

PROJECT SPECIFICATIONS

INSURANCE REQUIREMENTS:

The Contractor shall purchase and maintain at its expense the following types of insurance, issued by companies acceptable to the Commonwealth.

Workmen's Compensation Insurance. Sufficient to cover all of the employees of the Contractor, working to fulfill this contract.

Comprehensive General Liability Insurance. To include bodily injury and property damage insurance, to protect the Commonwealth, the Contractor or any Sub-Contractors from claims arising out of the performance of the contract. The amount of bodily injury insurance shall not be less than \$300,000 for injury to or death of persons per occurrence. The amount of property damage insurance shall not be less than \$300,000 per occurrence. Certificates evidencing coverage for Workmen's Compensation, Public Liability and Property Damage shall be furnished if requested.

Special Hazard. Special hazards, if there is a possibility of such hazard existing in the work contemplated, this shall be covered by separate insurance or by rider(s) to other required policy(s). Possible hazards, such as blasting, explosion, and fire on insurable items shall be so covered.

Policy or Policies in duplicate to accomplish insurance as above described, shall be written on either a Builder's Risk Form or Alterations and Additions Form or Installation Floater Form, whichever, is applicable, and shall be filed, upon request, with the Pennsylvania Game Commission before starting the work. Duplicate certificates of insurance for the Installation Floater covering this project will be acceptable.

All policies shall be issued by Insurance Companies authorized to conduct such business under the laws of the Commonwealth of Pennsylvania, and shall run until date of final acceptance of the work. Policies expiring at a fixed date before final acceptance of the work must be renewed and refiled before such date.

OBSERVANCE OF LAWS AND REGULATIONS. The contractor shall observe all laws and regulations pertaining to his work, including regulations of the Department of Labor and Industry, the Department of Environmental Resources, the applicable local laws or ordinances, and shall furnish as required any permits, licenses and certificates and pay any fees incidental thereto. The Contractor agrees to save harmless and fully indemnify the Commonwealth from all damages, costs or expenses for infringement of any patent rights as a result of use on the project of patented articles.

INSPECTION AND CHANGES. All work will be subject to inspection and acceptance by the Pennsylvania Game Commission. The Pennsylvania Game Commission shall have the right to make changes in the quantities or character of the work involved. Adjustments to the contract amount to be on the unit price and/or lump sum price.

TEMPORARY SERVICES AND JOB CONDITIONS. The contractor shall be responsible for providing temporary facilities and utilities necessary to execute and protect his work. The contractor shall accept all conditions as found by him upon examination of the site. He shall

cooperate in the arrangements of his work as necessary to least affect the administration or operations of present buildings, and shall keep the site clean at all times. If such modifications materially increase the unit cost of work, the increased expense will be paid by the Commission following execution of a Change Order in a dollar amount determined by the Commission, in its sole discretion, to be fair and reasonable. If such modifications diminish the unit cost of the work, the amount of said diminution may be retained or withheld by the Commission. No consequent loss of anticipated profit on work not executed will be paid to the Contractor.

LABOR REQUIREMENTS. All laws and regulations of the Commonwealth pertaining to conditions of employment shall be observed including, but not limited to, the Act of July 18, 1935, No. 383 (43 P.S. Sec. 153) prohibiting racial discrimination, Act of July 19, 1935, No. 414 (43 P.S. Sec. 154) requiring hiring of state resident, the Act of June 21, 1937, No. 373 (71 P.S. Sec. 202) relating to minimum wages and the veteran's preference provision of the Military Code (51 Pa. P.S. Sec. 7106).

PREVAILING WAGE. This contract is subject to the provisions, duties, obligations, remedies and penalties of the Act of August 15, 1961 (P.L. 987), as amended, known as the "Pennsylvania Prevailing Wage Act" (43 P.S. Sec. 165-1 *et seq.*). The general prevailing minimum wage rates as determined by the US Department of Labor shall be paid for each craft or classification of all workmen needed to perform this Contract during the term hereof, for the locality in which the work is to be performed. (See attached Prevailing Wage Determination, pages 1 to 7.

PAYMENT TERMS. Payment will be made at the unit prices bid for each item upon satisfactory completion of items as listed on the Proposal Form.

If after substantial completion of work, final completion thereof is materially delayed through no fault of the Contractor, the Commission, may without terminating the Contract, make payment for that portion of the work completed and accepted. Upon completion, final approval and acceptance of work, the Contractor, will be paid the total amount of the Contract, subject to any authorized additions to or deductions from the Contract amount.

CONTRACT TERM. The Contract shall commence upon delivery of purchase order to Contractor (estimated to be September 17, 2018) and shall terminate on October 26, 2018. All work must be completed and accepted by that date. Time extensions will be considered for factors beyond the contractor's control such as adverse weather conditions.

EXCISE TAXES, PENNSYLVANIA SALES TAX. It is further understood the Commonwealth is exempt from all Excise Taxes. This also applies with reference to the Pennsylvania Sales Tax, however, the Contractor remains liable for the payment of Sale and Use Tax on all materials and fixtures which he purchases or uses for the purpose of fulfilling this contract, irrespective of the fact that the work is being performed for a governmental instrumentality.

OFFSET PROVISION. The Contractor agrees that the Commonwealth may set off the amount of any state liability or other debt of the Contractor or its subsidiaries that is owed to the Commonwealth and not being contested on appeal against any payments due the contractor under this or any other contract with the Commonwealth.

**BUREAU OF LABOR LAW COMPLIANCE
PREVAILING WAGES PROJECT RATES**

Project Name:	Scotia Archery Range
Awarding Agency:	PA Game Commission
Contract Award Date:	9/12/2018
Serial Number:	18-05807
Project Classification:	Building/Heavy/Highway
Determination Date:	8/9/2018
Assigned Field Office:	Altoona
Field Office Phone Number:	(814)940-6224
Toll Free Phone Number:	
Project County:	Centre County

**BUREAU OF LABOR LAW COMPLIANCE
PREVAILING WAGES PROJECT RATES**

Project: 18-05807 - Building	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Asbestos & Insulation Workers	7/2/2019		\$35.80	\$28.26	\$64.06
Asbestos & Insulation Workers	7/2/2020		\$35.80	\$30.01	\$65.81
Asbestos & Insulation Workers	6/26/2017		\$32.00	\$26.51	\$58.51
Asbestos & Insulation Workers	7/2/2018		\$35.80	\$26.76	\$62.56
Boilermaker (Commercial, Institutional, and Minor Repair Work)	3/1/2018		\$29.52	\$18.22	\$47.74
Boilermaker (Commercial, Institutional, and Minor Repair Work)	3/1/2017		\$28.52	\$18.22	\$46.74
Boilermakers	1/1/2018		\$46.26	\$33.36	\$79.62
Bricklayers, Stone Masons, Pointers, Caulkers, Cleaners	5/1/2020		\$34.17	\$17.64	\$51.81
Bricklayers, Stone Masons, Pointers, Caulkers, Cleaners	5/1/2021		\$34.78	\$18.13	\$52.91
Bricklayers, Stone Masons, Pointers, Caulkers, Cleaners	5/1/2019		\$33.63	\$17.18	\$50.81
Bricklayers, Stone Masons, Pointers, Caulkers, Cleaners	5/1/2017		\$32.77	\$16.34	\$49.11
Bricklayers, Stone Masons, Pointers, Caulkers, Cleaners	5/1/2018		\$33.16	\$16.75	\$49.91
Carpenters	6/1/2017		\$27.93	\$14.79	\$42.72
Carpenters, Drywall Hangers, Framers, Instrument Men, Lathers, Soft Floor Layers	6/1/2018		\$28.51	\$15.27	\$43.78
Carpenters, Drywall Hangers, Framers, Instrument Men, Lathers, Soft Floor Layers	6/1/2020		\$29.93	\$16.39	\$46.32
Carpenters, Drywall Hangers, Framers, Instrument Men, Lathers, Soft Floor Layers	6/1/2021		\$30.77	\$16.89	\$47.66
Carpenters, Drywall Hangers, Framers, Instrument Men, Lathers, Soft Floor Layers	6/1/2019		\$29.11	\$15.92	\$45.03
Cement Masons	7/1/2018		\$27.74	\$17.10	\$44.84
Cement Masons	7/10/2017		\$26.96	\$16.73	\$43.69
Cement Masons	6/1/2018		\$27.25	\$10.71	\$37.96
Cement Masons	7/1/2019		\$28.49	\$17.45	\$45.94
Drywall Finisher	6/1/2017		\$27.80	\$19.14	\$46.94
Drywall Finisher	6/1/2018		\$28.10	\$19.99	\$48.09
Electricians & Telecommunications Installation Technician	12/22/2018		\$41.74	\$26.44	\$68.18
Electricians & Telecommunications Installation Technician	12/22/2019		\$44.46	\$26.44	\$70.90
Electricians & Telecommunications Installation Technician	12/23/2017		\$39.76	\$26.44	\$66.20
Elevator Constructor	1/1/2018		\$45.35	\$33.00	\$78.35
Elevator Tender (Use Elevator Apprentice or Constructor)	1/1/2007		\$0.00	\$0.00	\$0.00
Glazier	9/1/2017		\$22.50	\$18.85	\$41.35
Iron Workers	6/1/2018		\$28.97	\$29.07	\$58.04
Iron Workers (Bridge, Structural Steel, Ornamental, Precast, Reinforcing)	6/1/2017		\$28.02	\$28.36	\$56.38
Laborers (Class 01 - See notes)	1/1/2017		\$18.47	\$15.49	\$33.96
Laborers (Class 01 - See notes)	1/1/2018		\$18.47	\$16.49	\$34.96
Laborers (Class 01 - See notes)	1/1/2018		\$20.37	\$14.59	\$34.96

