receipts and not to exceed reasonable and customary rates for the locale of the Work. For owned equipment, Contractor must prove reasonable rental rate pursuant to actual ownership costs.
  - e. Cost of any subcontracted work subject to the above requirements and limitations.
  - f. Insurance and bond premiums not to exceed a total of 1% of the change order amount.

Any dispute regarding the cost of the change, as calculated above, shall not relieve the Contractor from proceeding with the change as directed by the Owner or Engineer.

If the alterations or changes in quantities do not significantly change the character of the Work to be performed under the Contract, the altered work will be paid for as provided elsewhere in the Contract.

The term "significant change" shall be construed to apply only to the following circumstances:

1. When the character of the Work as altered differs materially in kind or nature from that involved or included in the original proposed construction, or
2. When the as-built quantity of a Major Pay Item, as defined herein, that is based on unit price is in excess of 120 percent or below 80 percent of the original Contract quantity. Any allowance for an increase in quantity shall apply only to that portion in excess of 120 percent of original Contract item quantity, or in case of a decrease below 80 percent, to the actual amount of work performed.

Changes that solely involve the increase or decrease in the quantity of Pay Items (not involving unit price adjustments pursuant to Subsection 00700.7), the elimination of Pay Items, the adjustment of the estimated quantities which are set forth in Attachment "A" as the result of as-built calculations, or minor changes in the Work as provided in 00700.5, may be affected by a Construction change directive or by a Change Order (in the form set forth in Attachment "C"), as determined by the Engineer. All other changes will be included in a Change Order that specifies, in addition to the Work to be done, an adjustment of Contract Time, if any, and the basis of compensation for such Work. A Change Order does not become effective until the Owner has approved the proposed Change Order submitted by the Engineer.

Upon receipt of a Construction change directive or Change Order, the Contractor shall proceed with the ordered Work. Where the changes involved require a Change Order, and a Change Order has not yet been issued, the Owner may direct, by Construction change directive, that the Contractor proceed with the desired Work, and the Contractor shall comply. In such cases, the Owner will, as soon as practicable, issue a Change Order for such Work.

When the compensation for an item of Work is subject to adjustment under the provisions of Subsections 00700.5 through 00700.11 the Contractor shall furnish the Engineer with adequate detailed cost data for such item of Work.

In addition to Construction change directives and Change Orders, the terms and conditions relating to changes may be negotiated with the Contractor. If the Contractor signifies acceptance of such terms and conditions by executing a Supplementary Agreement, and if such Supplementary Agreement is approved by the Owner and issued to the Contractor, payment according to the terms and conditions as to compensation and adjustments in the Contract Time therein set forth constitutes full compensation and a mutually acceptable adjustment of Contract Time for all Work included therein or required thereby. The Contractor agrees that a proposed Supplementary Agreement that is not approved by the Owner or that is rejected by the Contractor shall have no effect and that neither may attempt to use it in any litigation that may result from the Contract.

The Contractor acknowledges and agrees that no claim for additional compensation shall be made because of any alteration, deviation, addition to, or omission from the Work required by the Contract, by reason of any variation between the approximate quantities as set forth in Exhibit "G" and subsequent owner approved schedule of values and the quantities of Work as done, by reason of Extra Work, by reason of elimination of Pay Items, or by reason of changes in the character of Work, except as allowed in this Section.

The Contractor acknowledges and agrees that no claim for additional compensation or extension of Contract Time within the scope of this Section will be allowed if asserted after Acceptance.

#### **00700.5 Minor Changes in the Work.**

The Engineer has the authority to order minor changes in the Work not involving an adjustment to the unit or lump sum prices, or an adjustment to Pay Items, or an extension of Contract Time, and not inconsistent with the intent of the Contract Documents. Such changes may be effected by Construction change directive and are binding on the Owner and the Contractor. Additional compensation or extension of Contract Time will not be allowed.

#### **00700.6 Procedure and Protest.**

A Construction change directive or Change Order may be issued at any time. Should the Contractor disagree with any terms or conditions set forth in a Construction change directive or a Change Order, the Contractor shall submit a written protest to the Engineer within 5 days after the receipt of such Construction change directive or Change Order on forms furnished by the Engineer as directed by the Owner. The protest shall state the points of disagreement, and, if possible, the specification references, quantities, and costs involved. The protest shall be a specific, detailed statement of the points of disagreement, and the Owner reserves the right to reject general protests. Rejected general protests that are not cured by the submission of a specific, detailed statement within five days of such rejection will not be considered. If a written protest is not submitted, payment will be made as set forth in the Construction change directive or Change Order and such payment constitutes full compensation for all Work included therein or required thereby and also is conclusive as to any Contract Time adjustments provided for therein or in establishing that no Contract Time adjustment was warranted.

Protests related to Work ordered by Construction change directive, but as to which a Change Order is required, shall be made within 5 days after receipt of the Construction change directive. Subsequent issuance of the Change Order shall not be the basis for a protest except to the extent that the Change Order differs materially from the Construction change directive.

Where the protest concerning a Construction change directive or a Change Order relates to compensation, the compensation payable for all Work specified or required by said Construction change directive or Change Order to which such protest relates, if later deemed appropriate by the Owner, will be determined as provided in Subsection 01450.5 through 01450.8. The Contractor shall keep full and complete records

of the cost of such Work and shall permit the Owner and Engineer to have such access thereto consistent with Subsection 01290.9, as may be necessary to assist in the determination of the compensation payable for such Work.

Where the protest concerning a Change Order relates to the adjustment of Contract Time, the time to be allowed, if later deemed appropriate, will be determined as provided in Subsection 01310.11 (Extensions and Reductions of Contract Time).

#### **00700.7 Increased or Decreased Quantities.**

Increases or decreases in the quantity of a Pay Item will be determined by comparing the partial or total as-built quantity of such item of Work, as applicable, with the quantity set forth in Exhibit "G" and subsequent owner approved schedule of values or the Project Plans, as applicable. In making such a comparison, quantities that are the subject of Supplementary Agreements or Change Orders for Extra Work will not be considered.

Minor Pay Items are not eligible for any adjustment in unit price regardless of how much the total as-built quantity varies from the quantity set forth in Exhibit "G" and subsequent owner approved schedule of values unless eligible for adjustment pursuant to Subsection 00700.9.

#### **00700.8 Eliminated Items.**

Should any Pay Item set forth in Exhibit "G" and subsequent owner approved schedule of values be found unnecessary for the proper completion of the Work, the Engineer may, upon written order to the Contractor, eliminate such item from the Contract. In such case compensation, if any is appropriate, will be made as provided in this Subsection.

If acceptable material is ordered by the Contractor for the eliminated item before the date of notification of such elimination and if orders for such material cannot be canceled, it will be paid for at the actual cost to the Contractor. In such case, the material paid for becomes the property of the Owner, and the actual cost of any further handling will be paid for. If the material is returnable to the vendor and if the Engineer so directs, the material shall be returned, and the Contractor will be paid for the actual cost or charges made by the vendor for returning the material. The actual costs of handling returned material will be paid for.

A reduction in the Contract Time may be made by the Engineer as a result of an eliminated item, if appropriate.

#### **00700.9 Changes in Character of Work.**

If the Owner determines that an ordered change in the work materially changes the character of the work of a Pay Item, or a portion thereof, and if the change substantially increases or decreases the actual cost of such changed item as compared to the actual or estimated cost of performing the work of said item according to the Contract Documents originally applicable thereto, in the absence of a Supplementary Agreement or un-protested Change Order specifying the compensation payable, an adjustment in compensation will be made according to the following:

1. The basis of such adjustment in compensation will be the difference between the actual cost to perform the work of said item or portion thereof involved in the change as originally planned or estimated and the actual cost of performing the work of said item or portion thereof involved in the change, as changed. Any such adjustment is to apply only to the portion of the work of said item actually changed in character.
2. If the compensation for an item of Work is adjusted under this Subsection, the costs recognized in determining such adjustment and quantity involved will be excluded from consideration in making an adjustment for such item of Work under the provision in Subsection 00700.7.

Failure of the Owner to recognize a change in character of the Work at the time a Construction change directive or Change Order is issued does not relieve the Contractor of the duty and responsibility of filing a written protest within the five-day limit as provided in Subsection 00700.6.

#### **00700.10 Extra Work.**

The Owner reserves the right to require Extra Work as needed for the satisfactory completion of the Project. Such Work will be designated as Extra Work when it is determined by the Engineer that such Work is not required according to the Contract Documents originally applicable thereto. In the event portions of such Work are determined to be required according to the Contract Documents originally applicable thereto, the remaining portion of such Work will be designated as Extra Work. Extra Work also includes Work specifically designated as Extra Work in the Contract Documents.

The Contractor shall do such Extra Work and furnish labor, material, and equipment therefor upon receipt of a Change Order, Construction change directive, or Supplementary Agreement. In the absence of such, the Contractor shall not perform, nor be entitled to payment for, such Extra Work.

If the Contractor and the Owner cannot agree on a Supplementary Agreement for Extra Work and the Engineer deems it inadvisable to have such Work completed by the Contractor, the Owner may elect to have such Work completed by others, and the Contractor shall not interfere therewith nor have any claim for additional compensation as the result of such election.

#### **00700.11 Notification of Changes.**

The Contractor shall promptly report to the Engineer changes that the Contractor believes constitute a change to the Contract. Except for changes identified as such pursuant to Subsections 00700.4 and 00700.5 the Contractor shall promptly notify the Engineer in writing within five (5) days from the date that the Contractor identifies any Changes, which the Contractor regards as a change to the Contract terms and conditions. In no event shall the Contractor begin Work or incur any expenses with relation to the claimed change before giving notice.

The notice shall state the following on the basis of the most accurate information available to the Contractor:

1. The date, nature, and circumstances of the conduct or circumstances regarded as a change.
2. The name, function, and activity of each person involved in or knowledgeable about such conduct or circumstances.
3. The identification of any documents and the substance of any oral communication involved in such conduct or circumstances.
4. In the instance of alleged Extra Work, the basis for the Contractor's claim that the Work is extra.
5. The particular elements of Contract
  - a. What Pay Items have been or may be affected by the alleged change.
  - b. What labor or materials or both performance for which the Contractor may seek additional compensation under this Section including: have been or may be added, deleted, or wasted by the alleged change and equipment idled, added, or required for additional time.
  - c. To the extent practicable, what delay and disruption in the manner and sequence of performance and effect on continued performance have been or may be caused by the alleged change.
  - d. What adjustments to Contract price, delivery schedule, and other provisions affected by the alleged change are estimated.

Following submission of the notice, the Contractor shall diligently continue performance of the Contract to the maximum extent possible according to the Contract Documents, unless such notice results in a direction by the Engineer, in which event the Contractor shall continue performance in compliance therewith, provided, however, that if the Contractor regards such direction itself as a change, notice shall be given as provided above. All directions, orders, and similar actions of the Engineer will be reduced to writing and copies thereof furnished to the Contractor.

The Engineer will promptly and in any event within ten (10) days after receipt of notice, respond thereto in writing. In such response, the Engineer will do one of the following:

1. Confirm that the conduct or circumstance of which the Contractor gave notice constitutes a change, and when necessary direct the mode of further performance.
2. Revise or rescind any communication regarded as a change.
3. Deny that the conduct or circumstance of which the Contractor gave notice constitutes a change, and when necessary direct the mode of further performance; or
4. In the event the Contractor's notice information is inadequate to make a decision under Items 1, 2, or 3 of this paragraph, advise the Contractor as to what additional information is required, and establish the date by which it should be furnished and the date thereafter by which the Owner will respond.

If the Engineer confirms that conduct or circumstances effected a change as alleged by the Contractor, and such conduct or circumstances causes an increase or decrease in the cost of, or the time required for performance of any part of the Work under the Contract, an adjustment in compensation will be made according to the provisions of this Section, and the Contract will be modified in writing accordingly. In the case of drawings, designs, or specifications that are defective and for which the Owner is responsible, the adjustment will be made to include the cost and extension of Contract Time for delay reasonably incurred by the Contractor in attempting to comply with such defective drawings, designs, or specifications before the Contractor identified, or reasonably should have identified, such defect. When the cost of materials made obsolete or excess as a result of a change confirmed by the Engineer pursuant to this Subsection is included in the adjustment in compensation, the Engineer has the right to prescribe the manner of disposition of such materials. Adjustments will not be made that include increased costs or extensions of Contract Time for delay resulting from the Contractor's failure to provide adequate notice or to continue performance as provided above. Any adjustments of Contract Time will be made pursuant to Subsection 01310.11.

The failure of the Contractor to give notice pursuant to the provisions of this Subsection shall constitute a waiver of any and all claims and damages that could have been avoided or mitigated had such timely notice been given. Moreover, no action or inaction of any person shall constitute a waiver of the Owner's absolute right to receive written notice of an alleged claim pursuant to this Subsection.

## **DIVISION 1 - GENERAL REQUIREMENTS**

### **01100 Summary**

#### **01110 *Summary of Work***

The Project consists of the construction of Refer to plans and specifications created by Remington & Vernick

## **01140 Work Restrictions**

### **01140.1 PROPERTY OWNER OCCUPANCY**

- A. The Property Owner(s) intend to occupy the Project during the construction period for the conduct of normal operations.
- B. Cooperate with Property Owner to minimize conflict, and to facilitate Property Owner's operations.
- C. Protect the building and patrons of the establishment involved/affected by the construction operations from injury resulting from all construction operations, equipment, installations or demolition.
- D. Schedule the Work to accommodate building occupancy and operation.

### **1140.2 RESERVED**

### **01140.3 Work Time.**

The Contractor is limited to working the Standard Working Hours. However, if the Contractor so requests, the Owner may consider seeking approval for the Contractor to work outside of the Standard Working Hours. No work is to be progressed outside of Standard Working Hours unless approved in writing by the Owner.

### **01140.4 Consideration and Safety of, and Coordination with Global Spectrum Operation.**

The Contractor is aware that the Project Area is a Convention Center which may result in the public being attracted to the construction activity. As such, the Contractor shall take care and be cognizant at all times of pedestrians within right-of-ways and persons that may be attracted to the Work activities. At all times, the Contractor must take all necessary and desirable measures to protect equipment and materials used in performance of the Work from accessibility by third parties. The Contractor shall not be entitled to additional compensation or an extension of time in the Contract due to such pedestrian traffic conditions.

If in the opinion of the Owner, in consultation with the Engineer, the Contractor is not abiding by applicable public safety laws and regulations, or determines that the Project Area has not been secured after work hours to prevent the injury to third parties, the Owner will instruct the Engineer to halt the Project in accordance with Subsection 01310.14 (Temporary Suspension of Work) and contract with the local authorities or take whatever measures necessary and desirable to protect public safety. The Owner will be entitled to reimbursement of all reasonable costs and expenses from the Contractor associated with such determination, in accordance with Subsection 01360.14 (Recovery of Monies by the Owner).

### **01140.5 Damage to Property.**

The Contractor shall protect all local roadways, and private property from damage. Any damage caused by the Contractor shall be considered part of the Contractor's risk and included as part of the Contractor's costs for the Project. The Contractor's obligation in this Subsection is in addition to other similar obligations of the Contract, including those set forth in Sections and Subsections 00630.5 (Examination of Contract Documents and Site of Project), 11020 (Site Restoration and Final Cleanup), 01450.16 (Load

Restrictions), 01450.17 (Maintenance During Construction), 01450.18 (Failure to Maintain Project Area, Surroundings and Roadway). A failure by the Contractor to repair any of the above mentioned items in a prompt and timely manner, as determined by the Owner, in its sole discretion, shall be cause for the Owner to contract with a separate contractor to repair the damage and be reimbursed by the Contractor in accordance with Subsection 01360.14 (Recovery of Monies by the Owner). An exception to requiring immediate repair may be approved by the Owner, if the damage is expected to be repetitive due to the nature of the vehicle traffic, is not a danger to the public, and not required by the owner of the right-of-way or other public property, or the private landowner impacted. However, all such approvals must be issued in writing by the Owner and the City. The Contractor shall also be responsible for repairing the damage allowed to remain until Substantial Completion at the Contractor's cost or reimburse the Owner in accordance with Subsection 01360.14 (Recovery of Monies by the Owner).

#### 01140.6 Use of Site.

The use of the Project Area is limited to the construction needed for the completion of the Project. The Project Area shall not be used to store equipment or materials other than that to perform the Work called for under the Contract. In addition, at the end of the work day, unless in a location that would prove difficult logistically to move equipment, all machinery and purchased materials shall be stored outside of the Project Area.

## **01200 Price and Payment Procedures**

### ***01210 Allowances***

Allowance shall include cost to Contractor of specific products and materials ordered by Owner under allowance and shall include taxes, freight, and delivery to Project site.

Contractor's costs for receiving and handling at Project site, labor, installation, overhead and profit, and similar costs related to products and materials ordered by Owner under allowance shall be included as part of the Contract Sum and not part of the allowance. All other costs will be reimbursed at actual with supporting documentation.

### ***01270 Measurement of Quantities***

Measurements will be made according to the United States customary English units.

The method of measurement and computations to be used in determination of quantities of Work performed under the Contract are those methods generally recognized as conforming to good Engineering practice. The method of measurement chosen must be consistent and unchanging through the life of the Project.

The term "lump sum" when used as a basis of payment means complete payment for the Work of that item, and that item will not be measured.

When the unit price Pay Items set forth in Exhibit "G" and subsequent owner approved schedule of values are specified to be the pay quantity, either the Engineer or the Contractor may request that the quantity be measured. If the Contractor makes such a request, it shall be accompanied by drawings, calculations, or other information indicating that the quantity in Exhibit "G" and subsequent owner approved schedule of values is not correct.

## **01290 Payment Procedures**

### **01290.1 Scope of Payment.**

The Contractor shall receive and accept the compensation provided for in the Contract as full payment for furnishing all labor, materials, tools, equipment, and incidentals necessary to complete the Work, and for performing all Work contemplated and embraced under the Contract in a complete and acceptable manner. Except where specifically provided elsewhere in the Contract Documents, compensation shall encompass full payment for all risk, loss, damage, or expense of whatever character arising out of the nature of the Work or the prosecution thereof, or for the action of the elements, or for any unforeseen difficulties that may be encountered during the prosecution of the Work until Acceptance.

The payment for the various Pay Items set forth in Exhibit "G" and subsequent owner approved schedule of values encompasses all compensation for work essential to each Pay Item. Work essential to each Pay Item will not be measured or paid for under any other Pay Item in the Contract Documents.

### **01290.2 Payment for Contractor's Expenses During Delays.**

The Contractor is expected to be familiar with the type of work being progressed under this Contract. Therefore, no delays due to, for example, weather, flooding, coordination with subcontractors, and adjacent work by others will be compensated by the Owner. The Contractor shall take any and all necessary and desirable steps to be familiar with all aspects of the Project, including, without limitation, the Project Area, the contemplated Work, and the Project Plans and Specifications.

### **01290.3 Partial Payments.**

The Owner will make monthly estimated payments to the Contractor based on the approximate quantities of Work satisfactorily performed according to the Contract Documents during the preceding month. Partial payments on account of such monthly estimate will be made based on the prices set forth in Exhibit "G" and subsequent owner approved schedule of values or as provided by Construction change directive, Change Order, or Supplementary Agreement. The Owner will also pay the Contractor for materials delivered according to Subsection 01290.4.

Before the issuance of each monthly payment before Substantial Completion, the Contractor shall present an invoice along with a fully completed Application for Payment in the form set forth in Attachment "A." The Application for Payment shall include a Partial Release and Waiver of Liens executed by the Contractor and by any subcontractor or supplier who has provided work, services, material or equipment to the Project and is requesting payment for any of the Work encompassed by the Application for Payment, waiving the Contractor's, subcontractor's and/or supplier's right to assert a construction lien in regard to the Project pursuant to N.J.S.A. 2A:44A-1 to the extent of payments actually received for work, services, materials or equipment provided or to be provided.

Pay Items that are on a lump sum basis will not be measured. However, payment for such items will be included in partial payments consistent with the provisions of the Subsection describing the Work under the lump sum Pay Item. Where the method of payment is not described under the Subsection describing the Work of the lump sum Pay Item, partial payment will be made based on an approximation of the proportionate value of the Work satisfactorily performed to date.

When an Application for Payment includes an application for payment of any unit price pay item, the Application shall include a certification by the Contractor of the quantity of units applied for, along with all necessary documentation, as determined by the Engineer, of the measurement of the quantity of unit price items.

From the total amounts ascertained as payable, Owner will retain the Retainage in accordance with the Contract.

Such estimate or payment will not be made when, in the judgment of the Engineer, the Work is not proceeding according to the Contract Documents or following the Owner giving the Contractor and surety notice of delay, neglect, or default under Subsection 01310.16 (Default and Termination of Contractor's Right to Proceed).

Such estimate or payment shall not be construed to be an approval of any defective or improper Work. The Engineer upon determining that any payment under a previous monthly estimate was improper or unwarranted for any reason may deduct the amount of such payment from the subsequent monthly estimate and partial payments made to the Contractor.

The Owner will deduct from any monthly estimate and payment and/or the final payment such amounts as are required to be deducted pursuant to provisions of the Contract Documents.

#### **01290.4 Materials Payments.**

Before including payments for Items that include materials, the Engineer must be satisfied that:

1. The materials have been properly stored, insured and protected along or upon the Project Area or have been stored at locations owned or leased by the Contractor or the Owner; and
2. The materials have been inspected and appear to be acceptable based upon available supplier's certification and/or materials test reports; and
3. The Contractor has provided the Engineer with proof of good credit standing with the material supply company; and
4. The materials, if stored on property not belonging to the Owner, are fenced in with access limited to the Owner, Engineer and the Contractor, and the fenced-in materials are clearly identified in large letters as being without encumbrances and for use solely on the Project.

The Contractor assumes full responsibility for the safe storage and protection of the materials and nothing in this Subsection alters the provisions of Subsections 01360.12 (Risks Assumed by the Contractor) and 00620 (Insurance). If materials paid for under this Subsection are damaged, stolen, or prove to be unacceptable, the payment made therefor shall be deducted from subsequent estimates and payments.

Payment for materials as provided in this Subsection shall not be deemed to be an approval of such materials, and the Contractor shall be responsible for and must deliver to the Project Area and properly incorporate in the Work only those materials that comply with the Contract Documents.

The Contractor shall pay any and all costs of handling and delivering materials to and from the place of storage to the Project Area, as well as any storage rental. Any taxes levied by any government against the materials shall be borne by the Contractor.

#### **01290.5 Payments Following Substantial Completion.**

Following Substantial Completion of the Contract according to Subsections 00700.3 (Intent) and 01450.20 (Substantial Completion) payments to the Contractor will be made only upon certification by the Contractor to the Engineer and Owner that:

1. Each subcontractor or supplier has been paid all amounts due from all previous progress payments and shall be paid all amounts due from the current progress payment; or
2. There exists a valid basis under the terms of the subcontractor's or supplier's contract to withhold payment from the subcontractor or supplier, and therefore payment is withheld.

The Owner shall not be responsible for any interest payment to material suppliers, no matter what circumstance arises; either through delays in payment by the Owner or delays in payment by the Contractor.

All monies retained subsequent to Substantial Completion shall be released at final payment. Ninety-five percent of the Retainage shall be paid at final payment, with the balance retained in an interest bearing account by the Owner until such time as the Contractor satisfies its obligations under this Contract after which time, such balance will be paid to the Contractor.

#### **01290.6 Payment Following Acceptance.**

After Acceptance as provided in Subsection 01450.21 (Completion and Acceptance), the Engineer will make an estimate of the total amount of Work done under the Contract and the Owner will make a final monthly payment. The Owner will pay the balance found to be due after deduction of all previous payments and such further amounts as the Engineer determines to be necessary and proper under the Contract (including those required under Subsection 01290.5) pending issuance of the Final Certificate and payment. Retainage is released with this estimate except where the Engineer determines to continue to retain them under the provisions of Subsections 01290.5 and 01290.7.

#### **01290.7 As-Built Quantities.**

Following Substantial Completion, the Engineer will finalize as-built quantities for all unit price Pay Items and for Extra Work that has been authorized and incorporated into the Project. The Contractor shall assume the positive obligation of assisting the Engineer in the preparation of such as-built quantities at no extra cost. If the Contractor disagrees with the final as-built quantities, the Contractor must submit, together with a notice of disagreement, the proposed changes and supporting calculations within five (5) days. Where the Contractor fails to respond or fails to provide supporting calculations, together with a notice of disagreement, within the aforesaid 5-day period, such failure will be construed to be acceptance of the as-built quantities. However, the Engineer will review supporting calculations properly received from the Contractor according to this Subsection, within five (5) days, and will accept or reject, in part or in whole, the proposed changes to the as-built quantities. The Engineer has the discretion to extend the Contractor's 5-day response period, but only upon receipt of a written request from the Contractor, submitted within the aforesaid 5-day period. After the Contractor's acceptance, expiration of the aforesaid 5-day period and any properly granted extensions, or after review of any properly submitted proposed changes; final as-built quantities will be incorporated into a proposed Final Certificate. A claim based upon proposed changes to the as-built quantities that have not been accepted by the Engineer, but which were supported by calculations and submitted within the aforesaid 5-day period, may be reserved by the Contractor according to Subsection 01290.8. In addition, the provision of Section 01270 (Measurement of Quantities) shall also govern.

The Engineer may from time to time, before Completion, prepare as-built quantities and incorporate these quantities into monthly estimate certificates through an appropriate Field Order or Change Order. Such interim as-built quantities are subject to recalculation following Completion. However, nothing contained in the Contract Documents shall be construed to place on the Engineer the obligation of providing the Contractor with as-built quantities for the Work performed before the issuance of the proposed Final Certificate, nor to provide more than rough, approximate quantities of the Work done for use in the preparation of monthly estimates.

Should it appear to the Engineer at the time of Acceptance that the calculation of as-built quantities might result in the Contractor being obliged to return money to the Owner, the Engineer may refuse to release Retainage pending issuance of the proposed Final Certificate. Where the estimate reveals that an overpayment has been made, the Contractor shall immediately return the amount of the overpayment. If the Contractor fails to remit the overpayment, the Owner will avail itself of other funds held against the Retainage, and then if necessary proceed against the Contractor or its surety. Where the proposed Final Certificate reveals that no overpayment has been made, the Contractor shall be entitled to payment

thereunder and the release of Retainage in accordance with the Contract, but the Contractor shall have no claim of any kind for additional compensation as a result of the Engineer's decision to withhold Retainage or other monies pending issuance of the proposed Final Certificate.

### **01290.8 Final Payment.**

The Final Certificate shows the total amount payable to the Contractor, including therein an itemization of said amount segregated as to Pay Item quantities, Extra Work, and any other basis for payment, and also shows therein all deductions made or to be made for prior payments and as required pursuant to the provisions of the Contract Documents. All prior estimates and payments are subject to correction in the Final Certificate.

Within 30 days after said Final Certificate has been issued to the Contractor, the Contractor shall either submit to the Engineer a written acceptance of the Final Certificate without exception or a written acceptance of the Final Certificate with exception or reservation. The Contractor's failure to submit any written acceptance within said 30 days will be construed as an acceptance of the Final Certificate without exception or reservation. Final payment will be made to the Contractor in the amount set forth in the Final Certificate, and the Contract will be complete as of the date on which such payment is issued. Failure of the Contractor to accept the tendered Final Payment shall not affect completion of the Contract.

If the Contractor submits to the Engineer its written acceptance of the Final Certificate without exception or reservation, the acceptance shall contain a release signed by the Contractor in a form satisfactory to the Owner.

Upon receipt of such written approval and release, the Owner will pay the entire sum due and owing hereunder, and the Contract will be complete as of the date on which that payment is issued, subject to the provisions of 01290.5 (Payments Following Substantial Completion).

Any claims the Contractor may have that cannot be resolved with the Engineer or Owner at Final Payment will be submitted to non-binding mediation in accordance with Subsection 01360.2 (Process for the Resolution of Contract Disputes). No action of any kind arising under this Contract shall be brought before the matter at issue is submitted to non-binding mediation in accordance with Subsection 01360.2.

### **01290.9 Audits.**

All claims filed under non-binding mediation are subject to audit at any time following the filing of such claim. The audit may be performed by the Owner or by an auditor under contract with the Owner. The audit may begin on ten (10) days notice to the Contractor or its subcontractor. The Contractor, subcontractor, or supplier shall provide adequate facilities that are acceptable for such audit during normal business hours. The Contractor, subcontractor, or supplier shall make a good faith effort to cooperate with the auditors. Failure of the Contractor, subcontractor, or supplier to maintain and retain sufficient records to allow the Owner's auditor to verify all or a portion of such claim to the books and records of the Contractor, subcontractor, or supplier shall constitute a waiver of such claim and shall bar any recovery thereunder.

At a minimum, the auditors shall have available to them the following documents:

1. Daily time sheets and foreman's daily reports.
2. Insurance, welfare, and benefits records.
3. Payroll registers.
4. Earnings records.
5. Payroll tax forms.
6. Material invoices and/or requisitions.
7. Material cost distribution worksheet.

8. Equipment records (list of company equipment and rates).
9. Vendors', rental agencies', and subcontractors' contracts and invoices.
10. Subcontractors' payment certificates.
11. Canceled checks (payroll and vendors).
12. Job cost report.
13. Job payroll ledger.
14. General ledger.
15. Cash disbursements journal.
16. Financial statements for all years reflecting the operations on the Project.
17. Income tax returns for all years reflecting the operations on the Project.
18. Depreciation records on all company equipment whether such records are maintained by the company involved, or its accountant, or others.
19. If a source other than depreciation records is used to develop costs for the Contractor's internal purposes in establishing the actual cost of owning and operating equipment, all such other source documents.
20. All documents which reflect the Contractor's actual profit and overhead during the years the Project was being performed and for each of the five years before the commencement of the Project.
21. All documents related to the preparation of the Contractor's Bid including the final calculations on which the bid was based.
22. All documents that relate to each and every claim together with all documents which support the amount of damages as to each claim.
23. Worksheets used to prepare the claim establishing the cost components for items of the claim including, but not limited to, labor, benefits and insurance, materials, equipment, subcontractors, and all documents which establish the time periods, individuals involved, and the hours and rates for these individuals.

#### **01290.10 Warranty Against Defective Work.**

In addition to any other rights or remedies the Owner may have against the Contractor, its officers, employees, agents, subcontractors, fabricators, and suppliers under other provisions of the Contract Documents or as are otherwise allowed in law or equity, the following rights, remedies, and obligations are imposed by this Subsection:

1. On all Projects, all subcontractors', manufacturers', fabricators', and suppliers' warranties, express or implied, respecting any work or materials shall, at the direction of the Engineer, be enforced by the Contractor for the benefit of the Owner. The Contractor shall obtain any warranties that subcontractors, manufacturers, fabricators, and suppliers would give in normal commercial practice. If directed, the Contractor shall require any such warranty to be executed in writing to the Engineer. The Engineer may direct the Contractor to undertake litigation to enforce any warranty. Litigation directed to be brought during the life of the Contract and until three year following Acceptance (whether actually instituted within this period or not) shall be at the Contractor's expense.
2. The Contractor warrants that work performed conforms to the Contract requirements and is free of any defect of equipment, material or design furnished, or workmanship performed by the Contractor or any of its subcontractors, fabricators, or suppliers at any tier. Such warranty shall continue for a period of one year following Acceptance. Under this warranty, the Contractor shall remedy at its own expense any such failure to conform or any such defect. In addition, the Contractor shall remedy at its own expense any damage to Owner or Property Owner owned or controlled real or personal property, when that damage is the result of the Contractor's failure to conform to Contract requirements or any such defect of equipment, material, workmanship, or

design. The Contractor shall also restore any work damaged in fulfilling the terms of this clause. The Contractor's warranty with respect to work repaired or replaced hereunder shall run for the greater of: (i) the balance of the original three year term or (ii) one year from the date of such repair or replacement.

The Engineer will notify the Contractor in writing of the discovery of any failure, defect, or damage. Should the Contractor fail to remedy any failure, defect, or damage described in the paragraph above, within 45 days after receipt of notice thereof, the Engineer, on the Owner's behalf, will have the right to replace, repair, or otherwise remedy such failure, defect, or damage at the Contractor's expense.

3. Notwithstanding any other provision of this Subsection, the Contractor shall not be liable, hereunder, to the extent of any defects of material or design furnished by the Owner nor for the repair of any damage that results from any such defect in Owner furnished material or design.

## **01300 Administrative Requirements**

### **01310 Project Management and Coordination**

#### **01310.1 Assignment.**

The performance of the Contract may not be assigned, except upon the written consent of the Owner. Consent will not be granted to any proposed assignment that would relieve the original Contractor or its surety of their responsibilities under the Contract nor will the Owner consent to any assignment of a part of the Work under the Contract.

#### **01310.2 Subcontracting.**

The Contractor shall make application to the Owner, through the Engineer, of the names of persons or entities, not listed on the subcontractor utilization form, that the Contractor proposes to engage as subcontractors under this contract. The Owner will reply to the Contractor in writing promptly with any objections to the proposed person or entity. The contractor shall not contract with anyone that the Owner has made timely and reasonable objection. It is understood, however, that any consent of the Owner for the subcontracting of any Work of the Contract in no way relieves the Contractor from its full obligations for all Work under the Contract, nor the surety of its obligations under the bond. The Contractor shall at all times give its personal attention to the fulfillment of the Contract and shall keep the Work under control. The Contractor shall be responsible for all work of subcontractors which work shall conform to the provisions of the Contract Documents. The consent to the subcontracting of any part of the Work shall not be construed as an approval of the said subcontract or of any of its terms, but is to operate only as an approval of the Contractor's request for the making of a subcontract between the Contractor and its chosen subcontractor.

Application for subcontracting any part of the Work shall be made by the Contractor in writing to the Owner. The Contractor shall attach to that application a certified copy of the proposed subcontract between the Contractor and the subcontractor. After review of the application, the consent of or rejection by the Owner of the subcontracting will be provided to the Contractor in writing. Before the receipt of the written consent from the Owner, Work shall not be performed on the Project under the subcontract.

The subcontractor shall look only to the Contractor for the payment of any claims of any nature whatsoever arising out of the subcontract. Nothing contained in this Contract shall create any contractual relationship between any subcontractor and the Owner. The Contractor shall insert appropriate clauses in all subcontracts to bind subcontractors to the terms and conditions of this contract insofar as they are applicable to the work of subcontractors.

The Owner will not consent to the making of any subcontract unless the proposed subcontractor furnishes a statement to the effect that the subcontractor is acquainted with and expressly understands all of the provisions of the Contract.

### **01310.3 Commencement of Work.**

Upon execution of the Contract by the Owner, a fully executed copy together with a Notice to Proceed will be provided to the Contractor. Receipt of the executed Contract and Notice to Proceed shall constitute the Contractor's authority to enter upon the Project Area, provided the Contractor has submitted to the Owner, and the Owner has accepted and approved, the insurance certificates required under Subsection 00620 and a preconstruction conference has been held. Construction operations shall not begin until the Contractor has supplied, and the Engineer has accepted, the Progress Schedule and other certifications, forms, schedules, and any other Submittals required by the Contract Documents.

The Contractor is not entitled to additional compensation or extension of Contract Time for any delay, hindrance, or interference caused by or attributable to commencement of Work within 30 days following the Notice to Proceed.

The Contractor shall give the Engineer at least 72 hours advance notice in writing of its intention to start construction operations.

### **01310.4 Progress Schedule and Prosecution of the Work.**

Upon bid award, the Contractor should furnish a proposed Progress Schedule showing the order in which the Contractor proposes to prosecute the Work; the dates on which the various work stages, operations, and principal items of Work including procurement of materials will begin; the quantity and kinds of equipment and character of the labor force; and the contemplated dates for completing the same.

Construction operations shall not begin until the Progress Schedule has been approved. Five Working Days will be required for review and approval of progress. Once the Progress Schedule has been approved, the Contractor shall not deviate from it without first notifying the Engineer in writing.

In scheduling and executing the Work, the following shall be considered:

- 1. Mobilization and Staging.** The Contractor shall schedule the Work using such procedures and staging as may be specified in the Contract Documents. The Contractor is responsible for obtaining a construction trailer, if needed, and a site location for the trailer. The contractor shall also obtain facilities for storage of materials and equipment.
- 2. Prosecution of the Work.** The Contractor shall provide sufficient materials, equipment, and labor to guarantee the completion of the Project according to the Contract Documents and within the time set forth under Subsection 01310.10 (Time of Completion).

If the Contractor falls ten percent or more of the total project time behind the submitted schedule, the Contractor shall submit a revised schedule for approval.

Should the Contractor discontinue the prosecution of the Work for any reason, it shall notify the Engineer, in writing, before discontinuing work and at least 24 hours before resuming operations.

The Contractor shall arrange and prosecute the Work so that each successive construction operation at each location shall follow the preceding operation as closely as the requirements of the various types of construction permit to facilitate the efficient and effective completion of the Project in accordance with the Progress Schedule.

Compensation for additional expense to the Contractor and allowance of additional time for completion of the Work shall be as set forth in a Change Order or Supplementary Agreement or according to Subsection 01310.11 (Extensions and Reductions of Contract Time).

3. **Intent, Responsibility and Time.** Scheduling of construction is the responsibility of the Contractor. Therefore, it is the Contractor's responsibility to determine the most feasible order of Work commensurate with the Contractor's abilities and the Contract Documents. The requirement for the Progress Schedule is included to ensure adequate planning and execution of the Work, to assist the Engineer in appraising the Contractor's compliance with the Contract Documents, and to evaluate progress of the Work. The Progress Schedule will be used for determining extensions or reductions of Contract Time pursuant to Subsection 01310.11.

It is not intended that the Engineer, by approving the Progress Schedule, agrees that it is reasonable in all respects or that following the Progress Schedule can result in timely completion of the Project. Only the approved Progress Schedule is a part of the Contract.

If, in the preparation of the Progress Schedule, the Contractor projects a completion date that is different than that specified under Subsection 01310.10, this in no way voids the date set therein. The date as specified in that Subsection governs. Where the Progress Schedule reflects a completion date that is earlier than that specified as the Contract Time, the Engineer may approve the schedule with the Contractor specifically understanding that no claim for additional Contract Time or compensation shall be brought against the Owner as the result of failure to complete the Work by the earlier date shown on the Progress Schedule.

4. **Acceleration and Default.** If, in the opinion of the Engineer, the Contractor falls behind its Progress Schedule, and cannot complete the Work within the time prescribed under Subsection 01310.10, as modified pursuant to Subsection 01310.11, the Contractor shall take such steps as may be necessary to improve its progress. The Engineer may require the Contractor to increase the number of shifts, begin overtime operations, work extra days including weekends and holidays, or supplement its equipment and materials, and to submit for approval such supplementary schedule or schedules, as may be deemed necessary to demonstrate the manner in which the agreed rate of progress shall be regained, all at no cost to the Owner.

Failure of the Contractor to comply with the requirements of the Engineer under this Subpart is grounds for the determination that the Contractor is not prosecuting the Work with such diligence as to ensure Completion within the time specified. Upon such determination, the Engineer may terminate the Contractor's right to proceed with the Work or any separable part thereof according to Subsection 01310.14 (Temporary Suspension of Work).

5. **Types of Progress Schedules.** All Progress Schedules shall comply with the foregoing provisions of this Subsection. Regardless of the type of progress schedule used, the Contractor shall supply the Engineer with a weekly work schedule indicating the Contractor's planned work, the subcontractors' planned work, and the dates when materials are to be delivered.
6. **Cost Savings Opportunities.** During the prosecution of the Work, Contractor shall identify and present to the Engineer and Owner cost saving opportunities, if any, to reduce the Total Contract Price. To incent Contractor to diligently work to identify such opportunities, if Owner agrees to implement such opportunities, the savings actually realized by the Owner shall be shared equally by and between the Owner and Contractor, and the Total Contract Price shall be reduced accordingly. If during the prosecution of the Work, Owner identifies cost savings opportunities, the savings actually realized from the execution thereof shall be shared by the Owner and Contractor, as the parties mutually agree, with such sharing agreement to account solely for the direct costs that Contractor has incurred and paid that the Contractor cannot receive credit, obtain reimbursement or otherwise avoid. Contractor's claim for cost sharing under this subpart shall

be accompanied by sufficient documentation so that the Engineer can validate the request. Prior to Owner's execution of the Contract, Owner may identify cost saving opportunities that reduce or eliminate costs, and the Owner shall not be responsible to the Contractor for any costs and shall receive one-hundred percent of the benefit of all such pre-execution opportunities that Owner identifies, and the Total Contract Price shall be reduced accordingly.

## **01310.5 Project Meetings.**

### **1. Pre-Construction Meeting at Owner's Office**

Prior to the issuance of the Notice to Proceed, a pre-construction meeting will be coordinated by the Engineer. In attendance shall be an authorized representative of the Owner, the Engineer, and the Contractor's Project Manager. The agenda of the meeting will include without limitation, the following topics:

- Introductions;
- The Engineer's role on the Project and respective duties to the Owner and Contractor;
- Mobilization, Staging Areas, and Equipment Storage;
- Responsibility for the safety of the public;
- Working Hours;
- Coordination between contractors (if applicable);
- Discussion of structure buffers within the Project Area (if applicable);
- Notification procedures in emergencies. Preparation of list of contacts and telephone numbers for notification during emergencies;
- Municipal approvals, if any;
- Project Access Locations, and visits to each such location;
- Project schedule and procedures for written correspondence to alert of delays due to weather or other impacts outside of the Contractors controls;
- Identification of the Project Team and meeting frequency.

