

BID OPENING DATE AND TIME

ON: OCTOBER 1, 2010

AT: 10:30 A.M.

BID NO. S10F1750	PAGE 1 OF 81	INVITATION AND BID ADVERTISED	BIDDER MUST COMPLETE BELOW
This Invitation to Bid with your quotations must be received prior to the above cited bid opening date and time.		 BIDS MUST BE RETURNED TO CITY OF PHILADELPHIA PROCUREMENT DEPARTMENT MUNICIPAL SERVICES BLDG. 1401 JFK BLVD, ROOM 170A PHILADELPHIA, PA 19102-1685	BIDDER AGREES TO COMPLY WITH ALL CONDITIONS OF THIS BID. UNSIGNING BIDS WILL NOT BE ACCEPTED.
DEPARTMENT DIVISION PARKS & REC ENVIRONMENT			NAME AND ADDRESS OF FIRM
AWARDED DATE			Federal EIN/Social Security Number
FOR THE PROCUREMENT COMMISSIONER			BUYER: K. HANAGAN J. WASHINGTON

TITLE OF BID: PHILADELPHIA NATURAL LAND RESTORATION PROJECTS

Commerce Department-Office of Economic Development (OEO)
Anti-Discrimination Policy
Executive Order 02-05 – Bidder Requirements

This Invitation to Bid is issued under the Anti-Discrimination Policy described in the Mayor's Executive Order, policy and guidelines as attached. Specific instructions must be adhered to, and forms completed. Bidders are advised to review the instructions carefully. Failure to comply may disqualify the bidder. The specified ranges represent the percentage of Minority, Woman and Disabled participation that should be attained by the Bidder.

Participation Ranges

M-BE: 20% to 25%
 W-BE: 10% to 15%
 DS-BE: BEST to EFFORTS

Any and all questions about Executive Order 02-05 and bidder compliance should be directed to the Commerce Department Office of Economic Opportunity (OEO) office at (215) 686- 6232.

BID QUESTIONS

All questions concerning this Invitation to Bid, including specifications and conditions, must be Presented prior to the bid opening date and time. Contact the Procurement Department, Public Information Center by calling (215) 686-4721, 686-4720, or 686-4719 with questions.

For City Use Only

BID SECURITY See Conditions of Bidding	MASTER BID SECURITY		CERTIFIED CHECK SUBMITTED WITH BID	
	<input type="checkbox"/> YES	<input type="checkbox"/> NO	AMOUNT	CHECK NUMBER

**City of Philadelphia
Economic Opportunity Plan
for
PHILADELPHIA NATURAL LAND RESTORATION PROJECT**

I. Introduction and Definitions

A. Executive Orders 02-05 and 14-08 establish an antidiscrimination policy relating to the participation of Minority (MBE), Woman (WBE) and Disabled (DSBE) Owned Business Enterprises (collectively referred to hereafter as M/W/DSBEs) in City Contracts (the "Antidiscrimination Policy"). Executive Order 14-08 disestablished the Minority Business Enterprise Council and transferred its administrative functions under Executive Order 02-05 to the Office of Economic Opportunity ("OEO").

The purpose of the Antidiscrimination Policy is to provide equal opportunity for all businesses and to assure that City funds are not used directly or indirectly, to promote, reinforce or perpetuate discriminatory practices. In support of the City's Antidiscrimination Policy, Chapter 17-1600 of The Philadelphia Code requires the development and implementation of "Economic Opportunity Plan(s)" for certain classes of contracts and covered projects as defined in Section 17-1601. The Economic Opportunity Plan ("Plan") memorializes the successful Bidder's best and good faith efforts to provide meaningful and representative opportunities for M/W/DSBEs in contracts and covered projects and identifies the successful Bidder's outreach and hiring activities for employing an appropriately diverse building trades workforce in connection with the contract or covered project.

This Invitation To Bid and resulting Project are subject to the Plan requirements as described in Section 17-1603 (2). Accordingly, by submission of its Bid, a responsible Bidder makes a legally binding commitment to abide by the provisions of this Plan which include Bidder's commitment to exercise its best and good faith efforts throughout the contract term to provide meaningful and representative contracting opportunities for M/W/DSBEs and to employ an appropriately diverse workforce of tradespeople including minority and female persons in all phases of the contract awarded under this Bid.

Bidder hereby verifies that all information submitted to the City including without limitation, the Plan and all forms and attachments thereto, are true and correct and is notified that the submission of false information by Bidder is subject to the penalties of 18 Pa. C.S. Section 4904 relating to unsworn falsification to authorities.

B. For the purposes of this Plan, MBE, WBE and DSBE shall refer to businesses so certified by the City of Philadelphia through its Office of Economic Opportunity ("OEO"). For this Plan, the term "Best and Good Faith Efforts," the sufficiency of which shall be in the sole determination of the City, means: a Bidder's efforts, as evaluated by the City, the scope, intensity and appropriateness of which are designed and performed to achieve meaningful business opportunities for M/W/DSBEs and building trades employment opportunities for journeyman and apprentice minorities and females. The following are examples of Best and Good Faith Efforts:

- Bidder seeks assistance from the Philadelphia area building trades and the Diversity Apprenticeship Program to conduct employment outreach and identify minority and female apprentices and journeymen for work on the project.
- Bidder adheres to a published policy of nondiscrimination in the hiring, retention and promotion of employees which includes communication of that policy to Bidder's project forepersons.

- Bidder sponsors minority or female apprentices or otherwise demonstrates support of pre-apprentice, apprenticeship or training program(s) that target the employment of minority persons and women.
- Bidder makes commitments to use MBEs, WBEs and DSBEs in its bid for commercially acceptable subcontracted services and materials supply even when the Bidder might otherwise prefer to perform/supply these items without subcontracting.
- Bidder timely solicits through all reasonable and available means the interest of OEO certified businesses who have the capability to perform the work of the Bid. Such efforts include use of the OEO Directory of Certified Firms, attendance at pre-bid meetings, advertising in minority focused publications, written mailings to certified M/W/DSBEs. The Bidder must determine with certainty if the M/W/DSBEs are interested by taking appropriate steps to follow up on initial solicitations; one time contact, without any follow up, is not acceptable.
- Bidder provides interested MBEs, WBEs and DSBEs, prior to the date of bid submission, with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation. Assistance may include estimating support.
- Bidder provides arms length business assistance to interested M/W/DSBEs which may include access or introduction to major manufacturer/suppliers, lines of credit and union halls.
- Bidder negotiates in good faith with interested M/W/DSBEs. A Bidder using good business judgment would consider a number of factors in negotiating with subcontractors, including M/W/DSBE subcontractors, and would take a firm's price and capabilities as well as the objectives of Chapter 17-1600 into consideration.

II. Economic Opportunity Plan Commitments

A. M/W/DSBE Participation

1. Participation Ranges

As a benchmark for the Bidder's expression of its best and good faith efforts to provide meaningful and representative opportunities for M/W/DSBEs in the contract, the following participation ranges have been developed. These participation ranges represent, in the absence of discrimination in the solicitation and selection of M/W/DSBEs, the percentage of MBE, WBE and DSBE participation that is reasonably attainable on this contract through the exercise of Bidder's best and good faith efforts. These ranges are based upon an analysis of factors such as the size and scope of the contract and the availability of MBEs, WBEs and DSBES to perform various elements of the contract:

BID	MBE	WBE	DSBE
	20%-25%	10%-15%	BEST EFFORTS

a. Documentation of Best and Good Faith Efforts

Bidder shall respond to the Participation Ranges by completing the *Documentation of Best and Good Faith Efforts Form* ("BGFE Form") in Section VI, documenting its solicitations and commitments with M/W/DSBEs,

and detailing its exercise of best and good faith efforts to include M/W/DSBEs in the contract. The submission of the BGFE Form is an element of bid responsiveness and failure to include this form may result in the rejection of the Bid.

(1) The BGFE Form must include the company name, address, contact person, telephone number, facsimile number and OEO certification number of each M/W/DSBE firm solicited for participation under this Bid (regardless of the response by the firm), a detailed description of the services or the supply effort solicited/quoted and the dollar amount and percentage of contract commitments made to M/W/DSBE firms. Bidder should avoid using one-word descriptions of the services or supply effort and is required to submit copies of the supporting quotation(s) or letter(s) of intent. If no commitments were made, or if quotes were not received from M/W/DSBE firms solicited by the Bidder, Bidder must provide an explanation. Only firms that are certified by the OEO at the time of bid opening will receive credit as a Best and Good Faith Effort. A list of currently certified firms is maintained by the OEO and is available online at www.phila.gov/mbec/directory or in printed format at the OEO offices, located in the Municipal Services Building, 1401 JFK Blvd. Suite 330, Philadelphia, PA. 19102-1666.

(2) The Bidder's identified commitment to use an M/W/DSBE on the BGFE Form constitutes a representation by Bidder, that the M/W/DSBE is capable of completing the subcontract with its own workforce, and that the Bidder has made a legally binding commitment with the firm. The listing of the M/W/DSBE firm by Bidder further represents that if Bidder is awarded the contract, Bidder will subcontract with the listed firm(s) for the work or supply effort described and the dollar/percentage amount(s) set forth on the BGFE Form. Bidder is to maintain the M/W/DSBE percentage commitments throughout the term of the contract which shall apply to the total amount of the contract and any additional increases. In the event the Successful Bidder's contract is increased by change order and/or modification, or amendment, it shall be the responsibility of the Successful Bidder to apply its Best and Good Faith Efforts to the amended amount in order to maintain any participation ranges committed to on the total dollar amount of the contract at the time of contract completion.

(3) A Bidder that enters into a subcontract with an M/W/DSBE shall be considered to have made a Best and Good Faith Effort in that regard only if the M/W/DSBE subcontractor performs a commercially acceptable function ("CAF"). An M/W/DSBE is considered to perform a CAF when it engages in meaningful work or supply effort that provides for a distinct element of the subcontract (as required by the work to be performed in accordance with Bid specifications), where the distinct element is worthy of the dollar amount of the subcontract and where the M/W/DSBE carries out its responsibilities by actually performing, managing and supervising the work involved. The City may evaluate the amount of work subcontracted, industry practices and any other relevant factors in determining whether the M/W/DSBE is performing a CAF and in determining the amount of credit the Bidder receives towards the participation ranges. For example, a Bidder using an M/W/DSBE non-stocking supplier (i.e., a firm that does not manufacture or warehouse the materials or equipment of the general character described by the Bid specifications and required under the contract) to furnish equipment or materials will only receive credit towards the participation ranges for the fees or commissions charged, not the entire value of the equipment or materials furnished.

(4) In calculating the percentage of M/W/DSBE participation, Bidder shall apply the standard mathematical rules in rounding off numbers. In the event of inconsistency between the dollar and percentage amounts listed on the BGFE Form, the percentage will govern.

(5) Upon award, the letters of intent, quotations and any other accompanying documents regarding solicitation and commitments with MBEs, WBEs and DSBEs, including the BGFE Form, become

part of the contract. M/W/DSBE percentage commitments are to be maintained throughout the term of the contract and shall apply to the total contract value (including approved change orders and amendments). Any change in commitment, including but not limited to substitutions for the listed firms, changes or reductions in the work and/or listed dollar/percentage amounts, must be pre-approved in writing by OEO. Throughout the term of the contract, Bidder is required to continue its Best and Good Faith Efforts.

B. Employment of a Diverse Workforce

1. Employment Benchmarks and Outreach

Bidder agrees to exhaust its Best and Good Faith Efforts to employ minority persons and females in its workforce of apprentices and journeymen. As evidence of its Best and Good Faith Efforts, Bidder shall establish and maintain a current list of minority and female recruitment sources and provide written notification to these recruitment sources, to community organizations and the trades unions when Bidder has employment opportunities available; Bidder shall maintain a record of the organizations' responses. Bidder agrees to work with the Diversity Apprenticeship Program and similar programs to identify pre-apprentices for Bidder's referral to trades unions. Bidder is encouraged to sponsor minority and female apprentices. Bidder also agrees to work with representatives of trades unions to create apprenticeship opportunities for project area residents. Bidder is obligated to exhaust its Best and Good Faith Efforts to employ:

Minority Apprentices – 27% of all hours worked by all apprentices
Minority Journeymen – 27% of all journey hours worked across all trades
Female Apprentices – 7% of all hours worked by all apprentices
Female Journeypersons - 7% of all hours worked across all trades

Bidder agrees that when a union with which Bidder has a collective bargaining agreement has impeded Bidder's efforts to meet its obligations hereunder, Bidder shall immediately refer this information to the City Official designated in the contract.

2. Training

If Bidder operates on-the-job training programs and/or participates/funds union administered training programs, Bidder is required to expressly include opportunities for minority persons, females and project area residents to participate in such programs, including apprenticeship and trainee programs relevant to Bidder's employment needs.

III. Evaluation of Responsiveness and Responsibility

A. Evaluation and Determination

1. The City, acting through its OEO, will evaluate the responsiveness of the Bidder's Plan to these requirements. OEO reserves the right to request further documentation and/or clarifying information at any time prior to the award of the contract which may result in Bidder's amendment to its BGFE Form.

2. Best and Good Faith Efforts will be evaluated on the basis of Bidder's BGFE Form and any other information requested from Bidder by the City.

B. Administrative Reconsideration

1. If the OEO determines that the apparent low Bidder has not made sufficient Best and Good Faith Efforts, the Bidder will be notified and may file a written appeal with OEO within forty-eight (48) hours of the date of notification. The decision of OEO may be appealed in writing within forty-eight (48) hours of the date of OEO's decision to the Director of Neighborhood and Business Services or his designee whose decision shall be final. If it is determined that the apparent low Bidder did not make sufficient Best and Good Faith Efforts, its Bid will be rejected.

