

PENNSYLVANIA GAME COMMISSION
2001 ELMERTON AVENUE
HARRISBURG, PA 17110-9797
ATTN: FORESTRY DIVISION, BUREAU OF WILDLIFE HABITAT MANAGEMENT

Gentlemen:

In answer to a recent advertisement for lump sum bids on an estimated 244,440 board feet of sawlogs and 1,143 tons of pulpwood located on 124 acres of State Game Lands No. 289, West Burlington Township, Bradford County, I offer the following:

\$ _____
(BID QUOTATION MUST BE TYPEWRITTEN OR IN INK)

Full payment will be made when agreements are signed or payment in full for each individual cutting block before cutting operations are started on that block.

It is further understood that an acceptable bond of **\$7,000.00** will be provided to guarantee faithful performance of the agreement.

Removal of timber to be subject to the terms, conditions and stipulations included in the Timber Sale Agreement. It is understood that the contract will run until **SEPTEMBER 30, 2018**.

ATTACHED IS **CERTIFIED, CASHIER'S OR TREASURER'S CHECK OR MONEY ORDER, (PERSONAL, COMPANY, CORPORATE CHECK OR CASH ARE NOT ACCEPTED)**, IN THE AMOUNT OF **\$1,000.00** as evidence of good faith in bidding. I understand that it will be forfeited as fully liquidated damages upon my failure within 45 days after presentation to accept and execute the contract and provide a bond as required.

IN CASE OF PARTNERSHIP, EACH PARTNER SIGNS: IF A CORPORATION, THE AUTHORIZED OFFICER MUST SIGN, GIVING HIS/HER TITLE AND NAME OF CORPORATION.

Sincerely yours,

(Tax No. or Social Security No.)

Signature of Bidder - Sign In Ink

(Telephone Number)

Print Name

Firm Name

Street Address (Name, Number, Etc.)

City State Zip

BIDS MUST BE SUBMITTED IN AN ENVELOPE THAT CLEARLY STATES ON THE OUTSIDE: **BID PROPOSAL FOR TIMBER SGL #289**. Bids will be opened in the Bureau of Wildlife Habitat Management, 2001 Elmerton Avenue, Harrisburg, PA 17110-9797, at **2:00 P.M., Monday, SEPTEMBER 26, 2016**. The Commission reserves the right to reject any and all bids and to award the contract as deemed to its best interests.

STATE GAME LANDS #:289
SALE: 289-16-01
NAME: Four Horsemen

- INSTRUCTIONS TO BIDDERS -

The following information covers details concerning the proposed lump sum sale of an estimated 244,440 board feet of sawlogs and 1,143 tons of pulpwood located on 124 acres of State Game Lands No. 289, West Burlington Township, Bradford County.

See attached sheets for additional volume information. The volume and percentages are not guaranteed and each prospective bidder is urged to examine the sale area and bid on the basis of his own estimate.

- SHOW DATE -

Timber will be shown to prospective bidders on **SEPTEMBER 9, 2016**. Viewers will be met at the **FOOD AND COVER BUILDING ALONG SR 6. GPS COORDINATES -76.631 41.773** at 10:00 a.m., and conducted to the sale area.

The timber to be sold will be clearly designated by **WARREN E. HARRIS, 3917 MEMORIAL HIGHWAY, DALLAS, PA 18612**, telephone: 1-570-675-1143, the Regional Forester.

- BIDS -

BIDS SHOULD BE MAILED AT LEAST FOUR (4) WORKING DAYS PRIOR TO BID OPENING TO PERMIT U.S. POSTAL SERVICE DELIVERY. USE SPECIAL MAIL SERVICE IF MAILED LATER THAN FOUR DAYS PRIOR TO BID OPENING. SPECIAL DELIVERY BIDS SHOULD BE ADDRESSED TO: PENNSYLVANIA GAME COMMISSION, FORESTRY DIVISION, 2001 ELMERTON AVENUE, HARRISBURG, PA 17110-9797.

Bids must be submitted in an envelope that clearly states on the outside: **BID PROPOSAL FOR TIMBER. SGL #289**. Bids received in envelopes not containing this information will be rejected.

In order to be considered, the bid shall be accompanied by a **CERTIFIED, CASHIER'S OR TREASURER'S CHECK, OR A BANK, POSTAL OR EXPRESS MONEY ORDER**, payable to the Pennsylvania Game Commission in the amount of **\$1,000.00**, as evidence of good faith in bidding, to be forfeited as fully liquidated damages upon the bidders failure to accept the award, execute the contract and give bond as required. Bid deposits will be returned to the unsuccessful bidder when the contract has been executed and a satisfactory performance deposit has been furnished.

In lieu of bid deposit, bidders may submit an open bid bond to cover the deposit requirement. Any bid bond must be filed for an annual period and both the amount of bond and the surety shall receive prior approval of the Pennsylvania Game Commission.

The Commission reserves the right to reject any and all bids and to award the contract as deemed to its best interests.

Bids will be opened in the Bureau of Wildlife Habitat Management, 2001 Elmerton Avenue, Harrisburg, Pennsylvania 17110-9797, at 2:00 P.M., **Monday, SEPTEMBER 26, 2016**, telephone: 717/787-2039. **BIDS RECEIVED LATER THAN 2:00 P.M., THIS DATE, WILL BE REJECTED.**

- PERFORMANCE DEPOSIT -

A performance bond in the amount of **\$7,000.00** will be required in the form of a Certified Check or a Postal Money Order drawn to the order of the Pennsylvania Game Commission. Negotiable securities, including assignment of a bank savings account may be furnished in lieu of above. A bond with corporate surety approved by the Attorney General, or a bank Irrevocable Letter of Credit, may be posted provided the bond has an expiration date a minimum of 1 year beyond the expiration date of the timber contract.

- EXPIRATION OF CONTRACT -

Contract will expire **SEPTEMBER 30, 2018.**

- PAYMENTS -

The sale is divided into 5 cutting blocks. Payment may be made by:

1. Total payment when agreement is signed.
- or
2. Payment by individual block or blocks.

- 1 – 45% - 31 acres
- 2 – 19% - 56 acres
- 3 – 18% - 15 acres
- 4 – 16% - 21 acres
- 5 – 2% - 1 acres

Payment for Block 3 & 5 (20% of bid price) is due at contract execution.

Final payment is due **No Later Than 120 days before the expiration of the Agreement.**”

- ANTI DISCRIMINATION -

The contractor awarded the Timber Sale Agreement agrees he will not discriminate against any employee or other persons on account of race, sex, creed, age, ancestry or national origin.

- SAFETY and ENVIRONMENTAL PROTECTION –

The Buyer, his employees and sub-contractors are expected to perform all logging operations in a safe manner as required by applicable laws and regulations. The Commission expects the Buyer to ensure that logging crewmembers dress in protective attire, and perform their duties with equipment in accordance with standards established by the logging industry and the Occupational Safety and Health Administration (OSHA).

The PGC recommends that logging crews working on State Game Lands be trained in safe logging techniques and sound environmental logging practices through a formal training program such as the one provided by the Pennsylvania Sustainable Forestry Initiative (PA SFI) or another similar program.

Contractor must comply with the erosion and sediment control plan for disturbed areas that is included as a part of the timber contract.

- SPECIAL PROVISIONS -

See 9 Attached Sheet(s).

SPECIAL PROVISIONS FOR THE “FOUR HORSEMEN” TIMBER SALE

S.G.L. # 289

1) ADMINISTRATIVE ITEMS

a) *Payment Schedule*

1. Payment for Block 3 & 5 (20% of bid price) is due at contract execution.
2. Final payment is due **No Later Than 120 days before the expiration of the Agreement.**”

b) An underground gas pipeline is located in block 1.