### **2. Weekly to Bi-Weekly Project Meetings**

During the execution of the Work, project meetings shall be held every other week with the Project Team to discuss the Project's progress. Specifically, these meetings will address the progress of the Work, with an emphasis on ensuring that the Work is consistent with the Project Plans, discussions of the Progress Schedule and any adjustments that may need to be made to the preliminary schedule prepared as part of these Specifications, Change Orders, unforeseen conditions, discussions regarding payment schedule and any other issues of concern. As the Work progresses and at the discretion of the Owner, these meetings may be extended to bi-weekly meetings. This meeting will be held at the Owner's Office or at such location as the Owner may agree.

### **3. Minutes of Meetings**

The Contractor is required to attend all meetings outlined in the Contract, or as reasonably requested by the Engineer. The Engineer shall record and maintain the Minutes of all meetings outlined in the Contract, and provide copies thereof to the parties in attendance prior to the next scheduled meeting.

## **01310.6 Limitation of Operations.**

The Contractor shall conduct the Work at all times in such a manner and in such sequence that shall ensure the least interference with the surrounding community, pedestrian traffic, and other contractors, if any. The Contractor shall conduct Work during Standard Working Hours. If the Contractor is expecting to work hours greater than this specified time period, written permission from the Owner must be obtained prior to commencement of such work

#### **01310.7 Character of Workers, Methods, and Equipment.**

The Contractor shall at all time employ sufficient labor and equipment for prosecuting the Work to full completion in the manner and time required by the Contract Documents.

All workers shall have sufficient skill and experience to properly perform the work assigned to them. Workers engaged in special work or skilled work shall have sufficient experience in that work and in the operation of the equipment required to perform the Work satisfactorily, in accordance with the best practices in the industry.

Any person employed by the Contractor or by any subcontractor who, in the opinion of the Engineer, does not perform Work in a proper and skillful manner or is intemperate or disorderly shall, at the written request of the Engineer, be promptly removed by the Contractor or subcontractor employing the person and shall not be again employed in any portion of the Work without approval. Should the Contractor fail to remove such person or persons as required, or fail to furnish suitable and sufficient personnel for the proper prosecution of the Work, the Engineer may suspend the Work by written notice until compliance with such orders, and if so suspended and in the absence of such compliance, the Owner shall have all its rights and remedies as outlined in the Contract.

All equipment that is proposed to be used on the Work shall be of sufficient size and in such mechanical condition as to meet the requirements of the Work and to produce a satisfactory quality of Work, in accordance with best practices in the industry. Equipment used on any portion of the Project shall not cause damage to, adjacent property or the ROW for which the Contractor shall be solely responsible.

When the methods and equipment to be used by the Contractor in accomplishing the construction are not specified, the Contractor is free to use any methods or equipment that accomplishes the Work. When the use of certain methods and equipment is specified, the specified methods and equipment shall be used unless otherwise authorized according to Subsection 01451.12 (Substitutes or "Or Equal" Items).

#### **01310.8 Working Site.**

Except as otherwise provided, any space that the Contractor may require for plant, equipment, storage, or other purposes in addition to that available at the Project Area, shall be procured by the Contractor, and the cost thereof shall be borne by the Contractor with no increase to the Total Contract Price. In the event of default as set forth in Subsection 01310.16, the Owner has the right to take over and occupy such space, or cause it to be occupied, for the purpose of completing the Project, at the Contractor's expense.

#### **01310.9 Unusual Site Conditions.**

During the progress of the Work, if latent physical conditions are encountered at the Project Area differing materially from those indicated in the Contract or if unknown physical conditions of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in the work provided for in the Contract are encountered at the site, the party discovering such conditions shall promptly notify the Engineer in writing of the specific differing conditions before they are disturbed and before the affected work is performed.

Upon written notification, the Engineer will investigate the conditions, and if the Engineer determines that the conditions materially differ and could not have been discovered by the Contractor pursuant to Subsection 00630.5 (Examination of Contract Documents and Site of Project) and if they cause an increase or decrease in the cost or time required for the performance of any work under the Contract, an adjustment,

excluding loss of anticipated profits, will be made and the Contract modified in writing accordingly. The Engineer will notify the Contractor of the Engineer's determination whether or not an adjustment of the Contract is warranted. Adjustments in Contract Time will be made pursuant to Subsection 01310.11. Adjustments in compensation will be made pursuant to Subsections 00700.4, 00700.5, 00700.7, 00700.8, and 00700.10.

No Contract adjustment that results in a benefit to the Contractor will be allowed unless the Contractor has provided the required written notice herein. No Contract adjustment will be allowed under this clause for any effects caused on unchanged work.

### **01310.10 Time of Completion.**

The Contractor shall complete all or any portion of the Project called for under the Contract in all parts and requirements within the time or times for completion outlined in the Specification. Time is of the essence as to all time frames stated in the Contract Documents; therefore, all time frames shall be strictly enforced.

Contract Time is Calendar Days counting from the date of the Notice to Proceed, including all Saturdays, Sundays, holidays, and non-work days.

### **01310.11 Extensions and Reductions of Contract Time.**

- A. Basis for Extension.** Where appropriate under the provisions of this Subsection, extensions or reductions to the Contract Time may be provided by Change Order, however, such extensions or reductions will be allowed only to the extent that, the increase or decrease in the Work, or delays of the types indicated below affect current controlling operations and the overall Completion. Increases or decreases in Work or such delays that do not affect the overall Completion are not to be the basis for reduction or extension of Contract Time. Extensions of Contract Time will not be granted under this Subsection where it is determined that the Contractor could have avoided the circumstances that caused the request for extension.

If the Contractor is delayed in completion of the Work by reason of changes made under Subsection 00700.4 (Changes), or by failure of the Owner to acquire easements, permits or other approvals, or by any act of other contractors consistent with Subsection 01450.10 (Cooperation Between Contractors), or the discovery of hazardous substances, or by any act of the Engineer or of the Owner not contemplated by the Contract, an extension of Contract Time commensurate with the delay in overall completion of the Contract thus caused will be granted, and the Contractor is relieved from any claim for liquidated damages or the Engineer and inspection charges.

Additionally, the Contractor may be granted an extension of Contract Time and not be assessed liquidated damages or the costs of the Engineer and inspection for any portion of the delay in overall completion of the Work beyond the time provided in Subsection 01310.10 caused by the following reasons:

1. acts of civil or military authorities, war, or riot;
2. fire;
3. floods, tidal waves, earthquakes, cyclones, tornadoes, hurricanes, or other cataclysmic natural phenomenon;
4. extreme weather conditions;
5. epidemics or quarantine restrictions;
6. strikes or labor disputes beyond the control of the Contractor which prevent work on the construction operations which are critical to the completion of the Project;

7. shortages of materials [Subpart 01310.11(B)(1)] or freight embargoes;
8. acts of the State in its sovereign capacity;
9. failure of the Engineer to furnish interpretations of the Contract Documents [Subpart 01310.11(B)(2)].

**B. Criteria for Evaluation.** Extension of Contract Time for the reasons set forth in this Subsection will not be granted unless the Contractor has notified the Engineer in writing of the causes of delay within 5 days from the beginning of any such delay. The Engineer will evaluate the facts and the extent of the delay, and upon approval, will extend the Contract Time one day for each approved day of delay.

1. Extensions of Contract Time will not be granted for a delay caused by a shortage of materials unless the Contractor furnishes:
  - a. documentary proof that it has diligently made every effort to obtain such materials from all known sources within reasonable distance from the Work, and
  - b. further proof in the form of a supplementary Progress Schedule, as required in Subsection 01310.4, showing that the inability to obtain such materials when originally planned, did, in fact, cause a delay in completion of the Contract which could not be compensated for by revising the sequence of the Contractor's operations. The term "shortage of materials" applies only to raw and fabricated materials, articles, parts, and equipment that are standard items and does not apply to materials, parts, articles, or equipment, which are processed, made, constructed, fabricated, or manufactured to meet the specific requirements of the Contract. Only the physical shortage of materials and not the cost of materials will be considered.
2. Extensions of Contract Time will not be granted for failure of the Engineer to furnish interpretations of the Contract Documents until 10 days after receipt of such demand in writing as required by Subsection 00700.9 (Changes in Character of Work), and not then unless such request for an interpretation of the Contract Documents is reasonable and made in good faith, and the failure to respond was unwarranted.

Except where specifically provided in the Contract Documents, the Contractor shall not make any claim for damages or additional compensation for any delay in or hindrance to the performance of the Contract occasioned by any act or omission to act by the Owner or any of its representatives, or for any of the reasons enumerated in this Subsection, and agrees that any such claim shall be fully compensated for by an extension of Contract Time to complete performance of the Work.

Extensions of Contract Time will not be granted due to delays caused by, or in any way related to, the financial condition of the Contractor, subcontractors, sub-subcontractors, materialmen, fabricators, or suppliers. The Contractor and its surety assume full responsibility for ensuring that the financial condition of any of the above does not delay completion of the Contract.

If, as a result of modifications made under Subsection 00700.4, 00700.7, 00700.8, or 01310.9, the Work required is reduced or altered so that the time required for Completion is reduced, the Engineer may reduce the Contract Time provided under Subsection 01310.10. The Engineer will evaluate the facts and the extent of the reduction. The Engineer's findings thereon will be final and conclusive.

The Contractor and surety are not relieved of liability for liquidated damages or the Engineer and inspection charges for any period of delay in Completion in excess of that expressly provided for in this Subsection.

## **01310.12      RESERVED**

### **01310.13 Suspension of Work for Convenience of the Owner.**

The Engineer may order the Contractor, in writing, to suspend, delay, or interrupt all or any part of the Work for such period of time as the Engineer may determine to be appropriate for the convenience of the Owner.

If the performance of all or any portion of the Work is suspended, delayed, or interrupted by the Engineer in writing for an unreasonable period of time (not originally anticipated, customary, or inherent to the construction industry) and the Contractor believes that additional compensation or Contract Time or both are due as a result of such suspension, delay, or interruption, the Contractor shall submit to the Engineer in writing a request for adjustment within five (5) Calendar Days of receipt of the notice to resume Work. The request shall set forth the reasons and support for such adjustment.

Upon receipt, the Engineer will evaluate the Contractor's request. If the Engineer agrees that the cost or time or both required for the performance of the Contract have increased as a result of such suspension and the suspension was caused by conditions beyond the control of and not the fault of the Contractor, its suppliers, or subcontractors, and not caused by weather, the Engineer will make an adjustment (excluding profit) and prepare the written modification of the Contract accordingly. The Engineer will determine and notify the Contractor whether or not an adjustment of the Contract is warranted. Adjustments in Contract Time will be made pursuant to 01310.11.

Adjustments in compensation will be made pursuant to 00700.4, 00700.5, 00700.7, 00700.8, and 00700.10.

No Contract adjustment will be considered unless the Contractor has submitted the request for adjustment within the time prescribed.

No Contract adjustment will be allowed under this clause to the extent that performance would have been suspended, delayed, or interrupted by any other cause, or for which an adjustment is provided for or excluded under any other term or condition of the Contract.

The failure of the Engineer to consider the Work suspended and to allow for an adjustment in the compensation or in the Contract Time will not bar recovery under the foregoing provisions, provided the Contractor gives written notice to the Engineer within ten (10) days of the start of the alleged suspension. The failure of the Contractor to give such notice pursuant to the provisions of this Subsection shall constitute a waiver of any and all claims and damages which would have been avoided or mitigated had such timely notice been given.

### **01310.14 Temporary Suspension of Work.**

The Engineer has the authority to suspend the Work, wholly or in part, for such period as deemed necessary due to unsuitable weather, or for such time as deemed necessary due to the failure on the part of the Contractor to carry out orders given or to perform any provision of the Contract. The Contractor shall promptly comply with the written order of the Engineer to suspend the Work wholly or in part. The suspended work shall be resumed when conditions are favorable and methods are corrected, as ordered or approved in writing.

In the event that a suspension of Work is ordered as provided above, and should such suspension be ordered by reason of the failure of the Contractor to carry out orders or to perform any provision of the Contract; or by reason of weather conditions being unsuitable for performing any item or items of Work, which work, in the sole opinion of the Engineer, could have been performed before the occurrence of such unsuitable weather conditions had the Contractor diligently prosecuted the Work when weather conditions were suitable; the Contractor, at its expense, shall do all the work necessary to provide a safe, smooth, and unobstructed passageway through the construction area for use by public traffic during the period of such suspension. In the event that the Contractor fails to perform the work above specified, the Owner will

perform such work and the cost thereof will be deducted from any monies due or that may become due the Contractor. In the event that a suspension of Work is ordered by the Engineer due to unsuitable weather conditions and, in the sole opinion of the Engineer, the Contractor has prosecuted the Work with energy and diligence before the time that operations were suspended, the cost of providing a smooth and unobstructed passageway through the Work will be paid for as Extra Work, or, at the option of the Engineer, such work will be performed by the Owner or different Contractor working for the Owner at no cost to the Contractor.

If the Engineer orders a suspension of all of the Work or a portion of the Work, which is the current controlling operation or operations, due to unsuitable weather, the days on which the suspension is in effect are not considered Working Days on Working Day contracts. If a portion of Work at the time of such suspension is not a current controlling operation or operations, but subsequently does become the current controlling operation or operations, the determination of Working Days will be made on the basis of the then current controlling operation or operations. Similarly, on Calendar Day and specified completion date contracts, extensions of Contract Time will be granted only if the suspension affects the overall completion of the Contract and the other requirements of Subsection 01310.11 are satisfied.

If a suspension of Work is ordered by the Engineer due to the failure on the part of the Contractor to carry out orders given or to perform any provision of the Contract, the days on which the suspension order is in effect are to be considered Working Days if such days are Working Days within the meaning of the definition set forth in Subsection 00700.2 (Terms). On Calendar Day and specified completion date contracts, extensions of Contract Time will not be granted due to such suspension.

The Contractor shall have no claim for additional compensation as a result of suspension ordered for the reasons set forth in this Subsection.

#### **01310.15 Failure to Complete on Time.**

The Contractor and the Owner recognize that delay in Completion results in damages to the Owner in terms of the effect of the delay on the use of the Project, upon the convenience of the Property Owners, and also results in additional costs to the Owner for Engineer, inspection, and administration of the Contract. Because it is difficult or impossible to accurately estimate the damages incurred, and not intended as a penalty or fine but rather as an agreed-upon estimate of actual damages, the parties agree that if the Contractor fails to complete the Contract within the time stated in the Specification, or within such further time as may have been granted according to the provisions of the Contract, the Contractor shall pay the Owner liquidated damages in the amount of \$1,000 per day for each day beginning on the first day after the approved date of Completion. Such liquidated damages shall be paid for each and every day, as hereafter, defined that the Contractor is in default to complete the Contract.

#### **01310.16 Events of default.**

The following shall constitute events of default under this Agreement:

1. Contractor fails to begin the Work under the Contract within the time specified in Subsection 01310.3 (Commencement of Work); or
2. Contractor fails to perform the Work with sufficient workers and equipment or with sufficient materials to ensure its completion within the Contract Time specified, or any extension thereof; or
3. Contractor fails to complete the Contract within the Contract Time specified, as extended; or
4. Contractor performs the Work unsuitably or neglects or refuses to remove materials or to again perform such Work as may be rejected as unacceptable and unsuitable; or
5. Contractor discontinues the prosecution of the Work; or
6. Contractor fails to resume Work which has been discontinued within a reasonable time after notice to do so; or

7. Contractor becomes insolvent or is declared bankrupt, or commits any act of bankruptcy or insolvency; or
8. Contractor allows any final judgment to stand against it unsatisfied for a period of ten (10) days; or
9. Contractor makes an assignment for the benefit of creditors; or
10. Contractor fails to acquire or maintain the required insurance; or
11. Contractor fails to comply with applicable laws and regulations governing its conduct of business in the State of New Jersey and under this Contract; or
12. Contractor is a party to fraud; or
13. Contractor for any other cause whatsoever, fails to carry out the Work in an acceptable manner;

#### **01310.17 OWNER REMEDIES UPON EVENT OF DEFAULT.**

The Engineer will give written notice to the Contractor of Event of Default under Section 01310.16 and demanding the immediate elimination of such event of default. The Contractor, shall correct said event of default within a period of ten (10) days after such notice. If the contractor fails to cure said event of default the Owner shall, in its sole discretion, have the following remedies:

- a. Issue a Notice of Default to the Contractor and Surety.
- b. Appropriate any or all materials and equipment on the site as may be suitable and acceptable and may direct the Surety to complete the Contract.
- c. Appropriate any or all materials and equipment on the site as may be suitable and acceptable and enter into an agreement for the completion of the Contract according to the terms and provisions thereof with another contractor
- d. Use such other methods required for the completion of the Contract, including completion of the Work by the Owner.

The Contractor and Surety are not relieved of the assessment of liquidated damages under Subsection 01310.15 because of the Contractor's default.

All costs and charges incurred by the Owner, together with the cost of completing the Work, will be deducted from any monies due or that may become due the Contractor and Surety. If such expense exceeds the sum that would be available from such monies, then the Contractor and the Surety shall be liable and shall pay to the Owner the amount of such excess.

The rights and remedies of the Owner herein are in addition to any other rights and remedies provided by law or under the Contract and the Bonds.

If, after notice of default under the provisions of this Subsection, it is determined for any reason that the Contractor was not in default or that the delay was excusable, the rights and obligations of the parties are the same as if the notice of termination for convenience had been issued pursuant to Subsection 01310.18.

Where the Owner's default of the Contractor pursuant to the provisions of this Subsection is found by a court to be legally improper, the Contract will be treated as if terminated for convenience pursuant to Subsection 01310.18 and such termination is to be compensated for according to provisions of Subsection 01310.18.

#### **01310.18 Termination of Contract for convenience of Owner.**

The Owner may, by written order, terminate the Contract or any portion thereof for convenience after determining that for reasons beyond the Contractor's control, the Contractor is unable to proceed with or complete the Work as contracted for, or that termination is in the Owner's interest.

Upon receipt of an Order of Termination for convenience, the Contractor shall not proceed with any item of Work that is not specified in the Order of Termination. The Contractor shall complete all items of Work specified in the termination order. Such Work shall include punch list items and all Work necessary to ensure the safety of the public, to properly secure existing work already constructed or partially constructed, and to secure the Project Area. This work so ordered shall be performed according to the Contract Documents and may include items of work not in the original Contract. The Contract shall be considered substantially complete upon completion and acceptance of all items of Work specified in the Order of Termination, except punch list items. After completion of the punch list items and all documents required by the Contract, the Contract shall terminate upon issuance of a Final Certificate and payment. The Owner reserves the right to declare in default a Contractor who fails to carry out the conditions set forth in an Order of Termination for convenience.

When the Owner orders termination of the Contract for convenience, all completed items of Work as of that date will be paid for based on the number of units completed and the Contract unit price, or for items of work performed on a lump sum basis, based on the percentage of the lump sum item of work performed. Items that are eliminated in their entirety by such termination will not be paid for.

Materials obtained by the Contractor for the Work but which have not been incorporated therein may, at the option of the Engineer, be purchased from the Contractor at actual cost delivered to a prescribed location or otherwise disposed of as mutually agreed.

Within 45 days of the effective termination date, the Contractor shall submit claims for additional costs actually incurred not covered above or elsewhere in the Specifications. Such claims may only include 1) reasonable mobilization efforts, 2) subcontractor costs not otherwise paid for, and 3) guaranteed payments for private land usage as part of the original Contract. Claims shall not include lost profits or expectation profits from work eliminated by the termination for convenience.

In terminating a Contract pursuant to this Subsection:

1. The Contractor shall make cost records available to the extent necessary to determine the validity and amount of each item for which it seeks compensation.
2. The Contractor shall not be relieved of contractual responsibilities for the Work completed, nor shall the surety be relieved of its obligations for and concerning any just claim arising out of the Work performed.
3. The Contractor shall, if so directed by the Engineer, remove promptly any or all of its equipment and supplies from the Project Area or other property of the Owner. If the Contractor fails to remove the equipment and supplies as directed, the Engineer may remove such equipment and supplies at the expense of the Contractor.

#### **01310.19 TERMINATION OF CONTRACT FOR CAUSE.**

The Owner may also, by written order, terminate the Contract or any portion thereof for cause after determining that reasons for default as stated in Subsection 01310.16 exist. The decision whether to terminate for cause or declare the Contractor in default will be made in the sole discretion of the Owner acting in its own best interest. Before the issuance of an Order of Termination for cause, the Engineer will give written notice to the Contractor and Surety of the causes for the proposed termination. The notice will demand the elimination of such causes.

If the Contractor or Surety, within a period of ten days after such notice, does not proceed in accordance therewith, the Owner may terminate the Contract for cause.

The Order of Termination for cause will terminate the Contractor's right to proceed with any items of Work except as specified in the termination order. Such work will include punch list items and all work necessary

to ensure the safety of the public, to properly secure existing work already constructed or partially constructed, and to secure the Project Area. This work so ordered shall be performed according to the Contract Documents and may include such items of Work not in the original Contract. Substantial Completion shall occur when all Work specified in the termination order, except for punch list items, is complete and accepted by the Engineer. After the completion of all punch list items and all documents required by the Contract, the Contract shall terminate upon issuance of a Final Certificate and payment.

When the Owner terminates the Contract for cause, all completed items of Work as of that date will be paid for at the Contract price. Payment for partially completed work will be made based on the unit prices or portion thereof provided that such payment does not exceed the Contract price of the Pay Item under which the Work was performed. Items that are eliminated in their entirety by such termination will not be paid for. No other costs will be allowed to the Contractor.

In terminating a Contract for cause, the Owner does not waive its right to sue the Contractor for any costs incurred by the Owner as a result of the termination, including the additional costs of completing the Project. The Owner reserves the right to declare in default a Contractor who fails to carry out the conditions set forth in an Order of Termination for cause.

Where the Owner's termination of the Contract for cause pursuant to the provisions of this Subsection is found by a court to be legally improper, the termination of the Contract for cause will be treated as if it had been a termination for convenience, and such termination is to be compensated for according to the provisions of this Subsection governing terminations for convenience.

In terminating a Contract pursuant to this Subsection:

1. The Contractor shall make cost records available to the extent necessary to determine the validity and amount of each item for which it seeks compensation.
2. The Contractor shall not be relieved of contractual responsibilities for the Work completed, nor shall the surety be relieved of its obligations for and concerning any just claim arising out of the Work performed.
3. The Contractor shall, if so directed by the Engineer, remove promptly any or all of its equipment and supplies from the Project Area or other property of the Owner. If the Contractor fails to remove the equipment and supplies as directed, the Engineer may remove such equipment and supplies at the expense of the Contractor.

## **01330 Submittals RESERVED**

### **01360 *Additional Legal Provisions***

#### **01360.1 Legal Jurisdiction and Governing Law.**

Any action or proceeding arising hereunder shall be brought in the Courts of the State of New Jersey; provided, that if any such action or proceeding arises under the Constitution, the laws or treaties of the United States of America, or if there is a diversity of citizenship between the parties hereto, so that it is to be brought in a United States District Court, it shall be brought in the United States District Court for the District of New Jersey or any successor court thereto.

This Contract shall be governed by the laws of the State of New Jersey.

#### **01360.2 Process for the Resolution of Contract Disputes.**

In an effort to resolve any conflicts that arise during the construction of the Project or following the completion of the Project, before any action or proceeding is commenced, the Contractor and Owner agree that all disputes between them arising out of or relating to this Contract or the Project shall be submitted to

nonbinding mediation unless the parties mutually agree otherwise. The parties agree to use a professional mediator from the American Arbitration Association, the International Institute for Conflict Prevention and Resolution (CPR Institute), or like organization selected by agreement or, absent agreement, through selection procedures administered by the CPR Institute. Within a period of forty-five (45) days after the request for mediation, the parties agree to convene with the Mediator, with business representatives present, for at least one session to attempt to resolve the dispute. In no event shall mediation delay commencement of an action or proceeding for more than 70 days, absent agreement of the parties, or interfere with the availability of emergency relief.

The Contractor and Owner further agree to include a similar mediation provision in all agreements with independent contractors and consultants retained for the Project and to require all independent contractors and consultants also to include a similar mediation provision in all agreements with their subcontractors, sub-consultants, suppliers and fabricators, thereby providing for mediation as the primary method for dispute resolution between the parties to all those agreements. All parties agree that they can be joined as a party in any mediation proceedings conducted pursuant to this Subsection.

### **01360.3 Laws to be Observed.**

The Contractor shall keep fully informed of all Federal, State, and local laws, ordinances, and regulations, and all orders and decrees of bodies or tribunals having any jurisdiction or authority, which in any manner affect those engaged or employed on the Work, or which in any way affect the conduct of the Work. The Contractor shall at all times observe and comply with, and shall cause its agents and employees to observe and comply with, all such laws, ordinances, regulations, orders, and decrees and shall defend, protect, indemnify and save harmless the Owner, the Casino Licensee, and their respective members, directors, officers, and employees against any claim or liability arising from or based on the violation of any such law, ordinance, regulation, order, or decree, whether by the Contractor or the Contractor's agents or employees, subcontractors of any tier, suppliers, or materialmen. If any discrepancy or inconsistency is discovered between the Contract Documents and any such law, ordinance, regulation, order, or decree, the Contractor shall immediately report the same to the Engineer in writing.

### **01360.4 Permits, Licenses, and Taxes.**

The Contractor shall procure all permits, grants, and licenses, pay all charges, fees, and taxes, and give all notices necessary and incidental to the due and lawful prosecution of the Work except where the Owner has procured such permits, grants, or licenses for temporary or permanent construction. The Contractor shall advise the issuing agency or party of its proposed operations and obtain their cooperation and such supplemental permission as may be necessary. Before submitting its bid, the Contractor should obtain from the Owner all available information on the permits, grants, and licenses the Owner has obtained. Charges incurred by the Contractor for permits, grants, and licenses in connection with the Work shall be paid by the Contractor and shall be included in the Total Contract Price.

### **01360.5 Patented Devices, Materials, and Processes.**

If any design, device, material or process covered by letters of patent or copyright is used in the Work, the Contractor shall provide for such use by suitable legal agreement with the patentee or owner. The Contractor shall assume all costs arising from the use of patented materials, equipment, devices, or processes used on or incorporated in the Work. The Contractor shall defend, indemnify, and save harmless the Owner, the Casino Licensee, any affected third party, or political subdivision (the "Indemnitees") from any and all claims for infringement by reason of the use of any such patented design, device, material, or process, or any trademark or copyright, and shall indemnify the Indemnitees for any costs, expenses, and damages which it may be obliged to pay by reason of an infringement, at any time during the performance of the Work or after Acceptance.

#### **01360.6 Public Convenience and Safety.**

The Contractor shall at all times conduct the Work to ensure the least possible obstruction to traffic in right-of-ways. The safety and convenience of the general public along the Project Area, and the protection of persons and property shall be provided for as specified under applicable laws and regulations.

The Contractor shall exercise precaution at all times for the protection of persons and property. The safety provisions of applicable laws, OSHA regulations, international building and construction codes, and the rules and regulations of the New Jersey Department of Labor shall be observed at all times.

#### **01360.7 Barricades and Warning Signs.**

In public right-of-ways, the Contractor shall provide, erect, and maintain all necessary barricades, suitable and sufficient lights, danger signals, signs, and other devices according to applicable laws and regulations, and shall take all necessary precautions for the protection of the Work and safety of the public. Within the Project Area, the Contractor shall take all necessary precautions to mitigate public access during non-working hours.

#### **01360.8 RESERVED**

#### **01360.9 Independent Contractor.**

The relationship of the Contractor to the Owner is that of an independent contractor, and Contractor, according to its status as an independent contractor, covenants and agrees that it shall conduct itself consistent with such status, that it shall neither hold itself out as nor claim to be an officer or employee of the Owner by reason hereof. The Contractor shall not, by reason hereof, make any claim, demand, or application to or for any right or privilege applicable to an officer or employee of the Owner, including, but not limited to, workers compensation coverage, unemployment insurance benefits, social security coverage, or retirement membership or credit.

#### **01360.10 Third Party Beneficiary Clause.**

It is specifically agreed between the parties executing the Contract that no provision of the Contract is intended to make the public or any member thereof a third party beneficiary hereunder, or to authorize anyone not a party to the Contract to maintain a suit for personal injuries or property damage pursuant to the terms or provisions of the Contract.

It is the further intent of the Owner and the Contractor in executing the Contract that no individual, firm, corporation, or any combination thereof, that supplies materials, labor, services, or equipment to the Contractor for the performance of the Work becomes thereby a third party beneficiary of the Contract.

#### **01360.11 Assignment of Contract Funds and Claims.**

The Contractor shall not transfer or assign to any party any contract funds, due or to become due, or claims of any nature it has against the Owner, without the written approval of the Owner having first been obtained.

#### **01360.12 Risks Assumed by the Contractor.**

The Contractor assumes the following distinct and several risks, whether they arise from acts or omissions, whether negligent or not, of itself, its subcontractors, suppliers, materialmen, employees, agents, and all others working for the Contractor on the Project, and whether such risks are within or beyond the control of the Contractor as described in Subparts 1 through 4 below. The risks are as follows:

- 1. Risks of Loss or Damage to the Permanent Construction.** Until Acceptance, and within the limits of the Project Area, the Contractor shall bear the risk of all loss or damage to all permanent construction and temporary construction performed under this Contract and to materials, whether or not it has received payment for such construction or materials. The Contractor shall take every precaution, as allowed by the Contract against injury or damage to any part of the construction or

to materials and equipment by the action of the elements, the traveling public, vandalism, or from any other cause, whether arising from the execution or the non-execution of the Work. The Contractor shall promptly repair, replace, and make good any such damage or loss without cost to the Owner. The Contractor shall not bear such risk of loss or damage, which arises from acts of war or floods, tidal waves, earthquakes, cyclones, tornadoes, hurricanes, or other cataclysmic natural phenomenon unless such loss or damage is covered by insurance.

The Contractor shall, in furtherance of the above paragraph, but not by way of limitation, at the Contractor's expense, erect such temporary structures where necessary to protect the Work from damage. The Contractor shall assume the risks for failure to take such actions.

In case of suspension of the Work from any cause whatever, the Contractor shall continue to be responsible for the Project as provided above and shall take such precautions as may be necessary to prevent damage to the Project, and shall erect any necessary temporary structures, signs, or other facilities. If ordered by the Engineer, the Contractor shall properly store, during such suspension of the Work, materials which have been partially paid for or furnished by the Owner. The Owner will be entitled to the possession of such materials, and the Contractor shall promptly return the same to the Project site when requested. The Contractor shall not dispose of any of the materials so stored except on written authorization. The Contractor shall be responsible for the loss of or damage to such materials.

2. **Risks of Claims on Account of Injury, Loss, or Damage.** The Contractor shall bear the risk of claims, just or unjust, by third persons, including, without limitation, the Property Owners, made against the Contractor or the Owner, on account of injuries (including wrongful death), loss, or damage of any kind whatsoever arising or alleged to arise out of or in connection with the performance of the Work, except if the injury, loss or damages is caused by or results from the sole negligence of the Owner. The risk of claims, whether or not actually caused by or resulting from the performance of the Work or out of or in connection with the Contractor's operations or presence at or in the vicinity of the Project Area or Owner premises, whether such claims are made and whether such injuries, loss, and damages are sustained, applies at any time both before and after Acceptance.
3. **Risks of Loss to Property of Those Performing the Work.** The Contractor shall bear the risk of loss or damage to any property of the Contractor, and of claims made against the Contractor or the Owner for loss or damage to any property of subcontractors, materialmen, workers, and others performing the Work, and to Property Owners or Tenants. Said risk occurs at any time before completion of removal of such property from the Project Area or the Owner's premises, or the vicinity thereof.
4. **Risks of Claims Related to the Contractor's Safety and Health Program.** The Contractor shall bear the risk of any action from or alleged to arise from the Contractor's Safety and Health Program.

The Contractor shall indemnify and save harmless the Owner from any and all claims or alleged claims described in Subsections 2, 3, and 4 herein-above, and for all expense incurred by the Owner in the defense, including legal and related costs, settlement, or satisfaction thereof. If so directed, the Contractor shall at its own expense defend against such claims, in which event it shall not, without obtaining express advance permission from the Owner, raise any defense involving in any way jurisdiction of the tribunal, immunity of the Owner, or the provisions of any statutes respecting suits against the Owner.

The provisions of this Subsection are also for the benefit of the Casino Licensee, and all officers, agents, and employees of the Owner and Casino Licensee so that they have all the rights which they would have

under this Subsection if they were named at each place under this Subsection at which the Owner is named, including a direct right of action against the Contractor to enforce the foregoing indemnity.

Neither Acceptance nor the making of final payment releases the Contractor from its obligations under this Subsection. Moreover, neither the enumeration in this Subsection nor the enumeration elsewhere in this Contract of particular risks assumed by the Contractor or of particular claims for which it is responsible shall be deemed:

1. To limit the effect of the provisions of this Subsection or of any other provision of the Contract relating to such risks or claims, or
2. To imply that the Contractor assumes or is responsible for risks or claims only of the type enumerated in this Subsection or in any Contract, or
3. To limit the risks that the Contractor would assume or the claims for which the Contractor would be responsible in the absence of such enumerations.

The Contractor expressly understands and agrees that any insurance protection required by the Contract, or otherwise provided by the Contractor, in no way limits the Contractor's responsibility to defend, indemnify, and save harmless the Owner as herein provided. Such insurance requirements are designed to provide greater assurance to the Owner that the Contractor is financially able to discharge its obligations under this Subsection and as to the risks assumed elsewhere in the Contract, and are not in any way construed as a limitation on the nature and extent of such obligations.

#### **01360.13 Personal Liability of Officers, Members and Agents of Owner.**

As between the Contractor and Owner, there shall be no liability upon the members, directors, officers, employees, and any other designated agent or representative, either personally or as officials of the Owner in carrying out any of the provisions of the Contract nor in exercising any power or authority granted to them by or within the scope of the Contract, it being understood that in all such matters they act solely as agents and representatives of the Owner.

#### **01360.14 Recovery of Monies by the Owner.**

Whenever it is provided in the Contract Documents that the Owner or Engineer is to withhold or deduct money from any monies due or that may become due the Contractor, or that the Contractor is to pay or return monies for any reason, or that the Owner or Engineer can charge against the Contractor certain costs or assessments, or that the Owner or Engineer can recover any sum for any reason from the Contractor, it is understood that the Owner has available to it any monies due or that may become due the Contractor under the Contract and on other contracts between the Contractor and the Owner. Such other contracts shall include joint ventures in which the Contractor is a participant but only to the extent of its participation. The right to recover against the Contractor as herein provided is in addition to and does not affect the right of the Owner to seek recovery against the Contractor or Surety under the Contract, bonds, or as otherwise allowed by law. The Engineer shall provide the Contractor with sufficient documentation to reasonably outline the basis for such withholding or deduction prior to the Owner withholding or deducting any such sums, as provided under the Contract.

#### **01360.15 No Waiver of Legal Rights.**

Notwithstanding any other provision of the Contract and provided that the Owner has conducted a diligent review of Contractor invoices during the prosecution of the Project, for a period of six months after Acceptance, all estimates and payments made pursuant to Section 01200, including the Final Certificates and Final Payment, are subject to correction and adjustment for clerical or other errors in the calculations involved in the determination of quantities and payments. The Contractor and the Owner agree to pay to the other any sum due under the provisions of this Subsection, provided, however, if the total sum to be paid is less than \$100, payment will not be made.

A waiver on the part of the Owner of any breach of any part of the Contract is not to be held as a waiver of any other or subsequent breach.

The Contractor, without prejudice to the terms of the Contract, shall be liable to the Owner at any time both before and after Acceptance for latent defects, fraud, such gross mistakes as may amount to fraud, or actions affecting the Owner's rights under any warranty or guarantee.

#### **01360.16 Limitations of Liability.**

In any event, whether under the provisions of the Contract, as a result of breach of contract, tort (including negligence), or otherwise, the Owner and the Contractor will not be liable to each other for any special, consequential, incidental, or penal damages including, but not limited to, loss of profit or revenues, loss of rental value for contractor-owned equipment, damages to associated equipment, cost of capital, or interest of any nature, loss of use, loss of business, loss of reputation, loss of management or employee productivity or of the services of such persons, principal office expense including the compensation of personnel stationed there, and loss of financing. Nothing in this Subsection shall be deemed to preclude an award of liquidated direct damages, when applicable, in accordance with the requirements of the Contract Documents. Nothing in this Subsection shall be deemed to preclude or limit in any way the Contractor's liability for direct or indirect claims for injury, loss or damages of any kind whatsoever asserted by third party owners of property adjacent to or in the Project Area, including, without limitation the Property Owners, except if the claimed injury, loss or damage is caused by or results from the sole negligence of the Owner.

#### **01360.17 RESERVED**

## **01400 Quality Requirements**

### ***01420 References***

All materials, products and work methods shall meet industry best practice standards and applicable regulatory requirements of contractors performing similar work in the State of the New Jersey.

### ***01450 Quality Control - Work***

#### **01450.1 Authority of the Engineer.**

The Engineer will decide all questions that may arise as to the quality and acceptability of the Work and as to the rate of progress of the Work, all questions that may arise as to the interpretation of the Contract Documents, all questions as to the acceptable fulfillment of the Contract on the part of the Contractor, and all questions as to compensation. All questions as to the interpretation of the Contract Documents shall be submitted to the Engineer in writing.

The Engineer has the authority to suspend the Work wholly or in part pursuant to 01310.13 or 01310.14 and to suspend partial payments under Subsection 01290.3 due to the failure of the Contractor to correct conditions unsafe for the workers or the general public, for failure to carry out provisions of the Contract, or for failure to carry out orders. The Engineer may also suspend the Work wholly or in part for such periods as deemed necessary due to unsuitable weather, for conditions considered unsuitable for the prosecution of the Work, or for any other condition or reason deemed to be in the Owner's interest.

#### **01450.2 Communications.**

Unless otherwise directed, all communications with the Owner shall be sent to the Engineer. Where communications are directed to persons other than the Engineer, a clear copy shall be sent to the Engineer.

### **01450.3 Plans and Specifications.**

The Plans consist of general drawings and show such details as are necessary to give a comprehensive idea of the construction contemplated. The Contractor shall keep one set of Plans available on the Project site at all times. All alterations affecting the requirements and information given on the Plans will be authorized in writing.

Omissions from the Plans or Specifications of details of Work which are manifestly necessary to carry out the intent of the Contract Documents, or which are customarily included, shall not relieve the Contractor from including such omitted details of Work, but they shall be included as if fully and correctly set forth and described.

The Contractor will receive two (2) copy of the latest Project Manual and three (3) sets of Drawings.

### **01450.4 Reserved.**

### **01450.5 Conformity with Contract Documents.**

In the event the Engineer finds the Work not in conformance with the Contract Documents but that reasonably acceptable Work has been produced, the Engineer will determine if the Work is to be accepted and remain in place. In this event, the Engineer will document the basis of the acceptability of the Work and provide for an appropriate adjustment in the contract price for such Work as deemed necessary. If an appropriate adjustment cannot be negotiated, the Work shall be removed and replaced or otherwise corrected at no cost to the Owner.

In the event the Engineer finds the Work not in conformance with the Contract Documents, resulting in an inferior or unsatisfactory product, the Work shall be removed and replaced or otherwise corrected at no cost to the Owner.

Neither the observations of the Engineer in the administration of the Contract, nor inspections, tests, or approvals by persons other than the Contractor relieve the Contractor from its obligation to perform the Work according to the Contract Documents.

### **01450.6 Special Inspection, Testing, or Approval.**

Whenever the Engineer considers it necessary or advisable to ensure the proper implementation of the Contract Documents, the Engineer has authority to require special inspection or testing of the Work in addition to that required elsewhere in the Contract Documents, whether or not such Work is then fabricated, installed, or completed. However, neither the Engineer's authority to act under this Subsection, nor any decision made by the Engineer either to exercise or not to exercise such authority, creates a duty or responsibility of the Engineer to the Contractor, any subcontractor, or any of their agents or employees performing any of the Work.

If after commencement of the Work the Engineer determines that any Work requires special inspection, testing, or approval not provided for elsewhere in the Contract Documents, the Engineer will perform such inspection, testing, or approval using Owner facilities, by contracting with others for such services, or by instructing the Contractor by Construction change directive to order special inspection, testing, or approval. If such special inspection or testing reveals a failure of the Work to comply with the requirements of the Contract Documents or, with respect to the performance of the Work, with laws, ordinances, rules, regulations, or orders of any public authority having jurisdiction, the Contractor shall bear all costs thereof, including the Engineer's additional services made necessary by such failure. If tests reveal no such failure, the Owner will bear such costs, and a Supplementary Agreement will be negotiated.

### **01450.7 Coordination of Contract Documents.**

The Contract Documents are essential parts of the Contract, and a requirement occurring in one is as binding as though occurring in all. They are intended to be complementary and to describe and provide for a functionally complete Project.

In case of discrepancy, calculated dimensions will govern over scaled dimensions; Specifications will govern over Plans. Division 1 and Division 2 terms and conditions in the Contract will prevail over conflicting Division 1 and Division 2 terms and conditions contained in the Plans.

As the Work progresses, it is anticipated that the Contractor shall frequently request information from the Engineer relative to the interpretation and coordination of the Contract Documents. Such applications shall be in writing. Should it appear that the Work to be done or any of the matters relative thereto are not sufficiently detailed or explained in the Contract Documents, the Contractor shall request from the Engineer such further explanations as may be necessary and shall conform to them as part of the Contract.

Both parties realize that in performing the Work, field conditions may require modifications in the Plans and quantities of Work involved. Work under all Pay Items must be carried out to meet these field conditions to the satisfaction of the Engineer and according to its directions and the Contract Documents.