**BUREAU OF LABOR LAW COMPLIANCE
PREVAILING WAGES PROJECT RATES**

Project: 18-05807 - Building	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Laborers (Class 02 - See notes)	1/1/2018		\$18.62	\$16.49	\$35.11
Laborers (Class 02 - See notes)	1/1/2018		\$20.52	\$14.59	\$35.11
Laborers (Class 02 - See notes)	1/1/2017		\$18.62	\$15.49	\$34.11
Laborers (Class 03 - See notes)	1/1/2018		\$20.62	\$14.59	\$35.21
Laborers (Class 03 - See notes)	1/1/2017		\$18.72	\$15.49	\$34.21
Laborers (Class 03 - See notes)	1/1/2018		\$18.72	\$16.49	\$35.21
Laborers (Class 04 - See notes)	1/1/2017		\$17.47	\$15.49	\$32.96
Laborers (Class 04 - See notes)	1/1/2018		\$17.47	\$16.49	\$33.96
Laborers (Class 04 - See notes)	1/1/2018		\$19.37	\$14.59	\$33.96
Landscape Laborer	1/1/2018		\$20.59	\$15.31	\$35.90
Landscape Laborer	1/1/2017		\$20.59	\$14.36	\$34.95
Landscape Laborer (Skilled)	1/1/2017		\$21.01	\$14.36	\$35.37
Landscape Laborer (Skilled)	1/1/2018		\$21.01	\$15.31	\$36.32
Landscape Laborer (Tractor Operator)	1/1/2018		\$21.31	\$15.31	\$36.62
Landscape Laborer (Tractor Operator)	1/1/2017		\$21.31	\$14.36	\$35.67
Marble Mason	5/1/2020		\$31.02	\$16.87	\$47.89
Marble Mason	5/1/2017		\$29.27	\$15.62	\$44.89
Marble Mason	5/1/2018		\$29.88	\$16.01	\$45.89
Marble Mason	5/1/2019		\$30.46	\$16.43	\$46.89
Marble Mason	5/1/2021		\$31.55	\$17.34	\$48.89
Millwright	6/1/2017		\$39.83	\$18.57	\$58.40
Operators (Class 01 - see notes)	7/1/2017		\$30.17	\$17.42	\$47.59
Operators (Class 01 - see notes)	7/1/2019		\$31.27	\$18.82	\$50.09
Operators (Class 01 - see notes)	7/1/2018		\$30.72	\$18.12	\$48.84
Operators (Class 01 - see notes)	7/1/2021		\$32.47	\$20.32	\$52.79
Operators (Class 01 - see notes)	7/1/2020		\$31.87	\$19.57	\$51.44
Operators (Class 02 -see notes)	7/1/2021		\$27.85	\$20.32	\$48.17
Operators (Class 02 -see notes)	7/1/2017		\$26.45	\$17.42	\$43.87
Operators (Class 02 -see notes)	7/1/2020		\$27.45	\$19.57	\$47.02
Operators (Class 02 -see notes)	7/1/2018		\$26.75	\$18.12	\$44.87
Operators (Class 02 -see notes)	7/1/2019		\$27.05	\$18.82	\$45.87
Operators (Class 03 - See notes)	7/1/2021		\$26.30	\$20.32	\$46.62
Operators (Class 03 - See notes)	7/1/2017		\$25.30	\$17.42	\$42.72
Operators (Class 03 - See notes)	7/1/2018		\$25.50	\$18.12	\$43.62
Operators (Class 03 - See notes)	7/1/2020		\$26.00	\$19.57	\$45.57
Operators (Class 03 - See notes)	7/1/2019		\$25.70	\$18.82	\$44.52
Operators (Class 04 - Instrument Person (Surveying & Layout))	7/1/2016		\$22.65	\$16.77	\$39.42
Operators (Class 04 - Rodman/Chainman (Surveying and Layout))	7/1/2016		\$22.20	\$16.77	\$38.97
Painters Class 6 (see notes)	6/1/2019		\$28.50	\$20.06	\$48.56
Painters Class 6 (see notes)	6/1/2017		\$27.50	\$18.66	\$46.16
Painters Class 6 (see notes)	6/1/2018		\$28.00	\$19.36	\$47.36
Pile Driver Divers (Building, Heavy, Highway)	1/1/2017		\$49.13	\$17.95	\$67.08
Pile Driver Divers (Building, Heavy, Highway)	1/1/2018		\$50.33	\$18.55	\$68.88

**BUREAU OF LABOR LAW COMPLIANCE
PREVAILING WAGES PROJECT RATES**

Project: 18-05807 - Building	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Pile Driver Divers (Building, Heavy, Highway)	1/1/2019		\$51.45	\$19.30	\$70.75
Piledrivers	1/1/2019		\$34.30	\$19.30	\$53.60
Piledrivers	1/1/2018		\$33.55	\$18.55	\$52.10
Piledrivers	1/1/2017		\$32.75	\$17.95	\$50.70
Plasterers	6/1/2017		\$27.30	\$9.66	\$36.96
Plasterers	6/1/2017		\$27.30	\$9.66	\$36.96
Plumber/Pipefitter	5/1/2018	4/30/2019	\$36.87	\$25.26	\$62.13
Plumber/Pipefitter	5/1/2017		\$35.82	\$24.51	\$60.33
Roofers (Composition)	5/1/2018		\$37.15	\$31.27	\$68.42
Roofers (Composition)	5/1/2017		\$36.15	\$30.22	\$66.37
Roofers (Shingle)	5/1/2016		\$25.70	\$19.17	\$44.87
Roofers (Shingle, Slate, Tile)	5/1/2018		\$27.50	\$20.37	\$47.87
Roofers (Slate & Tile)	5/1/2018		\$30.50	\$20.37	\$50.87
Roofers (Slate & Tile)	5/1/2016		\$28.70	\$19.17	\$47.87
Sheet Metal Workers	6/1/2017		\$33.98	\$35.40	\$69.38
Sheet Metal Workers	6/1/2016		\$33.60	\$33.43	\$67.03
Sign Makers and Hangars	5/21/2010		\$24.33	\$16.37	\$40.70
Sprinklerfitters	4/1/2017		\$37.40	\$21.74	\$59.14
Sprinklerfitters	4/1/2018		\$38.80	\$22.74	\$61.54
Terrazzo Finisher	5/1/2018		\$32.35	\$15.91	\$48.26
Terrazzo Finisher	5/1/2017		\$31.64	\$15.62	\$47.26
Terrazzo Finisher	5/1/2019		\$33.04	\$16.22	\$49.26
Terrazzo Setter	5/1/2018		\$31.23	\$19.25	\$50.48
Terrazzo Setter	5/1/2017		\$30.63	\$18.85	\$49.48
Terrazzo Setter	5/1/2019		\$31.81	\$19.67	\$51.48
Tile & Marble Finisher	5/1/2021		\$29.61	\$15.14	\$44.75
Tile & Marble Finisher	5/1/2020		\$28.96	\$14.79	\$43.75
Tile & Marble Finisher	5/1/2018		\$27.60	\$14.15	\$41.75
Tile & Marble Finisher	5/1/2019		\$28.29	\$14.46	\$42.75
Tile & Marble Finisher	5/1/2017		\$26.89	\$13.86	\$40.75
Tile Setter	5/1/2020		\$31.02	\$16.87	\$47.89
Tile Setter	5/1/2018		\$29.88	\$16.01	\$45.89
Tile Setter	5/1/2021		\$31.55	\$17.34	\$48.89
Tile Setter	5/1/2017		\$29.27	\$15.62	\$44.89
Tile Setter	5/1/2019		\$30.46	\$16.43	\$46.89
Truckdriver class 1(see notes)	1/1/2016		\$27.62	\$16.60	\$44.22
Truckdriver class 2 (see notes)	1/1/2016		\$27.75	\$16.69	\$44.44
Truckdriver class 3 (see notes)	1/1/2016		\$28.23	\$16.98	\$45.21