2. Notwithstanding compliance with the requirements set forth herein, the City reserves the right to reject any or all bids as deemed in the best interest of the City.

IV. Compliance and Monitoring of Best and Good Faith Efforts

A. The Successful Bidder agrees to cooperate with OEO in its compliance monitoring efforts, and to submit, within the time limits prescribed by OEO, all documentation which may be requested by OEO relative to the awarded contract, including the items described below. The Successful Bidder must provide as required and maintain the following contract documentation for a period of three (3) years following acceptance of final payment under the contract:

- Copies of signed contracts and purchase orders with M/W/DSBE subcontractors;
- Evidence of payments (cancelled checks, invoices, etc.) to subcontractors and suppliers to verify participation;
- Telephone logs and correspondence relating to M/W/DSBE commitments.

B. The Successful Bidder shall ensure that all its on-site contractors submit certified payrolls to the City's Labor Standards Unit in the format prescribed by that agency which includes hours worked by minority and female apprentices and journeypersons.

C. Prompt Payment of M/W/DSBEs

1. The Successful Bidder shall within five (5) business days after receipt of a payment from the City for work performed under the contract, deliver to its M/W/DSBE subcontractors their proportionate share of such payment for work performed (including the supply of materials). In connection with payment of its M/W/DSBE subcontractors, the Successful Bidder agrees to fully comply with the City's payment reporting process which may include the use of electronic payment verification systems.
2. Each month of the contract term and at the conclusion of the contract, the Successful Bidder shall provide to the OEO documentation reconciling actual dollar amounts paid to M/W/DSBE subcontractors to M/W/DSBE commitments presented in the BGFE Form.

D. Oversight Committee

1. For this project, the City, in its sole discretion, will establish a Project Oversight Committee consisting of representatives from the Bidder's company, representatives of the building trades, the construction manager, and the City including the Project site's District Councilperson, OEO, and appropriate community organizations ("Committee"). The Committee will meet regularly to provide advice for the purpose of facilitating compliance with the Plan.
2. The City will convene meetings of the Project Oversight Committee no later than one (1) month after issuance of the Notice To Proceed.

V. Remedies and Penalties for Non-Compliance

A. The Successful Bidder agrees that its compliance with the requirements of the Plan is material to the contract. Any failure to comply with these requirements may constitute a substantial breach of the contract. It is further agreed and understood that in the event the City determines that the Successful Bidder hereunder has failed to comply with these requirements the City may, in addition to any other rights and remedies the City may have under the contract, or any bond filed in connection therewith or at law or in equity, exercise one or more of the remedies discussed below, as deemed applicable, which shall be deemed cumulative and concurrent:

- a. Withhold payment(s) or any part thereof until corrective action is taken.
- b. Terminate the contract, in whole or in part.
- c. Suspend the successful bidder from bidding on and/or participating in any future City contracts for a period of up to three (3) years.
- d. Recover as liquidated damages, one percent of the total dollar amount of the contract for each one percent (or fraction thereof) of the commitment shortfall. (**NOTE:** The "total dollar amount of the contract" shall include approved change orders, amendments and for requirements contracts shall be based on actual quantities ordered by the City.)

The remedies enumerated above are for the sole benefit of the City and City's failure to enforce any provision or the City's indulgence of any non-compliance with any provision hereunder, shall not operate as a waiver of any of the City's rights in connection with any contract resulting from this Invitation and Bid nor shall it give rise to actions by any third parties including identified M/W/DSBE subcontractors. No privity of contract exists between the City and the M/W/DSBE subcontractor identified in any contract resulting from this Invitation and Bid. The City does not intend to give or confer upon any such M/W/DSBE subcontractor(s) any legal rights or remedies in connection with subcontracted services under any law or Executive Order or by any reason of any contract resulting from the Invitation and Bid except such rights or remedies that the M/W/DSBE subcontractor may seek as a private cause of action under any legally binding contract to which it may be a party.

VI. Documentation of Best and Good Faith Efforts [*See Forms on following pages; these Forms, as completed by Bidder, must be submitted with the Bid as a matter of Responsiveness and Responsibility*]

Documentation of Economic Opportunity Plan Form

Project Title: _____

City of Phila. Bid/Proposal No. (if applicable): _____

Name of Bidder/Proposer: _____

Date: ____/____/____

I. M/W/DSBE Participation

Name of M/W/DSBE Solicited: _____

Street Address, Telephone and Facsimile Number:

OEO Certification Number _____

(Check all that apply):

- MBE (Minority Owned Business Enterprise)
- WBE (Women Owned Business Enterprise)
- DSBE (Disabled Owned Business Enterprise)

Date(s) Solicited (mm/dd/yyyy): ____/____/____

Method(s) of Solicitation (check all that apply):

- Telephone Mail Advertisement

Commitment:

- Yes (If yes, please proceed to Part A)
- No (If no, please proceed to Part B)

Part A

If yes, describe/ identify the following:

Documentation of Economic Opportunity Plan Form (continued)

Subcontractor - Type of Work _____

Supplier - Type of Supply Effort _____

Dollar Amount: \$ _____

Percentage of Bid _____ %

Note: Please attach Letter of Intent and/or Quotation

Part B

- If no commitment resulted from the solicitation, please explain what efforts were made and why they were unsuccessful.
- Did you attempt to negotiate price and scope (please be specific, attaching any dated price quotations and correspondence)?
- What kind of business assistance did you offer the M/W/DSBE (e.g., introduction to manufacturer, helped provide access to line of credit, access to union hall, etc.)?
- What efforts were made to provide to M/W/DSBEs information about the scope of work required?
- Are you planning to award this work or supply effort to a non-M/W/DSBE? If so, please explain why. Identify the name of the awarded firm(s), provide the awarded firms' quotation and any price adjusted quotations, scope of work and experience of the awarded firm(s).

II. Workforce Diversity

Do you operate or provide funding to any on-the-job training programs? If so please describe and provide the number of trainees and breakout of minority and female participants.

Provide your list of minority and female recruitment agencies or other community based organizations that your firm uses for employment placement:

Describe any specific outreach activities taken to advise minority persons and women of employment opportunities with your company.

Identify the unions with which you have a collective bargaining agreement. Describe any hiring practices, apprenticeship programs that specifically encourage the training and employment of minority persons and women.

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		FIRM NAME (Must be filled in)	

SECTION 1: GENERAL BID SUBMISSION

1.1 TITLE: **PHILADELPHIA NATURAL LAND RESTORATION PROJECTS**

1.2 CONTRACT TYPE: **FIRM LIMIT**

1.3 METHODOLOGY OF ACQUISITION: Purchase only.

1.4 STATEMENT OF DIRECTION:

1.4.1 It is the intent of the City of Philadelphia to make an award for Natural Land Restoration for the Philadelphia Parks and Recreation (PPR) as specified herein during the contract period.

1.5 BID SECURITY

1.5.1 For the purpose of this bid only, paragraph 2 of the attached "Conditions of Bidding-General" is hereby deleted. Instead, bidders must submit with their bid a Bid Bond executed on the attached City Bid Bond Form in the amount of 10% of the bidder's bid.

1.6 BID INFORMATION:

1.6.1 All information concerning this bid will be contained in this bid document as issued or amended.

1.6.2 Information provided verbally by any City official shall not be binding or relevant.

1.7 BID SUBMISSION:

1.7.1 Bid information must be submitted to the City of Philadelphia no later than the time and date for the bid opening.

1.7.2 Advertised sealed bids will be received and read publicly at 10:30 AM in Room #170A, 1st Floor, Municipal Services Building, 1401 JFK Boulevard.

1.7.3 Bid should be complete and include ALL information required as described in the various paragraphs of the bid specifications.

1.7.4 All pricing must be completed on the forms provided; be complete; and be in ink or typed.

1.7.5 The bid must be complete as to required bid signatures and corporate seal, and fully accept the terms and conditions contained in the bid.

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1.7.6 **BID PROCESSING FEE:**

All bids submitted where the bid total is greater than \$30,000 must be accompanied by the proper Bid Processing Fee. The fee shall be in the form of a separate check or money order in accordance with Paragraph 3 of the "Terms and Conditions of Bidding and Contract".

1.7.7 When M-BE, W-BE or DS-BE ranges are required on an Invitation and Bid, bidders are reminded that the submission of a **blank** "Office of Economic Opportunity (OEO) Solicitation and Commitment Form" will be deemed non-responsive and ineligible for an award. Bidders are reminded to read carefully and entirely the "Bidder's Guidelines relating to Executive Order 02-05".

1.7.8 If no M-BE, W-BE or DS-BE ranges are established for this Invitation and Bid, bidders are requested to complete the "Voluntary Participation and Commitment Form (Bid)" located after page 1 of the bid.

Completion of this form will not, in any way, impact the City's determination concerning bidder's responsiveness to the requirements of the bid and the award process. The information provided in the "Voluntary Participation and Commitment Form (Bid)" will be for the City's information.

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1.7.9 CONTACT PERSON:

PRE-AWARD:

Indicate below to whom in your firm questions concerning this Invitation and Bid should be directed:

Name: _____

Address: _____

City/State/ZC: _____

Telephone No. (_____) _____ Ext.: _____

Fax No. (_____) _____

E-mail address _____

Vendor's WEB address _____

POST-AWARD:

Indicate below to whom in your firm questions concerning the Contract resulting from this Invitation and Bid should be directed:

Name: _____

Address: _____

City/State/ZC: _____

Telephone No. (_____) _____ Ext.: _____

Fax No. (_____) _____

E-mail address _____

Vendor's WEB address _____

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1.7.10 BID QUESTIONS OR PROBLEMS

In preparing the bid response, should any bidder need clarification on the bid requirements, identify a discrepancy in the specifications, determine that a specified product has been discontinued or an alternate procedure is advised, etc.; then the bidder is **STRONGLY** encouraged to bring these issues to the attention of the Procurement Department prior to the bid opening by calling (215) 686-4720 or 4721, or by addressing a letter or fax (fax # 215-686-4727) to the Buyer. Questions, whether written, phoned or faxed should be received no later than seven (7) calendar days prior to the scheduled opening date of the bid. The City reserves the right to only respond to those questions submitted prior to the stated deadline. If it is in the City's best interest to do so, the bid **MAY** be amended to reflect the proposed changes/modifications. Exceptions taken **DO NOT** obligate the City to change the specifications. The City of Philadelphia, Procurement Department will notify all bidders in writing, by addendum duly issued, of any interpretations/changes made to specifications or instructions. The City will not accept responsibility for oral instructions, suggestions or changes by any City agency.

1.8 BIDDER QUALIFICATION:

1.8.1 All bidders must be a bona fide manufacturer of, or dealer in, the article or service specified within the bid. To demonstrate this, bidders should submit the following reference information with their bid. References provided should be pertinent to the commodity or service requested in this Invitation and Bid and demonstrate the bidders ability to perform on a contract of this size and scope.

Please note that reference information in each section must be completed. Failure to submit this information may result in the bidder's disqualification.

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SECTION 1:

Customer Reference other than an employee or department of the City of Philadelphia, (excluding suppliers or financial institutions).

Firm Name: _____

Contact Name: _____

Phone No.: _____

Type Work: _____

Years dealing w/your firm: _____

SECTION 2:

Previous purchase order(s)/contract(s) with the City of Philadelphia; (State "None" if applicable).

Dept. Name: _____

Contact Name: _____

Phone No.: _____

PO#/Contract#: _____

Items: _____

Note: Do not provide the name and phone number of a Procurement Department Buyer in this section. Contact name(s) and phone number (s) must be from a City ordering department.

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1.8.2 The bidding contractor must submit information requested below to allow Philadelphia Parks and Recreation (PPR) to evaluate their qualifications and ability to perform the proposed restoration project. Note that a qualified arborist will be required for the Carpenters Woods project site and the Combined Tree Removal projects. In addition, the fencing contractor must have a minimum of three (3) years experience installing deer fencing. Specific information must be provided as described below.

1.8.2.1 **Prior Experience:** The contractor shall provide narrative and color photographs (if available) of at least three (3) projects implemented by the contractor, which are **related** to the project for which the bid is being submitted. References for projects performed on behalf of City State or Federal entities are preferred. One 8.5" x 11" sheet is to be used to describe each project. The projects are to have been completed in the last three (3) years. The following information (as a minimum) should be included for each project:

- Project Name
- General physical (site) characteristics
- Specific features, accomplishments or problems
- Dates of service
- Construction cost
- Individual references. Include current contact addresses and telephone numbers. A minimum of one reference shall be included for each project.

1.8.2.2 **EQUIPMENT**

The prime contractor is to own or have access to equipment capable of handling and hauling trees up to 30 inches in diameter and at a minimum should include the following:

- One tree shear or feller/buncher (capable of cutting/hauling trees up to 12" diameter)
- One (1) skidder
- One (1) whole tree chipper
- One (1) log truck w/loader or boom truck
- One front-mounted forestry mulcher/shredder
- One brush hog/mower or hydro axe
- One (1) stump grinding machine
- One small bulldozer or equivalent (trail grading)

Equipment may be supplied by a sub-contractor but must be identified as such by the prime contractor.

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1.8.2.2.1 Ability to Perform the Project in the Required Time: The bidding contractor must have a demonstrated ability to perform the project and meet the project schedule. Bidding contractor must provide a list of key personnel and their qualifications. Contractor must provide a list of the equipment that will be used to perform the entire project and identify the project tasks for which particular equipment will be used. The contractor is to note the equipment that is owned or will be provided by sub-contractors or rented from a Leasing Company. This information may be provided on a separate sheet.

Other Materials: The bidding contractor may provide any additional materials that they deem appropriate for use in evaluating their ability to perform the proposed project. For instance, equipment owned by the contractor that may be more cost-effective or suitable for performing the proposed project tasks.

