#### **SPECIFICATIONS**

FOR

# GALLOPING HILL GOLF COURSE IMPROVEMENTS BOROUGH OF KENILWORTH COUNTY OF UNION, NEW JERSEY

BA#69-2017; UNION COUNTY ENGINEERING PROJECT #2016-031

#### **NOVEMBER 2017**

# UNION COUNTY OFFICIALS BOARD OF CHOSEN FREEHOLDERS

Bruce H. Bergen, Chairman Sergio Granados, Vice Chairman Linda Carter, Freeholder Angel G. Estrada, Freeholder Christopher Hudak, Freeholder Mohamed S. Jalloh, Freeholder Bette Jane Kowalski, Freeholder Alexander Mirabella, Freeholder Vernell Wright, Freeholder

#### **CLERK OF THE BOARD**

James E. Pellettiere, RMC

#### COUNTY MANAGER

Alfred J. Faella

# DEPARTMENT OF ENGINEERING, PUBLIC WORKS AND FACILITIES MANAGEMENT

Joseph A. Graziano, Sr., CPWM
Director, Department of Engineering, Public Works and
Facilities Management

# COUNTY ENGINEER DIVISION OF ENGINEERING

Thomas O. Mineo, P.E. 2325 South Avenue Scotch Plains, New Jersey 07076 Telephone: (908) 789-3675 Fax: (908) 789-3674

PREPARED BY:
Rees Jones, Inc.
55 South Park Street
Montclair, New Jersey 07042

## COUNTY OF UNION NOTICE TO BIDDERS

Sealed bids will be received by the director of the Division of Purchasing, or her designee, at the County of Union, New Jersey on November 22, 2017at 10:30 a.m., prevailing time, in the 3<sup>rd</sup> Floor Conference Room, U.C. Administration Building, 10 Elizabethtown Plaza, Elizabeth, New Jersey for:

# GALLOPING HILL GOLF COURSE IMPROVEMENTS BOROUGH OF KENILWORTH, COUNTY OF UNION, NEW JERSEY BA#69-2017; UNION COUNTY ENGINEERING PROJECT #2016-031

Bid Packages may be obtained at no charge by registering and downloading at <a href="http://ucnj.org/bid-specs">http://ucnj.org/bid-specs</a>. Bid Packages may also be obtained in person from the Division of Engineering at 2325 South Avenue, Scotch Plains, New Jersey 07076 between 8:30 a.m. and 4:00 p.m. weekdays upon payment of a non-refundable money order or bank check in the amount of \$275.00 made payable to the County of Union. No Personal / Company checks will be accepted. Requests for mailing of specifications will not be honored. For further information please call 908-789-3675.

The County reserves the right to reject any and all bids and to waive any and all informalities in the bid in accordance with the New Jersey Local Public Contracts Law.

Bids shall be submitted in a sealed envelope and clearly marked with the subject of the bid, name and address of the bidder, phone & fax number, and date of the bid opening. Each bid must be delivered to reach the Division of Purchasing prior to the stated time of the opening of the bids. The County will not be responsible for late delivery by the U.S. Mail or any other carrier. If hand delivered, please note that parking and security access at the County Complex may cause delays and bidders should take them into consideration in order to submit a timely bid. **No** late bids will be accepted.

Bidders are required to comply with the requirements of N.J.S.A. 10:5-31 et seq. and N.J.A.C. 17:27.

LAURA M. SCUTARI, QPA, MPA, DIRECTOR OF PURCHASING



NB-1

Revised: 2017.10.26

#### **GALLOPING HILL GOLF COURSE IMPROVEMENTS** BOROUGH OF KENILWORTH, COUNTY OF UNION, NEW JERSEY BA#69-2017; Union County Engineering Project #2016-031

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# UNION COUNTY BOARD OF CHOSEN FREEHOLDERS INSTRUCTIONS TO BIDDERS AND FORMS

#### **DEFINITIONS**

Wherever reference is made to the County, Title of Project, Bidder, or Vendor/Contractor they shall be as follows:

#### **OWNER/COUNTY:**

Union County Board of Chosen Freeholders UC Administration Building, 6<sup>th</sup> Floor 10 Elizabethtown Plaza Elizabeth, New Jersey 07207

#### ADDRESS BIDS AND SUBMIT TO:

Union County Division of Purchasing UC Administration Building, 3<sup>rd</sup> Floor 10 Elizabethtown Plaza Elizabeth, NJ 07207

Attn: Laura M. Scutari, QPA, MPA, Director, Division of Purchasing

Telephone: 908-527-4130 Facsimile: 908-558-2548

TITLE OF PROJECT: Galloping Hill Golf Course Improvements

Borough of Kenilworth, County of Union, New Jersey BA#69-2017; Union County Engineering Project #2016-031

BIDDER: Bidder shall be a single overall contract bidder

**ENGINEER:** Rees Jones, Inc.

**55 South Park Street** 

Montclair, New Jersey 07042

#### COUNTY ENGINEER AND/OR CONSTRUCTION MANAGER (as applicable):

#### **COUNTY ENGINEER:**

Thomas O. Mineo, P.E. Union County
Division of Engineering 2325 South Avenue
Scotch Plains, NJ 07076

Office: (908) 789-3675 Facsimile: (908) 789-3674 Email: <u>tmineo@ucnj.org</u>

#### **CONSTRUCTION MANAGER:**

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#### **GENERAL SPECIFICATIONS**

#### 1. BID FORM

Bids for this Work will be enclosed in a sealed envelope addressed to the Purchasing Division, County of Union, New Jersey, Union County Administration Building, 10 Elizabethtown Plaza, Elizabeth, New Jersey 07207, with the full name of the Project clearly marked on the outside. Refer to the sheet marked "Notice of Bid (Advertisement)" for the correct name of the Project. Bidders must submit their bids on the attached pricing sheet (Bid Form), in a sealed envelope addressed to the County and bearing on the outside: the name of the Bidder, Bidder's business address, and the title of the Project.

The Division of Purchasing will receive the bids for this Work at the Union County Administration Building, 10 Elizabethtown Plaza, Elizabeth, New Jersey on the date and time noted on the sheet marked "**Notice of Bid (Advertisement)**".

The County will not assume responsibility for bids forwarded by mail. It is the individual's responsibility to see that the bids are presented to the Purchasing Division at the time and at the place designated.

Bids will be accepted only on the Bid Form supplied. Bids on forms other than the original supplied herein will be rejected. The "complete" Bid Documents includes the Bid Bond, Bid Form, Bidder's Checklist, Consent of Surety, Ownership Disclosure Certification, Non-Collusion Affidavit, and any other documents noted in these Instructions to Bidders or Contract Document to be submitted with this Bid.

The bidder will state in the bidding sheet the price per unit of measure for each scheduled Item of Work for which he will agree to carry out the Work, and the Total Bid Price for the construction of the Project.

The prices in the Bid Form shall be typed or written in pen and ink. Erasures or alterations must be initialed by the bidder in ink.

The bidding sheet for this Project may include a fixed amount as a Bid Allowance. If applicable, all bidders are required to add this fixed amount to their base bid and to include this additional amount in their Bid Bond. This sum will be included in the Contract as well as the performance, labor and materials bond. Payment by the County will be made to the Contractor from these funds only upon the completion of extra Work pursuant to a written Change Order(s) signed by the County's Engineer or his designee and the Contractor, prior to the commencement of such Work. Work commenced prior to written approval by the County shall be done at Contactor's risk. Such payment will only be in the amount agreed to by the parties, in writing in the Change Order(s). See Section 37, Change Orders, of these general specifications for further details.

Refer to Bid Document Submission Checklist for all required documents.

In the event there is a discrepancy between the unit price given and the extended total, the unit price will govern. Any discrepancies will be mathematically adjusted.

Insert applicable alternates, if any have been specified, applicable to the Bidder's Work. All alternates MUST be bid upon. Any Bidder's failure to do so will be deemed a material, non-waivable defect and shall render the bid nonresponsive. The Bidder shall clearly designate whether the change in price is an addition or subtraction, by using either a "+" sign or the word "addition", or in the alternative, a "-"sign or the word "minus". If there is no other change in price, the Bidder shall insert "NC" or "No Charge".

When two or more low bids are equal in all respects, awards will be made according to the provisions of N.J.S.A. 40A:11-6.1(d).

Where unit prices have already been established by the Contract Documents, the Bidder agrees that such unit prices shall prevail. All unit prices, whether filled in by the Bidder or established by the Contract Documents, shall become part of the Contract. No bid will be considered or award made, unless applicable unit prices, as required, are filled in.

The County reserves the right to reject any or all bids and also reserves the right to waive any informality in the bids received so long as said waiver is not of a response which is considered to be material and non-waivable pursuant to law.

The County of Union has the right to reject any and all bids from any bidder that is in, or contemplates bankruptcy of any chapter of nature. Said bidder shall notify the County, in writing, of any condition or knowledge of the same.

Conditional bids will not be accepted. Bids may be withdrawn prior to the advertised time for the opening of bids or authorized postponement thereof or in accordance with the provisions of N.J.S.A. 40A:11-23.3 discussed below. Bids received after the advertised time shall not be considered. Bidders shall be solely responsible for premature opening or late delivery of bids not properly marked, addressed, or directed.

#### 2. WITHDRAWAL OF BID DUE TO MISTAKE

N.J.S.A. 40A:11-23.3 authorizes a bidder to request withdrawal of a public works bid due to a mistake on the part of the bidder. A mistake is defined by N.J.S.A. 40A:11-2(42) as a clerical error that is an unintentional and substantial computational error or an unintentional omission of a substantial quantity of labor, material, or both, from the final bid computation.

A bidder claiming a mistake under N.J.S.A. 40A:11-23.3 must submit a request for withdrawal, in writing, by certified or registered mail to Laura M. Scutari, QPA, MPA,

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Director, Division of Purchasing, County of Union, New Jersey, Union County Administration Building, 10 Elizabethtown Plaza, Elizabeth, New Jersey 07207. The bidder must request withdrawal of a bid due to a mistake, as defined by the law, within five business days after the receipt and opening of the bids. Since the bid withdrawal request shall be effective as of the postmark of the certified or registered mailing, Laura M. Scutari, QPA, Director of the Division of Purchasing or his designee may contact all bidders, after bids are opened, to ascertain if any bidders wish to, or already have exercised a request to withdraw their bid pursuant to N.J.S.A. 40A:11-23.3.

A bidder's request to withdraw the bid **shall** contain evidence, including any pertinent documents, demonstrating that a mistake was made. Such documents and relevant written information shall be reviewed and evaluated by the County's designated staff pursuant to the statutory criteria of N.J.S.A. 40A:11-23.3.

The County will not consider any written request for a bid withdrawal for a mistake, as defined by N.J.S.A. 40A:11-2(42), by a bidder in the preparation of a bid proposal unless the postmark of the certified or registered mailing is within the five business days following the opening of bids.

#### 3. QUALIFICATIONS OF BIDDERS AND REQUIRED SUBMISSIONS

The County may make such investigation as it deems necessary to determine the ability of the Bidders to perform the Work, which includes investigation of any and all subcontractors listed with the bid. The Bidder shall furnish any information and data for this purpose as the County may request.

#### 4. INTERPRETATIONS AND ADDENDA

Any explanation desired by a bidder regarding the meaning or interpretation of the Contract Documents must be requested in writing to the County Engineer or Design Professional as the case may be and with reasonable time allowed for a reply to reach bidders before submission of their bids. Any interpretation or instruction made by the County Engineer will be in the form of an addendum to the Contract Documents or clarification and will be furnished to all prospective bidders. Oral explanations or instructions given before the award of the Contract will not be binding. Bidders are required to bring to the attention of the County Engineer, the discovery of any apparent ambiguity, inconsistency, error, discrepancy, omission in the Contract Documents for interpretation and correction at least ten (10) working days before opening of bids with the exception of Saturdays, Sundays and holidays.

All Addenda issued through the Offices of the County Engineer are amendments to the Contract Documents and shall be considered in preparing bids. Same shall become part of the Contract Documents.

Addenda take precedence over all earlier documents and over each other according to the latest date. Addenda unless themselves interpretive remain subject to interpretation the same as any other document incorporated in the Contract.

Addenda may be issued by the County Engineer up to seven (7) working days prior to the opening of bids. Failure of any bidder to receive an addendum shall not relieve such bidder from the obligation imposed by such addendum. Bidders are to keep themselves currently acquainted with the Contract Documents during the entire bidding period and make inquiry on their own initiative as to issuance of any Addenda. Receipts of all Addenda shall be acknowledged on the "Acknowledgement of Receipt of Changes" included in the bid package and must be submitted with the bid.

# 5. OBLIGATION OF BIDDER TO INSPECT SITE AND CONTRACT DOCUMENTS

At the time of the opening of bids, each Bidder will be presumed to have inspected the site(s) and to have read, and be thoroughly familiar with the Contract Documents. The failure or neglect of any Bidder to receive or examine any form, instrument, or document shall in no way relieve any Bidder from any obligation in respect to its bid.

The Bidder shall examine the contents of the Project Manual and the set of Drawings and assure itself that all pages of the Specifications, Drawings, and other Contract Documents are included in the documents obtained for bidding purposes. Should the Specifications, Drawings, and other Contract Documents be incomplete, the Bidder shall notify the County Engineer in writing, who will supply the Bidder with any missing pages of Specifications, Drawings, or other Contract Documents. The lack of such written notification by the Bidder will be construed as evidence that the Specifications, Drawings, or other Contract Documents supplied it for bidding purposes are full and complete and as a waiver of any subsequent claim to the contrary.

#### 6. BID AND PERFORMANCE GUARANTEE

Each bidder must furnish a Bid Bond, Certified Check or Bank Cashier's Check in the amount of ten percent (10%) of the Bid. Checks shall be drawn to the order of the County of Union, New Jersey, not to exceed \$20,000.

Each bidder must furnish with the bid a certificate from a Surety Company, i.e. Consent of Surety, stating that in the event of the contract being awarded to said bidder, such Surety Company will provide the Contractor with Bonds guaranteeing the faithful performance of the Work in accordance with the plans and specifications, and the payment for labor, materials, and all other indebtedness which may accrue on the account of this Work. A Performance, Labor and Materials bond will be furnished by the Contractor upon an award of Contract, and will be in the amount of 100% of the contract price.

G-5 Revised: 2017.10.26 A one-year Maintenance Bond will be required upon acceptance of the Project by the County in the amount as stated in Section 15 of the General Specifications. Bonds will be written by a firm authorized to issue the bonds under the laws of the State of New Jersey and be in a form acceptable to the County Counsel.

N.J.S.A. 40A:11-1.1 et seq. allows the prime Contractor to furnish the Performance Security for his Subcontractors. The County of Union requires Performance Security to be furnished by the prime contractor for the entire job in the total amount of the contract.

The County of Union shall award the contract or reject all bids within sixty (60) days; except that the bids of any bidders who consent thereto may, at the request of the County be held for consideration for such longer periods as may be agreed.

The County will return all certified checks or cashier's checks after the proposals have been opened, read, tabulated and checked except those of the three (3) bidders who have bid the lowest total price for carrying out the Project. The County will return the checks of these bidders when a contract is awarded to the successful bidder within ten (10) days after the award of the contract.

If the successful bidder refuses or neglects to sign the said Agreement and furnish the required bonds, the Bid Bond will be held and used by the County to offset any damages for such refusal or neglect.

#### 7. COMMENCEMENT AND COMPLETION

Work will not commence until a Notice to Proceed is received from the County Engineer.

Upon substantial completion of the Project, the Contractor must request a joint inspection with the County Engineer. Upon completion of this inspection, the County Engineer will prepare a list of incomplete or incorrect items (punch list) and have Contractor initial and date same. The Contractor shall rectify all deficiencies noted on the punch list within 30 calendar days of receipt of the list. The County Engineer may approve extensions for extenuating circumstances.

#### 8. BIDDER AFFIDAVIT

All Bidders are required to complete, sign, and submit with their Bid, the attached "Affidavit Regarding List of Debarred, Suspended or Disqualified Bidders". (See form enclosed)

#### 9. BID SECURITY

All Bidders are required to submit a form of Bid Security with their bids. (Bid Bond or Certified Funds)

The Bid Security shall be in the amount of ten percent (10%) of the Bid, but not in excess of Twenty Thousand Dollars (\$20,000.00), and payable to the order of the "County of Union."

#### 10. LABOR AND MATERIALS

The prices will cover all costs of any nature incident to and growing out of the Work, including all labor, material, equipment, transportation, loss by damage or destruction of the Project, settlement of damages, and for replacement of defective work or materials. N.J.S.A. 54:32B-1 et seq. exempts all materials sold to the County of Union from sales or use taxes and should not be included in the prices provided on the Bidding Sheet.

#### 11. INSURANCE REQUIREMENTS

The County of Union requires all contractors to be able to comply with the following insurance requirements. In the event a bid is accepted by the County, the contractor must accept the applicable insurance requirements, as set forth below, as part of any contract awarded to it by the County.

Contractor shall carry and maintain at all times while the contract is in full force and effect, the following insurance coverage with an insurance company or companies acceptable to the County, with limits not less than those shown below. A Certificate of Insurance shall be filed with the County <u>prior</u> to commencement of any Work indicating the following:

- a) Commercial General Liability (CGL): Coverage for all operations including, but not limited to, contractual, products and completed operations, and personal injury with limits no less than \$5,000,000 per occurrence/\$10,000,000 aggregate. The County of Union, its Board of Chosen Freeholders, officers, employees, agents and servants shall be included as an additional insured. Coverage is provided on a primary and non-contributory basis to the County of Union, et al.
- b) Automobile Liability: Coverage for all owned, non-owned and hired vehicles with limits not less than \$5,000,000 per occurrence, combined single limits (CSL) or its equivalent.
- c) Workers Compensation: As required by the State of New Jersey and Employers Liability with limits not less than \$1,000,000 per accident for bodily injury or disease.

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- d) Professional Liability (if design/build): Coverage with limits not less than \$1,000,000 per occurrence or claim, \$2,000,000 aggregate
- e) Contractor's Pollution Legal Liability and/or Asbestos Legal Liability and/or Errors & Omissions (if project involves environmental hazards): Coverage with limits no less than \$1,000,000 per occurrence or claim/\$2,000,000 aggregate.
- f) Builders Risk (for major renovations): During the course of construction utilizing an "All Risk" coverage form with limits equal to the completed value of the project and no coinsurance penalty provisions.

Where applicable, a waiver of subrogation in favor of the County of Union, its Board of Chosen Freeholders, officers, employees, agents, servants and the State of New Jersey is to be included in those policies of insurance where permitted by law.

Notice of Cancellation: Each insurance policy required above shall provide that coverage shall not be canceled, except with notice to the Entity.

Special Risks or Circumstances: The County reserves the right to modify these requirements, including limits, based on the nature of the risk, prior experience, insurer, coverage, or other special circumstances.

#### 12. INDEMNIFICATION REQUIREMENTS

The County of Union requires all bidders to accept the following indemnification requirements in the event the County accepts their bid. The Contract awarded by the County to the successful bidder will contain the following provision:

"To the fullest extent permitted by law the Contractor shall indemnify and hold harmless the owner and the owner's consultants, agents, representatives, and employees from and against any and all claims, damages, losses, costs, and expenses, including, but not limited to attorneys' fees, legal costs and legal expenses arising out of or resulting from the performance of the Contractor's work under this contract, provided that such claim, damage, loss, cost, or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the work itself) caused or alleged to be caused by the negligent acts, negligent omissions, and/or fault of the Contractor, anyone directly or indirectly employed or retained by the Contractor, or anyone for whose acts the Contractor may be liable regardless of whether caused in part by the negligent act or omission of a party indemnified hereunder provided it is not caused by the sole negligence of a party indemnified hereunder. Contractor shall further indemnify and hold harmless the County and the County's consultants, agents, representative, and employees from and against any and all claims, damages, losses, costs, and expenses, including, but not limited to attorneys' fees, legal costs and legal expenses, arising out of or resulting from performance of the work, provided that such claim, damage, loss,

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cost, or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the work itself) caused or alleged to be caused by the negligent acts, negligent omissions, and/or fault of the County or the County's consultants, agents, representatives, or employees and arises out of this project and provided such claim, damage, loss, cost, or expense is not caused by the sole negligence of a party indemnified hereunder."

#### 13. ROYALTIES AND PATENTS

The Contractor shall pay all royalties and license fees. He shall defend all suits or claims for infringement of any patent rights and shall hold the County harmless from loss on account thereof.

#### 14. PLANS AND SPECIFICATIONS

In carrying out the Work, the plan(s) and the specifications will be followed by the Contractor. Minor alterations in the plan may be made or permitted by the County Engineer from time to time and, if no additional Work is necessary, there will be no additional charge for carrying out such minor alterations.

The Contractor shall provide the County Engineer a set of reproducible as-built drawings upon completion of the Project. The Contractor shall maintain an updated construction progress plan in the Project field office at all times.

When applicable, The New Jersey Department of Transportation Standard Specifications for Road and Bridge Construction, as amended, and Supplemental Specifications for State Aid Projects, herein after referred to as the "Standard Specifications", are made a part of these specifications and contract for the improvements, and will govern the construction of this Project, the material used and the execution of this Project, except as revised and modified herein. The references to these specifications are given herein for the purpose of aiding in the rapid location of the description of the various items herein specified. The entire Work must be carried on and completed to the satisfaction of the County. The Standard Specifications are amended as follows:

"Any reference to the Commissioner, Department, Department Laboratory, Engineer or Inspector should be redefined to be the County of Union".

#### 15. GUARANTEE AGAINST DEFECTIVE WORK

Prior to final payment being made or before the release of the performance security required by Section 3 above, the Contractor and Surety shall execute and deliver to the County an original Maintenance Bond with an original signature and seal having a penal sum equal to:

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- A) One hundred percent (100%) of the final adjusted Contract amount, if such amount is \$50,000.00 or less;
- B) Fifty percent (50%) of the final adjusted Contract amount, if such amount be greater than \$50,000.00 but less than \$250,000.00; and,
- C) Twenty-five percent (25%) of the final adjusted contract amount, if such amount is \$250,000.00 or more.

The Bond and Surety shall be satisfactory to the Union County Counsel. The Surety shall hold a Certificate of Authorization to do business in the State of New Jersey and shall conform to P.L. 1995 c.384, codified as N.J.S.A. 2A:44-143, 144. The Surety Disclosure Statement and Certification required by N.J.S.A. 2A: 44-143, 144, shall be attached to the Bond. Such Maintenance Bond shall remain in full force and effect for a period of one (1) year from the date of Final Completion. Such Maintenance Bond shall also provide that the Contractor and the Surety guarantee to replace for the said period of one (1) year from the date of Final Completion, all Work performed and/or all materials furnished that were not performed or were not furnished in accordance to the terms and performance requirements of the Contract Documents, and will make good any defects thereof which become apparent before the expiration of one (1) year. If, during that period, any part of the Project, in the judgment of the Engineer, is found defective, the Contractor will repair or replace same within five (5) days of receipt of notice from the County Engineer. If the Contractor refuses or neglects to do such Work in the time specified, the County Engineer may have the Work done by others and the Contractor or his Surety thereof will pay the cost.

The Contractor will furnish the County a Maintenance Bond for a percentage of the final adjusted contract price, as stated above. The one (1) year period will start the day of Final Completion of Project by the County. Final payment is conditional on the receipt of a maintenance bond in a form acceptable to County Counsel.

#### 16. TRAFFIC AND STREET MAINTENANCE

The Work must be started and performed by the Contractor in such a manner as to minimize delays to the traveling public. It must be completed in a timely fashion, with little or no inconvenience to traffic and pedestrians, where such inconvenience may be avoided.

All municipal, county, and state roadways shall remain open to traffic unless otherwise provided for in the technical specifications.

If modified traffic patterns are authorized in order to provide a safe working or traveling environment, the Contractor is responsible for providing all equipment, barrels, cones, signs, and barricades to implement the work zone and detours, unless otherwise specified in the technical specifications. All work zones and detours shall be

G-10 Revised: 2017.10.26 established in accordance with the technical plans and specifications if provided or in strict compliance with the current version of the Manual for Uniform Traffic Control Devices (MUTCD). The Contractor shall obtain approval for these work zones and detour plans from the Municipal Police or applicable police agency and the Union County Bureau of Traffic Maintenance prior to implementation.

All traffic control plans shall provide for safe movement of vehicular, bicycle, and pedestrian traffic. Particular attention shall be given to requirements of the Americans with Disabilities Act.

No portion of any street or alleyway may be used for the storage of any materials or equipment without the approval of the Municipal Police or other applicable police agency. Sidewalks, gutters, drains, fire hydrants and private drives shall be maintained for their intended use unless specifically approved by the County Engineer.

Upon suspension of Work, at the end of the day or for protracted periods, the Contractor shall remove all rubbish and materials from the Work site to the approved storage/staging location. All road cuts, saw cuts, and trenches that may pose hazard to vehicular, pedestrian, or bicycle traffic, to include handicapped users, shall be filled to the surface of the roadway or sidewalk. At no time will steel plates or settled trenches be allowed at the daily suspension of Work, unless specifically approved by the County Engineer.

Use of Traffic Control Officers shall be determined by the County in accordance with the provisions of N.J.S.A. 40A:11-23.1(c). If applicable to the Project, the County shall have provided an allowance for same as set forth in the Bid Form.

With respect to pedestrian traffic, the Contractor shall install signs restricting access of the general public and, as necessary, Union County employees to the area of construction. The Contractor shall provide safe access to required areas and place physical barriers to restricted areas. These barriers may range from caution tape to actual barriers, at the direction of the County Engineer.

#### 17. CONTRACTOR'S EMPLOYEES

The Contractor must employ only suitable and competent labor in the Work, and must remove from the Work any incompetent, unsuitable, or disorderly person upon complaint from the County Engineer.

The parties to any contract resulting from this proposal do hereby agree that the provisions of N.J.S.A. 10:2-1 through 10:2-4 (discrimination in employment on public works contracts): 34:11-56.25 et seq. (payment of prevailing rate of wages determined pursuant to N.J.S.A. 34:11-56.30 by the Commissioner), and the Rules and Regulations

G-11 Revised: 2017.10.26 promulgated pursuant thereto, are hereby made a part of any contract and are binding upon them.

There will be no discrimination against any employee who is employed in the Work to be covered by any contract resulting from this bid because of age, race, creed, color, national origin, ancestry, marital status or sex.

Any person, firm, or corporation violating the provisions of this Section will be deemed and judged a disorderly person.

#### 18. OWNERSHIP DISCLOSURES REQUIRED

Pursuant to P.L. 1977, N.J.S.A. 52:25-24.2, the Bidder shall submit with its Bid, or prior to receipt of bids, a statement setting forth the names and addresses of all stockholders in the corporation or partnership bidding who own ten percent (10%) or greater interest therein. (See forms attached)

#### 19. NON-COLLUSION AFFIDAVIT

The Bidder shall submit with its bid either the attached completed "Non-Collusion Affidavit" or a statement of non-collusion with verbiage similar to same.

#### 20. EQUAL EMPLOYMENT OPPORTUNITY COMPLIANCES

The successful bidder shall be required to complete and submit an Initial Project Workforce Report, New Jersey Department of Treasury Form AA-201, upon notification of award. Failure to submit this completed form may result in the Contract being terminated.

The successful bidder shall also be required to submit a copy of its Monthly Project Workforce Report, New Jersey Department of Treasury Form AA-202, to the New Jersey Department of Treasury's Division of Public Contracts Equal Employment Opportunity Compliance and to the Board.

#### 21. COMPLIANCE WITH NEW JERSEY PREVAILING WAGE ACT

The County of Union, in order to fulfill the requirements of N.J.S.A. 34:11-56.25 et seq, requires that the following additional conditions be strictly followed. The bidders represent that he is not listed or is not on record in the Office of the Commissioner or the Department of Labor and Industry as one who failed to pay prevailing wages in accordance with the provisions of this Act. The bidder agrees to the inclusion of a contract provision upon award which specifically requires said Contractor to fully comply with each and all of the requirements of the aforesaid Act as it relates to prevailing rates

G-12 Revised: 2017.10.26 of wages on public contracts as set forth in the New Jersey Prevailing Wage Act, P.L. 1963, Chapter 150 and P.L. 1974, Chapter 64.

A Copy of the Prevailing Wage Rates is attached for your reference. Applicable rates are those wages and fringe benefit rates in effect on the date the contract is awarded. All predetermined rate increases listed at the time the contract award must also be paid, beginning on the dates specified. Rates may change between the time of issuance of this determination and the award of the public works contract. Therefore, prior to the award of the contract, verification must be made with the Public Contracts section, to insure that the rates contained in this determination are still prevailing.

The Contractor agrees to abide and be bound by each and all of the said statutory provisions with respect to the payment of prevailing rates of wages, and acknowledges that the County reserves the right to terminate the Contractor's (or his subcontractors') right to proceed with the scope of Work, or such portion thereof that relates to the failure to pay prevailing rates of wages. In such event or under the terms of N.J.S.A. 34:11-56.27, the Contractor and his surety will be liable to the County of Union for any excess costs occasioned by such a violation.

The Contractor or subcontractors for this Project will post the Prevailing Wage Rates for each craft and classification involved as determined by the Commissioner of Labor and Industry, including the effective date of any changes thereof, in prominent and easily accessible places at the site of the Work or at such place or places as are used by them to pay workmen their wages.

The County of Union requires a copy of payroll records from the Contractor and subcontractors. Payroll records shall be submitted with each voucher request for payment. Prevailing wage rates may be obtained from the New Jersey Labor, Division of Workplace Standards, Public Contracts Section, (609-292-2259).

In addition to compliance with the New Jersey Prevailing Wage Act, the County requires compliance with procedures established by Resolution No. 2014-0408 adopted by the Union County Board of Chosen Freeholders on May 8, 2014. The resolution is furnished in Section 51 of these General Specifications.

#### UNION LABOR IS PREFERRED ON ALL COUNTY WORK

The foregoing reference to specific laws will not be deemed to be a limitation of obligation of the Contractor to perform his obligations in full compliance with the provisions and requirements of all federal and state statues and local ordinances applicable to the Work to be done under the contract.

It is agreed and understood that any contracts and/or orders placed as a result of this proposal will be governed and construed and the rights and obligations of the

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parties hereto will be determined in accordance with the laws of the State of New Jersey.

Upon completion of the Work, the Contractor will furnish a Certification of Compliance with the New Jersey Prevailing Wage Act. The certificate in a form acceptable to County Counsel is a condition of the final payment. (See form attached)

#### 22. BRAND NAME OR EQUAL

When the Specifications, Forms, and other Contract Documents use "brand name or equivalent" or similar language, the listed brand name shall serve as a reference or point of comparison for the functional or operational characteristic desired for the goods or services being requested. Where a bidder attempts to submit an equivalent product for a brand name, it shall be the responsibility of the bidder to fully describe and document the product to be provided with the bid in order to establish the equivalence claim.

- A. If the Bidder proposes to offer substitute goods as an equal to those specified herein, the bidder shall so indicate with the Bid Proposal. For the purposes of this paragraph, a proposed item shall be considered equal to goods specified herein if:
  - 1. The County, in its sole discretion, determines that: (i) the goods conform substantially, even with deviations, to the brand name goods specified herein; (ii) the goods are equal to or greater than the brand name goods specified herein in terms of quality, durability, functionality, appearance, strength and design; (iii) the goods are capable, at least as well as the brand name goods specified herein, or performing with existing equipment; and (iv) the goods do not cost the County more than the brand name goods specified herein costs the County.
- B. To offer substitute goods as an equal to those specified herein, it is necessary that:
  - The Bidder submits sufficient information with its bid to permit the County to determine that the goods are equivalent to the brand name goods specified herein, including, but not necessarily limited to the brand, catalog number and specifications/data sheets;
  - 2. The Bidder fully identifies and describes the variations of the goods from the brand name goods specified herein

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- on a separate sheet that is to be submitted with the bid proposal. Bidder's literature WILL NOT suffice in explaining exceptions to these specifications.
- 3. The Bidder certifies that the goods (i) are similar in substance to the brand name goods specified, and (ii) are suited to the same use as the item specified;
- C. The County shall be allowed a reasonable time within which to evaluate the Bidder's proposal to offer substitute goods as an equal to those specified herein. The County shall be the sole judge of acceptability. No "or-equal" goods shall be ordered, delivered, assembled, set-up or utilized until the County's evaluation is complete. The County's determination as to equivalency shall be deemed final and absolute.

In the event the Bidder does not provide sufficient supporting documentation with the bid, it will be presumed and required that the brand name goods and services as described in the specifications will be provided.

#### 23. LINES AND GRADES

Normally, horizontal and vertical control points will be provided in the technical specifications. All other surveying will be the responsibility of the Contractor unless otherwise noted.

#### 24. NUMBER OF WORKING DAYS

In accordance with N.J.S.A. 40A:11-17, the Work for the within Project shall be completed as specified on the Time of Completion Form. See form attached

There shall be taken a deduction from the contract price, or any wages paid by the County, to any inspector(s) necessarily employed by it on the Work, for any number of days in excess of the number allowed in the specifications.

# 25. PROMPT PAYMENT OF CONSTRUCTION CONTRACTS (NJ Prompt Payment Act)

Pursuant to N.J.S.A. 2A:30A-1 et seq., payment to the Contractor, other than for Work done pursuant to a contact allowance, where applicable, shall be processed and paid as follows:

1. All contractor bills shall be either approved for payment, or notice provided as to why the bill or any portion of it will not be approved by the representative(s) of the governing body no later than the

G-15 Revised: 2017.10.26 public meeting following 20 calendar days of the billing date as defined in the statute.

2. If the billing is approved, said bill shall be paid in the payment cycle following the meeting.

#### 26. STOPPING WORK ON ACCOUNT OF BAD WEATHER

Work must only be performed in weather suitable for the type of construction planned or underway. Extremes in temperature, humidity, precipitation, evaporation, etc. can detrimentally affect the constructed product. Refer to the Standard and Technical Specifications for specific items.

#### 27. ACCESS FOR OTHER CONTRACTORS

The Contractor for this Work will give proper access to other contractors who may be employed upon the Project and must not hinder or delay unnecessarily any Work that may be progressing under other contracts.

#### 28. CONDEMNED MATERIALS AND WORK

Any materials and or part of the Work that may be condemned by the County Engineer will be removed and replaced by the Contractor or otherwise rectified, as may be directed by the County Engineer. No payment will be made upon the Work until such faulty work has been made good as may be directed. In the event the Contractor refuses or neglects to make good such faulty work, he will be deemed to have abandoned the contract and proceedings may be taken against him as provided herein.

#### 29. STORAGE

In the event that it is necessary for the Contractor to stockpile or store materials or equipment on the job site, the Contractor shall inform the County of such necessity and the County may offer available space, if any, for storage of such materials or equipment. The Contractor shall use said space only for such purpose. Any and all materials which may be stored in such space or which may be brought onto the job site at any time by the Contractor will be at the Contractor's sole risk. The County will not be responsible for loss of or damage to said materials or equipment for any cause whatsoever. The Contractor shall take necessary measures to protect any such storage area and shall be responsible for any and all damages.