The Contractor shall not take advantage of any apparent error or omission in the Contract Documents. In the event the Contractor discovers any discrepancy, error, or omission in the Plans, Specifications, or other Contract Documents, or if there is any doubt or question as to the intent or meaning of the Plans, Specifications, or other Contract Documents, the Contractor shall immediately notify the Engineer in writing. The Engineer will promptly make, in writing, such corrections and interpretations as deemed necessary.

### **01450.8 Cooperation by Contractor.**

The Contractor shall give the Work the constant attention necessary to facilitate the progress thereof, and shall cooperate with the Engineer, the Engineer's inspectors, and other contractors in every way possible.

When the Contractor is comprised of two or more persons, firms, partnerships, or corporations functioning on a joint venture basis, said Contractor shall designate in writing, before starting Work, the name of one individual who shall have the authority to represent and act for the joint venture.

The Contractor shall designate in writing before starting Work, a competent, English-speaking superintendent capable of reading and thoroughly understanding the Contract Documents, and thoroughly experienced in the type of construction being performed. The superintendent shall have the authority to represent and act for the Contractor. An alternate to the superintendent, with equal authority and qualifications, may also be designated.

The superintendent or the alternate shall be present at the site of the Project at all times while Work is actually in progress on the Contract irrespective of the amount of Work subcontracted. The superintendent or the alternate shall have full authority to execute orders or direction from the Engineer, without delay, and to promptly supply such materials, equipment, tools, labor, and incidentals as may be required. When Work is not in progress and during periods when Work is suspended, arrangements acceptable to the Engineer shall be made for any emergency Work that may be required.

Whenever the superintendent or the alternate is not present on the site or at the location of any particular part of the Work where it may be desired to give direction, the Engineer may suspend all of the Work or the particular Work in reference until the superintendent or the alternate is present. Such suspension shall not be the basis of any claim against the Owner.

### **01450.9 RESERVED.**

#### **01450.10 Cooperation Between Contractors.**

The Owner reserves the right at any time to contract for and perform other or additional work in, on or near the Project Area.

When separate contracts are let within the limits of the Project Area, or in areas adjacent thereto, the Contractor shall conduct its Work so as not to interfere with or hinder the progress or completion of the work being performed by other contractors. Moreover, the Contractor assumes the positive obligation of cooperating with such other contractors and coordinating its activities with theirs. If there is a difference of opinion as to the respective rights of the Contractor and others doing work within the limits of or adjacent to the Project Area, the Engineer will decide as to the respective rights of the various parties involved in order to secure the completion of the Owner's Work in general harmony and in a satisfactory manner. The decision of the Engineer is final and binding and is not cause for claims by the Contractor for additional compensation.

The Contractor shall assume all liability, financial or otherwise, in connection with its Contract, and, provided that Owner affords reasonable access to the Project Area during the Contract Time, hereby waives any and all claims against the Owner for additional compensation that may arise because of inconvenience, delay, or loss experienced by it because of the presence and operations of other contractors working within the limits of or adjacent to the Project Area.

The Contractor shall arrange its Work and shall place and dispose of the materials being used so as not to interfere with the operation of the other contractors within the limits of the Project Area or adjacent thereto. The Contractor shall join its Work with that of the others in an acceptable manner and shall perform it in proper sequence to that of the others.

The Contractor is not responsible for damage to Work performed on the Contract or on other contracts within or adjacent to the site of the Project that may be caused by or on account of the work of other contractors. The Contractor is responsible for any damage done or caused by its Work or forces to the work performed by other contractors within or adjacent to the site of the Project, and the Contractor shall repair or make good any such damage in a manner satisfactory to the Engineer and at no cost to the Owner.

The provisions of this Subsection also apply to utilities and their contractors working in the Project Area or adjacent thereto.

#### **01450.11 RESERVED.**

#### **01450.12 Authority and Duties of the Engineer.**

As the direct representative of the Owner, the Engineer has immediate charge of the technical details of the Project. The Engineer is responsible for the administration of the Contract. This responsibility includes the authority to reject defective material and to suspend any or all of the Work according to Subsection 01310.13 and 01310.14.

#### **01450.13 Duties of the Inspector.**

Inspectors employed by the Engineer are authorized to inspect all Work. Such inspection may extend to all or any part of the Work and to the preparation, fabrication, or manufacture of the materials to be used. The inspector is not authorized to alter or waive the provisions of the Contract. The inspector is not authorized to issue instructions contrary to the Contract Documents or to act as foreman for the Contractor; however, the inspector has the authority to reject Work subject to confirmation by the Engineer.

#### **01450.14 Inspection of Work.**

Each part or detail of the Work is subject to inspection by the Engineer. The Engineer shall be allowed access to all parts of the Work and shall be furnished with such information and assistance by the Contractor

as is required to make a complete and detailed inspection. When the Engineer is in or about the site of the Work in the course of its duties, the Engineer is deemed conclusively to be an invitee of the Contractor. If the Contractor is not the owner of the place where fabrication, preparation, or manufacture is in progress, the owner thereof shall be deemed to be the agent of the Contractor with respect to the obligation assumed hereunder. The Contractor or its agent shall be responsible for the payment of claims for injuries to the Engineer due to negligence on the part of the Contractor or its agent.

At the direction of the Engineer, the Contractor, at any time before Acceptance, shall remove or uncover specified portions of the finished Work that the Engineer had previously inspected. After examination, the Contractor shall restore said portions of the Work to the standard required by the Contract Documents. Should the Work so exposed or examined prove acceptable, the uncovering, or removing, and the replacing of the covering, or making good of the parts removed, will be paid for as Extra Work; however, should the Work so exposed or examined prove unacceptable, the uncovering, or removing, and the replacing of the covering, or making good of the parts removed, will be at no cost to the Owner.

The Engineer may order any Work done without the Engineer's inspection to be removed and replaced at the Contractor's expense. Payment for the Work will be made and the uncovering, or removing, and the replacing of the covering, or making good of the parts removed, of the un-inspected Work will be paid for as Extra Work only if all of the following conditions are met:

1. The Work removed, uncovered, and/or replaced proves to have been acceptable according to the Contract Documents; and
2. The Contractor gave reasonable notice in writing to the Owner that the un-inspected work was to be performed; and
3. The Contractor, in performing the un-inspected work, did not do so in the face of a directive from the Owner that such work not be performed.

The Contractor is responsible for carrying out the provisions of the Contract at all times and for control of the quality of the Work regardless of whether an authorized inspector is present or not. This obligation to perform the Work according to the Contract Documents is not relieved by the observations of the Engineer in the administration of the Contract, nor by inspections, tests, or approvals by others. Work not meeting the Contract requirements shall be made good, and unsuitable Work may be rejected, notwithstanding that such Work had been previously inspected and approved by the Engineer or that payment therefor has been included in a monthly estimate certificate.

#### **01450.15 Removal of Unacceptable and Unauthorized Work.**

All Work that does not conform to the requirements of the Contract is unacceptable unless otherwise determined acceptable under the provisions in Subsection 01450.5 (Conformity with Contract Documents). Unacceptable Work, from any cause, found to exist before Acceptance, shall be remedied in an acceptable manner at no cost to the Owner

Work done contrary to the instructions of the Engineer, or any Extra Work done without authority is considered as unauthorized and will not be paid for under the provisions of the Contract. Work so done may be ordered remedied at no cost to the Owner.

If the Contractor fails to comply promptly with any order of the Engineer made under the provisions of this Subsection, the Engineer will have authority to cause unacceptable Work to be remedied by others and to deduct the costs thereof from any monies due or that may become due the Contractor.

#### **01450.16 Load Restrictions.**

Within or on Roadways used for transportation of Equipment the operation of Equipment of such weight or so loaded as to cause damage to structures or the Roadway or to any other type of construction will not be permitted. In no case shall legal load limits be exceeded when Equipment is used for hauling to and

from the Project Area unless permitted in writing by the appropriate governmental authorities. The Contractor shall be responsible for all damage done by it or its subcontractors' hauling Equipment.

Without limiting any other obligation set forth in the Contract, the Contractor shall be solely responsible for complying with legal load limits.

If the Engineer becomes aware of repeated violations of roadway load limits, the Engineer may suspend operations until the condition is remedied to the satisfaction of the Engineer. The Owner may not make payment for any Materials in excess of the legal truck load limit.

#### **01450.17 Maintenance During Construction.**

Except as provided for below, the Contractor shall be responsible for maintenance within the Project Area until Acceptance. This maintenance shall consist of continuous and effective work prosecuted day by day, with adequate Equipment and forces to the end that the Project Area, surroundings, Roadways, shall be kept in satisfactory condition at all times.

On any section of haul route used on paved or unpaved roadways, whether provided for in the Contract Documents or opened as directed, any damage to the roadways due to the Contractor's operations shall be repaired at no cost to the Owner. Nothing in this Subsection shall be construed to limit or change the risks assumed by the Contractor pursuant to 01360.12.

#### **01450.18 Failure to Maintain Project Area and Surroundings.**

If the Contractor at any time fails to comply with the provisions of Subsection 01450.17, the Engineer will immediately notify the Contractor of such noncompliance. If the Contractor fails to remedy unsatisfactory maintenance within 24 hours after receipt of such notice, the Engineer may proceed to maintain the Project and deduct the entire cost of this maintenance from any monies due or that may become due the Contractor.

#### **01450.19 Partial Acceptance.**

If at any time during the prosecution of the Project the Contractor completes a unit or portion of the Project, the Contractor may request the Engineer to make final inspection of that unit. If the Engineer finds upon inspection that the unit has been satisfactorily completed in compliance with the Contract, the Engineer may accept that unit as being completed, and the Contractor may be relieved of the responsibility of doing further Work on or maintaining that unit or portion of the Project. The Engineer reserves the right to reject the request made by the Contractor, if the Engineer determines that the unit or portion of the Project should not be the subject of a partial acceptance. Such partial acceptance shall in no way void or alter any of the terms of the Contract, including Subsections 01360.12 (Risks Assumed by the Contractor) and Subsection 00620 (Insurance), nor shall it be construed as relieving the Contractor of full responsibility for making good defective work or materials found at any time before Acceptance pursuant to Subsection 01450.21 (Completion and Acceptance).

#### **01450.20 Substantial Completion.**

When the Contractor determines that the Work is substantially complete, the Contractor shall prepare a written notice thereof for submission to the Engineer listing the items remaining to be completed or corrected. The failure to include any items on such list does not alter the responsibility of the Contractor to complete all Work according to the Contract Documents. If the Engineer determines that the Work is substantially complete, the Engineer will then prepare a letter which states the date of Substantial Completion and establishes a reasonable time within which the Contractor shall perform the final cleanup and repair unacceptable Work, which time may be before Contract Time as modified. The letter will be submitted to the Contractor for its prompt compliance therewith.

If, however, the inspection discloses that the Work is not substantially completed to the Engineer's satisfaction, the Engineer will give the Contractor the necessary instructions for completion and correction

of same, and the Contractor shall immediately comply with and execute such instructions. Upon completion and correction of the Work, the Contractor shall re-notify the Engineer and another inspection will be made.

#### **01450.21 Completion and Acceptance.**

Upon receipt by the Engineer of written notice from the Contractor that the Work has reached Completion and is ready for final inspection and Acceptance, the Engineer will promptly make such inspection. When such inspection indicates that the Work is in compliance with the Contract, the Engineer will promptly begin the process to issue a Certificate of Completion stating that, to the best of the Engineer's knowledge, information, and belief, and on the basis of observations and inspections, the Work has been completed according to the terms and conditions of the Contract. If, however, the final inspection discloses that the Work has not reached Completion, the Engineer will give the Contractor the necessary instructions for the correction of deficiencies, and the Contractor shall immediately comply with and execute such instructions. Upon correction of the deficiencies, the Contractor shall re-notify the Engineer, and another inspection will be made. This procedure is to be repeated until a Certificate of Completion is issued.

At the request of the Contractor, the Engineer may issue a Certificate of Completion without receiving all required documents, certificates, or proofs of compliance. The Contractor's request must satisfactorily establish that the Contractor could not reasonably and in good faith provide some of the required documents, certificates, or proofs of compliance at a time contemporaneous with Completion and with the Project being ready for use by the Property Owners to the degree contemplated by the Contract. In such instances where a Certificate of Completion is issued, the Contractor shall expeditiously attempt to provide the exempted document, certificate, or proofs of compliance. Final payment will not be made, however, until all such documents, certificates, and proofs of compliance have been satisfactorily executed and delivered to the Engineer.

The Certificate of Completion is issued establishing Completion as of the date of the notice or re-notice from the Contractor. If the Owner concurs in the Certificate of Completion, the Contractor will be notified of Acceptance and the date thereof.

After Acceptance, the Contractor is relieved of the duty of maintaining and protecting the Work as a whole, and is not required to perform any further Work thereon. In addition, the Contractor is relieved of its responsibility for damage to the Work that may occur after Acceptance. However, nothing herein shall be construed to limit the provisions of 01360.12 (Risks Assumed by the Contractor), 00620 (Insurance), 01360.15 (No Waiver of Legal Rights), and 01290.10 Warranty Against Defective Work).

#### **01451      *Quality Control - Materials***

##### **01451.1 Source of Supply and Quality Requirements.**

All Materials for the Project shall be furnished by the Contractor and shall be new, unless otherwise specifically prescribed in the Contract Documents. The Materials shall conform to the requirements of the Contract Documents and shall be from approved sources. Only Materials that have been approved by the Engineer shall be used.

Within 12 hours after receiving a shipment of Materials, the Engineer shall be notified of the kind, size, quantity, and location thereof.

In any item of construction, the sources, brands, or types of Materials shall not be changed without the consent of the Engineer. Request for such changes shall be filed with the Engineer the number of days in advance of such changes as required above. The request shall state the name and address of the owner, the location of the proposed source, the method of shipment, and the intended use of the Material.

The foregoing provisions shall apply with regard to requests by subcontractors for the sources of the Materials they propose to use, such requests to be submitted through the Contractor.

The notice provisions of this Subsection shall not be so construed as to relieve the Contractor of its obligation to ensure that all Materials required for the construction of the Project shall be available at the time and place necessary for their incorporation into the Work in order that the completion date set forth in Subsection 01310.10 is met. If any doubt exists as to the timely availability of any material, the Engineer shall be immediately informed, in writing, of the potential problem and of the action to be taken to guarantee the availability of such material. Stockpiles of materials whose availability is or may be problematical shall be established at an early date.

#### **01451.2 RESERVED**

#### **01451.3 Materials, Inspections, Tests, and Samples.**

All Materials will be inspected, tested (where applicable), and approved before incorporation in the Work. Unapproved Materials may be used only with written permission of the Engineer. In the absence of such written permission, unapproved materials will not be paid for and shall be removed at no cost to the Owner.

All Materials being used are subject to inspection, testing, or rejection at any time before Acceptance.

Nothing in this Subsection shall be construed to limit the right of the Engineer to order special inspection or tests as provided in Section 01450.6.

Except as otherwise provided, all Materials will be tested at the expense of the Contractor.

Certain materials as specified will be accepted on the basis of Certifications of Compliance according to 01451.4.

Samples shall be required whenever, in the opinion of the Engineer, additional tests are required to determine the quality and suitability of Materials for their respective uses.

#### **01451.4 Certification of Compliance.**

Materials will be accepted on the basis of Certificates of Compliance stating that such materials fully comply with the requirements of the Contract. The Engineer must approve the form of Certificates of Compliance.

Materials used on the basis of Certificates of Compliance may be sampled and tested at any time. Materials, if found not to be in conformance with Contract requirements, will be rejected whether in place or not. The Contractor shall require the manufacturer or supplier to furnish two copies of Certificates of Compliance with each delivery of Materials and manufactured items that are acceptable by certification. One copy shall be furnished to the Engineer and one copy shall be retained by the Contractor.

Certificates of Compliance shall contain the following information:

1. Project to which the material is consigned.
2. Name of the Contractor to which the material is supplied.
3. Kind of material supplied.
4. Quantity of material represented by the certificate.
5. Means of identifying the consignment, such as label marking, seal number, etc.
6. Date and method of shipment.
7. Statement that the material has been tested and found in conformity with the pertinent Contract requirements stated in the certificate.
8. Signature of a person having legal authority to bind the supplier.
9. Signature attested to by a notary public or other properly authorized person.

Payments will not be made for Materials specified to be accepted on the basis of Certificates of Compliance until the Engineer has received the required Certificate of Compliance.

## **01451.5 Product requirements.**

### **01451.5.1 PRODUCTS**

Products: Means new material, machinery, components, equipment, fixtures, and systems forming the Work, but does not include machinery and equipment used for preparation, fabrication, conveying and erection of the Work. Products may also include existing materials or components specifically identified for reuse.

Do not use materials and equipment removed from existing premises, except as specifically identified or allowed by the Contract Documents.

Provide interchangeable components of the same manufacture for components being replaced.

### **01451.5.2 PRODUCT OPTIONS**

Products Specified by Reference Standards or by Description Only: Any Product meeting those standards or description.

Products Specified by Naming One or More Manufacturers: Products of manufacturers named and meeting specifications, no options or substitutions allowed.

Products Specified by Naming One or More Manufacturers with a Provision for Substitutions: Submit a request for substitution for any manufacturer not named.

### **01451.5.3 PRODUCT DELIVERY, STORAGE AND HANDLING REQUIREMENTS**

Transport, handle, store, and protect Products in accordance with manufacturer's instructions.

**01451.6 RESERVED.**

**01451.7 RESERVED.**

**01451.8 RESERVED.**

**01451.9 Storage and Handling of Materials.**

Materials shall be stored to ensure the preservation of their quality and fitness. Stored Materials, even though approved before storage, may again be inspected before their use on the Project. Stored Materials shall be located so as to facilitate their prompt inspection. The Contractor shall be responsible for obtaining locations for storage of equipment and materials. Materials shall be handled to ensure the preservation of their quality and fitness.

**01451.10 Unacceptable Materials.**

All Materials, whether in place or not, which do not conform to the requirements of the Contract Documents shall be considered as unacceptable, and such materials will be rejected and shall be removed immediately from the site of the Work unless otherwise directed. Rejected material, the defects of which have been corrected, shall not be used until approval has been given.

## **01451.11 RESERVED.**

### **01451.12 Substitutes or “Or Equal” Items.**

Whenever Materials or Equipment are specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular supplier, the naming of the item is intended to establish the type, function, and quality required. Unless the name is followed by words indicating that no substitution is permitted, materials or equipment of other suppliers may be accepted if sufficient information is submitted by the Contractor to allow the Engineer to determine that the material or equipment proposed is equivalent or equal to that named. Requests for review of substitute items of material or equipment will not be accepted from anyone other than the Contractor. If the Contractor wishes to furnish or use a substitute item of material or equipment, the Contractor shall make written application to the Engineer for approval thereof, certifying that the proposed substitute performs adequately the functions and achieves the results called for by the general design, is similar and of equal substance to that specified, and is suited to the same use as that specified. The application shall state that the evaluation and approval of the proposed substitute does not prejudice the Contractor’s achievement of Completion on time. It shall also state whether or not approval of the proposed substitute for use in the Work requires a change in any of the Contract Documents (or in the provisions of any other direct Contract with the Owner for Work on the Project) to adapt the design to the proposed substitute, and whether or not incorporation or use of the substitute in connection with the Work is subject to payment of any license fee or royalty. All variations of the proposed substitute from that specified shall be identified in the application, and available maintenance, repair, and replacement service shall be indicated, as applicable. The application shall also contain an itemized estimate of all costs that result directly or indirectly from approval of such substitute, including costs of redesign, all of which will be considered in evaluating the proposed substitute. The Engineer may require the Contractor to furnish additional data about the proposed substitute.

If a specific means, method, technique, sequence, or procedure of construction is indicated in or required by the Contract Documents, the Contractor may furnish or use a substitute means, method, technique, sequence, or procedure of construction which is acceptable, if the Contractor submits sufficient information to allow the Engineer to determine that the substitute proposed is equivalent to that indicated or required by the Contract Documents. The procedure for review by the Engineer is to be similar to that described in the previous paragraph.

The Engineer is to be allowed a reasonable time within which to evaluate each proposed substitute. The Engineer will be the sole judge of acceptability, and no substitute shall be ordered, installed, or used without an approved cut sheet from the manufacturer. If approval is given, it is on the condition that the Contractor is fully responsible for producing Work in conformity with Contract requirements.

The Contract Sum shall be reduced by Change Order to compensate the Owner for the Cost of the Engineer and his consultants review the merits of the proposed substitution as well as for time to redesign the lighting, power distribution, mounting, and control systems, if required, to accommodate it. The substitution request should also include the cost of any new or extra power or control equipment, or any change in the mounting hardware or any custom-built mounting brackets required to accommodate the proposed substitute.

If, after trial use of the substituted materials, equipment, means, method, technique, sequence, or procedure of construction, the Engineer determines that the Work produced does not meet Contract requirements, the Contractor shall discontinue the use of the substitute and shall complete the remaining Work with the specified materials, equipment, means, method, technique, sequence, or procedure of construction. The Contractor shall remove the deficient Work and replace it as specified, or take such other corrective action as the Engineer may direct. Changes will not be made in the basis of payment for the Pay Items involved, nor in the Contract Time as a result of authorized substitutes. The Engineer may require the Contractor to furnish at no cost to the Owner a special performance guarantee or other surety with respect to any substitute. When the Contract Documents permit the use of more than one type of material, equipment, or product, only one type is to be used throughout the Project.

## **01500 TEMPORARY FACILITIES AND CONTROLS**

### ***01510 Temporary Utilities***

The Contractor shall be solely responsible for the installation, removal and approvals for any temporary utility that the Contractor should require for Project related activities, including but not limited to electric powered generators or pumps (any phase type) and lighting. The costs for purchasing, installing, protecting and obtaining approvals are not to be charged to the Owner and shall be included in the Total Contract Price.

### ***01520 Construction Facilities***

Temporary Sanitary facilities: Provide and maintain chemical type toilet facilities and enclosures. Do not use Owner's existing facilities. Maintain in clean and sanitary condition.

### ***01550 Vehicular Access and Parking***

During the course of the Project, the Contractor shall ensure that all employees' and subcontractors' automobiles are parked in a manner that does not interfere with local traffic, block pedestrian traffic or cause an unsafe situation.

The following provisions augment the requirements of this Subsection: Subsections 01140 (Work Restrictions), 01360 (Additional Legal Provisions), 01450.8 (Cooperation by the Contractor), and 01450.10 (Cooperation between Contractors).

### ***01560 Temporary Security***

If the Contractor requires security from theft or vandalism or to protect the public, such security measures shall be at the Contractors expense. The Contractor acknowledges and agrees that the Owner is not responsible for the damage or theft of any equipment, or injury to the public as a result of the breach or lack of security measures implemented by the Contractor.

### ***01560 Barriers***

The Contractor shall provide barriers to prevent unauthorized entry to construction areas to allow for residents and retail owners and patrons use of the site and to protect existing facilities and adjacent properties from damage from construction operations and demolition. The Contractor will provide barricades and covered walkways required by governing authorities for public rights-of-way.

## **01600 EXECUTION AND CLOSEOUT REQUIREMENTS**

### **01600.1 EXAMINATION**

Verify that existing site conditions and substrate surfaces are acceptable for subsequent Work. Beginning new Work means acceptance of existing conditions.

Verify that services are available, of the correct characteristics and in the correct location.

### **01600.2 PREPARATION**

Clean substrate surfaces prior to applying next material or substance.

Apply manufacturer required or recommended substrate primer, sealer, or conditioner prior to applying new material or substance in contact or bond.

### **01600.3 FIELD ENGINEERING**

Employ an experienced instrument technician to locate a reference datum and protect survey control and reference points.

Establish elevations, lines, and levels and certify that elevations and locations of the Work conform to the Contract Documents.

Verify that field measurements are as indicated on shop drawings or as instructed by the manufacturer.

### **01600.4 EXECUTION - CUTTING AND PATCHING**

Employ a skilled and experienced installer to perform cutting and patching new Work; restore Work with new Products.

Submit written request in advance of cutting or altering structural or building enclosure elements.

Execute cutting, fitting, and patching including excavation and fill, to complete Work, and to: Fit the several parts together, to integrate with other Work.

Uncover Work to install or correct ill-timed Work.

Remove and replace defective and nonconforming Work.

Remove samples of installed Work for testing.

Provide openings in elements of Work for penetrations of mechanical and electrical Work.

Cut masonry and concrete materials using masonry saw or core drill. Restore Work with new Products in accordance with requirements of Contract Documents.

Fit Work tight to adjacent elements. Maintain integrity of wall, ceiling, or floor construction; completely seal voids.

Fit Work tight to pipes, sleeves, ducts, conduit, and other surface penetrations.

Refinish surfaces to match adjacent finishes.

## **01600.5 CLEANING AND WASTE MANAGEMENT**

### **01600.5.1 PROGRESS CLEANING AND WASTE REMOVAL**

Maintain site in a clean and orderly condition. Dispose of all waste in accordance with all governing Federal, State, and Local regulations.

Collect and maintain areas free of waste materials, debris, and rubbish on a daily basis.

### **01600.5.2 FINAL CLEANING**

Execute final cleaning prior to final inspection.

Clean interior and exterior surfaces exposed to view. Vacuum carpeted and soft surfaces.

Clean debris from site, roofs, gutters, downspouts, and drainage systems.

Replace filters of operating equipment.

Remove waste and surplus materials, rubbish, and construction facilities from the site.

## **01600.6 STARTING AND ADJUSTING**

### **01600.6.1 STARTING SYSTEMS**

Provide seven days notification prior to startup of each item.

Ensure that each piece of equipment or system is ready for operation.

Execute start up under supervision of responsible persons in accordance with manufacturers' instructions.

Submit a written report that equipment or system has been properly installed and is functioning correctly.

### **01600.6.2 ADJUSTING**

Adjust operating Products and equipment to ensure smooth and unhindered operation.

## **01600.7 PROTECTING INSTALLED CONSTRUCTION**

### **01600.7.1 PROTECTION OF INSTALLED WORK**

Protect installed Work and provide special protection where specified in individual specification sections.

Prohibit traffic or storage upon waterproofed or roofed surfaces.

## **01600.8 CLOSEOUT SUBMITTALS**

### **01600.8.1 PROJECT RECORD DOCUMENTS**

Maintain on site one set of Contract Documents to be utilized for record documents.

Record actual revisions to the Work. Record information concurrent with construction progress.

Specifications: Legibly mark and record at each Product section a description of actual Products installed.

Record Documents and Shop Drawings: Legibly mark each item to record actual construction.

Submit documents to Engineer/Engineer with final Application for Payment.

### **01600.9 OPERATION AND MAINTENANCE DATA**

Submit two sets prior to final inspection, bound in 8-1/2 x 11 inch text pages, three D side ring binders with durable covers.

Cover: Prepare binder cover with printed title "OPERATION AND MAINTENANCE INSTRUCTIONS" and title of project.

Organization: Internally subdivide binder contents with permanent page dividers, logically organized, with tab titles clearly printed under reinforced laminated plastic tabs.

Contents:

Part 1: Directory, List names, addresses, and telephone numbers of Engineer/Engineer, Contractor, Subcontractors, and major equipment suppliers.

Part 2: Operation and maintenance instructions, arranged by system.

Part 3: Project documents and certificates.

### **01600.10 SPARE PARTS AND MAINTENANCE MATERIALS**

Provide Products, spare parts, maintenance and extra materials in quantities specified in individual specification sections.

Deliver to Project site and place in location as directed; obtain receipt prior to final payment.

**01600.11 WARRANTIES**

Provide duplicate notarized copies.

Execute and assemble transferable warranty documents from Subcontractors, suppliers, and manufacturers. Place in operations and maintenance binder (see I. Above).

Submit prior to final Application for Payment.

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## SCOPE OF WORK

### 1.01 GENERAL

This project consists of the resurfacing of **Convention Boulevard** in the City of Atlantic City in Atlantic County, New Jersey.

In general, the scope of work for this project shall consist of site clearing; traffic control; milling of the existing asphalt surface to a maximum depth of 3"; removal and replacement of deteriorated areas of concrete base course, if and where directed by the engineer; the installation of a Hot Mix Asphalt surface course; the replacement of selective concrete gutter; the replacement or resetting of existing granite curb; the repair of a section of trench drain; the replacement of 2 lighted bollards; the reconstruction and resetting of existing stormwater inlets, the installation of various striping; site restoration; and all other work contained in the Plans and Specifications or directed by the Engineer.

The work also includes traffic control, dust control, soil erosion control, cleaning and restoration. The contractor is responsible for the location of all utilities and to schedule all work involved with utilities. Any cost related to their coordination shall be included in their proposal.

The above scope of work outlines the general items and distribution of work and shall not be construed as being all inclusive. The plans entitled "*Convention Boulevard Resurfacing*" with improvements proposed in the City of Atlantic City, Atlantic County, New Jersey, are appended hereto and are made part of these specifications.

**This project will require electrical restoration work, as part of the bollard replacements, to be completed by a licensed electrician. If the general contractor planning to submit a bid intends to utilize an electrical subcontractor to fulfill this requirement the Subcontractor Declaration form must be completed properly and submitted with the bid. Failure to do so will result in rejection of the submitted bid.**

### 1.02 GENERAL INFORMATION

- A. The contractor shall verify all dimensions and existing conditions in the field prior to the start of construction. Any errors or discrepancies shall be brought to the attention of the Engineer immediately.
- B. The contractor shall be responsible to remove excess unwanted materials from the project site, and dispose of all excess unwanted materials in accordance with all applicable laws and regulations.
- C. Reuse of asphalt millings must be in accordance with the NJDEP Recycled Asphalt Pavement and Asphalt Millings (RAP) Reuse Guidance Document (March 2013). A copy is included in the Appendix.
- D. The Contactor shall obtain all utility markouts and shall be responsible for the location and preservation of all underground and surface utilities and structures at or adjacent to the project site. Any damages shall be repaired or replaced at no additional cost to the Owner. The locations of existing utilities shown on the plans are approximate and must

be verified in the field prior to the start of construction. Any conflicts or discrepancies shall be reported to the Engineer immediately.

- E. The Contractor shall notify the Engineer of any utility conflicts at least seven days in advance of the proposed work. Separate payment will not be made for down time if the Contractor fails to notify the Engineer of any conflicts as described above.
- F. It is the contractor's responsibility to verify all pipe sizes and locations for the purpose of making the necessary connections between existing and proposed facilities. The contractor is strongly advised to dig the necessary test pits to make such determinations. There will be no separate payment for this work.
- G. The Contractor shall restore the site and adjacent properties, at a minimum, to a condition at least equal to that which existed prior to the start of the project. All paved and concrete areas disturbed during construction shall be restored and all grassed areas disturbed during construction shall be fertilized and seeded. No separate payment will be made for this work unless otherwise indicated on the plans.
- H. All fill shall be placed in 12-inch layers and thoroughly compacted to the satisfaction of the Engineer. If borrow fill is required, it shall be subject to the approval of the Engineer.
- I. A baseline has been provided on the plans and established in the field. It shall be the Contractor's responsibility to locate the construction line in accordance with the baseline as shown on the plans.
- J. The Contractor shall contact the Owner prior to the removal of excess material and/or castings from the project site, and if requested, shall deliver the material and/or castings to the Owner's designated site. The Contractor shall dispose of all excess unwanted material and/or castings in an approved manner. No separate payment will be made for the removal, delivery or disposal of excess material or castings.
- K. All right-of-way lines shown on the plans are approximately located based on the most current available municipal tax maps, unless otherwise noted.
- L. Seven days prior to construction, the Contractor shall submit cut sheets indicating the proposed curb grades. If determined by the Engineer to be improperly installed without approved cut sheets, the curb shall be replaced at no additional cost to the Owner.
- M. All road construction work shall be completed in accordance with the Project schedule. The Contractor shall ensure that adequate workmen and equipment are on site to accomplish this, also taking into account for adverse weather conditions and the availability of Hot Mix Asphalt.
- N. The Contractor shall be responsible for the location and preservation of underground and surface utilities and structures, at or adjacent to the site of construction, and shall repair or replace anything that is damaged at no additional cost to the Owner.

- O. The Contractor shall coordinate all utility relocations as required with the applicable utility companies. Separate payment will not be made for utility relocations or coordination.
- P. No separate payment will be made for: Layout; dust control; cleaning and restorations; soil erosion and sediment control; sawcutting or sealing, unless otherwise indicated on the plans; underlayer preparation; prime coat or tack coat; relocation of signs or U.S. mailboxes, unless otherwise indicated on the plans; dewatering; core drilling manholes and inlets; bypass pumping; trench bedding for pipe; elevational adjustments of cleanouts, gas valve boxes, water meter pits, or sprinkler heads; conductors or conduits damaged during construction; or any other structures encountered unless otherwise indicated on the plans.
- Q. Existing roof drains that project through curbs are to remain or be replaced as required and new concrete curb shall be poured around them. Roof drains shall be reset by the Contractor so the invert matches the proposed paving. Separate payment will not be made for resetting roof drains.
- R. Sidewalk and driveway areas shall be maintained in a passable condition at all times.
- S. Where proposed concrete curb abuts proposed concrete sidewalk, proposed concrete gutter, or proposed concrete driveway, the construction method shall be non-monolithic.
- T. The Contractor is responsible for obtaining all construction permits related or necessary to complete the work of this project. It is the Contractor's responsibility to ensure that all work complies with Federal, State and local laws, ordinances, regulations, building codes, etc.
- U. The Contractor shall be responsible for clearing horizontally and vertically to provide for the proposed elevations and adequate clearance above the proposed pavement. The cost of this work shall be included in the pay item "Clearing Site".
- V. All work shall be performed in accordance with the 2019 edition of the New Jersey Department of Transportation Standard Specifications for Road and Bridge Construction, as amended.
- W. No separate payment will be made for the removal or disposal of curb, sidewalk, or driveway. The costs shall be included in the causing pay items.
- X. No separate payment will be made for sawcutting of any kind. The cost for any required sawcutting shall be included in the causing bid items.
- Y. Throughout construction, any trees or stumps interfering with the proposed improvements shall be removed at the discretion of the Engineer. The cost of this work shall be included in the pay item "Clearing Site".
- Z. Where construction is being performed in traveled roadways, the Contractor shall provide necessary traffic controls and devices, in accordance with the current Manual on Uniform Traffic Control Devices, the 2019 edition of the New Jersey Department of

Transportation Standard Specifications for Road and Bridge Construction, and in accordance with local authorities.

- AA. The Contractor shall be responsible for construction layout. Separate payment will not be made for this work.
- BB. If and where certain work requires that existing facilities be removed and reinstalled, the costs for this work shall be included in the causing pay item of the project.
- CC. All bidders shall visit the site prior to bidding and ascertain for themselves the existing conditions, determine the difficulties which will be encountered for a complete job, and include all costs within the various related bid items outlined in this proposal.
- DD. The Contractor is responsible for coordinating the work of all other contractors on the project. Any costs related to this coordination shall be included in the various pay items of the project.
- EE. Global Spectrum L.P. reserves the right to reject or award any or all bids, either in whole or in part, whichever is in the best interest of Global Spectrum L.P.

### 1.03 SPECIAL CONDITIONS

- A. The Contractor shall notify the Engineer 72 hours prior to mobilization.**
- B. The Contractor shall notify all residents and businesses affected by this project with door-hangers at least forty-eight (48) hours in advance of starting construction. Notices shall provide the nature of the work to be performed; anticipated dates, days, and hours of work; and all pertinent information relating to road closures, staging of equipment and materials, limited access to driveways, interruptions in utilities, and other anticipated inconveniences. If, after providing notice, changes are made to the construction schedule or the nature of work to be performed, the Contractor shall provide additional notice in order to keep all affected residents and businesses informed.**
- C. There will be deducted from the contract and retained by the Owner an amount equal to the cost paid by the Owner to the Engineer, for all inspection and contract administration performed in excess of the completion time stipulated for the contract, or as amended by approved change orders.**
- D. Payment will not be made for asphalt price adjustment for any quantity of hot mix asphalt less than 1,000 tons. Payment for fuel price adjustment will only be made for eligible pay items that require 500 or more gallons of fuel during months in which the fuel price index differs from the base index by five percent or more.**
- E. If required, there will be no separate payment for resetting existing castings, including but not limited to stormwater manhole rims and catch basins, Atlantic City Electrical Bureau castings, Atlantic City Sewerage Company castings, Atlantic City Municipal Utilities Authority castings, and monument covers. Contractor shall**

**coordinate all required resetting of castings with the respective utility companies at no cost to the Owner.**

- F. Contractor shall coordinate any water main shutdowns, resetting of water valve boxes, and connections to the water system with the Atlantic City Municipal Utilities Authority at no cost to the Owner.**
- G. Contractor shall coordinate any resetting of sanitary sewer castings, sewer main shutdowns, and any potential sanitary sewer conflicts with the Atlantic City Sewerage Company at no cost to the Owner.**
- H. Delays resulting from inadequate coordination with utility companies during construction will not be considered for time extensions.**
- I. Contractor shall return any existing granite curb that is removed and not reset to the Owner.**
- J. Please note that a third party utility markout will be required prior to the start of construction. Payment for the work will be paid for under Pay Item “3<sup>rd</sup> Party Utility Markout.” A report will be required to be delivered to the owner for the satisfaction of this pay item. The markout will be required to search for all underground detectable utilities within the work area. Trace any utilities for which structures are visible from the work area. Utilities should be marked on the surface using spray paint or other appropriate means.**

1.04 The above Scope of Work outlines the general items and distribution of work and shall not be construed as being all-inclusive.

#### 1.05 ALLOWANCES

- A. The following allowances are included in this contract. The cost of any work to be paid under an allowance shall be approved by the Owner prior to Contractor initiating the work. Any unused allowance monies shall be retained by the Owner.
  - 1. Allowance, General:
    - a. A predetermined allowance to be used if and where directed by the Owner/Engineer.

END OF SCOPE

## SECTION 010000

### GENERAL REQUIREMENTS

#### 1.01 GENERAL

- A. Only major items of work are given in the Bid Form, but it is the intent of the specifications to secure a completely interconnected and functional system, and if any workmanship or materials be required which are obviously necessary to carry out the full intent and meaning of the plans and specifications or to be reasonably inferred therefrom, the cost of such workmanship or materials shall be included in the unit price for the major items of work.
- B. Where construction is being performed in traveled roadways, Contractor is to provide necessary traffic control and devices in accordance with the Current Manual on Uniform Control Devices.
- C. Contractor shall notify all utility companies prior to construction of the work under this contract including the utility "Call Before You Dig" requirement at 1-800-272-1000 for any excavation or asphalt paving work under the contract.
- D. Prior to any excavation, the Contractor shall have all utilities marked, and shall excavate or otherwise determine the exact location and elevations of said utilities. The Contractor shall notify the Engineer of any conflicts. The Contractor shall arrange for any necessary utility relocations or plan changes and shall reschedule his operations appropriately.
- E. The contractor, in the construction of any project, shall not stockpile materials or his equipment on any private property; except areas designated by the plans or as directed by the Engineer. If so required, the Engineer may direct the Contractor to have his equipment removed from any project during weekend hours.
- F. All work of refilling sunken ditches, repaving over trenches and keeping streets and sidewalks in passable condition shall be done to the satisfaction of the owner during the construction of the above work as well as during the maintenance period. If any work is not done within five (5) days after written notice is given by the Engineer, the work may be done by the Owner and charged to the Contractor.
- G. Special care shall be taken to prevent contamination, siltation, or interfering in any way with the stream flows or ponds along the line of work. No waste matter of any kind will be allowed to discharge into the stream flows or impounded water or any ponds or other bodies of water.
- H. The contractor is hereby advised that Public Law 1975, Chapter 251, as amended by P.L. 1979, Chapter 459 is applicable to this project.
- I. It is the intent of the current standards for Soil Erosion and Sediment Control to insure that proper measures for erosion control are employed and provide for the early establishment of vegetation that will help avoid erosion problems during and after construction. It is expected that the contractor will anticipate possible problems and provide timely and adequate control to prevent or minimize adverse effect.

- J. The contractor shall apply and pay for all permits that may be required for any of the work involved with this project. Municipalities or Authorities having an interest or jurisdiction on this project are:

**City of Atlantic City  
Atlantic City Municipal Utilities Authority  
Atlantic City Sewerage Company**

- K. Contractor is to notify residents by door-hangers at least forty-eight (48) hours in advance before starting construction work.
- L. All notes on plans shall be made a part of the specifications.
- M. Contractor shall notify Engineer at least forty-eight (48) hours in advance of any work on Saturdays. There will be no work permitted on Sundays or holidays. This project will receive inspections and the normal working hours for the Inspector are from 8:00 AM to 4:30 PM, Monday through Friday. Any overtime inspection costs which are avoidable will be reimbursed by the contractor.
- N. During the construction of the project, travel lanes shall remain open at all times unless otherwise approved by the Atlantic City Police Department.
- O. Contractor shall take extreme care in the placement of the asphaltic tack coat so as to not make it visible on the concrete curb. It shall be the contractor's responsibility to keep the concrete curb clean of this oil.

#### 1.02 PUBLIC UTILITIES

- A. The bidder is advised to ascertain for himself all the facts concerning the location of existing utilities.
- B. The contractor shall cooperate with the utility owners in the adjustment of their facilities and shall notify the utility owners not less than ten (10) days in advance of the time he proposes to perform any work that will endanger or affect their facilities.
- C. The Contractor shall permit the owners of utilities, or their agents access to the site of the work at all times in order to relocate, construct or protect their lines and he shall cooperate with them in performing this work.
- D. Separate payments will not be made for the coordination and cooperation of the contractor with the utility companies, nor for the protection or replacement of utilities as specified hereinbefore and the bidder shall include all such costs in the prices bid for the various scheduled items in the Bid Form.