1.8.2.3 **Required Staff**

1.8.2.3.1 **Skilled Arborist - Carpenters Wood's and Combined Tree Removal Projects.**

A skilled arborist will be required for tree removal/pruning at several project sites due to the proximity of trees to utility wires and/or structures. The skilled arborist maybe sub-contracted. The company owner or arborist/foreman performing the work shall have the following minimum qualifications:

- International Society of Arboriculture (ISA) certified arborist
- Necessary equipment and personnel trained to perform large tree removal and line clearing
- Utility clearing must be performed by a qualified line clearance arborist in accordance with ANSI Z133.1, 29CFR1910.331-335, 29CFR 1910.268 or 29CFR 1910.269.
- Minimum three (3) years experience and demonstrated ability to perform required work

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1.8.2.3.2 **Deer Fencing Contractor - Houston Meadows and Greenland Nursery projects**

The proper installation of deer fencing requires experience and familiarity with specialized materials, techniques and equipment. The PPR will require that the fencing be installed by a contractor/subcontractor that has at least three (3) years experience installing deer fencing. The contractor bidding on the Houston Meadows and the Greenland Nursery project sites must provide information demonstrating that they will have the required three (3) years minimum experience and demonstrated ability to perform the project. Please provide three references for deer fencing projects completed during the past three years.

1.8.3 **Licensing and Qualifications-Herbicide Treatment**

- 1.8.3.1 Contractor shall be responsible for applying for and obtaining all permits. All commercial trucks and vehicles must have a **BU#** and **permit** or the operator risks police intervention. Such violations may result in the termination of contract with forfeiture of payment from PPR and/or its assessors to the vendor. The Contractor and operators shall have the necessary State and Federal permits and licensing for this contract.
- 1.8.3.2 The Contractor's business will have at least three (3) years of spraying experience in natural areas (forests, meadows, riparian areas, and wetlands).
- 1.8.3.3 One of the persons on the application vehicle must have a valid Commonwealth of Pennsylvania applicators license and have at least three seasons of experience in broadcast application of herbicides in natural areas.
- 1.8.3.4 The Contractor shall provide copies of current pesticide licenses to PPR upon contract approval.
- 1.8.3.5 An Owner or Officer of the company must have a Bachelor's degree from an accredited college or university.

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- 1.8.2.6 Any contractor who has not worked for PPR (formerly Fairmount Park) within the last three seasons will be required to provide at least three references demonstrating competence in this area.
- 1.8.2.7 PPR reserves the right to cease herbicide applications if proper precautions are not followed, or if weather conditions prohibit proper application.

NOTE: If one contractor submits the lowest qualified bid for more than two of the project groups, the contractor must demonstrate to the Philadelphia Dept. of Parks and Recreation that they can and will provide sufficient equipment and manpower to work on at least two sites simultaneously and to complete all work on all sites within the timeframes provided in these specifications. The qualification that must be provided is specified under "Bidders Qualifications" listed above.

1.9 MANDATORY PRE-BID MEETING:

A MANDATORY PRE-BID MEETING for all interested parties will be held on **Wednesday, September 15, 2010** at 8:00 AM at The Pennypack Environmental Center (see attachment A, Directions), 8600 A Verree Road, Phila. PA 19115

The purpose of this meeting is to perform inspections of the project sites and to respond to questions from prospective bidders. Bidders are encouraged to submit questions in writing at this time. All questions that materially impact upon the bid process will be answered, in writing, in a formal addendum issued by the City. Oral responses by City employees or their representatives are not binding and shall not in any way be a commitment by the City. Additional information regarding submission of question is provided above (para. 1.7.10).

Attendance at this Pre-Bid Meeting is Mandatory. Only bidders who attend the Pre-Bid Meeting and are subsequently qualified by the City will be eligible for award.

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1.10 **MANDATORY SITE INSPECTION:**

Bidder is responsible for examining prior to bid submission, in detail the site(s) of the work to be done, shall acquaint himself with conditions affecting the work, and if applicable, shall take his own measurements for which he will be held responsible. The bid shall be prepared with due regard to the conditions existing or to be anticipated at the site(s) of the work.

Attendance at the Site Inspection is Mandatory. Failure to submit a signed Certification of Site Visit form will disqualify bidder. (See "Certification of Site Visit" form below). The PPR representative shall sign the "Certification of Site Visit" form at the conclusion of the Mandatory Site Inspections.

Site inspection shall be held directly following the pre-bid meeting at the Pennypack Environmental Center.

The project sites are public parks. The potential bidders are encouraged to revisit the project sites in order to further familiarize themselves with the conditions specific to each site visit.

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MANDATORY SITE VISIT CERTIFICATION

BID NO. S10F1750

(TO BE SUBMITTED WITH BID PACKAGE)

Site Visit immediately follows the Mandatory Pre-Bid Meeting listed above.

Note: This site visit will encompass the areas to be covered under the contract resulting from this Invitation and Bid and will finish approximately at 4:00 PM.

This form MUST be signed and dated by a representative of PPR to certify that the below vendor inspected the area as per specifications.

FAILURE TO VISIT THE SITE WILL DISQUALIFY YOUR BID.

COMPANY NAME: _____

ADDRESS: _____

CITY/STATE/ZIP CODE: _____

PHONE NO.: _____ FAX NO.: _____

CITY REPRESENTATIVE:

DEPT.: _____

NAME: _____

SIGNATURE: _____

DATE: _____

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SECTION 2: SPECIFICATIONS

- 2.1 The Philadelphia Natural Land Restoration project includes a total of seven (7) project sites; Houston Meadow; Andorra Meadow, Carpenter's Woods, Fisher's Lane Meadow, Verree & Susquehanna Rds., Greenland Nursery and Bocce Woods. In addition this project includes three tree removal projects that are combined as a single project. These project sites are generally located in the northern and central portions of Philadelphia, Pennsylvania (See attached "Project Sites Location Map").

The goal of these projects is to increase habitat diversity, in particular for birds that require open and/or brush areas, such as meadow or shrub cover. These types of habitat are under-represented within the Philadelphia region as a result of development and a decline in agriculture. The habitat enhancement will be achieved primarily through the removal of a variety of invasive, non-native species of trees and shrubs (and herbaceous plants in some instances) which will be followed by herbicide treatment and replanting with native species. Replanting will include drill seeding warm season grasses and wildflowers within meadow creation areas, along with planting native shrubs within proposed shrub areas and trees and shrubs in forest understory areas. Meadow creation is proposed at the Andorra Meadow, Verree & Susquehanna Rds., and Fisher's Lane Meadow project sites. An additional goal of this project is to further the understanding of techniques and methods for effective invasive species removal and habitat restoration within the Philadelphia region.

This Invitation and Bid is for invasive species removal, forestry mowing, stump grinding, temporary seeding, herbicide treatment and planting trees and shrubs. For sites that are to have plants installed Philadelphia Parks & Recreation (PPR) will supply the tree and shrub plant material. A brief description of each project site follows. Individual project site maps are attached.

Note: The drill seeding will be performed under a separate contract.

Project start date: Within Two (2) weeks of contract conformance

Project end date: September 30, 2011

All work must be completed by project end date unless otherwise stated in bid document.

NOTE: "Work on all project groups is to begin by November 1, 2010. If the contract is not executed by that date, work is to start no more than 1 week after contract execution. All tree removal and forestry mowing for all projects are to be completed by February 25, 2011."

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2.1.1 **Houston Meadow**

The Houston Meadow project site is located within the Wissahickon Valley Park between West Bells Mill Road and Cathedral Road. The project site consists of two parcels separated by a forested riparian stream corridor. The northern site is approximately 22 acres and the southern site is 27 acres in size. The tree and shrub clearing was completed between late 2009 and Spring 2010.

In addition, a forested area totaling 7 acres, was thinned to favor native mast producing species, primarily oaks and hickories. Remaining project tasks include the installation of deer fencing to protect the forested area, and replanting within the fenced area. Approximately 3,800 feet of deer fence is to be installed.

2.1.2 **Andorra Meadow**

The Andorra Meadow project site is located within the Wissahickon Valley Park and is accessible from Northwestern Avenue. The site is approximately 33.4 acres in size. A number of hiking trails access and traverse the site. The site is currently dominated by intermediate aged forest and dense stands of invasive shrubs, which in combination total approximately 28 acres. Existing meadow within the site totals approximately 6 acres and is represented by a number of disjunct patches. This project, along with future work, will result in the creation of approximately 21 acres of contiguous meadow and 4 acres of shrub habitat, and the restoration of 5 acres of forest/forest understory. An unnamed tributary to the Wissahickon Creek and fringing wetlands are located in the south-central part of the site.

2.1.3 **Verree & Susquehanna Rds.**

The Verree & Susquehanna Rds. site is located within the Pennypack Park and may be accessed from Verree Road. An actively used playground and parking area are adjacent to the site entrance. A gravel road bisects the site and a number of hiking trails traverse the site. The project site is approximately 32.1 acres in size and is dominated by dense stands of invasive shrubs, totaling approximately 23 acres, and a fringe of intermediate aged forest and a stand of conifers, which total approximately 11 acres. This project, along with future work, will result in the creation of approximately 22 acres of meadow and the restoration of 10 acres of forest/forest understory.

2.1.4 **Carpenter's Woods**

The Carpenter's Woods site is part of the Wissahickon Valley Park and is encompassed by a residential neighborhood. Numerous trails traverse this site and it is actively used by local residents. The site is notable for the large number and variety of neo-tropical birds that migrate through or breed within this woodlot.

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Surrounding streets from which the park is accessible include Wissahickon Ave., N. Mt. Pleasant Rd., S. Mt Pleasant Rd., and Sedgewick Street. The site totals approximately 40 acres; however the project activities will be focused on the perimeter/fringes with less work in the central portion of the site. The site is dominated by an intermediate-aged forest that includes numerous Norway maple (*Acer platinoides*) trees and saplings.

In places, the forest understory includes dense stands of invasive shrubs and herbaceous plants. This project will focus on the removal of Norway maple trees as well as mowing and herbicide treatment of forest understory. This project will result in about 19 acres of improved forest. An unnamed tributary to the Wissahickon Creek and fringing wetlands bisect the site. The wetland boundary shown on the existing conditions plan is an approximated boundary and represents the maximum extent of the wetland. This boundary is based on a visual assessment performed by PPR staff March 31, 2010.

2.1.5 **Fisher's Lane Meadow**

The Fisher's Lane meadow site is located within the Tacony Creek Park and may be accessed via a gated road off of Fisher Lane. Numerous trails cross this site and it is subject to illegal ATV use. The project site is approximately 6.0 acres in size and includes small areas of intermediate-aged forest along with early and late successional field communities and some denuded/barren ground. Invasive tree and shrub removal followed by herbicide treatment has previously been performed at this site. This project, along with future work, will result in the creation of approximately 6 acres of meadow and shrub habitat along with a few small stands of shrubs and trees. Two disjunct areas, totaling approximately 1.3 acres include desirable warm season grass and shrub vegetation and will be avoided during construction. No planting is proposed as part of this project.

2.1.6 **Greenland Nursery**

The Greenland Nursery site is located within West Fairmount Park southwest of the intersection of Ford Road and Chamounix Drive. The project site totals approximately 12.5 acres and primarily includes removing invasive trees and shrubs throughout this area. A greenhouse facility is located within the project site. The natural areas have been degraded as a result of white tailed deer herbivory along with the introduction of invasive species of trees and shrubs. In addition, approximately 3,250 linear feet of deer fence will be installed to secure and protect the greenhouse facilities. No planting is proposed as part of this project.

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2.1.7 **Bocce Woods**

The Bocce Woods site is part of the Cobbs Creek Park and is adjacent to the corner of North Daggett St. and Race St. The project site includes two zones which total approximately 8.7 acres. Cobbs Creek is located to the immediate south of the project site. Some areas of wetland as well as areas of moderate to steep slopes are found within portions of the site. The site is dominated by intermediate aged forest which includes invasive species of trees and shrubs, such as Norway maple, Tree-of-heaven, princess tree, amur honeysuckle and privet.

2.2 **Combined Tree Removals**

2.2.1 Chamounix Drive

The Chamounix Drive project site is located within West Fairmount Park northeast of the intersection of Ford Road and Chamounix Drive. This project consists of the removal of approximately 54 Chinese cedrela trees. Trees to be removed include the following: thirty four (34) trees between 1-10" DBH; sixteen (16) trees between 11-20" DBH; and four (4) trees between 21-30" DBH. No additional herbicide treatment or planting is proposed.

2.2.2 Warner Creek

The Warner Creek project site is located within West Fairmount Park near the intersections of Lansdown Drive, Black Road and 41st Street. This project consists of the removal of approximately 22 trees and topping a single tree. The trees to be removed are primarily Norway maple along with a few sycamore maple, Chinese cedrela and three (3) dead trees. Trees to be removed include the following: ten (10) trees between 1-10" DBH; nine (9) trees between 11-20" DBH; and three (3) trees between 21-30" DBH. A single dead 33" DBH white ash tree will also be topped to a height of 30-40 ft. Note that native trees have been planted throughout the project site. The contractor must take precautions to avoid damaging this regeneration to the extent practicable. No additional herbicide treatment or planting is proposed.

2.2.3 Lotus Street

The Lotus Street project site is located within Cobbs Creek Park near the intersections of 66th Street and Malvern Avenue. This project consists of the removal of approximately 36 trees. The trees to be removed are primarily white ash and Ailanthus. Trees to be removed include the following: fifteen (15) trees between 1-10" DBH; twelve (12) trees between 11-20" DBH; six (6) trees between 21-30" DBH; two (2) trees between 31-40" DBH, and one tree larger than 41". No additional herbicide treatment or planting is proposed.