#### 30. FINAL CLEAN UP

Upon completion of the Work, the Contractor will remove all equipment, unused materials, rubbish, etc., and will repair, or replace in an a manner acceptable to the

G-16 Revised: 2017.10.26 County Engineer, all areas that may have been damaged in the prosecution of the Work. Same shall be a condition precedent to final payment. Should said Contractor fail to comply with this requirement, the County shall undertake the clean-up with its own forces and charge the cost of same against the Contractor's contract balance.

#### 31. SUB-LETTING OF WORK

Except for the List of Subcontractors, pursuant to N.J.S.A. 40A:11-16 (See form attached), no portion of the Work will be sublet by the Contractor to any other entities, except with the consent of the County Engineer. A complete list of subcontractors must be submitted to the County Engineer at the preconstruction meeting. If the job does not warrant a preconstruction meeting, the Contractor must submit such list prior to the start of Work.

All Subcontractors will be subject to N.J.S.A. 34:11-56 et al.

N.J.S.A. 40A:11-16 requires the bidder to list in the bid sheets the name or names of all subcontractors involved in the following types of Work: plumbing and gas fitting and all kindred work, steam and hot water heating, ventilating apparatus, steam power plants and kindred work, electrical work, ornamental iron work, and structural steel. In addition, the County may require the identification of specific additional subcontractors. If these trades are expected to be part of the contract, such subcontractors should be listed on the "Subcontractor Identification Statement List of Subcontractors" and Bidder shall certify same on the accompanying sheet titled "Subcontractor Identification Certification". (See forms attached) Bidder's failure to submit these two forms shall be considered a material defect and result in rejection of Bidder's bid. Substitutions of any listed subcontractors pursuant to N.J.S.A. 40A:11-16 will not be permitted except with the consent of the County Engineer.

#### 32. SAFETY

The Contractor shall observe all rules and regulations of the Federal, State, and local health officials. Attention is directed to Federal, State, and local laws, rules, and regulations concerning construction safety and health standards. The Contractor shall not require any worker to work in surroundings or under conditions that are unsanitary, hazardous, or dangerous to the worker's health or safety.

The Contractor shall admit to the site, without delay and without the presentation of an inspection warrant, any inspector of OSHA or other legally responsible agency involved in safety and health administration upon presentation of proper credentials.

The Contractor shall make available to the Contractor's employees, subcontractors, the County Engineer, and the public, all information pursuant to OSHA 29 CFR Part 1926.59 of The Hazard Communication Standard 29 CFR 1910.1200, and shall also maintain a file on each job site containing all Material Safety Data Sheets (MSDS) for

G-17 Revised: 2017.10.26 products in use at the Project. These Material Safety Data Sheets shall be made available to the Engineer upon request.

The Contractor shall at all times conduct the Work to provide for the safety and convenience of the general public and protection of persons and property. The safety provisions of applicable laws, OSHA regulations, building and construction codes, and the rules and regulations of the New Jersey Department of Labor and Workforce Development and Commerce shall be observed.

#### 33. QUALITY, SAFETY AND PERFORMANCE STANDARDS

All goods and services must be constructed and provided with the highest quality materials and workmanship. It is the intent of these specifications that only equipment equal to, or exceeding, the standard specified will be acceptable in order to protect the safety of the occupants of the Building.

#### 34. MATTERS NOT MENTIONED IN CONTRACT DOCUMENTS

Any Work, material, or method, not specifically described in these specifications, but shown upon the plans of the Work, will be carried out as shown on said plan.

#### 35. PERMITS

The Contractor will obtain all necessary permits required by law and provide the County with necessary approvals prior to commencement of permitted Work.

#### 36. CONTRACTOR TO PROVIDE PROOF OF PAYMENT

Upon the completion of the Work, the Contractor will furnish a General Release as proof that all claims for labor, materials, etc., have been settled by the Contractor. The General Release, in a form acceptable to County Counsel, is a condition of final payment.

#### 37. CHANGE ORDERS

Change Order Procedures shall comply with N.J.A.C. 5:30-11.1 et seq., "Change Orders and Open End Contracts" and subsequent provisions of the New Jersey Administrative Code.

#### 38. SUPPLEMENTAL WORK

In case any supplemental work is necessary, it will be performed by the Contractor at a price fixed by agreement between the Contractor and the County Engineer and approved by the County as specified in Section 36. The Contractor will do no supplemental work on any character, for which the Contractor will demand pay, except upon the written order of the County.

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#### 39. FORM OF CONTRACT

The Contract will be subject to all statutory provisions on the matter of Public Works, Public Contracts, The Law Against Discrimination, the Laws Governing Affirmative Action and Prevailing Rates of Wages under the laws of New Jersey.

The Agreements shall be executed by both parties not later than twenty-one (21) days from the date of the award by the County (Sundays and holidays excluded); however, such time frame may be extended by agreement of the parties.

#### **40. PROGRESS PAYMENTS**

Monthly progress payments will be made based on the value of labor and materials incorporated in the Work and of materials suitably stored at the site. An itemized schedule of values shall be submitted with each Application for Payment.

(Refer to the Owner/Contractor Agreement for Retainage and other conditions pertaining to payment and the application of N.J.S.A. 2A:30A-1 et seq.)

All Applications for Payment shall be accompanied by paid invoices for materials incorporated in the Work and for materials suitably stored at the site, and affidavit(s) by Subcontractors whose Work was included in the next to the last application to the effect such Work and such materials have been paid for.

No payment shall be made without Contractor having provided all submittals set forth in this Section, and the approval of same by the County.

For contracts exceeding \$100,000.00, monthly payments will be made on the Work to the extent of 98% of the value of the Work done which is considered to be retainage.

For contracts less than \$100,000.00, monthly payments will be on the Work to the extent of 90% of the value of the Work done. In lieu of the retainage, the Contractor will, at his option, deposit with the County Counsel negotiable bearer bonds of the State of New Jersey or any political subdivision thereof, equal to the amount otherwise withheld as retainage.

When the Project is completed, the final cost of the Project will be based on actual quantities of authorized Work done under each item scheduled in the bidding sheet and approved Change Orders, if any. The money due to the Contractor as determined by said final certificate after deduction of previous monthly payments on account, will be paid to the Contractor in accordance with the terms of the contract dealing with Prompt Payment, providing, however that before such final payment is

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made, all outstanding claims against the Contractor must be satisfied. Before final payment is released, the Contractor must furnish: a) Maintenance Bond (see Section 6 of these general specifications); b) Certification of Compliance, New Jersey Prevailing Wage Act (see Sections 21 and 51); and c) General Release (see Section 36) in a form satisfactory to County Counsel; d) complete set of as-built plans in the latest AutoCad on compact disc; and e) a complete set of in-progress photos in jpg, jpeg, or bmp digital format on a compact disc.

#### 41. INSPECTION

The Work must be done in accordance with the plans and specifications, and will be inspected by the County Engineer. An inspector may be placed upon the Work at any time by the County Engineer to see that the plans, specifications, and instructions of the County Engineer are carried out. In connection herewith, bidders are referred to N.J.S.A. 40A:11-17.

#### 42. DAMAGES

The Contractor will be held responsible for all damages that may occur to Work, or to persons or property by reason of the nature of the Work or from the elements, or by reason of inadequate protection of the Work, or from any carelessness or negligence on his part or on the part of his employees. The County will withhold payments on the Work until all suits or claims for damages sustained on, or by reason of, this Work will have been settled by the Contractor.

The construction and final completion of this Work will be guaranteed by the Contractor. Any damages that may be done to the Work or any part thereof, by the elements or otherwise, during its construction, will be made good by the Contractor.

#### 43. LIQUIDATED DAMAGES

If the Project is not completed within the time specified herein or within such further time as may have been granted by the County Engineer, then the Contractor hereby agrees to pay to the County as liquidated damages, but not as a penalty, \$1,000.00 per day for each and every calendar day that he is in default on time to complete the Work. The said sum will be deducted from moneys due the Contractor and if the damages exceed this amount, then the Contractor or his Surety Company will pay the excess. These damages may be waived at the option of the County.

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#### 44. AFFIRMATIVE ACTION REQUIREMENTS

## EXHIBIT B (Revised 4/10)

# MANDATORY EQUAL EMPLOYMENT OPPORTUNITY LANGUAGE N.J.S.A. 10:5-31 et seq. (P.L. 1975, C. 127) N.J.A.C. 17:27

#### CONSTRUCTION CONTRACTS

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

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

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

The contractor or subcontractor will send to each labor union, with which it has a collective bargaining agreement, a notice, to be provided by the agency contracting officer, advising the labor union 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.

When hiring or scheduling workers in each construction trade, the contractor or subcontractor agrees to make good faith efforts to employ minority and women workers in each construction trade consistent with the targeted employment goal prescribed by N.J.A.C. I7:27-7.2; provided, however, that the Division may, in its discretion, exempt a contractor or subcontractor from

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- If the contractor or subcontractor has a referral agreement or arrangement with a union for a construction trade, the contractor or subcontractor shall, within three business days of the contract award, seek assurances from the union that it will cooperate with the contractor or subcontractor as it fulfills its affirmative action obligations under this contract and in accordance with the rules promulgated by the Treasurer pursuant to N.J.S.A. 10:5-31 et. seg., as supplemented and amended from time to time and the Americans with Disabilities Act. If the contractor or subcontractor is unable to obtain said assurances from the construction trade union at least five business days prior to the commencement of construction work, the contractor or subcontractor agrees to afford equal employment opportunities minority and women workers directly, consistent with this chapter. If the contractor's or subcontractor's prior experience with a construction trade union, regardless of whether the union has provided said assurances, indicates a significant possibility that the trade union will not refer sufficient minority and women workers consistent with affording equal employment opportunities as specified in this chapter, the contractor or subcontractor agrees to be prepared to provide such opportunities to minority and women workers directly, consistent with this chapter, by complying with the hiring or scheduling procedures prescribed under (B) below; and the contractor or subcontractor further agrees to take said action immediately if it determines that the union is not referring minority and women workers consistent with the equal employment opportunity goals set forth in this chapter.
- (B) If good faith efforts to meet targeted employment goals have not or cannot be met for each construction trade by adhering to the procedures of (A) above, or if the contractor does not have a referral agreement or arrangement with a union for a construction trade, the contractor or subcontractor agrees to take the following actions:
- (I) To notify the public agency compliance officer, the Division, and minority and women referral organizations listed by the Division pursuant to N.J.A.C. 17:27-5.3, of its workforce needs, and request referral of minority and women workers;
- (2) To notify any minority and women workers who have been listed with it as awaiting available vacancies;
- (3) Prior to commencement of work, to request that the local construction trade union refer minority and women workers to fill job openings, provided the contractor or subcontractor has a referral agreement or arrangement with a union for the construction trade;
- (4) To leave standing requests for additional referral to minority and women workers with the local construction trade union, provided the contractor or subcontractor has a referral agreement or arrangement with a union for the construction trade, the State Training and Employment Service and other approved referral sources in the area:

- (5) If it is necessary to lay off some of the workers in a given trade on the construction site, layoffs shall be conducted in compliance with the equal employment opportunity and non-discrimination standards set forth in this regulation, as well as with applicable Federal and State court decisions:
- (6) To adhere to the following procedure when minority and women workers apply or are referred to the contractor or subcontractor:
- (i) The contactor or subcontractor shall interview the referred minority or women worker.
- (ii) If said individuals have never previously received any document or certification signifying a level of qualification lower than that required in order to perform the work of the construction trade, the contractor or subcontractor shall in good faith determine the qualifications of such individuals. The contractor or subcontractor shall hire or schedule those individuals who satisfy appropriate qualification standards in conformity with the equal employment opportunity and non-discrimination principles set forth in this chapter. However, a contractor or subcontractor shall determine that the individual at least possesses the requisite skills, and experience recognized by a union, apprentice program or a referral agency, provided the referral agency is acceptable to the Division. If necessary, the contractor or subcontractor shall hire or schedule minority and women workers who qualify as trainees pursuant to these rules. All of the requirements, however, are limited by the provisions of (C) below.
- (iii) The name of any interested women or minority individual shall be maintained on a waiting list, and shall be considered for employment as described in (i) above, whenever vacancies occur. At the request of the Division, the contractor or subcontractor shall provide evidence of its good faith efforts to employ women and minorities from the list to fill vacancies.
- (iv) If, for any reason, said contractor or subcontractor determines that a minority individual or a woman is not qualified or if the individual qualifies as an advanced trainee or apprentice, the contractor or subcontractor shall inform the individual in writing of the reasons for the determination, maintain a copy of the determination in its files, and send a copy to the public agency compliance officer and to the Division.
- (7) To keep a complete and accurate record of all requests made for the referral of workers in any trade covered by the contract, on forms made available by the Division and submitted promptly to the Division upon request.
- (C) The contractor or subcontractor agrees that nothing contained in (B) above shall preclude the contractor or subcontractor from complying with the union hiring hall or apprenticeship policies in any applicable collective bargaining agreement or union hiring hall arrangement, and, where required by custom or agreement, it shall send journeymen and trainees to the union for referral, or to the apprenticeship program for admission, pursuant to such agreement or arrangement. However, where the practices of a union or apprenticeship program will result in the exclusion of minorities and women or the failure to refer minorities and women consistent with the targeted county employment goal, the contractor or subcontractor shall consider for employment persons referred pursuant to (B) above without regard to such agreement or arrangement; provided further, however, that the contractor or subcontractor shall

G-23 Revised: 2017.10.26 not be required to employ women and minority advanced trainees and trainees in numbers which result in the employment of advanced trainees and trainees as a percentage of the total workforce for the construction trade, which percentage significantly exceeds the apprentice to journey worker ratio specified in the applicable collective bargaining agreement, or in the absence of a collective bargaining agreement, exceeds the ratio established by practice in the area for said construction trade. Also, the contractor or subcontractor agrees that, in implementing the procedures of (B) above, it shall, where applicable, employ minority and women workers residing within the geographical jurisdiction of the union.

After notification of award, but prior to signing a construction contract, the contractor shall submit to the public agency compliance officer and the Division an initial project workforce report (Form AA 201) electronically provided to the public agency by the Division, through its website, for distribution to and completion by the contractor, in accordance with N.J.A.C. 17:27-7. The contractor also agrees to submit a copy of the Monthly Project Workforce Report once a month thereafter for the duration of this contract to the Division and to the public agency compliance officer.

The contractor agrees to cooperate with the public agency in the payment of budgeted funds, as is necessary, for on-the-job and/or off-the-job programs for outreach and training of minorities and women.

(D) The contractor and its subcontractors shall furnish such reports or other documents to the Division of Public Contracts Equal Employment Opportunity Compliance as may be requested by the Division from time to time in order to carry out the purposes of these regulations, and public agencies shall furnish such information as may be requested by the Division of Public Contracts Equal Employment Opportunity Compliance for conducting a compliance investigation pursuant to <a href="Subchapter IO">Subchapter IO</a> of the Administrative Code (NJAC 17:27).

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#### 45. INVESTMENT ACTIVITIES IN IRAN

Pursuant to P.L. 2012, c.25, codified as N.J.S.A. 2:32-55 et seq., prohibits State and local public contracts with persons or entities engaging in certain investment activities in energy or finance sectors of Iran.

# 46. COMPLIANCE WITH THE PUBLIC WORKS CONTRACTOR REGISTRATION ACT - (N.J.S.A. 34:11-56.48 et. seq.)

Pursuant to the above-referenced law, Bidders are required to be registered with the New Jersey Department of Labor and Workforce Development and to possess a current certificate by said Department indicating compliance with the Act prior to the time and date that bids are received. Bidders are notified of this requirement of their compliance. Such certificates or applications shall also be provided for each Subcontractor furnishing plumbing and gas fitting, steam and hot water heating and ventilating apparatus, and all kindred work, steam power plants and kindred work, electrical work, structural steel and ornamental iron work, and such other subcontractors as the specifications require relative to prior identification.

#### 47. UTILITIES

Attention of the bidder is directed to the fact that the approximate locations of known utility structures and facilities that may be encountered within and adjacent to the limits of the Work are shown on the plans and described herein. The accuracy and completeness of this information is not guaranteed by the County Engineer and the bidder is advised to ascertain for himself all the facts concerning the location of these and other utilities.

The Contractor will not proceed with his Work until he has made diligent inquiries of all public utility and municipal officials to determine the exact location of all-underground structures and pipes within the site of the Project. The Contractor will notify 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 in compliance with **New Jersey One-Call.** In excavating in any part of the Work, care must be taken not to remove or damage any gas, water, sewer, or other pipe, conduit, or structure, - public or private - without the concurrence of the owner and the County Engineer. The Contractor will, at his own expense, shore up, secure and maintain a continuous flow in such structures, and will keep them in repair until final acceptance of the Work.

When pipes or other structures are encountered or when the removal, relocation or protection of these utilities are necessary in carrying out the Project as planned, the Contractor will cooperate with the owner of said utilities and will permit the owners or their agents access to the site of the Work in order to relocate or protect their facilities

G-25 Revised: 2017.10.26 and not hinder or delay unnecessarily the Work of the owners in moving same. No extra allowance of payment will be made to the Contractor for the use of any materials. equipment, etc., or for the performance of any Work in connection with the moving of said structures unless the Contractor is specifically ordered by the County Engineer to furnish such materials, equipment, or services. If directed by the County Engineer to do any Work or furnish any materials or equipment, payment will be allowed the Contractor in accordance with the unit prices bid for such Work, or, if such items are not scheduled in the proposal, such Work shall be allowed "Supplemental Work" as provided in Section 39 of these general specifications. The corporations, companies, agencies or municipalities owning or controlling the utilities, and the name, and telephone numbers are listed in the beginning of the Technical Specifications.

#### 48. MATERIAL COMPLIANCE AND SHOP DRAWINGS

The Contractor will require the manufacturer or supplier to furnish three (3) copies of Certification of Compliance with each delivery of materials, components and manufactured items for the Project. Two (2) copies will be furnished to the County Engineer; one copy will be retained by the Contractor. Certificates of Compliance will contain the following information:

- 1. Project to which material is consigned;
- Name of the Contractor to which the material is supplied; 2.
- 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. That the material is in conformity with the pertinent specifications stated in the certificate: and
- 8. Signature of a person having legal authority to bind the supplier.

The Contractor will submit to the County Engineer for his approval five (5) copies of complete and fully detailed shop or working drawings for those items listed in the beginning of the technical specifications.

Each drawing will identify the name of the job, location and Contractor.

All drawings will be approved in accordance with the standard specifications. Refer to the Technical Specifications for specific items.

All materials or articles used in the Work will be of American manufacture, insofar as same are available, in conformance with N.J.S.A. 40A:11-18.

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#### 49. PRECONSTRUCTION

In order to provide full coordination of this Project among the parties concerned, the County Engineer will arrange for a preconstruction meeting between the Contractor, County Engineer and other interested parties as soon as possible after the contract is executed. At this meeting the Contractor will present his proposed schedule of Work which shall be subject to review and approval of the County through its designated representatives.

#### 50. DISPUTES UNDER THE CONTRACT

A dispute arising under the Contract shall be submitted in writing to the County Engineer with all facts and supporting data. The County Engineer will review the dispute and issue his decision or request additional facts or documentation after which he will render his decision.

In the event the dispute is not then resolved, the matter shall, pursuant to law, be submitted to mediation before being submitted to a court of competent jurisdiction venued in Union County.

The County Engineer will notify the County Counsel when a matter is to be submitted to mediation. The County Counsel will communicate with the parties and inform them of the procedures to be followed in making such a submission.

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G-27 Revised: 2017.10.26

# 51. CONTRACTOR BUSINESS REGISTRATION CERTIFICATE New Mandatory Requirement -Effective 1/18/2010

The recently enacted **P.L. 2009, c.315**, requires that effective January 18, 2010; a contracting agency must receive proof of the bidder's business registration prior to the award of a contract. However, the proof must show that the bidder was in fact registered with the State of New Jersey Department of the Treasury, Division of Revenue and obtained the business registration prior to the receipt of bids.

If subcontractors are named on the bid, proof of the business registration for each subcontractor must be provided prior to the award of bid. Similarly to the bidder, the proof must show that each subcontractor was registered with the State of New Jersey Department of the Treasury, Division of Revenue and obtained the business registration prior to the receipt of bids.

Proof of business registration shall be

A copy of a Business Registration Certificate issued by the Department of the Treasury, Division of Revenue; or

A copy of the web version provided by the NJ Division of Revenue, or

Register online at <a href="http://www.state.nj.us/treasury/revenue/busregcert.htm">http://www.state.nj.us/treasury/revenue/busregcert.htm</a>. Click the "online" link and then select "Register for Tax and Employer Purposes or call the Division at 609-292-1730.

Note: A NJ Certificate of Authority is <u>not</u> acceptable.

**FAILURE** to submit proof of registration of the bidder or any subcontractor named on the bid prior to the award of contract shall be cause to reject the bid.

**FAILURE** of the bidder or any subcontractor named on the bid to be <u>registered</u> prior to the receipt of bids is cause for a **MANDATORY REJECTION** of bids. (A NON-WAIVABLE DEFECT). This covers construction Work as well as non-construction bids.

#### IN ADDITION:

*N.J.S.A.* 52:32-44 imposes the following requirements on Contractors and all subcontractors that knowingly provide goods or perform services for a Contractor fulfilling this contract:

- 1) the Contractor shall provide written notice to its subcontractors and suppliers to submit proof of business registration to the Contractor;
- subcontractors through all tiers of a project must provide written notice to their subcontractors and suppliers to submit proof of business registration and subcontractors shall collect such proofs of business registration and maintain them on file;

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- 3) prior to receipt of final payment from a contracting agency, the Contractor must submit to the contacting agency an accurate list of all subcontractors and suppliers or attest that none was used; and,
- 4) during the term of this contract, the Contractor and its affiliates shall collect and remit, and shall notify all subcontractors and their affiliates that they must collect and remit, to the Director, New Jersey Division of Taxation, the use tax due pursuant to the Sales and Use Tax Act, (*N.J.S.A.* 54:32B-1 *et seq.*) on all sales of tangible personal property delivered into this State.

A Contractor, subcontractor or supplier who fails to provide proof of business registration or provides false business registration information shall be liable to a penalty of \$25 for each day of violation, not to exceed \$50,000 for each business registration copy not properly provided or maintained under a contract with a contracting agency. Information on the law and its requirements are available by calling (609) 292-9292.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

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#### 52. BID PROTEST – LEGAL FEES AND COSTS

In the event a Bidder unsuccessfully challenges a Bid Submission by filing an action in a court of law concerning same, said Bidder shall be responsible for payment of reasonable legal costs and fees incurred by the County relating to said protest.

#### 53. AMERICAN GOODS AND PRODUCTS WHERE POSSIBLE

Bidder shall comply with the requirements of N.J.S.A. 40A:11-18 and use only manufactured and farm products of the United States, wherever available, for the Project.

#### 54. NEW JERSEY PAY-TO-PLAY REQUIREMENTS

This Contract is required by law to be publicly advertised for bids. As such, lists of political contributions pursuant to N.J.S.A. 19:44A-1 et seq. are NOT REQUIRED to be provided with the bids.

#### 55. STATEMENT OF EQUIPMENT TO BE USED IN CONSTRUCTION

Pursuant to N.J.S.A. 40A:11-20 entitled Certificate of Bidder Showing Ability to Perform Contract, the County requires a Certification from all bidders submitting a bid showing that the Bidder owns, leases, or controls all necessary equipment required by the Project Plans and Specifications. All bidders shall provide this information at the time of the bid opening using the attached form entitled, "CERTIFICATE OF BIDDER SHOWING ABILITY TO PERFORM CONTRACT".

If the Bidder is not the actual owner of the equipment, it shall state the source from which the equipment will be obtained and shall attach a certificate from the owner or person in control of the equipment demonstrating that the equipment owner has granted the Bidder control of the requisite equipment during such time as may be necessary for completion of the portion of the contract for which the equipment is necessary.

#### 56. NEW JERSEY SALES AND USE TAX REQUIREMENTS.

Contractors are required to comply with the following:

New Jersey Sales and Use Tax Requirements: All contractors with subcontractors, or any of their affiliates, who enter into contracts for the provision of goods or services with or for New Jersey local government entities, are required to collect and remit to the New Jersey Director of Taxation in the Department of the Treasury the use tax due on all of their sales of tangible personal property delivered into the State of New Jersey pursuant to the "Sales and Use Tax Act." (N.J.S.A. 54:32B-1 et seq.).

G-30 Revised: 2017.10.26 regardless of whether the tangible personal property is intended for a contract with the contracting agency. This tax shall be remitted for the term of the Contract.

For purposes herein "affiliate" shall mean any entity that: (a) directly, indirectly, or constructively controls another entity, (b) is directly, indirectly, or constructively controlled by another entity, or (c) is subject to the control of a common entity. For purposes of the immediately preceding sentence, an entity controls another entity if it owns, directly or indirectly, more than fifty percent (50%) of the ownership interest in that entity. NJSA 52:32-44(g)(3).

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Bidder's Name		

#### ALFRED J. FAELLA COUNTY MANAGER

### LAURA M. SCUTARI, QPA, MPA DIRECTOR / DIVISION OF PURCHASING

#### **BID DOCUMENT SUBMISSION CHECKLIST**

ALL SIGNATURES AND SEALS SHALL BE ORIGINALS UNLESS OTHERWISE SPECIFIED BID SHEETS SHOULD NOT BE SUBMITED DOUBLE SIDED PAGES, (SINGLE SIDE ONLY)

	IDDER SHOULD COMPLETE THIS FORM AND INITIAL EACH ENTRY.  OMPLETED:
	SUBMIT BID DOCUMENTS ON SINGLE SIDED PAPER ONLY, WITH THE EXCEPTION OF RETY AND BID BOND DOCUMENTS.
	DRDANCE WITH THE BID SPECIFICATIONS I HAVE REVIEWED, COMPLETED / EXECUTED CLUDED THE FOLLOWING FORMS:
Bi	d Form Page (Signed, Dated and Bid on all alternatives applicable to the Work).
Se _ _	ecurity in the form of: Bid bond in an amount equal to 10% of the total amount of this bid not to exceed \$20,000.00; or Certified check or cashier's check in the amount of 10% of this bid not to exceed \$20,000.00
If y Pe Th Su re th	consent of Surety form signed by a Surety Company if the total amount of your Bid is over \$36,000.00. your bid is accepted, the Surety Company that provided the Consent shall be required to furnish a performance, Labor and Materials Bond in the amount of 100% of the award of the contract. The County of Union has provided its Consent of Surety form for your use. The use of this form by your urety Company will expedite the bid review process and eliminate the possibility of having your bid ejected. If, however, you should need to use another form, please use language similar to that used on the Union County form and avoid making any additions or deletions to the Union County form language. Ilieu of the Consent of Surety you may submit a Certified Check in the full amount of the bid.
	TATEMENT OF BIDDER OWNERSHIP. Pursuant to N.J.S.A. 52:25-24.2, which includes <b>BOTH</b> of the llowing documents:
-	Bidder Signature Page Bidder Disclosure Statement (Fill out 2 pages completely)
	JBCONTRACTOR IDENTIFICATION. Pursuant to N.J.S.A. 40A:11-16, which includes <b>BOTH</b> of the llowing documents:
-	Subcontractor Identification Statement: List of Subcontractors (only for certain types of work) Subcontractor Identification Certification
	cknowledgement of Addendum form: (This form is to be used only when an addendum has been dded to the specifications).
<b>R</b> €	copy of the State of New Jersey Department of the Treasury, Division of Revenue, <b>Business</b> egistration Certificate ("BRC") should be included with the bids as it must be received by the County ior to the award of the contract. The BRC provided must show that the Bidder was registered at the ne of receipt of bids or the bid will be rejected.
Re Co the	copy of the State of New Jersey Department of the Treasury, Division of Revenue, <b>Business</b> egistration Certificate ("BRC") of all named or listed subcontractors (List of Subcontractors) in a construction bid should be included with the bid as the BRC(s) must be received by the County prior to e award of the contract. Each subcontractor's certificate provided must show that the subcontractor as registered at the time of the receipt of bids or the bid will be rejected.

Bidder's Name	

Affirm	native Action Requirement
Exper	ience Statement
Certifi	cate of Bidder showing ability to perform Contract
Non-C	Collusion Affidavit – Fill out completely and notarize
	cates from New Jersey Department of Labor and Workforce Development – Public Works Contractor tration Act. (Only for certain types of work)
Feder	al Attachments (If applicable)
NJDP	MC Certificate / Notice of Classification (If applicable)
Ameri	cans with Disabilities Act
Stater	ment of Bidder's Qualifications
Contra	actor Performance Record
Affida	vit Regarding List of Debarred, Suspended or Disqualified Bidders
Prior N	Negative Experience Questionnaire
Contra	actor's Certification of Compliance – New Jersey Prevailing Wage Act
Uncor	npleted Contracts Affidavit (For Bidder, if applicable) MUST ALSO PROVIDE DPMC FORM 701
Certific	cate of Insurance Statement
Collec	ction of Use Tax on Sales to Local Government Statement
Time o	of Completion
Disclo	sure of Investment Activities in Iran Certification Form
I HAVE TAI	KEN THE FOLLOWING ACTIONS:
Visited	d the site and attended the Pre-Bid Meeting (Where applicable)
obtain	wed the Contract Documents (including any permits the County or its professionals may have ed), Work, Site, Locality, and Local Conditions and Laws and Regulations that in any manner may Cost, Progress, Performance or Furnishing of Work.
Revie	wed Bond Requirements
Provid	led Proof of Compliance with New Jersey Prevailing Wage Act
Review	wed Form of Owner/Contractor Agreement and General Conditions to the Contract

NOTE: QUESTIONS PERTAINING TO THIS BID ARE TO BE DIRECTED TO DIVISION OF ENGINEERING AT 908-789-3675

Bidder's Name	

## **BIDDING DOCUMENTS**

The Bidding Documents consist of the following items:

- ADDENDA, if issued
- CLARIFICATIONS, if issued
- INSTRUCTION TO BIDDERS
- BID FORM
- SPECIFICATIONS: As outlined in the Table of Contents and included in the Project Manual.
- DRAWINGS:
   As per List of Drawings, indicated on the Project Title Sheet.

## **BID FORM**

I/We have carefully examined the plans, specifications, and advertisement for bid for the

#### GALLOPING HILL GOLF COURSE IMPROVEMENTS BOROUGH OF KENILWORTH, COUNTY OF UNION, NEW JERSEY BA#69-2017; UNION COUNTY ENGINEERING PROJECT #2016-031

that is on file in the Union County Division of Engineering. I/We have inspected the site of the work and will contract to do all the work and furnish all materials mentioned in said plans and specifications. Work will be accomplished in the manner prescribed therein.

#### **BASE BID ITEMS:**

ITEM NO	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT PRICE	AMOUNT
1	Mobilization	L.S.	1		
2	Inlet Filter Protection	Unit	21		
3	Install Silt Fence	L.F.	5,100		
4	Remove Existing Turf	S.F.	185,000		
5	Load, Haul and Place Stockpiled Fill	C.Y.	12,000		
6	Load, Haul and Spread Imported Topsoil	C.Y.	2,000		
7	Strip, Stockpile and Respread Topsoil	C.Y.	1,500		
8	Fairway and Rough Shaping	Acre	4.00		
9	Bunker Shaping	S.F.	1,500		
10	Install 4" Perforated Pipe in Gravel	L.F.	150		
11	Install 4" Unperforated Pipe	L.F.	200		
12	Install 8" Unperforated Pipe	L.F.	500		
13	Install Inlet	Unit	4		
14	Elevate Existing Inlets	Unit	17		
15	Edge and Hand Shape Bunker Floor	S.F.	1,500		

Bidder's Name
---------------

16	Install 2" BBB Gravel	S.F.	1,500	
17	Provide and Install BBB Liner	S.F.	1,500	
18	Install Bunker Sand	S.F.	1,500	
19	Remove and Reinstall Irrigation Heads	Unit	30	
20	Pre-Plant Preparation and Fertilizer	S.F.	185,000	
21	Install Short Cut Bluegrass Sod	S.F.	100,000	
22	Install Tall Fescue Sod	S.F.	85,000	
23	Haul Road Repair	L.S.	1	

Written	Figures
BID CONTINGENCY: (To be used if and when di	rected by the County)
THIRTY THOUSAND DOLLARS Written	<b>\$30,000.00</b> Figures
TOTAL BASE BID ITEMS PLUS BID CONTINGEN	CY AMOUNT:
Written	Figures

NOTE: Bid Contingency may include one-half of one percent of contract amount set aside for local training if and when directed by the County.

Revised: 10/19/17

Bidder's Nan	<b>}</b>

# CONSENT OF SURETY TO ACCOMPANY PROPOSAL (BID)

	_(hereinafter called Surety), organized and existing under the I	aws of the State of
	duly authorized and qualified to transact business in the State	of New Jersey, in
consideration of the sum	of One Dollar (\$1.00), lawful money of the United States of An	nerica, to it in hand
paid, receipt whereof is	hereby acknowledged, and in consideration, hereby certifies	and agrees that if
the contract for which the	e attached proposal is made be awarded to	(hereinafter
called Contractor) for the	e performance of certain work and labor or the supplying of co	ertain materials, or
both, as more particularly	y set forth in said proposal and described for purposes of th	is instrument as a
proposal for	to the COUNTY OF UNION and if Contractor	shall enter into the
contract, Surety will beco	ome bound as surety for its faithful performance, labor and ma	terial payment and
will provide the Contracto	or with a performance, labor and material payment bond in the	full amount of the
contract price.		
NOTE:	NAME OF INSURANCE COMPANY	_
Expiration date		
Needed if Annual Surety	ADDRESS:	
•		
	ORIGINAL SIGNATURE	
	ATTORNEY-IN-FACT FOR INSURANCE CO.	

NOTE: PROOF OF AUTHORITY OF OFFICERS OF SURETY COMPANY TO EXECUTE THIS DOCUMENT MUST BE SUBMITTED.

<b>Bidder's Name</b>	
Diadci 3 Nailic	

#### **BIDDER SIGNATURE PAGE**

THE BIDDER MUST READ THE FOLLOWING INSTRUCTIONS TO COMPLETE THIS PAGE:

- 1. If doing business under a <u>trade name, partnership or a sole proprietorship</u>, you must submit the bid under exact title of the trade name, partnership, or proprietorship, and the bid must be signed by either the <u>owner</u>, or a <u>partner</u> and <u>witnessed</u> by a <u>notary public</u>.
- 2. If a <u>Corporation</u>, the bid must be signed by the <u>President</u> or <u>Vice President</u> and <u>witnessed</u> by a <u>Corporate Secretary</u> (corporate title must be exact) and <u>affix corporate seal</u>. If a Corporate Secretary does not exist, President or Vice President's signature shall be witnessed by a Notary Public.
- 3. Other persons <u>authorized</u> by <u>corporate resolution</u> to execute agreements in its behalf may also sign the bid documents (pages). <u>Copy of a resolution must accompany the bid</u>.
- 4. The person who signs this bid form **must also** sign the **Non-Collusion Affidavit**.
- 5. You <u>cannot</u> witness your own signature.