**BUREAU OF LABOR LAW COMPLIANCE
PREVAILING WAGES PROJECT RATES**

Project: 18-05807 - Heavy/Highway	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Carpenter Welder	1/1/2017		\$33.10	\$17.14	\$50.24
Carpenter Welder	1/1/2018		\$33.87	\$17.77	\$51.64
Carpenter Welder	1/1/2019		\$34.72	\$18.42	\$53.14
Carpenters	1/1/2018		\$32.92	\$17.77	\$50.69
Carpenters	1/1/2019		\$33.77	\$18.42	\$52.19
Carpenters	1/1/2017		\$32.15	\$17.14	\$49.29
Cement Finishers	1/1/2017		\$30.14	\$19.40	\$49.54
Cement Finishers	1/1/2019		\$31.94	\$20.50	\$52.44
Cement Finishers	1/1/2018		\$31.04	\$19.90	\$50.94
Electric Lineman	5/27/2019		\$47.38	\$26.30	\$73.68
Electric Lineman	5/28/2018		\$46.29	\$25.26	\$71.55
Electric Lineman	5/29/2017		\$45.24	\$24.23	\$69.47
Iron Workers (Bridge, Structural Steel, Ornamental, Precast, Reinforcing)	6/1/2017		\$28.02	\$28.36	\$56.38
Iron Workers (Bridge, Structural Steel, Ornamental, Precast, Reinforcing)	6/1/2016		\$27.81	\$27.25	\$55.06
Laborers (Class 01 - See notes)	1/1/2018		\$24.75	\$22.35	\$47.10
Laborers (Class 01 - See notes)	1/1/2017		\$24.75	\$20.95	\$45.70
Laborers (Class 01 - See notes)	1/1/2019		\$24.75	\$23.85	\$48.60
Laborers (Class 02 - See notes)	1/1/2019		\$24.91	\$23.85	\$48.76
Laborers (Class 02 - See notes)	1/1/2018		\$24.91	\$22.35	\$47.26
Laborers (Class 02 - See notes)	1/1/2017		\$24.91	\$20.95	\$45.86
Laborers (Class 03 - See notes)	1/1/2019		\$25.40	\$23.85	\$49.25
Laborers (Class 03 - See notes)	1/1/2018		\$25.40	\$22.35	\$47.75
Laborers (Class 03 - See notes)	1/1/2017		\$25.40	\$20.95	\$46.35
Laborers (Class 04 - See notes)	1/1/2019		\$25.85	\$23.85	\$49.70
Laborers (Class 04 - See notes)	1/1/2018		\$25.85	\$22.35	\$48.20
Laborers (Class 04 - See notes)	1/1/2017		\$25.85	\$20.95	\$46.80
Laborers (Class 05 - See notes)	1/1/2019		\$26.26	\$23.85	\$50.11
Laborers (Class 05 - See notes)	1/1/2018		\$26.26	\$22.35	\$48.61
Laborers (Class 05 - See notes)	1/1/2017		\$26.26	\$20.95	\$47.21
Laborers (Class 06 - See notes)	1/1/2018		\$23.10	\$22.35	\$45.45
Laborers (Class 06 - See notes)	1/1/2019		\$23.10	\$23.85	\$46.95
Laborers (Class 06 - See notes)	1/1/2017		\$23.10	\$20.95	\$44.05
Laborers (Class 07 - See notes)	1/1/2018		\$25.75	\$22.35	\$48.10
Laborers (Class 07 - See notes)	1/1/2019		\$25.75	\$23.85	\$49.60
Laborers (Class 07 - See notes)	1/1/2017		\$25.75	\$20.95	\$46.70
Laborers (Class 08 - See notes)	1/1/2018		\$27.25	\$22.35	\$49.60
Laborers (Class 08 - See notes)	1/1/2019		\$27.25	\$23.85	\$51.10
Laborers (Class 08 - See notes)	1/1/2017		\$27.25	\$20.95	\$48.20
Operators (Class 01 - see notes)	1/1/2017		\$30.69	\$19.98	\$50.67
Operators (Class 01 - see notes)	1/1/2019		\$31.89	\$21.68	\$53.57
Operators (Class 01 - see notes)	1/1/2018		\$31.29	\$20.78	\$52.07
Operators (Class 02 -see notes)	1/1/2019		\$31.63	\$21.68	\$53.31
Operators (Class 02 -see notes)	1/1/2017		\$30.43	\$19.98	\$50.41

**BUREAU OF LABOR LAW COMPLIANCE
PREVAILING WAGES PROJECT RATES**

Project: 18-05807 - Heavy/Highway	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Operators (Class 02 -see notes)	1/1/2018		\$31.03	\$20.78	\$51.81
Operators (Class 03 - See notes)	1/1/2018		\$27.38	\$20.78	\$48.16
Operators (Class 03 - See notes)	1/1/2019		\$27.98	\$21.68	\$49.66
Operators (Class 03 - See notes)	1/1/2017		\$26.78	\$19.98	\$46.76
Operators (Class 04 - See notes)	1/1/2018		\$26.92	\$20.78	\$47.70
Operators (Class 04 - See notes)	1/1/2017		\$26.32	\$19.98	\$46.30
Operators (Class 04 - See notes)	1/1/2019		\$27.52	\$21.68	\$49.20
Operators (Class 05 - See notes)	1/1/2019		\$27.27	\$21.68	\$48.95
Operators (Class 05 - See notes)	1/1/2018		\$26.67	\$20.78	\$47.45
Operators (Class 05 - See notes)	1/1/2017		\$26.07	\$19.98	\$46.05
Painters Class 1 (see notes)	6/1/2018		\$32.50	\$19.36	\$51.86
Painters Class 1 (see notes)	6/1/2019		\$33.15	\$20.06	\$53.21
Painters Class 1 (see notes)	6/1/2017		\$31.85	\$18.66	\$50.51
Painters Class 1 (see notes)	6/1/2016		\$31.58	\$17.58	\$49.16
Painters Class 1 (see notes)	6/1/2017		\$31.98	\$18.43	\$50.41
Painters Class 2 (see notes)	6/1/2018		\$34.60	\$19.36	\$53.96
Painters Class 2 (see notes)	6/1/2019		\$35.25	\$20.06	\$55.31
Painters Class 2 (see notes)	6/1/2017		\$33.95	\$18.66	\$52.61
Painters Class 2 (see notes)	6/1/2016		\$31.58	\$17.58	\$49.16
Painters Class 2 (see notes)	6/1/2017		\$34.08	\$18.43	\$52.51
Painters Class 3 (see notes)	6/1/2017		\$33.95	\$18.66	\$52.61
Painters Class 3 (see notes)	6/1/2018		\$34.60	\$19.36	\$53.96
Painters Class 3 (see notes)	6/1/2017		\$27.58	\$18.48	\$46.06
Painters Class 3 (see notes)	6/1/2019		\$35.25	\$20.06	\$55.31
Painters Class 3 (see notes)	6/1/2016		\$33.68	\$17.58	\$51.26
Painters Class 4 (see notes)	6/1/2018		\$27.68	\$19.36	\$47.04
Painters Class 4 (see notes)	6/1/2019		\$28.20	\$20.06	\$48.26
Painters Class 4 (see notes)	6/1/2016		\$26.95	\$17.58	\$44.53
Painters Class 4 (see notes)	6/1/2017		\$27.16	\$18.66	\$45.82
Painters Class 4 (see notes)	6/1/2017		\$27.27	\$18.43	\$45.70
Painters Class 5 (see notes)	6/1/2018		\$22.49	\$19.36	\$41.85
Painters Class 5 (see notes)	6/1/2019		\$22.91	\$20.06	\$42.97
Painters Class 5 (see notes)	6/1/2017		\$22.07	\$18.66	\$40.73
Painters Class 5 (see notes)	6/1/2017		\$22.16	\$18.43	\$40.59
Painters Class 5 (see notes)	6/1/2016		\$21.90	\$17.58	\$39.48
Pile Driver Divers (Building, Heavy, Highway)	1/1/2017		\$49.13	\$17.95	\$67.08
Pile Driver Divers (Building, Heavy, Highway)	1/1/2019		\$51.45	\$19.30	\$70.75
Pile Driver Divers (Building, Heavy, Highway)	1/1/2018		\$50.33	\$18.55	\$68.88
Piledrivers	1/1/2018		\$33.55	\$18.55	\$52.10
Piledrivers	1/1/2017		\$32.75	\$17.95	\$50.70
Piledrivers	1/1/2019		\$34.30	\$19.30	\$53.60
Steamfitters (Heavy and Highway - Gas Distribution)	5/1/2017		\$40.98	\$32.53	\$73.51
Truckdriver class 1(see notes)	1/1/2019		\$28.99	\$19.43	\$48.42
Truckdriver class 1(see notes)	1/1/2017		\$28.10	\$17.42	\$45.52

**BUREAU OF LABOR LAW COMPLIANCE
PREVAILING WAGES PROJECT RATES**

Project: 18-05807 - Heavy/Highway	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Truckdriver class 1(see notes)	1/1/2018		\$28.52	\$18.40	\$46.92
Truckdriver class 2 (see notes)	1/1/2019		\$29.13	\$19.51	\$48.64
Truckdriver class 2 (see notes)	1/1/2017		\$28.24	\$17.50	\$45.74
Truckdriver class 2 (see notes)	1/1/2018		\$28.66	\$18.48	\$47.14
Truckdriver class 3 (see notes)	1/1/2019		\$29.59	\$19.82	\$49.41
Truckdriver class 3 (see notes)	1/1/2018		\$29.13	\$18.78	\$47.91
Truckdriver class 3 (see notes)	1/1/2017		\$28.71	\$17.80	\$46.51

**PENNSYLVANIA GAME COMMISSION
CONDITIONS FOR CONSTRUCTION CONTRACTS**

The Contractor shall comply with the conditions listed below for this construction contract.