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2.3 The following general conditions apply to the various sites:

- For bidding purposes the projects are grouped into five distinct groups, each group comprised of 1-3 sites. The contractor may bid on one or more of these project groups. The lowest responsible bid for each project group will be selected so that more than one contractor may be conducting work on the projects.
- The Bocce Woods project is considered an "addition/alternate" project and will only be considered for construction if adequate funding is available. This project will be authorized or eliminated following the review of the cost proposals for all sites.
- The contractor will be removing trees and shrubs from three sites (Andorra Meadow, Verree & Susquehanna Rds., & Fisher's Lane Meadow) that include the creation of meadow habitat. These meadow areas will eventually be drill seeded. The contractor will be required to remove all tree and shrub stumps from within the proposed meadow creation areas.
- The project site(s) are parkland and are actively used by hikers and for recreation in some instances. The contractor will be required to provide warning signs and temporary barriers at selected access points.
- Three project sites, Andorra Meadow, Carpenter's Woods, and Bocce Woods include State open waters and wetlands. Invasive plants may be removed from these sensitive areas; however, State and Federal regulations require that the contractor not damage these areas in any way, including leaving wheel ruts.
- The Carpenter's Woods project site and the Combined Tree Removal projects will require that a certified arborist be employed to perform tree removals due to proximity of utility wires, roads and structures.
- Deer fencing will be installed at two project sites, Houston Meadow and Greenland Nursery. The deer fencing must be installed by a contractor with at least three years experience installing deer fencing.
- Herbicide application shall be by Commonwealth of Pennsylvania licensed pesticide applicators only.
- To reduce the quantity of material that must be removed from each site, the contractor will be permitted to leave large diameter logs (>12" diameter at small end) from felled trees on site as "habitat logs" within areas of forest and shrub habitat.
- The contractor must be sensitive to weather conditions and will not be allowed to work with heavy equipment when soils are wet and subject to rutting.
- The contractor will variously be required to install stabilized construction entrances, temporary access roads and landing areas. The contractor will be required to remove these features in their entirety and restore all disturbed areas.
- All woody organic material must be removed from the site to the maximum extent practicable. Wood chips may not be disposed of onsite.

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- Most of the project sites will be treated with herbicide twice, during early and late summer 2011.
- The contractor will be performing planting tasks on some of the sites. The PPR will supply the trees and shrubs as #1/2, #3, #5 or #7 container plants. The contractor is to pick up all plants at PPR's Greenland Nursery in West Fairmount Park. The contractor will be responsible solely for proper handling, proper planting and adequate watering while onsite. No plant guarantee is included.
- The PPR has prepared existing and prepared conditions Maps for all project sites (except tree removal sites). The Maps are included in this Invitation and Bid.
- The PPR has prepared Erosion and Sediment Control (ESC) plans for each of the sites. The contractor will be required to adhere to the requirements of the ESC plans. The ESC plans are included in this Invitation and Bid.
- The contractor bidding on these projects must be qualified and have at least three years experience performing similar work. The PPR will require the bidding contractor to provide project summaries and references.
- The project sites provide valuable habitat for a variety of wildlife, therefore, **all site work at the Andorra Meadow, Houston Meadow, Verree & Susquehanna Rds., Greenland Nursery, Fisher's Lane Meadow. and Bocce Woods sites will be limited to late fall and winter months, November 1, 2010 to Feb 25, 2011. The Carpenters Woods, and Combined Tree Removal projects may begin within Two (2) weeks of contract conformance and be completed by Feb 25, 2011.**

2.4 SITE PROTECTION

2.4.1 CONSTRUCTION SITE - DESCRIPTION

2.4.1.1 The project sites include trails that are subject to use by day hikers. Contractor must provide warning signs and temporary fencing at major trail access points to prevent access to the portion(s) of site within which construction is occurring. These temporary barriers shall be moved as portions of the site work progresses in order to allow day hiker access to completed sections of the site(s). The major trail access points are shown on the "existing conditions" maps provided for each site. The following number of access points is preliminarily identified:

- Andorra Meadows five (5)
- Verree & Susquehanna four (4)
- Carpenter's Woods 10 (10)
- Fisher Lane Meadow two (2)

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- Bocce Woods one (1)

2.4.1.2 **MATERIALS**

Four (4) ft height high visibility construction limiting fence, 6' hgt metal fence posts, signage of corrugated plastic or .040 aluminum. Signage is to indicate that the site is under construction and include a warning such as: "DANGER - Equipment Working Ahead - KEEP OUT"). Signs to be a minimum of 12" by 18" in size

2.4.1.3 **EQUIPMENT**

Tools necessary for installing temporary fence posts, fencing and signage

2.4.14 **EXECUTION**

To protect the public during construction, the contractor is required to install four (4) ft height high-visibility orange construction limiting fencing and warning signage. Fencing shall be installed at any trails that access the portion of the site within which the contractor is currently working. The fencing should be placed across trails to prevent access to within at least 150 ft from the construction activities. Fencing is to be placed perpendicular to the trail to provide a physical barrier. Fencing to extend at least 20 feet into the adjacent areas on both sides of trail. Fencing may be zip tied to trees or mounted on metal posts; however, fence supports shall be no more than 10 feet apart. Fencing may not be stapled or nailed to trees. At least one (1) warning sign must be installed at each trail access point. The fence shall be maintained in good condition and repaired as necessary during the construction and post-construction/site stabilization phases. The fencing, posts and signs are to be removed after all work is completed.

2.4.1.5. **Pricing**

Payment for all work specified under this SECTION, including installation, maintenance and removal of the protection of construction site fencing and signage shall be a Lot (LO) price. Payment is for materials, labor, equipment, tools, and incidentals necessary to complete the work.

2.4.2 **STABILIZED CONSTRUCTION ENTRANCE**

The Contractor shall furnish all materials, labor, and equipment necessary to construct a stabilized construction entrance. The

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stabilized construction entrance will be constructed within the approximate location as shown on the site specific maps. Philadelphia Parks and Recreation (PPR) will stake out the approximate location of this feature in the field prior to installation. It is anticipated that the Philadelphia Natural Land Restoration projects will require the installation of stabilized construction entrances at Andorra Meadows, Verree and Susquehanna, Greenland Nursery and Bocce woods site(s).

This feature shall be maintained in good condition and repaired as necessary by the Contractor for the duration of the project. The stabilized construction entrance shall be removed in its entirety, including all stone and filter fabric upon project completion.

2.4.2.1 MATERIALS

The stabilized construction entrance shall be constructed of the following materials:

AASHTO #1 Coarse Aggregate

Filter Fabric Underliner:

The filter fabric shall be Mirafi 600X, or approved equal, and which shall be suitable for heavy duty construction traffic.

2.4.2.2 EQUIPMENT

Equipment must be suitable for stripping and stockpiling surface soil, and placing and grading stone

2.4.2.3. Stabilized Construction Entrance

The footprint of the stabilized construction entrance will be stripped of surface soils to a depth of 4-6 inches, which may be stockpiled in a parallel berm. The stabilized construction entrance shall be no larger than ten (10) feet wide and fifty (50) feet in length; however it must be flared where it meets the public right-of-way to accommodate turning. Filter fabric shall be placed over the entire area prior to placing of the coarse aggregate. Filter fabric shall be as specified above. The coarse aggregate shall be placed so that it is not less than six (6) inches thickness.

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All surface water flowing or diverted toward construction entrances shall be piped across the entrance. If piping is impractical, a mountable berm with 5:1 slopes will be permitted. The entrance shall be maintained in a condition which will prevent tracking or flowing of sediment onto public rights-of-way. All sediment spilled, dropped, washed or tracked onto public rights-of-way must be removed by the contractor immediately.

2.4.2.4 Restoration

After completion of the project, the stabilized construction entrance shall be removed and all areas regraded to original condition. The area of the stabilized construction entrance shall be de-compacted using a plow followed by disking or other means acceptable to the PPR. The stripped surface soil shall be replaced to cover the area of the stabilized construction entrance. All areas shall be seeded and stabilized with straw mulch. Seeding shall be winter wheat (*Triticum aestivum*) @ 3 bushels per acre

2.4.2.5 **Pricing**

Payment for all work specified under this SECTION, including installation, maintenance and removal of a stabilized construction entrance shall be a Lot (LO) price. Payment is for materials, labor, equipment, tools, and incidentals necessary to complete the work of installing a single stabilized construction entrance.

2.4.3 **TRAIL CONSTRUCTION**

2.4.3.1 **DESCRIPTION**

This work shall consist of the initial grading/construction of new trails. Trail construction is anticipated to be required within the Andorra Meadows site only. A total distance of approximately 4,500 linear feet of new trail is anticipated to be constructed at the Andorra Meadow site.

2.4.3.2 **EQUIPMENT**

Equipment must be capable of performing shallow grading and should be no more than 6 feet in width, such as a skid steer with bucket or small bulldozer.

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2.4.3.4 EXECUTION

The contractor is to grade a narrow, six (6) foot width trail. Grading will consist of scraping the soil surface to a depth of approximately 1 inch in order to remove all shallowly rooted vegetation. Trail will generally parallel the site contours. Excess spoil may be bladed to the down gradient side of the trail, if being constructed on a slope. Trail will avoid trees, desirable vegetation and other sensitive resources such as streams, wet areas and riparian zones. Trail shall be graded to provide a relatively level surface for pedestrians; however, it must be gently outsloped (2-4%) to provide positive drainage. The uphill (cut side) of the trail must be graded to a slope no greater than 1:1 (horizontal:vertical). Philadelphia Parks and Recreation (PPR) will field locate the trail centerline.

2.4.3.5 PRICING

Payment for all work specified under this SECTION will be for the actual feet of trail graded (as determined by the PPR) on a per 1000 linear foot basis or portion completed thereof. Payment is for materials, labor, equipment, tools, and incidentals necessary to complete the trail construction work within the Andorra Meadows project site.

2.4.4 TEMPORARY ACCESS ROAD

2.4.4.1 DESCRIPTION

The Contractor shall furnish all materials, labor, and equipment necessary to construct temporary access road(s). The temporary access road will be constructed within the approximate location as shown on the site map. Philadelphia Parks and Recreation (PPR) will stake out the approximate centerline of this feature in the field prior to installation. It is anticipated that the Philadelphia Natural Land Restoration projects will require a single temporary access road at the Andorra Meadows site. The temporary access road at the Andorra Meadows site is approximately 140 ft in length.

This feature shall be maintained in good condition and repaired as necessary by the Contractor for the duration of the project. This feature shall be removed in its entirety, including all stone and filter fabric upon project completion.

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2.4.4.2 **MATERIALS**

The access road shall be constructed of the following materials:

AASHTO #1 Coarse Aggregate

Filter Fabric Underliner:

The filter fabric shall be Mirafi 600X, or approved equal, and which shall be suitable for heavy duty construction traffic.

2.4.4.3 **EQUIPMENT**

Equipment must be suitable for placing and grading stone

2.4.4.4. Temporary Access Road

The footprint of the temporary access road may be constructed at grade and does not need to be stripped of surface soils. Access road(s) shall be minimum ten (10) foot width. Coarse aggregate shall be placed to a depth of at least four (4) inches. A broad based dip may be required to be constructed along the temporary access road to control/minimize road drainage. Additional detailed specifications regarding the "Broad Based Dip" are included.

2.4.4.5 Restoration

After completion of the project, temporary access road(s) shall be removed and all areas regraded to original condition. Any designated landing areas will be scraped to remove excess surficial wood chips and woody debris. The area of the temporary access road and the landing shall be de-compacted using a plow followed by disking or other means acceptable to the PPR. All areas shall be seeded and stabilized with straw mulch. Seeding shall be winter wheat (*Triticum aestivum*) @ 3 bushels per acre

2.4.4.6 **Pricing**

Payment for all work specified under this SECTION, including installation, maintenance and removal of the temporary access road shall be LOT (LO) price. Payment is for materials, labor, equipment, tools, and incidentals necessary to complete the work.

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2.4.5 **BROAD BASED DIP**

2.4.5.1 **DESCRIPTION**

This work shall consist of the installation of a single (1) broad based dip (rolling dip). Broad based dip(s) shall be constructed along temporary access roads or other road/skid trail/trail locations that pose risk of erosion. Broad based dips shall be constructed at recommended distances in accordance with PADEP Erosion and Sediment Control for Timber Harvesting. Philadelphia Parks and Recreation (PPR) will identify the need for broad based dips and assist in locating the broad based dip. As currently proposed, a single broad based dip will be required to be installed along the access road at the Andorra Meadows project site.

2.4.5.2 **MATERIALS**

Coarse Aggregate Stone; AASHTO #1

2.4.5.3 **EQUIPMENT**

Equipment must be capable of grading and moving soil/stone along access roads, such as small bulldozer or blade on skidder. Hand tools as required for final shaping

2.4.5.4 **EXECUTION**

- A. Broad based dips are to be installed and worked before ground freezes.
- B. The trough/dip length is to be 6' - 10'
- C. The rise/ramp length is to be 10' - 20'
- D. The difference in trough to rise should be 24"
- E. The slope below the trough drain shall be armored with coarse aggregate stone and shaped to distribute flow as sheet flow. Stone shall be AASHTO #1 placed to a depth of 4"
- F. The slope of the drain must be a minimum of 3% or must be greater than the grade of the road descending to it.

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2.4.5.5 **Pricing**

Payment for all work specified under this SECTION shall be Lot (LO). Payment is for materials, labor, equipment, tools, and incidentals necessary to complete the work of installing one broad based dip.