		NAME OF BIDDER
		ADDRESS OF BIDDER
ORIGINAL SIGNATURE CORPORATE SECRETARY		
		TEL:
PRINT NAME AND TITLE CORPORATE SECRETARY		FAX:
	BY:	
	2	ORIGINAL SIGNATURE
Corporate Seal		
		PRINT OR TYPE NAME AND TITLE

WARNING: IF YOU FAIL TO FULLY, ACCURATELY, AND COMPLETELY SUPPLY THE INFORMATION REQUESTED ON THIS PAGE, YOUR BID MAY BE REJECTED.

## STATEMENT OF OWNERSHIP DISCLOSURE

N.J.S.A. 52:25-24.2 (P.L. 1977, c.33, as amended by P.L. 2016, c.43)

This statement shall be completed, certified to, and included with all bid and proposal submissions. Failure to submit the required information is cause for automatic rejection of the bid or proposal.

<u>Name</u>	of Organization:
Organi	zation Address:
Part ]	Check the box that represents the type of business organization:
Sol	le Proprietorship (skip Parts II and III, execute certification in Part IV)
No	on-Profit Corporation (skip Parts II and III, execute certification in Part IV)
Fo	r-Profit Corporation (any type) Limited Liability Company (LLC)
Pa	rtnership Limited Partnership Limited Liability Partnership (LLP)
Otl	her (be specific):
Part 1	<u>u</u>
	The list below contains the names and addresses of all stockholders in the corporation who own 10 percent or more of its stock, of any class, or of all individual partners in the partnership who own a 10 percent or greater interest therein, or of all members in the limited liability company who own a 10 percent or greater interest therein, as the case may be. (COMPLETE THE LIST BELOW IN THIS SECTION)
	OR
	No one stockholder in the corporation owns 10 percent or more of its stock, of any class, or no individual partner in the partnership owns a 10 percent or greater interest therein, or no member in the limited liability company owns a 10 percent or greater interest therein, as the case may be. (SKIP TO PART IV)

(Please attach additional sheets if more space is needed):

Bidder's Name
---------------

Home Address (for Individuals) or Business Address

## <u>Part III</u> DISCLOSURE OF 10% OR GREATER OWNERSHIP IN THE STOCKHOLDERS, PARTNERS OR LLC MEMBERS LISTED IN PART II

If a bidder has a direct or indirect parent entity which is publicly traded, and any person holds a 10 percent or greater beneficial interest in the publicly traded parent entity as of the last annual federal Security and Exchange Commission (SEC) or foreign equivalent filing, ownership disclosure can be met by providing links to the website(s) containing the last annual filing(s) with the federal Securities and Exchange Commission (or foreign equivalent) that contain the name and address of each person holding a 10% or greater beneficial interest in the publicly traded parent entity, along with the relevant page numbers of the filing(s) that contain the information on each such person. Attach additional sheets if more space is needed.

Website (URL) containing the last annual SEC (or foreign equivalent) filing	Page #'s
	_

**Please list** the names and addresses of each stockholder, partner or member owning a 10 percent or greater interest in any corresponding corporation, partnership and/or limited liability company (LLC) listed in Part II **other than for any publicly traded parent entities referenced above**. The disclosure shall be continued until names and addresses of every noncorporate stockholder, and individual partner, and member exceeding the 10 percent ownership criteria established pursuant to N.J.S.A. 52:25-24.2 has been listed. **Attach additional sheets if more space is needed.** 

Bidder's Name	
---------------	--

Stockholder/Partner/Member and Corresponding Entity Listed in Part II	Home Address (for Individuals) or Business Address

## Part IV Certification

I, being duly sworn upon my oath, hereby represent that the foregoing information and any attachments thereto to the best of my knowledge are true and complete. I acknowledge: that I am authorized to execute this certification on behalf of the bidder/proposer; that the *County of Union* is relying on the information contained herein and that I am under a continuing obligation from the date of this certification through the completion of any contracts with *County of Union* to notify the *County of Union* in writing of any changes to the information contained herein; that I am aware that it is a criminal offense to make a false statement or misrepresentation in this certification, and if I do so, I am subject to criminal prosecution under the law and that it will constitute a material breach of my agreement(s) with the, permitting the *County of Union* to declare any contract(s) resulting from this certification void and unenforceable.

Full Name (Print):	Title:	
Signature:	Date:	

Bidder's Name
---------------

# SUBCONTRACTOR IDENTIFICATION STATEMENT LIST OF SUBCONTRACTORS

This form is ONLY required for plumbing and gas fitting, steam and hot water heating and ventilating apparatus, steam power plants, electrical work, structural steel, ornamental iron work, and any other trades required to be identified by the specifications (including, but not limited, to satisfying any DPMC Classification requirements).

## CHECK THIS BOX IF NONE OF THE ABOVE LISTED TRADES OR THOSE REQUIRED TO BE IDENTIFIED IN THE SPECIFICATIONS ARE TO BE USED TO PERFORM THE WORK In compliance with N.J.S.A. 40A:11-16 and the bid specifications, the undersigned hereby lists the name or names of the following subcontractors: Company Name: Address:\_\_\_\_ Subcontract Amount: \$\_\_\_\_\_ Telephone: Specific Scope of Work Subcontracted: License No. Company Name:\_\_\_\_\_ Telephone: \_\_\_\_\_ Subcontract Amount: \$\_\_\_\_\_ Specific Scope of Work Subcontracted: License No. Company Name: Address: Telephone: \_\_\_\_\_ Subcontract Amount: \$\_\_\_\_\_ Specific Scope of Work Subcontracted: License No. IF MORE THAN THREE SUBCONTRACTORS, PLEASE COPY THIS SHEET AS NECESSARY AND ATTACH TO THE BID PACKAGE. (Continued on following page)

#### **SUBCONTRACTOR IDENTIFICATION CERTIFICATION**

Note the law does not permit the listing of alternate subcontractors. However, multiple subcontractors for the same trade are permitted to be named provided the bidder meets the following requirements:

- Bidder identifies each subcontractor named for that category;
- Bidder states the scope of work, goods and services (the portion of the work) to be performed by each subcontractor; and
- Bidder provides the price quote provided by each subcontractor.

The bidder is advised that any change of subcontractor(s) from ones listed herein is subject to the County's approval. Change of subcontractor(s) will be approved only if made for good cause and not as a result of an arbitrary purpose.

The undersigned Bidder certifies and declares that the subcontractors listed above shall be used as subcontractors to complete certain portions of the work in this project as set forth in N.J.S.A. 40A: 11-16.

Witness		NAME OF BIDDER
Date		
		ADDRESS
	Ву:	ODICINAL CICNATUDE ONLY
		ORIGINAL SIGNATURE ONLY
		PRINT NAME AND TITLE

Bidder's Nan	<b>}</b>

## **ACKNOWLEDGMENT OF ADDENDUM**

## **COUNTY OF UNION**

(Name of Construction /Public	Works Project)	(Project or Bid Number)		
Pursuant to N.J.S.A. 40A:11-23.1a., the undersigned bidder, hereby acknowledges receipt of the following notices, revisions, or addenda to the bid advertisement, specifications or bid documents. By indicating date of receipt, bidder acknowledges the submitted bid takes into account the provisions of the notice, revision or addendum. Note that the County of Union's record of notice to bidders shall take precedence and that failure to include provisions of changes in a bid proposal may be subject for rejection of the bid.				
Local Unit Reference Number or Title of Addendum/Revision	How Received (mail up, etc.)	l, fax, pick-	Date Received	
or Title of Addendant/INEVISION	up, etc.)			
ACKNOWLEDGMENT BY BIDDE	R:			
NAME OF BIDDER:			· · · · · · · · · · · · · · · · · · ·	
ORIGINAL SIGNATURE:				
PRINTED NAME AND TITLE:				

B-13 Revised: 10/19/17

DATE: \_\_\_\_\_

R	idda	ar'e	Name	
0	ıaae	31 S	name	

## **CONTRACTOR BUSINESS REGISTRATION CERTIFICATE**

New Mandatory Requirement - Effective 1/18/2010

The recently enacted **P.L. 2009, c.315**, requires that effective January 18, 2010; a contracting agency must receive proof of the bidder's business registration prior to the award of a contract. However, the proof must show that the bidder was in fact registered with the State of New Jersey Department of the Treasury, Division of Revenue and obtained the business registration prior to the receipt of bids.

If subcontractors are named on the bid, proof of the business registration for each subcontractor must be provided prior to the award of bid. Similarly to the bidder, the proof must show that each subcontractor was registered with the State of New Jersey Department of the Treasury, Division of Revenue and obtained the business registration prior to the receipt of bids.

Proof of business registration shall be

A copy of a Business Registration Certificate issued by the Department of the Treasury, Division of Revenue; or

A copy of the web version provided by the NJ Division of Revenue, or

Register online at www.nj.gov/treasury/revenue/taxreg.htm. Click the "online" link and then select "Register for Tax and Employer Purposes or call the Division at 609-292-1730.

Note: A NJ Certificate of Authority is not acceptable.

**FAILURE** to submit proof of registration of the bidder or any subcontractor named on the bid prior to the award of a contract shall be cause to reject the bids.

**FAILURE** of the bidder or any subcontractor named on the bid to be <u>registered</u> prior to the receipt of bids is cause for a **MANDATORY REJECTION** of bids. (A NON-WAIVABLE DEFECT). This covers construction work as well as non-construction bids.

#### IN ADDITION:

The contractor shall provide written notice to all **subcontractors and suppliers** not specifically named on the bid of the responsibility to register and submit proof of business registration to the contractor. The requirement of proof of business registration extends down through all levels (tiers) of the project.

Before final payment on the contract is made by the contracting agency, the contractor shall submit an accurate list and the proof of business registration of each subcontractor or supplier used in the fulfillment of the contract, or shall attest that no subcontractors were used.

For the term of the contract, the contractor and each of its affiliates and a subcontractor and each of its affiliates [N.J.S.A. 52:32-44(g)(3)] shall collect and remit to the Director, New Jersey Division of Taxation, the use tax due pursuant to the Sales and Use Tax Act on all sales of tangible personal property delivered into this State, regardless of whether the tangible personal property is intended for a contract with a contracting agency.

A business organization that fails to provide a copy of a business registration as required pursuant to section 1 of P.L.2001,c.134 (C.52:32-44 et al.) or subsection e. or f. of section 92 of P.L.1977,c.110 (C.5:12-92), or that provides false business registration information under the requirements of either of those sections, shall be liable for a penalty of \$25 for each day of violation, not to exceed \$50,000 for each business registration copy not properly provided under a contract with a contracting agency.

Bidder's Name	
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#### **BUSINESS REGISTRATION**

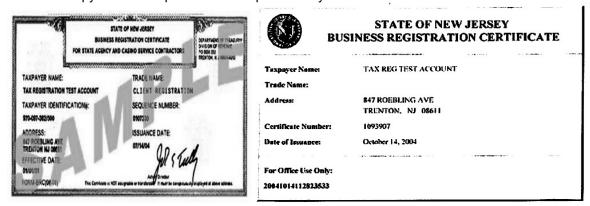
Mandatory Requirement

**P.L. 2009, c.315**, requires that effective January 18, 2010; a contracting agency must receive proof of the bidder's business registration prior to the award of a contract. However, the proof must show that the bidder was in fact registered with the State of New Jersey Department of the Treasury, Division of Revenue and obtained the business registration prior to the receipt of bids.

If subcontractors are named on the bid, proof of the business registration for each must be provided prior to the award of a contract. Similarly to the bidder, the proof must show that each subcontractor was registered with the State of New Jersey Department of the Treasury, Division of Revenue and obtained the business registration prior to the receipt of bids.

Proof of business registration shall be:

- A copy of a Business Registration Certificate issued by the Department of Treasury, Division of Revenue; or
- A copy of the web printed version provided by the NJ Division of Revenue



ATTACH BRC HERE	

Revised: 10/19/17

#### **AFFIRMATIVE ACTION REQUIREMENT**

#### REQUIRED AFFIRMATIVE ACTION EVIDENCE

General Requirements of P.L. 1975, c. 127: You are hereby put on notice that:

CONSTRUCTION CONTRACTS: The successful contractor must submit within three (3) days of the notice of intent to award or the signing of the contract the initial project manning report (A.A.201). This report should be submitted at the time the signed contract is returned to the County of Union. Attention: *Affirmative Action Officer*.

If the successful contract <u>does not submit the initial project manning report</u> (A.A.201) within the three (3) days from the time the signed contract is returned to the County of Union, the County of Union <u>WILL</u> declare the contractor <u>non-responsive and award the</u> contract to the next lowest responsible bidder.

NAME OF BIDDER
ORIGINAL SIGNATURE
PRINT OR TYPE NAME AND TITLE
DATE THIS FORM IS COMPLETED

Bidder's Name	
---------------	--

## **EXPERIENCE STATEMENT**

I hereby certify that my company has performed the following private or public work, which is relevant to this bid. I further certify that my company has never defaulted under any contract. Should you not sign this form due to prior defaults, please provide details on an attached sheet.

Witness	NAME OF BIDDER	
Date		
	ADDRESS	
	Ву:	
	ORIGINAL SIGNATURE ON	LY
	PRINT NAME AND TITLE	

YOU MAY ATTACH ADDITIONAL SHEETS, BUT YOU MUST SIGN AND WITNESS THIS SHEET.

Bidder's Name
---------------

## CERTIFICATE OF BIDDER SHOWING ABILITY TO PERFORM CONTRACT

STATE OF NEW JERSEY /		)
COUNTY OF	Specify, if Other )	) SS:
I, State of to law on my oath depose and say t	that:	, of the (City, Town, Borough, etc.) of, of full age, being duly sworn according
I am	of the firm of	,
proposal with full authority to do so;	and that said Contractor	t ("Contractor"), and that I executed said r, pursuant to N.J.S.A. 40A:11-20, certifies required by the Plans, Specifications and
Certificate information identifying the information shall be accompanied by	e source from which the by a certificate from the or e control of the equipment	equipment, then the Bidder shall attach to this equipment will be obtained, and such wner or person in control of the equipment nt required during such time as may be
(Also type or print name of affiant u	nder signature)	
Bv:		

## **NON-COLLUSION AFFIDAVIT**

(N.J.S.A. 52:34-15)

STATE OF	
COUNTY OF	) <b>SS</b> :
above named project, and that I executed has not, directly or indirectly, entered into taken any action in restraint of free, computate all statements contained in said prop knowledge that the COUNTY OF UNION	, in the County of, of full age, being duly sworn according to law, on my oath of the firm of, the enamed project, and that I executed the said proposal for the did the said proposal with full authority to do so; that said bidder of any agreement, participation in any collusion, or otherwise poetitive bidding in connection with the above named project; and posal and in this Affidavit are true and correct, and made with full I, NEW JERSEY relies upon the truth of the statements contained ontained in the affidavit in awarding the contract for the said
contract upon an agreement or understar	agency has been employed or retained to solicit or secure such nding for a commission, percentage, brokerage or contingent fee, established commercial or selling agencies maintained by 5).
	NAME OF BIDDER
	ORIGINAL SIGNATURE ONLY
	NOTE: The person who signed the bidder signature page for the bidder should sign this form also.
Subscribed and sworn before me thisday of, 20	
Notary Public of the State of My commission expires:	

WARNING: IF YOU FAIL TO FULLY, ACCURATELY, AND COMPLETELY FILL OUT THIS AFFIDAVIT OF NON-COLLUSION, YOUR BID MAY BE REJECTED.

Bidder's Name	į.		

#### **Contractor Registration Advisement**

For Public Works Projects

A new law, known as "The Public Works Contractor Registration Act" (P.L. 1999, c.238), became effective April 11, 2000. Under the Act, no contractor/subcontractor will be permitted to bid on or engage in any contract for public work, as defined in Section 2 of P.L. 1963, c.150 (C:34:11-56.26), unless that contractor/subcontractor is registered with the New Jersey Department of Labor and Workforce Development. The Act provides that upon registration with the Department, a public works contractor/subcontractor will be issued a certificate by the Department indicating compliance with the Act's requirements. The registration fee has been set at \$300.00 per year. Upon the effective date of the Act, public bodies will be expected to request production of such a certificate from those bidding on or engaging in public works projects.

It is important to note that the term "contractor," is defined in the, Act as, "a person, partnership, association, joint stock company, trust, corporation or other legal business entity or successor thereof who enters into a contract which is subject to the provision of the "New Jersey Prevailing Wage Act," P.L. 1963, c.150 (C.34:11-56.25, et seq.) for the construction, reconstruction, demolition, alteration, repair or maintenance of a public building regularly open to and used by the general public or a public institution, and includes any subcontractor or lower tier subcontractor as defined herein: except that, for the purposes of the act, no pumping station, treatment plant or other facility associated with utility and environmental construction, reconstruction, demolition, alteration, repair or maintenance shall be regarded as a public building regularly open to and used by the general public or a public institution."

Registration forms, copies of the Act, and other relevant information can be obtained by contacting:

Contractor Registration Unit
New Jersey Department of Labor and Workforce Development
Division of Wage & Hour Compliance
PO Box 389
Trenton, New Jersey 08625-0389
Telephone: 609-292-9464
Fax: 609-633-8591

E-mail: contreg@dol.state.nj.us

Bidder's Name
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#### **AMERICANS WITH DISABILITIES ACT**

#### EQUAL OPPORTUNITY FOR INDIVIDUALS WITH DISABILITIES

The contractor and the County of Union (hereafter "Owner") do hereby agree that the provisions of Title II of the Americans With Disabilities Act of 1990 (the "Act") (42 US.C. S12101 et seq.), which prohibits discrimination on the basis of disability by public entities in all services, programs and activities provided or made available by public entities, and the rules and regulations promulgated pursuant thereunto, are made a part of this contract. In providing any aid, benefit, or service on behalf of the Owner pursuant to this contract, the contractor agrees that the performance shall be in strict compliance with the Act. In the event the contractor, its agents, servants, employees, or subcontractors violate or are alleged to have violated the Act during the performance of this contract, the contractor shall defend the Owner in any action or administrative proceeding commenced pursuant to this Act. The contractor shall indemnify, protect, and save harmless the Owner, its agents, servants, and employees from and against any and all suits, claims, losses, demands, or damages of whatever kind or nature arising out of or claimed to arise out of the alleged violation. The contractor shall, at its own expense, appear, defend, and pay any and all charges for legal services and any and all costs and other expenses arising from such action or administrative proceeding or incurred in connection therewith. In any and all complaints brought pursuant to the Owner's grievance procedure, the contractor agrees to abide by any decision of the Owner which is rendered pursuant to said grievance procedure. If any action or administrative proceeding results in an award of damages against the Owner, or if the Owner incurs any expense to cure a violation of the ADA which has been brought pursuant to its grievance procedure, the contractor shall satisfy and discharge the same at its own expense.

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

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

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

Name	(Please print or type)
Signature	Date

Bidder's Name	
---------------	--

## STATEMENT OF BIDDER'S QUALIFICATIONS

All questions must be answered and the data given must be clear and comprehensive. This statement must be notarized. Questions may be answered on separate attached sheets. The Bidder may submit any additional information it desires.

(Name of Bidder)
(Permanent Main Office Address)
(When Organized)
(If a Corporation, where incorporated)
Number of years your organization has been engaged in construction or contracting business under present firm or trade name?
How many years of experience in construction work has your organization had (a) as a general contractor? And/or (b) As a subcontractor?
Contracts on hand: (Attach a list or table showing gross amounts of each Contract and the appropriate dates of completion)
General character of work performed by you
Have you ever failed to complete any work awarded to you?

## STATEMENT OF BIDDER'S QUALIFICATIONS - (continued)

11.	Has any officer or partner of your organization ever failed to complete a construction contract handled in its own name? If so, state name of individual, name of owner, location and type of project, and reason for the failure to complete.
12.	List your major equipment available for this Contract.
13.	Experience in the construction work similar in importance to this Project.
14.	Have you had any material adverse changes from the trades as listed in NJ Notice of Classification within last five (5) years? If so, list prior classification.
15.	Background and experience of the principal members of your organization, including the officers.

Individual's Name	Present Position or Office	Yrs. of Construction Experience	Magnitude &  Type of Work	In What Capacity	

16.	Bank Reference. (Name, Addı	ress, Phone, Representative)			
17.	Will you, upon request, fill out a detailed financial statement?				
18.		norizes and requests any person, firm or corporation to furnish any proper agency in verification of the responses comprising this eations.			
19.	Bidder's telephone number, fa	ax number and e-mail address (if applicable).			
	Phone				
	Fax				
	E-mail				
	Mobile				
Dated	at	this day of _, 20			
BIDDE	ER (Signature)				
BIDDE	ER (Print Name)	<u> </u>			
Subsc this	ribed and sworn to before me	, 20			
Specif	Notary Public of New Jersey/ y Other State mmission Expires	, 20			

Bidder's Name\_\_\_\_\_

NOTE: FAILURE TO COMPLETE AND SUBMIT THIS DOCUMENT WITH YOUR PROPOSAL MAY RESULT IN A REJECTION OF YOUR BID.

## **CONTRACTOR PERFORMANCE RECORD**

List all contracts completed by you below or provide separate form.

Name of Owner	Name & Location of Project: Type Of Work	Prime or Sub- Cont.	Engineer or Architect in Charge for Owner	Contract Price (Omit Cost)	Date Completed	Was Time* Extension Necessary	Were Any Penalties Imposed	Were Liens* Claims or Stop Notice Filed

<sup>\*</sup> If answer is YES, provide explanation of details in connection with non-completion of contracts, time extensions, penalties imposed, labor troubles, liens, claims and notices filed against contracts listed in preceding item "Performance Record" on an attached sheet.

NOTE: FAILURE TO COMPLETE AND SUBMIT THIS DOCUMENT WITH YOUR PROPOSAL MAY RESULT IN A REJECTION OF YOUR BID.

Bidder's Name		

## CONTRACTOR PERFORMANCE RECORD CERTIFICATION

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

			(Name of Organization)	
			(Signature)	
			(Title)	
Subscribed and	d sworn to before me			
this	day of	, 20		
			_	
(Seal) Notary F Specify Other S	Public of New Jersey/ State			
My Commissio	n Expires	, 20		

## AFFIDAVIT REGARDING LIST OF DEBARRED, SUSPENDED OR DISQUALIFIED BIDDERS

STATE OF NEW JERSEY /	)
COUNTY OFSpecify,	if Other ) SS:
I, State of to law on my oath depose and say that:	, of the (City, Town, Borough, etc.) of , of full age, being duly sworn according
authority to do so. Said Bidder is not at the tim	of the firm of, named Project. I have executed the said Proposal with full e of the making this bid included on the New Jersey State f Debarred, Suspended or Disqualified Bidders as a result
	Name of Contractor  By:(Signature of Authorized Representative)
Subscribed and sworn to before me this day of	
(Seal) Notary Public of New Jersey/ Specify Other State  My Commission Expires	20

NOTE: FAILURE TO COMPLETE AND SUBMIT THIS DOCUMENT WITH YOUR PROPOSAL MAY RESULT IN A REJECTION OF YOUR BID.

# PRIOR NEGATIVE EXPERIENCE QUESTIONNAIRE (N.J.S.A. 40A:11-4)

					olution mechanism, to have: ete a contract in a timely mar th a public entity?
_	yes		no	If yes, please provi	de full, detailed explanation.
_					
to		es of another co			, thereby requiring a public er or perform the services or to
	yes		no	If yes, please provi	de full, detailed explanation.
					, thereby requiring a public er the costs of completion?
	yes		no	If yes, please provi	de full, detailed explanation.
_					
Wi	thin the past ten	(10) years, have	you bee	en debarred or suspe	ended from contracting with a
the co	e agencies or dep	partment of the elere the action w	executive	branch of the State	ended from contracting with a of New Jersey at the time of m a contact for goods or servi

## PRIOR NEGATIVE EXPERIENCE CERTIFICATION

day of	at the above statemen , 20	ts are true and accu	rate as of this	
Name of Contract	or			
By (Signature of A	uthorized Representat	ive)		
Subscribed and s	worn to before me			
thisc	lay of	, 20		
(Seal) Notary Pub Specify Other Sta	olic of New Jersey/ te			
My Commission E	Tyniree	20		

NOTE: FAILURE TO COMPLETE AND SUBMIT THIS DOCUMENT WITH YOUR PROPOSAL MAY RESULT IN A REJECTION OF YOUR BID.

#### TO BE COMPLETED ONLY WHEN FINAL PAYMENT IS REQUESTED

#### CONTRACTOR'S CERTIFICATION OF COMPLIANCE - NEW JERSEY PREVAILING WAGE ACT

TO:	County of Union Division of Engineering	CONTRACT:
	2325 South Avenue	
	Scotch Plains, New Jersey 07076	
PROJ	IECT:	
	cordance with the requirements of the N indersigned contractor on the public work	lew Jersey Prevailing Wage Act, N.J.S.A. 34:11-56 et al * being performed for:
	CO	UNTY OF UNION
		th the contract requirements regarding the payment of the "The New Jersey Prevailing Wage Act" N.J.S.A. 34:11-56
	CONTRACTOR: ADDRESS:	
	BY:	ORIGINAL SIGNATURE ONLY
	E OF NEW JERSEY	
	by me duly sworn according to law, on hays that	
of the fa	ays thatisthe above named of cts set forth in the above statement are to	contractor, and that rue.
	cribed and sworn before me day of, 200	
Notary My Co	y Public:  pmmission Expires:	_
iviy Oc		<del></del>

\* N.J.S.A. 34:11-56.33 requires the contractor and subcontractor to file written statements with the public body in form satisfactory to the Commissioner certifying to the amounts then due and owing from such contractor and subcontractor filing such statement to any and all workmen for wages due on account of the public work, setting forth therein the names of the persons whose wages are unpaid and the amount due to each respectively. Union County will withhold the amount so deducted for the benefit of the workmen whose wages are unpaid as shown by the verified statement filed, and will pay directly to any workman the amount shown by such statement to be due to him for such wages. Such payment shall thereby discharge the obligation of the contractor to the person receiving such payment to the extent of the amount thereof.

Bidder's Name	

# UNCOMPLETED CONTRACTS AFFIDAVIT (To be Submitted with DPMC Form 701)

PURSUANT TO N.J.A.C. 17:19-2.13, BIDDER DECLARES THE FOLLOWING WITH RESPECT TO ITS UNCOMPLETED CONTRACTS, ON ALL WORK, FROM WHATEVER SOUCE (PUBLIC AND PRIVATE), BOTH IN NEW JERSEY AND FROM OTHER GOVERNMENTAL JURISDICTIONS				
ENTITY	PROJECT TITLE	ORIGINAL CONTRACT AMOUNT	UNCOMPLETED AMOUNT AS OF BID OPENING DATE	NAME AND TELEPHONE NUMBER OF PARTY TO BE CONTACTED FRM ENTITY FOR VERIFICATION
	·	_		
				·

TOTAL AMOUNT OF UNCOMPLETED CONTRA	ACTS \$
Sworn and Subscribed to Before me	BIDDER:
Thisday of, 20	(Signature)
Notary Public	(Print Name)

NOTE: FAILURE TO COMPLETE AND SUBMIT THIS DOCUMENT WITH YOUR PROPOSAL MAY RESULT IN A REJECTION OF YOUR BID.

Bidder's Name	
---------------	--

## **CERTIFICATE OF INSURANCE STATEMENT**

The Bidder fully understands the County of Union insurance requirements as stated in the Instructions to Bidders as well as the Owner/Contractor Agreement and agrees to provide all insurance required by these documents <u>prior</u> to the issuance of the Notice to Proceed.

BIDDER (Signature)	
BIBBEIT (Olgitataic)	
BIDDER (Print Name)	

NOTE: FAILURE TO COMPLETE AND SUBMIT THIS DOCUMENT WITH YOUR PROPOSAL MAY RESULT IN A REJECTION OF YOUR BID.

Bidder's Name	

## **COLLECTION OF USE TAX ON SALES TO LOCAL GOVERNMENTS STATEMENT**

The Bidder fully understands the requirements of the use tax on sales to local governments as stated in the General Conditions to the Contract for Construction and the Instructions to Bidders, and agrees at all times to comply with the "Contractor Use Tax Collection Legislation", as defined therein, and the terms relating thereto contained in the Contract Documents.

BIDDER (Signature)	
(g	
BIDDER (Print Name)	

NOTE: FAILURE TO COMPLETE AND SUBMIT THIS DOCUMENT WITH YOUR PROPOSAL MAY RESULT IN A REJECTION OF YOUR BID.

Bidder's Name
---------------

## **TIME OF COMPLETION**

The undersigned proposed that if awarded	the Contract, the scope	of work will be started within ten (10)
calendar days and will be substantially com	npleted within <b>90 calend</b>	lar days from the date of
he notice to proceed, but in no event shall	the work be completed	later than <b>March 15, 2018</b> .
, of		
,of NAME (Print or type)	COMPANY	
Agree to complete work in the time frame s	pecified	SIGNATURE
SITE VISIT – GENERAL CONTRACTOR		
,of		
NAME (Print or type)	COMPANY	
Visited the site of the work on		
		SIGNATURE

Bidder's Name	
---------------	--

## **COUNTY OF UNION NEW JERSEY** Division of Purchasing DISCLOSURE OF INVESTMENT ACTIVITIES IN IRAN FORM

Solicitation Num	ber: Vendor/Bidder:
	PART 1
<u>F</u> .	CERTIFICATION  VENDOR/BIDDER MUST COMPLETE PART 1 BY CHECKING ONE OF THE BOXES  AILURE TO CHECK ONE OF THE BOXES WILL RENDER THE PROPOSAL NON-RESPONSIVE
must complete the affiliates, is identificativities in Iran. Vendors/Bidders r Vendor's/Bidder's of the law, s/he sh	Law 2012, c. 25, any person or entity that submits a bid or proposal or otherwise proposes to enter into or renew a contract certification below to attest, under penalty of perjury, that neither the person nor entity, nor any of its parents, subsidiaries, or fied on the State of New Jersey, Department of the Treasury's Chapter 25 list as a person or entity engaged in investment The Chapter 25 list is found on the Department's website at <a href="http://www.state.nj.us/treasury/pdf/Chapter25List.pdf">http://www.state.nj.us/treasury/pdf/Chapter25List.pdf</a> .  The Chapter 25 list is found on the Department's website at <a href="http://www.state.nj.us/treasury/pdf/Chapter25List.pdf">http://www.state.nj.us/treasury/pdf/Chapter25List.pdf</a> .  The Chapter 25 list is found on the Department's website at <a href="http://www.state.nj.us/treasury/pdf/Chapter25List.pdf">http://www.state.nj.us/treasury/pdf/Chapter25List.pdf</a> .  The Chapter 25 list is found on the Department's website at <a href="http://www.state.nj.us/treasury/pdf/Chapter25List.pdf">http://www.state.nj.us/treasury/pdf/Chapter25List.pdf</a> .  The Chapter 25 list is found on the Department's website at <a href="http://www.state.nj.us/treasury/pdf/Chapter25List.pdf">http://www.state.nj.us/treasury/pdf/Chapter25List.pdf</a> .  The Chapter 25 list is found on the Department's website at <a href="http://www.state.nj.us/treasury/pdf/Chapter25List.pdf">http://www.state.nj.us/treasury/pdf/Chapter25List.pdf</a> .  The Chapter 25 list is found on the Department's website at <a href="http://www.state.nj.us/treasury/pdf/Chapter25List.pdf">http://www.state.nj.us/treasury/pdf/Chapter25List.pdf</a> .  The Chapter 25 list is found on the Department's website at <a href="http://www.state.nj.us/treasury/pdf/Chapter25List.pdf">http://www.state.nj.us/treasury/pdf/Chapter25List.pdf</a> .  The Chapter 25 list is found on the Department's website at <a href="http://www.state.nj.us/treasury/pdf/Chapter25List.pdf">http://www.state.nj.us/treasury/pdf/Chapter25List.pdf</a> .  The Chapt
	CHECK THE APPROPRIATE BOX
☐ A.  OR	I certify, pursuant to Public Law 2012, c.25, that neither the Vendor/Bidder listed above nor any of its parents, subsidiaries, or affiliates is listed on the N.J. Department of Treasury's list of entities determined to be engaged in prohibited activities in Iran pursuant to P.L. 2012, c. 25 ("Chapter 25 List"). Disregard Part 2 and complete and sign the Certification below.
В.	I am unable to certify as above because the Vendor/Bidder and/or one or more of its parents, subsidiaries, or affiliates is listed on the Department's Chapter 25 list. I will provide a detailed, accurate and precise description of the activities in Part 2 below and sign and complete the Certification below. Failure to provide such information will result in the proposal being rendered as non-responsive and appropriate penalties, fines and/or sanctions will be assessed as provided by law.
If you checked Bo	PART 2  LEASE PROVIDE ADDITIONAL INFORMATION RELATED TO INVESTMENT ACTIVITIES IN IRAN  x "B" above, provide a detailed, accurate and precise description of the activities of the Vendor/Bidder, or one of its parents, itates, engaged in investment activities in Iran by completing the information below.
DESCRIPTION OF DURATION OF E ANTICIPATED C VENDOR/BIDDE	NGAGEMENT:  ESSATION DATE: R CONTACT NAME: R CONTACT PHONE#:
any attachments he information contai completion of any herein; that I am av to <u>criminal prosect</u>	CERTIFICATION  In certify that I am authorized to execute this certification on behalf of the Vendor/Bidder, that the foregoing information and reto, to the best of my knowledge are true and complete. I acknowledge that the County of Union, New Jersey is relying on the ned herein, and that the Vendor/Bidder is under a continuing obligation from the date of this certification through the contract(s) with the County of Union to notify the County of Union in writing of any changes to the information contained ware that it is a criminal offense to make a false statement or misrepresentation in this certification. If I do so, I will be subject ution under the law, and it will constitute a material breach of my agreement(s) with the County of Union, permitting the odeclare any contract(s) resulting from this certification void and unenforceable.
Signature	Date

Revised: 10/19/17

Print Name and Title

Revised 10/19/17

#### STANDARD SPECIFICATIONS

The Standard Specifications for Road and Bridge Construction of New Jersey Department of Transportation, 2007 Edition; is added to and/or amended elsewhere herein by the Notice to Contractors (Advertisement), Proposal, Information for Bidders, General Conditions, Special Provisions, Project Plans, and Supplementary Specifications; shall, insofar as technical requirements are involved, govern in the execution of this project.

Such Standard Specifications are made a part of these Specifications by this reference and will not be repeated herein. It is the responsibility of prospective bidders to familiarize themselves with these Standard Specifications, copies of which may be examined at the office of the Engineer and may be obtained, upon payment of the cost thereof, from:

Department of Transportation State of New Jersey 1035 Parkway Avenue Trenton, New Jersey 08625

The Notice to Bidders (Advertisement), Proposal, General Conditions, Instructions to Bidders, Special Provisions, Project Plans and/or Technical Specifications shall govern and prevail in the case of conflict between them and the Standard Specifications.