1. **Steel Products Procurement Act**

In accordance with the Act of March 3, 1978 (P.L. 6, No. 3), as amended, known as the "Steel Products Procurement Act" (73 P.S. Section 1881 et seq.), the Contractor, subcontractors, material men, or suppliers shall use only steel products produced in the United States. "Steel products" mean products rolled, formed, shaped, drawn, extruded, forged, cast, fabricated or otherwise similarly processed by a combination of two or more of such operations, from steel made in the United States by the open hearth, basic oxygen, electric furnace, Bessemer, or other steel making process, including cast iron products. With each shipment of steel or cast iron products delivered to the project site, the Contractor shall provide evidence to the Game Commission's field representative that such steel products comply with the Act. When Unidentified Steel Products are supplied, the Contractor must provide documentation which includes, but is not limited to: invoices, bills of lading, and mill certification that the steel was melted and manufactured in the United States, which establishes that the Contractor has fully complied with the Act. If a steel product is identifiable from its face, the Contractor must provide certification that it has fully complied with the Act.

The definition of steel products shall include machinery and equipment listed in United States Department of Commerce Standard Industrial Classification 25 (furniture and fixture), 35 (machinery, except electrical) and 37 (transportation equipment) and made of, fabricated from, or containing steel components. If a product contains both foreign and United States steel, such product shall be determined to be a United States steel product only if at least 75% of the cost of the articles, materials and supplies have been mined, produced or manufactured, as the case may be, in the United States. Transportation equipment shall be determined to be a United States steel product if it complies with Section 165 of Public Law 97-424 (96 Stat. 2136).

The Commission shall not provide for, or make any payments to, any person who has not complied with the Act. Any such payments made to any person by the Commission which should not have been made as a result of the Act shall be recoverable directly from the Contractor or subcontractor who did not comply with the Act. In addition to the above penalties, any person who willfully violates the provisions of the Act shall be subject to other penalties outlined in the Act.

2. **Trade Practices Act**

In accordance with the Act of July 23, 1968 (P.L. 686, No. 226), as amended, known as the "Trade Practices Act" (71 P.S. Section 773.101 et seq.) the Contractor shall not use or permit to be used in the work any aluminum or steel products made in a foreign country which is listed below as a foreign country which discriminates against aluminum or steel products manufactured in Pennsylvania. The countries of Brazil, Spain, South Korea, and Argentina have been found to discriminate against certain products manufactured in Pennsylvania. Therefore, the use of those countries' products, as listed below, are not permitted:

- a. Brazil: welded carbon steel pipes and tubes; carbon steel wire rod; tool steel; certain stainless steel products including hot-rolled stainless steel bar; stainless steel wire rod and cold-formed stainless steel bar; prestressed concrete steel wire strand; hot-rolled carbon steel plate in coil; hot-rolled carbon steel sheet; and cold-rolled carbon steel sheet.
- b. Spain: certain stainless steel products, including stainless steel wire rod, hot-rolled stainless steel bars; and cold-formed stainless steel bars; prestressed concrete steel wire strand; and certain steel products including hot-rolled steel plate, cold-rolled carbon steel plate, carbon steel structural shapes, galvanized carbon steel sheet, hot-rolled carbon steel bars, and cold-formed carbon steel bars.
- c. South Korea: welded carbon steel pipes and tubes; hot-rolled carbon steel plate; hot-rolled carbon steel sheet; and galvanized steel sheet.
- d. Argentina: carbon steel wire rod and cold-rolled carbon steel sheet.

Penalties for violation of this paragraph may be found in the Trade Practices Act, which penalties include becoming ineligible for public works contracts for a period of three (3) years. This paragraph in no way relieves the Contractor of responsibility to comply with the provisions of the Steel Products Procurement Act described herein.

3. **Reciprocal Limitations Act**

The form GSPUR89 (Reciprocal Limitations Act Requirements) is attached. The Contractor shall complete the applicable portions of pages 3 and 4 of the form and submit the completed pages to the Game Commission for processing of the purchase order for the project.

**RECIPROCAL LIMITATIONS ACT
REQUIREMENTS**

Please Complete Applicable Portion of Pages 3 & 4 and Return with Bid.

NOTE: These Requirements Do Not Apply To Bids Under \$10,000.00

I. REQUIREMENTS

- A. The Reciprocal Limitations Act requires the Commonwealth to give preference to those bidders offering supplies produced, manufactured, mined or grown in Pennsylvania as against those bidders offering supplies produced, manufactured, mined or grown in any state that gives or requires a preference to supplies produced, manufactured, mined or grown in that state. The amount of the preference shall be equal to the amount of the preference applied by the other state for that particular supply.

The following is a list of states which have been found by the Department of General Services to have applied a preference for in-state supplies and the amount of the preference:

STATE	PREFERENCE
1. Alaska	7% (applies only to timber, lumber, and manufactured lumber products originating in the state)
2. Arizona	5% (construction materials produced or manufactured in the state only)
3. Hawaii	10%
4. Illinois	10% for coal only
5. Iowa	5% for coal only
6. Louisiana	4% meat and meat products 4% catfish 10% milk & dairy products 10% steel rolled in Louisiana 7% all other products
7. Montana	5% for residents * 3% for non-residents* *offering in-state goods, supplies, equipment and materials
8. New Mexico	5%
9. New York	3% for purchase of food only
10. Oklahoma	5%
11. Virginia	4% for coal only
12. Washington	5% (fuels mined or produced in the state only)
13. Wyoming	5%

- B. The Reciprocal Limitations Act requires the Commonwealth to give preference to those bidders offering printing performed in Pennsylvania as against those bidders offering printing performed in any state that gives or requires a preference to printing performed in that state. The amount of the preference shall be equal to the amount of the preference applied by the other state for that particular category of printing.

The following is a list of states which have been found by the Department of General Services to have applied a preference for in-state printing and the amount of the preference:

STATE	PREFERENCE
1. Hawaii	15%
2. Idaho	10%
3. Louisiana	3%
4. Montana	8%
5. New Mexico	5%
6. Wyoming	10%

- C. The Reciprocal Limitations Act, also requires the Commonwealth to give resident bidders a preference against a nonresident bidder from any state that gives or requires a preference to bidders from that state or exclude bidders from states that exclude nonresident bidders. The amount of the preference shall be equal to the amount of the preference applied by the state of the nonresident bidder. The following is a list of the states which have been found by the Department of General Services to have applied a preference for in-state bidders and the amount of the preference:

STATE	PREFERENCE
1. Alaska	5% (supplies only)
2. Arizona	5% (construction materials from Arizona resident dealers only)
3. California	5% (for supply contracts only in excess of \$100,000.00)
4. Connecticut	10% (for supplies only)
5. Montana	3%
6. New Mexico	5% (for supplies only)
7. South Carolina	2% (under \$2,500,000.00) 1% (over \$2,500,000.00)
This preference does not apply to construction contracts nor where the price of a single unit exceeds \$10,000.	
8. West Virginia	2.5% (for the construction, repair or improvement of any buildings)
9. Wyoming	5%

STATE	PROHIBITION
1. New Jersey	For supply procurements or construction projects restricted to Department of General Services Certified Small Businesses, New Jersey bidders shall be excluded from award even if they themselves are Department of General Services Certified Small Businesses.

D. The Reciprocal Limitations Act also requires the Commonwealth not to specify, use or purchase supplies which are produced, manufactured, mined or grown in any state that prohibits the specification for, use, or purchase of such items in or on its public buildings or other works, when such items are not produced, manufactured, mined or grown in such state. The following is a list of the states which have been found by the Department of General Services to have prohibited the use of out-of-state supplies:

STATE	PROHIBITION
1. Alabama	Only for printing and binding involving "messages of the Governor to the Legislature", all bills, documents and reports ordered by and for the use of the Legislature or either house thereof while in session; all blanks, circulars, notices and forms used in the office of or ordered by the Governor, or by any state official, board, commission, bureau or department, or by the clerks of the supreme court . . ./and other appellate courts/; and all blanks and forms ordered by and for the use of the Senate and Clerk or the House of Representatives, and binding the original records and opinions of the Supreme Court . . . /and other appellate courts/
2. Georgia	Forest products only
3. Indiana	Coal
4. Michigan	Printing
5. New Mexico	Construction
6. Ohio	Only for House and Senate bills, general and local laws, and joint resolutions; the journals and bulletins of the Senate and house of Representatives and reports, communications, and other documents which form part of the journals; reports, communications, and other documents ordered by the General Assembly, or either House, or by the executive department or elective state officers; blanks, circulars, and other work for the use of the executive departments, and elective state officers; and opinions of the Attorney General.
7. Rhode Island	Only for food for state institutions.