1. Moving material from north of the ROW in sale block 1 to the landing in block 1 will require the buyer to cross an underground gas pipeline.
 - i. An approved structure that will not put down pressure onto the pipeline is required when crossing the ROW.
 - ii. The buyer is required to contact Williams Partners LP to determine the exact location of the pipeline before crossing the ROW.
2. The required approved crossing structure detail is attached at the end of this document
3. The operator must have an on-site meeting with a representative of Williams Partners LP and the Regional Forester or his designee prior to logging operations north of the pipeline.
 - i. Contact information for Williams Partners LP is:
James Mills
Senior Operations Tech,
Williams, Bradford Supply Hub
1-817-487-0185

c) The Contractor is responsible for the control and collection of fluids leaking from any equipment used on the site. The Contractor must have a spill containment and cleanup kit appropriate for the equipment being used. At a minimum, the kit will contain: plugs and clamps to control hydraulic line breaks, a container to collect leaking fluids, fluid absorbent pads and a shovel. Operating any equipment noticeably leaking fluids is prohibited. The Contractor must collect and control fluids leaking from any equipment and dispose of properly.

d) All sale activity, (felling, skidding, & trucking), is restricted to the defined sale area.

e) Except for seasonally opened gates, PGC gates are to be kept closed and locked at all times except when the contractor is present on the site. Repeated failure to close gates will be penalized.

f) Many soils within the cutting area are classified as seasonably wet. If site conditions in the timber sale (for felling, skidding, or trucking) or the use of the haul road become wet and/or muddy in the opinion of the Regional Forester or his designee, all phases of the job will be suspended until working conditions are judged favorable.

g) Preliminary road work and site preparations specified in paragraph (4a) below must be completed to the satisfaction of the Regional Forester or his designee before harvesting in any other block may begin.

h) Buyer is not guaranteed exclusive use of the haul roads for this timber sale. Hauling restrictions may be implemented at the discretion of the Regional Forester or his designee to avoid excessive damage to haul roads under joint use.

i) All tops must be pulled back 25 feet from the State Game Land boundary, (blazed & painted white), all roads, parking lots, herbaceous openings, utility Right of Ways and deer exclosures. Tops, branches and slash will be removed from all ponds, lakes and streams.

- j) Whole tree chipping of all trees is permitted as specified in paragraph (2).
- k) No on-site sales of firewood to the general public is allowed.

2) BOUNDARIES, BLOCKS, AND CUTTING INSTRUCTIONS

- a) Timber sale boundaries are marked with 2 blue paint slashes and block boundaries are designated with 1 blue paint slash. Islands are marked with 2 blue paint slashes.
- b) Game Land boundary, roads, herbaceous openings, buffered areas and spring runs are to be kept free of tops.
- c) No cutting or skidding is permitted in the reserve areas.
- d) Whole tree chipping of all trees is permitted on this sale area.
 - 1. Landings must be cleared of all bark and debris.
- e) Block 5 encompasses all roads & landings.
 - 1. All stems in the road right of ways and landing areas may be whole tree chipped in their entirety.
 - 2. Boundaries for new haul roads and landings are marked in orange paint. All trees inside orange boundaries are to be cut and stumps will be removed.
 - i. The trees marked with orange paint will not be felled until stump clearing has been approved and do not require stump removal.
- f) Block 2
 - 1. Only trees marked with yellow paint are to be cut.
 - 2. Due to soils exhibiting hydric conditions harvesting will be permitted only when site conditions are stable or frozen.
- g) Block 4
 - 1. All trees 2" DBH and over, except for red and blue paint marked trees are to be cut.
- h) Blocks 1 and 3
 - 1. All trees 2" DBH and over, except for blue paint marked trees are to be cut. Reserve trees are marked with blue "spots".
- i) All stumps must be cut lower than 12" from the ground.
- j) Cull portions of the tree are to be left at the stump.
- k) Any reserved trees that are felled for safety reasons must be left at the stump.
- l) Extra caution should be taken to avoid felling damage or skidding damage to reserved trees.

3) US / STATE / LOCAL ROADS

- a) State Roads
 - 1. Visit <http://www.papostedroads.pa.gov/> for information on road bonds.
- b) Local Roads
 - 1. The haul road entrances are on T-357 (Steam Hollow Road),

2. Driveway entries are permitted and constructed for entrances
3. T-357 (Steam Hollow Road), has no winter maintenance.
4. Contractor will acquire and abide by any highway occupancy permit, zoning permit, road bonds required by Burlington Township, Bradford County
5. Contact John Donoavan, West Burlington Township roadmaster at 570-297-0773 for information pertaining to Heavy Road Use Permit.

4) GAME LAND ROADS TO BUILD / IMPROVE

a) Block 5

1. Block 5 encompasses all cutting, bulldozing, culvert installation, required stone placement, gate installation and driveway permit constructions associated with haul road, landing and skid road construction and improvements.
 - i. Block 5 improvements must be completed to the satisfaction of the Regional Forester or his designee before harvesting begins in any other block.
 - ii. Construction of all new roads and new landings must be completed within one year after the contract has been returned to the successful bidder and be allowed to settle for a minimum of 60 days prior to harvesting block 4.
 - iii. Boundaries for new haul roads and landings are marked in orange paint. All trees inside orange boundaries are to be cut and stumps will be removed.
 - iv. The trees marked with orange paint will not be felled until stump clearing has been approved and do not require stump removal.
2. Erosion and Sedimentation control structures will be in place and operable.
 - i. All Erosion and Sediment control structures will be in place and maintained throughout the duration of the contract.
3. The road contractor will notify the Regional Forester or his designee three days prior to road construction, landing construction, culvert installation, gate installation and final grading.

b) Road To Build

1. Locations of haul roads and skid roads to construct are designated on the sale maps.
 - i. A minimum of 684 feet of new haul road is designated for hauling.
 - ii. New road construction is required for access to blocks 4
2. Haul Roads
 - i. During times of wet site conditions no road construction will be permitted.
 - ii. The operator will build a haul road from the end of the existing administrative road in block 3 to the landing in block 4.
 - iii. The outer boundary of this new road is marked with orange paint. This new road will be crowned and must have a minimum 12-foot running surface and 3 feet on both sides for ditches (18 foot total). Ditches should be a minimum of 1 foot deep and sloped 1:3.

c) Road To Improve

1. Locations of roads to improve are identified on the sale maps.
 - i. A minimum of 3,087 feet of existing haul road is designated for hauling.

d) Culverts Information

1. The operator must install two new corrugated smooth bore, double-walled plastic culverts with a backhoe or excavator as directed by the Regional Forester or his designee. These

culverts must meet Penn Dot specifications for use on public roads. Culverts must have adequate catch basins and tail ditches installed. Culverts needed for this new road are as follows:

One – 24" diameter by 30' length

One – 18" diameter by 30' length

2. The operator will apply **40 Tons of 2A Modified Stone**, (1 ¼" to powder), for culvert placement. 20 tons will be required for each culvert installation. This stone is not available on the game land. It must be purchased off-site and delivered to the game land. This stone is included with the required stone listed in item 4e. Stone headwalls or pre-molded end flares must be set on both ends of each culvert.
 3. All culverts will have side ditches for drainage into the pipe and tail ditches to allow water to drain away from the road.
- e) Required Stone
1. The operator must apply **160 tons of AASHTO 1 Stone**, (2" to 4"), **300 Tons of AASHTO 3 Stone** (1 ½" to 2 ½"), **40 Tons of 2A Mod. Stone**, (1 ¼" to powder), as directed by the Regional Forester or his designee.
 2. The operator must use a bulldozer to shape and grade the roadway as the stone is applied.
- f) Gate Installation
1. No new gate installation is required for this contract.
- g) Road Retirement
1. A road grader or a bulldozer with a six-way blade will be required for final grading. The operator will crown, ditch, and stone rake all required haul roads and all other roads that have been used to a minimum 12' running surface or to the roadway original width, whichever is wider. Ditches and other drainage structures must be opened and re-established where needed. The road must also be crowned to drain all water into the ditches and culverts. All piles of surface side cast shall be graded level by feathering it back into the road berms and/or road surface during final grading. Road berms will be graded to a mowable contour.