In these Standard Specifications the words "COMMISSIONER" or "DEPARTMENT" shall refer to and mean the person, persons, body, board or agent legally empowered to enter into contracts and otherwise legally act for the Owner. The words "RESIDENT ENGINEER (RE)", "ENGINEER" or "STATE" shall refer to and mean the professional engineering representative of the Owner as hereinbefore defined and the word "INSPECTOR" shall mean the authorized project representative of the Engineer with the authority as hereinbefore defined. The word "LABORATORY" shall mean and refer to the Engineer who may, at his discretion, and with the consent of the Owner, employ qualified technical personnel or testing laboratories to assist him in fulfilling the duties normally assigned to the "LABORATORY" in these Standard Specifications.

When reference is made herein to the bulletins, standards, specifications, publications or requirements of the Manual on Uniform Traffic Control Devices (MUTCD), Institute of Traffic Engineers (ITE), Federal Highway Administration (FHWA), American Association of State Highway Officials (AASHO), the American Concrete Institute (ACI), the American Society of Civil Engineers (ASCE) or similar national or regional societies, associations, institutes or organizations; the requirements of the bulletins, specifications, publications or requirements referred to shall be considered a part of these Specifications by such reference and shall not be repeated herein but shall have the same import and be as binding as if herein set forth in full.

TERRITORY
ENTIRE STATE

## NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

**OPERATING ENGINEERS** Rates Expiration Date: 03/31/2020

{For apprentice rates refer to "Operating Engineers" apprentice rates in any county rate package}

The regular workday consists of 8 hours, Monday to Friday, between 6:00 AM and 4:30 PM.

#### SHIFT DIFFERENTIALS:

- Shift work must run for 5 consecutive workdays.
- When 2 shifts are worked, the second shift shall receive an additional 10% of the regular rate inclusive of benefits, per hour.
- When 3 shifts are worked, the second shift shall receive 8 hours pay for 7.5 hours of work, plus an additional 10% of the regular rate inclusive of benefits, per hour. The third shift shall receive 8 hours pay for 7 hours of work, plus an additional 15% of the regular rate inclusive of benefits, per hour.
- When such hours are mandated by the project owner, a shift that starts between 8:00 PM and midnight and ends by 6:00 AM Saturday, or that starts after 8:00 PM on Sunday, provided there are consecutive hours of work within the shift, shall receive an additional 15% of the regular rate, inclusive of benefits.
- On Highway, Road, Street, and Sewer projects irregular shifts starting between 5:00 PM and 12:00 AM may be worked Monday through Friday, and shall receive an additional 15% of the regular rate, inclusive of benefits. When working with other trades that receive a higher irregular shift rate, the Operating Engineer shall also receive the higher irregular shift rate.

#### OVERTIME:

- Hours in excess of 8 per day, or outside of the regular workday, Monday through Friday, that are not shift work, and all hours on Saturdays shall be paid at time and one-half the regular rate, inclusive of benefits. All hours on Sundays and holidays shall be paid at double the regular rate, inclusive of benefits.
- Four 10-hour days may be worked, Monday through Thursday, at straight time, with all hours on Friday paid at time and one-half the regular rate, inclusive of benefits.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday. When all trades on a particular job site agree, the day after Thanksgiving may be substituted for Veteran's Day.

On hazardous waste removal work or asbestos removal work, on a state or federally designated hazardous waste site, where the operating engineer is in direct contact with hazardous material and when personal protective equipment is required for respiratory, skin, and eye protection, the operating engineer shall receive an additional 20% of the hourly wage, per hour.

10/23/2017

# NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

ENTIRE STATE

OPERATING ENGINEERS Rates Expiration Date: 03/31/2020

**Effective Dates:** 

07/01/2017			01/01/2018	07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total	Total
48.98	30.70	79.68	80.68	82.03	83.03	85.38

#### **CLASSIFICATIONS:**

A-Frame

Backhoe (combination)

Boom Attachment on loaders (Except pipehook)

Boring & Drilling Machine

Brush Chopper, Brush Shredder, Tree Shredder

Bulldozer, finish grade

Cableway

Carryall

Concrete Pump

Concrete Pumping System (Pumpcrete & similar types)

Conveyor, 125 feet or longer

Drill Doctor (Duties include dust collector and maintenance)

Front End Loader (2 cu. yds. but less than 5 cu. yds.)

Grader, finish

Groove Cutting Machine (ride-on type)

Heater Planer

Hoist (all types including steam, gas, diesel, electric, air hydraulic, single and double drum, concrete, brick shaft caisson, snorkle roof, and other similar types, Except Chicago-boom type)

Hydraulic Crane (10 tons & under)

Hydro-Axe

Hydro-Blaster

Jack (screw, air hydraulic, power-operated unit, or console type, Except hand jack or pile load test type)

Log Skidder

# NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

ENTIRE STATE

**OPERATING ENGINEERS** Rates Expiration Date: 03/31/2020

**Effective Dates:** 

07/01/2017			01/01/2018	07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total	Total
48.98	30.70	79.68	80.68	82.03	83.03	85.38

## **CLASSIFICATIONS:**

Pan

Paver, concrete

Plate & Frame Filter Press

Pumpcrete (unit type)

Pumpcrete, Squeezecrete, or Concrete Pumping machine (regardless of size)

Scraper

Side Boom

Straddle Carrier (Ross and similar types)

Vacuum Truck

Whiphammer

Winch Truck (hoisting)

# NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

**OPERATING ENGINEERS** Rates Expiration Date: 03/31/2020

**Effective Dates:** 

07/01/2017			01/01/2018	07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total	Total
47.07	30.70	77.77	78.77	80.12	81.12	83.47

#### **CLASSIFICATIONS:**

Asphalt Curbing Machine

Asphalt Plant Engineer

Asphalt Spreader

Autograde Curb Trimmer & Sidewalk Shoulder Slipform (CMI & similar types)

Autograde Curecrete Machine (CMI & similar types)

Autograde Tube Finisher & Texturing Machine (CMI & similar types)

Bar Bending Machines (Power)

Batcher, Batching Plant, & Crusher [On Site]

Belt Conveyor System

Boom-Type Skimmer Machine

Bridge Deck Finisher

Bulldozer (all sizes)

Captain (Power Boats)

Car Dumper (railroad)

Compressor & Blower unit for loading/unloading of concrete, cement, fly ash, or similar type materials (used independently or truck-mounted)

Compressor (2 or 3 battery)

Concrete Breaking Machine

Concrete Cleaning/Decontamination Machine

Concrete Finishing Machine

Concrete Saw or Cutter (ride-on type)

Concrete Spreader (Hetzel, Rexomatic & similar types)

Concrete Vibrator

# NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

**OPERATING ENGINEERS** Rates Expiration Date: 03/31/2020

**Effective Dates:** 

Ladder (motorized)

Laddervator

07/01/2017			01/01/2018	07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total	Total
47.07	30.70	77.77	78.77	80.12	81.12	83.47

07/01/2017			01/01/2018	07/01/2018	01/01/2019				
Rate	Fringe	Total	Total	Total	Total				
47.07	30.70	77.77	78.77	80.12	81.12				
CLASSIFICATIONS:									
Conveyors - under 125 feet									
Crane Signalman									
Crushing Machine									
Directional Boring Machine									
Ditching Machine - Small (Ditchwitch, Vermeer or similar types)									
Dope Pot -	Mechanical (with	h or without pump	)						
Dumpster									
Elevator									
Fireman									
Fork Lift (E	Economobile, Lu	ll & similar types)							
Front End I	Loader (1 cu. yd.	and over but less	than 2 cu. yds.)						
Generator (	2 or 3 battery)								
Giraffe Grii	nder								
Grader & M	Motor Patrols								
Grout Pump	p								
Gunnite Ma	achine (Excludin	g nozzle)							
Hammer - V	Vibratory (in con	junction with gene	erator)						
Heavy Equipment Robotics - Operator/Technician									
Hoist (roof, tugger, aerial platform hoist, house car)									
Hopper									
Hopper Doors (power operated)									

# NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

**OPERATING ENGINEERS** Rates Expiration Date: 03/31/2020

**Effective Dates:** 

07/01/2017			01/01/2018	07/01/2018	01/01/2019	07/01/2019	
Rate 47.07	Fringe 30.70	Total 77.77	Total 78.77	Total 80.12	Total 81.12	Total 83.47	
CLASSIFIC	ATIONS:						
Locomotive	e (Dinky-type)						
Maintenanc	e Utility Man						
Master Env	ironmental Mai	ntenance Techniciar	1				
Mechanic							
Mixer (Exc	ept paving mixe	ers)					
Pavement E ride-on typ		nounted or small sel	f-propelled				
Pavement E	Breaker - mainte	enance of compresso	or or hydraulic unit				
Pipe Bendii	ng Machine (po	wer)					
Pitch Pump							
Plaster Pum	p (regardless o	f size)					
Post Hole [	Digger (post pou	ınder, auger)					
Roller (blac	k top)						
Scale (power	er)						
Seamen Pul	verizing Mixer						
Shoulder W	idener						
Silo							
Skimmmer	Machine (boon	n type)					
Steel Cuttin	g Machine (ser	vice & maintenance	)				
Tamrock D	rill						
Tractor							
Transfer Ma	achines						

Tug Master (Power Boats)

Tug Captains

# NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

OPERATING ENGINEERS Rates Expiration Date: 03/31/2020

**Effective Dates:** 

07/01/2017			01/01/2018	07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total	Total
47.07	30.70	77.77	78.77	80.12	81.12	83.47

# **CLASSIFICATIONS:**

Ultra High Pressure Waterjet Cutting Tool System - Operator/Maintenance Technician

Vacuum Blasting Machine - Operator/Maintenance Technician

Vibrating Plant (used with unloading)

Welder & Repair Mechanic

#### **Effective Dates:**

07/01/2017			01/01/2018	07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total	Total
43.73	30.70	74.43	75.43	76.78	77.78	80.13

#### **CLASSIFICATIONS:**

Assistant Engineer/Oiler

Driller's Helper

Field Engineer - Transit man or Instrument man

Maintenance Apprentice (Deckhand)

Maintenance Apprentice (Oiler)

Mechanic's Helper

Off Road Back Dump

#### **Effective Dates:**

07/01/2017			01/01/2018	07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total	Total
41.15	30.70	71.85	72.85	74.20	75.20	77.55

# **CLASSIFICATIONS:**

Field Engineer - Rodman or Chainman

# NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

**OPERATING ENGINEERS** Rates Expiration Date: 03/31/2020

**Effective Dates:** 

07/01/2017			01/01/2018	07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total	Total
51.31	30.70	82.01	83.01	84.36	85.36	87.71

# **CLASSIFICATIONS:**

Lead Engineer, Foreman Engineer, Safety Engineer (minimum)

# NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

**OPERATING ENGINEERS** Rates Expiration Date: 03/31/2020

Pavement & Concrete Breaker (Superhammer & Hoe Ram)

**Effective Dates:** 

07/01/2017			01/01/2018	07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total	Total
50.57	30.70	81.27	82.27	83.62	84.62	86.97

Rate	Fringe	Total	Total	Total	Total	Total
50.57	30.70	81.27	82.27	83.62	84.62	86.97
CLASSIFIC	ATIONS:					
Autograde l	Pavement Profil	ler (CMI & similar ty	pes)			
Autograde l types)	Pavement Profil	ler - Recycle Type (C	MI & similar			
Autograde l similar typ		/Spreader Combinatio	on (CMI &			
Autograde S	Slipform Paver	(CMI & similar types	s)			
Backhoe (E	xcavator)					
Central Pov	ver Plant					
Concrete Pa	wing Machine					
Draglines						
Drill, Bauer	, AMI and simi	lar types				
Drillmaster,	Quarrymaster					
		down-the-hole drill), rill, self-powered dril				
Elevator Gr	ader					
Field Engin	eer-Chief of Pa	rty				
Front End I	oader (5 cu. ya	rds or larger)				
Gradall						
Grader, Rag	go					
Helicoptor (	Co-Pilot					
Helicoptor (	Communication	ns Engineer				
Juntann Pile	e Driver					
Locomotive	e (large)					
Mucking M	achine					

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# NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

**Effective Dates:** 

07/01/2017			01/01/2018	07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total	Total
50.57	30.70	81.27	82.27	83.62	84.62	86.97

## **CLASSIFICATIONS:**

Pile Driver

Prentice Truck

Roadway Surface Grinder

Scooper (loader & shovel)

Shovel (Excavator)

Trackhoe (Excavator)

Tree Chopper with boom

Trenching Machine (cable plow)

Tunnel Boring Machine

# NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

OPERATING ENGINEERS Rates Expiration Date: 03/31/2020

**Effective Dates:** 

07/01/2017			01/01/2018	07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total	Total
45.44	30.70	76.14	77.14	78.49	79.49	81.84

#### **CLASSIFICATIONS:**

Chipper

Compressor (single)

Concrete Spreader (small type)

Conveyor Loader (Except elevator graders)

Engines, Large Diesel (1620 HP) & Staging Pump

Farm Tractor

Fertilizing Equipment (operation & maintenance)

Fine Grade Machine (small type)

Form Line Grader (small type)

Front End Loader (under 1 cubic yard)

Generator (single)

Grease, Gas, Fuel, & Oil Supply Trucks

Heaters (Nelson or other type)

Lights - portable generating light plant

Mixer, Concrete (small)

Mulching Equipment (operation & maintenance)

Power Broom or Sweeper

Pump (diesel engine & hydraulic - regardless of power)

Pump (larger than 2 inch suction, including submersible pumps)

Road Finishing Machine (small type)

Roller - grade, fill, or stone base

Seeding Equipment (operation & maintenance)

Sprinkler & Water Pump Trucks

# NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

PREVAILING WAGE RATE DET

Rates Expiration Date: 03/31/2020

**Effective Dates:** 

**OPERATING ENGINEERS** 

07/01/2017 01/01/2018 07/01/2018 01/01/2019 07/01/2019 Rate Fringe Total Total Total Total Total 45.44 30.70 76.14 77.14 78.49 79.49 81.84

#### **CLASSIFICATIONS:**

Steam Generator or Boiler

Stone Spreader

Tamping Machine (vibrating ride-on type)

Temporary Heating Plant (Nelson or other type, including proprane, natural gas, and flow-type units)

Water or Sprinkler Truck

Welding Machine (gas, diesel, or electric convertor, of any type)

Welding System - Multiple (rectifier transformer type)

Wellpoint Systems (including installation by bull gang and maintenance)

# **Effective Dates:**

07/01/2017			01/01/2018	07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total	Total
52.39	30.70	83.09	84.09	85.44	86.44	88.79

# **CLASSIFICATIONS:**

Helicoptor Pilot/Engineer

# **Effective Dates:**

07/01/2017			01/01/2018	07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total	Total
57.07	30.70	87.77	88.77	90.12	91.12	93.47

# **CLASSIFICATIONS:**

Cranes, Derricks, Pile Driver (all types), over 100 tons and TOWER CRANE with boom (including jib and/or leads) 140 ft. and over

#### **Effective Dates:**

07/01/2017			01/01/2018	07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total	Total
56.07	30.70	86.77	87.77	89.12	90.12	92.47

# **CLASSIFICATIONS:**

Cranes, Derricks, Pile Driver (all types), over 100 tons and TOWER CRANE with boom (including jib and/or leads) from 100 ft. to 139 ft

# NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

**OPERATING ENGINEERS** Rates Expiration Date: 03/31/2020

**Effective Dates:** 

07/01/2017			01/01/2018	07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total	Total
52.57	30.70	83.27	84.27	85.62	86.62	88.97

# **CLASSIFICATIONS:**

Cranes, Derricks, Pile Driver (all types), under 100 tons with a boom (including jib and/or leads) 140 ft. and over

# **Effective Dates:**

07/01/2017			01/01/2018	07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total	Total
55.07	30.70	85.77	86.77	88.12	89.12	91.47

# **CLASSIFICATIONS:**

Cranes, Derricks, Pile Driver (all types), over 100 tons and TOWER CRANE with a boom (including jib and/or leads) under 100 ft.

## **Effective Dates:**

07/01/2017			01/01/2018	07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total	Total
51.57	30.70	82.27	83.27	84.62	85.62	87.97

## **CLASSIFICATIONS:**

Cranes, Derricks, Pile Driver (all types), under 100 tons with a boom (including jib and/or leads) from 100 ft. to 139 ft.

# NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

# **STRUCTURAL STEEL ERECTION** Rates Expiration Date: 03/31/2020

{For apprentice rates refer to "Operating Engineers" apprentice rates in any county rate package}

The regular workday consists of 8 hours, Monday to Friday, between 6:00 AM and 4:30 PM.

#### SHIFT DIFFERENTIALS:

- Shift work must run for 5 consecutive workdays.
- When 2 shifts are worked, the second shift shall receive an additional 10% of the regular rate inclusive of benefits, per hour.
- When 3 shifts are worked, the second shift shall receive 8 hours pay for 7.5 hours of work, plus an additional 10% of the regular rate inclusive of benefits, per hour. The third shift shall receive 8 hours pay for 7 hours of work, plus an additional 15% of the regular rate inclusive of benefits, per hour.
- When such hours are mandated by the project owner, a shift that starts between 8:00 PM and midnight and ends by 6:00 AM Saturday, or that starts after 8:00 PM on Sunday, provided there are consecutive hours of work within the shift, shall receive an additional 15% of the regular rate, inclusive of benefits.
- On Highway, Road, Street, and Sewer projects irregular shifts starting between 5:00 PM and 12:00 AM may be worked Monday through Friday, and shall receive an additional 15% of the regular rate, inclusive of benefits. When working with other trades that receive a higher irregular shift rate, the Operating Engineer shall also receive the higher irregular shift rate.

#### OVERTIME:

- Hours in excess of 8 per day, or outside of the regular workday, Monday through Friday, that are not shift work, and all hours on Saturdays shall be paid at time and one-half the regular rate, inclusive of benefits. All hours on Sundays and holidays shall be paid at double the regular rate, inclusive of benefits.
- Four 10-hour days may be worked, Monday through Thursday, at straight time, with all hours on Friday paid at time and one-half the regular rate, inclusive of benefits.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday. When all trades on a particular job site agree, the day after Thanksgiving may be substituted for Veteran's Day.

On hazardous waste removal work or asbestos removal work, on a state or federally designated hazardous waste site, where the operating engineer is in direct contact with hazardous material and when personal protective equipment is required for respiratory, skin, and eye protection, the operating engineer shall receive an additional 20% of the hourly wage, per hour.

#### **Effective Dates:**

07/01/2017			01/01/2018	07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total	Total
54.20	30.70	84.90	85.90	87.25	88.25	90.60

#### **CLASSIFICATIONS:**

Helicopter Pilot or Engineer

# NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

**STRUCTURAL STEEL ERECTION** Rates Expiration Date: 03/31/2020

**Effective Dates:** 

07/01/2017			01/01/2018	07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total	Total
50.14	30.70	80.84	81.84	83.19	84.19	86.54

# **CLASSIFICATIONS:**

A-Frame

Cherry Picker -10 tons or less (Over 10 tons use crane rate)

Hoist (all types Except Chicago-boom)

Jack (screw, air hydraulic, power-operated unit or console type, Except hand jack or pile load test type)

Side Boom

Straddle Carrier

## **Effective Dates:**

07/01/2017			01/01/2018	07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total	Total
47.48	30.70	78.18	79.18	80.53	81.53	83.88

# **CLASSIFICATIONS:**

Aerial Platform Used On Hoists

Apprentice Engineer/Oiler with Compressor or Welding Machine

Captain (Power Boats)

Compressor (2 or 3 in battery)

Conveyor or Tugger Hoist

Elevator or House Car

Fireman

Forklift

Generator (2 or 3)

Maintenance Utility Man

Tug Master (Power Boats)

Welding Machines, Gas or Electric Converters on any type-2 or 3 in battery including diesels

# NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

# **STRUCTURAL STEEL ERECTION** Rates Expiration Date: 03/31/2020

**Effective Dates:** 

07/01/2017			01/01/2018	07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total	Total
45.95	30.70	76.65	77.65	79.00	80.00	82.35

# **CLASSIFICATIONS:**

Compressor (Single)

Generators

Welding Machines, Gas, Diesel, Or Electric Converters of any type-single

Welding System, Multiple (Rectifier Transformer Type)

## **Effective Dates:**

07/01/2017			01/01/2018	07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total	Total
44.19	30.70	74.89	75.89	77.24	78.24	80.59

# **CLASSIFICATIONS:**

Assistant Engineer/Oiler

Drillers Helper

Field Engineer - Transit/Instrument Man

Maintenance Apprentice (Deckhand)

Maintenance Apprentice (Oiler)

## **Effective Dates:**

07/01/2017		01/01/2018	07/01/2018	01/01/2019	07/01/2019	
Rate	Fringe	Total	Total	Total	Total	Total
51.76	30.70	82.46	83.46	84.81	85.81	88.16

## **CLASSIFICATIONS:**

Lead Engineer, Foreman Engineer, Safety Engineer (Minimum)

## **Effective Dates:**

07/01/2017			01/01/2018	07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total	Total
41.15	30.70	71.85	72.85	74.20	75.20	77.55

#### **CLASSIFICATIONS:**

Field Engineer - Rodman or Chainman

# NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

#### ENTIRE STATE

# **STRUCTURAL STEEL ERECTION** Rates Expiration Date: 03/31/2020

#### **Effective Dates:**

07/01/2017		01/01/2018	07/01/2018	01/01/2019	07/01/2019	
Rate	Fringe	Total	Total	Total	Total	Total
50.90	30.70	81.60	82.60	83.95	84.95	87.30

#### **CLASSIFICATIONS:**

Field Engineer-Chief of Party

#### **Effective Dates:**

07/01/2017			01/01/2018	07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total	Total
59.09	30.70	89.79	90.79	92.14	93.14	95.49

## **CLASSIFICATIONS:**

Cranes (all cranes, land or floating with booms, including jib, 140 ft. and over, above ground). Derricks (all derricks, land, floating or Chicago Boom type with booms including jib, 140 ft. and over, above ground), and Pile Drivers (all types) over 100 tons and Tower Cranes.

#### **Effective Dates:**

07/01/2019	01/01/2019	07/01/2018	01/01/2018	07/01/2017		
Total	Total	Total	Total	Total	Fringe	Rate
93.83	91.48	90.48	89.13	88.13	30.70	57.43

#### **CLASSIFICATIONS:**

Cranes (all cranes, land or floating with booms including jib, less than 140 ft. above ground), Derricks (all derricks. land, floating or Chicago Boom type with booms including jib, less than 140 ft. above ground), Pile Drivers (all types), over 100 tons and Tower Crane. **Effective Dates:** 

07/01/2019	01/01/2019	07/01/2018	01/01/2018	07/01/2017		
Total	Total	Total	Total	Total	Fringe	Rate
90.99	88.64	87.64	86.29	85.29	30.70	54.59

#### **CLASSIFICATIONS:**

Cranes (all cranes, land or floating with booms including jib, 140 ft. and over, above ground), Derricks (all derricks, land, floating or Chicago Boom type with booms including jib, 140 ft. and over, above ground), Pile Drivers (all types), under 100 tons.

#### **Effective Dates:**

07/01/2017		01/01/2018	07/01/2018	01/01/2019	07/01/2019	
Rate	Fringe	Total	Total	Total	Total	Total
52.93	30.70	83.63	84.63	85.98	86.98	89.33

#### **CLASSIFICATIONS:**

Cranes (all cranes, land or floating with booms including jib, less than 140 ft. above ground), Derricks (all derricks, land, floating or Chicago Boom type with booms including jib, less than 140 ft. above ground), Pile Drivers (all types), under 100 tons.

# NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

**STRUCTURAL STEEL ERECTION** Rates Expiration Date: 03/31/2020

**Effective Dates:** 

	07/01/201	7	01/01/2018	07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total	Total
54.59	30.70	85.29	86.29	87.64	88.64	90.99

# **CLASSIFICATIONS:**

Helicopter Co-Pilot

Helicopter Communications Engineer

# NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

#### TEST BORING PRELIMINARY TO CONSTRUCTION-SOUTH/WEST Rates Expiration Date: 03/31/2020

#### THESE RATES APPLY IN THE FOLLOWING COUNTIES ONLY:

Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, Hunterdon, Mercer, Monmouth, Ocean, Salem, Sussex, Warren

The regular workday consists of 8 hours, Monday to Friday, between 6:00 AM and 4:30 PM.

#### SHIFT DIFFERENTIALS:

- Shift work must run for 5 consecutive workdays.
- When 2 shifts are worked, the second shift shall receive an additional 10% of the regular rate inclusive of benefits, per hour.
- When 3 shifts are worked, the second shift shall receive 8 hours pay for 7.5 hours of work, plus an additional 10% of the regular rate inclusive of benefits, per hour. The third shift shall receive 8 hours pay for 7 hours of work, plus an additional 15% of the regular rate inclusive of benefits, per hour.
- When such hours are mandated by the project owner, a shift that starts between 8:00 PM and midnight and ends by 6:00 AM Saturday, or that starts after 8:00 PM on Sunday, provided there are consecutive hours of work within the shift, shall receive an additional 15% of the regular rate, inclusive of benefits.
- On Highway, Road, Street, and Sewer projects irregular shifts starting between 5:00 PM and 12:00 AM may be worked Monday through Friday, and shall receive an additional 15% of the regular rate, inclusive of benefits. When working with other trades that receive a higher irregular shift rate, the Operating Engineer shall also receive the higher irregular shift rate.

#### OVERTIME:

- Hours in excess of 8 per day, or outside of the regular workday, Monday through Friday, that are not shift work, and all hours on Saturdays shall be paid at time and one-half the regular rate, inclusive of benefits. All hours on Sundays and holidays shall be paid at double the regular rate, inclusive of benefits.
- Four 10-hour days may be worked, Monday through Thursday, at straight time, with all hours on Friday paid at time and one-half the regular rate, inclusive of benefits.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday. When all trades on a particular job site agree, the day after Thanksgiving may be substituted for Veteran's Day.

On hazardous waste removal work or asbestos removal work, on a state or federally designated hazardous waste site, where the operating engineer is in direct contact with hazardous material and when personal protective equipment is required for respiratory, skin, and eye protection, the operating engineer shall receive an additional 20% of the hourly wage, per hour.

#### **Effective Dates:**

07/01/2017		01/01/2018	07/01/2018	01/01/2019	07/01/2019	
Rate	Fringe	Total	Total	Total	Total	Total
50.57	30.70	81.27	82.27	83.62	84.62	86.97

#### **CLASSIFICATIONS:**

Driller

#### **Effective Dates:**

07/01/2017			01/01/2018	07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total	Total
43.73	30.70	74.43	75.43	76.78	77.78	80.13

#### **CLASSIFICATIONS:**

Driller's Helper

# NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

FREE AIR TUNNEL JOBS Rates Expiration Date: 02/28/2018

{For apprentice rates refer to "Heavy & General" apprentice rates in any county rate package}

The regular workday consists of 8 hours, starting at 7:00 AM or 8:00 AM.

#### SHIFT DIFFERENTIALS:

- Shifts must start at 3:00 PM, 4:00 PM, 12:00 AM, or 1:00 AM, to be considered shift work, except when the project owner mandates special hours of work in the job specifications, in which case those hours may be considered shift work.
- When such hours are mandated by the project owner, a shift that begins before midnight on Friday and ends on Saturday morning, or that begins at or after 8:00 PM on Sunday and ends on Monday morning may be paid at the shift differential rate.
- Shifts shall receive an additional \$2.50 per hour.

#### OVERTIME:

- Hours in excess of 8 per day, Monday through Friday, or outside of the regular workday that are not shift work, and all hours on Saturdays, shall be paid at time and one-half the hourly rate. All hours on Sundays and holidays shall be paid at double the hourly rate.
- Four 10-hour days may be worked, Monday through Thursday, at straight time, with Friday used as a make-up day for a day lost to inclement weather. If Friday is not a make-up day, all hours on Friday shall be paid at time and one-half the hourly rate.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday. Veterans Day may be substituted for the day after Thanksgiving. However, in the trading of Veterans Day for the day after Thanksgiving, if overtime is worked on Veterans Day, it shall be paid at double the hourly rate.

#### Hazardous Waste Work:

- -where Level A, B, or C protection is required: + \$3.00/hr
- -other Hazardous Waste site: + \$1.00/hr

#### **Effective Dates:**

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Rate	Fringe	Total
41.50	29.03	70.53

03/01/2017

## **CLASSIFICATIONS:**

Walking Boss & Superintendent

# **Effective Dates:**

03/01/2017	
Fringe	Tota

Rate Fringe Total 41.20 29.03 70.23

# **CLASSIFICATIONS:**

Heading Foreman, Shaft Foreman, Rod Foreman, Electrician Foreman, Rigging Foreman

# NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

#### ENTIRE STATE

# FREE AIR TUNNEL JOBS Rates Expiration Date: 02/28/2018

#### **Effective Dates:**

## 03/01/2017

Rate	Fringe	Total
40.70	29.03	69.73

#### **CLASSIFICATIONS:**

Iron Foreman, Caulking Foreman, Form Foreman, Cement Finishing Foreman, Concrete Foreman, Track Foreman, Cleanup Foreman, Grout Foreman

## **Effective Dates:**

#### 03/01/2017

Rate	Fringe	Total
43.20	29.03	72.23

#### **CLASSIFICATIONS:**

Blaster

#### **Effective Dates:**

#### 03/01/2017

Rate	Fringe	Total
40.15	29.03	69.18

## **CLASSIFICATIONS:**

Top Labor Foreman

# **Effective Dates:**

# 03/01/2017

Rate	Fringe	Total
39.80	29 03	68 83

# **CLASSIFICATIONS:**

Skilled Men (including Caulker, Powder Carrier, all other skilled men)

Skilled Men (including Miner, Drill Runner, Iron Man, Conveyor Man, Manitenance Man, Safety Miner, Rigger, Block Layer, Cement Finisher, Tod Man)

## **Effective Dates:**

## 03/01/2017

Rate	Fringe	Total
39.65	29.03	68.68

#### **CLASSIFICATIONS:**

Semi-Skilled Men (including Bell or Signal Man Top or Bottom, Form Worker & Mover, Concrete Worker, Shaft Man, Tunnel Laborer, Caulker's Helper, all other semi-skilled)

Semi-Skilled Men (including Miner's Helper, Chuck Tender, Track Man, Nipper, Brake Man, Derail Man, Cable Man, Hose Man, Gravel Man, Form Man)

# NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

ENTIRE STATE

FREE AIR TUNNEL JOBS Rates Expiration Date: 02/28/2018

**Effective Dates:** 

03/01/2017

Rate Fringe Total 39.15 29.03 68.18

# **CLASSIFICATIONS:**

All Others (including Powder Watchman, Change House Attendant, Top Laborer)

# NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

#### DRILL FOR GROUND WATER SUPPLY Rates Expiration Date: 03/31/2020

The well driller and/or helper may perform all work relative to the construction, finishing, and servicing of wells, pumps and borings for ground water supply. The present methods of well drilling entailing as they do, many diverse job operations calling for drilling, pump discharge, piping, and the operation of various types of related power equipment, shall all be within the job duties and functions of the well driller and/or helper. In the event that an extension of work should occur beyond water well drilling functions, into the field of general construction work, such extension of work would come under the appropriate rates listed elsewhere in this wage determination.

- For Work Hours, Shift Differentials, Overtime Rates, and Recognized Holidays see the "Operating Engineers" section of this wage determination.

#### **Effective Dates:**

	07/01/201	7	01/01/2018	07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total	Total
49.32	30.70	80.02	81.02	82.37	83.37	85.72

#### **CLASSIFICATIONS:**

Driller

#### **Effective Dates:**

	07/01/201	.7	01/01/2018	07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total	Total
42.48	30.70	73.18	74.18	75.53	76.53	78.88

#### **CLASSIFICATIONS:**

Driller's Helper

# NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

#### ENTIRE STATE

# OPERATING ENGINEERS MARINE-DREDGING Rates Expiration Date: 09/30/2018

NOTE: Boat crews carrying explosive material (dynamite, pourfex, and other similar materials) shall be paid at 120% of the hourly wage rate for hours engaged in handling of said materials. Employees required to possess a Hazardous Material Certification as a condition of employment shall be compensated at 120% of the hourly wage rate.

#### OVERTIME:

Hours in excess of 40 per week, and all hours on Saturdays and Sundays, shall be paid at time and one-half the hourly rate. All hours on holidays shall be paid at double the hourly rate.

RECOGNIZED HOLIDAYS: New Year's Day, Martin Luther King Day, Good Friday, Memorial Day, July 4th, Labor Day, Veterans' Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday.

#### **Effective Dates:**

#### 10/01/2017

Rate	Fringe	Total
38.18	14.33	52.51

#### **CLASSIFICATIONS:**

Lead Dredgerman, Operator, Leverman

Licensed Tug Operator (over 1000 HP)

#### **Effective Dates:**

#### 10/01/2017

Rate	Fringe	Total
33.03	13.92	46.95

## **CLASSIFICATIONS:**

Derrick Operator, Spider/Spill Barge Operator

Engineer, Electrician, Chief Welder, Chief Mate

Fill Placer, Operator II

Licensed Boat Operator

Maintenance Engineer

# **Effective Dates:**

# 10/01/2017

Rate	Fringe	Total
31.09	13.77	44.86

# **CLASSIFICATIONS:**

Certified Welder

# NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

ENTIRE STATE

# OPERATING ENGINEERS MARINE-DREDGING Rates Expiration Date: 09/30/2018

## **Effective Dates:**

10/01/2017

Rate Fringe Total 30.24 13.40 43.64

# **CLASSIFICATIONS:**

Mate, Drag Barge Operator, Steward, Assistant Fill Placer

Welder

## **Effective Dates:**

10/01/2017

Rate Fringe Total 29.26 13.32 42.58

## **CLASSIFICATIONS:**

**Boat Operator** 

# **Effective Dates:**

10/01/2017

Rate Fringe Total 24.30 12.62 36.92

# **CLASSIFICATIONS:**

Shoreman, Deckhand, Rodman, Scowman

# NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

ENTIRE STATE

## MICROSURFACING/SLURRY SEAL Rates Expiration Date: 02/28/2018

# THESE RATES APPLY IN THE FOLLOWING COUNTIES ONLY:

Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, Mercer, Ocean, Salem

\*\*\*IN ALL OTHER COUNTIES use the Heavy and General Laborers - North "Slurry Seal Laborer" rates.\*\*\*

# SHIFT DIFFERENTIALS:

Any shift starting at 3:30 PM or later shall receive an additional \$0.35/hr

#### OVERTIME:

Hours in excess of 8 per day or 40 per week shall be paid at time and one-half the hourly rate. All hours on holidays shall be paid at double the hourly rate.