*If the bid discloses that the bidder is offering to supply one of the above-listed products that is manufactured, mined, or grown in the listed state, it shall be rejected. Contractors are prohibited from supplying these items from these states.

II. CALCULATION OF PREFERENCE

In calculating the preference, the amount of a bid submitted by a Pennsylvania bidder shall be reduced by the percentage preference which would be given to a nonresident bidder by its state of residency (as found by the Department of General Services in Paragraph C_{above}). Similarly, the amount of a bid offering Pennsylvania goods, supplies, equipment or materials shall be reduced by the percentage preference which would be given to another bidder by the state where the goods, supplies, equipment or materials are produced, manufactured, mined or grown (as found by the Department of General Services in Paragraphs A and B above).

THIS FORM MUST BE COMPLETED AND RETURNED WITH THE BID

III. STATE OF MANUFACTURE

All bidders must complete the following chart by listing the name of the manufacturer and the state (or foreign country) of manufacture for each item. If the item is domestically produced, the bidder must indicate the state in the United States where the item will be manufactured. **This chart must be completed and submitted with the bid or no later than two (2) business days after notification from the Issuing Office to furnish the information. Failure to complete this chart and provide the required information prior to the expiration of the second business day after notification shall result in the rejection of the bid.**

ITEM NUMBER	NAME OF MANUFACTURER	STATE (OR FOREIGN COUNTRY) OF MANUFACTURE

IV. BIDDER'S RESIDENCY

A. In determining whether the bidder is a nonresident bidder from a state that gives or requires a preference to bidders from that state, the address given on the first page of this invitation to bid shall be used by the Commonwealth. If that address is incorrect, or if no address is given, the correct address should be provided in the space below:

Correct Address: _____

B. In order to claim the preference provided under Section I.B., Pennsylvania resident bidders must complete the following or have such information on file with the Issuing Office:

1. Address of bidder's bona fide establishment in Pennsylvania at which it was transacting business on the date when bids for this contract/requisition were first solicited: _____

2. a. If the bidder is a corporation:

(1) The corporation is or is not incorporated under the laws of the Commonwealth of Pennsylvania.

(a) If the bidder is incorporated under the laws of the Commonwealth of Pennsylvania, provide date of incorporation: _____

(b) If the bidder is not incorporated under the laws of the Commonwealth of Pennsylvania, it must have a certificate of authority to do business in the Commonwealth of Pennsylvania from the Pennsylvania Department of State as required by the Pennsylvania Business Corporation Law (15 P.S. §2001). Provide date of issuance of certificate of authority: _____

(2) The corporation is or is not conducting business in Pennsylvania under an assumed or fictitious name. If the bidder is conducting business under an assumed or fictitious name, it must register the fictitious name with the Secretary of the Commonwealth and the office of the prothonotary of the county wherein the registered office of such corporation is located as required by the Fictitious Corporate Name Act, as amended 15 P.S. §51 et seq. Corporate bidders conducting business under an assumed or fictitious name must provide date of registry of the assumed or fictitious name: _____

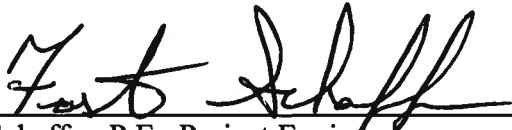
b. If the bidder is a partnership:

(1) The partnership is or is not conducting business in Pennsylvania under an assumed or fictitious name. If the bidder is conducting business under an assumed or fictitious name, it must file with the Secretary of the Commonwealth and the office of the prothonotary the county wherein the principal place of business is located as required by the Fictitious Name Act of May 24, 1945, P.L. 967, as amended 54 P.S. §28.1. Partnerships conducting business under an assumed or fictitious name must provide the date of filing of the assumed or fictitious name with the Secretary of the Commonwealth: _____

(2) The partnership is or is not a limited partnership formed under the laws of any jurisdiction other than the Commonwealth of Pennsylvania. If the bidder is an Out-of-state limited partnership, it must register with the Pennsylvania Department of State as required by the Act of July 10, 1981, P.L. 237, as amended, 59 Pa. C.S.A. §503. Out-of-state limited partnerships must provide the date of registry with the Pennsylvania Department of State: _____

c. If the bidder is an individual:

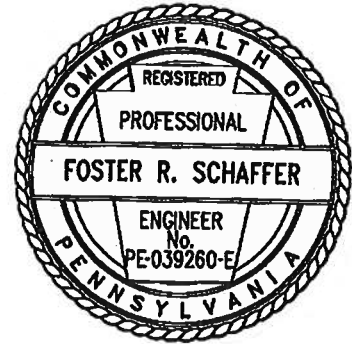
He or she is or is not conducting business under an assumed or fictitious name. If the bidder is conducting business under an assumed or fictitious name, he or she must file with the Secretary of the Commonwealth and the office of the prothonotary in the county wherein the principal place of business is located as required by the Fictitious Name Act of May 24, 1945, P.L. 967, as amended, 54 P.S. §28.1. Individuals conducting business under an assumed or fictitious name must provide the date of filing of the assumed or fictitious name with the Secretary of the Commonwealth: _____



8/15/18

Foster Schaffer, P.E., Project Engineer
Pennsylvania Game Commission

Date



TECHNICAL SPECIFICATIONS

The following stipulations, specifications and description of work are defined and described as Technical Specifications and it is understood and agreed that everything herein contained is hereby made part of the contract. Wherever any feature of the work is not fully set forth in these Technical Specifications, it must be understood that the same shall be governed by the rules of the best prevailing practice for that class of work, as determined by the Game Commission's Representative.

These Technical Specifications and any drawings, maps and/or plans forming a part thereof, will cover the furnishing of all labor, technical assistance, equipment, tools and materials necessary to perform the design and construction work, as required under this contract.

- Section 1 – Summary of Work
- Section 2 – Demolition
- Section 3 – Stripping
- Section 4 – Aggregate
- Section 5 – Concrete Sidewalks
- Section 6 – Guard Posts
- Section 7 – Mulch
- Section 8 – Target Stations
- Section 9 – Sand Pit Target
- Section 10 – Handicapped Sign
- Section 11 - Seeding

DRAWINGS

The following drawings are included:

- 1 of 3 Location Map, Site Plan, Aerial Photo and Notes
- 2 of 3 Parking Lot and Sidewalk Details
- 3 of 3 Target Station Details

TECHNICAL SPECIFICATION SECTION 1 - SUMMARY OF WORK

1.1 – SCOPE OF PROJECT

The intent of this project is to construct a new archery range on State Game Lands #176, Half Moon Township, Centre County. The project consists of demolishing and removing existing shooting range features, stripping sod from the work areas, constructing a stone surface parking area, concrete sidewalks, target stations and guard posts, and seeding disturbed areas at the new range.

1.2 – WORK AREA

The new archery range is on State Game Lands #176 which is about 5 miles northwest of State College off of US Route 322. The project site is located in the Scotia Range complex. The work area is a level grassed field within earthen embankments. The site is owned by the Pennsylvania Game Commission (PGC).

1.3 – WORK HOURS

The work hours at the project site are during regular PGC business hours which are Monday through Friday, 7:45AM to 4:00PM. Work during different hours must have prior written approval by the PGC. Requests for different working hours must be submitted in writing three days in advance.

1.4 – ACCESS TO WORK AREA

Access to the new range is from Scotia Range Road. Use the existing driveway entrance to the range complex to access the site. The Contractor must keep roads open to travel and repair any ruts or other damage caused by construction equipment. The other ranges at the complex will remain in operation during construction of the archery range.

1.5 – PROJECT LAYOUT

The Contractor shall stake out the range features using the dimensions shown on the Drawings. The PGC will assist the Contractor with the project layout at a pre-construction meeting. The Contractor is responsible for horizontal and vertical layout. All stakes, targets, grade markers, etc. used to establish locations and lines are the responsibility of the Contractor.

1.6 – PERMITS, LAWS AND REGULATIONS

The PGC is not aware of any permits required for construction of the project.

The Contractor shall comply with all laws, ordinances, rules, orders and regulations relating to the performance of the work, the protection of adjacent property, the maintaining of surface passageways, guard fences, and/or other protective facilities.

All applicable Federal and State laws and regulations, municipal ordinances and rules and regulations of all authorities, having jurisdiction over construction of the project shall apply to the contract throughout, and they shall be deemed to be included in the contract as a part, thereof, the same as though herein written out in full.

All regulations of the Occupational Safety and Health Act are in effect on this contract. It will be the Contractor's responsibility to make himself aware of all appropriate County, State and Federal regulations that apply to this contract.

Any violations incurred from improper execution of the above provisions shall be paid for by the Contractor. Loss of time on the project from such violations will not be tolerated.

1.7 – SCHEDULE

The Contract is to be completed by October 26, 2018. If the work is delayed by weather or other conditions beyond the contractor's control, the PGC will consider extending the completion date.

TECHNICAL SPECIFICATION SECTION 2 – DEMOLITION

2.1 – SCOPE

The work included in this section consists of the dismantling and disposal of the structures of the existing shooting range at the site. The structures include a two-story wood frame control tower, 2 rows of station markers, a concrete pit for targets and the mechanisms and equipment for the target turning system. The large tree in the southwest corner of the site is to be removed also.