#### 1.03 PRE-CONSTRUCTION PHOTOGRAPHS

- A. The Contractor shall, at no extra cost, take DVD or digital photographs of the site prior to the commencement of construction. The DVD or photograph record shall accurately depict the existing preconstruction condition of all curbs, sidewalks, driveways, fences, lawns, landscaped areas, mailboxes, street furniture and all other appurtenances within, or outside a 25 foot radius of the limits of the construction of the project. One (1) copy of the CD photograph record or DVD

shall be provided to the Engineer. The date of all disks, as well as identification as to the location which the records depict, must be provided.

#### 1.04 MAINTENANCE & PROTECTION OF TRAFFIC

- A. The contractor shall erect or place and maintain in good condition, barricades, warning signs, lights, rubber traffic cones, and other warning and danger signals and devices, appropriate and adequate for the specific needs and subject to the Engineer's approval at working sites, closed roads, intersections, open excavations, locations of material storage, standing equipment and other obstructions, at points where the usable traffic width of the road is reduced, and at points where traffic is deflected from its vehicular or pedestrian traffic.
- B. The contractor shall provide sufficient watchmen and traffic directors and shall take all other precautions including any that may be ordered by the Engineer, which are necessary for the safety of the public and protection of the work.
- C. The contractor shall obtain the approval and consent of all appropriate authorities having jurisdiction, for any detours which may be required. The contractor shall make all necessary arrangements with such authorities regarding the establishment, maintenance and repair of such detours, the regulations and direction of traffic thereon, and the installation and maintenance of sign and traffic devices.
- D. Before beginning work on any phase of the project, the contractor shall furnish and install all specified warning signals, barricades, wood traffic guides, lights and other devices necessary, in the opinion of the Engineer, to protect the public during that phase of his operations.
- E. Road construction signs shall be placed at each end of the project along the road for the work along the public road.
- F. During the work on this project, the contractor shall provide and/or be prepared to provide traffic protection devices in accordance with Part VI "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS.", Current Edition. The minimum numbers set forth in the Manual shall be on hand at each separate project site prior to the commencement of any work (or phase of work) and shall be maintained available on the project site throughout the period of the project (or phase). Failure to provide and maintain the minimum number of devices specified in the Manual shall be sufficient cause for the Engineer to order cessation of the work. When lack of any required safety devices presents an immediate hazard, the engineer may order that such devices be provided by the Owner or by other contractors, deducting the cost thereof from any monies due or becoming due the contractor.
- G. Additional devices up to the maximum number set forth in the Manual shall be provided by the contractor as required or directed prior to the commencement of any operation or phase of an operation requiring such devices.
- H. Traffic directors (flagmen) shall be provided whenever alternate two-way traffic is maintained in a single lane, whenever contractor's operations require closing of a lane or portion of a lane on a multiple lane roadway, whenever the contractor's equipment or vehicles are entering or leaving active roadways at other than normal street intersections, whenever a contractor's operations will be contrary to or cause confusion regarding normal traffic control devices (traffic signals, signs, etc.) within a work area and whenever else, in the opinion of the

Engineer, the contractor's operations cause such hazards as to require the use of Traffic Directors.

- I. Traffic Directors shall be responsible and thoroughly familiar with their responsibilities, and while serving as Traffic Directors, shall not be required to perform any other duties. Traffic Directors shall be provided with an orange or red flag, an orange or orange and white traffic safety vest or orange hard hat or other appropriate head gear.
- J. Traffic must be maintained throughout each separate work area during construction. At least one 12' lane must be maintained for traffic during all actual construction periods and at least two lanes must be maintained for traffic at all other times.
- K. The contractor is advised that there is heavy commuter traffic during the morning from 7:30 AM to 9:00 AM and the afternoon from 4:00 PM to 5:30 PM. The contractor shall schedule his construction activity such that he does not interfere or restrict traffic during the above peak hours.
- L. Construction shall be so staged to maintain at least one lane for traffic in each direction throughout each separate work area during the morning, 7:30 AM to 9:00 AM, and the afternoon, 4:00 PM to 5:30 PM weekday periods of peak traffic.
- M. Any restriction of traffic at any time shall be subject to the review of the Engineer and the Police Department having jurisdiction in the work area. The contractor shall submit a schedule of staged construction for review prior to any restriction of traffic.
- N. If detours are proposed by the Contractor, they are to be submitted to the Engineer for review and approval by the Police Department having jurisdiction in the work area and any other agency having jurisdiction of the roadway that will be detoured or roadway that will be used as a detour.
- O. All detour signs shall conform to the requirements for Traffic Control Devices.
- P. Temporary traffic stripes may be necessary to control and guide traffic through individual work areas. The contractor shall submit a scheme for review by the Engineer of all temporary traffic stripes prior to removal of any existing traffic stripes.
- Q. Construction of proposed utilities across existing roadways shall be so staged to maintain one lane in each direction. Trenches shall not remain open overnight.
- R. The contractor shall provide adequate means of access for fire, police and emergency vehicles throughout the length of the project.

#### 1.05 TEMPORARY PAVING FOR ALL TRENCHES

- A. Description - 2" thick temporary paving shall be in accordance with the plans and specifications and to the prescribed lines and grades. Temporary paving replacement shall include necessary excavation. There shall be no separate payment for temporary paving.
- B. Materials - Materials shall conform to the New Jersey Department of Transportation Standard Specifications for Road and Bridge Construction 2019 and/or as amended by these contract specifications.

- C. Contractor shall submit to Engineer, in triplicate, reports on materials used, attesting to the fact that said materials conform with these specifications of the State of New Jersey Department of Transportation and the Engineer.
- D. Method of Construction - Unless shown or specified otherwise, the trenches or other excavation, after backfilling, shall be covered with 2" thick temporary paving in passable condition suitable for normal use. The cost of such temporary paving and maintenance shall be included in the contract price for all items.

#### 1.06 REFERENCE TO THE STANDARD SPECIFICATIONS

- A. Portions of the work performed under this contract shall comply with the requirements of the State of New Jersey Department of Transportation Standard Specifications for Road and Bridge Construction 2019, and all requirements modified, as amended or supplemented and whose specifications are made part of these specifications. The New Jersey Department of Transportation Standard Construction Details shall govern except insofar as same are modified, amended or changed in detail drawings prepared specifically for this particular project.
- B. The Standard Specifications are made part of these specifications by this reference as if they were set forth in full. It is the responsibility of the prospective bidder to be familiar with these Standard Specifications. Copies may be examined in the Engineer's office or may be obtained from the New Jersey Department of Transportation's website.

#### 1.07 DUST CONTROL

The contractor will be required to maintain all excavations, embankments, stockpiles, haul roads, permanent access roads, plant sites, waste areas, borrow areas, and all other work areas within or outside the project boundaries free from dust which would cause a hazard or nuisance to others. Approved temporary methods of stabilization consisting of sprinkling, chemical treatment, light bituminous treatment or similar methods will be permitted to control dust. Sprinkling, to be approved, must be repeated at such intervals as to keep all parts of the disturbed area at least damp at all times, and the contractor must have sufficient competent equipment on the job to accomplish this if sprinkling is used. Dust control shall be performed as the work proceeds and whenever a dust nuisance or hazard occurs. If any dust control is not done within twenty-four (24) hours after written notice is given by the Engineer, the work may be done by the Owner and charged to the Contractor. Costs for dust control shall be included in the prices bid for the various items in the bid form.

#### 1.08 QUANTITY AND PAYMENT

Unless otherwise provided for in these contract specifications, no separate payment will be made for work associated with this section and all costs shall be included in the various items of the bid proposal.

END OF SECTION

## SECTION 013300

### SUBMITTALS

#### SECTION 1 – GENERAL

- 1.01 Summary: This section specifies requirements for handling submittals.
- 1.02 General Procedures: Coordinate submittal preparation with performance of construction activities, and with purchasing or fabrication, delivery, other submittals and related activities. Transmit in advance of performance of related activities to avoid delays.

Coordinate transmittal of different submittals for related elements so processing will not be delayed for coordination with other submittals. The Engineer reserves the right to withhold action on a submittal requiring coordination until related submittals are received.

Processing: Allow two weeks for review. Allow more time if processing must be delayed for coordination with other submittals. The Engineer will advise the Contractor when a submittal must be delayed for coordination. Allow two weeks for reprocessing each submittal.

No extension of time will be authorized because of failure to transmit submittals sufficiently in advance of the work to permit processing.

Submittal Preparation: Place a label or title block on each submittal for identification. Provide a 4" x 5" space on the label or beside the title block on shop drawings to record Contractor's review and approval markings and action taken. Include the following information on the label for processing and recording action taken:

Project Name  
Date  
Name and address of Engineer  
Name and address of Subcontractor  
Name and address of Supplier  
Name of Manufacturer

- 1.03 Submittal Transmittal: Package submittals appropriately for transmittal and handling. Transmit with a transmittal form. Submittals received from other than the Contractor will be returned without action.
- 1.04 Contractor's Construction Schedule: Submit a fully developed, bar-chart type construction schedule at the pre-construction conference. Provide a separate bar for each construction activity and a vertical line to identify the first working day of each week.

Coordinate the construction schedule with the list of subcontracts, submittal schedule, progress reports, payment requests and other schedules.

Indicate completion in advance of the date established for substantial completion. Indicate substantial completion on the schedule to allow time for the Engineer's procedures necessary for certification of substantial completion.

- 1.05 Distribution of Schedules: Distribute approved copies of the construction schedules to the Engineer, Owner, Subcontractors, and other parties required to comply with scheduled dates. Post copies in the temporary field office. When revisions are made, distribute to the same parties and post in the same locations.

Updating: Revise each schedule after each meeting or activity, where revisions have been made. Issue the updated schedules concurrently with report of each meeting. The revised schedule must be approved by the engineer.

- 1.06 Daily Construction Reports: Prepare a daily construction report, recording information concerning events at the site. Submit duplicate copies to the Engineer at weekly intervals. Include the following information:

List of subcontractors at the site.  
High and low temperatures, general weather conditions.  
Accidents, stoppages, delays, shortages, losses.  
Emergency procedures.  
Change orders received, implemented.  
Partial completions, occupancies.  
Substantial completions authorized.

- 1.07 Shop Drawing: Submit new information, drawn to accurate scale. Indicate deviations from contract documents. Do not reproduce contract documents or copy standard information as the basis of shop drawings. Include the following information:

Dimensions  
Identification of products and materials included.  
Notation of coordination requirements.  
Notation of dimensions established by field measurement.

Sheet Size: Except for templates, patterns and similar full-size drawings, submit shop drawings on sheets at least 8 1/2" x 11" but no larger than 30" x 42".

Do not use shop drawings without a final stamp indicating action taken indicating action taken in connection with construction.

- 1.08 Product Data: Collect product data into a single submittal for each element or system. Mark each copy to show applicable choices and options. Where product data includes information on several products, some of which are not required, mark copies to indicate the applicable information. Include the following information:

Manufacturer's printed recommendations.  
Compliance with recognized trade association standards.  
Compliance with recognized testing agency standards.  
Application of testing agency labels and seals.  
Notation of dimensions verified by field measurement.  
Notation of coordination requirements.

Submittals: Submit eight (8) copies of each required submittal. The Engineer will retain six (6) copies and return the others marked with action taken and corrections or modifications required. Alternatively one (1) electronic pdf type file may be submitted on disc. Reviewed submittals may be transmitted as paper copies, e-mail copies of electron copies on disc at the sole discretion of the engineer.

Unless noncompliance with contract document provisions is observed, the submittal may serve as the final submittal.

Distribution: Furnish copies of final submittal to installers, and other required for performance of construction activities. Show distribution on transmittal forms. Do not proceed with installation until an applicable copy of product data is in the installer's possession. Do not permit use of unmarked copies of product and data in connection with construction.

1.09 Samples: Submit full-size samples cured and finished as specified and identical to the product proposed. Mount, display or package samples to facilitate review. Prepare samples to match the Engineer's sample. Include the following:

1. Generic Description
2. Compliance with Recognized Standards
3. Source Availability and Delivery Time
4. Product name or name of manufacturer

Submit samples for review of kind, color, pattern and texture for a final check of these characteristics and a comparison of these characteristics between the final submittal and the component as delivered and installed. Where variations are inherent in the product, submit multiple units that show limits of the variations.

Refer to other sections for samples that illustrate details of assembly, fabrication techniques, workmanship, connections, operation and similar characteristics.

Refer to other sections for samples to be returned for incorporation in the work. Such samples must be undamaged at the time of use. On the transmittal indicate special requests regarding disposition of sample submittals.

Submittals: Except for samples illustrating assembly details, workmanship, fabrication techniques, connections, operation and similar characteristics, submit three (3) sets; one will be returned marked with the action taken. Maintain sample sets at the project site for quality comparisons.

Unless noncompliance with contract document provisions is observed, the submittal may serve as the final submittal.

Sample sets may be used to obtain final acceptance of the construction associated with each set.

1.10 Distribution: Prepare additional sets for subcontractors, manufacturers, fabricators, installers, and others as required for performance. Show distribution on transmittal forms.

1.11 Engineer's Action: Except for submittals for record, information or similar purposes, where action and return is required, the Engineer will review each submittal, mark to indicate action taken and return. Compliance with specified characteristics is the contractor's responsibility.

Action Stamp: The Engineer will stamp each submittal with a self explanatory action stamp. The stamp will be appropriately marked to indicate action taken.

## SECTION 2 – MATERIALS

A. Not Applicable

SECTION 3 – EXECUTION

A. Not Applicable

SECTION 4 – QUANTITY AND PAYMENT

A. No separate payment will be made for work performed under this section.

END OF SECTION

SECTION 017829

AS-BUILT PLANS

SECTION 1 – GENERAL

The Contractor shall provide a set of reproducible as-built plans prior to final payment.

SECTION 2 – MATERIALS

- A. As-builts shall be a reproducible of the original contract plans including any additional sheets required. All deviations from the original contract plans shall be on the as-builts. The plans shall be legible, neat, and of a quality acceptable to the Engineer.

SECTION 3 – EXECUTION

- A. The Contractor shall be responsible for keeping the as-built up-to-date as the project progresses.
- B. Storm Sewer: Any change in invert location, grate elevation, pipe size, class, or type, and any utility sleeves shall be indicated on the plans.
- C. This section is intended to provide a minimum level of acceptance. Any section with more stringent requirements shall have precedence over this section.

SECTION 4 – QUANTITY & PAYMENT

No separate payment will be made for the work performed under this section.

END OF SECTION

## SECTION 018929

### CLEANING AND RESTORATIONS

#### SECTION 1 – GENERAL

##### 1.01 DESCRIPTION

- A. Contractor shall provide all equipment, labor & materials required to clean and restore the site to at least the existing condition.
- B. Maintain premises and public properties free from accumulations of waste, debris and rubbish caused by work operations.
- C. At completion of work, remove waste materials, rubbish, tools, equipment, machinery and surplus materials; clean all sight exposed surfaces; leave project clean and ready for occupancy.
- D. At completion of work, restore or replace, when and as directed by the Engineer, any public or private property disturbed or damaged by Contractor's work operations to a condition at least equal to that existing prior to beginning work, or as otherwise specified. Materials, equipment and methods shall be approved by the Engineer.

#### SECTION 2 - MATERIALS

##### 2.01 MATERIALS

- A. For restorations, use the following materials. All materials shall comply with the following Articles of the New Jersey Department of Transportation Standard Specifications 2019 Edition and these specifications.
- B. Grass restorations: Topsoiling and seeding shall conform to Section 804 and 806.
- C. Pavement restorations: See Section 401 Hot Mix Asphalt (HMA).
- D. Restoration of curbs and other concrete structures:
  - 1. Concrete:
    - a. Shall conform to Section 903.
    - b. Compressive Strength: N.J.D.O.T Class "B".
    - c. Air-entrained.
  - 2. Joint Fillers: Section 914.01.
  - 3. Curing Compound: Section 903.10.
- E. Driveway Restoration: Driveway Aprons shall be replaced in kind with Portland Cement Concrete, or Hot Mix Asphalt. See Section 606 "Sidewalks, Driveways, and Islands".
- F. All other Materials: As approved by the Engineer or authorities having jurisdiction.

## SECTION 3 – EXECUTION

### 3.01 METHODS OF CONDUCTING WORK - CLEANING

- A. Requirements of regulatory agencies: All excess material shall be removed from the site and disposed of by the contractor at his expense. Cost to be & included in the unit price bid for all items. The disposal site shall be in permanently established licensed OSWA (Office of Solid Waste Administration, New Jersey Department of Environmental Protection) landfills.
- B. Cleaning during construction: Provide periodic cleaning to keep the work, the site, and adjacent properties free from accumulations of waste materials, rubbish and windblown debris resulting from construction operations.

Provide on-site containers for the collection of waste materials, debris and rubbish. Maintain containers as required.

- C. Dust Control: The Contractor will be required to maintain all excavations, embankments, stockpiles, haul roads, permanent access roads, plant sites, waste areas, borrow areas, and all other work areas within or without the project boundaries free from dust which would cause a hazard or nuisance to others. Approved temporary methods of stabilization consisting of sprinkling, chemical treatment, light bituminous treatment or similar methods will be permitted to control dust. Sprinkling, to be approved, must be repeated at such intervals as to keep all parts of the disturbed area at least damp at all times, and the Contractor must have sufficient competent equipment on the job to accomplish this if sprinkling is used. Dust control shall be performed as the work proceeds and whenever a dust nuisance or hazard occurs. If any dust control is not done within twenty-four (24) hours after written notice is given by the Engineer, the work may be done by Owner and charged to the Contractor.

### 3.02 METHODS OF CONDUCTING WORK - RESTORATIONS

- A. General: All existing structures, unpaved areas and paved areas disturbed or damaged during the work under this contract shall be restored or replaced to a condition at least equal to that existing prior to beginning work, or as otherwise specified. The methods of conducting this work shall, as a minimum, conform to the following Articles of the New Jersey Department of Transportation Standard Specifications, latest revision.
- B. Grass Restorations: See Section 806 “Fertilizing & Seeding”
- C. Pavement Restorations: The methods of construction employed shall conform to the requirements set forth in Section 301, 302, & 401 of the Standard Specifications as applicable to the type of material being utilized.
- D. Restorations of Curbs and Other Concrete Structures:
  - 1. Curbs: Section 607
  - 2. Other concrete structures: Restore in accordance with applicable Articles of the Standard Specifications.
- E. Fence Restorations: Contractor shall remove all concrete from existing fence posts and appurtenances before reinstalling fence in kind.

- F. All Other Restorations: Restore in accordance with applicable Articles of the Standard Specifications, or as approved by the Engineer or authorities having jurisdiction.

PART 4 – QUANTITY AND PAYMENT

- A. No separate payment will be made for the work performed under this section.

END OF SECTION

## SECTION 312319

### DEWATERING

#### SECTION 1 – GENERAL

##### 1.01 DESCRIPTION

Dewatering of trenches and excavations.

#### SECTION 2 – MATERIALS

2.01 All materials shall be adequate for the proposed work and shall comply with the requirements of the contract documents.

#### SECTION 3 - EXECUTION

##### 3.01 PERFORMANCE

1. Provide and maintain ample means and devices (including spare units for use in case of breakdown) to promptly remove and dispose of water or sewage entering excavations or trenches.
2. Keep excavations and structures dry until all work is completed and pipe joints are satisfactorily installed, and to extent that introduction of water in system will not damage either new or existing structures.
3. Dispose of water in suitable manner, without damage to work site or adjacent property.
4. If groundwater and subsoil conditions along line of work are such that a stable, hard trench or excavation bottom for the pipe or structure cannot be achieved by trench pump, bailing or other methods, the contractor shall provide alternate means and methods for trench dewatering without additional compensation.
5. If the contractor utilizes a well point system for dewatering, a signed and sealed well point system design, prepared by a professional engineer licensed in the State of New Jersey, shall be provided by the contractor as part of the submittal process.

#### SECTION 4 – QUANTITY AND PAYMENT

4.01 Costs for dewatering shall be included in the price bid for various related items of work listed in the proposal, which price shall include, pumping, bailing, well point system and signed and sealed well point system design (if utilized), permits, or any other method required to achieve results specified. All labor, equipment and materials for all dewatering methods used, include stone pipe bedding, trench stabilization stone, and all else necessary, shall be included.

END OF SECTION

## SECTION 265000 - LIGHTING

### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. Section Includes:
  - 1. Luminaires.
- B. Related Requirements:

#### 1.2 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Shop Drawings: Prepare and submit the following:
  - 1. Drawings, Diagrams, and Supporting Documents for Custom Luminaires:
    - a. Include plans, elevations, sections, and mounting and attachment details.
    - b. Include details of luminaire assemblies. Indicate dimensions, weights, loads, required clearances, method of field assembly, components, and location and size of each field connection.
    - c. Include diagrams for power, signal, and control wiring.

#### 1.3 CLOSEOUT SUBMITTALS

- A. Warranty documentation.

#### 1.4 WARRANTY FOR LUMINAIRES

- A. Special Installer Extended Warranty: Installer warrants that fabricated and installed luminaires perform in accordance with specified requirements and agrees to repair or replace products that fail to perform as specified within extended-warranty period. Warranty must convey to Owner upon acceptance of the Work.
  - 1. Extended-Warranty Period: Two years from date of Substantial Completion; full coverage for labor, materials, and equipment.

## PART 2 - PRODUCTS

### 2.1 PERFORMANCE REQUIREMENTS

- A. Regulatory Requirements: Products or components listed and labeled in accordance with NFPA 70, by qualified electrical testing laboratory recognized by authorities having jurisdiction, and marked for intended location and application.

### 2.2 LUMINAIRES

#### A. Bollard Luminaire:

##### 1. Listing Criteria:

- a. LED Luminaires: UL CCN IFAM; including UL 1598.
- b. Marked in accordance with UL CCN HYXT, including UL 1598, for compatible power supply, installation location, and environmental conditions.

##### 2. Luminaire Description:

- a. Outdoor bollard fixture to match the style of the existing fixtures onsite.
- b. LED Luminaires: UL CCN IFAM; including UL 1598.
- c. Nominal Operating Voltage: 120 V(ac) or 277 V(ac) universal voltage.
- d. Nominal Luminaire Operating Power Rating: Wattage to match existing fixtures.
- e. LED Luminaires (UL CCN IFAM):
  - 1) Output Intensity: Not less than 250 lm.
  - 2) Efficacy: Not less than 75 lm/W.
  - 3) Rated Life: 35 000 hours to L70.
  - 4) CCT: Match existing fixtures.
- f. Shape: Round.
- g. Height from Finished Grade: Match existing fixtures.
- h. Diameter: Match existing fixtures.
- i. Bollard Mounting: Three-point cast-aluminum base or manufacturer's standard.
- j. Finish: Factory-applied.
- k. Color: Flat black.

## PART 3 - EXECUTION

### 3.1 SELECTION OF LUMINAIRES

- A. Contractor is to submit on bollard fixtures that match the existing bollard fixtures at the site.

### 3.2 INSTALLATION OF LIGHTING

- A. Comply with manufacturer's published instructions.

- B. Reference Standards for Installation: Unless more stringent installation requirements are specified in Contract Documents or manufacturers' published instructions, comply with the following:
1. Electrical Construction: ICC IBC, ICC IFB, NFPA 1, NFPA 70, and NECA NEIS 1.
  2. Grounding and Bonding: NECA NEIS 331 and Article 250 of NFPA 70.
  3. Installation of Exterior Lighting Systems: NECA NEIS 501.
  4. Installation of Luminaires, Lampholders, and Lamps: Article 410 of NFPA 70.
  5. Consult Engineer for resolution of conflicting requirements.
- C. Special Installation Techniques:
1. Install luminaires level, plumb, and square with finished floor or grade unless otherwise indicated.
  2. Coordinate layout and installation of luminaires with other construction.
  3. Exterior Bollard Luminaires:
    - a. Align units for optimum directional alignment of light distribution.
    - b. Install on concrete base at luminaire location. Cast conduit into base, and shape base to match shape of bollard base. Finish by troweling and rubbing smooth. Concrete materials, installation, and finishing are specified in Section 033000 "Cast-in-Place Concrete."
  4. Exterior Corrosion Prevention:
    - a. Do not use aluminum in contact with earth or concrete. When in direct contact with dissimilar metals, protect aluminum with insulating fittings or treatment.
    - b. When embedding steel conduits in concrete, wrap conduit with 10 mil (0.254 mm) thick, pipe-wrapping plastic tape applied with a 50 percent overlap.
- D. Systems Integration: Integrate lighting control devices and equipment with electrical power connections for operation of luminaires as specified.
- E. Protection: After installation, protect lighting equipment from construction activities. Remove and replace items that are contaminated, defaced, damaged, or otherwise caused to be unfit for use prior to acceptance by Owner.

### 3.3 FIELD QUALITY CONTROL OF LIGHTING

- A. Tests and Inspections:
1. Perform manufacturer's recommended tests and inspections.
  2. Operational Test: After installing luminaires, switches, and accessories, and after electrical circuitry has been energized, test units to confirm proper operation.
- B. Nonconforming Work:
1. Luminaire will be considered defective if it does not pass tests and inspections.
  2. Remove and replace defective units and retest.

PART 4 – QUANTITY AND PAYMENT

- A. Bollard Lighting will be measured by the unit.
- B. Contractor must receive approval from the engineer prior to constructing any quantities of this item.
- C. Payment for the Bollard Lighting specified will be made for the quantity as determined above, measured by the number of each at the unit price for the item “Replace Bollard Lighting” in the bid form which prices shall include all labor, materials, foundations, cast-in-place concrete, conduits, all wiring and electrical work, ground work, equipment, installation and all else necessary therefore and all other work in connection therewith and incidental for a complete and functioning installation, ready for use by the Owner.

END OF SECTION 265000

# **SECTION 033000 - CAST-IN-PLACE CONCRETE**

## **PART 1 - GENERAL**

### **1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

### **1.2 SUMMARY**

- A. This Section specifies cast-in place concrete, including formwork, reinforcement, concrete materials, mixture design, placement procedures, and finishes, for the following:
  - 1. Footings.
  - 2. Foundation walls.
  - 3. Slabs-on-grade.
  - 4. Suspended slabs (Light Weight Concrete).
  - 5. Stair Tread/Pan Infill.

### **1.3 DEFINITIONS**

- A. Cementitious Materials: Portland cement alone or in combination with one or more of the following: blended hydraulic cement, fly ash and other pozzolans, ground granulated blast-furnace slag, and silica fume; subject to compliance with requirements.

### **1.4 SUBMITTALS**

- A. Product Data: For each type of product indicated.
- B. Design Mixtures: For each concrete mixture. Submit alternate design mixtures when characteristics of materials, Project conditions, weather, test results, or other circumstances warrant adjustments.
- C. Steel Reinforcement Shop Drawings: Placing drawings that detail fabrication, bending, and placement. Include bar sizes, lengths, material, grade, bar schedules, stirrup spacing, bent bar diagrams, bar arrangement, splices and laps, mechanical connections, tie spacing, hoop spacing, and supports for concrete reinforcement.
- D. Material Test Reports: For the following, from a qualified testing agency, indicating compliance with requirements:
  - 1. Aggregates. Include service record data indicating absence of deleterious expansion of concrete due to alkali aggregate reactivity.
- E. Field quality-control test reports for compressive strength of concrete, a minimum of two (2) tests shall be performed at 7 and 28 days for each pour.

- F. Floor surface flatness and levelness measurements to determine compliance with specified tolerances.
- G. Field quality-control test and inspection reports.

### **1.5 QUALITY ASSURANCE**

- A. **Installer Qualifications:** A experienced installer who has completed concrete Work similar in material, design, and extent to that indicated for this Project and whose work has resulted in construction with a record of successful in-service performance.
- B. **Manufacturer Qualifications:** A firm experienced in manufacturing ready-mixed concrete products and that complies with ASTM C 94/C 94M requirements for production facilities and equipment.
  - 1. Manufacturer certified according to NRMCA's "Certification of Ready Mixed Concrete Production Facilities."
- C. **Testing Agency Qualifications:** An independent agency, acceptable to authorities having jurisdiction, qualified according to ASTM C 1077 and ASTM E 329 for testing indicated, as documented according to ASTM E 548.
  - 1. Personnel conducting field tests shall be qualified as ACI Concrete Field Testing Technician, Grade 1, according to ACI CP-01 or an equivalent certification program.
  - 2. Personnel performing laboratory tests shall be ACI-certified Concrete Strength Testing Technician and Concrete Laboratory Testing Technician - Grade I. Testing Agency laboratory supervisor shall be an ACI-certified Concrete Laboratory Testing Technician - Grade II.
- D. **Source Limitations:** Obtain each type or class of cementitious material of the same brand from the same manufacturer's plant, obtain aggregate from one source, and obtain admixtures through one source from a single manufacturer.
- E. **Welding:** Qualify procedures and personnel according to AWS D1.4, "Structural Welding Code--Reinforcing Steel."
- F. **ACI Publications:** Comply with the following unless modified by requirements in the Contract Documents:
  - 1. ACI 301, "Specification for Structural Concrete," Sections 1 through 5.
  - 2. ACI 117, "Specifications for Tolerances for Concrete Construction and Materials."
- G. **Concrete Testing Service:** Engage a qualified independent testing agency to perform material evaluation tests and to design concrete mixtures.

### **1.6 DELIVERY, STORAGE, AND HANDLING**

- A. Deliver, store, and handle steel reinforcement to prevent bending and damage.
- B. **Waterstops:** Store waterstops under cover to protect from moisture, sunlight, dirt, oil, and other contaminants.

## **PART 2 - PRODUCTS**

### **2.1 FORM-FACING MATERIALS**

- A. Smooth-Formed Finished Concrete: Form-facing panels that will provide continuous, true, and smooth concrete surfaces. Furnish in largest practicable sizes to minimize number of joints.
  - 1. Plywood, metal, or other approved panel materials.
- B. Rough-Formed Finished Concrete: Plywood, lumber, metal, or another approved material. Provide lumber dressed on at least two edges and one side for tight fit.
- C. Chamfer Strips: Wood, metal, PVC, or rubber strips, 3/4 by 3/4 inch, minimum.
- D. Form-Release Agent: Commercially formulated form-release agent that will not bond with, stain, or adversely affect concrete surfaces and will not impair subsequent treatments of concrete surfaces.
  - 1. Formulate form-release agent with rust inhibitor for steel form-facing materials.
- E. Form Ties: Factory-fabricated, removable or snap-off metal or glass-fiber-reinforced plastic form ties designed to resist lateral pressure of fresh concrete on forms and to prevent spalling of concrete on removal.
  - 1. Furnish units that will leave no corrodible metal closer than 1 inch to the plane of exposed concrete surface.
  - 2. Furnish ties with integral water-barrier plates to walls indicated to receive dampproofing or waterproofing.

### **2.2 STEEL REINFORCEMENT**

- A. Reinforcing Bars: ASTM A 615/A 615M, Grade 60, deformed.
- B. Plain-Steel Wire: ASTM A 82, as drawn.
- C. Plain-Steel Welded Wire Reinforcement: ASTM A 185, plain, fabricated from as-drawn steel wire into flat sheets.
- D. Steel Bar Mats: ASTM A 184/A 184M, fabricated from ASTM A 615/A 615M, Grade 60, deformed bars, assembled with clips.

### **2.3 REINFORCEMENT ACCESSORIES**

- A. Joint Dowel Bars: ASTM A 615/A 615M, Grade 60, plain-steel bars, cut bars true to length with ends square and free of burrs.
- B. Bar Supports: Bolsters, chairs, spacers, and other devices for spacing, supporting, and fastening reinforcing bars and welded wire reinforcement in place. Manufacture bar supports from steel wire, plastic, or precast concrete according to CRSI's "Manual of Standard Practice," of greater compressive strength than concrete and as follows:

## 2.4 CONCRETE MATERIALS

- A. Cementitious Material: Use the following cementitious materials, of the same type, brand, and source, throughout Project:
  - 1. Portland Cement: ASTM C 150, Type III. Supplement with the following:
    - a. Fly Ash: ASTM C 618, Class F.
    - b. Ground Granulated Blast-Furnace Slag: ASTM C 989, Grade 100 or 120.
- B. Silica Fume: ASTM C 1240, amorphous silica.
- C. Normal-Weight Aggregates: ASTM C 33, uniformly graded, and as follows:
  - 1. Class: Moderate weathering region, but not less than 3M.
  - 2. Nominal Maximum Aggregate Size: 3/4-inch.
  - 3. Combined Aggregate Gradation: Well graded from coarsest to finest with not more than 18 percent and not less than 8 percent retained on an individual sieve, except that less than 8 percent may be retained on coarsest sieve and on No. 50 sieve, and not less than 8 percent may be retained on sieves finer than No. 50.
  - 4. Free of materials with deleterious reactivity to alkali in cement.
- D. Lightweight Aggregate: ASTM C 330, 3/4-inch nominal maximum aggregate size.
- E. Water: ASTM C 94/C 94M and potable.

## 2.5 ADMIXTURES

- A. General: Admixtures certified by manufacturer to contain not more than 0.1 percent water-soluble chloride ions by mass of cementitious material and to be compatible with other admixtures and cementitious materials. Do not use admixtures containing calcium chloride.

## 2.6 CURING MATERIALS

- A. Absorptive Cover: AASHTO M 182, Class 2, burlap cloth made from jute or kenaf, weighing approximately 9 oz./sq. yd. when dry.
- B. Water: Potable.

## 2.7 WATERSTOPS

- A. Flexible PVC Waterstops: CE CRD-C 572, with factory-installed metal eyelets, for embedding in concrete to prevent passage of fluids through joints. Factory fabricate corners, intersections, and directional changes.
  - 1. Profile: Ribbed with center bulb.
  - 2. Dimensions: 4 inches by 3/16 inch thick; non-tapered.

## 2.8 VAPOR RETARDERS

- A. Plastic Vapor Retarder: ASTM E 1745, Class A. Include manufacturer's recommended adhesive or pressure-sensitive tape.

1. Products:
  - a. Fortifiber Corporation; Moistop Ultra A.
  - b. Raven Industries Inc.; Vapor Block 15.
  - c. Reef Industries, Inc.; Griffolyn Type-65G.

## **2.9 RELATED MATERIALS**

- A. Joint-Filler Strips: ASTM D 1751, asphalt-saturated cellulosic fiber.
- B. Bonding Agent: ASTM C 1059, Type II, non-redispersible, acrylic emulsion or styrene butadiene.

## **2.10 CONCRETE MIXTURES, GENERAL**

- A. Prepare design mixtures for each type and strength of concrete, proportioned on the basis of laboratory trial mixture or field test data, or both, according to ACI 301.
  1. Use a qualified independent testing agency for preparing and reporting proposed mixture designs based on laboratory trial mixtures.
- B. Use a qualified independent testing agency for preparing and reporting proposed mix designs for the laboratory trial mix basis.
- C. Footings and Foundation Walls: Proportion normal-weight concrete mixture as follows:
  1. Minimum Compressive Strength: 4,000 psi at 28 days.
  2. Maximum Water-Cementitious Materials Ratio: 0.50.
  3. Slump Limit: 4 inches or 8 inches for concrete with verified slump of 2 to 4 inches before adding high-range water-reducing admixture or plasticizing admixture, plus or minus 1 inch.
  4. Air Content: 6 percent, plus or minus 1.5 percent at point of delivery for 1-inch nominal maximum aggregate size.
- D. Slabs-on-Grade: Proportion normal-weight concrete mixture as follows:
  1. Minimum Compressive Strength: 4,000 psi at 28 days.
  2. Minimum Cementitious Materials Content: 520 lb/cu. yd.
  3. Slump Limit: 4 inches, plus or minus 1 inch.
  4. Air Content: Do not allow air content of troweled finished floors to exceed 3 percent.
- E. Suspended Slabs: Proportion structural lightweight concrete mixture as follows:
  1. Minimum Compressive Strength: 4,000 psi at 28 days.
  2. Calculated Equilibrium Unit Weight: 115 lb/cu. ft., plus or minus 3 lb/cu. ft. as determined by ASTM C 567.
  3. Slump Limit: 4 inches, plus or minus 1 inch.
  4. Air Content: Do not allow air content of troweled finished floors to exceed 3 percent.
- F. Cementitious Materials: For concrete exposed to deicers, limit percentage, by weight, of cementitious materials other than portland cement according to ACI 301 requirements.
- G. Admixtures: Use admixtures according to manufacturer's written instructions.

## **2.11 FABRICATING REINFORCEMENT**

- A. Fabricate steel reinforcement according to CRSI's "Manual of Standard Practice."

## **2.12 CONCRETE MIXING**

- A. Ready-Mixed Concrete: Measure, batch, mix, and deliver concrete according to ASTM C 94/C 94M and ASTM C 1116, and furnish batch ticket information.
  - 1. When air temperature is between 85 and 90 deg F, reduce mixing and delivery time from 1-1/2 hours to 75 minutes; when air temperature is above 90 deg F, reduce mixing and delivery time to 60 minutes.

# **PART 3 - EXECUTION**

## **3.1 FORMWORK**

- A. Design, erect, shore, brace, and maintain formwork, according to ACI 301, to support vertical, lateral, static, and dynamic loads, and construction loads that might be applied, until structure can support such loads.
- B. Construct formwork so concrete members and structures are of size, shape, alignment, elevation, and position indicated, within tolerance limits of ACI 117.
- C. Limit concrete surface irregularities, designated by ACI 347R as abrupt or gradual, as follows:
  - 1. Class A, 1/8 inch.
  - 2. Class B, 1/4 inch.
- D. Construct forms tight enough to prevent loss of concrete mortar.
- E. Fabricate forms for easy removal without hammering or prying against concrete surfaces. Provide crush or wrecking plates where stripping may damage cast concrete surfaces. Provide top forms for inclined surfaces steeper than 1.5 horizontal to 1 vertical. Kerf wood inserts for forming keyways, reglets, recesses, and the like, for easy removal.
  - 1. Install keyways, reglets, recesses, and the like, for easy removal.
  - 2. Do not use rust-stained steel form-facing material.
- F. Set edge forms, bulkheads, and intermediate screed strips for slabs to achieve required elevations and slopes in finished concrete surfaces. Provide and secure units to support screed strips; use strike-off templates or compacting-type screeds.
- G. Provide temporary openings for cleanouts and inspection ports where interior area of formwork is inaccessible. Close openings with panels tightly fitted to forms and securely braced to prevent loss of concrete mortar. Locate temporary openings in forms at inconspicuous locations.
- H. Chamfer exterior corners and edges of permanently exposed concrete.
- I. Form openings, chases, offsets, sinkages, keyways, reglets, blocking, screeds, and bulkheads required in the Work. Determine sizes and locations from trades providing such items.

- J. Clean forms and adjacent surfaces to receive concrete. Remove chips, wood, sawdust, dirt, and other debris just before placing concrete.
- K. Retighten forms and bracing before placing concrete, as required, to prevent mortar leaks and maintain proper alignment.
- L. Coat contact surfaces of forms with form-release agent, according to manufacturer's written instructions, before placing reinforcement.

### **3.2 EMBEDDED ITEMS**

- A. Place and secure anchorage devices and other embedded items required for adjoining work that is attached to or supported by cast-in-place concrete. Use setting drawings, templates, diagrams, instructions, and directions furnished with items to be embedded.
  - 1. Install anchor bolts, accurately located, to elevations required.

### **3.3 REMOVING AND REUSING FORMS**

- A. General: Formwork for sides of beams, walls, columns, and similar parts of the Work that does not support weight of concrete may be removed after cumulatively curing at not less than 50 deg F for 24 hours after placing concrete, if concrete is hard enough to not be damaged by form-removal operations and curing and protection operations are maintained.
- B. Leave formwork, for beam soffits, joists, slabs, and other structural elements, that supports weight of concrete in place until concrete has achieved the following:
  - 1. 28 day design compressive strength.
- C. Clean and repair surfaces of forms to be reused in the Work. Split, frayed, delaminated, or otherwise damaged form-facing material will not be acceptable for exposed surfaces. Apply new form-release agent.
- D. When forms are reused, clean surfaces, remove fins and laitance, and tighten to close joints. Align and secure joints to avoid offsets. Do not use patched forms for exposed concrete surfaces unless approved by Architect.

### **3.4 VAPOR RETARDERS**

- A. Plastic Vapor Retarders: Place, protect, and repair vapor retarders according to ASTM E 1643 and manufacturer's written instructions.
  - 1. Lap joints 6 inches and seal with manufacturer's recommended tape.

### **3.5 STEEL REINFORCEMENT**

- A. General: Comply with CRSI's "Manual of Standard Practice" for placing reinforcement.
- B. Clean reinforcement of loose rust and mill scale, earth, ice, and other foreign materials that would reduce bond to concrete.

- C. Accurately position, support, and secure reinforcement against displacement. Locate and support reinforcement with bar supports to maintain minimum concrete cover. Do not tack weld crossing reinforcing bars.
  - 1. Shop- or field-weld reinforcement according to AWS D1, where indicated.
- D. Set wire ties with ends directed into concrete, not toward exposed concrete surfaces.
- E. Install welded wire reinforcement in longest practicable lengths on bar supports spaced to minimize sagging. Lap edges and ends of adjoining sheets at least one mesh spacing. Offset laps of adjoining sheet widths to prevent continuous laps in either direction. Lace overlaps with wire.