RECOGNIZED HOLIDAYS: New Year's Day, Washington's Birthday, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day.

#### **Effective Dates:**

03/01/	2017
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Rate	Fringe	Total
36.50	21.27	57.77

#### CLASSIFICATIONS:

Foreman

## **Effective Dates:**

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Rate	Fringe	Total
33.80	21.27	55.07

#### **CLASSIFICATIONS:**

Box man

#### **Effective Dates:**

03/01	1/2017
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Rate	Fringe	Total
31.75	21 27	53 02

#### **CLASSIFICATIONS:**

Microsurface/Slurry Preparation

# **Effective Dates:**

# 03/01/2017

Rate	Fringe	Total
31.75	21.27	53.02

## **CLASSIFICATIONS:**

Squeegee man

# NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

MICROSURFACING/SLURRY SEAL Rates Expiration Date: 02/28/2018

**Effective Dates:** 

03/01/2017

Rate Fringe Total 30.30 21.27 51.57

**CLASSIFICATIONS:** 

Cleaner, Taper

ENTIRE STATE

# NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

#### ASPHALT LABORERS - SOUTH Rates Expiration Date: 02/28/2018

"THESE RATES APPLY IN THE FOLLOWING COUNTIES ONLY: Atlantic, Burlington, Camden, Cape May, Cumberland,

Gloucester, Mercer, Ocean, Salem

{For apprentice rates refer to "Laborer - Heavy & General" apprentice rates in any county rate package}

The regular workday consists of 8 hours, starting at 7:00 AM or 8:00 AM.

#### SHIFT DIFFERENTIALS:

- Shifts must start at 3:00 PM, 4:00 PM, 12:00 AM, or 1:00 AM, to be considered shift work, except when the project owner mandates special hours of work in the job specifications, in which case those hours may be considered shift work.
- When such hours are mandated by the project owner, a shift that begins before midnight on Friday and ends on Saturday morning, or that begins at or after 8:00 PM on Sunday and ends on Monday morning may be paid at the shift differential rate.
- Shifts shall receive an additional \$2.50 per hour.

#### OVERTIME:

- Hours in excess of 8 per day, Monday through Friday, or outside of the regular workday that are not shift work, and all hours on Saturdays, shall be paid at time and one-half the hourly rate. All hours on Sundays and holidays shall be paid at double the hourly rate.
- Four 10-hour days may be worked, Monday through Thursday, at straight time, with Friday used as a make-up day for a day lost to inclement weather. If Friday is not a make-up day, all hours on Friday shall be paid at time and one-half the hourly rate.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday. Veterans Day may be substituted for the day after Thanksgiving. However, in the trading of Veterans Day for the day after Thanksgiving, if overtime is worked on Veterans Day, it shall be paid at double the hourly rate.

Hazardous Waste Work:

- -where Level A, B, or C protection is required: + \$3.00/hr
- -other Hazardous Waste site: + \$1.00/hr

## **Effective Dates:**

#### 03/01/2017

Rate	Fringe	Total
41.00	29 03	70.03

# **CLASSIFICATIONS:**

Paving Foreman

# **Effective Dates:**

Rate	Fringe	Total
39.55	29.03	68.58

# **CLASSIFICATIONS:**

Head Raker

### **Effective Dates:**

03/01/2017
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Rate	Fringe	Total
39.40	29.03	68.43

#### **CLASSIFICATIONS:**

Raker, Screedman, Luteman

# NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

ENTIRE STATE

# ASPHALT LABORERS - SOUTH Rates Expiration Date: 02/28/2018

## **Effective Dates:**

03/01/2017

Rate Fringe Total 39.15 29.03 68.18

# **CLASSIFICATIONS:**

Tampers, Smoothers, Kettlemen, Painters, Shovelers, Roller Boys

## **Effective Dates:**

03/01/2017

Rate Fringe Total 39.25 29.03 68.28

## **CLASSIFICATIONS:**

Milling Controller

# **Effective Dates:**

03/01/2017

Rate Fringe Total 39.45 29.03 68.48

# **CLASSIFICATIONS:**

Traffic Control Coordinator

# NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

# ENTIRE STATE

# TEST BORING PRELIMINARY TO CONSTRUCTION-NORTH Rates Expiration Date: 10/16/2018

## THESE RATES APPLY IN THE FOLLOWING COUNTIES ONLY:

Bergen, Essex, Hudson, Middlesex, Morris, Passaic, Somerset, Union

## SHIFT DIFFERENTIAL:

Employees on a shift other than between the hours of 8:00 AM and 5:00 PM shall receive an additional \$1.00 per hour.

#### OVERTIME:

Hours in excess of 8 per day, Monday through Friday, and all hours on Saturday shall be paid at time and one-half the regular rate. All hours on Sundays and holidays shall be paid at double the regular rate.

RECOGNIZED HOLIDAYS: New Year's Day, Memorial Day, July 4th, Labor Day, Thanksgiving Day, and Christmas Day. Sunday holidays observed the following Monday.

Hazardous Waste Pay (for Levels A, B, and C): an additional 10% of the hourly rate, per hour.

A newly hired Helper with no experience in the industry shall be paid as follows:

1st year on the job - 70% of Helper wage rate

2nd year on the job - 80% of Helper wage rate

3rd year on the job - 90% of Helper wage rate

All helpers receive full fringe benefit rate.

#### **Effective Dates:**

#### 10/17/2017

Rate	Fringe	Total
31.62	25.55	57.17

#### **CLASSIFICATIONS:**

Helper (4th year helper)

#### **Effective Dates:**

# 10/17/2017

Rate	Fringe	Total
39.69	25.55	65.24

# **CLASSIFICATIONS:**

Driller

# **Effective Dates:**

10	/1	7	/2	O.	17

Rate	Fringe	Total
45.73	25.55	71.28

### **CLASSIFICATIONS:**

Foreman

# NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

ENTIRE STATE

#### HEAVY & GENERAL LABORERS - NORTH Rates Expiration Date: 02/28/2018

#### THESE RATES APPLY IN THE FOLLOWING COUNTIES ONLY:

Bergen, Essex, Hudson, Hunterdon, Middlesex, Monmouth, Morris, Passaic, Somerset, Sussex, Union, Warren

{For apprentice rates refer to "Laborer - Heavy & General" apprentice rates in any county rate package}

The regular workday consists of 8 hours, starting at 7:00 AM or 8:00 AM.

#### SHIFT DIFFERENTIALS:

- Shifts must start at 3:00 PM, 4:00 PM, 12:00 AM, or 1:00 AM, to be considered shift work, except when the project owner mandates special hours of work in the job specifications, in which case those hours may be considered shift work.
- When such hours are mandated by the project owner, a shift that begins before midnight on Friday and ends on Saturday morning, or that begins at or after 8:00 PM on Sunday and ends on Monday morning may be paid at the shift differential rate.
- Shifts shall receive an additional \$2.50 per hour.

#### OVERTIME:

- Hours in excess of 8 per day, Monday through Friday, or outside of the regular workday that are not shift work, and all hours on Saturdays, shall be paid at time and one-half the hourly rate. All hours on Sundays and holidays shall be paid at double the hourly rate.
- Four 10-hour days may be worked, Monday through Thursday, at straight time, with Friday used as a make-up day for a day lost to inclement weather. If Friday is not a make-up day, all hours on Friday shall be paid at time and one-half the hourly rate.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday. Veterans Day may be substituted for the day after Thanksgiving. However, in the trading of Veterans Day for the day after Thanksgiving, if overtime is worked on Veterans Day, it shall be paid at double the hourly rate.

# Hazardous Waste Work:

- -where Level A, B, or C protection is required: + \$3.00/hr
- -other Hazardous Waste site: + \$1.00/hr

#### **Effective Dates:**

### 03/01/2017

Rate	Fringe	Total
38.75	29.03	67.78

## **CLASSIFICATIONS:**

### "D" Rate:

basic, landscape, asphalt, slurry seal, or railroad track laborer; utility meter installer; flagman; salamander tender; pitman; dumpman; rakers or tampers on cold patch work; wrappers or coaters of pipe; waterproofer; timberman; wagon drill or drill master helper; powder carrier; magazine tender; signal man; power buggy operator; tree cutter; operator of basic power tools

### **Effective Dates:**

# 03/01/2017

Rate	Fringe	Total
39.45	29.03	68.48

# **CLASSIFICATIONS:**

#### "C" Rate

pipe layer; laser man; conduit or duct line layer; operator of jack hammer, chipping hammer, pavement breaker, concrete cutter, asphalt cutter, sheet hammer, or walk-behind saw cutter; sandblaster; acetylene cutting or burning; wagon drill, directional drill, or hydraulic drill operator; drill master; core driller; traffic control coordinator; asphalt raker or lute man

# NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

# ENTIRE STATE

# HEAVY & GENERAL LABORERS - NORTH Rates Expiration Date: 02/28/2018

#### **Effective Dates:**

03/01/2017
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Rate	Fringe	Total
39.70	29.03	68.73

## **CLASSIFICATIONS:**

"B" Rate:

concrete finisher; setter of brick or stone pavers; stone cutter; form setter; manhole, catch basin, or inlet builder; asphalt screedman; rammer; hardscaping; gunite nozzle man

# **Effective Dates:**

## 03/01/2017

Rate	Fringe	Total
43.25	29.03	72.28

## **CLASSIFICATIONS:**

"A" Rate:

blaster

## **Effective Dates:**

# 03/01/2017

Rate	Fringe	Total
41.00	29.03	70.03

# **CLASSIFICATIONS:**

"FOREMAN" Rate:

labor foreman, asphalt foreman, drill foreman, pipe foreman, grade foreman, finisher foreman, concrete foreman

# **Effective Dates:**

# 03/01/2017

Rate	Fringe	Total
42.00	29.03	71.03

# **CLASSIFICATIONS:**

"GENERAL FOREMAN" Rate

# NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

ENTIRE STATE

#### HEAVY & GENERAL LABORERS - SOUTH Rates Expiration Date: 02/28/2018

#### THESE RATES APPLY IN THE FOLLOWING COUNTIES ONLY:

Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, Mercer, Ocean, Salem

{For apprentice rates refer to "Laborer - Heavy & General" apprentice rates in any county rate package}

The regular workday consists of 8 hours, starting at 7:00 AM or 8:00 AM.

#### SHIFT DIFFERENTIALS:

- Shifts must start at 3:00 PM, 4:00 PM, 12:00 AM, or 1:00 AM, to be considered shift work, except when the project owner mandates special hours of work in the job specifications, in which case those hours may be considered shift work.
- When such hours are mandated by the project owner, a shift that begins before midnight on Friday and ends on Saturday morning, or that begins at or after 8:00 PM on Sunday and ends on Monday morning may be paid at the shift differential rate.
- Shifts shall receive an additional \$2.50 per hour.

#### OVERTIME:

- Hours in excess of 8 per day, Monday through Friday, or outside of the regular workday that are not shift work, and all hours on Saturdays, shall be paid at time and one-half the hourly rate. All hours on Sundays and holidays shall be paid at double the hourly rate.
- Four 10-hour days may be worked, Monday through Thursday, at straight time, with Friday used as a make-up day for a day lost to inclement weather. If Friday is not a make-up day, all hours on Friday shall be paid at time and one-half the hourly rate.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday. Veterans Day may be substituted for the day after Thanksgiving. However, in the trading of Veterans Day for the day after Thanksgiving, if overtime is worked on Veterans Day, it shall be paid at double the hourly rate.

# Hazardous Waste Work:

- -where Level A, B, or C protection is required: + \$3.00/hr
- -other Hazardous Waste site: + \$1.00/hr

#### **Effective Dates:**

#### 03/01/2017

Rate	Fringe	Total	
38.75	29.03	67.78	

#### **CLASSIFICATIONS:**

basic, landscape, or railroad track laborer; utility meter installer; flagman; salamander tender; pitman; dumpman; rakers or tampers on cold patch work; wrappers or coaters of pipe; waterproofers; tree cutter, timberman

# **Effective Dates:**

#### 03/01/2017

Rate	Fringe	Total
39.45	29.03	68.48

#### **CLASSIFICATIONS:**

wagon drill or drill master helper; powder carrier; magazine tender; signal man

# NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

## ENTIRE STATE

# HEAVY & GENERAL LABORERS - SOUTH Rates Expiration Date: 02/28/2018

#### **Effective Dates:**

#### 03/01/2017

Rate	Fringe	Total	
39.45	29.03	68.48	

## **CLASSIFICATIONS:**

pipe layer; laser man; conduit or duct line layer; operator of jack hammer, chipping hammer, pavement breaker, concrete cutter, asphalt cutter, sheet hammer, or walk-behind saw cutter; sandblaster; acetylene cutting or burning

#### **Effective Dates:**

## 03/01/2017

Rate	Fringe	Total	
39.45	29.03	68.48	

#### **CLASSIFICATIONS:**

wagon or directional drill operator; drill master

## **Effective Dates:**

#### 03/01/2017

Rate	Fringe	Total	
43.25	29.03	72.28	

## **CLASSIFICATIONS:**

blaster

# **Effective Dates:**

# 03/01/2017

Rate	Fringe	Total
41.00	29.03	70.03

# **CLASSIFICATIONS:**

labor foreman, drill foreman, pipe foreman, grade foreman, finisher foreman, concrete foreman

### **Effective Dates:**

#### 03/01/2017

Rate	Fringe	Total	
42.00	29.03	71.03	

#### **CLASSIFICATIONS:**

general foreman

# NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

ENTIRE STATE

HEAVY & GENERAL LABORERS - SOUTH Rates Expiration Date: 02/28/2018

**Effective Dates:** 

03/01/2017

Rate Fringe Total 39.70 29.03 68.73

# **CLASSIFICATIONS:**

concrete finisher; setter of brick or stone pavers; stone cutter; form setter; manhole, catch basin, or inlet builder; rammer; gunite nozzle man

# NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

#### PIPELINE - MAINLINE TRANSMISSION Rates Expiration Date: 06/03/2018

These rates apply to the following: welding on Transportation Mainline pipe lines (cross-country pipe lines, or any segments thereof, transporting coal, gas, oil, water or other transportable materials, vapors or liquids, including portions of such pipe lines within private property boundaries up to the final metering station or connection - the point where a valve, consumer connection, or town border station divides mainline transmission lines or higher pressure lateral and branch lines from lower pressure distribution systems).

#### PER DIEM PAYMENT:

In addition to the total wage rate paid for each craft, the following per diem (per day) amounts must also be paid - Pipeline Journeyman: \$42.50; Pipeline Journeyman Welder: \$102.50; and Pipeline Helper: \$42.50. Note: in order to receive the per diem payment an employee must work a minimum of 8 hours in a 24 hour period.

#### NOTES:

- Journeymen employed as "stringer bead" welders and journeymen who are regularly employed as "hot-pass" welders shall receive \$1.00 per hour more than other journeymen.
- Welders running "stringer bead" or "hot-pass" on "cutouts" or "tie-ins" on a production basis shall be paid \$1.00 per hour above the journeymen rate.
- Whenever a welder helper is employed using a power buffer or power grinder immediately behind the stringer bead and/or hot-pass welders, and the pipe gang is set on a production basis, the helper shall be paid \$2.00 per hour above the helper rate.
- If back welding is performed inside a pipe under either or both of the following conditions, the welder engaged in the welding will receive \$3.00 per hour above the regular rate for the job only for the days on which such back welding is performed:
  - The employer elects, as a regular procedure, to back weld each line-up. This condition is not intended to apply to occasional back welding performed by the pipe gang to repair a bead, to rectify a "high-lo" condition or wall thickness, etc.
  - A welder is required to back weld a completed weld behind the firing line.
- If the welder helper is required to go inside the pipe for the purpose of brushing, buffing and grinding the weld, they shall receive a wage rate \$1.00 per hour above the regular

helper rate for the days involved.

- Welders working on "hot work" shall be paid \$2.00 per hour above the regular rate for each day engaged in such work. "Hot work' is defined as work on lines in service where there is the danger of fire or explosion.

The regular workday shall be 8 hours, between 8:00 AM and 4:30 PM.

# OVERTIME:

Hours in excess of 8 per day, and all hours on Sundays shall be paid at time and one-half the regular rate, inclusive of benefits. All hours on holidays shall be paid at double the regular rate, inclusive of benefits.

RECOGNIZED HOLIDAYS: New Year's Day, July 4th, Labor Day, Thanksgiving Day, and Christmas Day. Sunday holidays observed the following Monday.

### **Effective Dates:**

06/	'NE	/20	117

Rate	Fringe	Total	
54.58	28.97	83.55	

### **CLASSIFICATIONS:**

Pipeline Journeyman Welder

# NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

# ENTIRE STATE

# PIPELINE - MAINLINE TRANSMISSION Rates Expiration Date: 06/03/2018

**Effective Dates:** 

06/05/2017

Rate Fringe Total 54.58 28.97 83.55

**CLASSIFICATIONS:** 

Pipeline Journeyman

**Effective Dates:** 

06/05/2017

Rate Fringe Total 33.27 19.97 53.24

**CLASSIFICATIONS:** 

Pipeline Helper

# TERRITORY ENTIRE STATE

# NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

#### PIPELINE - GAS DISTRIBUTION Rates Expiration Date: 10/31/2020

These rates apply to the following: welding on gas line distribution systems (that portion of the gas distribution system placed in streets, roads, subways, tunnels, viaducts, highways and easements which serves the users of gas).

#### SHIFT DIFFERENTIALS:

An "irregular" shift may start any time from 5:00 PM to 12:00 AM, Monday through Friday, and shall receive an additional 15% of the regular rate per hour, inclusive of benefits.

#### OVERTIME:

Hours in excess of forty per week, and all hours on Saturdays shall be paid at time and one-half the regular rate, inclusive of benefits. All hours on Sundays and holidays shall be paid at double the regular rate, inclusive of benefits.

RECOGNIZED HOLIDAYS: New Year's Day, Memorial Day, July 4th, Labor Day, Thanksgiving Day, and Christmas Day. Sunday holidays observed the following Monday.

#### **Effective Dates:**

	11/01/201	6	11/05/2017	11/01/2018	11/01/2019
Rate	Fringe	Total	Total	Total	Total
57.58	21.55	79.13	81.38	82.96	84.63

#### **CLASSIFICATIONS:**

Pipeline Journeyman Welder

#### **Effective Dates:**

11/01/2016			11/05/2017	11/01/2018	11/01/2019
Rate	Fringe	Total	Total	Total	Total
57.58	21.55	79.13	81.38	82.96	84.63

#### **CLASSIFICATIONS:**

Pipeline Journeyman

#### **Effective Dates:**

	11/01/201	6	11/05/2017	11/01/2018	11/01/2019
Rate	Fringe	Total	Total	Total	Total
37.16	15.74	52.90	54.42	56.00	57.67

#### **CLASSIFICATIONS:**

Pipeline Helper

# NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

ENTIRE STATE

#### ASPHALT LABORERS- NORTH Rates Expiration Date: 02/28/2018

#### THESE RATES APPLY IN THE FOLLOWING COUNTIES ONLY:

Bergen, Essex, Hudson, Hunterdon, Middlesex, Monmouth, Morris, Passaic, Somerset, Sussex, Union, Warren {For apprentice rates refer to "Laborer - Heavy & General" apprentice rates in any county rate package}

The regular workday consists of 8 hours, starting at 7:00 AM or 8:00 AM.

#### SHIFT DIFFERENTIALS:

- Shifts must start at 3:00 PM, 4:00 PM, 12:00 AM, or 1:00 AM, to be considered shift work, except when the project owner mandates special hours of work in the job specifications, in which case those hours may be considered shift work.
- When such hours are mandated by the project owner, a shift that begins before midnight on Friday and ends on Saturday morning, or that begins at or after 8:00 PM on Sunday and ends on Monday morning may be paid at the shift differential rate.
- Shifts shall receive an additional \$2.50 per hour.

#### OVERTIME:

- Hours in excess of 8 per day, Monday through Friday, or outside of the regular workday that are not shift work, and all hours on Saturdays, shall be paid at time and one-half the hourly rate. All hours on Sundays and holidays shall be paid at double the hourly rate.
- Four 10-hour days may be worked, Monday through Thursday, at straight time, with Friday used as a make-up day for a day lost to inclement weather. If Friday is not a make-up day, all hours on Friday shall be paid at time and one-half the hourly rate.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday. Veterans Day may be substituted for the day after Thanksgiving. However, in the trading of Veterans Day for the day after Thanksgiving, if overtime is worked on Veterans Day, it shall be paid at double the hourly rate.

Hazardous Waste Work:

- -where Level A, B, or C protection is required: + \$3.00/hr
- -other Hazardous Waste site: + \$1.00/hr

#### **Effective Dates:**

#### 03/01/2017

Rate	Fringe	Total
41 00	29 03	70.03

#### **CLASSIFICATIONS:**

Asphalt Foreman

#### **Effective Dates:**

Rate	Fringe	Total
39.70	29.03	68.73

#### **CLASSIFICATIONS:**

Asphalt Screedman

#### **Effective Dates:**

03/01/2017	03	01	/20	017
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Rate	Fringe	Total
39.45	29.03	68.48

#### **CLASSIFICATIONS:**

Asphalt Raker or Lute Man

# NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

ENTIRE STATE

ASPHALT LABORERS- NORTH Rates Expiration Date: 02/28/2018

**Effective Dates:** 

03/01/2017

Rate Fringe Total 38.75 29.03 67.78

**CLASSIFICATIONS:** 

Asphalt Laborer

# NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

#### ENTIRE STATE

#### ELECTRICIAN- UTILITY WORK (NORTH) Rates Expiration Date: 12/03/2017

Electrician-Utility Work (North)

(For apprentice rates refer to Electrician-Utility Work (North) in any county rate package).

These rates apply to work contracted for by the following utility companies:

Public Service Electric & Gas Co. of NJ, GPU Energy, Borough of Madison Electric Department, Sussex Rural

Electric Cooperative, Rockland Utilities, and Butler Municipal Electric Co.

These rates do not apply to work on substations or switching stations.

For Utility work contracted for by a utility company other than those listed above or those listed under "Electrician-

Utility Work (South), see the "Outside Commercial Rates" for the county in which the jobsite is located.

#### \* FOR OUTSIDE COMMERCIAL RATES PLEASE SEE COUNTY RATES

The regular workday is 8 hours, between 6:00 AM and 6:00 PM.

FOR EMERGENCY WORK ONLY: (emergency work is defined as work caused by storm, catastrophe, act of god, and circumstances beyond the control of the employer)-all hours of work shall be paid at double the hourly rate.

#### SHIFT DIFFERENTIALS:

Shift work must run for a minimum of 5 consecutive workdays.

2nd shift (between the hours of 4:30 PM and 1:00 AM): 8 hours of work + 17.3% of the regular rate, inclusive of benefits.

3rd shift (between the hours of 12:30 AM and 9:00 AM): 8 hours of work + 31.4% of the regular rate per hour, inclusive of benefits.

#### OVERTIME:

Hours in excess of 8 per day, or before or after the regular wokday Monday through Friday, that is not shift work, and all hours on Saturday shall be paid at time and one-half the regular rate, inclusive of benefits. All hours on Sundays and holidays shall be paid at double the hourly rate, inclusive of benefits.

Four 10-hour days may worked, at straight time, between 7:00 AM and 6:30 PM, Monday through Thursday.

#### RECOGNIZED HOLIDAYS:

New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day and Christmas Day, or day on which they are legally observed.

#### **Effective Dates:**

1	2	0/	4	/2	0	1	6

Rate	Fringe	Total
52.26	35.01	87.27

#### **CLASSIFICATIONS:**

Chief Lineman

#### **Effective Dates:**

Rate	Fringe	Total
49.31	33.03	82.34

#### **CLASSIFICATIONS:**

Journeyman Lineman

# NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

ENTIRE STATE

#### ELECTRICIAN- UTILITY WORK (NORTH) Rates Expiration Date: 12/03/2017

**Effective Dates:** 

12/04/2016

Rate Fringe Total 49.31 33.03 82.34

**CLASSIFICATIONS:** 

Special License Operator

**Effective Dates:** 

12/04/2016

Rate Fringe Total 48.81 32.70 81.51

**CLASSIFICATIONS:** 

Transit Man

**Effective Dates:** 

12/04/2016

Rate Fringe Total 47.33 31.71 79.04

**CLASSIFICATIONS:** 

Line Equipment Operator

**Effective Dates:** 

12/04/2016

Rate Fringe Total 41.42 27.75 69.17

**CLASSIFICATIONS:** 

Dynamite Man

**Effective Dates:** 

12/04/2016

 Rate
 Fringe
 Total

 58.18
 38.98
 97.16

**CLASSIFICATIONS:** 

General Foreman

**Effective Dates:** 

12/04/2016

 Rate
 Fringe
 Total

 56.70
 37.98
 94.68

**CLASSIFICATIONS:** 

Assistant General Foreman

# NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

ENTIRE STATE

#### ELECTRICIAN- UTILITY WORK (NORTH) Rates Expiration Date: 12/03/2017

**Effective Dates:** 

12/04/2016

Rate Fringe Total 55.22 36.99 92.21

**CLASSIFICATIONS:** 

Line Foreman

**Effective Dates:** 

12/04/2016

Rate Fringe Total 39.94 26.75 66.69

**CLASSIFICATIONS:** 

Straight Light Mechanical Leader

**Effective Dates:** 

12/04/2016

Rate Fringe Total 37.97 25.43 63.40

**CLASSIFICATIONS:** 

Groundman Winch Operator

**Effective Dates:** 

12/04/2016

Rate Fringe Total 37.97 25.43 63.40

**CLASSIFICATIONS:** 

Groundman Truck Operator

**Effective Dates:** 

12/04/2016

Rate Fringe Total 37.47 25.10 62.57

**CLASSIFICATIONS:** 

Straight Light Mechanic

**Effective Dates:** 

12/04/2016

Rate Fringe Total 37.47 25.10 62.57

**CLASSIFICATIONS:** 

Line Equipment Mechanic

# NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

ENTIRE STATE

**ELECTRICIAN- UTILITY WORK (NORTH)** Rates Expiration Date: 12/03/2017

**Effective Dates:** 

12/04/2016

Rate Fringe Total 32.05 21.47 53.52

**CLASSIFICATIONS:** 

Groundman 2nd Year

**Effective Dates:** 

12/04/2016

Rate Fringe Total 29.58 19.81 49.39

**CLASSIFICATIONS:** 

Groundman 1st Year

**Effective Dates:** 

12/04/2016

Rate Fringe Total 48.81 32.70 81.51

**CLASSIFICATIONS:** 

Line Equipment Foreman

# NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

### ENTIRE STATE

#### **ELECTRICIAN- UTILITY WORK (SOUTH)** Rates Expiration Date: 12/02/2017

Electrician-Utility Work (South)

(For apprentice rates refer to Electrician-Utility Work (South) in any county rate package).

These rates apply to work contracted for by the following utility company:

Atlantic City Electric.

These rates do not apply to work on substations or switching stations.

For utility work contracted for by a utility company other than the one listed above or those listed under "Electrician-

Utility Work (North), see the "Outside Commercial Rates" for the county in which the jobsite is located.

#### \* FOR OUTSIDE COMMERCIAL RATES PLEASE SEE COUNTY RATES

The regular workday is 8 hours, between 7:00 AM and 4:30 PM.

FOR EMERGENCY WORK ONLY: (emergency work is defined as work caused by storm, catastrophe, act of god, and circumstances beyond the control of the employer)- all hours of work shall be paid at double the hourly rate.

#### SHIFT DIFFERENTIALS:

Shift work must run for a minimum of 5 consecutive workdays.

When two (2) or three (3) shifts are worked the following shall apply:

1st shift (between the hours of 8:00 AM and 4:30 PM)

2nd shift (between the hours of 4:30 PM and 12:30 AM): 8 hours of work + 10% of the regular rate of pay for 7.5 hours worked.

3rd shift (between the hours of 12:30 AM and 8:00 AM): 8 hours of work + 15% of the regular rate of pay for 7 hours worked.

#### OVERTIME:

Hours in excess of 8 per day, or before or after the regular wokday Monday through Friday, that is not shift work, and all hours on Saturday shall be paid at time and one-half the regular rate. All hours on Sundays and Holidays shall be paid double the hourly rate.

Four 10-hour days may be worked, at straight time, between 6:00 AM and 6:00 PM, Monday through Thursday with Friday used as a make-up day.

#### RECOGNIZED HOLIDAYS:

New Year's Day, Memorial Day, July 4th, Labor Day, Veterans' Day, Thanksgiving Day and Christmas Day or on days celebrated.

#### WORKING RULES:

There shall be a Foreman in charge of each work crew. No crews are to exceed twelve (12) men, including Foremen.

There shall be a General Foreman designated for transmission work when three (3) or more crews are on the same job and for distribution work where there are are more than twenty (20) employees on site.

A small job crew shall consist of five (5) or less employees, one (1) of the Journeyman Linemen in the crew shall be designated as a Small Job Foreman.

Work performed from ladders and/or mechanical lift equipment shall be the work of Linemen and/or Apprentices.

On new construction, fitting and framing poles, towers or structures may be done by Journeymen and/or Apprentices. Groundmen may assist, but may not perform any work which would be performed by Linemen if assembled in the air.

There shall be a Journeyman Lineman in each pole setting, erection, grounding, wire and cable-pulling crew of more than three (3) men.

#### **Effective Dates:**

#### 12/04/2016

Rate	Fringe	Total
58.38	45.19	103.57

#### **CLASSIFICATIONS:**

General Foreman

# NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

ENTIRE STATE

### ELECTRICIAN- UTILITY WORK (SOUTH) Rates Expiration Date: 12/02/2017

**Effective Dates:** 

12/04/2016

Rate Fringe Total 52.00 41.37 93.37

**CLASSIFICATIONS:** 

Foreman

**Effective Dates:** 

12/04/2016

Rate Fringe Total 49.26 39.74 89.00

**CLASSIFICATIONS:** 

Small Job Foreman

**Effective Dates:** 

12/04/2016

Rate Fringe Total 45.61 37.54 83.15

**CLASSIFICATIONS:** 

Heavy Equipment Operator

**Effective Dates:** 

12/04/2016

Rate Fringe Total 45.61 37.54 83.15

**CLASSIFICATIONS:** 

Cable Splicer

**Effective Dates:** 

12/04/2016

Rate Fringe Total 45.61 37.54 83.15

**CLASSIFICATIONS:** 

Journeyman Lineman

**Effective Dates:** 

12/04/2016

Rate Fringe Total 45.61 37.54 83.15

**CLASSIFICATIONS:** 

Journeyman Welder

# NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

**ENTIRE STATE** 

### ELECTRICIAN- UTILITY WORK (SOUTH) Rates Expiration Date: 12/02/2017

**Effective Dates:** 

12/04/2016

Rate Fringe Total 45.61 37.54 83.15

**CLASSIFICATIONS:** 

Journeyman Painter

**Effective Dates:** 

12/04/2016

Rate Fringe Total 36.49 32.08 68.57

**CLASSIFICATIONS:** 

Light Equipment Operator

**Effective Dates:** 

12/04/2016

Rate Fringe Total 31.93 29.37 61.30

**CLASSIFICATIONS:** 

Groundman Truck Driver

**Effective Dates:** 

12/04/2016

Rate Fringe Total 29.65 27.99 57.64

**CLASSIFICATIONS:** 

Groundman 3rd Year

**Effective Dates:** 

12/04/2016

Rate Fringe Total 27.37 26.66 54.03

**CLASSIFICATIONS:** 

Groundman 2nd Year

**Effective Dates:** 

12/04/2016

Rate Fringe Total 25.09 25.29 50.38

**CLASSIFICATIONS:** 

Groundman 1st Year

# NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

ENTIRE STATE

ELECTRICIAN- UTILITY WORK (SOUTH) Rates Expiration Date: 12/02/2017

**Effective Dates:** 

12/04/2016

Rate Fringe Total 20.07 22.27 42.34

**CLASSIFICATIONS:** 

Flagman

# TERRITORY ENTIRE STATE

# NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

#### HEAVY & GENERAL LABORERS- NEW TRANS HUDSON TUNNELS Rates Expiration Date: 02/28/2018

\*\*THESE RATES APPLY TO CONSTRUCTION ON NEW TRANS HUDSON TUNNELS ONLY\*\*

{For apprentice rates refer to "Laborer - Heavy & General" apprentice rates in any county rate package}

The regular workday consists of 8 hours, starting at 7:00 AM or 8:00 AM.

#### SHIFT DIFFERENTIALS:

- Shifts must start at 3:00 PM, 4:00 PM, 12:00 AM, or 1:00 AM, to be considered shift work, except when the project owner mandates special hours of work in the job specifications, in which case those hours may be considered shift work.
- When such hours are mandated by the project owner, a shift that begins before midnight on Friday and ends on Saturday morning, or that begins at or after 8:00 PM on Sunday and ends on Monday morning may be paid at the shift differential rate.
- Shifts shall receive an additional \$2.50 per hour.

#### OVERTIME:

- Hours in excess of 8 per day, Monday through Friday, or outside of the regular workday that are not shift work, and all hours on Saturdays, shall be paid at time and one-half the hourly rate. All hours on Sundays and holidays shall be paid at double the hourly rate.
- Four 10-hour days may be worked, Monday through Thursday, at straight time, with Friday used as a make-up day for a day lost to inclement weather. If Friday is not a make-up day, all hours on Friday shall be paid at time and one-half the hourly rate.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday. Veterans Day may be substituted for the day after Thanksgiving. However, in the trading of Veterans Day for the day after Thanksgiving, if overtime is worked on Veterans Day, it shall be paid at double the hourly rate.