2.2 – PROCEDURE

A – General – The Contractor shall inspect the control tower to determine the stability of the structure and formulate a plan to demolish the structure in a safe manner. All components of the building including the foundation/footings are to be removed from the site. Blasting or burning for demolition is not permitted and burning demolished building components or litter on-site is not permitted. The Contractor is permitted to salvage any components of the building for his own use.

The PGC will arrange for disconnection of the electric line from the building and target turning equipment before the demolition project begins.

B – Demolition – Furnish all labor, equipment and materials necessary to demolish the structures completely and remove the all components from the site. The existing range features can be simply knocked down and removed or disassembled piece by piece. All existing shooting range components are considered property of the Contractor and can be salvaged and sold by the Contractor to offset the costs of the project.

C – Concrete Target Pit – The concrete target pit is to be broken up into pieces that have a maximum dimension of 12-inches. The broken pieces of concrete and masonry are to be removed from the site.

D – Tree Removal – Cut down the large tree in the southwest corner of the site. Cut the tree so that the stump can be removed with the root ball. Collect and dispose of the limbs, branches, stump, trunk in an off-site spoil area. Merchantable logs are property of the Contractor and can be salvaged from the site. Burning is not permitted at the site. Use stripped material from the site to fill the whole left by removal of the stump and root ball.

E – Disposal – All demolished range components and materials are to be removed from the site. The Contractor is encouraged to salvage and recycle any of the materials. Materials that cannot be salvaged or recycled shall be disposed of at an approved landfill or incinerator. The Contractor shall adhere to all DEP solid waste disposal regulations. The Contractor shall supply copies of all landfill receipts for the demolished material to verify that proper disposal procedures were followed. Receipts for materials salvaged by the Contractor are not required.

F – Spoil Area – The void left by removing the concrete target pit and target turning mechanism is to be filled with the excess stripped material from archery range construction operations. Fill the area so that it is even with the existing range floor.

G – Site Conditions – All debris, equipment and material are to be removed from the site. The finished grade in the spoil area shall match the existing site contours. Refer to Section 11 of the Technical Specifications for requirements on seeding and site stabilization.

2.3 – MEASUREMENT AND PAYMENT

Lump Sum.

TECHNICAL SPECIFICATION SECTION NO. 3 - STRIPPING

3.1- SCOPE

This work is removal, hauling, and disposal of all materials encountered for construction of the new archery range as indicated on the Drawings, or designated by the Game Commission.

Stripping operations are only to remove the sod and top layer of organic soil for construction of the new range features. Site grading is not required; the range features shall be sloped to go with the existing site contours and grades

3.2 - PROCEDURE

A. General - Follow all guidelines set forth in the Construction Industry Standards, OSHA 2207, of the Occupational Safety and Health Administration, U.S. Department of Labor. Protect the work, adjacent roadways, and property.

The Contractor is required to contact the PA One Call System at 1-800-242-1776 prior to earthmoving operations at the site.

The Contractor is responsible for laying out the new archery range and setting grade and line from the dimensions shown on the Drawings. Do not over-excavate because unauthorized excavation and replacement of materials in the over-excavated areas will not be measured and paid for. Replace over-excavated work with concrete, gravel, earth or other materials designated by, and at no additional cost to the Game Commission.

B. Stripping - Remove all materials to the limits shown on the Drawings or as necessary to construct the archery range.

C. Disposal – Suitable soil material can be used for backfill of range features. The Contractor is required to spoil the extra stripped material in the void left by removal of the concrete pit and target mechanism along the toe of the back embankment at the range. The Contractor is responsible for repairing any damage to the existing grass range area caused by trucks and other equipment used to transport and spoil the stripped material.

3.3 - MEASUREMENT AND PAYMENT

Measurement will be in cubic yards, measured by the average end area method or by three-dimensional volume method, as applicable.

Payment will be made at the contract unit price per cubic yard for “Stripping”, which price shall include full compensation for the work described. No separate measurement or payment for using the stripped material to backfill the completed range features.

TECHNICAL SPECIFICATION SECTION NO.4 - AGGREGATE

4.1 - SCOPE

This work is placing stone for construction of the parking lot and for the subbase of the concrete sidewalks. Construction of the handicapped parking area and backfilling around the target stations is also included.

4.2 - MATERIALS

Stone for the handicapped parking area shall be AASHTO #10 as specified in Section 703.2 of PennDOT Pub. 408.

Stone for construction of the parking lot and for the subbase of the concrete sidewalks shall be #2A coarse aggregate as specified in Section 703.2 of PennDOT Pub. 408. #2A coarse aggregate shall also be used as backfill around the target stations.

Obtain the stone from a source listed in PennDOT Bulletin 14.

4.3 - PROCEDURE

Place stone in the dry. Place the stone in one layer and compact with a roller to the required minimum thickness of 4-inches for the parking lot. Compaction of the stone shall be considered satisfactory on the basis of non-movement of the materials under compaction equipment. The #2A coarse aggregate shall be 2-inches thick in the handicapped parking area. Surface this area with a 2-inch layer of AASHTO #10 stone.

Grade the areas for the concrete sidewalks for placement of #2A coarse aggregate. Place a 4-inch layer of stone. Rake and compact as necessary to provide an even surface for formwork and concrete placement.

Place the stone around the installed target station posts. The top level of the stone should match the top of the sidewalk and existing ground around the target stations. The thickness of the stone should be around 8-inches. Rake the stone to provide an even surface for foot traffic; compaction of the stone in these areas is not required.

4.4 - MEASUREMENT AND PAYMENT

Cubic yards for each type of stone (#2A coarse aggregate and AASHTO #10), measured by the average end area method or by three-dimensional volume method, as applicable.

TECHNICAL SPECIFICATION SECTION NO. 5 – CONCRETE SIDEWALKS

5.1 - SCOPE

This work is construction of the sidewalks at the new archery range.

5.2 - MATERIALS

A – Concrete - Concrete shall be composed of Portland cement, water, fine and coarse aggregates and approved admixtures, all well mixed and brought to the proper consistency.

1. Concrete shall be PennDOT Class A and shall develop a minimum compressive strength of 3,300 psi in twenty-eight (28) days.
2. Concrete shall be obtained from a batch plant currently approved by the Pennsylvania Department of Transportation (PennDOT).
3. Ready-mixed concrete shall be mixed and delivered in accordance with ASTM Designation C94.

Polypropylene fibers shall be included in the concrete mix. Cement shall be Type IA or IIA conforming to ASTM C 150. All materials shall be obtained from sources listed in PennDOT Bulletin 14 or PennDOT Bulletin 15.

B – Preformed Expansion Joint Filler – Preformed expansion joint filler shall be ½-inch thick gray sponge rubber conforming to AASHTO M153, Type 1. Joint filler shall be solid sponge rubber; no reprocessed material will be accepted. Joint filler made of numerous pieces of sponge rubber which adhere to each other will not be accepted.

C - Joint Seal Material - The joint seal material shall conform to the requirements of ASTM C290 such as Sikaflex-2c or Sikadur 51 as manufactured by the Sika Corporation, Lyndhurst, New Jersey or an approved equal. The material shall be stored as recommended by the manufacturer.

D - Curing Compound - The curing compound shall be clear or translucent containing a red fugitive dye conforming to the requirements of AASHTO M148, Type 1-D, and must not affect water in any respect to injure fish life or impair or be detrimental to water for human consumption. The curing compound shall be stored as recommended by the manufacturer.

5.3 – PROCEDURE

A – Preparation of Concrete Foundation Areas – Place and compact a 4-inch layer of #2A coarse aggregate to provide a stable, even surface for placement of concrete for the sidewalks. Moisten the surface of the aggregate before placing concrete.

B – Expansion Joints - Place preformed expansion joint filler in every third joint and at intersections in the sidewalk as shown on the Drawings. Sidewalk joints shall be every eight feet for the main sidewalk along the parking area and every five feet for the sidewalks to the target stations. The joint material shall be clean and free of dust, grit, mud, oil or grease, and shall be held firmly in place to avoid displacement during concreting.

C – Formwork - Forms shall conform to the shapes, lines, grades, and dimensions of the concrete as called for on the Drawing. They shall be sufficiently tight to prevent leakage of mortar and shall be properly braced or tied together so as to maintain the desired position and shape during and after placing concrete. Forms shall be removed in such a manner as to assure the complete safety of the structure.

D - Depositing - Concrete shall be deposited in the presence of a representative of the Game Commission.

In all cases, concrete shall be deposited as nearly as practicable in its final position and not allowed to flow in a manner to permit or cause segregation and loss of slump. Once concreting is started, the operation shall be carried on continuously until the placing of the panel or section is completed.

All conveying equipment shall be of such size and design as to insure a practically continuous flow of concrete at the forms. Free falls of more than four (4) feet are not permitted.

Any concrete that has been contaminated by foreign matter or which has become so stiff that proper placing can not be assured, shall be wasted.