### 3.6 JOINTS

- A. General: Construct joints true to line with faces perpendicular to surface plane of concrete.
- B. Construction Joints: Install so strength and appearance of concrete are not impaired, at locations indicated or as approved by Architect.
  - 1. Place joints perpendicular to main reinforcement. Continue reinforcement across construction joints, unless otherwise indicated. Do not continue reinforcement through sides of strip placements of floors and slabs.
  - 2. Form from preformed galvanized steel, plastic keyway-section forms, or bulkhead forms with keys, unless otherwise indicated. Embed keys at least 1-1/2 inches into concrete.
  - 3. Locate horizontal joints in walls and columns at underside of floors, slabs, beams, and girders and at the top of footings or floor slabs.
  - 4. Use a bonding agent at locations where fresh concrete is placed against hardened or partially hardened concrete surfaces.
- C. Contraction Joints in Slabs-on-Grade: Form weakened-plane contraction joints, sectioning concrete into areas as indicated. Construct contraction joints for a depth equal to at least one-fourth of concrete thickness as follows:
  - 1. Grooved Joints: Form contraction joints after initial floating by grooving and finishing each edge of joint to a radius of 1/8-inch. Repeat grooving of contraction joints after applying surface finishes. Eliminate groover tool marks on concrete surfaces.
  - 2. Sawed Joints: Form contraction joints with power saws equipped with shatterproof abrasive or diamond-rimmed blades. Cut 1/8-inch- wide joints into concrete when cutting action will not tear, abrade, or otherwise damage surface and before concrete develops random contraction cracks.
- D. Isolation Joints in Slabs-on-Grade: After removing formwork, install joint-filler strips at slab junctions with vertical surfaces, such as column pedestals, foundation walls, grade beams, and other locations, as indicated.
  - 1. Extend joint-filler strips full width and depth of joint, terminating flush with finished concrete surface, unless otherwise indicated.
  - 2. Install joint-filler strips in lengths as long as practicable. Where more than one length is required, lace or clip sections together.

### 3.7 WATERSTOPS

- A. Flexible Waterstops: Install in construction joints and at other joints indicated to form a continuous diaphragm. Install in longest lengths practicable. Support and protect exposed waterstops during progress of the Work. Field fabricate joints in waterstops according to manufacturer's written instructions.

### 3.8 CONCRETE PLACEMENT

- A. Before placing concrete, verify that installation of formwork, reinforcement, and embedded items is complete and that required inspections have been performed.
- B. Do not add water to concrete during delivery, at Project site, or during placement unless approved by Architect.
- C. Deposit concrete continuously or in layers of such thickness that no new concrete will be placed on concrete that has hardened enough to cause seams or planes of weakness. If a section cannot be placed continuously, provide construction joints as specified. Deposit concrete to avoid segregation.
- D. Deposit concrete in forms in horizontal layers no deeper than 24 inches and in a manner to avoid inclined construction joints. Place each layer while preceding layer is still plastic, to avoid cold joints.
  - 1. Consolidate placed concrete with mechanical vibrating equipment. Use equipment and procedures for consolidating concrete recommended by ACI 309R.
  - 2. Do not use vibrators to transport concrete inside forms. Insert and withdraw vibrators vertically at uniformly spaced locations no farther than the visible effectiveness of the vibrator. Place vibrators to rapidly penetrate placed layer and at least 6 inches into preceding layer. Do not insert vibrators into lower layers of concrete that have begun to lose plasticity. At each insertion, limit duration of vibration to time necessary to consolidate concrete and complete embedment of reinforcement and other embedded items without causing mix constituents to segregate.
- E. Deposit and consolidate concrete for floors and slabs in a continuous operation, within limits of construction joints, until placement of a panel or section is complete.
  - 1. Consolidate concrete during placement operations so concrete is thoroughly worked around reinforcement and other embedded items and into corners.
  - 2. Maintain reinforcement in position on chairs during concrete placement.
  - 3. Screenshot slab surfaces with a straightedge and strike off to correct elevations.
  - 4. Slope surfaces uniformly to drains where required.
  - 5. Begin initial floating using bull floats or darbies to form a uniform and open-textured surface plane, before excess bleedwater appears on the surface. Do not further disturb slab surfaces before starting finishing operations.
- F. Cold-Weather Placement: Comply with ACI 306.1 and as follows. Protect concrete work from physical damage or reduced strength that could be caused by frost, freezing actions, or low temperatures.
  - 1. When average high and low temperature is expected to fall below 40 deg F for three successive days, maintain delivered concrete mixture temperature within the temperature range required by ACI 301.
  - 2. Do not use frozen materials or materials containing ice or snow. Do not place concrete on frozen subgrade or on subgrade containing frozen materials.
  - 3. Do not use calcium chloride, salt, or other materials containing antifreeze agents or chemical accelerators unless otherwise specified and approved in mixture designs.
- G. Hot-Weather Placement: Comply with ACI 301 and as follows:

1. Cool ingredients before mixing to maintain concrete temperature below 90 deg F at time of placement. Chilled mixing water or chopped ice may be used to control temperature, provided water equivalent of ice is calculated to total amount of mixing water. Using liquid nitrogen to cool concrete is Contractor's option.
2. Cover steel reinforcement with water-soaked burlap so steel temperature will not exceed ambient air temperature immediately before embedding in concrete.
3. Fog-spray forms, steel reinforcement, and subgrade just before placing concrete. Keep subgrade uniformly moist without standing water, soft spots, or dry areas.

### **3.9 FINISHING FORMED SURFACES**

- A. Related Unformed Surfaces: At tops of walls, horizontal offsets, and similar unformed surfaces adjacent to formed surfaces, strike off smooth and finish with a texture matching adjacent formed surfaces. Continue final surface treatment of formed surfaces uniformly across adjacent unformed surfaces, unless otherwise indicated.

### **3.10 FINISHING FLOORS AND SLABS**

- A. General: Comply with ACI 302.1R recommendations for screeding, restraightening, and finishing operations for concrete surfaces. Do not wet concrete surfaces.
  1. Uniformly spread 25 lb/100 sq. ft. of dampened slip-resistive aggregate over surface in one or two applications. Tamp aggregate flush with surface, but do not force below surface.

### **3.11 MISCELLANEOUS CONCRETE ITEMS**

- A. Filling In: Fill in holes and openings left in concrete structures, unless otherwise indicated, after work of other trades is in place. Mix, place, and cure concrete, as specified, to blend with in-place construction. Provide other miscellaneous concrete filling indicated or required to complete the Work.
- B. Equipment Bases and Foundations: Provide machine and equipment bases and foundations as shown on Drawings. Set anchor bolts for machines and equipment at correct elevations, complying with diagrams or templates from manufacturer furnishing machines and equipment.
- C. Steel Pan Stairs: Provide concrete fill for steel pan stair treads, landings, and associated items. Cast-in inserts and accessories as shown on Drawings. Screed, tamp, and trowel-finish concrete surfaces.

### **3.12 CONCRETE PROTECTING AND CURING**

- A. General: Protect freshly placed concrete from premature drying and excessive cold or hot temperatures. Comply with ACI 306.1 for cold-weather protection and ACI 301 for hot-weather protection during curing.
- B. Formed Surfaces: Cure formed concrete surfaces, including underside of beams, supported slabs, and other similar surfaces. If forms remain during curing period, moist cure after loosening forms. If removing forms before end of curing period, continue curing for the remainder of the curing period by one or a combination of the methods listed below.
- C. Unformed Surfaces: Begin curing immediately after finishing concrete. Cure unformed surfaces, including floors and slabs, concrete floor toppings, and other surfaces by one or a combination of the methods listed below.

- D. Cure concrete according to ACI 308.1, by one or a combination of the following methods:
1. Moisture Curing: Keep surfaces continuously moist for not less than seven days with the following materials:
    - a. Water.
    - b. Continuous water-fog spray.
    - c. Absorptive cover, water saturated, and kept continuously wet. Cover concrete surfaces and edges with 12-inch lap over adjacent absorptive covers.

### **3.13 JOINT FILLING**

- A. Prepare, clean, and install joint filler according to manufacturer's written instructions.
1. Defer joint filling until concrete has aged at least six months. Do not fill joints until construction traffic has permanently ceased.
- B. Remove dirt, debris, saw cuttings, curing compounds, and sealers from joints; leave contact faces of joint clean and dry.

### **3.14 CONCRETE SURFACE REPAIRS**

- A. Defective Concrete: Repair and patch defective areas when approved by Architect. Remove and replace concrete that cannot be repaired and patched to Architect's approval.
- B. Patching Mortar: Mix dry-pack patching mortar, consisting of one part portland cement to two and one-half parts fine aggregate passing a No. 16 sieve, using only enough water for handling and placing.
- C. Repairing Formed Surfaces: Surface defects include color and texture irregularities, cracks, spalls, air bubbles, honeycombs, rock pockets, fins and other projections on the surface, and stains and other discolorations that cannot be removed by cleaning.
1. Immediately after form removal, cut out honeycombs, rock pockets, and voids more than 1/2 inch in any dimension in solid concrete, but not less than 1 inch in depth. Make edges of cuts perpendicular to concrete surface. Clean, dampen with water, and brush-coat holes and voids with bonding agent. Fill and compact with patching mortar before bonding agent has dried. Fill form-tie voids with patching mortar or cone plugs secured in place with bonding agent.
  2. Repair defects on surfaces exposed to view by blending white portland cement and standard portland cement so that, when dry, patching mortar will match surrounding color. Patch a test area at inconspicuous locations to verify mixture and color match before proceeding with patching. Compact mortar in place and strike off slightly higher than surrounding surface.
  3. Repair defects on concealed formed surfaces that affect concrete's durability and structural performance as determined by Architect.
- D. Repairing Unformed Surfaces: Test unformed surfaces, such as floors and slabs, for finish and verify surface tolerances specified for each surface. Correct low and high areas. Test surfaces sloped to drain for trueness of slope and smoothness; use a sloped template.
1. Repair finished surfaces containing defects. Surface defects include spalls, popouts, honeycombs, rock pockets, crazing and cracks in excess of 0.01 inch wide or that penetrate to reinforcement or completely through unreinforced sections regardless of width, and other objectionable conditions.
  2. After concrete has cured at least 14 days, correct high areas by grinding.

3. Correct localized low areas during or immediately after completing surface finishing operations by cutting out low areas and replacing with patching mortar. Finish repaired areas to blend into adjacent concrete.
  4. Repair defective areas, except random cracks and single holes 1 inch or less in diameter, by cutting out and replacing with fresh concrete. Remove defective areas with clean, square cuts and expose steel reinforcement with at least a 3/4-inch clearance all around. Dampen concrete surfaces in contact with patching concrete and apply bonding agent. Mix patching concrete of same materials and mixture as original concrete except without coarse aggregate. Place, compact, and finish to blend with adjacent finished concrete. Cure in same manner as adjacent concrete.
- E. Perform structural repairs of concrete, subject to Architect's approval, using epoxy adhesive and patching mortar.
- F. Repair materials and installation not specified above may be used, subject to Architect's approval.

### **3.15 FIELD QUALITY CONTROL**

- A. Testing Services: Testing of composite samples of fresh concrete obtained according to ASTM C 172 shall be performed according to the following requirements:
1. Testing Frequency: Obtain one composite sample for each day's pour of each concrete mixture exceeding 5 cu. yd., but less than 25 cu. yd., plus one set for each additional 50 cu. yd. or fraction thereof.
  2. Slump: ASTM C 143/C 143M; one test at point of placement for each composite sample, but not less than one test for each day's pour of each concrete mixture. Perform additional tests when concrete consistency appears to change.
  3. Air Content: ASTM C 231, pressure method, for normal-weight concrete; ASTM C 173/C 173M, volumetric method, for structural lightweight concrete; one test for each composite sample, but not less than one test for each day's pour of each concrete mixture.
  4. Concrete Temperature: ASTM C 1064/C 1064M; one test hourly when air temperature is 40 deg F and below and when 80 deg F and above, and one test for each composite sample.
  5. Compression Test Specimens: ASTM C 31/C 31M; cast and laboratory cure one set of four standard cylinder specimens for each composite sample.
    - a. Cast and field cure one set of four standard cylinder specimens for each composite sample.
  6. Compressive-Strength Tests: ASTM C 39/C 39M; test two laboratory-cured specimens at 7 days and two specimens at 28 days.
    - a. Test two field-cured specimens at 7 days and two specimens at 28 days.
    - b. A compressive-strength test shall be the average compressive strength from a set of two specimens obtained from same composite sample and tested at age indicated.
- B. When strength of field-cured cylinders is less than 85 percent of companion laboratory-cured cylinders, Contractor shall evaluate operations and provide corrective procedures for protecting and curing in-place concrete
- C. Strength of each concrete mixture will be satisfactory if every average of any three consecutive compressive-strength tests equals or exceeds specified compressive strength and no compressive-strength test value falls below specified compressive strength by more than 500 psi.
- D. Test results shall be reported in writing to Architect, concrete manufacturer, and Contractor within 48 hours of testing. Reports of compressive-strength tests shall contain Project identification name and

number, date of concrete placement, name of concrete testing and inspecting agency, location of concrete batch in Work, design compressive strength at 28 days, concrete mixture proportions and materials, compressive breaking strength, and type of break for both 7- and 28-day tests.

- E. Nondestructive Testing: Impact hammer, sonoscope, or other nondestructive device may be permitted by Architect but will not be used as sole basis for approval or rejection of concrete.
- F. Additional Tests: Testing and inspecting agency shall make additional tests of concrete when test results indicate that slump, air entrainment, compressive strengths, or other requirements have not been met, as directed by Architect. Testing and inspecting agency may conduct tests to determine adequacy of concrete by cored cylinders complying with ASTM C 42/C 42M or by other methods as directed by Architect.
- G. Additional testing and inspecting, at Contractor's expense, will be performed to determine compliance of replaced or additional work with specified requirements.
- H. Correct deficiencies in the Work that test reports and inspections indicate do not comply with the Contract Documents
- I. Measure floor and slab flatness and levelness according to ASTM E 1155 within 48 hours of finishing.

END OF SECTION 033000

**State of New Jersey  
Department of Transportation**



**N.J.D.O.T.  
Supplementary  
Specifications to  
the Standard  
Specifications for  
Road and Bridge  
Construction**

**FY 2019 Edition**

**SUPPLEMENTARY SPECIFICATIONS**  
**FOR THE**  
**CONVENTION BOULEVARD RESURFACING**  
**IN THE ATLANTIC CITY**

**AUTHORIZATION OF CONTRACT**

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The contract for this project is authorized by the provisions of local public contracts law.

**SPECIFICATIONS TO BE USED**

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The 2019 Standard Specifications for Road and Bridge Construction, of the New Jersey Department of Transportation (Department) as amended herein will govern the construction of this Project and the execution of the Contract.

These Supplemental Specifications consist of the following:

Pages 1 to 51 inclusive.

**WAGE RATES**

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State wage rates may be obtained from the New Jersey Department of Labor & Workforce Development (Telephone: 609-292-2259) or by accessing the Department of Labor & Workforce Development's website at [https://www.nj.gov/labor/wagehour/wagerate/prevailing\\_wage\\_determinations.html](https://www.nj.gov/labor/wagehour/wagerate/prevailing_wage_determinations.html). The State wage rates in effect at the time of award are part of this Contract, pursuant to Chapter 150, Laws of 1963 (N.J.S.A. 34:11-56.25 et seq.).

In the event it is found that any employee of the contractor or any subcontractor covered by the contract, has been paid a rate of wages less than the minimum wage required to be paid by the contract, the contracting agency may terminate the contractor's or subcontractor's right to proceed with the work, or such part of the work, as to which there has been a failure to pay required wages and to prosecute the work to completion or otherwise. The contractor and his sureties shall be liable to the contracting agency for any excess costs occasioned thereby.

## **GENERAL**

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Award of contract and subletting will not be permitted to, materials will not be permitted from, and use of equipment will not be permitted that is owned and/or operated by, firms and individuals included in the report of suspensions, [debarments](#) and disqualifications of firms and individuals as maintained by the Department of the Treasury, Division of Purchase & Property, Contract Compliance & Administration, Trenton NJ 08625 (609-292-5400).

Payment for a pay item in the proposal includes all the compensation that will be made for the work of that item as described in the contract documents unless the "measurement and payment" clause provides that certain work essential to that item will be paid for under another pay item.

Whenever any section, subsection, subpart or subheading is amended by such terms as changed to, deleted or added it is construed to mean that it amends that section, subsection, subpart or subheading of the 2019 Standard Specifications unless otherwise noted.

Whenever reference to page number is made, it is construed to refer to the 2019 Standard Specifications unless otherwise noted.

Henceforth in this supplementary specification whenever reference to the State, Department, ME, RE or Inspector is made, it is construed to mean the particular municipality or county executing this contract.

## **DIVISION 100 – GENERAL PROVISIONS**

THE FOLLOWING SECTIONS OF THE STANDARD SPECIFICATIONS ARE DELETED:

**SECTION 101 – GENERAL INFORMATION**

**SECTION 102 – BIDDING REQUIREMENTS AND CONDITIONS**

**SECTION 103 – AWARD AND EXECUTION OF CONTRACT**

**SECTION 104 – SCOPE OF WORK**

**SECTION 105 – CONTROL OF WORK**

**SECTION 106 – CONTROL OF MATERIAL**

**SECTION 107 – LEGAL RELATIONS**

**SECTION 108 – PROSECUTION AND COMPLETION**

**SECTION 109 – MEASUREMENT AND PAYMENT**

**SECTION 151 – PERFORMANCE BOND AND PAYMENT BOND**

**SECTION 152 – INSURANCE**

**SECTION 153 – PROGRESS SCHEDULE**

**SECTION 154 – MOBILIZATION**

**SECTION 155 – CONSTRUCTION FIELD OFFICE**

**SECTION 156 – MATERIALS FIELD LABORATORY AND CURING**

### **FACILITY**

THESE SECTIONS OF THE STANDARD SPECIFICATIONS ARE CHANGED TO THE REQUIREMENTS OF THE CONTRACTING AGENCY CONTAINED HERE IN THESE CONTRACT CONSTRUCTION SPECIFICATIONS DOCUMENT.

### **SECTION 157 – CONSTRUCTION LAYOUT AND MONUMENTS**

#### **157.04 MEASUREMENT AND PAYMENT**

THE ENTIRE SECTION IS CHANGED TO:

SEPARATE PAYMENT WILL NOT BE MADE FOR CONSTRUCTION LAYOUT.

## **SECTION 158 – SOIL EROSION AND SEDIMENT CONTROL AND WATER QUALITY CONTROL**

### **158.03.02 SESC Measures**

#### **19. Oil-Only Emergency Spill Kit.**

### **158.04 MEASUREMENT AND PAYMENT**

THE ENTIRE SECTION IS CHANGED TO:

SEPARATE PAYMENT WILL NOT BE MADE FOR SOIL EROSION CONTROL AND WATER QUALITY CONTROL

## **SECTION 159 – TRAFFIC CONTROL**

### **159.04 MEASUREMENT AND PAYMENT**

THE ENTIRE TEXT IS CHANGED TO:

No work contained in this Section will be measured for payment.

Payment will be made under:

*Pay Item*

MAINTENANCE & PROTECTION OF TRAFFIC

*Pay Unit*

LUMP SUM

Separate payment will not be made for any other work contained in this Section, including uniformed law enforcement officers, traffic safety services, relocating traffic control devices, posts for construction signs, traffic control coordinators, temporary pavement markers, removable pavement marking tape, and removable black line masking tape.

## **SECTION 160 – PRICE ADJUSTMENTS**

THE ENTIRE SECTION 160 IS CHANGED TO:

### **160.01 DESCRIPTION**

This Section describes the requirements for price adjustments for fuel and asphalt usage.

### **160.02 MATERIALS**

(Intentionally Blank)

### **160.03 PROCEDURE**

#### **160.03.01 Fuel Price Adjustment**

THE ENTIRE SUBPART IS CHANGED TO:

The Department will make price adjustments for fuel usage for Items listed in Table 160.03.01-1 and the Special Provisions. Each month may be divided into two periods. Period one includes the first day of the month through the fourteenth day of the month. Period two includes the fifteenth day of the month through the last day of the month. Work starting within period one and continuing past midnight of the fourteenth day into the fifteenth day of the month will be included in period one for any price adjustments. Work continuing past midnight of the last day of the month into the first day of the next month will be included in period two.

The Department will calculate fuel price adjustments based on the pay quantities of listed Items using the fuel usage factors listed in Table 160.03.01-1 and the Special Provisions.

Price adjustments may result in an increased payment to the Contractor for increases in the price index and may result in a reduction in payment for decreases in the price index.

If the as-built quantity of an Item eligible for fuel price adjustment differs from the sum of the quantities in the Estimates and the as-built quantity cannot be readily distributed among the time periods that the Item was constructed, then the Department will determine fuel price adjustment by distributing the difference in the same proportion as the Item's Estimate quantity is to the total of the Item's time period estimates.

**Table 160.03.01-1 Fuel Price Adjustments**

<b>Items</b>	<b>Fuel Usage Factor</b>
EXCAVATION, UNCLASSIFIED	0.50 Gallons per Cubic Yard
EXCAVATION, REGULATED MATERIAL	0.50 Gallons per Cubic Yard
EXCAVATION, ACID PRODUCING SOIL	0.50 Gallons per Cubic Yard
REMOVAL OF PAVEMENT	0.25 Gallons per Square Yard
MICRO-MILLING	0.25 Gallons per Square Yard
HMA MILLING, 3" OR LESS	0.25 Gallons per Square Yard
HMA MILLING, MORE THAN 3" TO 6"	0.25 Gallons per Square Yard
CONCRETE MILLING	0.25 Gallons per Square Yard
HMA PROFILE MILLING	0.25 Gallons per Square Yard
BREAKING PAVEMENT	0.25 Gallons per Square Yard
RUBBLIZATION	0.25 Gallons per Square Yard
SUBBASE	1.00 Gallon per Cubic Yard
I- SOIL AGGREGATE	1.00 Gallon per Cubic Yard
SOIL AGGREGATE BASE COURSE, ___ " THICK	1.00 Gallon per Cubic Yard
SOIL AGGREGATE BASE COURSE, VARIABLE THICKNESS	1.00 Gallon per Cubic Yard
DENSE-GRADED AGGREGATE BASE COURSE, ___ " THICK	1.00 Gallon per Cubic Yard
DENSE-GRADED AGGREGATE BASE COURSE, VARIABLE THICKNESS	1.00 Gallon per Cubic Yard
CONCRETE BASE COURSE, ___ " THICK	0.25 Gallons per Square Yard
CONCRETE BASE COURSE, REINFORCED ___ " THICK	0.25 Gallons per Square Yard
ASPHALT-STABILIZED DRAINAGE COURSE	2.50 Gallons per Ton
OPEN-GRADED ___ FRICTION COURSE	2.50 Gallons per Ton
HOT MIX ASPHALT _____ SURFACE COURSE	2.50 Gallons per Ton
HOT MIX ASPHALT _____ SURFACE COURSE HIGH RAP	2.50 Gallons per Ton
HOT MIX ASPHALT _____ INTERMEDIATE COURSE	2.50 Gallons per Ton
HOT MIX ASPHALT _____ INTERMEDIATE COURSE HIGH RAP	2.50 Gallons per Ton
HOT MIX ASPHALT _____ BASE COURSE	2.50 Gallons per Ton
HOT MIX ASPHALT _____ BASE COURSE HIGH RAP	2.50 Gallons per Ton
MODIFIED OPEN-GRADED ___ FRICTION COURSE _____	2.50 Gallons per Ton
ULTRA-THIN FRICTION COURSE	2.50 Gallons per Ton
STONE MATRIX ASPHALT ___ SURFACE COURSE	2.50 Gallons per Ton
HIGH PERFORMANCE THIN OVERLAY	2.50 Gallons per Ton
BINDER RICH INTERMEDIATE COURSE	2.50 Gallons per Ton
BRIDGE DECK WATERPROOFING SURFACE COURSE	2.50 Gallons per Ton
NON-VEGETATIVE SURFACE, HOT MIX ASPHALT	2.50 Gallons per Ton
NON-VEGETATIVE SURFACE COURSE, POROUS HOT MIX ASPHALT	2.50 Gallons per Ton
COLOR-COATED NON-VEGETATIVE SURFACE, HOT MIX ASPHALT	2.50 Gallons per Ton
CONCRETE SURFACE COURSE, ___ " THICK	0.25 Gallons per Square Yard
CONCRETE SIDEWALK, 4" THICK	0.25 Gallons per Square Yard
CONCRETE SIDEWALK, 5" THICK	0.25 Gallons per Square Yard
CONCRETE SIDEWALK, 6" THICK	0.25 Gallons per Square Yard
CONCRETE SIDEWALK, 8" THICK	0.25 Gallons per Square Yard

**Table 160.03.01-1 Fuel Price Adjustments**

<b>Items</b>	<b>Fuel Usage Factor</b>
CONCRETE SIDEWALK, REINFORCED, 6" THICK	0.25 Gallons per Square Yard
CONCRETE SIDEWALK, REINFORCED, 8" THICK	0.25 Gallons per Square Yard
DIAMOND GRINDING OF CONCRETE SURFACE COURSE	0.25 Gallons per Square Yard
DIAMOND GRINDING EXISTING CONCRETE PAVEMENT	0.25 Gallons per Square Yard
SLURRY SEAL AGGREGATE, TYPE II	2.5 Gallons per Ton
SLURRY SEAL EMULSION	0.10 Gallons per Gallon
CONCRETE BRIDGE APPROACH	0.50 Gallons per Cubic Yard
CONCRETE CULVERT	1.00 Gallon per Cubic Yard
CONCRETE FOOTING	1.00 Gallon per Cubic Yard
CONCRETE WING WALL	1.00 Gallon per Cubic Yard
CONCRETE PIER COLUMN PROTECTION, HPC	1.00 Gallon per Cubic Yard
CONCRETE PIER COLUMNS AND CAP	1.00 Gallon per Cubic Yard
CONCRETE ABUTMENT WALL	1.00 Gallon per Cubic Yard
CONCRETE PIER SHAFT	1.00 Gallon per Cubic Yard
CONCRETE PEDESTRIAN BRIDGE	1.00 Gallon per Cubic Yard
CONCRETE BRIDGE DECK	1.00 Gallon per Cubic Yard
CONCRETE BRIDGE DECK, HPC	1.00 Gallon per Cubic Yard
CONCRETE BRIDGE SIDEWALK	1.00 Gallon per Cubic Yard
CONCRETE BRIDGE SIDEWALK HPC	1.00 Gallon per Cubic Yard
CONCRETE BRIDGE PARAPET	1.00 Gallon per Cubic Yard
CONCRETE BRIDGE PARAPET HPC	1.00 Gallon per Cubic Yard
15" BY 32" CONCRETE BARRIER CURB, BRIDGE	0.12 Gallon per Linear Foot
24" BY 32" CONCRETE BARRIER CURB, BRIDGE	0.17 Gallon per Linear Foot
21" BY 34" CONCRETE BARRIER CURB, BRIDGE	0.15 Gallon per Linear Foot
24" BY 42" CONCRETE BARRIER CURB, BRIDGE	0.21 Gallon per Linear Foot
CAST-IN-PLACE CONCRETE PILES, DRIVEN _____ " DIAMETER	1.00 Gallon per Cubic Yard
RETAINING WALL, LOCATION NO. _____	0.10 Gallon per Square Foot
CONCRETE MEDIAN BARRIER, HPC	0.16 Gallon per Linear Foot
15" BY 41" CONCRETE BARRIER CURB	0.28 Gallon per Linear Foot
24" BY 32" CONCRETE BARRIER CURB	0.17 Gallon per Linear Foot
15" BY 54" CONCRETE BARRIER CURB	0.15 Gallon per Linear Foot
38" BY 79" CONCRETE BARRIER CURB	0.40 Gallon per Linear Foot
24" BY 39" CONCRETE BARRIER CURB	0.18 Gallon per Linear Foot
18 5/8" BY 65" CONCRETE BARRIER CURB	0.20 Gallon per Linear Foot
32" BY 41" CONCRETE BARRIER CURB	0.24 Gallon per Linear Foot
24" BY 41" CONCRETE BARRIER CURB	0.19 Gallon per Linear Foot
24" BY 45" CONCRETE BARRIER CURB	0.19 Gallon per Linear Foot
15" BY 35" CONCRETE BARRIER CURB, DOWELLED	0.09 Gallon per Linear Foot
15" BY VARIABLE HEIGHT CONCRETE BARRIER CURB	0.28 Gallon per Linear Foot
24" BY VARIABLE HEIGHT CONCRETE BARRIER CURB	0.15 Gallon per Linear Foot
15" BY VARIABLE HEIGHT CONCRETE BARRIER CURB, DOWELLED	0.24 Gallon per Linear Foot
24" BY VARIABLE HEIGHT CONCRETE BARRIER CURB, DOWELLED	0.15 Gallon per Linear Foot
19" BY 32" CONCRET BARRIER CURB, DOWELLED	0.10 Gallon per Linear Foot
24" BY 32" CONCRETE BARRIER CURB, DOWELLED	0.13 Gallon per Linear Foot
24 1/2" BY 53" CONCRETE BARRIER CURB, DOWELLED	0.18 Gallon per Linear Foot

**Table 160.03.01-1 Fuel Price Adjustments**

<b>Items</b>	<b>Fuel Usage Factor</b>
24 1/2" BY VARIABLE HEIGHT CONCRETE BARRIER CURB, DOWELLED	0.15 Gallon per Linear Foot
24" BY 35" CONCRETE BARRIER CURB, DOWELLED	0.13 Gallon per Linear Foot
GROUND MOUNTED BARRIER CURB	0.15 Gallon per Linear Foot
15" BY 51" F SHAPE CONCRETE BARRIER CURB	0.34 Gallon per Linear Foot
24 1/2" BY 51" F SHAPE CONCRETE BARRIER CURB	0.23 Gallon per Linear Foot
24 1/2" BY ___" F SHAPE CONCRETE BARRIER CURB, DOWELLED	0.23 Gallon per Linear Foot
15" BY VARIABLE HEIGHT F SHAPE CONCRETE BARRIER CURB, DOWELLED	0.34 Gallon per Linear Foot
15" BY ___" F SHAPE CONCRETE BARRIER CURB, DOWELLED	0.34 Gallon per Linear Foot
VARIABLE WIDTH BY VARIABLE HEIGHT F SHAPE CONCRETE BARRIER CURB	0.34 Gallon per Linear Foot
9" BY 16" CONCRETE VERTICAL CURB	0.04 Gallon per Linear Foot
9" BY 18" CONCRETE VERTICAL CURB	0.04 Gallon per Linear Foot
9" BY 20" CONCRETE VERTICAL CURB	0.04 Gallon per Linear Foot
9" BY 22" CONCRETE VERTICAL CURB	0.05 Gallon per Linear Foot
9" BY 14" CONCRETE VERTICAL CURB	0.03 Gallon per Linear Foot
9" BY 4" CONCRETE VERTICAL CURB, DOWELLED	0.01 Gallon per Linear Foot
9" BY 6" CONCRETE VERTICAL CURB, DOWELLED	0.01 Gallon per Linear Foot
9" BY 8" CONCRETE VERTICAL CURB, DOWELLED	0.02 Gallon per Linear Foot
9" BY 10" CONCRETE VERTICAL CURB, DOWELLED	0.02 Gallon per Linear Foot
12" BY 13" CONCRETE SLOPING CURB	0.04 Gallon per Linear Foot
12" BY 3" CONCRETE SLOPING CURB, DOWELLED	0.01 Gallon per Linear Foot
___" BY ___" CONCRETE SLOPING CURB, DOWELLED	0.01 Gallon per Linear Foot
9" BY VARIABLE HEIGHT CONCRETE VERTICAL CURB	0.04 Gallon per Linear Foot
9" BY VARIABLE HEIGHT CONCRETE VERTICAL CURB, DOWELLED	0.02 Gallon per Linear Foot

If an item listed in Table 160.03.01-1 has a payment unit which differs from that listed in Table 160.03.01-1, the Department will apply an appropriate conversion factor to determine the number of gallons of fuel used.

The Department will calculate fuel price adjustment using the following formula:

$$F = (MF - BF) \times G$$

Where:

- F = Fuel Price Adjustment
- MF = Fuel Price Index for work performed in the time period immediately before the estimate cutoff date.
- BF = Basic Fuel Price Index
- G = Gallons of Fuel for Price Adjustment

The Department will post the Fuel Price Index every month on the Department's website: <https://www.state.nj.us/transportation/business/aashtoware/PriceIndex.shtm>.

The Basic Fuel Price Index is the Index which is listed for the month prior to the receipt of bids. If the month prior to the receipt of bids has two Indexes, the Index in effect for the first day of that month will govern for the Basic Fuel Price Index. If the Fuel Price Index increases by 50 percent or more over the Basic Fuel Price Index, do not perform any work involving Items listed in Table 160.03.01-1 without written approval from the RE.

**160.03.02 Asphalt Price Adjustment**

The Department will make price adjustments for asphalt binder usage. The Department will calculate asphalt price adjustments based on the quantities of Items containing asphalt binder constructed.

Each month may be divided into two periods. Period one includes the first day of the month through the fourteenth day of the month. Period two includes the fifteenth day of the month through the last day of the month. Work starting on the fourteenth day of the month and continuing past midnight into the fifteenth day of the month will be included in period

one for any price adjustments. Work continuing through midnight of the last day of the month into the first day of the next month will be included in period two.

The Asphalt Price Adjustment will be separated between asphalt binder grades PG 64S-22 and PG 64E-22. The price used for both the Basic and Monthly Price Indexes will be determined based on the performance grade of asphalt binder in the approved mix design for the asphalt mixture.

Price adjustments may result in an increased payment to the Contractor for increases in the price index and may result in a reduction in payment for decreases in the price index.

The Department will calculate the asphalt price adjustment by the following formula:

$$A = (MA - BA) \times T$$

Where:

A = Asphalt Price Adjustment

MA = Asphalt Price Index for work performed in the time period immediately before the estimate cutoff date.

BA = Basic Asphalt Price Index

T = Tons of New Asphalt Binder<sup>1</sup>

1. The Department will determine the weight of asphalt binder for price adjustment by multiplying the percentage of new asphalt binder in the approved job mix formula by the weight of the item containing asphalt binder. If a Hot Mix Asphalt Item has a payment unit other than ton, the Department will apply an appropriate conversion factor to determine the number of tons of asphalt binder used.

For Tack Coat, Prime Coat, MICRO SURFACING EMULSION, SLURRY SEAL EMULSION, and FOG SEAL SURFACE TREATMENT, the Department will calculate the weight of asphalt as follows:

$$T = G \times C \times 0.00428$$

C = Petroleum content of the product

Use 100% for Tack Coat 64-22 and Tack Coat 64E-22

Use 60% for Polymer Modified Tack Coat, and all other emulsified asphalts

G = Gallons furnished

The constant 0.00428 is derived from the conversion factor of tons per gallon using 8.345 lbs/gallon for water and a factor of 1.025 for the specific gravity of asphalt binder.

The Department will not calculate an asphalt price adjustment for FOG SEAL STRIP.

The monthly asphalt price index, as determined by the Department, will be the average of quotations from suppliers serving the area in which the Project is located, and will be determined by the Department. The Department will post the asphalt price index every month on the Department's website: <https://www.state.nj.us/transportation/business/aashtoware/PriceIndex.shtm>.

The Basic Asphalt Price Index will be the Index which is listed for the month prior to the receipt of bids. If the month prior to the receipt of bids has two Indexes, the Index in effect for the first day of the month will govern for the Basic Asphalt Price Index.

The Monthly Asphalt Price Index will be that for the month that the work is constructed in. If work is constructed over the course of two or more months for a particular pay estimate, then multiple Monthly Indexes will be used corresponding to the date that the work was performed.

If the Asphalt Price Index increases 50 percent or more over the basic asphalt price index, do not perform work on Items containing asphalt binder without written approval from the RE.

THE FOLLOWINGS IS ADDED:

THE FOLLOWINGS SUBPART IS ADDED:

### **160.03.03 Steel Price Adjustment**

THE FIRST PARAGRAPH IS CHANGED TO:

The Department will make a steel price adjustment for Items listed in table 160.03.03-1 using the price index indicated for the Item. The Contractor may opt out of a steel price adjustment for one or more of the categories of structural steel, reinforcement steel, or piles, shown in table 160.03.03-1, by providing the Regional Construction Engineer with a list of those categories to which the Contractor does not want to apply the steel price adjustment. Provide the list within 5 days of award of the Contract. Ensure the list identifies all items in each opt out category by description and Item number. Only entire categories will be considered. Only the items listed will be excluded for a price adjustment. Failure to submit the list within the specified time will result in losing the opportunity to opt out of the steel price adjustment. The steel price adjustment will always apply to beam guide rail, rub rail, and sign structures. This adjustment is based solely on the mill provided steel.

<b>Table 160.03.03-1 Steel Price Adjustment Items</b>	
<b>Item</b>	<b>Price Index (BS &amp; MS)</b>
STRUCTURAL STEEL	US Dept. of Labor, Bureau of Labor Statistics - Producer Price Index for Hot Rolled Steel Bars, Plates, and Structural Shapes WPU 101704
REINFORCEMENT STEEL	US Dept. of Labor, Bureau of Labor Statistics - Producer Price Index for Semifinished Steel Mill Products WPU 101702
REINFORCEMENT STEEL, EPOXY-COATED	US Dept. of Labor, Bureau of Labor Statistics - Producer Price Index for Semifinished Steel Mill Products WPU 101702
REINFORCEMENT STEEL, GALVANIZED	US Dept. of Labor, Bureau of Labor Statistics - Producer Price Index for Semifinished Steel Mill Products WPU 101702
REINFORCEMENT STEEL, STAINLESS	US Dept. of Labor, Bureau of Labor Statistics - Producer Price Index for Semifinished Steel Mill Products WPU 101702
CAST-IN-PLACE CONCRETE PILE FURNISHED	US Dept. of Labor, Bureau of Labor Statistics - Producer Price Index for Hot Rolled Steel Bars, Plates and Structural Shapes WPU 101704
STEEL H-PILE, FURNISHED	US Dept. of Labor, Bureau of Labor Statistics - Producer Price Index for Hot Rolled Steel Bars, Plates and Structural Shapes WPU 101704
BEAM GUIDE RAIL	US Dept. of Labor, Bureau of Labor Statistics - Producer Price Index for Semifinished Steel Mill Products WPU 101702
RUB RAIL	US Dept. of Labor, Bureau of Labor Statistics - Producer Price Index for Semifinished Steel Mill Products WPU 101702
OVERHEAD SIGN STRUCTURE NO. ____	US Dept. of Labor, Bureau of Labor Statistics - Producer Price Index for Semifinished Steel Mill Products WPU 101702
BUTTERFLY SIGN SUPPORT, DMS STRUCTURE NO. ____	US Dept. of Labor, Bureau of Labor Statistics - Producer Price Index for Semifinished Steel Mill Products WPU 101702
CANTILEVER SIGN STRUCTURE NO. ____	US Dept. of Labor, Bureau of Labor Statistics - Producer Price Index for Semifinished Steel Mill Products WPU 101702
CANTILEVER SIGN SUPPORT, DMS STRUCTURE NO. ____	US Dept. of Labor, Bureau of Labor Statistics - Producer Price Index for Semifinished Steel Mill Products WPU 101702

Price adjustments may result in an increased payment to the Contractor for increases in the price index and may result in a reduction in payment for decreases in the price index.

A steel price adjustment will only be made for price increases when  $\frac{(MS-BS)}{BS} > 10\%$ , and a price adjustment will only be made for price decreases when  $\frac{(BS-MS)}{BS} > 10\%$ .

When the Monthly Steel Price Index is greater than the Benchmark Steel Price Index, the Department will calculate STEEL PRICE ADJUSTMENT using the following formula:

$$S = \frac{[(BS - MS) + (BS \times 0.10)]}{-BS} \times CB \times W$$

When the Monthly Steel Price Index is less than the Benchmark Steel Price Index, the Department will calculate STEEL PRICE ADJUSTMENT using the following formula:

$$S = \frac{[(MS - BS) + (BS \times 0.10)]}{BS} \times CB \times W$$

Where:

- S = Steel Price Adjustment (Dollars).
- BS = Benchmark Steel Price Index – the steel preliminary price index for the month before the project is bid.
- MS = Monthly Steel Price Index – the steel price index for the month steel is shipped from the mill.
- CB = Cost Basis (\$/lb).
- W = Weight of Steel (lb).

The Department will post the BS, MS and CB value every month at <https://www.state.nj.us/transportation/business/aashtoware/SteelPriceIndex.shtml>.

With each delivery of steel, submit to the RE documentation from the fabricator or supplier, which details the following information:

1. Weight of the steel shipped from the mill to the fabricator or supplier
2. Name of the mill, fabricator or supplier or both.
3. Identifying transmittal or invoice number for each shipment.
4. Date of the shipment
5. Item description and Item number(s) for which the steel is associated.

If the documented steel weight is for more than one Item, provide the RE with the weight attributed to each Item.

On a monthly basis, provide the RE with a certified tabulation listing all the eligible steel shipments for the prior month. The tabulation must list the above items correlating to the identifying marks noted on the mill delivery reports.

On a monthly basis, complete form DC-160(S) Steel Price Adjustment.

Provide the documentation to the RE within 60 days of the date of the shipment. The Department will not make a price adjustment for steel shipped before the bid date.

The Department will make a price adjustment for the Items “STRUCTURAL STEEL” based on the weights listed in Table 160.03.03-2. If the steel for an Item is shipped on dates having different monthly index prices, the Department will proportionately adjust the weight used in the calculation of the price adjustment by multiplying the weight shipped by the ratio of the weight for the Item listed in Table 160.03.03-2 to the sum total of weight shipped for that Item. If the weight of steel estimated for a structure in Table 160.03.03-2 differs from the actual weight by more than 10 percent, the Department will make a price adjustment based on the actual weight.