#### Hazardous Waste Work:

- -where Level A, B, or C protection is required: + \$3.00/hr
- -other Hazardous Waste site: + \$1.00/hr

#### **Effective Dates:**

#### 03/01/2017

Rate	Fringe	Total
62.25	29.03	91.28

#### **CLASSIFICATIONS:**

Walking Boss & Superintendent

#### **Effective Dates:**

#### 03/01/2017

Rate	Fringe	Total
61.80	29.03	90.83

#### **CLASSIFICATIONS:**

Heading Foreman, Shaft Foreman, Rod Foreman, Electrical Foreman, Rigging Foreman

# NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

#### ENTIRE STATE

#### HEAVY & GENERAL LABORERS- NEW TRANS HUDSON TUNNELS Rates Expiration Date: 02/28/2018

#### **Effective Dates:**

#### 03/01/2017

Rate	Fringe	Total
61.05	29.03	90.08

#### **CLASSIFICATIONS:**

Iron Foreman, Caulking Foreman, Form Foreman, Cement Finishing Foreman, Concrete Foreman, Track Foreman, Clean-up Foreman, Grout Foreman

#### **Effective Dates:**

#### 03/01/2017

Rate	Fringe	Total
64.80	29.03	93.83

#### **CLASSIFICATIONS:**

Blaster

#### **Effective Dates:**

#### 03/01/2017

Rate	Fringe	Total
60.23	29.03	89.26

#### **CLASSIFICATIONS:**

Top Labor Foreman

#### **Effective Dates:**

#### 03/01/2017

Rate	Fringe	Total
59.70	29.03	88 73

#### **CLASSIFICATIONS:**

Skilled Men (including Caulker, Powder Carrier, all other skilled men)

Skilled Men (including Miner, Drill Runner, Iron Man, Conveyor Man, Maintenance Man, Safety Miner, Rigger, Block Layer, Cement Finisher, Rod Man)

#### **Effective Dates:**

#### 03/01/2017

Rate	Fringe	Total
59.48	29.03	88.51

### **CLASSIFICATIONS:**

Semi-Skilled Men (including Bell or Signal Man top or bottom, Form Worker & Mover, Concrete Worker, Shaft Man, Tunnel Laborer, Caulker's Helper, all other semi-skilled)

Semi-Skilled Men (including Miner's Helper, Chuck Tender, Track Man, Nipper, Brake Man, Derail Man, Cable Man, Hose Man, Gravel Man, Form Man)

TERRITORY
ENTIRE STATE

# NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

## HEAVY & GENERAL LABORERS- NEW TRANS HUDSON TUNNELS Rates Expiration Date: 02/28/2018

**Effective Dates:** 

03/01/2017

 Rate
 Fringe
 Total

 58.73
 29.03
 87.76

#### **CLASSIFICATIONS:**

All others (including Powder Watchman, Change House Attendant, Top Laborer, Job Steward)

# **TECHNICAL SPECIFICATIONS FOR**

# **GALLOPING HILL GOLF COURSE**

# **IMPROVEMENTS TO HOLE 6**

PROJECT SPECIFIC CONDITIONS	1 – 4
PRE-CONSTRUCTION PREPARATION	1-1 – 1-4
TOPSOILING, EARTHWORK AND ROUGH GRADING	2-1 – 2-5
FEATURE CONSTRUCTION	3-1 – 3-14
FEATURE, FAIRWAY AND ROUGH AREA SEEDBED PREPARATION	4-1 <i>–</i> 4-5
GRASSING	5-1 – 5-5

## **GALLOPING HILL GOLF COURSE**

# **IMPROVEMENTS TO HOLE 6**

# **PROJECT SPECIFIC CONDITIONS**

## 1) MATERIAL'S TO BE PROVIDED BY THE COUNTY OF UNION

The County of Union will provide gravel, green's mix, bunker sand, all turf grass, topsoil and clean fill material to the Contractor for use on-site for the proposed improvements. This material will be located at the maintenance yard or another designated location as identified by the Owner. It will be the Contractor's responsibility to transport the available, supplied material to the proposed improvements shown on the site plans. The cost of transporting and placing the available material shall be included in the various bid items as shown with the Bid Sheets of the Specifications and installed as shown within the construction details or outlined in the technical specifications.

# 2) PRESERVATION OF VEGETATION

The Contractor shall take all necessary precautions to preserve and protect all existing vegetation that is not to be removed and which does not interfere with the work, as well as all barrier fencing required by the Owner's representative to protect the above noted vegetation.

The Contractor shall only remove trees as specified by the Designer or Owner's representative. Limbs or branches of trees to remain, which are broken or otherwise damaged during contract performance, or by the careless operation of equipment, shall be clean cut and painted with a tree-pruning compound as directed in the contract documents.

# 3) RECORD DRAWINGS

Contractor shall keep one Record Copy of all plans, sketches and technical specifications at the site. Record Copy shall be updated daily, in order and accurately annotated to show all work completed and changes made during the construction process.

# 4) CONSTRUCTION ROADS

The location of all construction and access roads shall be approved by the Owner's representative prior to the creation and use of said roads by Contractor. Upon the completion of use of said roads, the Contractor shall rip, loosen, regrade, amend and/or otherwise prepare and/or grass all construction and access roads to a condition deemed acceptable by Owner's representative and Designer.

# 5) PROJECT MANAGEMENT

The following outlines the general duties of the Golf Course Contractor with respect to project administration and supervision. Such duties shall include, but not necessarily be limited to the items listed below.

#### I. GENERAL MATTERS

- A. Monthly progress and budget meetings; attendance and preparation of related paperwork, including a Monthly Budget Report.
- B. Weekly construction meetings: attendance and presentation of progress from prior week, forecast for upcoming week, current and projected staffing levels, expenditures, construction schedules and forecasts regarding the upcoming week.
- C. Permit inspection meetings by local, state and federal authorities: attendance and compliance with all inspections and regulations.
- D. Coordination and scheduling of work performed by subcontractors and local utility companies.

#### II. FIELD MEASUREMENTS AND REPORTS

- A. Preparation of forms and paperwork required by the Owner or Engineer for sign-off of work completed.
- B. Weekly field measurements of green, tee and bunker sizes, areas seeded, sod installed, etc. and all other budget-related line items to help ensure compliance with design, budget and completion goals.
- C. All "As-Built" information recorded for the previous month shall be provided with the current month's payment application, as a condition of approval and payment.
- D. Maintenance of up-to-date lists reflecting the time and costs involved in actual work completed on each line item in the Budget. The format for such lists will be subject to the approval of the Designer and the Owner's representative. The lists will be incorporated in the Monthly Budget Report for each monthly Budget meeting.
- E. Monthly estimates of the time and costs required for the completion of each line item in the Budget. These lists will also be incorporated in the Monthly Budget Report for each monthly Budget

meeting. They will be utilized by the Owner and the Designer to initiate possible additions or deletions. All totals must be accurate at the time of submittal.

- F. Measurements will be made based on the units used in the Scope of Work Form for each line item. For example, greens will be in square feet, drainage pipe will be in linear feet, bulk earthwork will be in cubic yards, etc.
- G. The Contractor will be responsible for the accuracy of all numbers submitted in the Monthly Budget Report. Owner reserves the right to verify Contractor's measurements.

# 6) MOBILIZATION

Mobilization / Demobilization shall consist of the cost of initiating the contract, including preparatory work and operations, necessary for the movement of personnel, equipment, supplies and incidentals to the Project site, and other work performed or costs incurred prior to beginning work and completing work. In any case of inconsistencies with the N.J.A.C. 7:14-2.9, the NJ Administrative Code shall govern.

Payment for mobilization / demobilization will be made on a lump sum basis, which price shall include the cost of initiating the contract, regardless of the fact that the Contractor may have, for any reason, shut down his work on the Project or moved equipment away from the Project and back again, in accordance with Standard Specifications Section.

Payment will be made in accordance with the following schedule:

- ➤ When 5% of the work is completed 25% of the amount bid for mobilization or 2.5% of the Total Contract Price, whichever is less, will be paid
- ➤ When 10% of the work is completed 50% of the amount bid for mobilization or 5% of the Total Contract Price, whichever is less, will be paid
- ➤ When 15% of the work is completed 75% of the amount bid for mobilization or 7.5% of the Total Contract Price, whichever is less, will be paid
- ➤ When 20% of the work is completed 100% of the amount bid for mobilization or 10% of the Total Contract Price, whichever is less, will be paid
- upon completion of all work on the project, payment for the amount bid for mobilization in excess of 10% of the Total Contract Price will be made.
- the percentage of work completed shall be the total of payments earned compared to the Total Contract Price. The total of payments earned excludes the amount paid for this item and the amount paid for materials furnished but not incorporated into the work in accordance with Subsection 109.06, as shown on the monthly estimates of the approximate quantities of work done, prepared in accordance with Subsection 109.05.

The lump sum price bid for mobilization / demobilization is limited to the following maximum amounts:

Original Contract Amount (Including Mobilization)

For More Than	To and Including	Max. Amount for Item of Mobilization
\$0	100,000	\$3,000
·	,	
100,000	500,000	15,000
500,000	1,000,000	30,000
1,000,000	2,000,000	60,000
2,000,000	3,000,000	90,000
3,000,000	4,000,000	120,000
4,000,000	5,000,000	125,000
5,000,000	6,000,000	150,000
6,000,000	7,000,000	175,000
7,000,000	10,000,000	200,000
10,000,000		2.5% of amount bid

Payment for Mobilization/Demobilization will be made on a lump sum basis at the price bid for the item MOBILIZATION in the Proposal which price shall include the cost of, any and all materials, all labor and equipment and all else necessary and incidental thereto.

## **GALLOPING HILL GOLF COURSE**

## **IMPROVEMENTS TO HOLE 6**

# **TECHNICAL SPECIFICATIONS**

### **SECTION ONE**

# PRE-CONSTRUCTION PREPARATION

## 1-01 **SCOPE**

Under this Section, the Contractor shall complete all operations necessary to prepare designated portions of the Golf Course for subsequent construction activities.

Work under this Section shall include, but not be limited to, the installation of all required erosion control devices, as designed and specified by the Owner's engineer, all required chemical applications (i.e. Round Up®), all required rototilling and / or stripping of existing turf, including removal, transport and disposal of all resulting debris at an on-site location to be determined by the Owner's representative, as well as the continuous implementation of necessary dust control measures.

The Contractor, or subcontractor, selected to supply, handle and apply the specified Round Up® products, must be properly licensed and have prior experience with the storage, use and application of these products, to insure the related work is completed in accordance with all local, state and federal laws and ordinances.

The Contractor shall accomplish all related work as shown on the plans and/or sketches, as described in these specifications and as otherwise directed by the Designer or Owner's representative.

All work under this Section shall be accomplished to the complete satisfaction of the Designer and Owner's representative.

#### **1-02 INTENT**

Work under this Section includes all operations required to prepare designated portions of the Golf Course for subsequent construction activities.

# 1-03 WORK AREA

The area of work under this Section shall include all designated areas of the Golf Course, necessary circulation routes and other non-play areas designated by the

Designer or Owner's representative.

## 1-04 SUBCONTRACTORS

When submitting a final bid, Contractor shall identify any proposed subcontractors for subsequent approval by Designer and Owner's representative.

The Contractor, or subcontractor, selected to supply, handle and apply the specified Round Up® products, must be properly licensed and have prior experience with the storage, use and application of these products, to insure the related work is completed in accordance with all local, state and federal laws and ordinances.

## 1-05 PRE-CONSTRUCTION MEETING

The Owner's representative, Engineer, Designer and Contractor shall meet on site, prior to any work under this Section, to review all of the proposed work.

## 1-06 PRIOR WORK

#### A. Permits & Approvals

The Owner shall have previously obtained all permits and approvals necessary to complete the defined scope of work. Contractor shall conduct all operations in accordance with the provisions of said permits and approvals.

## B. Utilities & Infrastructure

The Owner shall have previously marked the locations of any existing utilities and other buried infrastructure components (e.g. drainage, irrigation, etc.), prior to work under this Section.

Prior to commencement of work under this Section, the Owner shall have previously removed any sod, irrigation components or other equipment / materials it desires to save.

## C. Tree & Stump Removal

The Owner shall have previously removed any designated trees, shrubs or other vegetation necessary to complete the defined scope of work. Work shall include the complete removal or grinding of all stumps.

## 1-07 EROSION CONTROL

The Contractor shall install all required erosion control devices, as designed and specified by the Owner's engineer.

The Owner's representative or engineer, shall confirm all erosion control devices

are properly installed.

The Contractor shall be responsible for the on-going and continuous maintenance of all erosion control devices throughout construction.

## 1-08 CHEMICAL TREATMENT OF TURF AREAS TO BE DISTURBED

As directed by the Owner's representative in the field, the Contractor shall apply all necessary Round Up® chemicals, in designated areas, to facilitate subsequent construction activities.

The Contractor, or subcontractor, selected to supply, handle and apply the specified Round Up® chemicals, must be properly licensed and have prior experience with the storage, use and application of these products, to insure the related work is completed in accordance with all local, state and federal laws and ordinances.

As directed by the Owner's representative in the field, the Contractor shall apply Round Up® at a rate of 2 ounces per 1000 square feet to all designated fairway areas throughout the Golf Course.

As directed by the Owner's representative in the field, the Contractor shall apply Round Up® at a rate of 2 ounces per 1000 square feet to all designated, non-fairway areas, throughout the Golf Course, to be disturbed.

## 1-09 ROTOTILLING AND / OR TURF REMOVAL

Subsequent to the application of Round Up® on all designated, fairway and non – fairway areas throughout the Golf Course, and Owner's confirmation of the resulting effective treatment, the Contractor shall employ suitable equipment and complete all necessary rototilling of existing turf, to enable subsequent construction activities.

It is anticipated the desired results will require multiple passes across a given area with the proper rototilling equipment. Contractor shall continue rototilling of all areas until accepted by the Owner's representative.

As an Owner approved alternative to rototilling, the Contractor shall use small sod cutting machines, or other methods approved by the Designer or Owner's representative, to strip or otherwise remove all designated existing turf. All turf stripped from a designated area shall be collected, transported and disposed of in an on-site location determined by the Owner's representative.

## 1-10 STONE REMOVAL

All stone/rock over two - inches (2") in diameter and any existing stone/rock stockpiles or loose stone/rock unearthed during construction, shall be removed

and buried in designated areas on the Owner's property, as approved by the Owner's representative.

All stone/rock that is buried shall be covered with a minimum of two - feet (2') of clean fill. Cover fill shall be compacted to fill all voids and to eliminate all future settlement.

## 1-11 HAUL ROADS

All construction and access roads shall be approved by The Owner's representative. Prior to the completion of work under this Section, the Contractor shall re-grade, loosen and/or otherwise prepare all haul roads to a condition deemed acceptable by the Designer and/or Owner's representative.

# 1-12 CONTRACTOR'S RESPONSIBILITIES

The Contractor shall take all necessary precautions to prevent any damage to existing trees, foliage, plant material and other property of the Owner outside the area of work under this Section.

The appearance and conduct of the Contractor's personnel and the movement of equipment and other vehicles on site shall be in strict adherence with Owner's requirements.

The Contractor shall immediately inform the Designer, Owner's representative and the Engineer of any unforeseen conditions that may affect the scope of work under this Section.

#### 1-13 **OTHER**

The Contractor shall remove all debris and other foreign materials prior to leaving the job each day. The Contractor's equipment shall be stored in a designated location each night as determined by the Owner's representative.

# 1-14 PAYMENT

Payment for all authorized and verified work under this Section shall be in accordance with the terms described in the contractual agreement between the Owner and Contractor.

## **GALLOPING HILL GOLF COURSE**

### **IMPROVEMENTS TO HOLE SIX**

## **TECHNICAL SPECIFICATIONS**

### **SECTION TWO**

## TOPSOILING, EARTHWORK AND ROUGH GRADING

### **2-01 SCOPE**

# AS REFERENCED HEREIN, THE TERM "GOLF COURSE" SHALL BE DEFINED TO INCLUDE THE EIGHTEEN - HOLE GOLF COURSE.

Under this Section, the Contractor shall perform any necessary de-watering, strip and stockpile all existing topsoil in areas to be disturbed, all borrow and fill operations, and all cut and fill operations.

The Contractor shall provide all required dust control services.

The Contractor shall accomplish all related work as shown on the plans and/or sketches, as described in these specifications and as otherwise directed by the Designer or Owner's representative. All Golf Course excavation shall be considered "Unclassified Excavation".

All work under this Section shall be accomplished to the complete satisfaction of the Designer and Owner's representative.

#### **2-02 INTENT**

Work under this Section includes all operations required to strip and stockpile all suitable topsoil, and provide all suitable, "Unclassified Excavation" necessary for the construction of the Golf Course and out of play areas.

The Contractor shall strip and stockpile existing topsoil throughout disturbed areas of the Golf Course and all other areas designated by the Owner's representative.

The Contractor shall generate, transport and place all borrow and cut material, in required fill areas, as designated on the golf course grading plan.

# 2-03 WORK AREA

The area of work under this Section shall include all designated areas of the Golf Course, necessary circulation routes and other non-play areas designated by the

Designer or Owner's representative.

## 2-04 SUBCONTRACTORS

When submitting a final bid, Contractor shall identify any proposed subcontractors for subsequent approval by Designer and Owner's representative.

# 2-05 PRECONSTRUCTION MEETING

The Owner's representative, Engineer, Designer and Contractor shall meet on site, prior to any work under this Section, to review all of the proposed work.

## 2-06 PRIOR WORK

# A. Permits & Approvals

The Owner shall have previously obtained all permits and approvals necessary to complete the defined scope of work. Contractor shall conduct all operations in accordance with the provisions of said permits and approvals.

## B. Utilities & Infrastructure

The Owner shall have previously marked the locations of any existing utilities and other buried infrastructure components (e.g. drainage, irrigation, etc.), prior to work under this Section.

# C. Erosion Control

Installation and continuous maintenance of all required erosion and/or sediment control devices are the responsibility of the Contractor. Owner's Engineer shall be responsible for the design and installation approval of the above.

## D. Tree & Stump Removal

The Owner shall have previously removed any designated trees, shrubs or other vegetation necessary to complete the defined scope of work. Work shall include the complete removal or grinding of all stumps.

## E. Pre-Construction Preparation

As noted in Section One of the Specifications, the Contractor shall have previously completed all necessary Pre-construction activities.

Prior to commencement of work under this Section, the Contractor shall have previously removed any sod, irrigation components or other equipment / materials to be saved, reused or reset.

### 2-07 STRIP & STOCKPILE TOPSOIL

### A. General

Wherever suitable, existing topsoil is found in the designated work areas of the Golf Course, all topsoil shall be preserved by stripping and stockpiling. The intent is to conserve all topsoil and insure very little is buried or otherwise wasted by grading operations.

## B. Quality

If, in the opinion of the Designer or Owner's representative, surface soil does not constitute good topsoil, it need not be stripped.

# C. Stockpiles

All topsoil stripped from the designated areas shall be stockpiled at suitable locations throughout the site, as designated by the Owner's representative. Topsoil stockpiles shall receive no compaction other than that resulting from the equipment used to place the topsoil. Stockpile areas shall have necessary soil erosion measures installed in accordance with construction plans.

## 2-08 BORROW & CUT AREAS - "UNCLASSIFIED EXCAVATION"

## A. Intent

Proposed areas of borrow and cut have been identified on the Golf Course Grading Plan

### B. Source

Source of unclassified fill for all feature, fairway and rough construction shall be material generated by cut operations.

# C. Use

Material resulting from areas of borrow and cut throughout the Golf Course, is to be used for necessary filling throughout the Golf Course and designated out of play areas.

## D. Quality

All "Unclassified Excavation" material used for feature, fairway and rough construction shall be clean, free of unstable organic matter, roots or other debris that might cause settlement or otherwise prevent shaping of Golf Course features, fairways and roughs.

The Contractor shall collect and dispose of all drainpipe, irrigation components, or other non-vegetative debris encountered during the earthwork operation, in an on-site location designated by the Owner's representative.

## 2-09 TRANSPORT & PLACEMENT OF UNCLASSIFIED EXCAVATION

## A. Intent

The purpose of this operation is to transport and place suitable fill material throughout the Golf Course, as well as any out of play areas designated by the Owner's representative.

# B. <u>Placement</u>

Placement of all "Unclassified Excavation", throughout the Golf Course and all out of play areas, shall provide complete surface drainage and contours suitable for subsequent final shaping.

# C. Compaction

To facilitate subsequent shaping operations, "Unclassified Excavation" shall receive no compaction other than that caused by the use of normal earthmoving equipment during its placement.

# 2-10 STONE REMOVAL

All stone/rock over two - inches (2") in diameter and any existing stone/rock stockpiles or loose stone/rock unearthed during construction, shall be removed and buried in designated areas on the Owner's property, as approved by the Owner's representative.

All stone/rock that is buried shall be covered with a minimum of two - feet (2') of clean fill. Cover fill shall be compacted to fill all voids and to eliminate all future settlement.

# 2-11 HAUL ROADS

All construction and access roads shall be approved by the Owner's representative. Prior to the completion of work under this Section, the Contractor shall re-grade, loosen and/or otherwise prepare all haul roads to a condition deemed acceptable by the Designer and/or Owner's representative.

## 2-12 CONTRACTOR'S RESPONSIBILITIES

The Contractor shall take all necessary precautions to prevent any damage to existing trees, foliage, plant material and other property of the Owner outside the

area of work under this Section.

The appearance and conduct of the Contractor's personnel and the movement of equipment and other vehicles on site shall be in strict adherence with Owner's requirements.

The Contractor shall immediately inform the Designer, Owner's representative and the Engineer of any unforeseen conditions that may affect the scope of work under this Section.

# 2-13 **OTHER**

The Contractor shall remove all debris and other foreign materials prior to leaving the job each day.

The Contractor's equipment shall be stored in a designated location each night as determined by the Owner's representative.

# 2-14 PAYMENT

Payment for all authorized and verified work under this Section shall be in accordance with the terms described in the contractual agreement between the Owner and Contractor.

### GALLOPING HILL GOLF COURSE

## **IMPROVEMENTS TO HOLE 6**

## **TECHNICAL SPECIFICATIONS**

## **SECTION THREE**

### **FEATURE CONSTRUCTION**

# 3-01 <u>SCOPE</u>

Under this Section, the Contractor shall shape and construct selected tees, bunkers and surrounds. Contractor shall also perform the leveling of tees and the expansion of green surfaces in selected locations.

Work under this Section shall also include the installation of supplemental drainage and the respreading of all topsoil.

The Contractor shall also provide all required dust control measures.

All work shall be completed in accordance with the sketches, specifications and directions of the Designer.

All work under this Section shall be accomplished to the complete satisfaction of the Designer and Owner's representative.

# 3-02 <u>INTENT</u>

The work under this Section includes all operations required to shape and construct all designated bunkers, and and respread all topsoil across designated areas, all in accordance with the Designer's sketches, specifications and field directions. When complete, the contours, rolls and hollows of all areas of the Golf Course shall be shaped to blend harmoniously with surrounding contours.

Preparation of the sand bunkers shall include all clean out, removal of all existing sand, drainpipe and gravel backfill, all shaping, edging, tamping, liner and drainage installation, the installation, compaction and smoothing of the specified sand, as well as any other operations necessary to prepare each bunker for play.

# 3-03 WORK AREA

The area of work under this Section shall include all designated bunker areas, fairways, roughs and necessary circulation routes of the Golf Course, as well as any out of play areas designated by the Designer or Owner's representative.

# 3-04 SUBCONTRACTORS

When submitting a final bid, Contractor shall identify any proposed subcontractors for subsequent approval by the Designer and the Owner's representative.

## 3-05 PRECONSTRUCTION MEETING

The Owner's representative, Engineer, Designer, Contractor and any subcontractors shall meet on site, prior to any work under this Section, to review all of the proposed work.

# 3-06 PRIOR WORK

### A. Erosion Control

Maintenance of all previously installed erosion and sediment control devices is the responsibility of the Contractor. Owner's engineer shall be responsible for the design and installation approval of the above.

## B. Pipe Drainage

It is anticipated that any required pipe drainage and drop inlet structures will be installed, as per the Engineer's plans and specifications, prior to, or in conjunction with work under this Section.

## C. Earthwork

All topsoil stripping and stockpiling and all borrow and fill of earthwork shall be completed under the previous section.

## 3-07 GREEN & TEE CONSTRUCTION: MATERIALS - Not in Contract

The Owner shall be solely responsible for insuring all tee construction materials are procured and prepared in strict accordance with U.S.G.A. recommendations in effect at the bid date. The Owner shall also be responsible for the random testing, including all shipping and laboratory testing expenses associated with said testing, of the various materials as they are delivered to the project site, in order to insure delivered materials comply with laboratory recommendations.

Prior to purchasing any materials, the Owner shall submit for analysis, to the testing

laboratory listed below\*, samples of the gravel, greensmix proposed for incorporation in the construction of the tees. All of the above materials shall be submitted to the selected testing lab simultaneously.

The Owner shall be responsible for paying all shipping and laboratory fees associated with the above material testing. Upon receipt of the test results and recommendations, the Owner shall make copies available to the Designer for their approval.

Hummel & Co. Mr. Norm Hummel 35 King Street Trumansburg, NY 14886 Phone: (607) 387-5694

Fax: (607) 387-9499

E-mail: soildr1@zoom-dsl.com

## A. Underdrains

ADS N-12, four - inch (4") perforated underdrains (without the filter cloth sock), or Designer approved equal, shall be installed beneath the surfaces of all tees.

ADS N-12, four - inch (4") solid pipe, or Designer approved equal, shall be connected to the perforated pipe at the outside edge of the playing surface of all tees and continue to a point of final discharge designated by the Owner's representative.

At a point designated by the Designer or Owner's representative along the solid pipe "outfall" drain of the green, an "observation port" shall be created by installing a four - inch (4") tee coupling & solid vertical riser pipe. The riser pipe shall be extended to surface grade and capped with a standard drain cover.

Drainage trenches containing solid pipe shall be backfilled with native soil, free of any rock greater than two - inches (2") in size.

## B. Gravel

All material used for subsurface drainage and underdrain trench backfilling shall be a 3/8" diameter, washed gravel, laboratory tested and approved. Gravel shall be clean and free from clay and silt particles that might impede drainage.

# C. Greensmix

Greensmix for use in the seedbed mixture of the surfaces of all tees and greens, shall be a laboratory tested and approved to USGA specifications.

# D. <u>Copper Wire</u>

#14 copper wire, or Designer approved equal, shall be installed in each subsurface drainage trench adjacent to all "Main" and "Smile" drain lines. Wire shall continue along the main outfall line(s), to the point of final discharge.

## 3-08 SAND BUNKER MATERIALS

## A. <u>Supplemental Drainage Components</u>

## 1. Pipe & Backfill Material:

All solid and perforated drainpipe (without a filter cloth sock) installed within the fairways, roughs and other designated areas, shall be ADS N-12, or Designer approved equal.

Supplemental drainage trenches containing perforated pipe (without a filter cloth sock) shall be completely backfilled with the laboratory approved, 3/8" washed gravel used in the construction of all tees.

Supplemental drainage trenches containing solid pipe shall be backfilled with native soil, free of any rock greater than two – inches (2") in size.

### 2. Gravel:

All material used for backfilling of perforated underdrains (without a filter cloth sock) shall be the laboratory approved, 3/8" washed gravel used in the construction of all tees.

# 3. <u>Drain Basins:</u>

A. <u>Basin Structures</u>: All drain basins within the Golf Course and any other designated, out of play areas shall be twelve - inch (12"), perforated, Nyoplast® drain basins, as manufactured by ADS, or Designer approved equal.

## B. <u>Ductile Iron Grates:</u>

All Drain Basins shall include a twelve - inch (12"), square, ductile iron pedestrian grate (i.e. not domed) and all adaptors and reducers necessary to connect the drain basin with the various sized outfall pipe(s).

C. <u>Stone:</u> All material used for backfilling the perforated, Nyoplast® basins shall be a clean, oversized stone (similar to a #57 stone), free of any silt or clay particles that might impede drainage.

### B. Sand Bunkers

1. <u>Pipe:</u> ADS N-12, four - inch (4") perforated underdrains (without a filter cloth sock), or Designer approved equal, shall be installed beneath the playing surface of all sand bunkers throughout the Golf Course.

ADS N-12 four - inch (4") solid drainpipe, or Designer approved equal, shall be connected to the perforated pipe at the outside edge of the playing surface of each bunker and continue to a point of final discharge.

Drainage trenches containing solid pipe shall be backfilled with native soil, free of any rock greater than two - inches (2") in size.

- 2. <u>Gravel:</u> All material used for underdrain trench backfilling of perforated pipe shall be the laboratory approved, 3/8" diameter, washed pea gravel used in the construction of all tees.
- 3. <u>Bunker Liner:</u> **ST410 Polymer -** As manufactured by Better Billy Bunker, Inc.

## 4. Bunker Sand:

The Owner shall supply the bunker sand for use by the Contractor. The Owner shall be responsible for paying all shipping and laboratory fees associated with the analysis and final recommendations. It is anticipated that the sand shall be from Valley Forge Buff Bunker Sand.

Tifton Physical Soil Testing Laboratory, Inc. Mr. Powell T. Gaines 1412 Murray Avenue Tifton, GA 31794

Phone: 229) 382-7292 Fax: (229) 382-7992

E-mail: pgaines@friendlycity.net

Upon receipt of the test results, Owner shall make copies available to the Designer. Following receipt of the test results, the Designer and Owner's representative shall provide final confirmation of the sand to be used in all bunkers throughout the Golf Course.

As the selected sand is delivered to the site, the Contractor shall be responsible for obtaining and testing random samples to insure the laboratory's recommendations are being achieved. All samples shall be pulled from the center of each pile. The Contractor shall be responsible for paying all shipping and laboratory fees associated with the above testing.

## 3-09 METHOD: SUPPLEMENTAL DRAINAGE

As directed by the Designer, Owner's representative and/or Engineer, the Contractor shall install all required supplemental drainpipe and drain basins throughout the Golf Course and any designated, irrigated or non-irrigated areas.

The location and size of all required supplemental drainage components shall be determined by the Designer, Engineer and Owner's Representative.

All supplemental drainage shall discharge into lakes, drop inlets, swales or out of play areas designated by the Designer, Owner's representative or Engineer.

All existing drainage shall be reset to the proposed finished grade by the Contractor

All supplemental drainage trenches containing solid pipe shall be backfilled with native soil, free of any rock greater than two – inches (2") in size.

# 3-10 METHOD - TEES

#### A. General

- The selected tees and sand bunkers shall be molded as shown on the sketches of the Designer, or as modified by the Designer in the field. The Designer shall indicate the position, size and shape of the features and slopes, as well as the direction of the flow of surface drainage, on the sketches. The Contractor shall be responsible for any required field staking of the sketches.
- 2. Because the shaping of all features is paramount to the character of the Golf Course, the Designer reserves the right to request specific operators to perform the feature shaping. In addition, the Designer and Owner's representative must be permitted to speak directly with said operators during Designer's field visits, in order to effectively communicate the intent of the design and/or any desired revisions.
- 3. The selected tees and bunkers shall be shaped from existing or previously placed fill, such that their lines and slopes blend harmoniously with the natural surrounding contours. The rolls and valleys of all greens shall be

shaped into smooth, curving lines as indicated on the sketches, or as otherwise designated by the Designer in the field.

# B. <u>Tee Construction</u>-Not in Contract

- The subgrade of all tees shall be graded such that they are smooth, with no pockets and complete surface drainage. Unless otherwise directed by the Designer or Owner's representative, this shall be accomplished by sloping the subgrade surface, at a uniform one percent (1%) slope, from the rightfront corner to the back- left corner of each tee.
- 2. Upon Designer's approval of the subgrade shaping of each tee surface, the Contractor shall install ADS N-12, four inch (4") perforated underdrains, or Designer approved equal.

Unless otherwise directed by the Designer or Owner's representative, perforated underdrains shall be installed along the entire left edge and rear of each tee. Perforated drains shall connect to the solid outfall pipe at the outside edge of the left - rear corner of each tee's playing surface.

- 3. Immediately upon initiating the installation of any drainage components within any tee, the Contractor shall, as necessary, install and maintain throughout the completion of the project, all silt fence and other erosion control devices that may be required to prevent contamination of the various tee construction materials (i.e. drain pipe, gravel or greensmix).
- 4. Trenches for said underdrains shall be cut into the subgrade such that all pipes slope uniformly, with a minimum slope of one percent (1%) in all lines. Trenches shall be cut a minimum of twelve inches (12") deep, or as necessary, to secure specified slopes and to provide firm bedding, under the bottom of the pipe, for two inches (2") of the specified, washed, pea gravel.

All excavated trench spoils shall be removed from each tee surface. The subgrade surface shall be hand raked to insure runoff is not prevented from entering the trenches.

After the perforated pipe has been installed in each trench, the upper end of each drain line shall be capped. Trenches containing perforated pipe (i.e. beneath the tee surface) shall be completely backfilled with the specified, washed pea gravel.

5. ADS N-12, four - inch (4") solid drainpipe, or Designer approved equal, shall be connected to the perforated pipe at the outside edge of the left-rear corner of each tee's playing surface and continue from there to a point of final discharge designated by the Owner's representative.

The trenches containing non-perforated "outfall" pipe (i.e. outside the tee surface) shall be backfilled with native soil.

6. Upon approval of all drainage installation by the Designer or Owner's engineer, the Contractor shall spread a uniform, six - inch (6") layer of the previously prepared greensmix material across the entire subgrade surface of each tee throughout the Golf Course.

A small crawler-type tractor and blade, or other approved equipment, shall be used to push the mixture onto the tee surface. Equipment shall be operated with its weight on the mixture already placed, in order to avoid disturbing the subgrade layer and installed drainage.

Contractor shall firm the greensmix around the perimeter of the tee, by use of a vibratory plate tamper (i.e. Whacker Packer), or other similar device approved by the Designer or Owner's representative. As necessary, the Contractor shall incorporate supplemental moisture to facilitate adequate firming of the greensmix.

- 7. Unless otherwise directed by the Designer or Owner's representative, final tee surfaces shall be laser-leveled to match the subgrade surface, at a one percent (1%) slope, from the front–right corner to the left–rear corner of each tee. Leveling shall be accomplished with the assistance of a laser controlled hydraulic box blade, mounted on a small tractor, or other method approved by the Designer. Side slopes of the tees shall be graded to blend smoothly with the greensmix and all surrounding contours.
- 8. In an effort to eliminate material contamination and Contractor's removal and re-installation of the above drainage materials, all of which would be done by the Contractor at no additional cost to the Owner, the Contractor shall schedule all drainpipe installation and the spreading of the six inch (6") layer of greensmix on each tee, to be initiated and completed during the same work day.

# C. <u>Tee Leveling</u>

Tee leveling shall be performed by following items B6 and B7 only in this Section.

## 3-11 METHOD: SAND BUNKER CONSTRUCTION

Subsequent to Designer's approval of the subgrade shaping of new or reshaped bunkers, but prior to grassing the project, the Contractor shall prepare each bunker for play in accordance with the following procedures: After each bunker floor has been shaped to the complete satisfaction of the Designer and the Owner's representative, each bunker shall be edged, along a line marked by the Designer, with a uniform, 6 - inch (6") deep lip around the entire bunker.

A small – bucket, track machine may be used for the actual "cutting out" of the bunker, although a variety of methods, including hand labor only, might be required. If a machine is used, it is best to cut initially below the marked line. A worker can then refine the actual line with a shovel. A truck should be on hand so that all excavated fill can be loaded and transported in one operation.

After each bunker is properly edged, the previously shaped "floor" of each bunker shall be graded to drain to a low point. The slopes of the floor shall be graded with care and not be so steep as to prohibit the placing of sand thereon.

At this point, the Contractor shall paint the proposed location of the underdrain trenches to be installed in each bunker, for subsequent approval by the Designer or Owner's representative. Spacing and configuration of underdrain trenches will vary according to the size and shape of each bunker. Regardless, the maximum distance between the centerline of adjacent underdrain trenches shall be fifteen feet (15').

Upon approval of the proposed underdrain trench locations by the Designer or Owner's representative, said trenches shall be cut in the bunker floor to accommodate the subsequent installation of underdrains. Underdrain trenches shall be cut into the subgrade so that all pipe slopes uniformly, with a minimum slope of one percent (1%) in all lines.