If unfavorable weather conditions exist, the Game Commission may order the work stopped, either before concreting has started or after it is in progress, until a suitable formwork or covering is set up on the site to protect fresh concrete from rain, hail, snow, or other unfavorable conditions.

E- Finishing Concrete - All unformed surfaces shall be finished in accordance with the following requirements by a skilled concrete finisher:

Immediately after placement of concrete is completed, the surface shall be leveled and screeded sufficiently to produce an even, uniform texture.

Floating shall be done by hand or power-driven equipment. Floating shall not start until some stiffening has taken place in the surface concrete and the moisture film or "shine" has disappeared. The floating should work the concrete no more than necessary to produce a surface that is uniform in texture and free of screed marks. Any necessary cutting or filling of surface to prevent irregularities should be done during the floating operations. Joints and edges shall be finished with edging tools at this time.

After floating is completed, apply a light broom finish to the top surface of unformed concrete. Light surface pitting and light trowel marks are not objectionable.

F – Curing Concrete - After finishing operations are completed, the concrete shall be membrane cured. Curing compound shall be applied in two (2) coats, each coat covering 300 square feet of concrete surface per gallon. A pressure tank type spraying equipment shall be used, which shall provide continuous agitation of the compound during coating operations. Do not use ordinary orchard-type hand sprays. In order to insure thorough and complete coverage of the concrete surfaces, the first coat shall be applied by moving the spray gun back and forth in one direction, and the second coat immediately thereafter by moving the spray gun at right angles to the direction of the first coat.

The first coat shall be applied immediately after finishing operations are completed. The second coat shall be applied immediately after the first coat has set.

G – Protection of Concrete - All concrete shall be protected against injury until final inspection and acceptance by the Game Commission.

During the construction period, the concrete shall be protected from damaging mechanical disturbances, such as load stresses, heavy shock, and excessive vibration. All finished concrete surfaces shall be protected from damage by construction equipment, materials or methods, by application of curing procedures, and by rain or running water.

Until final inspection and acceptance by the Game Commission, the Contractor shall repair, or remove and replace any damaged concrete at no additional cost to the Game Commission.

H – Sealing Expansion Joints - Use a caulking gun to place a ½-inch bead of joint seal material over the preformed joint filler material in the expansion joints. Use masking tape on each side of the joint to prevent the joint seal material from leaking over the slab.

5.4 - MEASUREMENT AND PAYMENT

For concrete, measurement will be in cubic yards, measured by the average end area method or by the three-dimensional volume method, as applicable.

Payment will be made at the unit price per cubic yard bid for "Concrete Sidewalks"; which price shall include the furnishing of cement, fine and coarse aggregates; admixtures, forms, all labor and equipment for mixing, placing, curing, finishing,

repairing and forming; and all labor, materials, and appurtenances necessary to do and complete the work.

No separate measurement or payment for polypropylene fibers in the concrete mix.

TECHNICAL SPECIFICATION SECTION 6 – GUARD POSTS

6.1 -SCOPE

This work is furnishing and installing wooden guard posts along the edge of the parking area in the mulch median.

6.2 – MATERIALS

A - Guard Posts - The guard posts shall have nominal dimensions of 8"x8" and conform to the following characteristics.

- 1) Southern Yellow Pine – Dimension Lumber
- 2) Structural Grade No. 2
- 3) Pressure Treated, ACQ (waterborne preservative), 0.60 pcf retention in conformance with American Wood Preservers Association Standards U1, T1, UC1, UC2, UC3A, UC3B, UC4A, UC4B.

6.3 - PROCEDURE

Drill or auger the soil at the locations to the depth shown on the Drawings on 6-foot centers along the edge of the parking area. Set the posts plumb in the holes and backfill around the posts with the excavated material. Firmly tamp the backfill in 6-inch lifts around the posts. Place mulch around the guard posts in the median area after backfilling operations are complete.

6.4 - MEASUREMENT AND PAYMENT

Each. No separate measurement or payment for excavation and backfill around the guard posts.

TECHNICAL SPECIFICATION SECTION 7 – MULCH

7.1 -SCOPE

This work is installing mulch in the median areas between the parking lot and main sidewalk.

7.2 – MATERIALS

Mulch consists of ground up hardwoods colored black through a dyeing process. The dye must be an environmentally safe water-based product. The mulch must be at least double shredded so that it has an even, fine consistency.

7.3 - PROCEDURE

Install the guard posts in the median areas after completion of the sidewalk and parking area. Grade the median area so that the base surface is relatively flat and even. Place mulch so that is around 6-inches thick and even with the top edge of the sidewalk and stone in the parking area.

7.4 - MEASUREMENT AND PAYMENT

Cubic yards measured by the average end area method.

TECHNICAL SPECIFICATION SECTION NO. 8 – TARGET STATIONS

8.1 - SCOPE

This work is fabrication and installation of the target stations at the new archery range.

8.2 - MATERIALS

A – Pressure Treated Wood – Wood for the protective fence shall be Structural Grade No. 2, pressure treated ACQ (waterborne preservative) with a 0.4 pcf retention in conformance with the American Wood Preservers Association (AWPA) Standard UC3b. The 8” x 8” posts shall have 0.6pcf retention.

B – Fasteners – Polymer plated suitable for use in pressure treated wood. #10 x 3-inch star drive flat head wood deck screws.

C – Lag Bolts – ¾” x 14-inch galvanized carriage bolts with galvanized nut and washer.

D – Hinges – 6-inch galvanized steel strap hinge with brass hinge pin (Stanley Part #17-1170 or approved equal).

E – Hasps – 6-inch zinc plated latch post safety hasp (Everbuilt Part #16076 or approved equal).

8.3 – PROCEDURE

Fabricate the target stations using the dimension lumber cut to size as shown on the Drawings. Secure the wood pieces with the specified fasteners (carriage bolts and deck screws). Install the hinges on the inside faces of the rear door boards. Make sure that the doors swing freely. Attach the hasps to the outside face of the target wall board.

Excavate holes for the wood posts on the spacing as shown on the drawings. Place the posts in the holes and hold the posts plumb and level during backfilling operations. Tamp the backfill in place in layers not exceeding six inches. Use a string to keep the posts in line.

Backfill around the target stations with an 8-inch thick layer of #2A coarse aggregate. The top of the stone should be even with the sidewalk and ground. Rake the top surface of the stone so that it is flat and even.

NOTE – The PGC will supply and install the targets and locks on the installed stations.

8.4 - MEASUREMENT AND PAYMENT

Each.

TECHNICAL SPECIFICATION SECTION 9 – SAND PIT TARGET

9.1 -SCOPE

This work is constructing a sand pit target station using precast concrete blocks, pressure treated wood and sand. The sand pit target station is at a 20-yard distance.

9.2 – MATERIALS

Precast Concrete Blocks - The precast concrete blocks shall be plain blocks with end and top grooves and keyways. The blocks should also be equipped with steel lifting rings or rebar. Plain finish blocks are required – no patterns. The blocks shall be two different sizes; 2' x 2' x 6' and 2' x 2' x 3'.

Pressure Treated Wood – The wood roof pieces shall have the nominal dimensions as show on the Drawings and conform to the following characteristics.

- 1) Southern Yellow Pine – Dimension Lumber
- 2) Structural Grade No. 2
- 3) Pressure Treated, ACQ (waterborne preservative), 0.40 pcf retention in conformance with American Wood Preservers Association Standards U1, T1, UC1, UC2, UC3A, UC3B, UC4A, UC4B.

Fasteners – Polymer plated suitable for use in pressure treated wood. #10 x 3-inch star drive flat head wood deck screws. For attaching the nailers to the precast concrete blocks, use 3/16" x 3-1/4" Phillips flat-head concrete anchors (Tapcons).

Rebar – Deformed steel #4 bar conforming to Section 709.1 of PennDOT Publication 408, Grade 60.

Sand – Mortar Sand, Type C conforming to the requirements of Section 703.1 of PennDOT Publication 408. Obtain the sand from a PennDOT approved supplier.

9.3 - PROCEDURE

Lay out the limits of the of the sand pit target station according to the dimensions shown on the drawings. Excavate to the proper depth for placement of the bottom course of blocks. Use #2A coarse aggregate in the base to provide an even and level surface for the blocks to sit on. The first course of blocks should start approximately 4-inches below finished grade.

Place the first course of blocks. Trim the protruding end keys for the back wall blocks that would interfere with the adjacent side wall blocks. Make sure that the blocks fit together snugly. Prepare the base for the next layer of blocks. Continue with placement of the blocks to form the walls of the target station.

Place the 8" x 8" timbers in the front opening of the target station along the sidewalk. The bottom timber should extend 4-inches above the top of the concrete sidewalk. Drill holes through the timbers and pound 3 pieces of #4 rebar in the holes to secure the timbers.

Attach the 2" x 6" pressure treated wood nailers to the top surface of the top row of blocks as shown on the Drawings. Secure the nailers to the blocks with the concrete anchors. Use a concrete anchor every 24-inches. Place the 2" x 12" roof boards on the nailers and secure them with the deck screws. Attach the center nailer to the underside of the roof boards with deck screws.