Table 160.03.03-2 Structural Steel Price Adjustment Items		
Structure	Item No.	Weight (Lb)
.....		

The Department will make a price adjustment for the Items OVERHEAD SIGN STRUCTURE and CANTILEVER SIGN STRUCTURE based on the weights listed in Table 160.03.03-3. If the steel for an Item is shipped on dates having different monthly index prices, the Department will proportionately adjust the weight used in the calculation of the price adjustment by multiplying the weight shipped by the ratio of the weight for the Item listed in Table 160.03.03-3 to the sum total of

weight shipped for that Item. If the weight of steel estimated for a structure in Table 160.03.03-3 differs from the actual weight by more than 10percent, the Department will make a price adjustment based on the actual weight.

<b>Table 160.03.03-3 Overhead Sign Structure and Cantilever Sign Structure Price Adjustment Items</b>		
<b>Overhead and Cantilever Sign Structure Number</b>	<b>Item No.</b>	<b>Weight (Lb)</b>
.....		

The Department will only make a price adjustment for reinforcement steel for steel provided in association with the reinforcement steel items. The Department will make a price adjustment for reinforcement steel based on the weight of reinforcement steel indicated in the Proposal for an Item as adjusted by Change Orders. If the reinforcement steel for an Item is shipped on dates having different monthly index prices, the Department will proportionately adjust the weight used in the calculation of the price adjustment by multiplying the weight shipped by the ratio of the weight for the Item to the sum total of weight shipped for that Item.

The Department will make a price adjustment for piles based on the weight of steel furnished for pipe piles and for H-piles based on the RE’s order list. The weight of steel furnished for piles will not include the weight for ancillary materials such as pile shoes and splice collars.

The Department will make a price adjustment for BEAM GUIDE RAIL (including posts) and RUB-RAIL based on the weight of steel furnished. The weight does not include coating. The weight does not include associated hardware and the weight of end treatments.

If the preliminary Monthly Steel Price Index increases 100percent or more over the Benchmark Steel Price Index, do not order more steel without written approval from the RE. The RE will determine if work will continue based on the Steel Price Index increase.

There will be no increase to STEEL PRICE ADJUSTMENT if the work is behind schedule by fault of the Contractor and the steel was not purchased prior to the delay.

**160.04 MEASUREMENT AND PAYMENT**

THE SUBSECTION IS CHANGED TO:

The Department will measure and make payment for Items as follows:

<i>Pay Item</i>	<i>Pay Unit</i>
FUEL PRICE ADJUSTMENT	DOLLAR
ASPHALT PRICE ADJUSTMENT	DOLLAR

THE SECOND PARAGRAPH IS CHANGED TO:

The Items FUEL PRICE ADJUSTEMENT and ASPHALT PRICE ADJUSTMENT must be included in the Proposal or added to the Contract to qualify for payment.

## DIVISION 200 – EARTHWORK

### SECTION 201 – CLEARING SITE

#### 201.03.01 Clearing Site

Remove trees and branches within 15 feet of the end of JCP&L pole cross arms. If the resulting tree is rendered hazardous, then remove the entire tree according to Section 802.

PART A IS CHANGED TO:

**A. Preparation.** Construct SESC measures, as specified in 158.03.02, before clearing site.

THE FIRST PARAGRAPH IN PART B IS CHANGED TO:

**B. Clearing and Grubbing.** Before beginning excavation or embankment construction, clear the site within the limits of construction. Clear the ground surface of vegetation (trees of various caliper, brush, weeds, roots, matted leaves), small structures not shown on the Plans for demolition, debris, and other objectionable material where its existing position conflicts with the limits of construction. In cut sections, grub out tree stumps within the limits of the total cut area. In fill sections, the Contractor may leave tree stumps extending less than 1 foot above the original ground surface in those areas where the proposed subgrade, or proposed finished grade in non-pavement sections, is greater than 3 1/2 feet above the original ground surface. Grub out tree stumps that lie within 5 feet horizontally or vertically from any proposed structure, pipe, or duct.

#### 201.03.02 Clearing Site, Bridge and Clearing Site, Structure

THE FIRST PARAGRAPH IS CHANGED TO:

Submit a demolition plan detailing the work area, methods, and equipment to be used to the RE for approval 30 days before demolition operations. Clear site within work area as specified in 201.03.01. Remove the substructures of existing structures to at least 3 feet below the natural stream bottom, and remove those parts outside of the stream to at least 2 feet below natural ground surface. Where such portions of existing structures lie wholly or in part within the limits of a new structure, remove them to accommodate the construction of the proposed structure. Only the following equipment is permitted for the work:

THE FOLLOWING IS ADDED:

The procedure is described below:

1. **Prestressed Concrete Stringers and Concrete Diaphragms.** Repair damage to prestressed concrete stringers and concrete diaphragms using nonshrink grout conforming to 903.08 before deck placement.
2. **Steel Stringers, Floorbeams, Cross Frames, and Diaphragms.**
  - a. Repair procedures to tensile components in conformance with ASTM A6/A6M and the following:
    - 1 Repair gouges up to 1/8 inch by grinding flush in the direction of principal stress.
    - 2 Repair gouges deeper than 1/8 inch by first grinding; then, depositing weld metal and grinding flush with the surface of the metal in the direction of principal stress. Weld using low hydrogen electrodes conforming to current AWS Specifications A5.1 and A5.5.
    - 3 Repair kinks and deformations by flame straightening or a combination of flame straightening and jacking. Ensure flame straightening is performed by personnel having a minimum of three years of documented experience. Submit the names of the personnel to the RE for review and approval prior to performing the work.
  - b. Repair procedures to compression components for kinks and deformations as outlined in 2.a.3 above. Where more than 5 percent of the cross-sectional area of the member is damaged, submit a repair procedure to the RE for review and approval.

Clean and paint exposed existing top flanges of beams with prime coat as specified in 554.03.

- 1. Grounding for Electrified Railroad.** Submit a list of required grounding materials to the RE for approval 21 days before construction operation. In the list, include the material description, manufacturer, and catalog number. After obtaining the RE's approval, submit the list to the railroad for review and approval. Do not order the materials prior to obtaining the railroad's approval. Furnish and deliver the grounding materials to the railroad. Obtain a receipt for the materials from the railroad and provide a copy to the RE.

**List of Materials**

Description	Quantity Required
U-bolt, 7/8 inch diameter by 4 inch, BS fastener	-----
Strap, clevis, 1 1/4 by 2 inches stock, 12 inch connecting length, 1 inch diameter hole, 5/8 inch diameter bolt, ultimate strength 25 psi, Brewer Tilchener Corp.-3074 C	-----
Dead end eye bolt, compression type steel, use DIE 6010SH, compression tool, 60A ALCOA 9190-332	-----
Jumper cable, compression type aluminum, use DIE 6020AH, compression tool 60A ALCOA 5120-781	-----
Terminal - Bundy AK2C39B1 to 336400 Cable (1)	-----
Ground terminal - Bundy AK2C39B1 to 336400 Cable (2)	-----
Terminal - solid barrier to 0.17 square inch cable Bundy KC28B1	-----
Compound, aluminum to copper connection (ALNOX) CANS	-----
Termination, dead end strand clamp, ALCO 336 4 KCM	-----
Clip, bronze, complete type BC, Ohio brass	-----
Thimble-Bronx 336 4 KCM	-----
U-bolt, 1 1/4 inch diameter by 1 1/2 inch loop 336 4 KCM 11, 30/7 STR ACSR, ANACONDA insulated aluminum cable having a diameter of 0.17 square inches, ANACONDA	-----

**201.03.03 Clearing Site, Tank Removal**

Remove following:

Parcel No.	Tank Size	Contents	Tank Registration No.

**201.04 MEASUREMENT AND PAYMENT**

THE ENTIRE TEXT IS CHANGED TO:

Clearing site will not be measured, and payment will be made on a lump sum basis.

Payment will be made under:

<i>Pay Item</i>	<i>Pay Unit</i>
CLEARING SITE	LUMP SUM

Payment for the pay item "Clearing Site" in excess of 10% of total contract price will not be made until Completion.

## **SECTION 202 – EXCAVATION**

### **202.04 MEASUREMENT AND PAYMENT**

THE ENTIRE SECTION IS CHANGED TO THE FOLLOWING:

NO SEPARATE PAYMENT WILL BE MADE FOR EXCAVATION OF ANY KIND.

# DIVISION 400 – PAVEMENTS

## SECTION 401 – HOT MIX ASPHALT (HMA) COURSES

### 401.02.01 Materials

THE FIRST ITEM IS CHANGED TO:

Tack Coat 64-22, PG 64S-22 ..... 902.01.01

### 401.03.01 Milling

#### A. HMA Milling.

Stage	Max. Time Interval Allowed
-------	----------------------------

#### C. Micro-Milling and Profile Milling.

THE FOLLOWING IS ADDED AT THE END:

The Department will provide the time interval for resurfacing the micro-milled areas in the Special Provisions. Extensions to the time interval may be approved by the RE. The RE is responsible for performing a daily inspection of the micro-milled surface to ensure continued compliance with ASTM E 965. The contractor is responsible for any incidental costs incurred as a result of time interval extension.

The RE may increase the allowable time interval to a maximum of 72 hours based on field conditions and provided that the condition does not deteriorate the pavement or impact the safety of the traveling public.

Stage	Max. Time Interval Allowed
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### 401.03.03 HMA Pavement Repair

THE TITLE AND ENTIRE SUBSECTION IS CHANGED TO:

#### 401.03.03 HMA Repair

- A. **HMA Pavement Repair.** Arrange a project site meeting with the RE to establish the limits of HMA pavement repair. Additional repairs, not delineated on the Plans or by the RE during the project site meeting, may be required if the need is established by the RE.

If potholes are discovered, notify the RE immediately. The RE may immediately direct repairs of small areas. The RE may require further evaluation of a large area to determine the need for additional milling and paving.

Perform HMA repairs as a separate operation before milling, paving, and other surface treatments. The Contractor may request approval of the RE to perform the repair work as one operation with the paving or surface treatment.

HMA repairs may be performed on full depth HMA pavement or on composite pavement (HMA over concrete pavement). For full depth HMA pavement, sawcut existing HMA pavement to a depth of 8 inches. For composite pavement, sawcut existing HMA to a depth of 8 inches or up to the top of concrete, whichever is less. Sawcut lines parallel and perpendicular to the roadway baseline and 3 inches away, at the closest point, from the damaged area to be repaired.

Remove damaged and loose material within the boundary of the sawcuts to form rectangular openings with vertical sides to a depth of 8 inches for HMA pavement, or to the top of concrete for composite pavement. A milling machine may be used to remove damaged pavement to form the repair areas if approved by the RE.

After the existing damaged HMA and loose material has been removed, the RE will examine underlying material to determine its condition.

If the base of the repair area is unbound material, then shape and compact the unbound material to produce a firm and level base.

If water exists in the area, remove the underlying material to the depth as directed by the RE. Place geotextile, then place and compact coarse aggregate to required grade to provide for a minimum 8 inch thick HMA pavement repair. Compact coarse aggregate as specified in 203.03.02.B.3.

If the base of the repair is HMA or concrete pavement, then ensure that the remaining pavement is cleaned and dry prior to applying tack coat.

Apply tack coat at an application rate of 0.15 gallons per square yard to the vertical surfaces and base of the opening. Spread and grade HMA surface course mix in the opening as specified for the roadway surface or a HMA surface course mix approved by the RE. Ensure that the temperature of the HMA when placed is at least 250 °F, and compact as specified in 401.03.07.F. Compact areas not accessible to rollers with a flat face compactor. Compact until the top of the patch is flush with, or 1/8 inch higher than, the adjacent pavement surface.

Reuse removed material as specified in 202.03.03.C.1.

- B. HMA Longitudinal Joint Repair.** Arrange a project site meeting with the RE to establish the limits of HMA longitudinal repair areas. Additional repairs, not delineated on the Plans or by the RE during the project site meeting, may be required if the need is established by the RE.

Mill 2 feet wide, unless directed otherwise by the RE, centered over the HMA longitudinal joint, rumble strip, longitudinal distress areas or any combination of the three, as shown on the Plans and as directed by the RE. Mill to a minimum 2 inches in depth, or as required to remove the damaged pavement. For distress areas wider than 4 feet, the RE may direct the use of HMA pavement repair as specified in 401.03.03.A.

Clean the milled area as specified in 401.03.01.A. Obtain RE approval of the repair area before proceeding with the repair.

Apply polymerized joint adhesive to the vertical surfaces of the repair area as specified in 401.03.04. Apply tack coat as specified in 401.03.05 at an application rate of 0.15 gallons per square yard to the bottom surface of the repair area. Obtain RE approval of the repair area before proceeding with the repair. Spread and grade Hot Mix Asphalt 9.5M64 Surface Course in the repair area as specified in 401.03.07.E. Ensure that the temperature of the HMA when placed and compacted is at least 250 °F. Compact as specified in 401.03.07.F, ensuring that the top of the compacted HMA is flush with, or not greater than 1/8 inch higher than, the adjacent pavement surface.

Reuse removed material as specified in 202.03.03.C.1.

#### **401.03.05 Tack Coat**

THE FOLLOWING IS ADDED AFTER THE FOURTH PARAGRAPH:

The Department will perform verification testing of tack coat application rate according to ASTM D2995, Option A, within the first 300 feet of each paving operation for each lane of paving, except that only one pad assembly will be used for the transverse application rate and the longitudinal application rate will not be verified. Prior to tack coat application, allow the RE access to set geotextile pads for the initial verification test. After passing over the pads with the tack distributor, allow the RE time to perform the verification test and calculation. If the application rate is determined to be outside the rate specified in Table 401.03.05-1, stop the tack coat and paving operations, make the required adjustments to achieve a proper application rate, and allow the RE to perform an additional verification test within the next 300 feet. Allow the RE to perform additional tests until the correct application rate is achieved. Retack areas that are insufficiently coated. The frequency of testing may be increased based on a visual inspection or at the discretion of the RE.

### **401.03.07 HMA Courses**

#### **A. Paving Plan.**

PART (4) IS CHANGED TO:

4. Lighting plan for night operations as specified in 108.06.

#### **C. Test Strip**

REPLACE THE FIRST PARAGRAPH OF THIS SECTION WITH THE FOLLOWING:

**Test Strip.** Construct a test strip for each HMA mix for contracts with more than a total of 5,500 tons of HMA. For HMA HIGH RAP, construct the test strip at least 14 days prior to production. Test strips are not necessary for temporary pavement. Ensure that the tack coat or prime coat has been placed as specified in [401.03.05](#) and [401.03.06](#), before placing HMA. Transport and deliver, spread and grade, and compact as specified in [401.03.07.D](#), [401.03.07.E](#), and [401.03.07.F](#), respectively, and according to the approved paving plan. Construct a test strip for the first 700 to 1,200 square yards placed for each job mix formula. If the paving lot area is less than 700 square yards, the District Local Aid Office may waive the coring requirements. While constructing the test strip, record the following information and submit to the RE:

#### **D. Transportation and Delivery of HMA.**

THE SECOND SENTENCE OF THE FIRST PARAGRAPH IS CHANGED TO:

Do not allow trucks to leave the plant within 1 hour of sunset unless lighting for night operations is provided as specified in 108.06.

THE SECOND PARAGRAPH IS CHANGED TO:

Ensure that weigh tickets are signed and sealed by a certified weighmaster. Individual weigh tickets do not need to be signed and sealed if using an automated batching plant or automated drum plant.

THE FOURTH PARAGRAPH IS CHANGED TO:

When using an automated batching plant, obtain weigh tickets from the printer used in conjunction with an automated batching and mixing system. Ensure the printed ticket shows the individual weights of the various components of the HMA in a batch, the total weight of each batch, and the sum of all batch weights in the truckload. If using an automated batching plant or automated drum plant, at the completion of each day's work, provide certification from the weighmaster that the total net weight supplied was correct.

#### **E. Spreading and Grading.**

#### **G. Opening to Traffic.**

THE FOLLOWING IS ADDED AFTER THE LAST PARAGRAPH:

Ensure that RPMs are installed and rumble strips are constructed within 14 days of opening each day's surface paving to traffic.

#### **H. Air Void Requirements**

FOR LOCAL AID PROJECTS, THIS SUBSECTION IS REPLACED BY THE FOLLOWING.

Pavement lots are defined as approximately 15,000 square yards of pavement in Surface area. If pavement lot area is less than 5000 square yards, the Local Aid District Office may waive the air voids requirements.

The RE will designate an independent testing agency (Laboratory) to perform the quality assurance sampling, testing and analysis. The Laboratory is required to be accredited by the AASHTO Accreditation Program ([www.amrl.net](http://www.amrl.net)). The Laboratory's accreditation must include AASHTO T 166 and AASHTO T 209.

The Laboratory Technician who performs the quality assurance sampling shall be certified by the Society of Asphalt Technologists of New Jersey as an Asphalt Plant Technologist, Level 2.

The Laboratory will determine air voids from 5 (Five) 6 inch diameter cores taken from each lot in random locations within the traveled way and at least one core in each travel lane. The HMA Core Sampling Plan form provided on the [Local Aid Website](#) must be utilized by the Laboratory to determine the random locations of the cores. The Laboratory may rerun the random location functions on the HMA Core Sampling Plan form to resolve any conflicts generated by the HMA Core Sampling Plan form and physical limitations of the HMA lot, such as utility conflicts, or the specifications defined herein. The coring locations must be designated by a station and offset, and offsets are taken from the left edge of the pavement in the direction of travel within the lane lines. The Laboratory must disclose the contents of the HMA Core Sampling Plan with the Contractor to assist in the schedule of construction.

The Laboratory will determine air voids of cores from the values for the maximum specific gravity of the mix and the bulk specific gravity of the core. The Laboratory will determine the maximum specific gravity of the mix according to NJDOT B-3 and AASHTO T 209, except that minimum sample size may be waived in order to use a 6-inch diameter core sample. The Laboratory will determine the bulk specific gravity of the compacted mixture by testing each core according to AASHTO T 166.

The Laboratory will calculate the percent defective (PD) as the percentage of the lot outside the acceptable range of 2 percent air voids to 8 percent air voids. The acceptable quality limit is 15 percent defective. For lots in which PD > 15, the Department will assess a negative pay adjustment.

The Laboratory will use and submit to the RE the DS8S-PD form provided on the [Local Aid Website](#) and verify manually the PD calculation.

The Laboratory will calculate pay adjustments based on the following:

**1. Sample Mean ( $\bar{X}$ ) and Standard Deviation (S) of the N Test Results (X1, X2,..., XN).**

$$\bar{X} = \frac{(X_1 + X_2 + \dots + X_N)}{N}$$

$$S = \sqrt{\frac{(X_1 - \bar{X})^2 + (X_2 - \bar{X})^2 + \dots + (X_N - \bar{X})^2}{N - 1}}$$

**2. Quality Index (Q).**

$$Q_L = \frac{(\bar{X} - 2.0)}{S}$$

$$Q_U = \frac{(8.0 - \bar{X})}{S}$$

**3. Percent Defective (PD).** Using NJDOT ST for the appropriate sample size, the Laboratory will determine PD<sub>L</sub> and PD<sub>U</sub> associated with Q<sub>L</sub> and Q<sub>U</sub>, respectively. PD = PD<sub>L</sub> + PD<sub>U</sub>

**4. Reduction Per Lot.** Calculate the reduction per lot as specified in Table 401.03.07-3:

Table 401.03.07-3

Reduction in Payment for Nonconformance to Air Void Requirements

Percent Defective (PD) Per Lot	Reduction Per Lot (%)
0 < PD ≤ 15	0
15 < PD ≤ 30	0.5
30 < PD ≤ 35	2
35 < PD ≤ 40	10
40 < PD ≤ 45	15
45 < PD ≤ 50	20
50 < PD ≤ 60	30
60 < PD ≤ 75	45
PD > 75	Remove & Replace

5. **Outlier Detection.** If PD < 10, the Laboratory will not screen for outliers. If PD ≥ 10, the Laboratory will screen acceptance cores for outliers using a statistically valid procedure. The following procedure applies only for a sample size of 5 or 10.

1. The Laboratory will arrange the core results in ascending order, in which X<sub>1</sub> represents the smallest value and X<sub>N</sub> represents the largest value.
2. If X<sub>N</sub> is suspected of being an outlier, the Laboratory will calculate:

$$R = \frac{X_N - X_{(N-1)}}{X_N - X_1}$$

3. If X<sub>1</sub> is suspected of being an outlier, the Laboratory will calculate:

$$R = \frac{X_2 - X_1}{X_N - X_1}$$

4. For N = 5 if R > 0.642, the value is judged to be statistically significant and the core is excluded.  
For N = 10 if R > 0.412, the value is judged to be statistically significant and the core is excluded.

If an outlier is detected for N = 5 and no retest is warranted, the Contractor may replace that core by taking an additional core at the same offset and within 5 feet of the original station. If an outlier is detected and a retest is justified, take a replacement core for the outlier at the same time as the 5 additional retest cores are taken. If the outlier replacement core is not taken within 15 days, the Laboratory will use the initial core results to determine reduction per lot.

If an outlier is detected for N = 10, the Contractor may replace that core by taking an additional core at the same offset and within 5 feet of the original station. If the outlier replacement core is not taken within 15 days, the Laboratory will use the initial core results to determine the reduction per lot.

6. **Retest.** If the initial series of 5 cores produces a percent defective value of PD ≥ 30 for mainline or ramp lots, or PD ≥ 50 for other pavement lots, the Contractor may elect to take an additional set of 5 cores at random locations chosen by the HMA Core Sampling Plan form. Take the additional cores within 15 days of receipt of the initial core results. If the additional cores are not taken within the 15 days, the Laboratory will use the

initial core results to determine the PPA. If the additional cores are taken, the Laboratory will recalculate the reduction per lot using the combined results from the 10 cores.

7. **Removal and Replacement.** If the final lot PD  $\geq 75$  (based on the combined set of 10 cores or 5 cores if the Contractor does not take additional cores), remove and replace the lot and all overlying work. The replacement work is subject to the same requirements as the initial work.

For shoulder lots, the Department will assess the calculated reduction per lot instead of removal and replacement. Fog seal the lot as specified in 422.03.01.

## I. Thickness Requirements

DELETE THIS SUBSECTION AND REPLACE THIS SUBSECTION'S CONTENTS WITH THE FOLLOWING:  
This subsection is deleted. In no instance will a compacted average thickness of less than 1.25 inches be acceptable.

DELETE THIS SUBSECTION AND REPLACE THIS SUBSECTION'S CONTENTS WITH THE FOLLOWING:

Thickness requirements will apply when full-depth, uniform-thickness HMA pavement construction is shown.

Pavement lots are defined as approximately 15,000 square yards of pavement area. The Engineer will not include areas consisting of different HMA mixtures or thicknesses in the same lot. If thickness lot area is less than 5000 square yards, the District Local Aid Office may waive the thickness requirements.

The RE will designate an independent testing agency (Laboratory) to perform the quality assurance sampling, testing and analysis. The Laboratory is required to be accredited by the AASHTO Accreditation Program ([www.amrl.net](http://www.amrl.net)). The Laboratory's accreditation must include AASHTO T 166 and AASHTO T 209.

The Laboratory Technician who performs the quality assurance sampling shall be certified by the Society of Asphalt Technologists of New Jersey as an Asphalt Plant Technologist, Level 2.

The Laboratory will test for thickness using the full-depth cores taken for surface course air voids, evaluated according to NJDOT B-4. The Laboratory will base acceptance on total thickness and thickness of the surface course.

1. **Total Thickness.** The Laboratory will calculate the percent defective (PD) as the percentage of the lot that is less than the design thickness. The Laboratory will consider 25 percent defective as the acceptable quality limit. For lots where PD < 25, the Department will award a positive pay adjustment. For lots where PD > 25, the Department will assess a negative pay adjustment.

The Department will base total thickness acceptance on the percentage of the lot estimated to fall below the specified thickness as follows

- a. **Sample Mean ( $\bar{X}$ ) and Standard Deviation (S) of the N Test Results ( $X_1, X_2, \dots, X_N$ ).** Calculate as specified in 401.03.07.H.1.

$$\bar{X} = \frac{(X_1 + X_2 + \dots + X_N)}{N}$$

$$S = \sqrt{\frac{(X_1 - \bar{X})^2 + (X_2 - \bar{X})^2 + \dots + (X_N - \bar{X})^2}{N - 1}}$$

**b. Quality Index (Q<sub>i</sub>)**

$$Q_L = \frac{(\bar{X} - T_{des})}{S}$$

Where T<sub>des</sub> = design thickness.

- c. Percent Defective (PD).** Using NJDOT ST for the appropriate sample size, determine the percentage of material (PD) falling below the design thickness associated with Q<sub>L</sub> (lower limit).
- d. Reduction in Payment.** The Department will determine the reduction in payment based on the quantity of the surface course multiplied by the percent reduction in payment from Table 401.03.07-5.

<b>Percent Defective</b>	<b>Percent Reduction</b>
0 to 25.0	0
25.1 to 30.0	2
30.1 to 35.0	5
35.1 to 40.0	10
40.1 to 45.0	20
Over 45.0	Remove & Replace

- e. Retest.** If the initial series of 5 cores produces a percent defective value of PD ≥ 30, the Contractor may elect to take an additional set of 5 cores at random locations chosen by the RE. Notify the RE within 15 days of receipt of the initial core results to take the additional cores. If the RE is not notified within the 15 days, the Laboratory will use the initial core results to determine the reduction in payment for nonconformance requirements. If the additional cores are taken, the ME will recalculate the reduction in payment for nonconformance requirements using the combined results from the 10 cores.
- f. Removal and Replacement.** If the lot PD ≥ 45, remove and replace, or mill and overlay, the lot. The replacement work is subject to the same requirements as the initial work.

- 2. Surface Course Thickness.** The Laboratory will evaluate the surface course solely to determine whether a remove- and-replace or an overlay condition exists, not for pay adjustment. The Laboratory will calculate the percent defective (PD) as the percentage of the lot that is less than the allowable thickness for the nominal maximum aggregate used in the surface course. The Laboratory will accept pavement lots with PD ≤ 30 and will reject pavement lots with PD > 30.

The Laboratory will base surface thickness acceptance on the percentage of the lot estimated to fall below the allowable thickness as follows:

- a. Sample Mean (X) and Standard Deviation (S) of the N Test Results (X<sub>1</sub>, X<sub>2</sub>,..., X<sub>N</sub>).** Calculate using the formula as specified in 401.03.03.I.1.
- b. Quality Index (Q).**

$$Q_L = (X - T_{all})/S, \text{ where } T_{all} \text{ is the minimum allowable thickness from Table 401.03.07-6.}$$

**Table 401.03.07-6 Surface Course Thickness Requirements**

HMA Mix Design Size Designation	Minimum Allowable Compacted Lift Thickness (T <sub>all</sub> )
4.75 MM	0.50 inch
9.5 MM	1.00 inch
12.5 MM	1.25 inches
19 MM	2.00 inches

- c. **Percent Defective.** Using NJDOT ST - Statistical Tables (NJDOT Standard Specs for Roads and Bridges 2019-NJDOT TEST METHODS) for the appropriate sample size, determine the percentage of material (PD) falling below the allowable thickness associated with Q<sub>L</sub> (lower limit).
- d. **Retest.** If the initial series of 5 cores produces a percent defective value of PD > 30, the Contractor may take an additional 5 cores at random locations determined by the Laboratory. Notify the RE within 15 days of receipt of the initial core results to take the additional cores. If the RE is not notified within the 15 days, the Laboratory will use the initial core results to determine the PPA. When the additional cores are taken, the Laboratory will recalculate the reduction in payment for nonconformance requirements using the combined results from the 10 cores to obtain the total PD.
- e. **Removal and Replacement.** If the surface course fails to meet the acceptance requirement with a PD ≤ 45, the Department will require removal and replacement of the lot. The replacement work is subject to the same requirements as the initial work.

**J. Ride Quality Requirements.**

The Department will evaluate the ride quality of the final riding surface of all constructed pavement on the project, for routes designated as National Highway System (NHS) and routes under NJDOT jurisdiction, using the International Roughness Index (IRI) according to ASTM E 1926. All NHS roadways are listed on the Department’s website [here](#). The Department may evaluate ride quality of other routes not designated as NHS or under NJDOT jurisdiction. The final riding surface is defined as the last lift of the pavement structure where traffic will be allowed. The pavement will be evaluated using the current average IRI (C) to select the target IRI (T) from Table 401.03.07-8. The current average IRI (C) is defined as the preconstruction ride quality measured not more than two years from the start of the project pavement construction.

The RE will designate an independent testing agency to perform the ride quality testing and analysis. The testing agency is required to comply with testing and certification requirements according to NJDOT R-1. If the current average IRI (C) is not available, then the testing agency will test, analyze and report ride quality before pavement construction to measure current average IRI (C). The testing agency will use and submit to the RE the [IRI Testing Summary Report form](#) provided from The Local Aid District Office and verify manually the pay adjustment calculation.

Current IRI data for paving routes designated NHS or NJDOT jurisdiction can be made available by request by contacting Shahid Haji and Peter Brzostowski at [Shahid.Haji@dot.nj.gov](mailto:Shahid.Haji@dot.nj.gov) and [Peter.Brzostowski@dot.nj.gov](mailto:Peter.Brzostowski@dot.nj.gov). Municipal or county officials may request IRI information through this process. Contractors, consultants, and bidding parties shall not request IRI values through this process for their own benefit.

For projects paving routes designated NHS or NJDOT jurisdiction on mainline travel lanes equal to or greater than 2,500 feet length and any lane within the project of at least 1,000 feet length, the Department will evaluate the ride quality of the final riding surface of the mainline travel lanes using IRI. The Department will use the measured IRI to calculate the pay adjustment (PA) using pay adjustment equation (PAE) type PA1 as specified in Table 401.03.07-

7. PA will be based on lots of 0.01 mile length. The PA will be zero for acceptable quality and negative for inferior quality work.

For projects paving routes designated NHS or NJDOT jurisdiction on mainline travel lanes of less than 2,500 feet length, the RE will visually inspect the final riding surface. Based on visual inspection, if the RE determines that the work may not conform to the ride quality requirements, then the Department will evaluate the ride quality of the final riding surface using IRI. Visual inspection by the RE is considered sufficient grounds for such evaluation. The Department will use the measured IRI to calculate the PA using pay equation type PA1 as specified in Table 401.03.07-7.

For paving on ramps and shoulders, the RE will visually inspect the final riding surface. Based on visual inspection, if the RE determines that the work may not conform to the ride quality requirements, then the Department will evaluate the ride quality of the final riding surface using IRI. Visual inspection by the RE is considered sufficient grounds for such evaluation. The Department will use the measured IRI to calculate the pay adjustment using pay equation type PA2 as specified in Table 401.03.07-7.

When paving over bridge structures on NHS or NJDOT jurisdiction roadways, the Department will use the measured IRI to calculate the pay adjustment using pay equation type PA3 as specified in Table 401.03.07-7.

For paving on Local roadways other than NHS and NJDOT jurisdiction on mainline travel lanes equal to or greater than 2,500 feet length and any lane within the project of at least 1,000 feet length, the Department may evaluate the ride quality of the final riding surface of the mainline travel lanes using IRI. Local roadways are defined as municipal and county roads that are not designated as part of the NHS. The Department will use the measured IRI to calculate the pay adjustment (PA) using pay adjustment equation (PAE) type PA4 as specified in Table 401.03.07-7.

1. **Smoothness Measurement.** The Department will test the longitudinal profile of the final riding surface for ride quality with a Class 1 Inertial Profiling System according to NJDOT R-1. If project conditions preclude the use of the Class 1 Inertial Profiling System, the Department will use a Class 1 Walking Profiler or lightweight profiler.
2. **Quality Control Testing.** Perform quality control testing during lift placement to ensure compliance with the ride quality requirements specified in Table 401.03.07-8.
3. **Preparation for IRI Testing.** Notify the RE when all paving is complete and the RE will request IRI testing by independent testing agency. Provide traffic control when the independent testing agency performs IRI testing. Perform mechanical sweeping of the surface before IRI testing. To facilitate auto triggering on laser profilers, place a single line of temporary pavement marking tape perpendicular to the roadway baseline at the beginning and end of each lane, shoulder, and ramp to be tested or as per direction of the independent testing agency. Submit the actual stationing for each temporary pavement marking tape location to the RE.
4. **Quality Acceptance.** The Department will determine acceptance and provide PA based on the following:
  - a. **Pay Adjustment.** The acceptable IRI for the roadway pavement will be the target IRI (T) from Table 401.03.07-8 rounded to the nearest whole number for which full payment will be made and will be determined using the latest available current average IRI (C) data. The number of lots for final pay adjustment will be reduced by the number of lots excluded for each segment shown in Table 401.03.07-7. Lots excluded from final PA will be those with the highest recorded IRI numbers for respective roadway and bridge deck segments. A single average IRI value and the corresponding PA for each 0.01 mile lot will be reported. IRI units are in inches per mile.

Table 401.03.07-7 Pay Adjustment Equations (PAE) for Ride Quality			
Pay Equation Type	Exclusions	Pay Equations	
PA1	As shown in the Special Provisions Table 401.03.07-7A	IRI<T	PA1=PAE (see note 2)
		T≤IRI≤170	PA1=PAE
		IRI>170	PA1= -A or Corrective action

PA2	Will include, if tested	IRI ≤ 120	PA2 = 0
		120 < IRI ≤ 170	PA2 = (IRI - 120) x (-\$5.00)
		IRI > 170	Maximum Negative Pay or Corrective action
PA3	Will include, if tested	IRI ≤ 120	PA3 = 0
		120 < IRI ≤ 170	PA3 = PAE
		IRI > 170	PA3 = -A or Corrective action
PA4	Will include, if tested	IRI ≤ T	PA4 = 0
		T < IRI ≤ T+80 or 170 whichever is higher	PA4 = (IRI - T) x (-\$1.25)
		IRI > T+80 or 170 whichever is higher	Maximum Negative Pay or Corrective action

$$PAE = \frac{A}{-37.75347 \times \log_e(T) + 194.87} - \frac{A}{-37.75347 \times \log_e(IRI) + 194.87}$$

$$A = 1267.2 \left[ \frac{M}{9} + \frac{PD}{150} \right]$$

P = Bid price of last lift of the pavement structure to be evaluated or price listed in table 401.03.07-7B, whichever is higher, per Ton

D<sup>1</sup> = Design thickness of last lift to be evaluated, Inch

M = Bid price of Milling, per Square Yard

T = Target IRI

- For various design thicknesses of last lift to be evaluated within a segment, calculate the thickness using the following equation:

$$\text{Design thickness of last lift to be evaluated (D)} = \frac{D_1 N_1 + D_2 N_2 + \dots + D_N N_N}{N_1 + N_2 + N_3 + \dots + N_N}$$

Where:

D<sub>N</sub> = Design thickness of the last lift to be evaluated of N sections having same mix, Inch

N<sub>N</sub> = Number of lots of N section with design thickness D<sub>N</sub> of last lift to be evaluated

- Positive pay adjustment will be used to offset negative pay adjustment. Total pay adjustment for each lane will not be greater than zero, but may result in a negative pay adjustment.

THE FOLLOWING IS ADDED:

**Table 401.03.07-7A Exclusions for Resurfacing or Reconstruction**

Roadway	Lane Number	Exclusions
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Lane designation is by increasing numbers from left to right in the direction of traffic with left lane being Lane 1.

**Table 401.03.07-7B Minimum Value of P**

Surface Course Mix	P
Hot Mix Asphalt (Dense Graded) with PG 64-22 binder	\$60.00
Hot Mix Asphalt (Dense Graded) with PG 64E-22 binder	\$70.00
Stone Matrix Asphalt, High Performance Thin Overlay, Ultra-Thin Friction Course, Open Graded or Gap Graded Mixes not specified in this table	\$80.00
Bridge Deck Waterproof Surface Course	\$250.00

**Table 401.03.07-8 Target IRI for Resurfacing or Reconstruction (T)<sup>3</sup>**

Roadway Type	Current average IRI (C)	New Construction or Reconstruction	Number of Operation for other than New Construction or Reconstruction <sup>5</sup>			
			One <sup>4</sup>	Two <sup>4</sup>	Three <sup>4</sup>	Four or More <sup>4</sup>
Target IRI (T)						
NHS & NJDOT Freeways or Limited Access Highways	≤ 60	50	50	50	50	50
	61 to ≤95		53	50	50	50
	96 to ≤170		55	53	50	50
	171 to ≤200		0.64C <sup>7</sup>	55	53	50
	201 to ≤285			58	55	50
	>286 <sup>8</sup>			60	58	53
NHS & NJDOT Roadways other than Freeways or Limited Access Highways with speed limit > 35 MPH	≤ 60	60	60	60	60	60
	61 to ≤95		63	60	60	60
	96 to ≤170		66	63	60	60
	171 to ≤200		0.64C <sup>7</sup>	66	63	60
	201 to ≤285			69	66	60
	>286 <sup>8</sup>			72	69	63
NHS & NJDOT Roadways other than Freeways or Limited Access Highways with speed limit ≤ 35 MPH	≤ 60	70	70	70	70	70
	61 to ≤95		74	70	70	70
	96 to ≤170		77	74	70	70
	171 to ≤200		0.64C <sup>7</sup>	77	74	70
	201 to ≤285			81	77	70
	>286 <sup>8</sup>			84	81	74
Local Roadway with Posted Speed ≥45 MPH	C	80	0.7C or 80 whichever is higher	0.49C or 80 whichever is higher	0.34C or 80 whichever is higher	0.24C or 80 whichever is higher
Local Roadway with Posted Speed <45 MPH	C	100	0.84C or 100 whichever is higher	0.59C or 100 whichever is higher	0.41C or 100 whichever is higher	0.29C or 100 whichever is higher

1. The Department will determine target IRI (T) of roadways containing multiple speed limits of greater than 35 MPH and less than or equal to 35 MPH based on the following equation:

$$\text{Target IRI of a roadway consists of N Roadway type (T)} = \frac{T_1 L_1 + T_2 L_2 + \dots + T_N L_N}{L_1 + L_2 + L_3 + \dots + L_N}$$

Where T<sub>N</sub> is the Target IRI of N section and L<sub>N</sub> is the length of N section in miles to the nearest 0.01 mile

- Current average IRI (C) is the average of the latest available preconstruction IRI data.
- The target IRI (T) is selected or calculated from the table and rounded to the nearest whole number.
- Multiply T with 1.05 for HMA over Concrete, if total HMA after proposed treatment is less than 8 inch thick.
- Milling is one operation. Paving each layer of asphalt mix is an individual operation unless plans specify paving a mix in two lifts. In such case, each lift is considered as an operation.
- Construction or reconstruction of full pavement box on subgrade is new construction or reconstruction.
- Use Pay Equation as below:

$$\text{IRI} \leq T \quad \text{PA} = \text{PAE}^*$$

$$\text{IRI} > T \quad \text{PA} = \text{PAE}$$

\*Positive Pay adjustment will be used to offset negative pay adjustment. Total pay adjustment for each lane will not be greater than zero, but may result in a negative pay adjustment.

- For paving over rubblized concrete, use C >286 to determine target IRI, then multiply T with 1.05 if total HMA after proposed treatment is less than 8-inch thick.

- 9 Paving in one lift with no corrective work such as milling, grinding or pre-levelling of at least 25 percent of surface area of existing pavement is one operation.
- 

- b. **Corrective Action.** The Department may require corrective action or assess the maximum negative pay adjustment as computed in Table 401.03.07-7, if the average IRI after testing is performed of NHS or NJDOT jurisdiction roadway is greater than 170 inches per mile, or average IRI local roadway is greater than T+80 or 170 whichever is higher. If the Department requires corrective action submit a plan for corrective action. If the plan for corrective action is approved and the lot is corrected, the Department will retest and evaluate the corrected area as a new lot that must meet the same requirements as the initial work. If the plan for corrective action is not approved, the Department may require removal and replacement. The replacement work is subject to the same requirements as the initial work.

#### 401.03.08 Core Samples

REPLACE THIS SUBSECTION WITH THE FOLLOWING:

The LPA will designate an independent testing agency (Laboratory) to perform the quality assurance sampling, testing and analysis. The Laboratory is required to be accredited by the AASHTO Accreditation Program ([www.amrl.net](http://www.amrl.net)). The Laboratory's accreditation must include AASHTO T 166 and AASHTO T 209. The Laboratory Technician who performs the quality assurance sampling shall be certified by the Society of Asphalt Technologists of New Jersey as an Asphalt Plant Technologist, Level 2.

Upon completion of an HMA lot, the Laboratory shall drill cores at random locations at least 12 hours after paving. Take cores in the presence of the RE. The Laboratory will determine air voids from 5 (Five) 6 inch diameter cores taken from each lot in random locations within the traveled way and at least one core in each travel lane. The HMA Coring Layout Sheet provided on the [Local Aid Website](#) must be utilized by the Laboratory to determine the random locations of the cores. The Laboratory may rerun the random location functions on the HMA Coring Layout Sheet to resolve any conflicts generated by the HMA Core Sampling Plan form and physical limitations of the HMA lot, such as utility conflicts, or the specifications defined herein. The Laboratory must disclose the contents of the HMA Core Sampling Plan with the Contractor to assist in the schedule of construction.

The Laboratory shall use drilling equipment with a water-cooled, diamond-tipped masonry drill bit that produces 6 inch nominal diameter cores for the full depth of the pavement. The Laboratory shall remove the core from the pavement without damaging it. After the Laboratory removes the core, the Laboratory shall remove all water from the hole. The Laboratory shall apply an even coating of tack coat to sides of the hole. The Laboratory shall place cold patching material or HMA in maximum lifts of 4 inches in the hole and compact each lift. If cold patching material is utilized to fill the coring hole, then it is not necessary to apply tack coat to the sides of the hole. The Laboratory shall ensure that the final surface is 1/4 inch above the surrounding pavement surface.