5) LANDINGS

- a) Main landings locations are designated on the sale map. Any additional landings are to be approved by the Regional Forester or his designee.
- b) Boundaries for new landings are marked with orange paint. All trees inside orange boundaries are to be cut and stumps will be removed. .
 1. The trees marked with orange paint will not be felled until stump clearing has been approved and do not require stump removal.
- c) Parking lots and herbaceous openings cannot be used for log landings.
- d) Blocks 1, 2, 3, have existing landing areas, (approximately .25 acre each).
- e) One new landing location is designated for construction on the sale map.
 1. All trees inside orange marked boundary are to be cut and will be removed.
 2. Block 4 – .25 acre new landing area

- f) At the conclusion of the sale, all landings will be graded, leveled, cleared of debris, stone raked sufficiently for use as mowed fields, and seeded according to specifications outlined in Section 7 below.
- g) Stumps, stones, wood chips and other debris on the edges of the landing areas will be moved off the landing area and spread out into the surrounding woods.

6) **SKIDDING**

- a) Skid trails will be approved by the Regional Forester or his designee.
- b) An underground pipeline is located in block 1. Crossing of the pipeline will occur at the designated location at the end of the existing skid trail as shown on the sale map. An approved air bridge is required to cross the pipeline.
 - 1. A diagram for the required approved air bridge crossing structure detail is located at the end of this document
 - 2. The main skid trail accessing the gas line crossing location will remain open after harvesting is completed. This trail will be retired sufficiently to provide future administrative access in this block suitable for use by UTV.
- c) Skidders / forwarders are to be kept off of haul roads as much as possible. No skidding or use of forwarders is permitted on the haul road without permission of the Regional Forester or his designee.
- d) No skidding across small drainages will be permitted without the use of temporary bridges.
- e) No cutting or skidding is permitted in the reserve islands.
- f) Wet areas should be avoided when skidding and any treetops which are felled into small wet areas should be left in the water rather than pulling them out.
- g) If skid trails are to sit idle for one month or more they are to have water bars added.
- h) Main skid trails are to be leveled, open and have water bars added at the conclusion of the harvesting

7) **SEEDING OF ROADWAYS AND LANDINGS**

- a) At the conclusion of the sale, all haul roads and all landings used, and as well as all other disturbed areas along game land roads are to be leveled, cleared of rocks and debris and seeded according to the following:

120 lbs. per acre of Oats, (spring)
120 lbs. per acre of Wheat, (fall)

A minimum of 3 acres are to be seeded at the conclusion of the sale.

- b) Seeding will include ditch lines and all disturbed areas.
- c) Spring planting may be performed Until June 15th. The fall planting may be performed during the period from August 15th to September 15th.
 - 1. If any seeding is performed outside of the seeding dates, a guaranteed catch of seeding must be obtained to the satisfaction of the Regional Forester or his designee.

- d) Straw mulch will be required at a rate of 2.5 tons per acre on the following areas:
 - 1. All haul road and skid road approaches to culverts crossing perennial streams will be seeded and mulched for a minimum of 50' on each approach to the stream.
- e) Regional Forester or his designee is to be notified a minimum of three days prior to the application of lime, seed, fertilizer, and mulch.
- f) All bulldozed skid trails are to be seeded with wheat or oats depending on the time of seeding.
- g) Guaranteed catch of cover must be obtained to the satisfaction of the Regional Forester or his designee before the bond will be released.

8) **OPERATIONS AND NON-WORK DAYS**

- a) No woods operation will be permitted on the following days for the period of this contract::
 - 1. All Saturdays in the months of October, November, December, and January.
 - 2. The opening day and all Saturdays during spring turkey season, including the youth spring gobbler hunt.
 - 3. The four days of general statewide bear season.
 - 4. The entire 2 weeks of the general firearms deer season.
 - 5. The opening day of the flintlock muzzleloader season.

No woods operation will be permitted from **March 15 thru May 1**, without the permission of the Regional Forester.

- b) The contractor, employees, and sub-contractors may not hunt to, from, or at the job site when the work location is beyond a gated road that is closed to public traffic. The contractor may travel to and from the work location on no-work days to check on the condition of equipment.
- c) **Except on Sundays, it is unlawful to be present on State Game Lands from November 15 through December 15 inclusive when not engaged in lawful hunting or trapping and fail to wear a minimum of 250 square inches of daylight fluorescent-orange material on the head, chest, and back combined, or in lieu thereof, a hat of the same colored material. The material shall be worn so it is visible in a 360-degree arc.**

9) **SAFETY AND LOGGER TRAINING**

The Buyer, his employees and sub-contractors are expected to perform all logging operations in a safe manner as required by applicable laws and regulations. The Commission expects the Buyer to ensure that logging crewmembers dress in protective attire, and perform their duties with equipment, in accordance with standards established by the logging industry and the Occupational Safety and Health Administration (OSHA).

The PGC recommends that logging crews working on State Game Lands be trained in safe logging techniques and sound environmental logging practices through a formal training program such as the one provided by the Pennsylvania Sustainable Forestry Initiative or another similar course.

10) PNDI RECOMMENDATIONS

- a) A PNDI review was performed on 04/10/2015.
 - 1. No impact was found.
 - 2. If possible, the operators will clean all equipment and vehicles thoroughly to remove invasive plant species from being transported from other sites.

11) MISCELLANEOUS

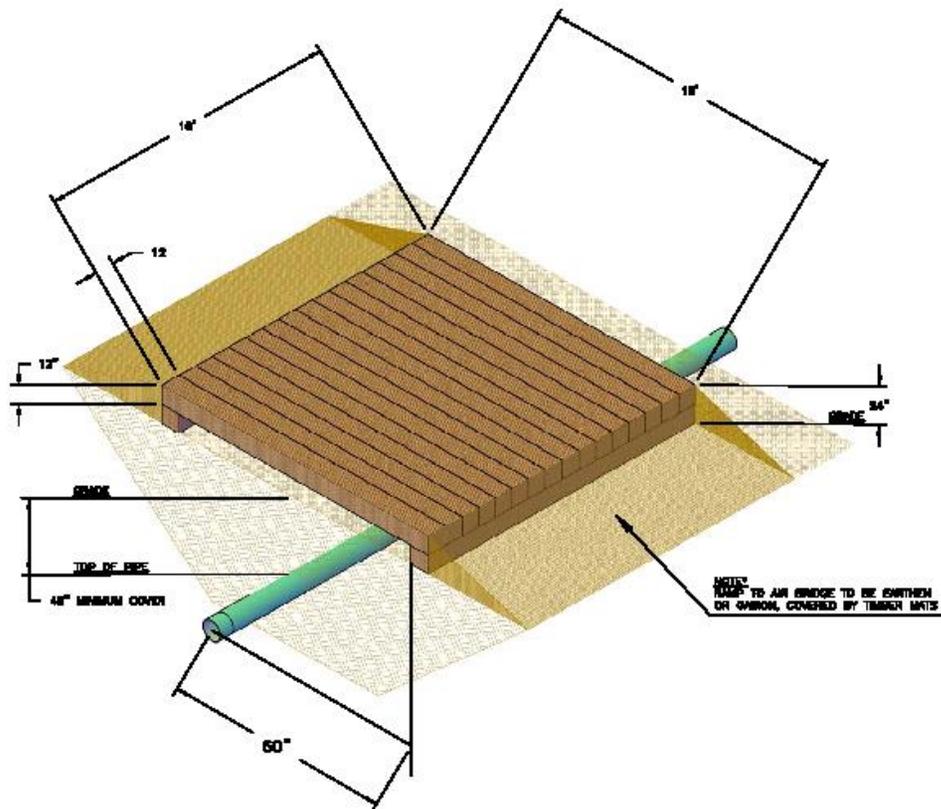
- a) Operator must comply with the erosion and sedimentation control plan for the area.
 - 1. A completed plan will be provided to the successful bidder.
- b) The contractor will provide weight slips for stone and receipts for all seed, lime, fertilizer, mulch, to the Regional Forester or his designee.
- c) Extra caution should be taken to avoid felling damage or skidding damage to reserved trees.
 - 1. Felling and skidding damage will be closely monitored and excessive damage will result in the payment of damages by the contractor.
- d) All existing trails and at least one main skid trail are to be kept open as hunter access in each block.
- e) Any culvert pipes that are damaged by the operator will be repaired or replaced by the operator at the operator's expense.
 - 1. The operator will remove and properly dispose of all culverts that are replaced.
- f) Contract Extension
 - 1. Payment in full of all blocks of the contract is required before any request for an extension can be made.
- g) Violation of contract provisions by the operator may subject the operator or its employees or contractors to fine based on Title 58 regulations.