Trenches shall be cut a minimum of twelve - inches (12") deep, or as necessary, to secure desired slopes and provide firm bedding under the bottom of the pipe of two - inches (2") of gravel.

Contractor shall dispose of all spoil generated by trench excavation as directed by the Designer or Owner's representative. In no case shall the excavated fill be deposited adjacent to any drainpipe, such that it acts as a berm and prevents water from entering the drainpipe.

After all underdrain trench excavation is complete in each bunker, four - inch (4") perforated underdrains shall be installed in each of the previously excavated trenches. Prior to installing the perforated underdrains, a uniform, two - inch (2") layer of the approved, washed pea gravel shall be placed in the floor of each trench.

After installation of the perforated underdrains, the upper end of each line shall be capped. All trenches containing perforated pipe (i.e. within the playing surface of the bunker) shall be completely backfilled with the laboratory approved, 3/8" washed gravel used in the construction of all tees.

Four - inch (4") solid piping shall be installed to connect with each bunker's perforated piping, at the outside edge of the bunker. The solid piping shall continue to a point of final discharge into ponds, drain basins, swales or out of play areas. Drainage trenches containing solid pipe shall be backfilled with native soil free of any rock greater than two – inches (2") in size.

When trenching through the edge of each bunker to connect the perforated and solid piping, the Contractor shall take every precaution to minimize damage to the previously shaped feature slopes and surrounding fairway or rough areas. Upon completion of the pipe installation, Contractor shall re-establish the bunker face to its original condition.

<u>Under no circumstances shall Contractor park or operate any machinery on the putting surface or collar of any green.</u>

#### DRAINAGE INSTALLATION

The entire foundation area in the bottom of all trench excavation and bunker cavity shall be smooth, firm, stable, and at uniform density and completed immediately prior to the placing of pipe or materials. Drainage of sand bunkers shall be accommodated by a drainage trench or multiple trenches connecting to each other, each trench measuring eight (8") inches wide and twelve (12") inches deep connecting into an acceptable and functional outfall pipe. Contractor is responsible for ensuring outfall pipe exiting the bunker cavity is not restricted and functioning properly to allow the bunker cavity to drain.

The locations of trenches will be as determined and subsequently painted out in the cavity by Designer or Golf Course Superintendent. Each sand bunker is to be drained with drainage trenches in a herringbone pattern with no distance between trenches or un-drained area in excess of twenty feet, unless approved by Designer or Golf Course Superintendent. The top of the pipe shall be set no higher than two (2") inches below the top surface of the trench, and centered within the eight (8") inch width of the trench. Each drainage trench shall slope a minimum of one-half percent (.5%) and shall terminate to the low point (or points) of the sand bunker where drainage will be collected and exit via the outfall pipe. Drainage from the bunker floor shall continue downgrade at a greater depth, if necessary, to the edge of the sand bunker where Designer or Golf Course Superintendent has designated the drainage exiting the sand bunker.

The minimum rate of fall shall not be less than one-half percent (.5%) at any point within the drainage trenches. At the edge of the sand bunker where drainage exits, the perforated pipe shall connect to the existing outfall pipe. All areas of the sand bunkers are to be built with adequate drainage. No water will be permitted to stand in any portion of any bunker. This is to be accomplished by sub-grades draining to the herring-bone drainage system and exiting the bunker

via the "outfall" connection point.

Prior to placement of the pea gravel blanket Contractor will provide Designer or Golf Course Superintendent with a record drawing (As-built) of the installed drainage showing the percentages of fall. In addition to the record drawing Contractor will provide to Designer or Golf Course Superintendent digital photos, on CD Media, showing the complete drainage system. CONTRACTOR WILL NOT BE GRANTED APPROVAL TO INSTALL THE GRAVEL LAYER UNTIL AS-BUILT DOCUMENTS HAVE BEEN REVIEWED AND APPROVED BY Designer or Golf Course Superintendent. Designer or Golf Course Superintendent will visually inspect all drainage installation, with written sign-off required before Contractor is authorized to install the pea gravel layer in bunker cavity.

Installation of new drainage lines may not require flush-out lines. However, if needed and determined by Designer or Golf Course Superintendent, a flush-out line may be required for some sand bunkers. In general, flush-out lines shall extend from the top side of the main drainage line of the sand bunker and terminate to the point where it will connects to a riser and trimmed and finished as specified by Designer or Golf Course Superintendent. Single flush outs will be contained in a 6" diameter irrigation valve box. In instances where two flush outs are next to each other, the risers will be contained in a single 10" irrigation diameter valve box.

#### BUNKER LINER INSTALLATION

Contractor will not be allowed to deviate from the Better Billy Bunker specifications and must not cause any portion of the Better Billy Bunker warranty to be voided or disallowed due to construction means and methods utilized by the Contractor.

#### BUNKER CAVITY PREPARATION

The Better Billy Bunker System must be installed in an approved bunker cavity. The area to be covered with the specified liner shall be water settled and mechanically compacted with a hand operated compacting machine to a minimum dry density of ninety-five percent (95%). Absolutely no loose soil shall remain in the bunker cavity prior to liner placement. No liner material will be placed in bunker until Designer or Golf Course Superintendent has approved the bunker shape, depth and compaction of the bunker cavity.

#### GRAVEL LAYER BLANKET

A layer of approved pea gravel (3/16"-1/4") (4.5mm-6mm) shall be placed over the entire floor of the bunker at a depth of 2" (51mm) deep. This gravel shall be brought up to the edge of the bunker. Contractor will not be allowed to use any machines of any type to spread the gravel within the bunker cavity. Gravel must be spread by hand to ensure no damage occurs to the prepared cavity or bunker edges. Contractor must protect the vertical bunker edges at all times when dumping gravel along the bunker edges. The gravel selected will be sent by the

Contractor to Turf Diagnostics and Design, {613 1st Street, Linwood Kansas 6602 (913)723-3700} soils lab or other approved lab for testing of the sand and gravel to ensure both materials meet the minimum "bridging" standard. This common standard is based on engineering principles that rely on the largest 15% of the sand particles "bridging" with the smallest 15% of the gravel particles. The gravel must be placed evenly and raked smooth.

Prior to placement of the pea gravel blanket Contractor will provide OWNER or AGENT with a record drawing (As-built) of the installed drainage showing the percentages of fall. In addition to the record drawing Contractor will provide to OWNER or AGENT digital photos, on CD Media, showing the complete drainage system. CONTRACTOR WILL NOT BE GRANTED APPROVAL TO INSTALL THE GRAVEL LAYER UNTIL AS-BUILT DOCUMENTS HAVE BEEN REVIEWED AND APPROVED BY OWNER OR AGENT.

#### ST410 POLYMER BINDER APPLICATION

ST410 POLYMER shall be sprayed by a certified and trained Better Billy Bunker installer. Using proper pressure spray equipment, a uniform layer of ST410 POLYMER shall be applied to the gravel in the bunker at a rate 1 gallon of ST410 POLYMER per 30-35 square feet. The gravel must be dry (less than 15% as tested by the certified installer) at application time. The treated bunker shall be allowed to cure for approximately 24 hours prior to sand installation. NOTE: ST410 POLYMER will penetrate approximately ½ - 1" (12mm - 25mm) depth of the gravel. A sturdy pliable layer of glued gravel will be the result.

#### INSPECTION AND QUALITY CONTROL

After 12-24 hours, the initial ST410 POLYMER application will have cured. Contractor will walk and inspect every square foot (meter) of each bunker at the end of the curing process. Any areas not to have received the specified rate of polymer will be marked with turf paint and re-sprayed prior to calling for a final inspection by Designer or Golf Course Superintendent. Improper application or omitting the inspection process and follow up polymer application will leave areas weak and the pea gravel loose. It is installer's responsibility to inspect and maintain the highest standards on when installing the Better Billy Bunker.

Upon the completion of all underdrain installation and installation of the liner material in each bunker, the Contractor shall stockpile and spread the laboratory tested and approved bunker sand to a uniformly compacted depth of four - inches (4"). Compaction shall be achieved by use of a mechanical plate - tamping machine.

If the gravel trenches become contaminated, in any manner, prior to the placement of the bunker sand, the Contractor shall be responsible for removing and completely replacing all contaminated materials at no additional charge to the Owner.

Final depths of sand in each bunker shall be approved by the Owner's representative. Contractor shall bear any additional expense associated with the removal and/or addition of sand, as required, to achieve the previously specified, uniformly compacted, four - inch (4") sand layer depth.

#### 3-12 FAIRWAY AND ROUGH CONTOURING

All designated fairway and rough areas to be disturbed throughout the Golf Course, shall be shaped according to Designer's sketches and field direction. All designated fairway and rough areas shall be contoured to provide complete surface drainage. When complete, the contours, rolls, and hollows of the fairway and rough areas shall blend harmoniously with adjacent fairway features, or into natural grade.

Fairway and rough contours shall be shaped to eliminate ruts, depressions, pockets or any sharp transitions that might result in the scalping or missing of ridges during normal mowing operations.

#### 3-13 **IRRIGATION**

All repair and installation of new irrigation components shall be completed according to existing layout of the system and/or adjusted to provide appropriate coverage of the fairway, rough and greens. Contractor shall coordinate locations with the owner.

#### 3-14 RESPREADING TOPSOIL

Upon Designer's approval of the subgrade shaping and contouring of all designated areas, the previously stripped topsoil shall be respread across all designated Features (including sand bunker faces), Fairways and Roughs, throughout the Golf Course, to a uniformly <u>compacted</u> depth of six - inches (6"). Contractor shall be responsible to haul supplemental topsoil to achieve the required depth in the location of improvements. Topsoil to be provided by the Owner.

### 3-15 HAUL ROADS

- A. Before use, all haul roads must first be approved by the Designer and/or Owner's representative.
- B. Prior to the completion of work under this Section, the Contractor shall regrade, loosen and/or otherwise prepare all haul roads to a condition deemed acceptable by the Designer and/or Owner's representative and which is suitable for subsequent course construction.

#### 3-16 CONTRACTOR'S RESPONSIBILITIES

A. The Contractor shall take all necessary precautions to prevent any damage

to existing trees, foliage, plant materials, and other property of the Owner outside the area of work under this Section.

- B. The Contractor shall immediately inform the Designer, Owner's representative and the Engineer of any unforeseen conditions that may affect the scope of construction under this Section of the specifications.
- C. The appearance and conduct of the Contractor's personnel and the movement of equipment and other vehicles on site shall be in strict adherence with Owner's requirements.

#### 3-17 <u>OTHER</u>

- A. The Contractor shall remove all debris and other foreign materials prior to leaving the job each day.
- B. The Contractor's equipment shall be stored in a designated location each night, as determined by Owner.
- **3-18 MEASUREMENT** Upon completion and approval by the Designer &/or Owner's representative of the edged & prepared "cavity" of each bunker, and prior to the installation of any bunker sand, the Contractor shall measure and record the square footage of each prepared cavity for approval and subsequent payment.

#### 3-19 PAYMENT

Payment for all authorized and verified work under this Section shall be in accordance with the terms described in the contractual agreement between the Owner and Contractor.

#### **GALLOPING HILL GOLF COURSE**

#### **IMPROVEMENTS TO HOLE 6**

#### **TECHNICAL SPECIFICATIONS**

#### SECTION FOUR

#### FEATURE, FAIRWAY AND ROUGH AREA SEEDBED PREPARATION

#### 4-01 **SCOPE**

Under this Section, the Contractor shall furnish all supervision, materials, labor, transportation and services necessary to prepare existing or previously provided soils, throughout designated portions of the Golf Course, as well as any designated out of play areas, in accordance with the specifications and directions of the Designer or Owner's representative.

The Contractor shall also provide all required dust control measures.

Work under this Section is all encompassing and shall be accomplished to the complete satisfaction of the Designer and Owner's representative.

#### **4-02 INTENT**

The intent of all work under this Section is to develop the finest possible seedbed, for all seeding and sodding throughout designated portions of the Golf Course, as well as any designated out of play areas.

The work described herein shall include the removal and proper disposal of all vegetative and non-vegetative debris, as well as any other material that might hinder the development of a finely pulverized seedbed.

Work under this Section is all encompassing and is intended to insure a final seedbed is developed, throughout all areas to be grassed, to the complete satisfaction of the Designer and Owner's representative.

#### 4-03 WORK AREA

Areas intended for seedbed preparation under this Section shall include all designated areas of the Golf Course and any disturbed or non-irrigated areas designated by the Designer or Owner's representative.

#### 4-04 SUBCONTRACTORS

When submitting a final bid, Contractor shall identify any proposed subcontractors for subsequent approval by the Designer and the Owner's representative.

#### 4-05 PRECONSTRUCTION MEETING

The Owner's representative, Engineer, Designer, Contractor and any subcontractors shall meet on site, prior to any work under this Section, to review all of the proposed work.

#### 4-06 PRIOR WORK

- A. <u>Permits & Approvals:</u> The Owner shall have previously obtained all permits and approvals necessary to complete the defined scope of work. The Contractor shall conduct all operations in accordance with the provisions of said permits and approvals.
- B. <u>Utilities & Infrastructure:</u> The Owner shall have previously marked the locations of any existing utilities and other buried infrastructure components (e.g. drainage, irrigation, etc.), prior to work under this Section.
- C. <u>Erosion Control:</u> The Contractor shall have previously installed all required erosion control devices, as per the Engineer's plans and specifications, prior to any work. Continuous maintenance of all required erosion control devices shall be the responsibility of the Contractor.
- D. <u>Shaping & Irrigation:</u> All shaping shall be complete and all irrigation system refinements installed, pressurized, adequately tested and deemed functional for use, throughout all areas designated for preparation, prior to work under this Section.
- E. <u>Sand Bunker Preparation & Supplemental Drainage:</u> All sand bunker preparation and installation of supplemental drainage components shall be complete prior to work under this Section.

#### 4-07 <u>SEEDBED PREPARATION</u>

#### A. <u>Tillage</u>

- 1. Prior to finish grading, all areas to be grassed shall be thoroughly scarified and loosened by discing, harrowing, or other suitable means, to a minimum depth of four inches (4").
- 2. All areas shall be machine or hand worked, as necessary, to eliminate stones, rocks, lumps or soil clods greater than one-half inch (1/2") in diameter. All haul roads shall be aerified or loosened to Owner's satisfaction.
- 3. Tillage shall include the removal of equipment ruts and tracks, areas of compaction or erosion and any other undesirable soil conditions that prevent the proper formation of a finely pulverized seedbed.

4. Tillage shall be accomplished only under proper conditions. The Designer or Owner's representative may, at its discretion, request the cessation of tillage operations during periods of severe drought, excessive soil moisture, or other unsatisfactory soil conditions.

#### B. Removal of Extraneous Material

- 1. All sticks, stones, brush, and other objectionable materials greater than one—half inch (1/2") in size, that might interfere with the formation of a finely pulverized seedbed, impair seeding, or create problems of maintenance, shall be removed from the soil.
- 2. All such extraneous material shall be disposed of in a method previously approved by Owner's representative and Designer.

#### C. <u>Finish Grading</u>

- 1. All areas to be grassed shall be graded and floated to provide complete surface drainage, with the elimination of all water holding depressions and pockets. Final grading of all drainage areas throughout the Golf Course shall result in minimum surface slopes of three percent (3%).
- 2. Undulations and unsightly variations in grade, that prevent the use of standard mowing equipment without "scalping", shall be eliminated.
- 3. Special attention shall be given to the tie-in of the seedbed mix of the putting surface and collar of the greens, as well as all tee surfaces, with the surrounding soils.

#### 4-08 <u>DESIGNER'S APPROVAL OF SEEDBED</u>

Prior to the Contractor's application of all fertilizer and necessary amendments, all areas prepared for same shall receive the approval of the Designer and the Owner's representative.

Inadequate preparation of the seedbed shall result in the Contractor's reworking of the area, **AT NO ADDITIONAL COST TO THE OWNER**, to the complete satisfaction of the Designer and the Owner's representative.

#### 4-09 REWORK OF DAMAGED AREAS

Should inclement weather or other natural causes result in the deterioration of the prepared seedbed prior to grassing, the Contractor shall re-work the area for grassing when practical to do so and to whatever degree necessary to regain its original satisfactory condition, as specified herein, **AT NO ADDITIONAL COST TO THE OWNER.** 

#### 4-10 FERTILIZER & PRE-PLANT AMENDMENTS

Upon Contractor's completion of all seedbed preparation and subsequent approval by Designer or the Owner's representative, the Contractor shall furnish and apply to all designated Golf Course or out of play areas, all necessary fertilizers and other desired amendments.

#### 4-11 MATERIALS

All materials specified herein shall adhere to the following quality standards:

- A. <u>General</u>: All materials and rates of application under this Section shall be subject to change upon the completion of laboratory testing of existing soils by the Owner.
- B. <u>Fertilizers & Amendments</u>: All fertilizers shall be manufactured from quality materials, free from impurities, uniform in composition, free flowing and suitable for application with approved equipment.

The basic fertilizers shall be of a turfgrass grade, containing monoammonium phosphate as the phosphorous source. Fertilizer shall be a dry-applied, granular and non-burning product composed of chemically homogeneous or polymer encapsulated dust-free particles.

All fertilizer shall be delivered in fully labeled standard bags of the manufacturer and shall conform with all applicable fertilizer laws and ordinances. Fertilizer shall be stored in such a manner as not to impair its effectiveness.

#### 4-12 PRE-GRASSING PREPARATION PROCEDURES

For bid purposes, the following materials and application rates should be applied. Final material selection and application rates may be revised pending soil testing.

<u>Fertilizers & Amendments</u>: Upon completion of all seedbed preparation and approval by Designer and the Owner's representative and immediately prior to grassing, the Contractor shall furnish and apply to all designated Golf Course areas, the following (or laboratory recommended and Designer/Owner's representative approved equal) fertilizers:

<u>Area</u>	<u>Product</u>	<b>Application Rate</b>
Greens & Tees:	Starter Fertilizer 12-20-14 with NutriLife 0-0-45 Polymer Coated Potassium Sulfate 21-0-20 / 100% Poly-S	8.0 lbs. / 1,000 SF 8.8 lbs. / 1,000 SF 5.3 lbs. / 1,000 SF
Fairways & Roughs:	Starter Fertilizer 12-20-14 with NutriLife 21-0-20 / 100% Poly-S	8.0 lbs. / 1,000 SF 240 lbs. / Acre

All fertilizers and amendments shall be applied under favorable climatic conditions and by such approved methods as will assure maximum uniformity of distribution.

#### 4-13 HAUL ROADS

All construction and access roads shall be approved by the Owner's representative. Prior to completion of work under this Section, the Contractor shall re-grade, loosen and/or otherwise prepare and grass all haul roads to a condition deemed acceptable by the Designer and/or Owner's representative.

#### 4-14 CONTRACTOR'S RESPONSIBILITIES

- A. The Contractor shall take all necessary precautions to prevent any damage to existing trees, foliage, plant materials, and other property of the Owner outside the area of work under this Section.
- B. The Contractor shall immediately inform the Designer, Owner's representative and the Engineer of any unforeseen conditions that may affect the scope of construction under this Section of the specifications.
- C. The appearance and conduct of the Contractor's personnel and the movement of equipment and other vehicles on site shall be in strict adherence with Owner's requirements.

#### **4-15 OTHER**

- A. <u>Clean up:</u> The Contractor shall remove all debris and other foreign materials prior to leaving the job each day.
- B. <u>Equipment Storage:</u> The Contractor's equipment shall be stored in a designated location each night, as determined by the Owner's representative.

#### 4-16 MEASUREMENT

Upon completion and approval by the Designer and / or Owner's representative of all work under this Section, the Contractor shall measure and record the square footage or acreage of each prepared area for verification, approval and subsequent payment by the Owner.

#### 4-17 PAYMENT

Payment for all authorized and verified work under this Section shall be in accordance with the terms described in the contractual agreement between the Owner and Contractor.

#### **GALLOPING HILL GOLF COURSE**

#### **IMPPROVEMENTS TO HOLE 6**

#### TECHNICAL SPECIFICATIONS

#### **SECTION FIVE**

#### **GRASSING**

### 5-01 **SCOPE**

Under this Section, the Contractor shall install all seed and sod, as supplied by the Owner, as well as furnish all supervision, machinery, equipment and personnel necessary for the completion of the grassing operation as outlined in these specifications, or as directed by the Designer or Owner's representative. The Contractor shall also provide all dust control services.

The Contractor shall sod all designated areas of the Golf Course, any out of play areas designated by the Designer or Owner's representative and all surrounding areas disturbed during construction, in accordance with these specifications and/or the direction of the Designer.

The Contractor shall also be responsible for the initial watering of each area immediately after sodding as specified herein. The initial watering shall adequately "seal" the surface and thoroughly moisten the subgrade of each grassed area.

All work under this Section shall be accomplished to the complete satisfaction of the Designer and Owner's representative.

#### 5-02 **INTENT**

The intent of the work under this Section is to sod all previously prepared areas of the Golf Course, designated out of play areas, or any other areas disturbed during construction.

#### 5-03 WORK AREA

The area of work under this Section shall include all designated areas of the Golf Course, out of play areas, or any other areas disturbed during construction.

#### 5-04 SUBCONTRACTORS

When submitting a final bid, Contractor shall identify any proposed subcontractors for subsequent approval by the Designer and the Owner's representative.

#### 5-05 PRECONSTRUCTION MEETING

The Owner's representative, Engineer, Designer, Contractor and Contractor's subcontractor(s) shall meet on site, prior to any work under this Section, to review all of the proposed work.

#### 5-06 PRIOR WORK

#### A. Permits & Approvals

The Owner shall have previously obtained all permits and approvals necessary to complete the defined scope of work. The Contractor shall conduct all operations in accordance with the provisions of said permits and approvals.

#### B. Utilities & Infrastructure

The Owner shall have previously marked the locations of any existing utilities and other buried infrastructure components (e.g. drainage, irrigation, etc.), prior to work under this Section.

#### C. Erosion Control

The Contractor shall have previously installed all required erosion control devices, as per the Engineer's plans and specifications, prior to any work. Continuous maintenance of all required erosion control devices shall be the responsibility of the Contractor.

#### D. <u>Pre-Grassing Preparation</u>

The Contractor shall have previously completed all necessary tillage, cleaning and floating of each area to be grassed. The Contractor shall have all areas at finished grade and the entire seedbed prepared, including the application of all required fertilizer and soil amendments, and approved by the Designer and/or the Owner's representative as being suitable for grassing.

Inadequate preparation of the seedbed shall result in the Contractor's reworking of the area, to the complete satisfaction of the Designer and/or Owner's representative, at no additional cost to the Owner.

If necessary, in order to provide a moist and thus optimum seedbed, the Contractor shall lightly irrigate all areas to be grassed prior to sodding.

#### 5-07 EQUIPMENT

The Contractor shall operate only tractors and other machinery equipped with tires that minimize tracking and rutting.

Contractor shall be responsible for the re-preparation and re-grassing of areas damaged by the operation of its equipment, or by malfunction of the irrigation system installed by the Contractor, to the complete satisfaction of the Designer and/or Owner's representative, **at no additional cost to the Owner**.

#### 5-08 SOD QUALITY

- A. Sodding shall include all tee and green surfaces, all fairways and designated rough areas.
- B. All sod grown shall be labeled in accordance with the U.S.D.A. Rules and Regulations under the Federal Seed Act and State laws.

#### 5-09 SOD: TURF TYPE, QUALITY & LOCATION

A. All tee and fairway sod shall be certified bentgrass sod and shall contain the following seed mixture blend:

33% Pennlinks II

33% Penneagle II

33% Pureformance

B. All rough sod and Driving Range fringe area sod shall be Turf Type Tall Fescue grass containing the following seed mixture blend:

85% Rembrandt Tall Fescue

15% Bluegrass (mixture of P105 and Midnight II Bluegrass)

The Owner shall provide all sod and designate the sod supplier prior to the bidding process.

- C. The Owner shall inspect each load of sod delivered to the site and reserves the right to reject any sod deemed unacceptable.
- D. If present after sod harvest, all netting shall be removed from the underside of the sod prior to installation.

#### 5-10 SOD: PLACEMENT & INSTALLATION METHODOLOGY

- A. The specified sod shall be installed on all disturbed tee and fairway areas, green and bunker slopes, the perimeter of all fairways, swales and areas surrounding drain inlets, as well as any other areas designated by the Designer or Owner's representative.
- B. Contractor shall implement all means necessary to insure the process of sod installation does not alter the previously approved final grade of any area.

This issue is of special concern regarding sodding of the tee surfaces.

- C. Depressions, ridges, air pockets or unevenness of any kind will not be acceptable. Sod installed on areas exceeding a 4:1 slope shall be secured in place with wooden stakes.
- D. Contractor shall take special care when installing the rough sod adjacent to the collar of each green, as well as the perimeter of each tee surface, to insure the turf portion of the sod is flush with the surface contouring of the green or tee.

In order to insure that a level and smooth transition is achieved between the surface of each green and tee and the adjacent sod, the Contractor may be required to raise or lower, the elevation of the adjacent, surrounding area.

E. In order to insure that a level and smooth transition is achieved between the top of each basin and the adjacent sod, the Contractor may be required to raise or lower, the elevation of the adjacent surrounding area.

#### 5-11 COMPLETION OF SODDING

- A. Immediately after the completion of sodding in a designated area, the Contractor shall be responsible for the initial watering of each grassed area. The initial watering shall adequately "seal" the surface and thoroughly moisten the subgrade of each sodded area.
- B. In no case shall a sodded area be allowed to remain for more than two hours before watering is initiated. Upon Contractor's completion of the above and acceptance by the Owner's representative, the maintenance of said areas, including watering and fertilizing, becomes the responsibility of the Owner.
- C. The Contractor shall be responsible for the loss of sod in all areas where erosion results from the malfunction of the irrigation system previously installed by Contractor, the improper use of the irrigation system by the Contractor's employees, or where damage results from the Contractor's equipment or negligence.
- D. Upon Contractor's completion of the above and acceptance by the Owner's representative, the maintenance of said areas, including watering & fertilizing, becomes the Owner's responsibility.

#### 5-12 POST - GRASSING EROSION

The Contractor shall be responsible for the loss of sod in all areas where erosion results from the improper use of the irrigation system by the Contractor's employees or where damage results from the Contractor's

equipment or negligence.

#### 5-13 HAUL ROADS

All construction and access roads shall be approved by the Owner's representative. Prior to completion of work under this Section, the Contractor shall re-grade, loosen and/or otherwise prepare and grass all haul roads to a condition deemed acceptable by the Designer and/or Owner's representative.

#### 5-14 CONTRACTOR'S RESPONSIBILITIES

The Contractor shall take all necessary precautions to prevent any damage to existing trees, foliage, plant material and other property of the Owner outside the area of work under this Section.

The appearance and conduct of the Contractor's personnel and the movement of equipment and other vehicles on site shall be in strict adherence with Owner's requirements.

The Contractor shall immediately inform the Designer, Owner's representative or Engineer of any unforeseen conditions that may affect the scope of work under this Section.

#### **5-15 OTHER**

The Contractor shall remove all debris and other foreign materials prior to leaving the job each day.

The Contractor's equipment shall be stored in a designated location each night as determined by the Owner's representative.

#### 5-16 MEASUREMENT AND PAYMENT

Payment quantities shall be determined by Contractor's field measurement of actual areas grassed, subject to verification by Owner's engineer.

# GALLOPING HILL GOLF COURSE





IMPROVEMENTS TO HOLE 6 BOROUGH OF KENILWORTH UNION COUNTY ~ NEW JERSEY **NOVEMBER 2, 2017** 

UNION COUNTY DEPARTMENT OF PARKS PROJECT NUMBER: 2017-







**SHEET INDEX** 

**DRAWING TITLE** 

COVER SHEET / KEY MAP

SITE & GRADING PLAN

**ROUTE PLAN** 

SOIL EROSION & SEDIMENT CONTROL DETAILS

CONSTRUCTION DETAILS

DRAWING NO.

1.00

2.00

2.01

3.00

4.00

- 5. THE CONTRACTOR SHALL RECEIVE ALL THE NECESSARY PERMITS & APPROVALS FROM ALL LOCAL, COUNTY, AND STATE GOVERNING
- AGENCIES, PRIOR TO CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR ANY ASSOCIATED FEES, AND SAME TO BE INCLUDED IN THE CONTRACTOR SHALL INSTALL PROTECTIVE BLOCKING, BRACING OR SHEETING TO SUPPORT ANY EXPOSED GAS OR WATER
- UTILITIES IN ACCORDANCE WITH RESPECTIVE GAS AND WATER REGULATIONS. B. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE ONE CALL NUMBER (800) 272-1000 FOR MARK OUTS PRIOR TO START OF
- WORK. THE CONTRACTOR SHALL RECORD AND HAVE THE CONFIRMATION NUMBER ONSITE DURING CONSTRUCTION. ). THE CONTRACTOR SHALL VISIT THE SITE TO PERFORM HIS OWN DUE DILIGENCE, AND FAMILIARIZE HIMSELF WITH THE EXISTING CONDITIONS PRIOR TO SUBMITTING HIS BID. ANY DISCREPANCIES SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER.

## **GENERAL NOTES:**

## **EXISTING CONDITIONS**

1. IT IS THE CONTRACTORS RESPONSIBILITY TO ASCERTAIN ALL UTILITY LOCATIONS PRIOR TO BIDDING.

## PROPOSED WORK

- MAINTENANCE AND PROTECTION OF PEDESTRIAN TRAFFIC CONTROL MUST CONFORM TO NJDOT AND MUTCD STANDARDS ALONG WITH THE REQUIREMENTS OF THE MUNICIPALITY. POLICE TRAFFIC DIRECTORS, IF REQUIRED, SHALL BE COORDINATED WITH THE
- . ALL STORM DRAINS AND CATCH BASINS WILL BE PROTECTED AT ALL TIMES. ANY DAMAGE WILL BE REPAIRED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.
- B. ALL FILL REMOVED FROM THE TRENCH IS TO BE DISCARDED BY THE CONTRACTOR IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REQUIREMENTS.
- I. UPON COMPLETION OF THE PROPER BACKFILL COMPACTING, A THREE (3) INCH LAYER OF HOT MIX ASPHALT BASE COURSE, MIX I-2, SHALL BE UTILIZED IN ALL TRENCH AREAS THAT DISTURB CART PATHS. THE TOP SURFACE SHALL BE FLUSH WITH THE ADJACENT PAVEMENT AND BE UNIFORMLY CONTOURED TO CONFORM TO THE EXISTING SURROUNDING SURFACE. SEPARATE PAYMENT WILL NOT BE MADE FOR MIX I-2 FOR TRENCH AREAS.
- 5. THE CONTRACTOR SHALL KEEP THE TRENCH FILLED TO THE LEVEL OF THE SURROUNDING GRADES UNTIL SETTLEMENT HAS CEASED.
- 6. TRAFFIC CONTROL DEVICES AS NECESSARY TO BE INCLUDED IN THE PRICE BID FOR THE PROJECT.
- 7. TRAFFIC CONTROL TO BE IN ACCORDANCE WITH MUNICIPAL, UNION COUNTY, AND MUTCD STANDARDS.

## RESTRICTIONS AND REQUIREMENTS

- . WORKING HOURS ON MUNICIPAL ROADS ARE BETWEEN THE HOURS OF 8:00 AM AND 5:00 PM. CONTRACTOR MUST CONFIRM HOURS PRIOR TO BIDDING AND CONSTRUCTION.
- 2. THE CONTRACTOR SHALL FURNISH AN APPROVED CONSTRUCTION SCHEDULE PRIOR TO MOBILIZATION.
- 3. THE CONTRACTOR SHALL MAINTAIN ACCESS FOR EMERGENCY VEHICLES.

REVISIONS

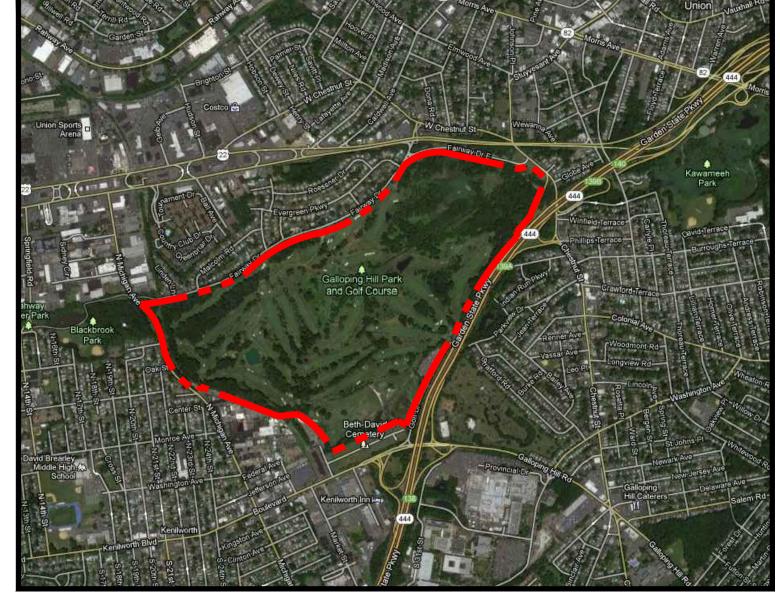
DESCRIPTION

- 4. THE CONTRACTOR SHALL PROVIDE PRE-CONSTRUCTION PHOTOGRAPHS OR VIDEOTAPES OF THE PROJECT AREA. PHOTOGRAPHS SHALL BE LABELED WITH HOLE NUMBER AND MOUNTED INTO BINDERS. AUDIO SHALL BE USED ON VIDEOTAPES TO DESIGNATE HOLE NUMBER. THE CONTRACTOR SHALL PROVIDE THE PHOTOGRAPHS OR VIDEOTAPES PRIOR TO MOBILIZATION.
- 5. THE CONTRACTOR SHALL OBSERVE ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES ILLUSTRATED WITHIN THESE CONSTRUCTION PLANS. A STAGING AREA HAS NOT BEEN DETERMINED FOR USE BY THE CONTRACTOR AT THE TIME THESE CONTRACT DRAWINGS WERE DRAWN. WHEN A STAGING AREA IS DETERMINED, THE CONTRACTOR SHALL CALL THE SOMERSET-UNION COUNTY SOIL CONSERVATION DISTRICT (908-231-7000) FOR INSPECTION OF THE STAGING AREA. THE CONTRACTOR IS RESPONSIBLE TO IMPLEMENT ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES AT THE STAGING AREA PRIOR TO INSPECTION. ALL COSTS TO BE INCLUDED IN THE PRICE BID FOR THE PROJECT.
- ALL WORK STATED IN THESE NOTES, PLANS AND SPECIFICATIONS SHALL BE INCLUDED IN THE PRICE BID FOR THE PROJECT UNLESS SPECIFICALLY ITEMIZED. THE CONTRACTOR IS NOT LIMITED TO THE REQUIREMENTS WITHIN THESE NOTES AND IS STRONGLY ADVISED TO REVIEW THE SPECIFICATIONS FOR ADDITIONAL INFORMATION.