2.5 **VEGETATION CLEARING**

2.5.1 **DESCRIPTION**

This work shall consist of tree and shrub removal throughout the various project sites. All site work at the Andorra Meadow, Houston Meadow, Verree & Susquehanna Rds., Fisher's Lane Meadow, Greenland Nursery and Bocce Woods sites will be limited to late fall and winter months, **November 1, 2010 to Feb 25, 2011**. The Carpenters Woods, and Combined Tree Removal projects may be performed between **within Two (2) weeks of contract conformance and February 25, 2011** in accordance with these specifications.

2.5.2 **EQUIPMENT**

Equipment must be capable of dragging and handling trees up to 30 inches in diameter.
See equipment list under Section 1.8.2.2.

2.5.3 **EXECUTION**

Note that some sites have requirements that are specific to a particular project site. See specifications regarding "Site Specific Requirements" for additional details.

2.5.3.1 The contractor is to install Erosion & Sedimentation Controls as indicated on the **enclosed E&S Control Plan(s)**. No work is to be performed during wet conditions when soils are saturated. Philadelphia Parks & Recreation (PPR) reserves the right to request that work be delayed if soil conditions are not suitable.

2.5.3.2 A landing for chipping operations, woodchip and log storage and equipment and materials storage will be constructed at each project site with the exception that the Combined Tree Removals project will not require landings. The landing shall be a maximum of 100' by 100' ft in dimension, but shall be no larger than required for the project. The contractor shall maintain the landing in a manner that prevents ponding and/or creates offsite erosion and sedimentation.

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The landing area will be restored following project completion. See specifications regarding "Stabilized Construction Entrance" and "Temporary Access Road" for details regarding restoration.

- 2.5.3.3 The Contractor is responsible to prune and remove any tree limbs or other vegetation as needed to enable equipment to pass during the performance of the work. Any pruning shall be performed in accordance with International Society of Arboriculture (ISA) standards.
- 2.5.3.4 Contractor is to install skid routes that minimize the distance traveled between work areas and landing area. Skid routes are to use existing trails and roads to the extent possible. New skid routes are to be located along contours and not directly up/down slope. Skid routes are not permitted on steep slopes (> 40%) and logs must be winched off of these steep slopes. In order to minimize soil exposure, the contractor is to alternate routes so as not to use one primary trail. Logs are to be skidded with log ends raised to prevent soil gouging. Trees to be removed may be left temporarily as "bumper trees" to protect better trees to remain. Skid routes on slopes must include water bars or other drainage/diversion features to keep skid trails dry. Details of appropriate control measures are included with the E&S Control Plans (enclosed). PPR staff will locate routes and flag areas of desirable vegetation that must be avoided during skidding.
- 2.5.3.5 PPR staff have field delineated the project site boundary. This limit was created by painting occasional trees on the project boundary with orange tree paint. All trees must be felled so that they remain within the project site limits. Contractor may not trespass beyond this limit.
- 2.5.3.6 For all project sites except for the Carpenter's Woods site (See "Site Specific Requirements", the PPR has marked all trees *to be retained* with blue tree paint See Individual Locations listed in Section 2.1. All unmarked trees, including saplings, are to be removed throughout the entire project site(s). There are also unmarked trees scattered through the areas of existing meadows within the Andorra Meadow and Verree & Susquehanna sites. These trees are to be removed.

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Note that there are some trees that have been marked with the letter "S," which will be future "snag" trees. These trees are not to be removed and will be girdled by PPR staff.

2.5.3.7 In general, trees of the following species will be removed while conducting the Philadelphia Natural Land Restoration projects:

- Non-natives, such as ailanthus, amur corktree, cedrela, Norway maple and sweet cherry (all)
- Box elder (all)
- Black locust (all)
- Black cherry (most)
- Tulip poplar (some)
- Sassafras (some)
- White ash (some)

2.5.3.8 All unmarked trees and shrubs within the proposed forest/woods or shrub areas are to be cut and/or mowed with brush hog/mower or forestry mulcher/shredder. An exception to this will be occasional shrubs such as spicebush, arrowwood or sumac, or other desirable species located within forest/woods and shrub areas. Desirable shrubs to be retained will be marked with blue or orange (orange paint in Carpenter's Woods only) tree paint or flagging. Since it is not possible to mark all desirable shrubs, it will be incumbent upon the contractor to be capable of identifying desirable shrubs to avoid.

2.5.3.9 Significant portions of the Andorra Meadow, Verree & Susquehanna, and Fisher Lane sites are proposed to be converted into meadow. In order to allow future use of a drill-seeder, mower, and other equipment within proposed meadow areas, the following will be required:

- a) All stumps greater than 3" diameter are to be ground to at least 2 inches below ground level. Stump grindings do *not* need to be removed from the site.
- b) All proposed meadow areas are to be mowed with a forestry mulcher/shredder to a minimum depth of 2" below the ground surface in order to eliminate stumps of the removed trees < 3" diameter and shrubs.

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Additional detailed specifications regarding "Stump Removal and Forestry Mowing" are included.

- 2.5.3.10 All non-target species are to be avoided. Damage to non-target trees during felling and log skidding is unacceptable and will not be tolerated. The contractor shall protect tree trunks along skid roads and will be required to properly prune broken or damaged branches. It is anticipated that only a few trees along skid roads will require protection. PPR staff will work with the contractor to minimize damage to desirable vegetation. A penalty may be assessed if undue damage occurs. Refer to para. 4.2.4.1 Liquidated Damages.
- 2.5.3.11 The contractor must **remove all woody material from the site**, since leaving organic matter serves to enrich the soil and encourage colonization by non-native plants. **All felled trees are to be removed to the landing location for delimiting and/or chipping.** However, large diameter, low quality logs may be left in forest areas as Habitat Logs. Additional detailed specifications regarding Habitat Logs under "Woody Material Management" are included.
- 2.5.3.12 Within the Andorra Meadow, Verree & Susquehanna, and Fisher Lane sites the contractor is to remove all already-down logs from the portions of the site designated as proposed meadow, unless they are well-rotted. Unrotted logs may be moved into designated forest/woods or shrub areas; however, all limbs protruding > 3 feet are to be cut off.
- 2.5.3.13 Deer fencing will be installed at the Houston Meadow and the Greenland Nursery sites. All hazard trees that are within a tree length of the deer fence must be felled before fence is erected. Hazard trees are dead and dying, split, heavily leaning and/or root sprung trees that are in a position to fall across the fence. The PPR representative will consult with the contractor to determine which trees are to be considered hazard trees. These trees may be felled and left onsite except for portions of the felled trees that are less than 2" diameter, which must be moved outside the project boundary.

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- 2.5.3.14 When tree and shrub removal work is complete, the Contractor will restore the ground to its original shape, including grading/filling in wheel ruts. Disturbed areas, including haul roads, are to be de-compacted and stabilized in accordance with the E&S Control Plan(s).
- 2.5.3.15 The contractor will be required to temporarily stabilize the site following completion of all clearing and forestry mowing (site disturbance). The site shall be seeded with winter wheat (*Triticum aestivum*) @ 3 bushels per acre. Seed may be applied by any effective method, including drill-seeding, hydro-seeding or other mechanical seeders. Seed may also be hand broadcast. Regardless of the method, seed is to be applied uniformly throughout the site. If a hydro-seeder is used, the contractor is not to use any fertilizer in the mix.
- 2.5.3.16 The contractor will be responsible for the clean up and disposal of any items used in association with the work.
- 2.5.3.17 The contractor is to immediately notify the PPR of any unintended damage to trees, turf, roads, pipes or other structures.
- 2.5.3.18 The project sites are each located within a Philadelphia park, within an urban setting where equipment may be subject to vandalism. The Contractor will be responsible for the safety of his equipment. This may include additional or increased insurance, the installation of surveillance cameras, obtaining a security guard, erection of temporary fencing, and/or storing equipment offsite. The City of Philadelphia nor Philadelphia Parks & Recreation is responsible for any damage to equipment owned or operated by the contractor.
- 2.5.3.19 The contractor will be compensated to mobilize/demobilize all equipment, machinery, tools and miscellaneous one time for each project site. No additional mobilization/demobilization costs will be paid that may result from unanticipated project delays or extraordinary weather conditions.

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2.5.4 **PRICING**

Payment for all work specified under this SECTION shall be a Lot (LO) price for each site or each zone completed. Vegetation clearing includes cutting and removing all unmarked trees and shrubs and incorporates the requirements under woody material management. Payment is for materials, labor, equipment, tools, and incidentals.

2.6 **HERBICIDE TREATMENT**

2.6.1 **DESCRIPTION**

The Contractor is to target exotic invasive plant species, within all of the Philadelphia Natural Land Restoration Project sites. Most areas to be treated are accessible by existing access roads and trails; however, significant areas that are off-road or off-trail will need to be treated. Some areas may only be accessible by foot. Types of application are to be foliar (primarily) and basal bark. All labor, materials, and equipment are to be supplied by the contractor.

2.6.2. **EQUIPMENT**

2.6.2.1 Truck, trailer or ATV mounted sprayers are acceptable for foliar spraying. Backpack spraying will be required for basal bark applications and possibly a few foliar applications. Contractor must have sufficient equipment to ensure that all work is done efficiently and expeditiously. Equipment must have an adjustable nozzle.

2.6.2.2 The equipment used must be capable of delivering chemical mix at a uniform rate over the entire spray pattern.

2.6.2.3 All equipment (hoses, pumps, valves, tanks, etc) on the spray unit and support truck will be in good working condition. The spray unit should be equipped to halt liquid flow should a leak or failure occur.

2.6.3. **MATERIALS**

All materials are to be approved by Philadelphia Parks and Recreation (PPR) prior to use. The contractor will be expected to be experienced in selecting the appropriate materials, concentration and adjuvants (surfactants/dyes) suitable for each site. The choice of materials must account for season, setting upland/wetland/riparian), plant species being treated, method of treatment and plant densities. All herbicides are to be applied at the manufacturers recommended rates.

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A spray pattern indicator applied at the labeled rate will be included in the tank mix. Sufficient dye is to be used such that PPR staff can readily detect all areas of application. A methylated seed oil at the label rate is to be used as a surfactant. In general, the formulations must be suitable for application within the following types of areas:

A. Foliar herbiciding - non-wetland areas

Typical herbicides to be used in the project are: Accord, Escort, Garlon 3, Arsenal, Milestone, Overdrive and Plateau. The tank mix will normally include more than one of these products. **Arsenal** (Imazapyr) shall not be using in areas with desirable trees.

B. Foliar herbiciding - wetlands and other areas where herbicide may contact water.

Typical herbicides to be used in wetlands are; Accord, Garlon 3 and Habitat. An aquatic surfactant is to be included in the tank mix.

C. Basal bark treatment

Basal bark treatments are to consist of 25% Garlon4 (Triclopyr); 75% basal oil; and an oil-soluble dye such as Bulls eye Basal Oil-55. The contractor may adjust this mix to include Stalker.

D. Warm Season Grass

It is anticipated that herbicide treatment within portions of the Andorra Meadow and Fisher Lane Meadow sites may be required in order to release of desirable grassland plant communities. These two sites combined include approximately 10 acres of existing grassland/meadow area. Plateau (Ammonium Salt of Imazapic) is to be used in these warm season grass sites. Plateau would only be applied during the Early Summer Treatment period, and would not be required to be repeated as part of the Late Summer Treatment. Note that no more than 12 ounces per acre of Plateau may be applied per year.

2.6.4. EXECUTION

2.6.4.1 General

2.6.4.1.1 The Contractor is ultimately responsible to determine appropriate spray equipment required based on site conditions. When using a gated road for access purposes, the Contractor shall keep the gate closed and locked at all times. Exceptions to this can be made at the discretion of the PPR.

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2.6.4.1.2 The contractor is to prominently place temporary flags at all site entrances in advance of herbicide work to notify park users that such work is in progress (e.g., "Pesticide Treatment - Keep Out"). The contractor is to remove these temporary flags after the herbicide is dry, no later than the following day,

2.6.4.1.3 The Contractor must have adequate staff and equipment to meet the spraying schedule. Large sites may require additional staff.

2.6.4.1.4 This contract calls for two herbicide treatments; one during early summer and a second during late summer. The dates recommended are PPR's best estimate of when the appropriate spray conditions will be met. The treatments are to be scheduled as follows:

2.6.4.2 Early Summer Treatment

The Early Summer Treatment will be performed between **June 13, 2011 and July 1, 2011**. This treatment is to occur when vegetation is at an appropriate stage of growth such that there is sufficient leaf contact area to effectively conduct herbicide to roots and effect a complete kill. However, plants are to be treated before they grow too large making application difficult.

2.6.4.3 Late Summer Treatment

The Late Summer Treatment, if required, will be performed between **August 8, 2011 and August 28, 2011**. This second application is to kill any unwanted vegetation that was missed in the first treatment as well as any undesirable new growth.

2.6.4.4 The Contractor shall have crews of at least two people for foliar spray applications.

2.6.5 **Safety**

2.6.5.1 The Contractor shall operate all equipment and apply all herbicides in a safe manner consistent with product labeling and instructions. Applicators should wear proper eye, skin, and respiratory protection as recommended on the herbicide label. The Contractor shall, at a minimum, maintain an eyewash station and first aid kit on site when employees are working. The Contractor shall meet all local, state, and federal safety requirements.

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2.6.5.2 All work will be performed with consideration of safety to oneself and to all visitors to the park. All precautions necessary to insure public safety will be the responsibility of the contractor. Spraying will be halted and PPR personnel will be immediately notified if disputes arise between the operators and other individuals on the sites.

2.6.5.3 The Contractor will immediately notify PPR if any chemical spills or non-target application of herbicides occur. The Contractor must carry a pesticide spill kit for unintended release of herbicides.

2.6.6 Transporting and handling materials

2.6.6.1 During all operations involving herbicide application the Contractor shall transport and handle (including storage) the materials in accordance with the manufacturer's recommendations, and store materials in a secure place in the original container. Any spills or leaks shall be cleaned-up immediately.