12) PA RIGHT TO KNOW PROVISIONS

- a) The Pennsylvania Right-to-Know Law, 65 P.S. §§ 67.101-3104, applies to this contract.
- b) Unless the Contractor provides the Commonwealth, in writing, with the name and contact information of another person, the agency shall notify the Contractor using the Contractor information provided by the Contractor in SRM [or "the legal contact information provided in this contract"] if the agency needs the Contractor's assistance in any matter arising out of the Right to Know Law ("RTKL"). The Contractor shall notify the agency in writing of any change in the name or the contact information within a reasonable time prior to the change.
- c) Upon notification from the Commonwealth that the Commonwealth requires the Contractor's assistance in responding to a RTKL request for records in the Contractor's possession, the Contractor shall provide the Commonwealth, within fourteen (14) calendar days after receipt of such notification, access to, and copies of, any document or information in the Contractor's possession which arises out of the contract that the Commonwealth requests ("Requested Information") and provided such other assistance as the Commonwealth may request in order to comply with the RTKL. If the Contractor fails to provide the Requested Information within fourteen (14) calendar days after receipt of such request, the Contractor shall indemnify and hold the Commonwealth harmless for any damages, penalties, detriment or harm that the Commonwealth may incur as a result of the Contractor's failure, including any statutory damages assessed against the Commonwealth.

- d) The Commonwealth's determination as to whether the Requested Information is a public record is dispositive of the question as between the parties. Contractor agrees not to challenge the Commonwealth's decision to deem the Requested Information a Public Record. If the Contractor considers the Requested Information to include a request for a Trade Secret or Confidential Proprietary Information, as those terms are defined by the RTKL, the Contractor will immediately notify the Commonwealth, and will provide a written statement signed by a representative of the Contractor explaining why the requested material is exempt from public disclosure under the RTKL within seven (7) calendar days of receiving the request. If, upon review of the Contractor's written statement, the Commonwealth still decides to provide the Requested Information, Contractor will not challenge or in any way hold the Commonwealth liable for such a decision.
- e) The Commonwealth will reimburse the Contractor for any costs associated with complying with this provision only to the extent allowed under the fee schedule established by the Office of Open Records or as otherwise provided by the RTKL if the fee schedule is inapplicable.
- f) Contractor agrees to abide by any decision to release a record to the public made by the Office of Open Records, or by the Pennsylvania Courts. The Contractor agrees to waive all rights or remedies that may be available to it as a result of the Commonwealth's disclosure of Requested Information pursuant to the RTKL. Contractor's duties relating to the RTKL are continuing duties that survive the expiration of this contract and shall continue as long as the Contractor has Requested Information in its possession.

AIR BRIDGE DETAIL



16'X16' AIR BRIDGE
 CONSTRUCTED OF 12"X12"X16" TIMBERS
 TYPICALLY STRAPPED TOGETHER IN SETS
 OF 4

CROSS SUPPORTS
 12"X12"X16" TIMBERS

MIDSTREAM ENERGY SERVICES \DRYFORD\PROJECTS\MARCELLUS SHALE FACILITIES\WINDROW-CRANE PIPELINE

REVISIONS													Drawn by	Scale	MARCELLUS SHALE	
No.	Description	APC	Drawn	Date	CHK'D	Date	Proj. Eng.	Date	Res. Coord.	Date	Eng. Mgr.	Date	Drawn by	2-25-12	NOY TO BIBLE	REVISED
													Monitor by	2-25-12	LARVILLE	
													Project Engineer		BARCLAY NORTH	
													Bridge Workbooks		RODRIGUEZ	
													Engineering Manager		APC Number	
															Sheet Name	

MARCELLUS SHALE

16'X16'X12"
AIR BRIDGE
DETAIL

Drawing File Name: AIR BRIDGE

Sheet No.:

PA GAME COMMISSION TIMBER SALE BLOCK SUMMARY

SALE NAME Four Horsemen
 BLOCK NO. 1,2,3,4,5
 COUNTY Bradford
 TOWNSHIP West Burlington

SGL NO. 289
 FORESTER BARCLAY
 DATE 3/31/2016
 ACRES 124

Species	CHESTNUT OAK	EASTERN HEMLOCK	MISC HW	MIXED OAK	N. RED OAK	RED MAPLE	SUGAR MAPLE	WHITE ASH	WHITE OAK	WHITE PINE	YELLOW-POPLAR	BLACK CHERRY	Totals	
Form Class	80	78	82	84	83	83	81	82	81	79	81	83		
Block No.	Acres	<i>Board Foot Volume - Girard & Mesavage Scribner Rule</i>												
1	31	28,632	23,893	1,215	2,282	35,474	4,973	2,828	2,808	5,620	843	1,579		110,147
2	56	74	15,382	1,591		1,744	4,035	3,407	18,971	594	58	240		46,096
3	15	105	2,240	1,642	615	15,246	2,055	2,846	3,027	10,859	2,464	1,330	1,157	43,586
4	21	136	7,100	3,206	135	4,244	5,607	2,289	8,978	3,657	2,850		135	38,337
5	1		124	543	75	2,360	55	225	1,009	1,633	250			6,274
Totals	124	28,947	48,739	8,197	3,107	59,068	16,725	11,595	34,793	22,363	6,465	3,149	1,292	244,440
No. of Trees		237	455	101	23	305	196	156	315	149	56	20	17	2,030
AVG. Bd.ft./Tree		122	107	81	135	194	85	74	110	150	115	157	76	120
No. of Culls														

<i>Pulpwood Volume</i>					
Block No.	Acres	Cords/Acre	Tons/Acre	Total Cords	Total Tons
1	31	2	6	77	178
2	56	1	3	83	192
3	15	5	11	69	159
4	21	12	28	256	588
5	1	11	26	11	26
				497	1,143

Comments:
 All volumes listed are estimates.
 MISC HW Includes: basswood, aspen, hickory, beech, and birch.
 Mixed Oak includes: black and scarlet oak.