**HMA cores are to be taken from the HMA lot for quality assurance sampling, testing and analysis within seven (7) days of completing the HMA lot.** For test strip lots and the first traveled way lot, the Laboratory shall deliver cores from the field to the testing Laboratory within 48 hours of completing the lot. The Laboratory shall deliver all other acceptance cores within 7 days of completing the lot.

After each air void lot is placed, the Laboratory shall drill cores so that the full depth of the course is recovered for air void acceptance testing. If thickness acceptance testing is required as specified in 401.03.07.I, the Laboratory shall drill the surface course air void cores for the full depth of pavement.

The Laboratory shall utilize a tamper proof core sample box for core storage and transportation. The Laboratory shall ensure that the core sample box can be locked and sealed and is tamper proof in such a manner that it cannot be opened without removing the seals. The Laboratory shall ensure that the core sample box provides protection for the cores from being disturbed or damaged during transit. The Laboratory shall mark the assigned core number on the side of the

sample. The Laboratory shall place core samples in the core sample box. The Laboratory shall transport the sealed core sample boxes to the testing Laboratory.

The Laboratory will not accept damaged core samples for testing. If the core sample box exhibits indications of tampering, the core samples will be rejected. If any core samples are rejected, drill a replacement core at the same offset and within 5 feet of the original station and deliver to the Laboratory as specified above within 48 hours.

If the project is utilizing quality control cores, the Laboratory shall provide the results of the quality control core testing to the Contractor in a timely manner which will not unnecessarily impede construction.

**401.04 Measurement and Payment**

REPLACE THIS SUBSECTION WITH THE FOLLOWING:

*The Department will measure and make payment for Items as follows:*

<i>Pay Item</i>	<i>Pay Unit</i>
HOT MIX ASPHALT _____ INTERMEDIATE COURSE	TON
HOT MIX ASPHALT _____ SURFACE COURSE	TON

*The specified depth of the milling is measured from the original surface to the top of the high spots of the textured surface.*

*The RE will measure HOT MIX ASPHALT PAVEMENT REPAIR before overlay by the square yard of area bounded by the sawcuts.*

*The RE will measure HOT MIX ASPHALT \_\_\_\_\_SURFACE COURSE, by the ton as indicated on the certified weigh tickets, excluding unused material.*

*The Department will make a payment adjustment for HMA air void quality per lot by the following formula:*

$$\text{Pay Adjustment Per HMA Lot} = - Q \times \text{BP} \times \text{Reduction Per Lot (\%)}$$

Where:

- BP = Bid Price of HMA
- Q = Quantity of HMA in lot receiving payment adjustment
- Reduction Per Lot (%) = Air void Reduction (%) per lot as specified in [401.03.07.H](#).

*The Department will make a payment adjustment for HMA thickness quality per lot by the following formula:*

$$\text{Pay Adjustment Per HMA Lot} = - Q \times \text{BP} \times \text{Percent Reduction (\%)}$$

Where:

- BP = Bid Price of HMA
- Q = Quantity of HMA in lot receiving payment adjustment
- Percent Reduction (%) = Thickness Percent Reduction (%) per lot as specified in [401.03.07.I](#).

*The Department will make a payment adjustment for HMA ride quality, as specified in 401.03.07.J.*

No other work contained in this Section will be measured for payment, including tack coat, prime coat, sawcutting, sealing, core samples, MTV, test strips, and quality control for compaction, including comparison cores, and nuclear density testing.

Separate payment will not be made for any other work contained in this Section, including tack coat, prime coat, sawcutting, sealing, core samples, MTV, test strips, and quality control for compaction, including comparison cores, and nuclear density testing.

**SECTION 620 – STAMPED CONCRETE**

**620.01 DESCRIPTION**

This Section describes the requirements for constructing stamped concrete.

**620.02 MATERIALS**

**620.02.01 Materials**

Provide materials as specified in Section 606 and the following:

Concrete coloring pigment (Color to match existing and be confirmed by Owner)

**620.02.02 Equipment**

Provide materials as specified in Section 606 and the following:

Stamp Mats: Semirigid polyurethane mats with projecting textured and ridged underside capable of imprinting texture and joint patterns on plastic concrete.

**620.03 CONSTRUCTION**

- A. Construct concrete in accordance with Section 606.03.02.
- B. Concrete shall be constructed with welded wire mesh and a final thickness of 8 inches.
- C. Concrete coloring: After initial floating, apply pigment materials to paving surfaces according to manufacturer’s written instructions.
- D. Stamping: After floating and while concrete is plastic, apply mat stamped finish to match existing stamped finish.

**620.04 MEASUREMENT & PAYMENT**

Stamped concrete will be measured by the square yard of concrete installed, stamped, and having a thickness of 8 inches.

Payment will be made under:

<i>Pay Item</i>	<i>Pay Unit</i>
STAMPED CONCRETE, 8” THICK	SQUARE YARD

No other work contained in this Section will be measured for payment, including but not limited to, excavation, removal of the existing stamped concrete, underlayer preparation, coloring of concrete with pigment, providing and installing welded wire mesh, stamping concrete, and all other work required to provide a complete and finished product.

## **DIVISION 600 – MISCELLANEOUS CONSTRUCTION**

### **SECTION 602 – DRAINAGE STRUCTURES**

#### **602.01 DESCRIPTION**

THE FIRST SENTENCE IS CHANGED TO:

This Section describes the requirements for constructing, reconstructing, and cleaning inlets, manholes, leaching and manholes.

#### **602.03.03 SET CASTINGS, RESET CASTING, AND RECONSTRUCTED INLETS AND MANHOLES**

THE FIRST PARAGRAPH IS CHANGED TO:

When modifying less than 1 foot of an inlet or manhole, set a new casting, or reset the existing casting. When modifying 1 foot or more of an inlet or manhole, reconstruct the inlet or manhole.

#### **602.03.07 CURB PIECE**

THE FOLLOWING IS ADDED:

Existing curb pieces which are no longer required shall become the property of the City of Egg Harbor.

#### **602.04 MEASUREMENT AND PAYMENT**

THE ENTIRE TEXT IS CHANGED TO:

Drainage structures of the various kinds and types will be measured by the unit.

Reset Existing Casting will not be measured for payment.

No other work contained in this Section will be measured for payment, including but not limited to, excavation, removal of the existing structure to be replaced, extension frames or extension rings used to reach proposed grade for any structures when resetting castings, and cleaning existing drainage structures. The cost of this work shall be included in the causing pay items.

Payment will be made under:

<i>Pay Item</i>	<i>Pay Unit</i>
RECONSTRUCTED INLET, TYPE A, USING EXISTING CASTING	UNIT

### **SECTION 606 SIDEWALKS, DRIVEWAYS, AND ISLANDS**

#### **606.04 Measurement And Payment**

THE ENTIRE TEXT IS CHANGED TO:

Concrete driveways will be measured by the square yard having a thickness of 6 inches.

Concrete sidewalk will be measured by the square yard having a thickness of 4 inches.

Concrete islands will be measured by the square yard having a thickness of 8 inches.

No other work contained in this Section will be measured for payment.

Payment will be made under:

<i>Pay Item</i>	<i>Pay Unit</i>
HOT MIX ASPHALT DRIVEWAY, 2" THICK	SQUARE YARD
CONCRETE DRIVEWAY, 6" THICK	SQUARE YARD

Separate payment will not be made for any other work contained in this Section, including staging and reuse of existing driveway materials.

Payment for the removal and disposal of any existing sidewalks and/or driveways, and all adjacent restoration, will be included in the unit price bid for the various types of sidewalk and driveway, unless otherwise indicated on the plans.

## SECTION 607 – CURB

### 607.01 DESCRIPTION

THE PARAGRAPH IS CHANGED TO:

This Section describes the requirements for constructing concrete curb, granite curb, and HMA curb, for resetting granite curb, and for cutting concrete vertical curb.

#### 607.02.01 Materials

THE FOLLOWING IS ADDED:

Epoxy Waterproofing..... 912.02.02

#### 607.02.02 Equipment

THE FOLLOWING IS ADDED:

Concrete Vertical Curb Saw..... 1008.07

THE FOLLOWING SUBPART IS ADDED:

#### 607.03.08 Sawcut Vertical Curb

The RE will determine if the existing concrete vertical curb is suitable for sawcutting. Construct cast in place curb as specified in 607.03.02 if the existing curb exhibits visible cracking or deterioration or both.

Provide a concrete vertical curb saw as specified in 1008.07. Construct erosion control measures as specified in 158.03.02. Set the concrete vertical curb saw height to the desired vertical curb face height. Sawcut the vertical curb to within ±1/2 inch of the desired curb face dimension. Sawcut grooves as specified in 507.03.02.L to transition height differentials.

Finish the sawcut concrete vertical curb as specified in 607.03.01.E. Seal sawcut concrete with epoxy waterproofing as specified in 504.03.03. Prepare sawcut surface of concrete vertical curb according to manufacturer's directions before applying epoxy waterproofing.

Dispose of cut material as specified in 201.03.01.H.

### 607.04 MEASUREMENT AND PAYMENT

THE ENTIRE TEXT IS CHANGED TO:

Curb of the various sizes and kinds will be measured by the linear foot along the face at the gutter line.

No other work contained in this Section will be measured for payment

Payment will be made under:

<i>Pay Item</i>	<i>Pay Unit</i>
GRANITE CURB	LINEAR FOOT
RESET EXISTING GRANITE CURB	LINEAR FOOT
8"X30" CONCRETE GUTTER	LINEAR FOOT

Separate payment will not be made for any other work contained in this Section. Payment for the removal and disposal of any existing curb, and all adjacent restoration, will be included in the unit price bid for the curb, unless otherwise indicated on the plans.

THE FOLLOWING SECTION IS ADDED:

### **SECTION 613 – RESET PAVERS**

#### **613.01 Description.**

THIS WORK SHALL CONSIST OF RESETTING, LOWERING OR RAISING EXISTING BRICK OR PAVER SIDEWALKS TO THE FINISHED GRADE.

#### **613.02 Materials**

MATERIALS SHALL CONFORM TO THE FOLLOWING SUBSECTIONS:

DENSE GRADED AGGREGATE .....	901.10
BRICK.....	910.03
MORTAR.....	903.08.01
CONCRETE.....	903
CONCRETE PAVERS.....	ASTM C 936

#### **613.03 Construction requirements.**

EXCAVATION AND BACKFILL SHALL BE IN ACCORDANCE WITH SECTION 201.

CONCRETE SHALL BE IN ACCORDANCE WITH SECTION 405 AND 607.06.

METHODS OF CONSTRUCTION SHALL BE SUCH THAT, WHEN RESET, THE BRICK OR PAVER DRIVEWAY SHALL CONFORM TO THE GRADE OF THE RESURFACED OR REGRADED AREA.

CARE SHALL BE EXERCISED IN RESETTING THE BRICK OR PAVER DRIVEWAY SUCH THAT THE BRICKS OR PAVERS ARE LEVEL AND NO DEPRESSIONS ARE CREATED.

PIECES OF DRIVEWAY WHICH ARE DAMAGED BECAUSE OF CONSTRUCTION OPERATIONS OR VEHICULAR TRAFFIC SHALL BE REPLACED IN KIND AND IN A MANNER SATISFACTORY TO THE OWNER WITHOUT ADDITIONAL COMPENSATION.

BRICKS OR PAVERS MATERIALS SET IN CONCRETE SHALL BE REMOVED AND CLEANED TO THE SATISFACTION OF THE ENGINEER AND THEN RESET AS DETAILED.

CONSTRUCTION OPERATIONS OR VEHICULAR TRAFFIC SHALL BE REPLACED IN KIND AND IN A MANNER SATISFACTORY TO THE OWNER WITHOUT ADDITIONAL COMPENSATION.

BRICKS OR PAVERS SHALL BE RESET IN THE SAME PATTERN AS EXISTING AND JOINED IN THE SAME MANNER AS EXISTING.

**613.04 Method of measurement.**

RESET BRICK, OR PAVERS SHALL BE MEASURED BY THE SQUARE YARD. SEPARATE PAYMENT SHALL NOT BE MADE FOR THE CONCRETE BASE ON WHICH THE BRICK OR PAVERS ARE PLACED.

**613.05 Basis of Payment.**

*Pay Item*  
RESET SIDEWALK PAVER

*Pay Unit*  
SQUARE YARD

THE FOLLOWING SECTION IS ADDED:

**DIVISION 650 – UTILITIES**

**SECTION 651 - WATER**

**651.04 MEASUREMENT AND PAYMENT**

THE ENTIRE TEXT IS CHANGED TO:

The resetting of water valve boxes will be measured by the number of units actually reset.

No other work contained in this Section will be measured for payment, including the resetting or coordination of the resetting of gas valves, cleanouts, water meter pits, or sprinkler heads.

No Payment will be made for resetting water valve boxes.

Separate payment will not be made for any other work contained in this Section, including the resetting or coordination of the resetting of gas valves, cleanouts, water meter pits, or sprinkler heads

**SECTION 653 – GAS**

**653.04 MEASUREMENT AND PAYMENT**

THE ENTIRE SECTION IS CHANGED TO:

SEPARATE PAYMENT WILL NOT BE MADE FOR RESETTING GAS VALVE BOXES.

**DIVISION 800 – LANDSCAPING**

# DIVISION 900 – MATERIALS

## SECTION 902 – ASPHALT

### 902.01.01 Asphalt Binder

THE FIRST TWO PARAGRAPHS ARE CHANGED TO:

Use an asphalt binder that is storage-stable and conforms to AASHTO M 332. Include compliance with the elastic response requirement in Figure 1 of AASHTO R 92, if applicable.

### 902.02.01 Mix Designations

PART (4) IS CHANGED TO:

4. “E” The fourth field in the Item description designates the high temperature designation of the performance-graded binder. Options are “64” for PG 64S-22 and “E” for PG 64E-22.

### 902.02.02 Composition of Mixtures

THE FOLLOWING IS ADDED

For public highway and local road projects as defined in “The Local Public Contracts Law” P.L. 1971, C198 (C40A:11-lexseg.)

Composition of the mixture for HMA surface course is coarse aggregate, fine aggregate, and asphalt binder, and may also include mineral filler, WMA additive, and up to 20 percent Reclaimed Asphalt Pavement (RAP). For controlled asphalt foaming system WMA, the Department may require an anti-stripping additive. Ensure that the finished mix does not contain more than a total of 1 percent by weight contamination from Crushed Recycled Container Glass (CRCG).

The composition of the mixture for HMA base or intermediate course is coarse aggregate, fine aggregate, and asphalt binder, and may also include mineral filler, WMA additive and up to 35 percent of recycled materials. For controlled asphalt foaming system WMA, the Department may require an anti-stripping additive. The 35 percent of recycled materials may consist of a combination of RAP, CRCG, Ground Bituminous Shingle Material (GBSM), and RPCSA, with the following individual limits:

### 902.02.03 Mix Design

THE FOLLOWING IS ADDED TO THE FIRST PARAGRAPH:

Unless otherwise approved by the engineer, only one source of supply for hot mix asphalt surface course may be used on the project.

### A General Acceptance Requirements.

THE SECOND PARAGRAPH OF SECTION (A) IS CHANGED TO:

For PG 64S-22, ensure that the temperature of the mixture at discharge from the plant or surge and storage bins is at least 290 °F when the ambient temperature is less than 50 °F or is at least 275 °F when the ambient temperature is greater than or equal to 50 °F. For PG 64E-22, ensure that the temperature of the mixture at discharge from the plant or surge and storage bins is at least 10 °F above the manufacturer’s recommended laydown temperature. For mixes produced using a WMA additive or process, ensure that the temperature of the mixture at discharge from the plant or surge and storage bins is at least 10 °F above the WMA manufacturer’s recommended laydown temperature.

**902.02.04 Sampling and Testing**

THE FOLLOWING SUBSECTION IS ADDED:

**E. Acceptance of HMA.** The Department may accept the HMA as specified in 902.02.04.A through 902.02.04.E by employing staff or an independent testing agency at the HMA plant during production. The inspector who performs the quality assurance sampling shall be certified by the Society of Asphalt Technologists of New Jersey as an Asphalt Plant Technologist, Level 2. Form “DS-8 HMA Testing Summary Report – State Aid” provided on the [Local Aid Website](#) must be utilized by the Laboratory to report their findings to the RE.

Alternatively, the Department may accept the HMA by [Certification of Compliance](#) according to 106.07.

**902.05 STONE MATRIX ASPHALT (SMA)**

**902.05.01 Composition of Mixture**

THE FIFTH PARAGRAPH IS CHANGED TO:

For fine aggregate, use 100 percent manufactured stone sand conforming to 901.05.02. Ensure that the combined fine aggregate of 100 percent manufactured stone sand in the mixture conforms to the requirements in Table 902.02.02-2.

**902.05.02 Mix Design**

TABLE 902.05.02-1 AND TABLE 902.05.02-2 ARE CHANGED TO:

<b>Table 902.05.02-1 SMA Specification Band (% Passing) Nominal-Maximum Aggregate Size</b>				
<b>Production Control Tolerances from JMF1</b>	<b>Sieve Size</b>	<b>19 mm % Passing</b>	<b>12.5 mm % Passing</b>	<b>9.5 mm % Passing</b>
0%	1"	100	100	100
±3%	3/4"	90 – 100	100	100
±5%	1/2"	50 – 88	90 – 100	100
±5%	3/8"	25 – 60	50 – 80	70 – 95
±6%	No. 4	20 – 28	20 – 35	30 – 50
±3%	No. 8	16 – 24	16 – 24	20 – 30
±4%	No. 16	–	–	0 – 21
±3%	No. 30	–	–	0 – 18
±3%	No. 50	–	–	0 – 15
±2%	No. 200	7.0 – 11.0	7.0 – 11.0	7.0 – 12.0
–	Coarse Aggregate Fraction	Portion Retained on No. 4 Sieve	Portion retained on No. 4 Sieve	Portion retained on No. 8 Sieve

1. Production tolerances are for the approved JMF and may not fall outside of the wide band gradation limits.

**Table 902.05.02-2 SMA Mixtures Volumetrics for Design and Plant Production**

Property	Production Control Tolerances	Requirement
Air Voids	±1%	3.5%
Voids in Mineral Aggregate (VMA)	–	17.0% minimum
VCA <sub>mix</sub>	–	Less than VCA <sub>DRC</sub>
Draindown @ production temperature <sup>1</sup>	–	0.30% maximum
Asphalt Binder Content (AASHTO T 308) <sup>2</sup>	±0.40%	6% minimum <sup>3</sup>
Tensile Strength Ratio (AASHTO T 283)	–	80% minimum

1. For design, conduct draindown test at anticipated mixing temperature and 15°F higher. Ensure draindown test meets requirement at both temperatures. For production, conduct draindown test at 15°F higher than anticipated mixing temperature.
2. Asphalt binder content may not be lower than the minimum after the production tolerance is applied.
3. Aggregate blends with a Gsb value of 2.90 and higher may produce the mix with a minimum asphalt content of 5.8% with ME approval.

### 902.05.03 Sampling and Testing

THE ENTIRE SUBSECTION IS CHANGED TO:

- A. General Acceptance Requirements.** Ensure that the mix meets the requirements as specified in 902.02.04.A.
- B. Sampling.** The ME will take a random sample from each 700 tons of production for volumetric acceptance testing and to verify composition. The ME will perform sampling according to AASHTO T 168, NJDOT B-2, or ASTM D 3665. During production at the plant, a sample of asphalt binder will be taken once every 3,500 tons or as directed by the ME.
- C. Quality Control Testing.** Perform quality control testing as specified in 902.02.04.C.

For each acceptance test, perform testing for draindown according to AASHTO T 305 at 15°F above the mixing temperature.

Perform bulk specific gravity of coarse aggregates ( $G_{CA}$ ) and dry-rodded voids in coarse aggregate VCA<sub>DRC</sub> testing according to AASHTO R 46 by sampling and drying aggregates according to AASHTO R 90 and AASHTO T 255, respectively. The ME shall ensure that the  $G_{CA}$  and VCA<sub>DRC</sub> of the aggregate blend has been determined within 7 days of the start of production. Stop production and conduct VCA<sub>DRC</sub> test immediately when there are major changes to aggregate blend percentages. When performing the VCA<sub>DRC</sub> test during production, use the  $G_{CA}$  value that was determined prior to production. The ME may request additional VCA<sub>DRC</sub> tests to be conducted with or without requiring a new  $G_{CA}$  test to be performed at any time.

- D. Acceptance Testing and Requirements.** The ME will determine volumetric properties at 75 gyrations for acceptance from samples taken, compacted, and tested at the HMA plant according to AASHTO T 312. The ME will determine bulk specific gravity of the compacted sample according to AASHTO T 166. The ME will use the QC maximum specific gravity test result in calculating the volumetric properties of the SMA. The ME will determine VCA<sub>mix</sub> according to AASHTO R 46.

If the acceptance sample is outside of the control tolerances for the No. 4 sieve in Table 902.05.02-1 or VCA<sub>mix</sub> is greater than VCA<sub>DRC</sub>, immediately take a quality control sample for testing. If the quality control sample is outside of the control tolerances for the No. 4 sieve in Table 902.05.02-1 or VCA<sub>mix</sub> is greater than VCA<sub>DRC</sub>, immediately stop production and shipping.

If the test results other than the No. 4 sieve or VCA<sub>DRC</sub> are outside of the production control tolerances specified in Table 902.05.02-1 or Table 902.05.02-2 for an acceptance sample, immediately run a quality control sample. If the quality control sample is also outside of the control tolerances in Table 902.05.02-1 or Table 902.05.02-2, determine if a plant adjustment is needed and take corrective action to bring the mix into compliance. Take an additional quality control sample immediately after completing the corrective action to ensure that the mix is within tolerances. If the mix is within tolerance based on the quality control sample results, then the ME will immediately take an acceptance sample to test and verify that the composition, air voids, draindown, VCA<sub>mix</sub>, and VMA meet the production control tolerances specified in Table 902.05.02-1 and Table 902.05.02-2. If 2 consecutive acceptance or quality control

samples are outside the tolerances specified in Table 902.05.02-1 or Table 902.05.02-2, immediately stop production and shipping.

After a production stop, obtain ME approval of a plant correction plan before resuming production. Upon restarting production, do not transport mixture to the Project Limits before the results of a quality control sample from the mixture indicate that the mixture meets JMF tolerances and ME approval.

**902.06.01 Composition**

THE SECOND PARAGRAPH IS CHANGED TO:

The mixture shall consist of asphalt binder and aggregate and may contain a WMA additive. Use asphalt binder that is PG 64S-22 as specified in 902.01.01. Use aggregate that conforms to 901.05.01 or 901.05.02 and the gradation requirements specified in Table 902.06.01-1.

**902.07.02 Asphalt-Rubber Binder**

PART (2) SUBSECTION (A) IS CHANGED TO:

**2. Asphalt Binder.**

- a. Use asphalt binder that conforms to AASHTO M 332, Table 1; PG 64S-22, PG 58-28 or an approved blend of both grades. The asphalt binder producer is required to provide the asphalt binder quality control plan annually to the ME for approval. Ensure that the quality control plan conforms to AASHTO R 26. Submit to the ME a certification of compliance, as specified in 106.07, for the asphalt binder. The ME will perform quality assurance sampling and testing of each asphalt binder lot as defined in the approved quality control plan.

**902.07.04 Sampling and Testing**

**C. Acceptance Testing.**

PART C IS CHANGED TO:

During production, the ME will take one random acceptance sample from each 700 tons of production to verify composition. The ME will perform sampling according to NJDOT B-2 or ASTM D 3665, and will perform testing for composition according to AASHTO T 308. Perform testing for air voids according to T 209 and either B-6 or T 331. Perform testing for draindown according to NJDOT B-8. During production at the plant, a sample of asphalt binder will be taken once every 3,500 tons or as directed by the ME.

Conduct air voids and draindown tests as directed by the ME.

If the composition testing results are outside of the production control tolerances specified in Table 902.07.04-1 for an acceptance sample, immediately run a quality control sample. If the quality control sample is also outside of the control tolerances in Table 902.07.04-1, determine if a plant adjustment is needed and take corrective action to bring the mix into compliance. Take an additional quality control sample immediately after completing the corrective action to ensure that the mix is within the production control tolerances. If the mix is within tolerance based on the quality control sample results, then the ME will immediately take an acceptance sample to test and verify that the composition meets the production control tolerances specified in Table 902.07.04-1. If 2 consecutive acceptance or quality control samples are outside the tolerances specified in Table 902.07.04-1, immediately stop production and shipping.

After a production stop, obtain ME approval of a plant correction plan before resuming production. Upon restarting production, do not transport mixture to the Project Limits before the results of a quality control sample from the mixture indicate that the mixture meets JMF tolerances and ME approval. The ME will reject mixture produced at initial restarting that does not meet tolerances.

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**Table 902.07.04-1 Production Control Tolerances for AR-OGFC Mixtures**

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Sieve Sizes	Production Control Tolerances from JMF <sup>1</sup>
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1/2"	±6.0
3/8"	±2.0
No. 4	±4.0
No. 8	±1.0
No. 200	±1.0
Asphalt-rubber binder, % (AASHTO T 308) <sup>2</sup>	±0.40
Minimum % Air Voids	1.0% less than design requirement

1. Production tolerances may fall outside of the wide band gradation limits in Table 902.07.03-1.
2. Asphalt-rubber binder content may not be lower than the minimum in Table 902.07.03-1 after the production tolerance is applied.

## 902.08 HIGH PERFORMANCE THIN OVERLAY (HPTO)

### 902.08.02 Mix Design

THE SUBPART IS CHANGED TO:

At least 45 days before initial production, submit a job mix formula for the HPTO on forms supplied by the Department. Include a statement naming the source of each component and a report showing the results meet the criteria specified in Table 902.08.02-1 and Table 902.08.02-2.

For the job mix formula for the HPTO mixture, establish the percentage of dry weight of aggregate passing each required sieve size and an optimum percentage of asphalt binder based upon the weight of the total mix. Determine the optimum percentage of asphalt binder according to AASHTO R 35 and M 323 with an  $N_{des}$  of 50 gyrations. Before maximum specific gravity testing or compaction of specimens, condition the mix for 2 hours according to the requirements for conditioning for volumetric mix design in AASHTO R 30, Section 7.1. If the absorption of the combined aggregate is more than 1.5 percent according to AASHTO T 84 and T 85, condition the mix for 4 hours according to AASHTO R 30, Section 7.2 prior to compaction of specimens (AASHTO T 312) and determination of maximum specific gravity (AASHTO T 209). Ensure that the job mix formula is within the master range specified in Table 902.08.02-1.

**Table 902.08.02-1 JMF Requirements for HPTO**

Sieve Sizes	Percent Passing <sup>1</sup>	Production Control Tolerances <sup>2</sup>
3/8"	100	±0.0%
No. 4	65 – 85	±4.0%
No. 8	30 - 45	±4.0%
No. 16	20 – 35	±3.0%
No. 30	15 – 30	±3.0%
No. 50	10 – 20	±2.0%
No. 100	5 – 15	±2.0%
No. 200	5.0 – 8.0	±1.0%
Asphalt Binder Content (Ignition Oven)		±0.40%

1. Aggregate percent passing to be determined based on dry aggregate weight.
2. Production tolerances are applied to the approved JMF for gradation and asphalt binder content. Gradation results may not fall outside of the wide band gradation limits when tolerances are applied.

Design the HPTO to meet the requirements in Table 902.08.02-2.

**Table 902.08.02-2 Volumetric Requirements for Design and Control of HPTO**

	Required Density (% of Max Sp. Gr.)		Voids in Mineral Aggregate (VMA)	Dust-to-Binder Ratio	Draindown <sup>1</sup> AASHTO T 305
	@ N <sub>des</sub> (50 gyrations)	@ N <sub>max</sub> (100 gyrations)			
<b>Design Requirements</b>	96.0	≤ 99.0	≥ 17.0 %	0.6 – 1.2	≤ 0.1 %
<b>Control Requirements</b>	95.0 – 97.0	≤ 99.0	≥ 17.0 %	0.6 – 1.3	≤ 0.1 %

1. Draindown testing is at the discretion of the ME.

Ensure that the job mix formula provides a mixture that meets a minimum tensile strength ratio (TSR) of 85 percent when prepared according to AASHTO T 312 and tested according to AASHTO T 283 with the following exceptions:

1. Before compaction, condition the mixture for 2 hours according to AASHTO R 30 Section 7.1.
2. Compact specimens with 40 gyrations.
3. Extrude specimens as soon as possible without damaging.
4. Use AASHTO T 269 to determine void content.
5. Record the void content of the specimens.
6. If less than 55 percent saturation is achieved, the procedure does not need to be repeated, unless the difference in tensile strength between duplicate specimens is greater than 25 pounds per square inch.
7. If visual stripping is detected, modify or readjust the mix.

For each mix design, submit 3 gyratory specimens and 1 loose sample corresponding to the composition of the job mix formula, including the design asphalt content. The ME will use these samples for verification of the properties of the job mix formula. Compact the specimens to the design number of gyrations (N<sub>des</sub>). To be acceptable all 3 gyratory specimens must comply with the gradation requirements in Table 902.08.02-1 and with the design requirements in Table 902.08.02-2. The ME reserves the right to be present at the time of molding the gyratory specimens.

In addition, submit 11 gyratory specimens and 2 boxes of loose mix to the ME. The ME will use these additional gyratory samples for performance testing of the HPTO mix. The ME reserves the right to be present at the time of molding the gyratory specimens. Ensure that the additional gyratory specimens are compacted according to AASHTO T 312. Compact 6 of the specimens to 77 millimeters in height and an air void content of 5.0 ± 0.5 percent. The ME will test the six 77 millimeter specimens using an Asphalt Pavement Analyzer (APA) according to AASHTO T 340 at 64 °C, 100 pound per square inch hose pressure, and 100 pound wheel load. Compact the other 5 specimens to 115 millimeter in height. These 5 specimens will be cut, from the middle of each 115 millimeter in height specimen, to 38 millimeter in height test specimens. The air void content of the 5 cut specimen will be determined to ensure compliance with the target air void content of 5.0 ± 0.5 percent. The ME will use the five 38 millimeter in height specimens to test using an Overlay Tester (NJDOT B-10) at 25 °C and a joint opening of 0.025 inch. The ME will eliminate the high and low Overlay test results then average and report the middle 3 test results. The ME will ensure that all submitted specimens are within the target air void content as tested at the Materials' Central Lab. The ME will not accept specimens lower than the target air void content, but may accept and test specimens higher than the target air void content.

The ME will approve the JMF if the average rut depth for the 6 specimens in the Asphalt Pavement Analyzer testing is not more than 3.0 millimeters at 8,000 loading cycles and the average number of cycles to failure in the Overlay Tester is not less than 1,200. If the JMF does not meet the APA and Overlay Tester criteria, redesign the HPTO mix and submit for retesting. The JMF for the HPTO mixture is in effect until modification is approved by the ME.

When unsatisfactory results for any specified characteristic of the work make it necessary, the Contractor may establish a new JMF for approval. In such instances, if corrective action is not taken, the ME may require an appropriate adjustment to the JMF.

Should a change in sources or changes in the properties of materials occur, the ME will require that a new JMF be established and approved before production can continue.

The ME may verify a mix on an annual basis rather than on a project-to-project basis if the properties and proportions of the materials do not change. If written verification is submitted by the HMA supplier that the same source and character of materials are to be used, the ME may waive the requirement for the design and verification of previously approved mixes.

### 902.08.03 Sampling and Testing

PART B IS CHANGED TO:

- B. Sampling.** The ME will take a sample of HPTO for volumetric acceptance testing from each 700 tons of a mix. The ME will perform sampling according to AASHTO T 168, NJDOT B-2, or ASTM D 3665. During production at the plant, a sample of asphalt binder will be taken once every 1,400 tons or as directed by the ME.

#### **D. Acceptance Testing and Requirements.**

PART D IS CHANGED TO:

The ME will determine volumetric properties at  $N_{des}$  for acceptance from samples taken, compacted, and tested at the HMA plant. The ME will compact HPTO to 50 gyrations, using equipment according to AASHTO T 312. The ME will determine bulk specific gravity of the compacted sample according to AASHTO T 166. The ME will use the most current QC maximum specific gravity test result in calculating the volumetric properties of the HPTO.

The ME will determine the dust-to-binder ratio from the composition results as tested by the QC technician.

THE THIRD PARAGRAPH OF PART D IS CHANGED TO:

Ensure that the HMA mixture conforms to the requirements specified in Table 902.08.02-2, and to the gradation and asphalt content requirements in Table 902.08.02-1. If the test results are outside of the requirements specified in Table 902.08.02-1 or Table 902.08.02-2 for an acceptance sample, immediately run a quality control sample. If the quality control sample is also outside of the control requirements specified in Table 902.08.02-1 or Table 902.08.02-2, determine if a plant adjustment is needed and take corrective action to bring the mix into compliance. Take an additional quality control sample immediately after completing the corrective action to ensure that the mix is within the requirements. If the mix is within the requirements based on the quality control sample results, then the ME will immediately take an acceptance sample to test and verify that the composition meets the requirements specified in Table 902.08.02-1 and Table 902.08.02-2. If 2 consecutive acceptance or quality control samples are outside the requirements specified in Table 902.8.02-1 or Table 902.08.02-2, immediately stop production and shipping.

After a production stop, obtain ME approval of a plant correction plan before resuming production. Upon restarting production, do not transport mixture to the Project Limits before the results of a quality control sample from the mixture indicate that the mixture meets the requirements specified in Table 902.08.02-1 and Table 902.08.02-2 and ME approval. The ME will reject mixture produced at initial restarting that does not meet the requirements specified in Table 902.08.02-1 and Table 902.08.02-2.

The ME will test a minimum of 1 sample per 3,500 tons for moisture, basing moisture determinations on the weight loss of an approximately 1,600 gram sample of mixture heated for 1 hour in an oven at  $280 \pm 5$  °F. Ensure that the moisture content of the mixture at discharge from the plant does not exceed 1.0 percent.

#### **E. Performance Testing.**

THE FOURTH PARAGRAPH OF PART E IS CHANGED TO:

If a sample does not meet the criteria for performance testing as specified in Table 902.08.03-1, the Department will assess a pay adjustment as specified. The Department will calculate the pay adjustment by multiplying the percent pay adjustment (PPA) by the quantity in the lot and the bid price for the HPTO item. If APA rutting is greater than 8.0 millimeters or Overlay cycles is less than 400 or both, the Department will assess the maximum pay adjustment of  $PPA = -100$  percent or may require removal and replacement. PPA for both APA and Overlay are cumulative and may not exceed -100 percent in total. If samples received are lower than the target air void range,  $5.0 \pm 0.5$  percent, the Department will consider the samples untestable and assess a PPA of -100 percent or may require removal and replacement of the lot. If the Department requires removal and replacement, then the replacement work is subject to the same requirements as the initial work.

TABLE 902.08.03-1 IS CHANGED TO:

**Table 902.08.03-1 Performance Testing Pay Adjustments for HPTO**

Test	Requirement	Test Result	PPA
APA @ 8,000 loading cycles, mm (AASHTO T 340)	3.0 maximum	$t \leq 3.0$	0
		$3.0 < t \leq 8.0$	-10(t-3)
		$t > 8.0$	-100 or Remove & Replace
Overlay Tester, cycles (NJDOT B-10)	1,200 minimum	$t \geq 1,200$	0
		$1,200 > t \geq 400$	-(1,200-t)/16
		$t < 400$	-100 or Remove & Replace

**902.09 MICRO SURFACING**

**902.09.03 Sampling and Testing**

TABLE 902.09.03-1 IS CHANGED TO:

**Table 902.09.03-1 Gradation Requirements for Aggregate and Mineral Filler**

Sieve Size	Type II Percent Passing	Type III Percent Passing	Stockpile Tolerances from JMF <sup>1</sup>
3/8"	100	100	-
No. 4	90 – 100	70 – 90	±4%
No. 8	65 – 90	45 – 70	±5%
No. 16	45 – 70	28 – 50	±4%
No. 30	30 – 50	19 – 34	±3%
No. 50	18 – 30	12 – 25	±3%
No. 100	10 – 21	7 – 18	±2%
No. 200	5 – 15	5 – 15	±2%

1. Stockpile tolerances are for the approved JMF and may not fall outside of the wide band gradation limits.

**902.10 SLURRY SEAL**

**902.10.03 Sampling and Testing**

TABLE 902.10.03-1 IS CHANGED TO:

**Table 902.10.03-1 Gradation Requirements for Aggregate and Mineral Filler**

Sieve Size	Type I Percent Passing	Type II Percent Passing	Type III Percent Passing	Stockpile Tolerances from JMF <sup>1</sup>
3/8"	100	100	100	-
No. 4	100	90 – 100	70 – 90	±5%
No. 8	90 – 100	65 – 90	45 – 70	±5%
No. 16	65 – 90	45 – 70	28 – 50	±5%
No. 30	40 – 65	30 – 50	19 – 34	±5%
No. 50	25 – 42	18 – 30	12 – 25	±3%
No. 100	15 – 30	10 – 21	7 – 18	±3%
No. 200	10 – 20	5 – 15	5 – 15	±2%

1. Stockpile tolerances are for the approved JMF and may not fall outside of the wide band gradation limits.

## 902.11 BINDER RICH INTERMEDIATE COURSE (BRIC)

### 902.11.03 Sampling and Testing

#### D. Acceptance Testing and Requirements.

PART D IS CHANGED TO:

The ME will determine volumetric properties at  $N_{des}$  for acceptance from samples taken, compacted, and tested at the HMA plant. The ME will compact HMA to the number of design gyrations ( $N_{des}$ ) of 50 gyrations, using equipment according to AASHTO T 312. The ME will determine bulk specific gravity of the compacted sample according to AASHTO T 166. The ME will use the most current QC maximum specific gravity test result in calculating the volumetric properties of the HMA.

The ME will determine the dust-to-binder ratio from the composition results as tested by the QC technician.

Ensure that the HMA mixture conforms to the requirements specified in Table 902.11.03-2 and to the gradation requirements in Table 902.11.03-1. If the test results are outside of the requirements specified in Table 902.11.03-1 or Table 902.11.03-2 for an acceptance sample, immediately run a quality control sample. If the quality control sample is also outside of the requirements in Table 902.11.03-1 or Table 902.11.03-2, determine if a plant adjustment is needed and take corrective action to bring the mix into compliance. Take an additional quality control sample immediately after completing the corrective action to ensure that the mix is within the requirements. If the mix is within the requirements based on the quality control sample results, then the ME will immediately take an acceptance sample to test and verify that the composition meets the requirements specified in Table 902.11.03-1 and Table 902.11.03-2. If 2 consecutive acceptance or quality control samples are outside the requirements specified in Table 902.11.03-1 or Table 902.11.03-2, immediately stop production and shipping.

After a production stop, obtain ME approval of a plant correction plan before resuming production. Upon restarting production, do not transport mixture to the Project Limits before the results of a quality control sample from the mixture indicate that the mixture meets the requirements specified in Table 902.11.03-1 and Table 902.11.03-2 and ME approval. The ME will reject mixture produced at initial restarting that does not meet the requirements specified in Table 902.11.03-1 and Table 902.11.03-2.

The ME will test a minimum of 1 sample per lot for moisture, basing moisture determinations on the weight loss of an approximately 1,600 gram sample of mixture heated for 1 hour in an oven at  $280 \pm 5$  °F. Ensure that the moisture content of the mixture at discharge from the plant does not exceed 1.0 percent.

## 902.12 ASPHALT RUBBER GAP GRADED COURSE

### 902.12.03 Sampling and Testing

THE ENTIRE SUBPART IS CHANGED TO:

Perform quality control testing as specified in 902.02.04.C. Ensure that the mix meets the requirements as specified in 902.02.04.A, otherwise the RE or ME will reject the material. Ensure that the temperature of the mixture at discharge from the plant or surge and storage bins meets the WMA additive manufacturer's recommendations. Do not allow the mixture temperature to exceed 300 °F at discharge from the plant.

During production at the plant, the ME will take a sample from each 700 tons of production to verify composition and air voids. Conduct draindown,  $VCA_{mix}$ ,  $VCA_{dry}$ , and VMA testing every 3,500 tons or as directed by the ME. Perform tests according to AASHTO R 46.

If the testing results are outside of the production control tolerances specified in Table 902.12.02-1 and Table 902.12.02-2 for an acceptance sample, immediately run a quality control sample. If the quality control sample is also outside of the control tolerances in Table 902.12.02-1, determine if a plant adjustment is needed and take corrective action to bring the mix into compliance. Take an additional quality control sample immediately after completing the corrective action to ensure that the mix is within tolerances. If the mix is within tolerances based on the quality control sample results, then the ME will immediately take an acceptance sample to test and verify that the composition meets the production control tolerances specified in Table 902.12.02-1 and Table 902.12.02-2. If 2 consecutive acceptance or quality control samples are outside the tolerances specified in Table 902.12.02-1 and Table 902.12.02-2, immediately stop production and shipping.

After a production stop, obtain ME approval of a plant correction plan before resuming production. Upon restarting production, do not transport mixture to the Project Limits before the results of a quality control sample from the mixture indicate that the mixture meets JMF tolerances and ME approval. The ME will reject mixture produced at initial restarting that does not meet tolerances.

The ME will perform sampling according to NJDOT B-2 or ASTM D 3665, and will perform testing for composition according to AASHTO T 308 or NJDOT B-5. The ME will determine bulk specific gravity of the compacted sample according to AASHTO T 166. The ME will use the most current QC maximum specific gravity test result, obtained according to AASHTO T 209, in calculating the volumetric properties of the ARGG. Perform testing for draindown according to AASHTO T 305. During production at the plant, the ME will take a sample of the asphalt binder once every 3,500 tons or as directed by the ME.