2.6.6.2 Herbicides shall be mixed and applied in accordance with the manufacturer's recommendations. Application rates shall be as per the manufacturer's recommendations/Herbicide Application Rate Table, unless otherwise directed by PPR.

2.6.6.3 Application of herbicide shall be performed in accordance with Pennsylvania, Federal, and PPR regulations. Failure to do so may result in the termination of contract and forfeiture of payment from PPR and/or its assessors to the vendor. The Contractor must have a current pesticide applicators license with proper category endorsements in order to perform the work. The Contractor shall submit to PPR a copy of the license for review and approval **PRIOR** to initiating the application.

2.6.6.4 Mixing tanks and/or spray vehicle tanks must have constant and sufficient agitation in operation to keep the formulation blended.

2.6.7 Target species

Examples of target invasive plants include, but are not limited to:

Herbaceous plants

Lesser Celandine
Japanese knotweed
Japanese hops
Mugwort

Woody plants

Cedrela (Toon)
Tree-of-Heaven
Amur Cork tree
White and Paper mulberries

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Phragmites Bedstraw Mile-a-minute Stinging nettle Japanese plume grass Thistles Burdock and curly dock Stiltgrass	Norway and Sycamore maples Devils's walking stick Princess tree Shrub honeysuckles Winged and Running euonymous Multiflora rose Privet Oriental bittersweet Japanese honeysuckle Poison ivy English ivy Wineberry Grape Porcelainberry Fiveleaf akebia Resprouts of native trees (black cherry, red maple, sassafras, black locust, tulip poplar)
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2.6.8 Removal and Control Techniques

2.6.8.1 **General**

- a. Herbicide applications shall not be done if winds exceed five (5) miles per hour.
- b. Herbicides shall be applied directly to targeted plant(s). Care shall be taken to avoid all non-target plant material from contact with the herbicide.
- c. Application of herbicides shall not occur when precipitation may occur within 4 hours of spraying.
- d. Treatments shall be made when conditions are calm to minimize drift and negative impacts to non-target species.
- e. All persons who apply herbicide shall follow product label specifications. Application shall be done by Commonwealth of Pennsylvania licensed pesticide applicators only.
- f. Actual commencement dates will be determined by the weather and stage of weed growth.

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- g. For all foliar and basal bark applications, the contractor must use sufficient dye to insure that both the contractor and PPR staff can rapidly see all treated areas.

2.6.8.2 Foliar Herbicide Treatment

- 2.6.8.2.1 As specified above, an early summer treatment (June 13th to July 1st, 2011) and a late summer treatment (August 8th to August 28th, 2011) are required to be performed.
- 2.6.8.2.2 Thoroughly wet all leaves to the point where the spray starts to run off the leaves. Use a low pressure and coarse spray pattern to reduce spray drift damage to non-target species.
- 2.6.8.2.3 For foliar applications, herbicide shall not be applied when rain is forecasted within 4 hours of expected application or if air temperature is <65° F or >90° F. Herbicide is to be applied only when foliage is dry.
- 2.6.8.2.4 Treat all invasive trees, shrubs, vines and herbaceous plants ≤ 15' tall.
- 2.6.8.2.5 The need to protect desirable plants may preclude the use of a boom sprayer on certain portions of the sites and may require a more selective application method.
- 2.6.8.2.6 Within the Philadelphia project sites the blue-painted trees and shrubs are to be carefully avoided. These plants are marked to keep. The only exception to this is at Carpenter's Woods. At this site, the orange-painted and unmarked trees and shrubs are to be carefully avoided.

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2.6.8.2.7 It is anticipated that foliar applications will need to be performed throughout all areas from which invasive species will be removed within the seven (7) Philadelphia Project Sites. It is expected that 100-110 acres in total will be treated/sprayed during the Early Summer treatment

2.6.8.2.8 The initial Early Summer application will require treatment within the areas as described under paragraph 2.6.8.27, above. Since significant control should occur as a result of the Early Summer treatment, the Late Summer treatment is anticipated to be less intensive and require proportionately less labor and material.

2.6.8.3 **Basal Bark Method**

2.6.8.3.1 Within the Carpenter's Woodsite, all blue-painted trees and trees marked with a white painted "G" will be basal bark treated or girdled and basal bark treated, respectively. These are primarily Norway maple.

2.6.8.3.2 For basal bark and girdling applications, herbicide is to be applied only when stems are dry.

2.6.8.3.3 Trees greater than (>) 8" DBH must be completely girdled with a chainsaw 15" above the ground surface before applying basal bark herbicide. An exception is that some Amur cork trees less than (<) 8" diameter have also been marked for girdling due to the difficulty killing these trees with basal bark treatment only.

2.6.8.3.4 Basal bark treatments shall not be conducted when temperatures exceed 80° F.

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2.6.8.3.5 Apply the formulation described above (under "Materials") to trunks of trees, shrubs and woody vines climbing trees >15' tall.

2.6.8.3.6 Apply to the basal parts of the plants to a height of 15 inches from the ground, around the entire circumference of the stem. Thoroughly wet stem, but do not apply so much that it runs off.

2.6.8.3.7 Extreme care must be taken when treating vines that are growing on desirable trees to insure that no chemical is sprayed on the tree. In such cases the vine must first be pulled away from the tree and carefully treated.

2.6.8.3.8 Basal bark application should occur between February 15 and March 15, 2011 as directed by PPR.

2.6.8.3.9 It is anticipated that approximately 460 trees will require a basal bark application, and another 100 trees will require girdling plus a basal bark application. These trees range from 3" to 33" in diameter.

2.6.9 WARRANTY

2.6.9.1 The Contractor must achieve at least a 90% mortality rate of target species with each treatment.

2.6.9.2 The effectiveness of the herbicide treatment must satisfy the PPR representative inspecting the work. If the PPR representative judges that treated areas were not adequately controlled, the contractor must re-herbicide sites as needed to achieve adequate control, at no cost to the PPR. All re-treatment must be done in accordance with these specifications.

2.6.9.3 The Contractor must use dye to prevent overlap and to assure that the entire site is treated at the specified rate.

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2.6.9.4 The Contractor must supply his own materials for marking coverage. There shall be no skips. If skips or deficiency in coverage resulting from application errors covers more than ten (10) percent of the site, the Contractor may be required to retreat the sites or be assessed a penalty sufficient to retreat the site by other means at the discretion of the PPR. In the event re-treatment is required, the Contractor shall supply the herbicide, as prescribed by the PPR for the application.

2.6.10 **Pricing**

Invasive plant control shall be paid for on a unit cost basis as it is completed in accordance with these specifications. Foliar applications are to be paid on a per acre (43,560 sq.ft.) treated basis, or portion thereof. Basal bark applications are to be paid per tree treated. The payment will be full compensation for control, including materials, labor, equipment, tools, and incidentals necessary to complete the work.

No payment will be approved until all work completed has been inspected and meets the satisfaction of PPR.

The Contractor **must** complete a **Pesticide Application Record** for each site treated and submit all records to PPR. Payment will not be released until the Contractor accurately and thoroughly completes these records and PPR approves them.

The treated area at each site will be measured by PPR staff. This measurement will be used as the basis for payment.

2.7 **DEER FENCING**

2.7.1 **DESCRIPTION**

This work shall consist of the installation of fixed-knot wire deer fencing and vehicle drive through gates. All fencing must be installed following the completion of site work, completion of herbicide application, and before any planting is to occur. Based on existing schedules, fencing would likely be installed late summer/early fall 2011. Fencing may be installed earlier if in the opinion of the contractor, it will not interfere with herbicide application. The fencing contractor must have a minimum of three (3) years experience installing deer fencing. See specifications regarding contractor qualifications. The fence should be constructed of material and in such a manner that it will have a 20-25 year life.

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2.7.2.

MATERIALS

The fencing will be Class 3, 12-1/2 gauge, galvanized steel woven wire fixed-knot fencing. Wire fencing will be minimum 96" height, have no more than 7 inches between horizontal wires and have at least 20 graduated line wires. The stay wires will be spaced no more than 12" apart.

The vehicle drive through access gates will consist of two (2) 6 ft by 8 ft gates, which together will provide a 12 ft wide passage. The gates will be hot dip galvanized after fabrication with 4" by 4" mesh panels constructed of 6 gauge material. Gates must have at least three heavy duty hinges and a 12" locking gate hinge bolt.

In-line posts must be full round 4"-5" tapered or non - tapered posts. Posts must be 0.40 CCA pressure treated southern yellow pine. In-line posts must be twelve (12) feet in length.

Corner/End/Gate posts must be full round 5-6" or larger, tapered or non - tapered posts. Posts must be 0.40 CCA pressure treated southern yellow pine. Corner/End/Gate posts must be at least fourteen (14) feet in length.

Brace pins will be galvanized 5" and 10" length, depending on use, and 3/8" diameter

Brace wire shall be Class 3, galvanized 12.5 gauge high tensile wire

Staples for mounting fence to posts will be Class 3, 8 or 9 gauge galvanized, one and one-half inch length, with two (2) barbs.

No aluminum may be used in the construction of the fences.

2.7.3.

EQUIPMENT

Installation equipment must be capable of traversing rough terrain and handling, hauling and installing fence posts and fencing.

2.7.4

EXECUTION

2.7.4.1 Clearing

The PPR will flag out the approximate location of the deer fence. The deer fence will generally be installed along the perimeter of clearings, which will typically be free of stumps, stones, brush and obstructions. However, the contractor will be responsible for the removal of any remaining obstructions that may interfere with the fence installation.

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Fence installation equipment will not be operated when, in the opinion of the PPR, ground conditions are such that excessive soil disturbance and damage to the soil profile will result. The contractor will be required to repair areas that become rutted due to work.

2.7.4.2 Hazard Trees

The fence will be constructed along the edge of cleared areas. However, after the location of the fence has been determined, all additional hazard trees identified that are within a tree length of the fence must be felled before fence is erected. Hazard trees are dead and dying, split, heavily leaning and/or root sprung trees that are in a position to fall across the fence. The PPR representative will consult with the contractor to determine which trees are to be considered hazard trees. These trees may be felled and left onsite except for portions of the felled trees that are less than 2" diameter, which must be moved outside the project boundary.

2.7.4.3 Fence Supports

The contractor will erect the fence by fastening the fence to posts only. Trees may not be used as a method of fence support.

Maximum distance between fence line posts will be no greater than 25 feet. Line posts are to be twelve (12) feet long and placed in the ground at least 42" with 102" remaining above grade. Corner/End/Gate posts will be at least fourteen (14) feet long with a minimum of 48" and a maximum of 66 inches placed in the ground and with 102" remaining above grade. This depth requirement for corner posts will be determined by the digging, driving, or drilling conditions.

Bracing will be used to support the end posts and corner post(s). Brace posts may be single or double but must be installed at a distance of at least 2 times (2X) the height of the fence, or 16 ft for the 8' height fence. Cross members may be pipe or full round posts and may not be 4 by 4 lumber or landscape timbers. Brace wire must be a double wrap of 12.5 gauge high tensile wire. Brace wire is to be tensioned with an inline strainer. Bracing must be sufficient to prevent the corner or end post from bending, leaning, or pulling free of the ground. Galvanized brace pins are to be used to connect braces to posts.

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Any length of run that exceeds 1320 feet will require the installation of an in-line brace assembly. In line brace assembly will be constructed similar to bracing as described above.

Wood posts should be installed at the lowest point of dips and the crown of humps/rises in the terrain, regardless of the distance between posts.

2.7.4.4. Securing Fence

The fence must be constructed so that the bottom of the fence is no more than three (3) inches off of the ground at any point to prevent deer from crawling under the fence. Gaps between the ground and the bottom of the fence that exceed 3" height will not be acceptable. To ensure that the fence height is maximized, the bottom of the fence is not to be laid on, or in contact with the ground

The fence is to be stapled/ secured to the posts with Class 3, 8 or 9 gauge galvanized staples that are one and one-half (1 ½) inch length, with two (2) barbs. Staples to be used to mount fence to each line post on two bottom and two top rows of horizontal wires. Every other wire may be stapled between the two top and two bottom stapled rows. This pattern may alternate between adjacent posts, except that all wires must be stapled on all wood posts installed at the lowest point in dips, highest point in humps/rises, and all end and corner posts

Staples are not to be driven tight against the fence wire on line posts. Staples should be driven at a slight angle straddling the wood grain. Staples should be rotated 1/4th turn away from the flat face.

At fence splices, the fence is to be connected with 12 ½ gauge galvanized crimping sleeves.

The fence is to be stretched taut to the manufacturers recommended specification.

2.7.4.5 Access Gates

Each vehicle drive through access gate will consist of two (2) 6 ft by 8 ft gates, which together will provide a 12 ft wide passage. The number and placement of each access gate will be determined by the PPR; however for the purpose of this specification, the following number of gates is estimated.

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Houston Meadows - two (2) access gates
Greenland Nursery - four (4) access gates

Gates must be provided by the contractor. The gate must include a latching/locking mechanism as well as a "keeper" to keep the gate held open. The PPR will provide chain and padlock.

2.7.5 Pricing

Payment for all work specified under this SECTION will be based on two separate items, the actual feet of fencing installed (as determined by the PPR) and for each gate installed. Payment is for all fencing and bracing materials, labor, equipment, tools, and incidentals necessary to complete the work.

2.8 TREE AND SHRUB PLANTING

2.8.1 DESCRIPTION

This work shall consist of planting Philadelphia-native trees and shrubs to complete the restoration work within the Philadelphia Natural Land Restoration project sites. Planting is currently proposed to be required at the Andorra Meadow, Houston Meadows, Carpenters Woods and Verree & Susquehanna project sites.