PA GAME COMMISSION TIMBER SALE BLOCK SUMMARY

SALE NAME Four Horsemen
 BLOCK NO. 1,2,3,4,5
 COUNTY Bradford
 TOWNSHIP West Burlington

SGL NO. 289
 FORESTER BARCLAY
 DATE 3/31/2016
 ACRES 124

Species	CHESTNUT OAK	EASTERN HEMLOCK	MISC HW	MIXED OAK	N. RED OAK	RED MAPLE	SUGAR MAPLE	WHITE ASH	WHITE OAK	WHITE PINE	YELLOW-POPLAR	BLACK CHERRY	Totals	
Form Class	80	78	82	84	83	83	81	82	81	79	81	83		
Block No.	Acres	<i>Board Foot Volume - Girard & Mesavage Scribner Rule</i>												
1-5	124	28,947	48,739	8,197	3,107	59,068	16,725	11,595	34,793	22,363	6,465	3,149	1,292	244,440
Totals	124	28,947	48,739	8,197	3,107	59,068	16,725	11,595	34,793	22,363	6,465	3,149	1,292	244,440
No. of Trees		237	455	101	23	305	196	156	315	149	56	20	17	2,030
AVG. Bd.ft./Tree		122	107	81	135	194	85	74	110	150	115	157	76	120
No. of Culls														

<i>Pulpwood Volume</i>					
Block No.	Acres	Cords/Acre	Tons/Acre	Total Cords	Total Tons
1-5	124	4	9	497	1,143
				497	1,143

Comments:
 All volumes listed are estimates.

PA GAME COMMISSION TIMBER SALE SUMMARY

SALE NAME Four Horsemen
 BLOCK NUMBER(S) 1,2,3,4,5
 COUNTY Bradford
 TOWNSHIP West Burlington

SGL NO. 289
 FORESTER BARCLAY
 DATE 3/31/2016
 ACRES 124

VOLUME TABLE - Girard & Mesavage Scribner Rule

All volumes listed are estimates

BOARD FOOT VOLUME

SPECIES	FORM CLASS	NO. OF TREES		BD.FT.VOL.	VOL.BD.FT. PER TREE	% BY VOLUME	VOLUME BY ACRE
		MERCH.	CULLS				
CHESTNUT OAK	80	237		28,947	122	11.8	233
EASTERN HEMLOCK	78	455		48,739	107	19.9	393
MISC HW	82	101		8,197	81	3.4	66
MIXED OAK	84	23		3,107	135	1.3	25
N. RED OAK	83	305		59,068	194	24.2	476
RED MAPLE	83	196		16,725	85	6.8	135
SUGAR MAPLE	81	156		11,595	74	4.7	94
WHITE ASH	82	315		34,793	110	14.2	281
WHITE OAK	81	149		22,363	150	9.1	180
WHITE PINE	79	56		6,465	115	2.6	52
YELLOW-POPLAR	81	20		3,149	157	1.3	25
BLACK CHERRY	83	17		1,292	76	0.5	10
TOTALS		2,030		244,440	120	100	1,970

CUBIC FOOT VOLUME

SPECIES	NO. OF TREES		CU.FT.VOL.	% BY VOLUME	VOLUME BY ACRE		
	MERCH.	CULL			CU.FT.	CORDS	TONS
BLACK CHERRY	16		267	0.7	2	0.0	0.1
CHESTNUT OAK	114		1,351	3.6	11	0.1	0.3
EASTERN HEMLOCK	727		5,058	13.6	41	0.5	1.3
MISC HW	536		5,724	15.4	46	0.6	1.4
MIXED OAK	10		165	0.4	1	0.0	0.0
N. RED OAK	55		886	2.4	7	0.1	0.2
RED MAPLE	1,144		9,142	24.5	74	1.0	2.3
SUGAR MAPLE	799		7,185	19.3	58	0.8	1.8
WHITE ASH	500		5,303	14.2	43	0.6	1.3
WHITE OAK	78		1,100	3.0	9	0.1	0.3
WHITE PINE	78		877	2.4	7	0.1	0.2
YELLOW-POPLAR	17		227	0.6	2	0.0	0.1
TOTALS	4,074		37,286	100	301	4.0	9.2

Total trees less than or equal to 4" dbh to be cut: _____

Comments:

PA GAME COMMISSION TIMBER SALE STAND AND STOCK TABLE

SALE NAME Four Horsemen
 BLOCK NO. 1,2,3,4,5
 COUNTY Bradford
 TOWNSHIP West Burlington

SGL NO. 289
 FORESTER BARCLAY
 DATE 3/31/2016
 ACRES 124

Sawtimber Trees													
SPECIES DBH	CHESTNUT OAK	EASTERN HEMLOCK	MISC HW	MIXED OAK	N. RED OAK	RED MAPLE	SUGAR MAPLE	WHITE ASH	WHITE OAK	WHITE PINE	YELLOW- POPLAR	BLACK CHERRY	Total
10"		1											1
12"	28	55	29	3	38	53	64	64	21	12	2	6	375
14"	58	149	45	5	47	82	48	104	37	15	8	5	603
16"	74	135	17	8	61	46	34	73	38	13	4	4	507
18"	38	70	7	3	54	11	4	47	24	6	1	2	267
20"	24	34	2	2	51	2	3	21	12	6	2		159
22"	13	6		2	29	1	2	4	12	2	3		74
24"	2	4	1		11	1	1	2	5	2			29
26"		1			5								6
28"					7								7
30"					2								2
32"													
34"													
36"													
38"													
40" +													
Total	237	455	101	23	305	196	156	315	149	56	20	17	2,030

Sawtimber Volume (bdf.)													
10"													
12"	1,191	2,243	1,223	118	1,796	2,516	2,428	2,608	957	468	83	267	15,898
14"	4,025	10,076	3,128	383	3,291	6,233	3,153	7,350	3,009	1,048	700	338	42,734
16"	8,023	14,147	1,772	804	7,697	5,192	3,492	8,811	5,010	1,342	560	352	57,202
18"	5,925	11,142	1,249	503	9,962	1,745	736	8,914	4,257	926	184	335	45,878
20"	5,403	7,598	547	644	12,534	360	764	5,163	2,930	1,376	468		37,787
22"	3,696	1,728		655	10,039	308	577	1,335	4,095	546	1,154		24,133
24"	684	1,524	278		5,622	371	445	612	2,105	759			12,400
26"		281			2,682								2,963
28"					4,767								4,767
30"					678								678
32"													
34"													
36"													
38"													
40" +													
Total	28,947	48,739	8,197	3,107	59,068	16,725	11,595	34,793	22,363	6,465	3,149	1,292	244,440

Pulpwood Trees													
SPECIES DBH	BLACK CHERRY	CHESTNUT OAK	EASTERN HEMLOCK	MISC HW	MIXED OAK	N. RED OAK	RED MAPLE	SUGAR MAPLE	WHITE ASH	WHITE OAK	WHITE PINE	YELLOW- POPLAR	Total
6"	3	51	271	173		1	524	268	108			1	1,399
8"	1	3	255	83	1	7	299	251	205	9	57	4	1,175
10"	6	14	125	192	2	23	180	215	113	50		8	927
12"	5	33	65	73	5	19	106	57	53	12	17	4	450
14"	1	9	8	9	1	3	21	6	14	5	4		81
16"		4	3	3	1	2	9	2	6	2			32
18"				2			5	1	1				9
20" +									1				1
Total	16	114	727	536	10	55	1,144	799	500	78	78	17	4,074

Pulpwood Volume (cuft.)													
6"	10	134	804	551		3	1,541	827	299			3	4,172
8"	7	20	1,522	530	6	49	1,832	1,954	1,423	53	425	27	7,847
10"	85	164	1,312	2,536	20	284	2,317	2,883	1,556	598		110	11,865
12"	127	619	1,108	1,586	82	376	2,172	1,193	1,159	230	335	87	9,073
14"	38	254	203	284	25	89	635	185	454	145	118		2,429
16"		161	109	119	32	85	383	86	274	75			1,324
18"				117			263	58	62				500
20" +									76				76
Total	267	1,351	5,058	5,724	165	886	9,142	7,185	5,303	1,100	877	227	37,286