Fill the target station with sand. The sand should slope back from the top of the timbers at the front of the station on a 1H:1V angle. Compaction of the sand is not required.

9.4 - MEASUREMENT AND PAYMENT

Lump Sum.

TECHNICAL SPECIFICATION SECTION 10 – HANDICAPPED SIGN

10.1 -SCOPE

This work is furnishing and installing a sign on a wood post to delineate the handicapped parking area.

10.2 – MATERIALS

A – Wooden Post - The wooden post shall have nominal dimensions of 4"x 4" and conform to the following characteristics.

- 1) Southern Yellow Pine – Dimension Lumber
- 2) Structural Grade No. 2
- 3) Pressure Treated, ACQ (waterborne preservative), 0.40 pcf retention in conformance with American Wood Preservers Association Standards U1, T1, UC1, UC2, UC3A, UC3B, UC4A, UC4B.

B – Sign - The sign shall conform to the dimensions and configurations for R7-8 signs as listed in the Manual on Uniform Traffic Control Devices (MUTCD), 2003 Edition from the Federal Highway Administration. A drawing for this sign is attached to this specification. The sign shall be on 0.080 aluminum sheet.

10.3 - PROCEDURE

The sign (R7-8) is to be placed at the center guard post in the handicapped parking area by attaching the sign to wood post. The wood post is to be attached to the guard post with two ¾" x 12" galvanized lag screws. The top of the post is to be 6-foot above finished grade. Secure the sign to the top of the post with corrosion resistant lag screws as recommended by the sign manufacturer.

10.4 - MEASUREMENT AND PAYMENT

Each.



R7-5 NO PARKING

LEGEND - GREEN (RETROREFL) BACKGROUND - WHITE (RETROREFL)



R7-6 NO PARKING

LEGEND - RED (RETROREFL) BACKGROUND - WHITE (RETROREFL)



R7-7 NO PARKING

LEGEND - RED (RETROREFL) BACKGROUND - WHITE (RETROREFL)



R7-8 NO PARKING

LEGEND - GREEN (RETROREFL), WHITE SYMBOL ON BLUE (RETROREFL) BACKGROUND - WHITE (RETROREFL)

04/14/05

* Reduce spacing 50%.
 ** See page 6-31.
 *** See page 6-2 for arrow design.

TECHNICAL SPECIFICATION SECTION 11 - SEEDING

11.1 - SCOPE

This work is securing a satisfactory stand of grass at disturbed areas on the archery range or where directed by the PGC, and includes preparation of the seed bed, furnishing and placing lime and fertilizer, furnishing and sowing of seed, mulching, and maintaining and tending the seeded areas.

11.2 - APPLICABLE ACTS AND PUBLICATIONS

Bulletin 15 - Approved Construction Materials,
Pennsylvania Department of Transportation.

Pub 408. - Specifications, Pennsylvania Department of Transportation.

11.3 - MATERIALS

A - Grass Seed - Use Formula B grass seed. The seed mix shall conform to Section 804.2(b) of Pub. 408. No seed shall contain Canada Thistle, Field Bindweed, Johnson Grass, Perennial Sowthistle, Quackgrass, Horse Nettle, Bedstraw, Corncockle, Brassica Kaber, Brassica Nigra, Wild Onion, or Wild Garlic.

With the approval of and at no additional cost to the PGC, you may add annual ryegrass seed to the mixture to secure a cover crop.

Deliver premixed seed in bags or other suitable containers, each fully labeled with the name, trademark, and warranty of the producer and with the mixture type, weedseed percentage, purity percentage, germination percentage, and mix formula or composition.

Do not use seed which has become wet, moldy, or otherwise damaged in transit or storage, has a mix date older than 9 months prior to seeding, or has a test date older than 6 months prior to seeding.

B - Fertilizer - Use dry formulation of 10-20-20-analysis. Fertilizer shall be delivered in bags or other suitable containers, each fully labeled and bearing the name, trademark, and warranty of the producer.

C - Lime - Conform to Section 804.2.(a).1 of Pub.408.

D - Mulches - Mulches shall be free from mature seedbearing stalks or roots of prohibited or noxious weeds as defined by law. Do not use mulches which are cut into lengths of less than 6 inches.

Mulches shall be either one or a combination of the following, shall contain no stems of tobacco, soybeans, or other coarse or woody materials.

1. - Hay - Timothy hay, mixed clover and timothy hay, or other approved native or forage grasses, well-cured to less than 20 percent moisture content by weight.

2. - **Straw** - Either wheat or oat straw, and reasonably free of viable seeds, well-cured to less than 20 percent moisture content by weight.

3. - **Wood Fiber** - Use wood fiber meeting the requirements of Section 805.2(a).1.c of Pub. 408.

4. - **Pellet Mulch** -. Use pellet mulch meeting the requirements of Section 805.2(a).1.d of Pub. 408.

E - Mulch Binders - Use one of the following mulch binders in accordance with Section 805.2(b) of Pub. 408. Use Recycled Cellulose Fiber, Wood Fiber, Nonasphaltic Emulsion, Polyvinyl Acetate, or a Mixture of Recycled Cellulose Wood Fiber and Wood Fiber. Obtain binders from a producer listed in Bulletin 15.

F - Water - Water shall be fresh and free from injurious amounts of oil, acid, alkali, salts, or other materials harmful to the growth of grass.

11.4 - PROCEDURE

Follow the procedures specified below. The amounts of seed, lime, fertilizer and mulch specified are the minimum acceptable. Employ modifications if they are deemed necessary, at no additional cost to the PGC, and accept full responsibility for obtaining a satisfactory stand of grass.

A - Preparation of Seed Bed by Shallow Tilling - After the areas to be seeded have been graded and approved by the PGC, thoroughly till the surfaces to a depth of 3 inches by discing, harrowing, or other approved means. Apply fertilizer and lime at a rate of 680 Lbs. and 4,000 Lbs. per acre respectively, and make sure that they are worked thoroughly into the soil to a depth of 3 inches and the tillage operations are sufficient to insure that the soil conditions are satisfactory for seeding. Smooth and bring the area to grade. Immediately prior to sowing, rake the soil to a depth of 3/4 inch. Rake in a direction parallel to the contour lines on the slope, and not uphill or downhill. Remove all sticks, stones, weeds, roots, and other objectionable materials appearing on the surface. Maintain the surface in a true and even condition during sowing of seed. In case of hydroseeding or grain drilling, apply limestone and fertilizer as specified in Section 12.3. At areas steeper than 3:1, till the surface horizontally by scarifying enough to break up the surface crust and eliminate irregularities resulting from soil erosion, and remove all objectionable materials from the surface.

B - Sowing - Sow the seed mixture on a still day at a rate specified in Section 804.2 of Pub. 408. Sow by hand or by approved sowing equipment in 2 applications, one-half the seed while the seeder is traveling in one direction and the other half while the seeder is traveling at right angle to the first direction. After sowing, rake, cultipack, or brush drag the surface very lightly, just deep enough to cover the seeds. Rake only in a direction parallel to the contour lines.

You may use hydroseeding or grain drilling, provided all methods and equipment are approved by the PGC. In case of hydroseeding, you may apply fertilizer and limestone at the time of sowing. In case of grain drilling, you may apply fertilizer at the time of sowing, provided the fertilizer does not come in contact with the seed. Drill only in a direction parallel to the contour lines. Do not sow seed on frozen or partially frozen ground. Inoculate the crownvetch according to Section 804.3(d) of Pub. 408.

C - Mulching - After sowing is completed, spread mulch uniformly over the entire seeded area at a rate of 3 tons (dry weight) per acre. The mulch shall be moist at the time of placement.

Apply wood fiber mulch hydraulically in accordance with the manufacturer's tank-mixing instructions. Wood fiber mulch may be incorporated into the slurry after the seed and soil supplements have been thoroughly mixed. Apply wood fiber mulch at a rate of 800 Lbs. per acre unless otherwise indicated by the manufacturer.

On slopes 6:1 or flatter, apply pellet mulch by hand or using a mechanical spreader immediately after seeding, at a rate of 2,615 Lbs. per acre. Thoroughly wet pellet mulch with water without dislodging mulch.

To prevent loss or bunching by wind and to form a soil-binding mulch, anchor the moist mulch to the soil with a mulch binder. Use mulch binders at the following rates:

- Recycled Cellulose Fiber - 775 Lbs./Acre
- Wood Fiber - 775 Lbs./Acre
- Mixture of Recycled Cellulose Fiber and Wood Fiber - 775 Lbs./Acre
- Nonasphaltic Emulsion - Manufacturer's Recommended Rate
- Polyvinyl Acetate - Manufacturer's Recommended Rate

On slopes where machinery cannot be used, retain the mulch in place by some suitable means which will not be detrimental to subsequent operations.

11.5 - MAINTENANCE

At no additional cost to the PGC, maintain the seeded areas until all work under the Contract has been completed and accepted by the PGC. Maintenance shall include refilling rain-washed gullies, reseeding, reapplying fertilizer, lime and mulch, and removal of large and noxious weeds, as directed by the PGC.

11.6 - MEASUREMENT AND PAYMENT

Lump Sum.