**GOLF COURSE DESIGN BY: REES JONES INC.** MONTCLAIR, NEW JERSEY



**KEY MAP** (N.T.S.)



**AERIAL MAP** 

# ALFRED J. FAELLA

## BOARD OF CHOSEN FREEHOLDERS

COUNTY MANAGER

BRUCE H. BERGEN CHAIRMAN

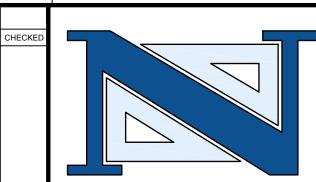
SERGIO GRANDADOS VICE CHAIRMAN

LINDA CARTER ANGEL G. ESTRADA CHRISTOPHER HUDAK MOHAMED S. JALLOH BETTE JANE KOWALSKI **ALEXANDER MIRABELLA VERNELL WRIGHT** 

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CERTIFICATE OF AUTHORIZATION (N.J.S.A. 45:8-56) 24GA27927000



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DAVID R. ATKINSON, P.E., C.M.E. N.J. LICENSE NO. 45506



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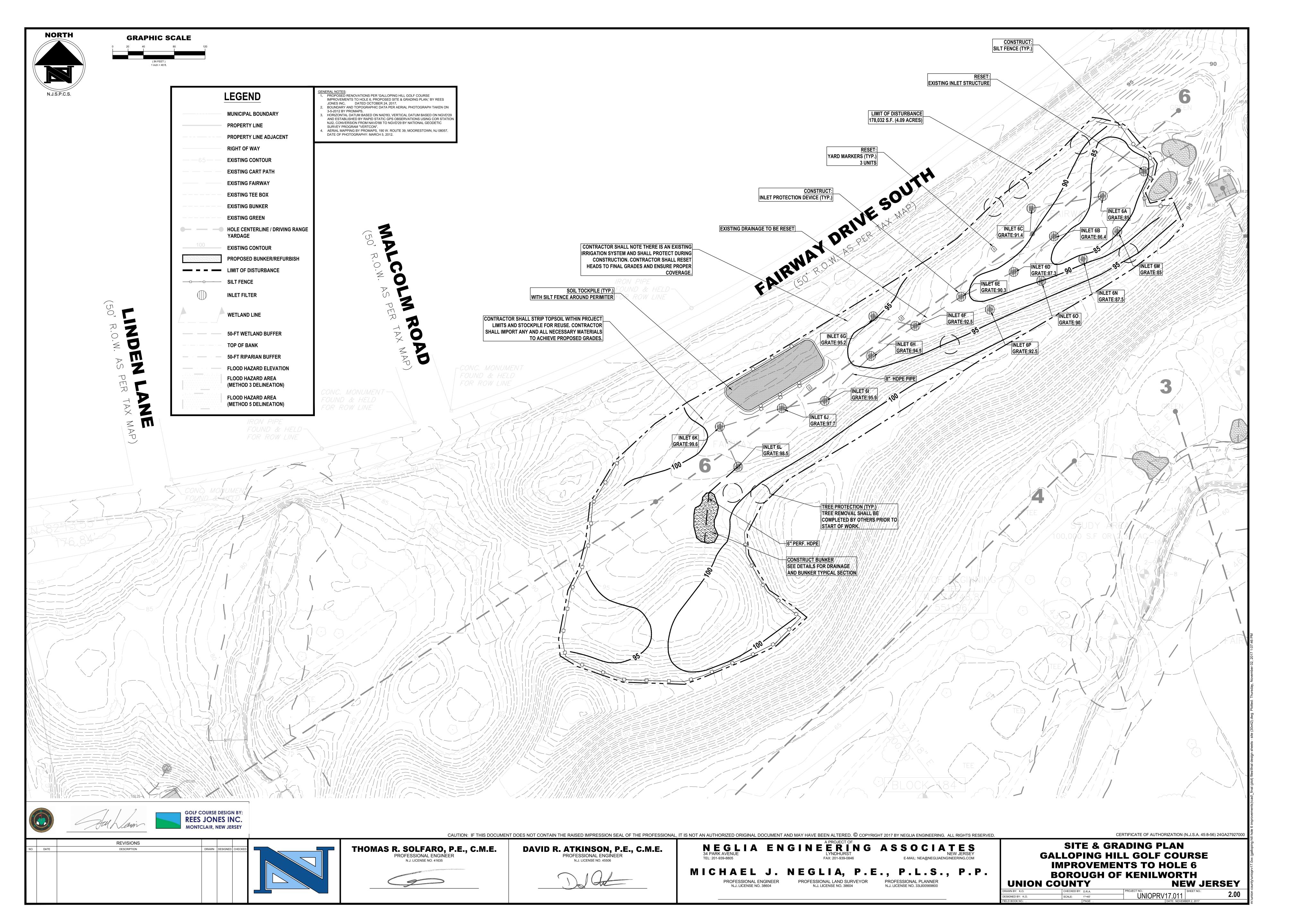
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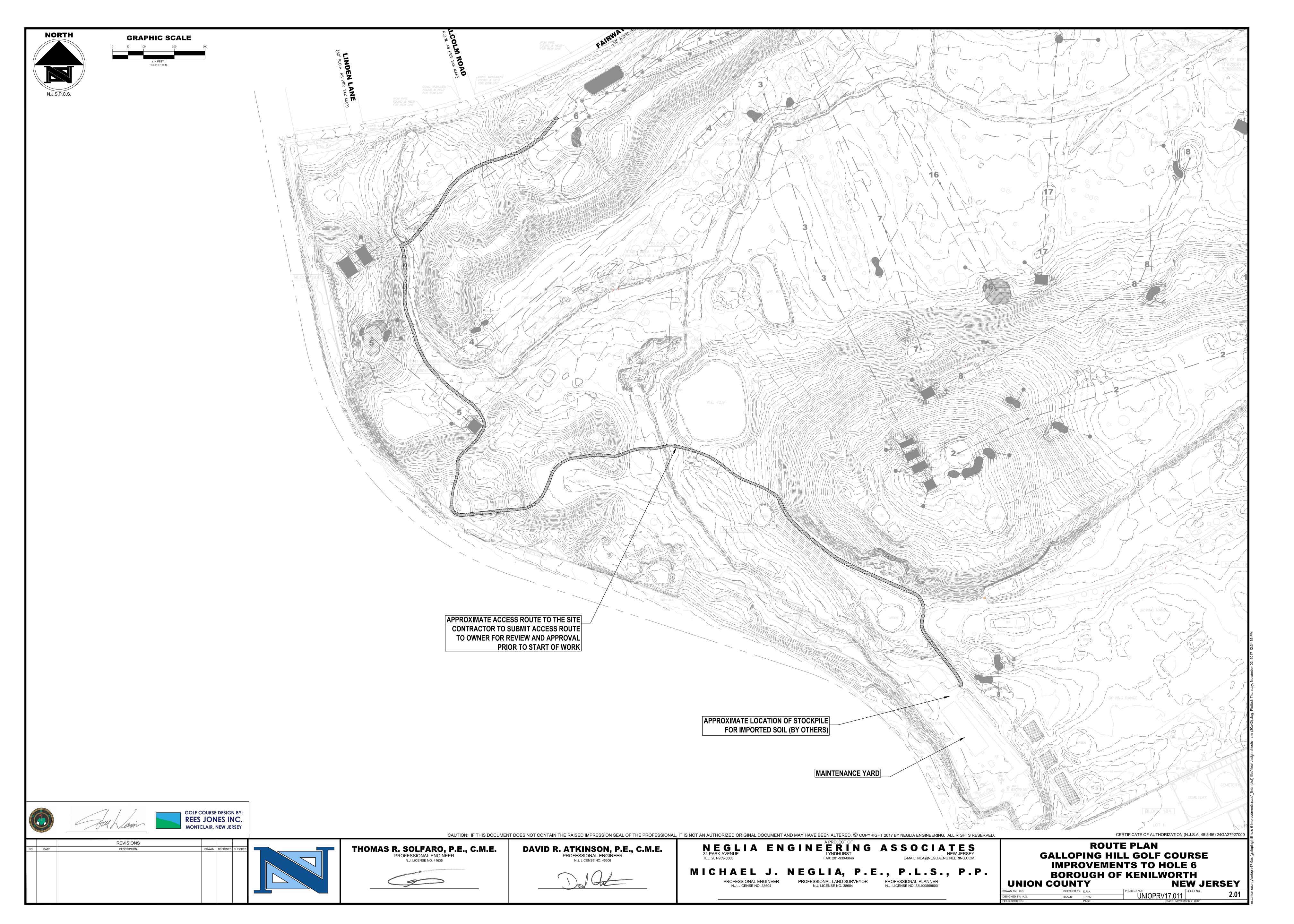
MICHAEL J. NEGLIA, P.E., P.L.S., P.P.

N.J. LICENSE NO. 38604

**COVER SHEET / KEY MAP GALLOPING HILL GOLF COURSE IMPROVEMENTS TO HOLE 6 BOROUGH OF KENILWORTH** 

**UNION COUNTY NEW JERSEY** 1.00 **UNIOPRV17.011** 





### SOMERSET-UNION COUNTIES SOIL CONSERVATION DISTRICT **SOIL EROSION & SEDIMENT CONTROL NOTES**

- 1. ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE INSTALLED PRIOR TO ANY MAJOR SOIL DISTURBANCES, OR IN THEIR PROPER SEQUENCE AND MAINTAINED UNTIL PERMANENT PROTECTION IS ESTABLISHED.
- 2. ANY DISTURBED AREAS THAT WILL BE LEFT EXPOSED MORE THAN 30 DAYS AND NOT SUBJECT TO CONSTRUCTION TRAFFIC, WILL IMMEDIATELY RECEIVE A TEMPORARY SEEDING. IF THE SEASON PREVENTS THE ESTABLISHMENT OF A TEMPORARY COVER, THE DISTURBED AREAS WILL BE MULCHED WITH STRAW, OR EQUIVALENT MATERIAL, AT A RATE OF TWO (2) TONS PER ACRE, ACCORDING TO NJ STATE STANDARDS
- 3. PERMANENT VEGETATION SHALL BE SEEDED OR SODDED ON ALL EXPOSED AREAS WITHIN TEN (10) DAYS AFTER FINAL GRADING. MULCH WILL BE USED FOR PROTECTION UNTIL SEEDING IS ESTABLISHED
- 4. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE NJ STATE STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY.
- 5. A SUB-BASE COURSE WILL BE APPLIED IMMEDIATELY FOLLOWING ROUGH GRADING AND INSTALLATION OF IMPROVEMENTS IN ORDER TO STABILIZE STREETS, ROADS, DRIVEWAYS AND PARKING AREAS. IN AREAS WHERE NO UTILITIES ARE PRESENT, THE SUB-BASE SHALL BE INSTALLED WITHIN 15 DAYS OR PRELIMINARY GRADING.
- IMMEDIATELY FOLLOWING INITIAL DISTURBANCE OR ROUGH GRADING ALL CRITICAL AREAS SUBJECT TO EROSION (I.E.: STEEP SLOPES, ROADWAY EMBANKMENTS) WILL RECEIVE A TEMPORARY SEEDING IN COMBINATION WITH STRAW MULCH OR A SUITABLE EQUIVALENT, AT A RATE OF TWO (2) TONS PER ACRE, ACCORDING TO THE NJ STATE
- 7. ANY STEEP SLOPES RECEIVING PIPELINE INSTALLATION WILL BE BACKFILLED AND STABILIZED DAILY, AS THE INSTALLATION PROCEEDS (I.E.: SLOPES GREATER THAT 3:1)
- 8. TRAFFIC CONTROL STANDARDS REQUIRE THE INSTALLATION OF A 50'X30'X6'PAD OF 1 1/2" OR 2" STONE, AT ALL CONSTRUCTION DRIVEWAYS, IMMEDIATELY AFTER INITIAL SITE DISTURBANCE.
- 9. THE SOMERSET-UNION SOIL CONSERVATION DISTRICT SHALL BE NOTIFIED IN WRITING 48 HOURS IN ADVANCE OF ANY LAND DISTURBING ACTIVITY.
- 10. AT THE TIME WHEN THE SITE PREPARATION FOR PERMANENT VEGETATIVE STABILIZATION IS GOING TO BE ACCOMPLISHED, ANY SOIL THAT WILL NOT PROVIDE A SUITABLE ENVIRONMENT TO SUPPORT ADEQUATE VEGETATIVE GROUND COVER. SHALL BE REMOVED OR TREATED IN SUCH A WAY THAT WILL PERMANENTLY ADJUST THE SOIL CONDITIONS AND RENDER IT SUITABLE FOR VEGETATIVE GROUND COVER. IF THE REMOVAL OR TREATMENT OF THE SOIL WILL NOT PROVIDE SUITABLE CONDITIONS, NON-VEGETATIVE MEANS OF PERMANENT GROUND STABILIZATION WILL HAVE TO BE EMPLOYED.
- 11. IN THAT NJSA 4:24-39 ET SEQ., REQUIRES THAT NO CERTIFICATE OF OCCUPANCY BE ISSUED BEFORE THE PROVISIONS OF THE CERTIFIED PLAN FOR SOIL EROSION AND SEDIMENT CONTROL HAVE BEEN COMPLIED WITH FOR PERMANENT MEASURES, ALL SITE WORK FOR SITE PLANS AND ALL WORK AROUND INDIVIDUAL LOTS IN SUBDIVISIONS, WILL HAVE TO BE COMPLETED PRIOR TO THE DISTRICT ISSUING A REPORT OF COMPLIANCE FOR THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY BY THE MUNICIPALITY.
- 12. CONDUIT OUTLET PROTECTION MUST BE INSTALLED AT ALL REQUIRED OUTFALLS PRIOR TO THE DRAINAGE SYSTEM BECOMING OPERATIONAL.
- 13. ANY CHANGES TO THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLAN WILL REQUIRE THE SUBMISSION OF REVISED SOIL EROSION AND SEDIMENT CONTROL PLANS TO THE DISTRICT FOR RE-CERTIFICATION. THE REVISED PLANS MUST MEET ALL CURRENT NJ STATE SOIL EROSION & SEDIMENT CONTROL STANDARDS.
- 14. THE SOMERSET-UNION SOIL CONSERVATION DISTRICT SHALL BE NOTIFIED OF ANY CHANGES IN OWNERSHIP.
- 15. MULCHING TO THE NJ STANDARDS IS REQUIRED FOR OBTAINING A CONDITIONAL REPORT OF COMPLIANCE. CONDITIONALS ARE ONLY ISSUED WHEN THE SEASON PROHIBITS SEEDING.
- 16. CONTRACTOR IS RESPONSIBLE FOR KEEPING ALL ADJACENT ROADS CLEAN DURING LIFE OF CONSTRUCTION
- 17. THE DEVELOPER SHALL BE RESPONSIBLE FOR REMEDIATING ANY EROSION OR SEDIMENT PROBLEMS THAT ARISE AS A RESULT OF ONGOING CONSTRUCTION AT THE REQUEST OF THE SOMERSET-UNION SOIL CONSERVATION DISTRICT
- 18. HYDRO SEEDING IS A TWO- STEP PROCESS. THE FIRST STEP INCLUDES SEED, FERTILIZER, LIME, ETC., ALONG WITH MINIMAL AMOUNTS OF MULCH TO PROMOTE CONSISTENCY, GOOD SEED TO SOIL CONTACT, AND GIVE A VISUAL INDICATION OF COVERAGE. UPON COMPLETION OF SEEDING OPERATION, HYDRO-MULCH SHOULD BE APPLIED AT A RATE OF 1500 LBS. PER ACRE IN SECOND STEP. THE USE OF HYDRO-MULCH, AS OPPOSED TO STRAW, IS LIMITED TO OPTIMUM SEEDING DATES AS LISTED IN THE NJ STANDARDS.

SEQUENCE OF CONSTRUCTION

1. INSTALL STABILIZED CONSTRUCTION ENTRANCE, SILT FENCE, AND

4. RECONSTRUCT EXISTING AND NEW STORM CONVEYANCE SYSTEM

8. REMOVE SOIL EROSION & SEDIMENT CONTROL DEVICES, FINAL SITE

7. FINAL SITE GRADING, TOPSOILING & SEEDING OR SODDING

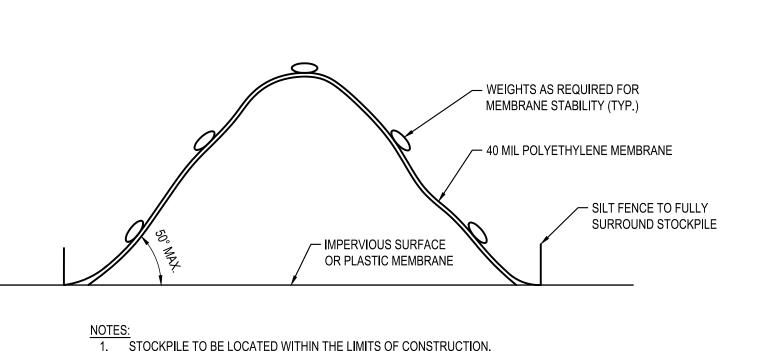
INLET FILTERS AT EXISTING INLETS

3. IMPORT SOIL AND ROUGH GRADE SITE

5. INSTALL INLET FILTERS AT NEW INLETS

6. CONSTRUCT NEW FAIRWAYS, BUNKERS, ETC.

2. REMOVE & STOCKPILE TOPSOIL

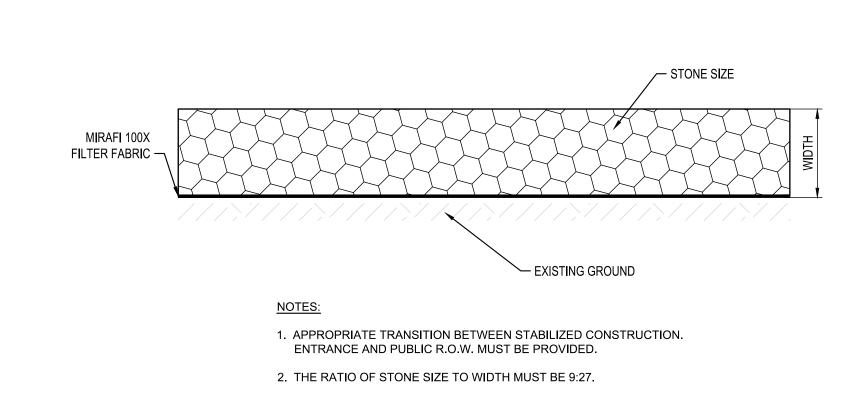


## **SOIL STOCKPILE**

2. CONTRACTOR SHALL PROVIDE DOUBLE SILT FENCE PROTECTION ON

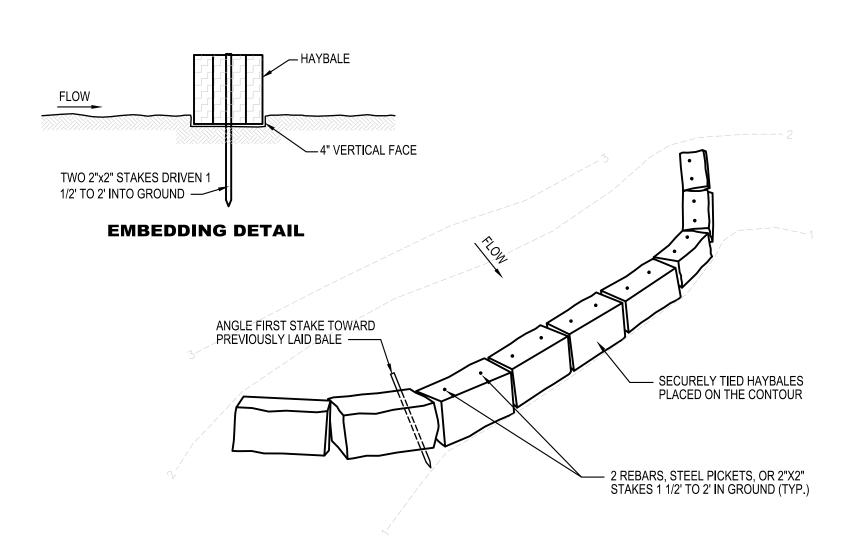
DOWN SLOPE SIDE OF STOCKPILE AS SHOWN ON PLANS.

NOT TO SCALE



## STABILIZED CONSTRUCTION ACCESS

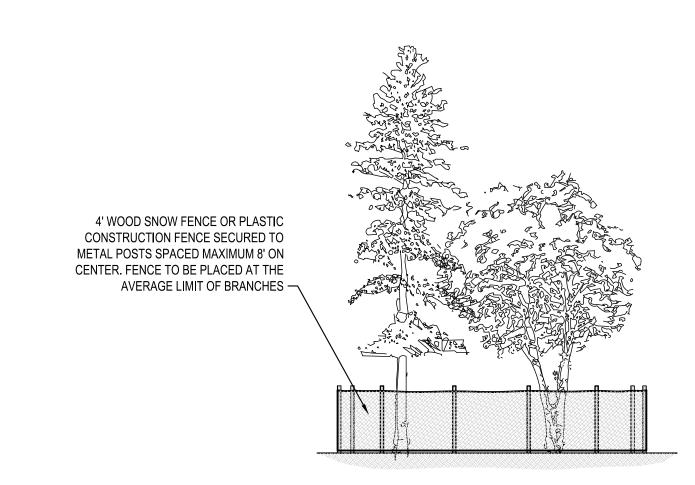
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PLACEMENT AND ANCHORING DETAIL

## **BALE SEDIMENT BARRIER**

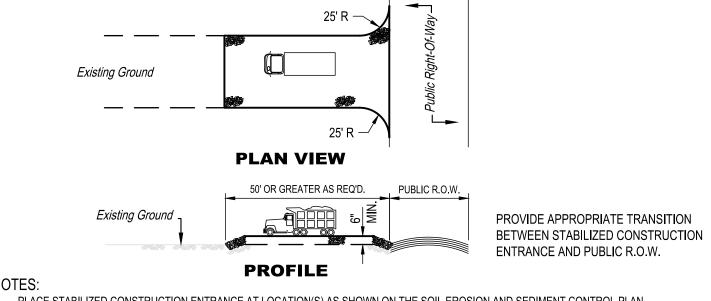
**NOT TO SCALE** 



1. CONSTRUCTION EQUIPMENT OF ANY KIND IS TO BE PROHIBITED FROM DRIVING AND/OR PARKING UNDER TREES. THE STOCKPILE OF CONSTRUCTION MATERIAL SHALL BE PROHIBITED FROM BEING STORED UNDER

## TREE PROTECTION

NOT TO SCALE



PLACE STABILIZED CONSTRUCTION ENTRANCE AT LOCATION(S) AS SHOWN ON THE SOIL EROSION AND SEDIMENT CONTROL PLAN.

STONE SIZE SHALL BE ASTM C-33, SIZE NO.2 OR 3, CRUSHED STONE. THE THICKNESS OF THE STABILIZED CONSTRUCTION ENTRANCE SHALL NOT BE LESS THAN 6".

1. THE WIDTH AT THE EXIST. PAVEMENT SHALL NOT BE LESS THAN THE FULL WIDTH OF POINTS OF INGRESS AND EGRESS. THE STAB. CONST. ENT. SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO THE R.O.W./PAVEMENT. THIS REQUIRES PERIODIC TOP DRESSING WITH ADDITIONAL STONE OR ADDITIONAL LENGTH AS CONDITIONS DEMAND AND

REPAIR AND/OR CLEANOUT OF ANY MEASURE USED TO TRAP SEDIMENT.

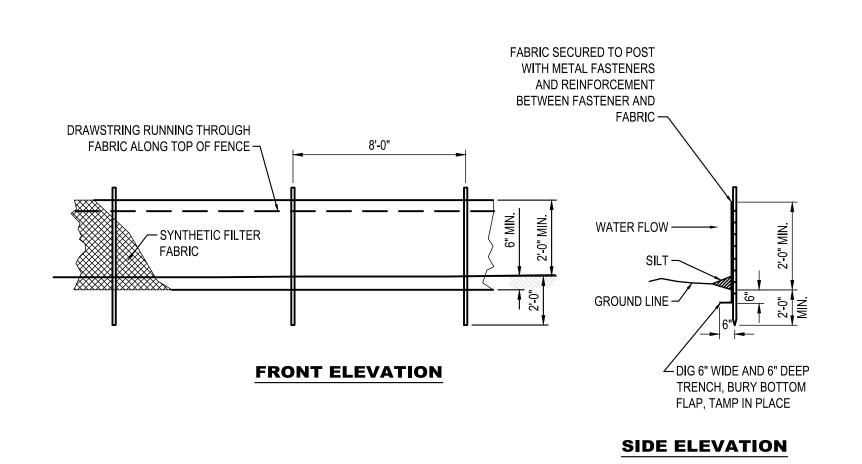
ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO THE PUBLIC ROADWAY MUST BE REMOVED IMMEDIATELY. APPROPRIATE TRANSITION BETWEEN STAB. CONST. ENT. & PUBLIC R.O.W. MUST BE PROVIDED.

8. THE RATIO OF STONE SIZE TO WIDTH MUST BE 9:27.

ENTIRE SURFACE STABILIZED WITH FABC BASE COURS

## STABILIZED CONSTRUCTION ACCESS

**NOT TO SCALE** 



## FILTER FENCE DETAIL

NOT TO SCALE

## **INLET PROTECTION STANDARDS**

## **DEFINITION**

A TEMPORARY BARRIER AND SETTLING FACILITY INSTALLED AT A STORM SEWER INLET

## **PURPOSE**

THE PURPOSE OF STORM SEWER INLET PROTECTION IS TO INTERCEPT AND RETAIN SEDIMENT, THUS PREVENTING THE ENTRANCE OF SEDIMENT INTO THE STORM SEWER SYSTEM.

## CONDITIONS WHERE PRACTICE APPLIES

- CONTRIBUTING DRAINAGE AREA IS 3 ACRES OR LESS.
- 2. A STORM SEWER OR THE OUTLET CHANNEL OF A STORM SEWER NEEDS PROTECTION FROM SEDIMENT.
- TRAFFIC WILL NOT DESTROY OR CAUSE CONSTANT MAINTENANCE OF THE STORM SEWER INLET PROTECTION.
- 4. A TRAFFIC HAZARD WILL NOT BE CREATED.
- 5. A FLOODING PROBLEM WILL NOT BE CREATED.

## WATER QUALITY ENHANCEMENT

THE PRIMARY BENEFIT TO WATER QUALITY IS REMOVAL OF SEDIMENT FROM STORMWATER RUNOFF PRIOR TO ENTERING THE STORM SEWER SYSTEM. AS AN ADDED BENEFIT, OTHER FLOATABLE DEBRIS, SUCH AS VEGETATIVE MATTER AND LITTER MAY ALSO BE FILTERED OUT OF THE RUNOFF.

## **DESIGN CRITERIA**

THE FOLLOWING APPLIES TO ALL METHODS OF STORM SEWER INLET PROTECTION: 1. MUST SLOW THE STORM WATER, PROVIDE THE COARSE SEDIMENT PARTICLES A CHANCE TO SETTLE, AND

PROVIDE AN AREA TO RETAIN THE PARTICLES THAT HAVE SETTLED.

2. IN ALL CASES, THE INLET PROTECTION SHOULD NOT COMPLETELY CLOSE OFF THE INLET.

3. THE PROTECTION DEVICE WILL BE DESIGNED TO CAPTURE OR FILTER RUNOFF FROM THE 1 YEAR, 24 HOUR STORM EVENT AND SHALL SAFELY CONVEY HIGHER FLOWS DIRECTLY INTO THE STORM SEWER SYSTEM.

OTHER METHODS THAT ACCOMPLISH THE PURPOSE OF STORM SEWER INLET PROTECTION MAY BE USED IF APPROVED BY THE SOIL CONSERVATION DISTRICT.

INSPECTIONS SHALL BE FREQUENT. MAINTENANCE, REPAIR, AND REPLACEMENT SHALL BE MADE PROMPTLY, AS NEEDED. THE BARRIER SHALL BE REMOVED WHEN THE AREA DRAINING TOWARD THE INLET HAS BEEN STABILIZED.

## **DUST CONTROL NOTES**

THE CONTROL OF DUST ON CONSTRUCTION SITES AND ROADS.

TO PREVENT BLOWING AND MOVEMENT OF DUST FROM EXPOSED SOIL SURFACES, REDUCE ON- AND OFF-SITE DAMAGE AND HEALTH HAZARDS, AND IMPROVE TRAFFIC SAFETY.

THIS PRACTICE IS APPLICABLE TO AREAS SUBJECT TO DUST BLOWING AND MOVEMENT WHERE ON- AND OFF-SITE DAMAGE IS LIKELY WITHOUT TREATMENT. CONSULT WITH LOCAL MUNICIPAL ORDINANCES ON ANY RESTRICTIONS.

SEDIMENTS DEPOSITED AS "DUST" ARE OFTEN FINE COLLOIDAL MATERIAL WHICH IS EXTREMELY DIFFICULT TO REMOVE FROM WATER ONCE IT BECOMES SUSPENDED. USE OF THIS STANDARD WILL HELP TO CONTROL THE GENERATION OF DUST FROM CONSTRUCTION SITES AND SUBSEQUENT BLOWING AND DEPOSITION INTO LOCAL SURFACE WATER RESOURCES.

THE FOLLOWING METHODS SHOULD BE CONSIDERED FOR CONTROLLING DUST: MULCHES - SEE STANDARDS FOR STABILIZATION WITH MULCHES ONLY (p. 5-1).

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<u>VEGETATIVE COVER</u> - SEE STANDARDS FOR: TEMPORARY VEGETATIVE COVER (p. 7-1), PERMANENT VEGETATIVE COVER (p. 4-1), AND PERMANENT STABILIZATION WITH SOD (p. 6-1). SPRAY-ON ADHESIVES - ON MINERAL SOILS (NOT EFFECTIVE ON MUCK SOILS). KEEP TRAFFIC OFF THESE AREAS.

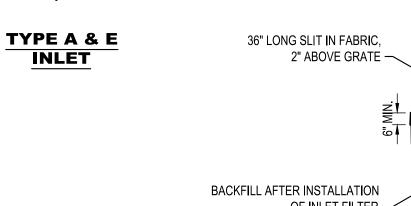
DUST CONTROL MATERIALS

	WATER DILUTION	TYPE OF NOZZLE	APPLY GALLON/ACRE	
ANIONIC ASPHALT EMULSION	7:1	COARSE SPRAY	1,200	
LATEX EMULSION	12.5:1	FINE SPRAY	235	
RESIN IN WATER	4:1	FINE SPRAY	300	
POLYACRYLAMIDE (PAM) - SPRAY ON POLYACRYLAMIDE (PAM) - DRY SPREAD		APPLY ACCORDING TO MANUFACTURER'S INSTRUCTIONS.  MAY ALSO BE USED AS AN ADDITIVE TO SEDIMENT BASINS TO FLOCCULATE AND PRECIPITATE SUSPENDED COLLOIDS. SEE SEDIMENT BASIN STANDARD, p. 26-1		
ACIDULATED SOY BEAN SOAP STICK	NONE	COARSE SPRAY	1,200	

TILLAGE - TO ROUGHEN SURFACE AND BRING CLODS TO THE SURFACE. THIS IS A TEMPORARY EMERGENCY MEASURE WHICH SHOULD BE USED BEFORE SOIL BLOWING STARTS. BEGIN PLOWING ON WINDWARD SIDE OF SITE. CHISEL-TYPE PLOWS SPACED ABOUT 12 INCHES APART, AND SPRING-TOOTHED HARROWS ARE EXAMPLES OF EQUIPMENT WHICH MAY PRODUCE THE DESIRED EFFECT. SPRINKLING - SITE IS SPRINKLED UNTIL THE SURFACE IS WET.

BARRIERS - SOLID BOARD FENCES, SNOW FENCES, BURLAP FENCES, CRATE WALLS, BALES OF HAY, AND SIMILAR MATERIAL CAN BE USED TO CONTROL AIR CURRENTS CALCIUM CHLORIDE - SHALL BE IN THE FORM OF LOOSE, DRY GRANULES OR FLAKES FINE ENOUGH TO FEED THROUGH COMMONLY USED SPREADERS AT A RATE THAT WILL KEEP SURFACE MOIST BUT NOT CAUSE POLLUTION OR PLANT DAMAGE. IF USED ON STEEPER SLOPES, THEN USE OTHER PRACTICES TO PREVENT. WASHING INTO STREAMS OR ACCUMULATION AROUND PLANTS. STONE - COVER SURFACE WITH CRUSHED STONE OR COARSE GRAVEL.

 $^-$  WIRE MESH WITH  $1\!\!/_2$ " OPENINGS SHALL BE PLACED OVER FRAME & GRATE AND EXTEND 6" MIN. & SIDES — 12" x 12" OPEING IN FABRIC - 2" HIGH x 12" WIDE 3/4" CLEAN GRAVEL FILTER BERM



CONVEY HIGHER FLOWS DIRECTLY INTO STORM SEWER SYSTEM.

 SECURE "MIRAFI 700x" (OR EQUIVALENT) FILTER FABRIC TO WELDED WIRE SUPPORT. FILTER FABRIC SHALL EXTEND 6" BELOW OF INLET FILTER -

TYPE B INLET

1. CONTRACTOR IS TO INSPECT INLET FILTER AFTER EVERY STORM, AND CLEAN OR REPLACE AS REQUIRED 2. CONTRACTOR IS TO REMOVE FABRIC AND MESH JUST PRIOR TO PAVING 3. FILTER FABRIC SHALL BE "MIRAFI 700X" TYPE OR APPROVED EQUAL 4. INLET FILTER SHALL FILTER RUNOFF FROM THE 1 YEAR 24 HOUR STORM EVENT AND SHALL SAFELY

**INLET FILTER & PROTECTION** 

**NOT TO SCALE** 



REVISIONS

DESCRIPTION



<u>LIMIT OF DISTURBANCE</u> = 178,032 SF (4.09 AC)



<u>DURATION</u>

2 DAYS

3 WEEKS

2 DAYS

2 WEEKS

1 WEEK



THOMAS R. SOLFARO, P.E., C.M.E. PROFESSIONAL ENGINEER









MICHAEL J. NEGLIA, P.E., P.L.S., P.P.

**SOIL EROSION & SEDIMENT CONTROL DETAILS GALLOPING HILL GOLF COURSE IMPROVEMENTS TO HOLE 6 BOROUGH OF KENILWORTH NEW JERSEY** 

CERTIFICATE OF AUTHORIZATION (N.J.S.A. 45:8-56) 24GA27927000

3.00

N.J. LICENSE NO. 38604

PROFESSIONAL LAND SURVEYOR N.J. LICENSE NO. 38604

N.J. LICENSE NO. 33LI00569800

E-MAIL: NEA@NEGLIAENGINEERING.COM

**UNION COUNTY** N.T.S. UNIOPRV17.011