PA GAME COMMISSION TIMBER SALE STAND AND STOCK TABLE

SALE NAME Four Horsemen
 BLOCK NO. 1
 COUNTY Bradford
 TOWNSHIP West Burlington

SGL NO. 289
 FORESTER BARCLAY
 DATE 3/31/2016
 ACRES 31

Sawtimber Trees													
SPECIES DBH	CHESTNUT OAK	EASTERN HEMLOCK	MISC HW	MIXED OAK	N. RED OAK	RED MAPLE	SUGAR MAPLE	WHITE ASH	WHITE OAK	WHITE PINE	YELLOW-POPLAR	BLACK CHERRY	Total
10"		1											1
12"	27	36	2	3	28	17	11	7	9				140
14"	56	83	8	3	33	22	7	10	14	1	3		240
16"	73	69	5	8	42	14	9	2	16		1		239
18"	38	30	1	1	38	5	1	3	6				123
20"	24	14		1	38		1	3	1	2	2		86
22"	13			2	21		1	1	2	1	2		43
24"	2				4		1		1				8
26"					3								3
28"													
30"													
32"													
34"													
36"													
38"													
40" +													
Total	233	233	16	18	207	58	31	26	49	4	8		883

Sawtimber Volume (bdf.)													
SPECIES DBH	CHESTNUT OAK	EASTERN HEMLOCK	MISC HW	MIXED OAK	N. RED OAK	RED MAPLE	SUGAR MAPLE	WHITE ASH	WHITE OAK	WHITE PINE	YELLOW-POPLAR	BLACK CHERRY	Total
10"													
12"	1,160	1,494	96	118	1,309	830	390	324	402				6,123
14"	3,877	5,870	507	225	2,419	1,632	463	716	1,200	72	250		17,231
16"	7,887	7,791	440	804	5,440	1,757	902	212	1,840		140		27,213
18"	5,925	5,238	172	184	6,904	754	184	621	956				20,938
20"	5,403	3,500		296	9,151		234	719	234	498	468		20,503
22"	3,696			655	7,231		210	216	734	273	721		13,736
24"	684				1,688		445		254				3,071
26"					1,332								1,332
28"													
30"													
32"													
34"													
36"													
38"													
40" +													
Total	28,632	23,893	1,215	2,282	35,474	4,973	2,828	2,808	5,620	843	1,579		110,147

Pulpwood Trees													
SPECIES DBH	BLACK CHERRY	CHESTNUT OAK	EASTERN HEMLOCK	MISC HW	MIXED OAK	N. RED OAK	RED MAPLE	SUGAR MAPLE	WHITE ASH	WHITE OAK	WHITE PINE	YELLOW-POPLAR	Total
6"	1		15	4		1	3	1	1				26
8"		2	21	7	1	4	6	7	3	1			52
10"	1	13	25	8	1	18	23	8	12	8			117
12"	1	33	25	5	4	18	22	6	2	9	2	1	128
14"		9	3	2	1	2	4	1	1	5	2		30
16"		4	1	2	1	2	3			1			14
18"							2	1					3
20" +													
Total	3	61	90	28	8	45	63	24	19	24	4	1	370

Pulpwood Volume (cuft.)													
SPECIES DBH	BLACK CHERRY	CHESTNUT OAK	EASTERN HEMLOCK	MISC HW	MIXED OAK	N. RED OAK	RED MAPLE	SUGAR MAPLE	WHITE ASH	WHITE OAK	WHITE PINE	YELLOW-POPLAR	Total
6"	3		45	12		3	9	3	3				77
8"		13	125	39	6	28	37	55	21	6			329
10"	14	152	263	86	10	222	297	107	166	96			1,414
12"	25	619	423	85	66	356	449	126	44	173	40	22	2,428
14"		254	76	49	25	59	121	31	32	145	59		851
16"		161	36	71	32	85	128			37			551
18"							105	58					163
20" +													
Total	43	1,199	969	342	139	754	1,145	380	265	457	99	22	5,812

PA GAME COMMISSION TIMBER SALE STAND AND STOCK TABLE

SALE NAME Four Horsemen
 BLOCK NO. 2
 COUNTY Bradford
 TOWNSHIP West Burlington

SGL NO. 289
 FORESTER BARCLAY
 DATE 3/11/2016
 ACRES 56

Sawtimber Trees													
SPECIES DBH	CHESTNUT OAK	EASTERN HEMLOCK	MISC HW	MIXED OAK	N. RED OAK	RED MAPLE	SUGAR MAPLE	WHITE ASH	WHITE OAK	WHITE PINE	YELLOW- POPLAR	BLACK CHERRY	Total
10"													
12"		5	6		3	6	18	28	3				69
14"	1	39	11		1	17	16	51	1		1		138
16"		43	3		4	16	10	39	1	1	1		118
18"		27	1		1	2	1	29	1				62
20"		12			2			12					26
22"		5			1	1	1	2					10
24"		3						2					5
26"		1											1
28"													
30"													
32"													
34"													
36"													
38"													
40" +													
Total	1	135	21		12	42	46	163	6	1	2		429

Sawtimber Volume (bdf.)													
10"													
12"		145	254		123	288	652	1,076	134				2,672
14"	74	2,440	808		80	1,375	1,080	3,588	100		100		9,645
16"		4,023	357		510	1,787	1,124	4,679	176	58	140		12,854
18"		3,676	172		142	277	184	5,396	184				10,031
20"		2,387			426			2,878					5,691
22"		1,390			463	308	367	742					3,270
24"		1,040						612					1,652
26"		281											281
28"													
30"													
32"													
34"													
36"													
38"													
40" +													
Total	74	15,382	1,591		1,744	4,035	3,407	18,971	594	58	240		46,096

Pulpwood Trees													
SPECIES DBH	BLACK CHERRY	CHESTNUT OAK	EASTERN HEMLOCK	MISC HW	MIXED OAK	N. RED OAK	RED MAPLE	SUGAR MAPLE	WHITE ASH	WHITE OAK	WHITE PINE	YELLOW- POPLAR	Total
6"			1	2			4	1	3				11
8"		1	3	3		1	14	14	15	1		1	53
10"		1	4	12	1	1	28	34	48	1			130
12"			14	16			26	21	41	1			119
14"			5	1			7	4	13				30
16"			2				2	1	6				11
18"				1			1		1				3
20" +									1				1
Total		2	29	35	1	2	82	75	128	3		1	358

Pulpwood Volume (cuft.)													
6"			3	7			12	3	8				33
8"		7	18	21		7	86	109	104	6		7	365
10"		12	42	164	10	12	361	457	663	12			1,732
12"			237	359			530	442	896	19			2,483
14"			127	34			212	123	421				917
16"			72				85	43	274				475
18"				57			53		62				171
20" +									76				76
Total		18	499	641	10	19	1,338	1,177	2,506	37		7	6,253

PA GAME COMMISSION TIMBER SALE STAND AND STOCK TABLE

SALE NAME Four Horsemen
 BLOCK NO. 3
 COUNTY Bradford
 TOWNSHIP West Burlington

SGL NO. 289
 FORESTER BARCLAY
 DATE 3/16/2016
 ACRES 15

Sawtimber Trees													
SPECIES DBH	CHESTNUT OAK	EASTERN HEMLOCK	MISC HW	MIXED OAK	N. RED OAK	RED MAPLE	SUGAR MAPLE	WHITE ASH	WHITE OAK	WHITE PINE	YELLOW- POPLAR	BLACK CHERRY	Total
10"													
12"	1	1	5		5	8	21	8	3	2	2	5	61
14"	1	8	13	1	6	12	11	13	11	2	4	4	86
16"		6	3		8	5	8	8	15	4	2	4	63
18"		2	1	1	6	1	1	3	11	2	1	2	30
20"		1		1	5	1	1		9	2			20
22"					4				6	1	1		12
24"		1			6				2	2			11
26"					2								2
28"					7								7
30"					2								2
32"													
34"													
36"													
38"													
40" +													
Total	2	19	22	3	51	26	42	32	57	15	10	15	294