Philadelphia Parks and Recreation (PPR) will be responsible for purchasing the plant materials. The contractor will be responsible for picking up the plants at the PPR's Greenland Nursery, delivering the plant materials to the site, protecting and maintaining the plants during the planting period, and to perform proper planting in accordance with accepted standards and as outlined herein.

2.8.2 MATERIALS

Plant Materials

2.8.2.1 The PPR will be responsible for providing all plant materials for the various project sites.

2.8.2.2 Plants will be provided in a range of container sizes, from #1 to #7. The number of plants varies with each site and is indicated on the bid form. The number of plants actually planted may be more or less than the number provided on the bid form.

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2.8.2.3 Plants will be held at the PPR's Greenland Nursery on Ford Rd. in West Fairmount Park. The contractor is to notify the PPR Project Coordinator at least 3 business days in advance of the plant pick-up day to allow time for PPR staff to pull the needed plants.

2.8.2.4 The contractor will be responsible for carefully handling trees and shrubs during transport, onsite storage and planting. Plants damaged by the contractor through mishandling or negligence will be the responsibility of the contractor and must be replaced in-kind by the contractor. The PPR will be the sole judge when determining whether plants have been properly handled and maintained.

2.8.2.5 Each plant or same-species group of plants shipped to the job site must be clearly labeled with its scientific name and common name. The Contractor is responsible to check to see that the plants are correctly labeled. The Contractor is prohibited to add, alter or remove labels. The Contractor will not be paid for material that is improperly labeled or for material on which the Contractor has altered or removed the labels.

2.8.3 **Fertilizer**

Fertilizer shall not be required as part of this planting effort.

2.8.4 **Water**

All plants must be thoroughly watered at the time of planting (see below). Water used shall be fresh clean water that is free of compounds injurious to plant life. The contractor shall be responsible for supplying water to the planting sites.

2.8.5 **CONSTRUCTION**

GENERAL

All restoration sites designated for native plantings shall be planted in accordance with the composition and planting schedules for each designated planting zone. No detailed planting plans are provided.

2.8.5.1 The Contractor shall refer to the Plant Schedules and Details for specific spacing requirements.

2.8.5.2 Planting shall be conducted between September 15 and November 30 and between March 15 and May 30, or as directed by the PPR.

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- 2.8.5.3 Root stock of the plant material shall be kept moist during transport from the source to the project area and until planted. All plants that are not planted must be watered each day.
- 2.8.5.4 The Contractor must check underground utilities through the PA One Call at the proposed planting locations.
- 2.8.5.5 The Contractor is to repair any damage to turf, asphalt paths, structures, utilities, or sidewalks, caused by the Contractor's work, to original conditions.

2.8.6 INSTALLATION

- 2.8.6.1 The Contractor is not required to stake out each individual planting pit. Trees and shrubs are to be planted in a random pattern to mimic their natural setting. They are not to be planted in rows, or with equal distance between each. The PPR will inspect and approve tree/shrub location, spacing, and planting techniques prior to proceeding.
- 2.8.6.2 All planting pits shall be dug so the walls of planting pits shall be vertical or sloping outward in heavy soils. Scarify the walls of the pit after digging.
- 2.8.6.3 Excavate the planting pit to at least 2 times (2X) the width of the root mass/container of the plant to be installed.
- 2.8.6.4 Remove all debris from the pit and tamp loose soil in the bottom of the pit to firm and prevent settling.
- 2.8.6.5 The planting pit shall be deep enough to allow the top of the soil surface of the containerized plant to be flush with or slightly elevated above the existing grade after soil in the bottom of the hole is tamped firm.
- 2.8.6.6 Remove the plant by inverting the container and pushing on the container bottom. If roots are concentrated along the inside surface of the plant pot, the surface of the plant root ball should be scarified to encourage outward growth into the soil of the planting pit.
- 2.8.6.7 Do not handle the plant by the branches, leaves or stem. Employees that are observed to repeatedly mishandle plants may be dismissed from the planting job.

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- 2.8.6.8 Place the plant straight in the center of the planting pit, carrying the plant by the root mass. Never lift or carry a plant by the trunk or branches.
- 2.8.6.9 Backfill planting pit with existing native soil and tamp firmly to fill all voids and air pockets. Do not over compact soil. Make sure plant remains straight during backfilling/tamping procedure.
- 2.8.6.10 The top of the root mass of trees and shrubs should be flush with, or slightly elevated above the existing grade. Plants may not be planted deep. Any plants that are planted with top of root mass below adjacent existing grade will be dug out and properly replanted at no cost to the PPR. Do not allow soil to contact plant stem.
- 2.8.6.11 Water plants thoroughly immediately after planting. Watering shall be of a sufficient quantity to saturate the backfill and shall be applied slowly enough to sink into the soil avoiding runoff. If the PPR determines that planted stock show signs of drought or stress before planting work is completed on the site, the plants must be re-watered in the same manner as the initial watering as described. The need for additional watering shall be at the sole discretion of the PPR.
- 2.8.6.12 The Contractor shall leave no open planting pits at the close of each day.
- 2.8.6.13 During planting, all areas shall be kept neat, clean and free of all trash and debris, and all reasonable precautions shall be taken to avoid damage to existing plants, turf, structures, and private property.
- 2.8.6.14 Remove all tags, labels, strings and wire from the plant materials, unless otherwise directed by the PPR. The used empty plant pots are to be disposed of by the Contractor.
- 2.8.6.15 It will be the Contractor's responsibility to supply water if there is none available on the site. Any costs associated with supplying water shall be the responsibility of the Contractor.
- 2.8.6.16 Final cleanup shall be the responsibility of the Contractor and consist of removing all trash and materials incidental to the project and disposing of them off-site.

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2.8.7 **FINAL INSPECTION**

2.8.7.1 The Contractor shall ensure and warrant that plant material is properly handled and properly planted and watered. The PPR shall perform a final inspection upon completion of planting at a site. All plant material found to be unacceptable, due to improper handling, planting or insufficient watering, must be replaced by the Contractor at the Contractors cost.

2.8.7.2 Plant replacements shall be performed in accordance with these specifications.

2.8.8 **MEASUREMENT AND PRICING**

2.8.8.1 Payment for all work specified under this SECTION will be measured and paid for based on the unit cost amount according to the quantity of plants of each size (#1/2, #3, #5, or #7) installed. Payment for planting trees and shrubs shall be full compensation for furnishing to the site from the Greenland Nursery, maintenance during the planting period, proper installation, watering, and passing final inspection.

2.8.8.1 The Contractor shall not be responsible for damage or plant mortality due to vandalism, wildlife predation, or an Act of God beyond the Contractor's control and responsibility (e.g., floods).

2.9 **WOODY MATERIAL MANAGEMENT**

2.9.1 **DESCRIPTION**

This work shall consist of the removal of all excess organic matter (small logs, branches, wood chips, etc.) from the Philadelphia Natural Land Restoration project sites. Excess organic matter enriches the soil which further promotes the establishment and growth of invasive plant species. The contractor will be responsible for the removal of woody material to the greatest extent practicable. More specifically the contractor will be required to handle and dispose of woody material as described below.

2.9.2 **EQUIPMENT**

Equipment must be capable of handling and hauling trees up to 30 inches in diameter.

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2.9.3 **EXECUTION**

2.9.3.1 **Trees < 16" Diameter**

All trees less than (<) 16" diameter at the base will be removed to the landing. Portions of the tree that can be salvaged for lumber, firewood or pulpwood are to be stockpiled at the landing for later removal. Otherwise all parts of the tree are to be chipped for disposal offsite.

2.9.3.2 **Tree > 16" Diameter**

2.9.3.2.1 The contractor will be permitted to leave tree trunks (habitat logs) within areas that are designated as forest/woods, shrub or conifer. No habitat logs may be left in areas designated as meadow creation areas. Meadow creation is proposed within portions of the Andorra Meadows, Verree & Susquehanna and Fisher Lane sites.

- a) If available, up to 10 habitat logs per acre may be left onsite within the designated forest/woods, shrub and conifer areas.
- b) Habitat logs may be any length but should be topped at the point where they taper to less than 12" diameter. Logs should be a minimum of 10' in length. All tops and limbs from habitat logs are to be removed.
- c) Habitat logs are to be placed parallel to the contour of the slope in order to detain surface runoff to the extent possible.

2.9.3.2.2 All remaining tree trunks less than 12" at the small end shall be stockpiled at the landing and disposed of by the contractor as woodchips, saw logs, pulpwood or firewood.

2.9.3.2.3 Any high value sawlogs as determined by the contractor shall be the property of the contractor for disposal or sale at his/her discretion. Any high value logs will not be required to be left onsite as habitat logs.

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2.9.4 **Brush/Branches**

All tops from all felled trees and including all branches larger than 3" diameter are to be removed to the landing and chipped for later disposal offsite. Branches/brush smaller than 3" diameter may be left onsite. However, the contractor will be responsible for ensuring that branches/brush that remains onsite are mulched to the extent that they will not interfere with future drill seeding operations. The proposed meadows at the Andorra Meadows, Verree & Susquehanna and Fisher Lane sites will be drill seeded.

2.9.5 **Landing**

All logs, limbs, woody debris and chips are to be completely removed from the log landing after clearing work is completed. Chips are to be scraped from the soil surface and removed.

2.9.6 **Pricing**

Payment for all work specified under this SECTION shall be a Lot (LO) price for cutting and removing unmarked trees and shrubs as described under the specifications for Vegetation Clearing for each site or each zone completed. This includes all materials, labor, equipment, tools, and incidentals necessary to complete the work.

2.10 **STUMP REMOVAL and FORESTRY MOWING**

2.10.1 **DESCRIPTION**

Under this item, the Contractor shall remove all tree and shrub stumps from within proposed meadow creation areas. Meadow creation is proposed within the Andorra Meadows, Verree & Susquehanna and Fisher Lane project sites. Approximate areas of meadow creation include the following:

Andorra Meadows - 20.7 acres
 Verree & Susquehanna - 22.3 acres
 Fisher Meadow - 4.0 acres

Certain exceptions to stump removal are identified under Item para. 2.10.3, Execution, below.

2.10.2 **EQUIPMENT**

2.10.2.1 Stump Grinding

Equipment must consist of a stump grinder that is capable of accessing the entire site and able to grind stumps up to a maximum of 30" diameter and depth of 2" below surface.

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2.10.2.2 Forest Mowing

Site preparation equipment such as a forestry mulcher/shredder or skid steer w/brush, tree mower or hydro axe for mowing within forest/woods and shrub areas. Equipment must be capable of cutting woody stems 3" in diameter.

2.10.3 **EXECUTION**

A) Proposed Meadow Creation

The proposed meadow creation areas will be subject to the following tree or shrub stump removal requirements or soil surface treatment.

Stump greater than (>) 3" diameter

All tree stumps greater than 3" in diameter within areas designated as "meadow creation" shall be ground out with a stump grinder. Stumps are to be ground to a depth of at least 2" below grade and to include removal of entire root flare and any radiating surface roots. All material generate from stump grinding shall be raked out smooth with ground surface and may be left in place.

Stump less than (<) 3" diameter

All tree stumps less than 3" in diameter and shrub stumps within areas designated as "meadow creation" shall be ground out with a forestry mulcher/shredded to a depth of 2" below grade. All material generated from forestry mulching/shredding may be left in place.

All Meadow Areas

All proposed meadow areas, whether they include invasive trees/shrubs or herbaceous vegetation alone will be surface mulched with the forestry mulcher/shredder. These areas will be mulched to a depth of 2". PPR staff may exclude certain portions of existing desirable meadow vegetation from mulching. These areas will be flagged for protection by PPR staff.

B) Proposed Forest/Woods, Shrub and Conifer

Stumps do not need to be removed from areas that are not designated as "meadow" (i.e. forest/woods, shrub or conifer areas). All proposed forest/woods, riparian and shrub areas will be mowed to remove invasive shrubs and saplings. Mowing may be performed with a forestry mulcher/shredder, hydro axe or brush hog mower. All tree stumps must cut as flush as possible and may be no more than 4" above grade.

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2.10.4 **Pricing**

Payment for all work specified under this SECTION shall be a Lot (LO) price for each site or each zone completed. Payment is for materials, labor, equipment, tools, and incidentals necessary to complete the work.

2.11 **SITE SPECIFIC REQUIREMENTS**

2.11.1 **DESCRIPTION**

Provided herein are site specific requirements for the Philadelphia Natural Land Restoration Project sites including Andorra Meadow, Verree & Susquehanna, Carpenter's Woods, Fisher Lane Meadow, Greenland Nursery, Bocce Woods and the Combined Tree Removal projects. These site specific requirements identify conditions that apply to particular project sites.

2.11.2 **EXECUTION**

2.11.2.1 **Andorra Meadow**

Temporary Access Road

The Contractor is to install a temporary access road in accordance with locations shown on both the Proposed Conditions Plan and the E&S Control Plan. Additional detailed specifications regarding "Temporary Access Road" are included.

Broad Based Dip

This work shall consist of the installation of a single (1) broad based dip (rolling dip) along the temporary access road at the approximate location shown on both the Proposed Conditions Plan and the E&S Control Plan. The grade/slope between the stabilized construction entrance and the log landing is estimated to be 9-10-%. The PA DEP Soil Erosion and Sediment Control - Best Management Practices recommend broad based dips to be spaced at 140 ft intervals on roads with a 9-10% slope. Site conditions will determine whether a broad based dip is ultimately required. If required, Philadelphia Parks & Recreation (PPR) will assist in determining the location of the broad based dip. Additional detailed specifications regarding "Broad Based Dip" construction are included.