## 902.13 HOT MIX ASPHALT HIGH RAP

### 902.13.01 Mix Designations

The requirements for specific HMA mixtures with required minimum amounts of RAP are identified by the abbreviated fields in the Item description as defined as follows:

#### HOT MIX ASPHALT 12.5ME SURFACE COURSE HIGH RAP

1. **“HOT MIX ASPHALT”** “Hot Mix Asphalt” is located in the first field in the Item description for the purpose of identifying the mixture requirements.
2. **“12.5”** The second field in the Item description designates the nominal maximum size aggregate (in millimeters) for the job mix formula (sizes are 4.75, 9.5, 12.5, 19, 25, and 37.5 mm).
3. **“M”** The third field in the Item description designates the design compaction level for the job mix formula based on traffic forecasts as listed in [Table 902.02.03-2](#) (levels are L=low and M=medium).
4. **“E”** The fourth field in the Item description designates the high temperature designation of the performance-graded binder. Options are “64” for PG 64S-22 and “E” for PG 64E-22.
5. **“SURFACE COURSE”** The last field in the Item description designates the intended use and location within the pavement structure (options are surface, intermediate, or base course).
6. **“HIGH RAP”** This additional field designates that there will be a minimum percentage of RAP required for the mixture in [902.13.02](#).

### 902.13.02 Composition of Mixture

Provide materials as specified:

Aggregates for Hot Mix Asphalt..... [901.05](#)

Use a virgin asphalt binder that will result in a mix that meets the performance requirements specified in [Table 902.13.03-2](#). Ensure that the virgin asphalt binder meets the requirements of [902.01.01](#) except the performance grade. Use a performance grade of asphalt binder as determined by the mix design and mix performance testing. Submit a certificate of analysis (COA) showing the PG continuous grading (AASHTO R 29) for the asphalt binder used in the mix design.

For quality assurance testing of the asphalt binder, the ME may sample the asphalt binder during production of the mix and compare the results with the COA submitted during test strip approval. To analyze the binder the ME will test the binder at the nearest standard PG temperature then compare the results with the COA. If the high ( $G^*/\sin \delta$ ) and low (stiffness and m value) temperature passing test results are within 5 percent of the results from the passing temperature on the COA, then the ME will consider the asphalt binder comparable to the binder used during the test strip.

Mix HMA HIGH RAP in a plant that is listed on the QPL for HMA Plants and conforms to the requirements for HMA Plants as specified in [1009.01](#).

Composition of the mixture for HMA HIGH RAP surface course is coarse aggregate, fine aggregate, asphalt binder, and greater than 15 percent Reclaimed Asphalt Pavement (RAP), and may also include mineral filler, asphalt rejuvenator, and

Warm Mix Asphalt (WMA) additives or processes as specified in [902.01.04](#). When WMA is used it must meet the requirements as specified in [902.10](#). Ensure that the finished mix does not contain more than a total of 1 percent by weight contamination from Crushed Recycled Container Glass (CRCG).

The composition of the mixture for HMA HIGH RAP base or intermediate course is coarse aggregate, fine aggregate, asphalt binder, and greater than 25 percent Reclaimed Asphalt Pavement (RAP), and may also include mineral filler, up to 10 percent of additional recycled materials, asphalt rejuvenator, and Warm Mix Asphalt (WMA) additives or processes as specified in [902.01.04](#). When WMA is used it must meet the requirements as specified in [902.10](#). The recycled materials may consist of a combination of RAP, CRCG, Ground Bituminous Shingle Material (GBSM), and RPCSA, with the following individual limits:

Recycled Material	Minimum Percentage	Maximum Percentage
RAP	Greater than 25	–
CRCG	–	10
GBSM	–	5
RPCSA	–	20

Combine the aggregates to ensure that the resulting mixture meets the grading requirements specified in [Table 902.02.03-1](#). In determining the percentage of aggregates of the various sizes necessary to meet gradation requirements, exclude the asphalt binder.

Ensure that the combined coarse aggregate, when tested according to ASTM D 4791, has less than 10 percent flat and elongated pieces retained on the No. 4 sieve and larger. Measure aggregate using the ratio of 5:1, comparing the length (longest dimension) to the thickness (smallest dimension) of the aggregate particles.

Ensure that the combined fine aggregate in the mixture conforms to the requirements specified in [Table 902.02.02-2](#). Ensure that the material passing the No. 40 sieve is non-plastic when tested according to AASHTO T 90.

### 902.13.03 Mix Design

At least 45 days before initial production, submit a job mix formula for the HMA HIGH RAP on forms supplied by the Department, to include a statement naming the source of each component and a report showing that the results meet the criteria specified in [Table 902.02.03-1](#) and [Table 902.13.03-1](#).

Include in the mix design the following based on the weight of the total mixture:

1. Percentage of RAP or GBSM.
2. Percentage of asphalt binder in the RAP or GBSM.
3. Percentage of new asphalt binder.
4. Total percentage of asphalt binder.
5. Percentage of each type of virgin aggregate.

Compaction Levels	Required Density (% of Theoretical Max. Specific Gravity)		Voids in Mineral Aggregate (VMA) <sup>2</sup> , % (minimum)					Voids Filled With Asphalt (VFA) %	Dust-to-Binder Ratio
			Nominal Max. Aggregate Size, mm						
	@N <sub>des</sub> <sup>1</sup>	@N <sub>max</sub>	25.0	19.0	12.5	9.5	4.75		

<b>L</b>	96.0	≤ 98.0	13.0	14.0	15.0	16.0	17.0	70 – 85	0.6 – 1.2
<b>M</b>	96.0	≤ 98.0	13.0	14.0	15.0	16.0	17.0	65 – 85	0.6 – 1.2

- As determined from the values for the maximum specific gravity of the mix and the bulk specific gravity of the compacted mixture. Maximum specific gravity of the mix is determined according to AASHTO T 209. Bulk specific gravity of the compacted mixture is determined according to AASHTO T 166. For verification, specimens must be between 95.0 and 97.0 percent of maximum specific gravity at  $N_{des}$ .
- For calculation of VMA, use bulk specific gravity of the combined aggregate include aggregate extracted from the RAP.

The job mix formula for the HMA HIGH RAP mixture establishes the percentage of dry weight of aggregate, including the aggregate from the RAP, passing each required sieve size and an optimum percentage of asphalt binder based upon the weight of the total mix. Determine the optimum percentage of asphalt binder according to AASHTO R 35 and M 323 with an  $N_{des}$  as required in [Table 902.02.03-2](#). Before maximum specific gravity testing or compaction of specimens, condition the mix for 2 hours according to the requirements for conditioning for volumetric mix design in AASHTO R 30, Section 7.1. If the absorption of the combined aggregate is more than 1.5 percent according to AASHTO T 84 and T 85, ensure that the mix is short term conditioned for 4 hours according to AASHTO R 30, Section 7.2 prior to compaction of specimens (AASHTO T 312) and determination of maximum specific gravity (AASHTO T 209). Ensure that the job mix formula is within the master range specified in [Table 902.02.03-1](#).

Ensure that the job mix formula provides a mixture that meets a minimum tensile strength ratio (TSR) of 80 percent when prepared according to AASHTO T 312 and tested according to AASHTO T 283. Submit the TSR results with the mix design.

Determine the correction factor of the mix including the RAP by using extracted aggregate from the RAP in the proposed proportions when testing is done to determine the correction factor as specified in AASHTO T 308. Use extracted aggregate from the RAP in determining the bulk specific gravity of the aggregate blend for the mix design.

For each mix design, submit with the mix design forms 3 gyratory specimens and 1 loose sample corresponding to the composition of the JMF. Ensure that the samples include the percentage of RAP that is being proposed for the mix. The ME will use these to verify the properties of the JMF. Compact the specimens to the design number of gyrations ( $N_{des}$ ). For the mix design to be acceptable, all gyratory specimens must comply with the requirements specified in [Table 902.02.03-1](#) and [Table 902.13.03-1](#). The ME reserves the right to be present at the time the gyratory specimens are molded.

In addition, submit 11 gyratory specimens and two 5 gallon buckets of loose mix to the ME. The ME will use these additional gyratory samples for performance testing of the HMA HIGH RAP mix. The ME reserves the right to be present at the time of molding the gyratory specimens. Ensure that the additional gyratory specimens are compacted according to AASHTO T 312. Compact 6 of the specimens to 77 millimeter height, and have an air void content of  $6.5 \pm 0.5$  percent. The ME will test 6 specimens using an Asphalt Pavement Analyzer (APA) according to AASHTO T 340 at 64 °C, 100 pound per square inch hose pressure, and 100 pound wheel load. Compact the other 5 specimens to 115 millimeter height. These 5 specimens will be cut, from the middle of each 115 millimeter height specimen, to 38 millimeter height test specimens. The air void content of the 5 cut specimen will be determined to ensure compliance with the target air void content of  $6.5 \pm 0.5$  percent. The ME will use the five 38 millimeter height specimens to test using an Overlay Tester ([NJDOT B-10](#)) at 25 °C and a joint opening of 0.025 inch. The ME will eliminate the high and low Overlay test results then average and report the middle 3 test results. The ME will ensure that all submitted specimens are within the target air void content as tested at the Materials' Central Lab.

The ME will approve the JMF if the results meet the criteria in [Table 902.13.03-2](#).

Test	Requirement			
	Surface Course		Intermediate and Base Course	
	PG 64S-22	PG 64E-22	PG 64S-22	PG 64E-22
APA @ 8,000 loading cycles (AASHTO T 340)	≤ 7 mm	≤ 4 mm	≤ 7 mm	≤ 4 mm
Overlay Tester ( <a href="#">NJDOT B-10</a> )	≥ 200 cycles	≥ 275 cycles	≥ 100 cycles	≥ 150 cycles

If the JMF does not meet the APA and Overlay Tester criteria, redesign the HMA HIGH RAP mix and submit for retesting. The JMF for the HMA HIGH RAP mixture is in effect until modification is approved by the ME.

When unsatisfactory results for any specified characteristic of the work make it necessary, the Contractor may establish a new JMF for approval. In such instances, if corrective action is not taken, the ME may require an appropriate adjustment to the JMF.

Should a change in sources be made or any changes in the properties of materials occur, the ME will require that a new JMF be established and approved before production can continue.

#### **902.13.04 Sampling and Testing**

- A. General Acceptance Requirements.** The RE or ME may reject and require disposal of any batch or shipment that is rendered unfit for its intended use due to contamination, segregation, improper temperature, lumps of cold material, or incomplete coating of the aggregate. For other than improper temperature, visual inspection of the material by the RE or ME is considered sufficient grounds for such rejection.

Ensure that the temperature of the mix at discharge from the plant or storage silo meets the recommendation of the supplier of the asphalt binder, supplier of the asphalt modifier, and WMA manufacturer. For HMA, do not allow the mixture temperature to exceed 330 °F at discharge from the plant. For WMA, do not allow the mixture temperature to exceed 300 °F at discharge from the plant.

Combine and mix the aggregates and asphalt binder to ensure that at least 95 percent of the coarse aggregate particles are entirely coated with asphalt binder as determined according to AASHTO T 195. If the ME determines that there is an ongoing problem with coating, the ME may obtain random samples from 5 trucks and will determine the adequacy of the mixing on the average of particle counts made on these 5 test portions. If the requirement for 95 percent coating is not met on each sample, modify plant operations, as necessary, to obtain the required degree of coating.

- B. Sampling.** The Laboratory, as defined in subsection 902.13.04.D, will take 5 stratified random samples of HMA HIGH RAP for volumetric acceptance testing from each lot of approximately 3,500 tons of a mix. When a lot of HMA HIGH RAP is less than 3,500 tons, the Laboratory will take samples at random for each mix at the rate of one sample for each 700 tons. The Laboratory will perform sampling according to AASHTO T 168, [NJDOT B-2](#), or ASTM D 3665. During production at the plant, a sample of asphalt binder will be taken once every 3,500 tons or as directed by the Laboratory.

Use a portion of the samples taken for volumetric acceptance testing for composition testing.

- C. Quality Control Testing.** The HMA HIGH RAP producer shall provide a quality control (QC) technician who is certified by the Society of Asphalt Technologists of New Jersey as an Asphalt Technologist, Level 2. The QC technician may substitute equivalent technician certification by the Mid-Atlantic Region Technician Certification Program (MARTCP). Ensure that the QC technician is present during periods of mix production for the sole purpose of quality control testing. The RE will not perform the quality control testing or other routine test functions in the absence of, or instead of, the QC technician.

The QC technician shall perform sampling and testing according to the approved quality control plan, to keep the mix within the limits specified for the mix being produced. The QC technician may use acceptance test results or perform additional testing as necessary to control the mix.

To determine the composition, perform ignition oven testing according to AASHTO T 308.

For each acceptance test, perform maximum specific gravity testing according to AASHTO T 209. Sample and test coarse aggregate, fine aggregate, mineral filler, and RAP according to the approved quality control plan for the plant.

Ensure that the supplier has in operation an ongoing daily quality control program to evaluate the RAP. As a minimum, this program shall consist of the following:

1. An evaluation performed to ensure that the material conforms to [901.05.04](#) and compares favorably with the design submittal.
2. An evaluation of the RAP material performed using a solvent or an ignition oven to qualitatively evaluate the aggregate components to determine conformance to [901.05](#).
3. Quality control reports as directed by the ME.

**D. Acceptance Testing and Requirements.** The RE will designate an independent testing agency (Laboratory) to perform the quality assurance sampling, testing and analysis. The Laboratory Technician (QC technician) who performs the quality assurance sampling shall be certified by the Society of Asphalt Technologists of New Jersey as an Asphalt Plant Technologist, Level 2. The Laboratory will determine volumetric properties at  $N_{des}$  for acceptance from samples taken, compacted, and tested at the HMA plant. The Laboratory Technician will compact HMA HIGH RAP to the number of design gyrations ( $N_{des}$ ) specified in [Table 902.02.03-2](#), using equipment according to AASHTO T 312. The Laboratory will determine bulk specific gravity of the compacted sample according to AASHTO T 166. The ME will use the most current QC maximum specific gravity test result in calculating the volumetric properties of the HMA HIGH RAP.

The Laboratory will determine the dust-to-binder ratio from the composition results as tested by the QC technician.

Ensure that the HMA HIGH RAP mixture conforms to the requirements specified in [Table 902.13.04-1](#), and to the gradation requirements in [Table 902.02.03-1](#). If 2 samples in a lot fail to conform to the gradation or volumetric requirements, immediately initiate corrective action.

The Laboratory will test a minimum of 1 sample per lot for moisture, basing moisture determinations on the weight loss of an approximately 1,600 gram sample of mixture heated for 1 hour in an oven at  $280 \pm 5$  °F. Ensure that the moisture content of the mixture at discharge from the plant does not exceed 1.0 percent.

**Table 902.13.04-1 HMA HIGH RAP Requirements for Control**

Compaction Levels	Required Density (% of Theoretical Max. Specific Gravity)  @ $N_{des}$ <sup>1</sup>	Voids in Mineral Aggregate (VMA), % (minimum)					Dust-to-Binder Ratio
		Nominal Max. Aggregate Size, mm					
		25.0	19.0	12.5	9.5	4.75	
L, M	95.0 – 98.5	13.0	14.0	15.0	16.0	17.0	0.6 – 1.3

1. As determined from the values for the maximum specific gravity of the mix and the bulk specific gravity of the compacted mixture. Maximum specific gravity of the mix is determined according to AASHTO T 209. Bulk specific gravity of the compacted mixture is determined according to AASHTO T 166.

**E. Performance Testing for HMA HIGH RAP.**

[Table 902.13.04-2](#) and [Table 902.13.04-3](#)

Provide 6 gyratory specimens that are compacted according to AASHTO T 312 and 2 boxes of loose mix. Compact all 6 specimens to  $62 \pm 1$  millimeters in height and an air void content of  $6.5 \pm 0.5$  percent. The Laboratory will ensure that all specimens are within the target air void content. The Laboratory will test 3 specimens for High Temperature Indirect Tensile Strength (HT-IDT) in accordance with ASTM D6931 and conditioned at 44 °C. The Laboratory will test the remaining 3 specimens for IDEAL-CT Index in accordance with ASTM D8225 and conditioned at 25 °C.

Ensure that the first sample is taken during the construction of the test strip as specified in 406.03.01.C. Thereafter, sample every lot. If the test strip is done within the Project Limits and the performance testing results are acceptable to the RE, the results will be included into the first lot. A lot is defined as 1,400 tons.

If a sample does not meet the criteria for performance testing as specified in 902.08.03-1, the RE will assess a pay adjustment as specified in [Table 902.13.04-2](#) and [Table 902.13.04-3](#). The RE will calculate the pay adjustment by multiplying the percent pay adjustment (PPA) by the quantity in the lot and the bid price for the HMA HIGH RAP item. If High Temperature Indirect Tensile Strength is less than 20 and/or the IDEAL-CT Index is less than 200, the RE will assess the maximum pay adjustment of PPA = -100 percent or may require removal and replacement. PPA for both High Temperature Indirect Tensile Strength and IDEAL-CT are cumulative and may not exceed -100 percent in total. If samples received are lower than the target air void range of  $6.5 \pm 0.5$  percent, the RE will consider the samples untestable and assess a PPA of -100 percent or may require removal and replacement of the lot. If the RE requires removal and replacement, then the replacement work is subject to the same requirements as the initial work.

Table 902.13.04-2 Surface Course Performance Testing Pay Adjustments for HMA HIGH RAP			
	Surface Course		PPA
	PG 64S-22	PG 64E-22	
High Temperature IDT (psi) (ASTM D6931)	$t \geq 25$	$t \geq 34$	0
	$21 < t \leq 25$	$25 < t \leq 34$	PG 64S-22: $-(t-25)/0.08$ PG 64E-22: $-(t-34)/0.18$
	$t < 21$	$t < 25$	-100 or Remove & Replace
IDEAL-CT Index (ASTM D8225)	$t \geq 130$	$t \geq 150$	0
	$130 > t \geq 120$	$150 > t \geq 130$	Surface PG 64S-22: $-(t-130)/0.2$ Surface PG 64E-22: $-(t-150)/0.4$
	$t < 120$	$t < 130$	-100 or Remove & Replace

Table 902.13.04-3 Intermediate and Base Course Performance Testing Pay Adjustments for HMA HIGH RAP			
	Intermediate and Base Course		PPA
	PG 64S-22	PG 64E-22	
High Temperature IDT (psi) (ASTM D6931)	$t \geq 25$	$t \geq 34$	0
	$21 < t \leq 25$	$25 < t \leq 34$	PG 64S-22: $-(t-25)/0.08$ PG 64E-22: $-(t-34)/0.18$
	$t < 21$	$t < 25$	-100 or Remove & Replace
IDEAL-CT Index (ASTM D8225)	$t \geq 100$	$t \geq 120$	0
	$100 > t \geq 91$	$120 > t \geq 104$	Intermediate PG 64S-22: $-(t-100)/0.18$ Intermediate PG 64E-22: $-(t-120)/0.32$
	$t < 91$	$t < 104$	-100 or Remove & Replace

## SECTION 909 – DRAINAGE

### 909.02.02 HDPE Pipe

THE SUBPART HEADING IS CHANGED TO:

### 909.02.02 HDPE Pipe and Polypropylene (PP) Pipe

THE ENTIRE SUBPART IS CHANGED TO:

Use corrugated HDPE drainage pipe that conforms to AASHTO M 294 and is Type S (smooth interior with annular corrugations) with gasketed silt-tight joints.

Use corrugated polypropylene (PP) drainage pipe that conforms to AASHTO M 330 and is Type S (smooth interior with annular corrugations) with gasketed silt-tight joints.

Use HDPE and polypropylene (PP) pipe from a manufacturer who is an AASHTO NTPEP (National Transportation Product Evaluation Program) certified manufacturer. For a list of NTPEP certified manufacturers, see the following webpage: <https://data.ntpep.org/>.

Submit a certification of compliance, as specified in 106.07, for HDPE and polypropylene (PP) pipe.

## SECTION 912 – PAINTS, COATINGS, TRAFFIC STRIPES, AND TRAFFIC MARKINGS

### 912.01.04 Concrete Stain

THE SUBSECTION IS CHANGED TO:

Provide a penetrating stain that is a single component, water-based acrylic coating, alkali resistant, and water repellent. Primer is required for application on smooth concrete. Provide a primer that is a penetrating, water based, water repellent concrete sealer. Ensure that the stain conforms to the requirements in Table 912.01.04-1.

<b>Property</b>	<b>Value</b>	<b>ASTM Test Method</b>
Dry – to – Touch Time	Max. 1 hour	D 1640
Dry – to – Recoat Time	Max. 4 hour	D 1640
Weight per Gallon	11.0 + 0.5 lbs.	D 1475
Weight Solids	52 + 2%	D 2369
Adhesion, Tape Test	Min. 4A	D 3359
Gloss	Flat	D 523
Weathering	<3.0 dE @ 3,000 hrs.	G 154 / D 4587
VOC	<100 g/L	D 2369

### 912.04.02 Removable Pavement Marking Tape

#### A. Temporary Pavement Tape.

THE FOURTH PARAGRAPH IN PART A IS CHANGED TO:

Provide a certification of compliance, as specified in 106.07, for temporary pavement tape.

#### B. Removable Black Line Masking Tape.

THE THIRD PARAGRAPH IN PART B IS CHANGED TO:

Provide a certification of compliance, as specified in 106.07, for removable black masking tape.

## SECTION 1003 – HMA SITE EQUIPMENT

### 1003.01 MATERIALS TRANSFER VEHICLE (MTV)

THE FOLLOWING IS ADDED AFTER THE LAST PARAGRAPH:

Ensure the MTVs Gross Weight and maximum speed limit do not exceed the load restrictions as shown in 105.09 Special Provisions.

## SECTION 1008 – MISCELLANEOUS EQUIPMENT

THE FOLLOWING SUBSECTION IS ADDED:

### 1008.07 CONCRETE VERTICAL CURB SAW

Provide a power-driven vertical curb saw with horizontally-oriented blade capable of sawing to the required dimensions without causing uncontrolled cracking. Equip the vertical curb saw with water-cooled, circular, diamond-edge blades or abrasive wheels, and alignment guides. Ensure that the vertical curb saw is capable of immediately collecting the slurry produced from the operations. The Contractor may use a vertical curb saw that does not collect slurry if the RE approves an alternate slurry collection method.

When sawcutting grooves, use a multi-bladed saw with an adequate number of blades and alignment wheels.  
Provide within the Project Limits spare saw blades and at least one standby saw that meets the above requirements.

## **SECTION 1009 – HMA PLANT EQUIPMENT**

### **1009.01 HMA PLANT**

#### **A. Requirements for HMA Mixing Plants.**

##### **4. Equipment for Preparation of Asphalt Binder.**

THE 4TH PARAGRAPH IN PART 4 IS CHANGED TO:

Provide valves according to ASTM D 140, except ensure that a sampling valve is also located in the lowest third of each storage tank. If any additive is added at the HMA plant, provide a sampling valve according to AASHTO M 156, Section 4.3.4.

##### **8. Safety.**

THE THIRD PARAGRAPH IS CHANGED TO:

When plant production occurs during night operations, provide permanently fixed lighting throughout the plant operations, plant laboratory, and truck scale areas to ensure a clear view of the operations. Also provide permanently mounted lighting at the sampling platforms to sufficiently illuminate the bed of the truck for inspection and sampling operations.

### **1009.03 ASPHALT-RUBBER BINDER BLENDING EQUIPMENT**

THE 5TH PARAGRAPH IS CHANGED TO:

Provide valves according to ASTM D 140, except ensure that a sampling valve is also located in the lowest third of each storage tank.

# NJDOT TEST METHODS

## NJDOT R-1 – DETERMINING RIDE QUALITY OF PAVEMENT SURFACES

### **B. Apparatus.**

PART B IS CHANGED TO:

Use the following apparatus:

1. Class 1 IPS that meets the requirements of ASTM E 950, Sections 4.0, 5.0 and 6.0 of AASHTO M 328, and the following:
  - a. Valid certification.
  - b. Recertification after any major component repairs or replacements.
  - c. The data system provides the raw profile data in format readable in ProVal.
  - d. Current version of pavement profile analysis software installed on the IPS computer to compute the IRI.
2. Base plate and gauge blocks, of 1 inch and 2 inch thickness, provided by the manufacturer to verify daily vertical calibration.
3. Retro-reflective traffic marking tape or other approved mechanism to automatically trigger the start and stop of profile measurements.

### **C. Procedure.**

PART C IS CHANGED TO:

Perform the following steps:

1. Turn on the inertial profiler and warm up all electronic equipment in accordance with the manufacturer recommendations before testing.
2. Perform Block and Bounce tests each day before collecting data. Record the results in the calibration log. Ensure tolerances are within the certified limits.
3. Ensure retro-reflective traffic marking tape or other approved mechanism is placed at the beginning and end of each direction of travel lane.
4. Enter project information in the test equipment system.
5. Make provisions to start and stop recording profile at the beginning and end of testing. If an automatic trigger mechanism is not installed, make provision to initiate start and end of data recording manually by pressing an appropriate key(s) on the computer.
6. Ensure that the required speed, as recommended by the manufacturer, is achieved and that the system is collecting profile data before recording profile.
7. For each test section, perform 3 test runs to collect data of both wheel paths of each lane in the longitudinal direction of travel. The wheel path is defined as being located approximately 3 feet on each side of the centerline of the lane and extending for the full length of the lane. Lanes are defined by striping.
8. Save data from each run separately before the next run or lane testing, clearly identifying each test run, lane identification, and run number.

# APPENDIX A

## Recycled Asphalt Pavement and Asphalt Millings (RAP) Reuse Guidance



**RECYCLED ASPHALT PAVEMENT AND ASPHALT MILLINGS (RAP)  
REUSE GUIDANCE**

**MARCH 2013**  
(VERSION 1.0)

**RECYCLED ASPHALT PAVEMENT AND ASPHALT MILLINGS (RAP)  
REUSE GUIDANCE  
MARCH 2013**

**A. GENERAL INFORMATION**

It is the policy of the New Jersey Department of Environmental Protection (Department or NJDEP) to encourage and promote the use of recycled asphalt pavement (RAP), including asphalt millings excavated from public highways and roads consistent with the provisions of N.J.A.C. 7:26 & 26A. The Department has determined that the allowed uses of RAP described in this guidance document are consistent with the provisions of N.J.A.C. 7:26 and N.J.A.C. 7:26A. This guidance document (“Guidance”) is intended only as a guide to address the controlled use of recycled asphalt millings and does not replace any regulations in any context.

RAP may be recycled pursuant to existing regulations at N.J.A.C. 7:26A-1.4(a)1 for recycling directly into hot mix asphalt pavement without the Department’s prior approval; reused directly for road construction without the Department’s approval as outlined below; and, used for beneficial uses pursuant to N.J.A.C. 7:26-1.1(a)1 and 1.7(g) respectively without or with site-specific Department approval, as outlined below.

**B. DEFINITION OF TERMS**

**Allowed Uses:** Allowed Uses shall mean Commercial Allowed Uses, Transportation Allowed Uses and Other Allowed Uses pursuant to Paragraph C(4) of this Guidance.

**Child Care Center:** means such a facility as defined at N.J.S.A. 30:5B-13 et seq.

**Clean Site:** A site that contains soil or non-soil materials that meet the definition of “Clean fill” at N.J.A.C. 7:26E-1.8 and the Residential Direct Contact Soil Remediation Standards (RDCSR) at N.J.A.C. 7:26D.

**Commercial Allowed Uses:** Commercial Allowed Uses shall have the meaning set forth in Paragraph C(3) of this Guidance.

**Cover Material:** Soil or non-soil materials that meet the definition of “Clean fill” at N.J.A.C. 7:26E-1.8 and the Residential Direct Contact Soil Remediation Standards (RDCSR) at N.J.A.C. 7:26D such as, but not limited to, recycled concrete, topsoil, unconsolidated sediment (sand, gravel, clay, silt, and the like), and rock obtained directly from a quarry. Cover Material does not include coal or other carbonaceous materials extracted from the earth.

**Nonresidential:** As used herein, the term "nonresidential" means for commercial, or industrial uses or other location of nonresidential use as defined at N.J.A.C. 7:26D-1.5 (definitions of "Nonresidential Direct Contact Soil Remediation Standard" and "Nonresidential Use").

**Recycled Asphalt Pavement (RAP):** Recycled asphalt pavement (RAP) shall mean asphalt millings (the material produced from the milling of roads before repaving) and pieces of asphaltic roadway pavement removed from the roadway surface or subbase, or from other

asphalt-paved surfaces such as parking lots. RAP does not include other Class B recyclable materials that contain recycled asphalt.

**Residential:** As used herein, the term "Residential" means a human residence, child care center, school, or other location of residential use as defined at N.J.A.C. 7:26D-1.5 (definitions of "Residential Direct Contact Soil Remediation Standard" and "Residential Use").

**Transportation Allowed Use:** Transportation Allowed Use shall have the meanings set forth in Paragraph C(2) of this Guidance.

## **C. ALLOWED USES**

### **1. General Standards**

- a. Unless otherwise approved in advance in writing by the Department in accordance with applicable State law, to the extent that RAP is used in Transportation Allowed Uses, such use shall be in accordance with the following NJDOT 2007 Standard Specification for Road and Bridge Construction (or subsequent version): Section 203 -- Embankments for roadways, Subsection 203.03.01, which allows use of RAP in I-14 soil aggregate embankment that is at least two (2) feet above the water table.
- b. A Transportation Allowed Use would be prohibited if site-specific engineered design requirements demonstrate unsuitable performance of the RAP.
- c. Unless otherwise specified herein, all Allowed Uses of RAP shall be fully consistent with appropriate engineering design (including the volume of material).
- d. RAP may be taken directly to and used by asphalt manufacturing plants for direct incorporation into hot mix asphalt or warm mix asphalt, in accordance with NJDOT standards, pursuant to the recycling exemption for such use at N.J.A.C. 7:26A-1.4(a)1.i and (b).
- e. Any use of RAP under slabs of concrete at any site requires the filing of a Deed Notice identifying the location, quantity and amount of the RAP; installation, operation and maintenance of a complete vapor barrier; compliance with the Department's Vapor Intrusion Technical Guidance; compliance with all local building code and zoning and other requirements. This use of RAP is strictly limited to use under the slab. RAP at the site that cannot be consolidated to the area under the slab must be removed and managed as RAP in accordance with this Guidance or disposed as Solid Waste.

### **2. Transportation Allowed Uses (Nonresidential Sites)**

- a. Subject to the conditions set forth herein, RAP may be used in nonresidential roadway transportation and/or construction-related activities and under nonresidential building structure slabs that are unoccupied except for infrequent, short-term visits of employees or other persons (such as at salt storage or

transportation equipment storage buildings, hereinafter “Transportation Buildings”), without the Department’s prior site- or project-specific approval (“Transportation Allowed Uses”). These uses are considered direct use pursuant to N.J.A.C. 7:26-1.1(a)1 and do not require authorization as a Beneficial Use Project by the Department pursuant to N.J.A.C. 7:26-1.7(g) when performed as outlined below.

- b. Except as set forth in Paragraph E(8) of this Guidance, RAP may be used for roadway and parking area soil aggregate subbase material, if the RAP is placed directly beneath, and fully contained by a paved road surface of either hot mix asphalt or Portland cement concrete.
- c. RAP may be used to construct or repave roadway or vehicle use areas, such as parking lots and pot-hole filling, if such application is performed when the material is sufficiently hot to make the asphalt sufficiently pliable and adhesive to bind the asphalt millings particles on application. Alternately, RAP may be thoroughly mixed with an asphalt emulsion to produce a cold mix. These applications of the RAP should be followed by immediate rolling to complete the integration of the milling pieces and particles into a bound surface that is similar in consistency and performance to a hot mix asphalt or warm mix asphalt paved surface, such as a road. Rolling the surface will permanently rebind the RAP particles into a slab to prevent erosion and will ensure a dense, flat paved surface suitable for vehicular use.
- d. RAP may be used as surfacing materials if an appropriate binder is applied to bind the RAP. Liquid asphalt emulsion may be used to bind the RAP in surficial applications.
- e. RAP may also be used for the following, subject to the requirements of Paragraph C(2)(d) to the extent that RAP is used as surficial material and subject to Paragraph C(1)(b), as applicable:
  - (i.) Roadway edge stability and guard rail base material provided that the use complies with Paragraph C(2)(d) of this Guidance.;
  - (ii.) Base material (such as NJDOT I-14) under impervious surfaces, such as footings, foundations and slabs of Transportation Buildings.;
  - (iii.) Pipe, utility corridor bedding material above the seasonal, high ground water level covered with Cover Material, of a composition, characteristic and thickness that will prevent exposure of RAP at the surface. There shall be no visible RAP at the surface or at the perimeter of the application of Cover Material over RAP. The Cover Material layer shall be maintained to prevent RAP migration to the surface and perimeter.
  - (iv.) Component of boulder/stacked concrete wall structure;
  - (v.) Underpass abutment structures; and

(vi.) Stabilized wall structures, abutment fill, and retaining wall backfill material.

- f. RAP may be covered with Cover Material, of a composition, characteristic and thickness that will prevent exposure of RAP at the surface. There shall be no visible RAP at the surface or at the perimeter of the application of Cover Material over RAP. The Cover Material layer shall be maintained to prevent RAP migration to the surface and perimeter.
3. **Industrial and Commercial Applications — Nonresidential uses only (“Commercial Allowed Uses”)**
    - a. Building Foundations — except as set forth in Paragraph E(3), RAP may be used in subbase material placed under concrete slabs for nonresidential building structures in accordance with an appropriate engineering design and Paragraph C(1)(e) of this Guidance.
    - b. Other uses as approved by the Department per N.J.A.C. 7:26-1.7(g), such as at Clean Sites without prior construction, on a case-by-case basis and in accordance with an appropriate engineering design pursuant to Paragraphs E(3) and C(4) of this Guidance.
  4. **Other Allowed Uses**

Other uses of RAP may be authorized pursuant to regulations at N.J.A.C. 7:26-1.7(g) for beneficial use of materials (“Other Allowed Uses”). Contact the Beneficial Use section of the Bureau of Landfill and Hazardous Waste Permitting, Solid and Hazardous Waste Management Program at (609) 984-6985 for more information on the authorization process for a Certificate of Authority to Operate a Beneficial Use Project for RAP beneficial use applications. An application form for a Certificate of Authority to Operate a Beneficial Use Project, along with other information concerning the regulation of beneficial use of materials in New Jersey, can be found within the internet web page for beneficial use at: <http://www.state.nj.us/dep/dshw/rrtp/bud.htm> .

**D. STORAGE:** RAP for Transportation Allowed Uses, Commercial Allowed Uses and Other Allowed Uses shall be stored in compliance with all applicable laws.

#### **E. PROHIBITED USES**

The following uses of RAP are prohibited, except as provided below:

1. As final surfacing material, unless the RAP is bound with asphalt emulsion, or paved with hot mix asphalt or Portland cement concrete;
2. In wetlands, flood fringe, floodways or buffers to these regulated areas, unless such use is in conjunction with the repair, maintenance, or replacement of an existing vehicular paved surface, roadway or parking lot, and is undertaken in accordance with the requirements of the Freshwater Wetlands Protection Act

(FWPA), Flood Hazard Area Control Act (FHACA), and the regulations promulgated pursuant to these statutes;

3. As fill material at any Clean Site, except as authorized by the Department in writing in advance on a site- or project-specific basis, or as outlined for specific instances in Section C above;
4. Use in the reclamation of quarries of unconsolidated materials (e.g., sand, gravel);
5. Use in the reclamation and restoration of bedrock quarries unless specifically approved in writing in advance by the Department and in accordance with all relevant permit and other regulatory requirements;
6. Use as fill material, except for uses as provided for by this guidance in accordance with State law.
7. Less than two (2) feet above the seasonal high water table at the site of placement.
8. Use as roadway subbase in projects that must meet NJDOT specifications.

#### **F. ENVIRONMENTAL AND PUBLIC HAZARDS**

The bitumen binder used in asphalt paving applications contains a relatively high concentration of a family of organic compounds that has the potential to pose human health and environmental concerns in certain circumstances, especially when asphalt material is ground into very small particles that easily blow off of or wash from the surface. These compounds, known as polycyclic aromatic hydrocarbons (PAHs) are present in RAP at higher levels than the criteria established by the NJDEP's Site Remediation Program guidance for general use in a loose fashion on land. RAP used alone without a paved top surface has the potential to significantly migrate from the roadway through the actions of water, wind, and physical displacement and possibly contaminate surrounding soils and/or surface water sediments. Traffic traveling on the unpaved RAP could generate dust containing the compounds referenced above and the dust would be a major migration route of the RAP to the surrounding environment.

#### **G. VEHICLE REQUIREMENTS**

Note that a NJDEP solid waste vehicle registration pursuant to N.J.A.C. 7:26-1 et seq. for vehicles hauling RAP is not required for the transport of RAP for uses meeting the conditions of Section C and D above, to NJDEP-approved recycling centers or for Department-approved beneficial uses. However, a NJDEP solid waste vehicle registration is required for vehicles hauling RAP if the RAP is being disposed of as solid waste pursuant to N.J.A.C. 7:26-1 et seq. either in or out of State.

#### **H. COMPLIANCE WITH OTHER LAWS AND REQUIREMENTS**

Nothing contained in this guidance document is intended or shall be construed to exempt any use of RAP from compliance with other applicable lawful State and federal requirements and as subject to N.J.S.A. 13:1E et seq. and shall not supersede any applicable statutes or regulations.

This guidance does not represent an authorization to use RAP without obtaining site or project-specific authorization as a Certificate of Authority to Operate a Beneficial Use Project pursuant to N.J.A.C. 7:26-1.7(g), except for the uses as indicated above in Section C.2. Failure to obtain proper Department approval as required by State law prior to using RAP, except for the uses indicated in Section C.2 above may subject the responsible party to enforcement action, including, but not limited to the assessment of penalties and responsibility for any necessary remediation. This guidance shall not affect the Department's ability to pursue ongoing enforcement actions regarding the use of RAP or initiate enforcement actions against entities for past uses of RAP that are not in conformance with the provisions of this guidance document or applicable regulations.

Should you have any questions regarding this guidance document, you may discuss your questions with a representative in the Technical Assistance unit of the Bureau of Landfill and Hazardous Waste Permitting at (609) 984-6985 between the hours of 9:00 a.m. and 4:00 p.m.

# APPENDIX B

## New Jersey Prevailing Wage Rate Information

**BID FORM**

Pursuant to and in compliance with your Advertisement for Bids and the Information for Bidders relating thereto, the undersigned hereby offers to furnish all plant, labor, materials, supplies, equipment and other facilities and things necessary for, or proper for, or incidental to the Convention Boulevard Resurfacing, as required by, and in strict accordance with the applicable provisions of plans and specifications and all addenda issued by the Global Spectrum L.P. or its Engineer prior to the date of opening the bids, whether received by the undersigned or not, for the amount bid based on the following unit and/or lump-sum prices:

NOTE: Extension of Unit Prices must be exact.

**BASE BID**

<b>Item</b>	<b>Quantity</b>	<b>Units</b>	<b>Description</b>	<b>Unit Price</b>	<b>Amount</b>
1	1	L.S.	MAINTENANCE & PROTECTION OF TRAFFIC	\$	\$
2	100	DOLLAR	FUEL PRICE ADJUSTMENT	\$ 1.00	\$ 100.00
3	100	DOLLAR	ASPHALT PRICE ADJUSTMENT	\$ 1.00	\$ 100.00
4	1	L.S.	CLEARING SITE	\$	\$
5	5920	S.Y.	MILLING, 3" OR LESS	\$	\$
6	785	TON	HOT MIX ASPHALT 12.5M76 SURFACE COURSE, 2" THICK	\$	\$
7	10	L.F.	RESET EXISTING GRANITE CURB (IF & WHERE DIRECTED)	\$	\$
8	45	L.F.	GRANITE CURB	\$	\$
9	15	L.F.	8" X 30" CONCRETE GUTTER	\$	\$
10	200	S.Y.	CONCRETE BASE COURSE, 8" THICK (IF & WHERE DIRECTED)	\$	\$
11	12	S.Y.	RESET SIDEWALK PAVERS	\$	\$
12	5	S.Y.	STAMPED CONCRETE, 8" THICK	\$	\$
13	1	L.S.	3RD PARTY UTILITY MARKOUT	\$	\$
14	1	L.S.	TRENCH DRAIN REPAIR (ALLOWANCE)	\$ 10,000.00	\$ 10,000.00
15	2	UNIT	REPLACE BOLLARD LIGHTING	\$	\$
16	2510	L.F.	TRAFFIC STRIPES, 4"	\$	\$
17	1535	L.F.	TRAFFIC MARKINGS, LINES, 12"	\$	\$
18	90	L.F.	TRAFFIC MARKINGS, LINES, 24"	\$	\$
19	515	S.F.	TRAFFIC MARKING SYMBOLS	\$	\$
20	40	L.F.	CURB PAINTING	\$	\$
21	4	UNIT	RECONSTRUCTED INLET, TYPE A, USING EXISTING CASTING	\$	\$
TOTAL CONSTRUCTION COST, BASE BID Items #1 - #21, Inclusive				\$	

**TOTAL AMOUNT BID WRITTEN OUT, BASE BID Items #1-#21, Inclusive**

**SIGNATURE**

**NAME & TITLE**

**BID DATE**

**COMPANY NAME**