Sawtimber Volume (bdf.)													
10"													
12"	31	47	204		275	356	843	296	115	78	83	212	2,540
14"	74	494	948	83	387	975	705	1,040	871	144	350	258	6,329
16"		634	318		868	544	880	1,070	2,124	382	280	352	7,452
18"		367	172	184	1,237		184	621	2,015	389	184	335	5,688
20"		214		348	1,356	180	234		2,291	439			5,062
22"					956				2,387	273	433		4,049
24"		484			3,372				1,056	759			5,671
26"					1,350								1,350
28"					4,767								4,767
30"					678								678
32"													
34"													
36"													
38"													
40" +													
Total	105	2,240	1,642	615	15,246	2,055	2,846	3,027	10,859	2,464	1,330	1,157	43,586

Pulpwood Trees													
SPECIES DBH	BLACK CHERRY	CHESTNUT OAK	EASTERN HEMLOCK	MISC HW	MIXED OAK	N. RED OAK	RED MAPLE	SUGAR MAPLE	WHITE ASH	WHITE OAK	WHITE PINE	YELLOW- POPLAR	Total
6"	2			5			7	7	2			1	24
8"				7		2	17	22	13	5		3	69
10"	5		1	33		3	34	24	11	1		8	120
12"	3			25	1	1	31	15	9	2	2	3	92
14"	1			6		1	9	1			1		19
16"				1			4	1		1			7
18"				1			2						3
20" +													
Total	11		1	78	1	7	104	70	35	9	3	15	334

Pulpwood Volume (cuft.)													
6"	6			16			21	22	6			3	73
8"				50		14	104	172	90	29		20	479
10"	71		11	465		37	438	322	152	12		110	1,619
12"	76			562	16	20	632	315	197	38	40	65	1,962
14"	38			202		30	272	31			29		601
16"				48			170	43		37			299
18"				60			105						166
20" +													
Total	191		11	1,402	16	101	1,743	905	445	117	69	199	5,199

PA GAME COMMISSION TIMBER SALE STAND AND STOCK TABLE

SALE NAME Four Horsemen
 BLOCK NO. 4
 COUNTY Bradford
 TOWNSHIP West Burlington

SGL NO. 289
 FORESTER BARCLAY
 DATE 3/30/2016
 ACRES 21

Sawtimber Trees													
SPECIES DBH	CHESTNUT OAK	EASTERN HEMLOCK	MISC HW	MIXED OAK	N. RED OAK	RED MAPLE	SUGAR MAPLE	WHITE ASH	WHITE OAK	WHITE PINE	YELLOW- POPLAR	BLACK CHERRY	Total
10"													
12"		12	15		2	21	14	19	5	8		1	97
14"		19	13		7	31	11	28	9	12		1	131
16"	1	16	6		6	11	7	19	5	7			78
18"		11	3	1	8	4	1	12	5	4			49
20"		7	2		5	1	1	6	2	2			26
22"		1			1			1					3
24"						1			2				3
26"													
28"													
30"													
32"													
34"													
36"													
38"													
40" +													
Total	1	66	39	1	29	69	34	85	28	33		2	387

Sawtimber Volume (bdf.)													
10"													
12"		528	621		89	987	543	848	255	330		55	4,256
14"		1,272	865		405	2,251	680	1,880	638	832		80	8,903
16"	136	1,604	657		692	1,104	586	2,031	694	712			8,216
18"		1,861	516	135	1,435	714	184	2,276	870	537			8,528
20"		1,497	547		1,231	180	296	1,566	405	439			6,161
22"		338			392			377					1,107
24"						371			795				1,166
26"													
28"													
30"													
32"													
34"													
36"													
38"													
40" +													
Total	136	7,100	3,206	135	4,244	5,607	2,289	8,978	3,657	2,850		135	38,337

Pulpwood Trees													
SPECIES DBH	BLACK CHERRY	CHESTNUT OAK	EASTERN HEMLOCK	MISC HW	MIXED OAK	N. RED OAK	RED MAPLE	SUGAR MAPLE	WHITE ASH	WHITE OAK	WHITE PINE	YELLOW- POPLAR	Total
6"		51	255	153			509	255	102				1,324
8"			229	57			258	201	172		57		974
10"			92	128			92	147	37	37			532
12"			25	25			25	13			13		102
14"													
16"													
18"													
20" +													
Total		51	601	364			884	615	310	37	70		2,932

Pulpwood Volume (cuft.)													
6"		134	756	488			1,496	787	282				3,943
8"			1,367	360			1,581	1,564	1,194		425		6,490
10"			965	1,680			1,182	1,970	506	441			6,745
12"			431	536			519	268			255		2,009
14"													
16"													
18"													
20" +													
Total		134	3,519	3,064			4,779	4,588	1,983	441	680		19,187

PA GAME COMMISSION TIMBER SALE STAND AND STOCK TABLE

SALE NAME Four Horsemen
 BLOCK NO. 5
 COUNTY Bradford
 TOWNSHIP West Burlington

SGL NO. 289
 FORESTER BARCLAY
 DATE 3/11/2016
 ACRES 1

Sawtimber Trees													
SPECIES DBH	CHESTNUT OAK	EASTERN HEMLOCK	MISC HW	MIXED OAK	N. RED OAK	RED MAPLE	SUGAR MAPLE	WHITE ASH	WHITE OAK	WHITE PINE	YELLOW- POPLAR	BLACK CHERRY	Total
10"													
12"		1	1			1		2	1	2			8
14"				1			3	2	2				8
16"		1			1			5	1	1			9
18"			1		1				1				3
20"					1								1
22"					2				4				6
24"			1		1								2
26"													
28"													
30"													
32"													
34"													
36"													
38"													
40" +													
Total		2	3	1	6	1	3	9	9	3			37

Sawtimber Volume (bdf.)													
10"													
12"		29	48			55		64	51	60			307
14"				75			225	126	200				626
16"		95			187			819	176	190			1,467
18"			217		244				232				693
20"					370								370
22"					997				974				1,971
24"			278		562								840
26"													
28"													
30"													
32"													
34"													
36"													
38"													
40" +													
Total		124	543	75	2,360	55	225	1,009	1,633	250			6,274

Pulpwood Trees													
SPECIES DBH	BLACK CHERRY	CHESTNUT OAK	EASTERN HEMLOCK	MISC HW	MIXED OAK	N. RED OAK	RED MAPLE	SUGAR MAPLE	WHITE ASH	WHITE OAK	WHITE PINE	YELLOW- POPLAR	Total
6"				9			1	4					14
8"	1		2	9			4	7	2	2			27
10"			3	11		1	3	2	5	3			28
12"	1		1	2			2	2	1				9
14"							1				1		2
16"													
18"													
20" +													
Total	2		6	31		1	11	15	8	5	1		80

Pulpwood Volume (cuft.)													
6"				29			3	12					44
8"	7		12	60			25	55	14	12			184
10"			32	141		12	39	27	69	36			355
12"	25		17	45			41	42	22				192
14"							30				29		60
16"													
18"													
20" +													
Total	33		60	275		12	137	136	105	48	29		835

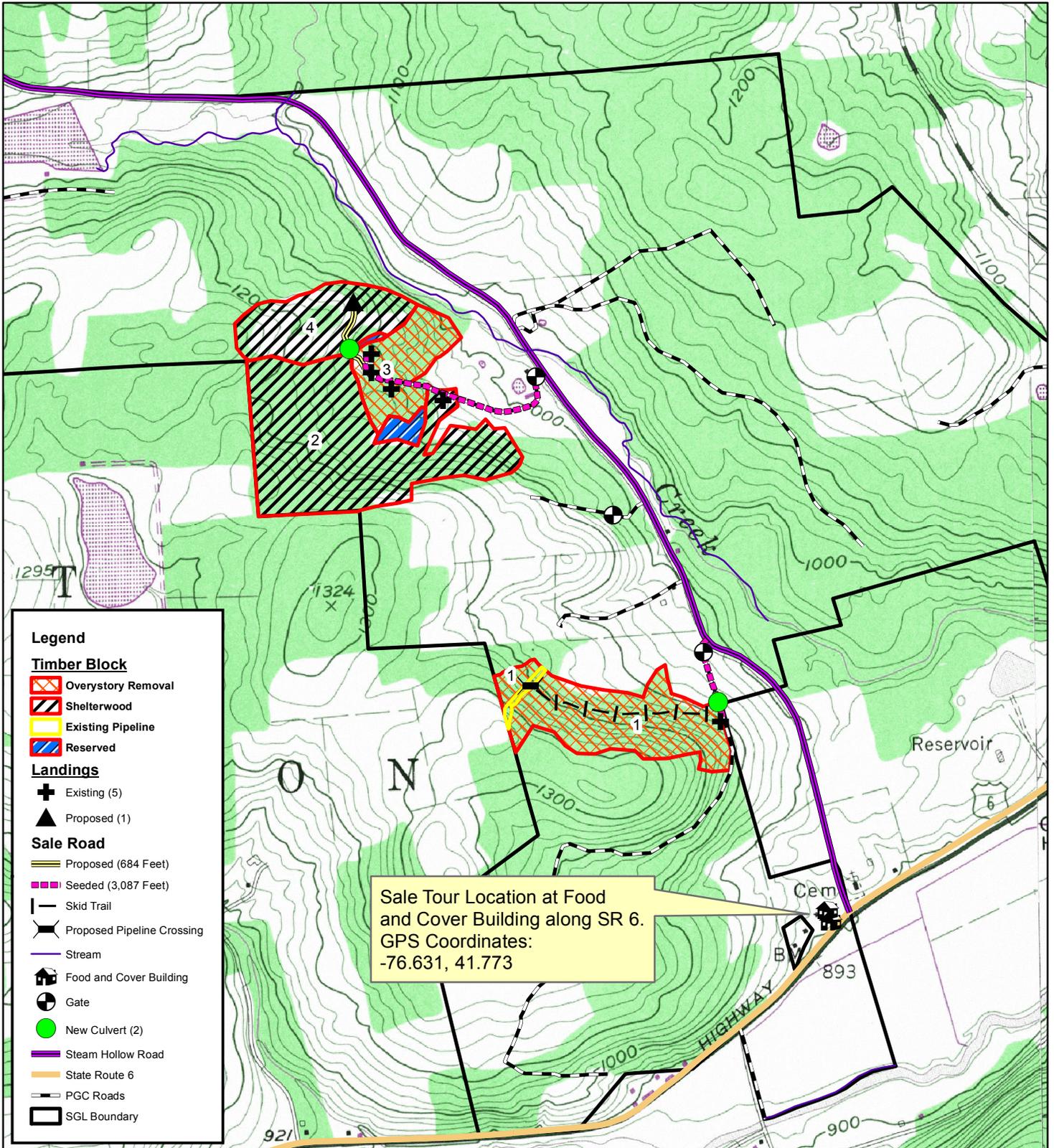
Bradford County
 West Burlington Twp.
 SGL 289
 Compartment 1
 Stands 18, 29, 30, 32, 68

Four Horsemen Timber Sale

SGL 289

289-16-01

Block 1: 31 Acres (Overstory Removal)
 Block 2: 56 Acres (Shelterwood)
 Block 3: 15 Acres (Overstory Removal)
 Block 4: 21 Acres (Shelterwood)
 Block 5: 1 Acre (Roads/Landing)
 Reserve: 3 Acres
 Total 127 Acres (124 Treated)



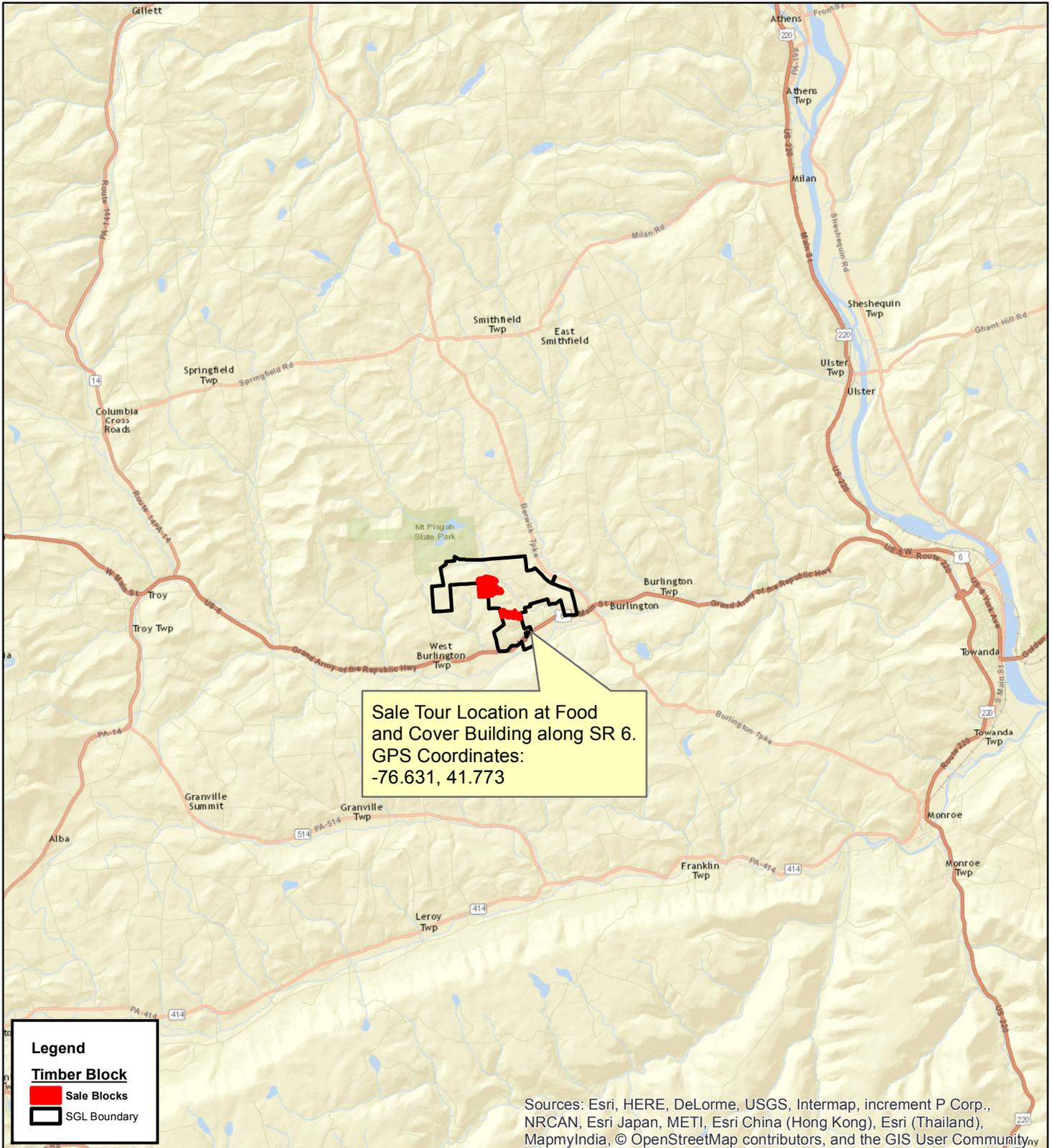
Forester:
C. Barclay



Bradford County
West Burlington Twp.
SGL 289
Compartment 1
Stands 18, 29, 30, 32, 68

Four Horsemen Timber Sale Location Map SGL 289 289-16-01

Block 1: 33 Acres (Overstory Removal)
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Forester:
C. Barclay