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Black Locust logs

Contractor shall set aside and stockpile all straight black locust (*Robinia pseudoacacia*) logs 12" or greater diameter at the small end. Locust logs with sweep, rot, or cavities do not need to be set aside. Locust logs greater than 30" diameter are too large and do not need to be set aside. Locust logs are to be cut into straight lengths as long as possible, with a maximum length of 20 feet and a minimum length of 8 feet. Contractor is required to deliver up to two log truck loads of black locust log lengths to the Wissahickon Maintenance Center facility (District #3 yard) located along Henry Avenue, approximately 2 miles south of the Andorra Natural Area project site. The contractor is to unload the logs at a designated location in the District #3 yard. These logs will be milled by Friends of Wissahickon (FOW) and used to build structures in the park.

Trail Construction

The trail system within the Andorra Meadow site will be reconfigured. The contractor will be responsible for preliminary trail grading. PPR will flag out trail centerline. Additional detailed specifications regarding "Trail Construction" are included.

Unnamed Tributary/Wetland Fringe

An unnamed tributary to the Wissahickon Creek and fringing wetlands are located in the south-central portion of the site. This tributary discharges offsite to a second tributary which flows in a southeasterly direction beneath West Bells Mill Rd., and ultimately discharges to the Wissahickon Creek. The contractor will be removing trees/shrubs from within the riparian zone of the unnamed tributary and fringing wetlands. The contractor may not cross these waters/wetlands with heavy equipment nor operate any heavy equipment within 10 feet of the top of bank of any open waters or fringing wetlands. All trees felled within these areas must be winched out beyond these limits prior to skidding. Conditions permitting (dry or frozen soil), mowing equipment may be operated within the wetland areas in order to eliminate invasive shrubs and small trees. If conditions do not permit, trees and shrubs must be cut and removed manually.

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2.11.2.2 **Verree & Susquehanna**

Utility Pole Removal

A total of eight (8) utility poles follow the access road that bisects the site. The contractor is to flush cut and remove from the site these eight (8) utility poles and is also to remove all associated wires. The wires have been disconnected by PPR and are not "live" wires.

Hazard Tree removal at Parking Lot

A dying/dead ash tree approximately 30" DBH, is located at the gravel parking area, where it transitions to the existing access road. This tree is considered a hazard tree due to proximity to public area and must be removed. Contractor will be required to remove this single dead/dying ash tree as a task under this project.

2.11.2.3 **Carpenter's Woods**

Trees greater than (>) 3" diameter

Contractor is to fell and remove all blue-marked trees within 40 feet (horizontally) of the park boundaries which are defined by the near edge of pavement along N. Mount Pleasant Rd. and Wissahickon Ave. or the inside edge of sidewalk along S. Mount Pleasant Rd., Sherman St., Sedgewick St., and Greene St. Also fell and remove all trees that could fall and strike a trail, sidewalk, road or utility lines. These trees are marked with blue paint and an additional white "X." The contractor will be responsible for treating (basal bark treatment) all remaining blue marked trees not identified above.

Vegetated strip parallel to N. Mount Pleasant Road

An approximately 20' width flat strip (See Carpenters Woods site map) occurs paralleling N. Mount Pleasant Rd, between the curblineline and the top of slope. This area totals approximately 0.5 acres. After invasive trees are removed, this area is to be brush mowed and all tree stumps are to be cut flush with ground surface in order to facilitate future mowing and maintenance.

Carpenters Wood's northeast of Greene St.

In this area, desirable plants <3" DBH, including ash saplings, spicebush and viburnums, were marked with orange paint. These tree saplings and shrubs are not to be removed.

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Unnamed Tributary/Wetland

An unnamed tributary to the Wissahickon Creek bisects the site. A wetland associated with this tributary is located within the western corner of the site. The contractor will be removing invasive trees/shrubs/herbaceous plants along the tributary and from within the wetland. The contractor may not cross the tributary nor operate any heavy equipment within 10 feet of the top of bank of any open waters or fringing wetland. All trees felled within these areas must be winched out. Conditions permitting (dry or frozen soil), mowing equipment may be operated within these environmentally sensitive areas in order to eliminate invasive shrubs and small trees. If conditions do not permit, trees and shrubs must be cut and removed manually.

Skilled Arborist

A skilled arborist will be required to perform tree removals proximal to utility lines that parallel and surround the Carpenters Woods project site. Contractor will be responsible for ensuring that private property and utilities are not damaged during performance of this task. Traffic control may be required for specific tree removal operations if they will impact traffic and public safety. Utility clearing must be performed by a qualified line clearance arborist in accordance with ANSI Z133.1, 29CFR1910.331-335, 29CFR 1910.268 or 29CFR 1910.269.

2.11.2.4 Houston Meadow and Greenland Nursery

Deer Fencing

This work shall consist of the installation of fixed-knot wire deer fencing and vehicle drive through gates. All fencing must be installed following the completion of site work, completion of herbicide application, and before any planting is to occur. Based on existing schedules, fencing would likely be installed late summer/early fall 2011. As currently proposed, approximately 4,000 LF of fencing will be required at the Houston Meadow site and 3,250 LF will be required at the Greenland Nursery site.

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2.11.2.5 **Combined Tree Removal Projects**

Skilled Arborist

A skilled arborist will be required to perform tree removals at the Warner Creek, Chamounix Rd. and Lotus St. project sites due to proximity to utility lines and structures. Contractor will be responsible for ensuring that private property and utilities are not damaged during performance of this task. Traffic control may be required for specific tree removal operations if they will impact traffic and public safety. Utility clearing must be performed by a qualified line clearance arborist in accordance with ANSI Z133.1, 29CFR1910.331-335, 29CFR 1910.268 or 29CFR 1910.269.

2.11.2.6 **Andorra Meadow, Verree & Susquehanna and Greenland Nursery**

Project Site Zones

PPR staff has separated the Andorra Meadow, Verree & Susquehanna, and Greenland Nursery project sites into zones. Bid documents identify these separate zones for the purpose of simplifying bid preparation.

2.11.3 **PRICING**

Payment for all work specified under this SECTION, will be incorporated into the various Lot costs for individual sites/tasks except that individual costs for the following tasks have been identified in the bid document:

- Andorra Meadow - Haul and unload two (2) loads black locust logs to District #3 Yard
- Andorra Meadow - construct +/- 4,500 ft new trail system
- Andorra Meadow - construct temporary access road and broad based dip
- Houston Meadow - install +/- 4,000 LF deer fencing
- Greenland Nursery - install +/- 3,250 LF deer fencing
- Verree & Susquehanna - Remove hazard tree from parking lot
- Verree & Susquehanna - Remove eight (8) abandoned utility poles from along access road

Payment is for materials, labor, equipment, tools, and incidentals necessary to complete the work.

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SECTION 3: BID EVALUATION AND AWARD

3.1 EVALUATION

- 3.1.1 Bid will be evaluated by the Procurement Department.
- 3.1.2 Bids will be evaluated for responsiveness to the bid specifications and for responsibility of the bidders.
- 3.1.3 Bids which are determined to be non-responsive for reasons of:
- (i) improper bid security
 - (ii) improper bid execution
 - (iii) incompleteness
 - (iv) offering counter terms and conditions
 - (v) improper or incomplete execution of OEO documents (if applicable)

may be disqualified by the City without notice to the bidder. The decision of the City is final.

- 3.1.4 Bidders whose bids are determined to be non-responsible for reasons of bidder qualification shall be notified by the City of the reasons for the determination and may contest the finding of non-responsibility through the prescribed procedures described in paragraph 9 of "Terms and Conditions of Bidding and Contract".

3.2 AWARD

- 3.2.1 The Procurement Commissioner reserves the right to award this bid to the lowest responsive and responsible bidder as a whole or by project groups, whichever he/she deems to be in the best interest of the City.
- 3.2.2 If one contractor submits the lowest qualified bid for more than two of the project groups, the contractor must demonstrate to the Philadelphia Dept. of Parks and Recreation that they can and will provide sufficient equipment and manpower to work on at least two sites simultaneously and to complete all work on all sites within the timeframes provided in these specifications. The qualification information that must be provided is specified under "Bidder Qualifications" (Section 1.8) which are included as part of this bid package and these contract documents.

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3.2.3 Schedule 5.b Bocce Woods project is considered an addition/alternate" project and will only be considered for construction if adequate funding is available. This project may be authorized or will be eliminated following the review of the cost proposals for all sites.

3.2.4 If the 5 % local bid preference is applicable, the total bid price or total section price of the certified Local Business Entity (LBE) will be multiplied by .95 and rounded to the second decimal place. The adjusted bid price of the LBE will then be used in determining the lowest responsive and responsible bidder.

Unless the Procurement Commissioner determines not to grant a preference for the reasons stated in subsection b., of the LBE Regulation, an LBE, whose bid is otherwise responsive and responsible and who has submitted the information required above, shall be granted a five percent bid preference on competitive bid(s) awards that are over \$30,000.00 and awarded as a whole or by section.

3.2.5 Performance Security

If the total award amount exceeds \$500,000, the Master Performance Security Program does not apply. Upon notification of award, the City will require the successful vendor to provide an individual Performance Bond in the amount of 100% of the contract award as specified in the Letter of Award.

If the total award amount is \$500,000 or less, bidders attention is directed to paragraph 14 of "Terms and Conditions of Bidding and Contract", for the required Performance Security.

3.2.6 Insurance

Insurance is a requirement for this bid in accordance with Paragraph 15 of the "Terms and Conditions of Bidding and Contract". No contract will be executed nor purchase order issued unless and until all required insurance certificates, in the required amount, are received. **All insurance MUST meet the following requirements:**

- Insured must be in the same name and address as the Bidder
- The insurance carrier must be rated "A" or better by AM Best
- The certificate holder must be the City of Philadelphia, and specifically named as an additional insured on the certificate in the "Description of Operations section."

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- Certificate must be signed by an authorized representative of the insurance company/carrier

All certificates are to be sent to the Office of Risk Management, One Parkway, 1515 Arch Street, 14th Floor, Philadelphia, PA 19102, Attn. Debbie Lawton or FAX to (215) 683-1705.

Additional Insurance Requirement:

Umbrella Liability Insurance at limits totaling \$2,000,000 per occurrence when combined with section 15.(b) General Liability Insurance, of the Terms and Conditions of Bidding and Contract. Such insurance shall name the City of Philadelphia, its officers, employees and agents as additional insureds. Evidence of insurance must be submitted per the requirements of the Insurance section.

SECTION 4: CONTRACT MANAGEMENT

4.1 CITY OF PHILADELPHIA RESPONSIBILITY

4.1.1 Order Against Contracts

Upon contract conformance of a Firm Limit bid, the Procurement Department shall apply the department's requisition against the contract and issue a purchase order for product and/or service awarded.

4.1.2 Invoices shall be submitted after delivery and acceptance of the service by the City. The City attempts to process invoices in a timely manner. Delays can occur because of incomplete or inaccurate invoicing information.

Please make sure that invoices contain the information as specified in Section 4.2.8. This is necessary to process payments to the Contractor as quickly as possible. Invoices which are not in accordance with the instructions in section 4.2.8 will be rejected for correction.

4.1.3 The using agencies and departments are responsible for monitoring the services delivered as described in the contract. If any problems arise, a letter should be sent to the vendor requesting resolution by a specified date. A copy should be sent to the buyer. If vendor does not resolve the breach of contract by the requested date the matter should be turned over to the buyer.

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4.2 VENDOR RESPONSIBILITY

4.2.1 Contractor may deliver only services as authorized in the contract and only after receipt of a purchase order or other authorized document from the Procurement Department. All orders must be in writing. Contractor shall not accept verbal delivery requests until after receipt of purchase order or other authorizing document from Procurement.

4.2.2 Contractor may deliver only services at the prices quoted in the contract and that are reflected on a purchase order or a change to a purchase order (a change to a purchase order is issued whenever the items, unit price, total amount, or terms and conditions change from the original purchase order).

4.2.3 Contractors may deliver services up to the dollar limit of the purchase order and for the period shown on the purchase order. Contractors are requested to carefully monitor obligations against purchase orders and inform the departments of anticipated funding shortfalls.

4.2.4 **VIOLATION OF CONTRACT**

If contractor abandons the work or if the job time schedule as defined between the operating department and the contractor prior to the initiation of work is exceeded or if the contractor neglects or fails to prosecute the work with promptness and diligence, or shall refuse or neglect to furnish and supply a sufficiency of properly skilled workmen and necessary equipment, or if vendor shall execute any of the work improperly, carelessly, or in bad faith or if the contractor shall default in the performance of any of the terms, conditions and provisions of the contract, the operating department may notify in writing the contractor to remedy his neglect or default and require the contractor to comply with the terms, conditions and provisions of this contract resulting from this Invitation and Bid.

4.2.4.1 **Liquidated Damages:**

Upon the occurrence of any event or omission listed below, there may be imposed by the City of Philadelphia upon the vendor liquidated damages of \$100.00 for each event or omission per day until such actions are remedied by the vendor at the discretion of the PPR:

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- Failure to commence work within specified time
- Poor performance
- Failure to provide all equipment, necessary for the performance of the work
- Failure to supply qualified personnel
- Unwarranted damage to vegetation

4.2.4.2 Nothing in the above section shall be deemed to limit the City's rights or remedies in the event the City's actual damage exceeds the amount withheld from the billing. Repeated events or omissions as described above shall be sufficient cause for the City, at its option, to declare vendor in default and exercise all available rights and remedies available under the law.

The City's failure at any time to enforce the provisions of this section shall in no way affect the City's right to enforce this provision for subsequent events. The City agency shall notify the vendor in writing on a monthly basis of said liquidated damages imposed on vendor; all assessments of liquidated damages must also be reported, in writing, to the Procurement dept. Buyer as they occur.

In the event of assessment of liquidated damages, if the vendor feels that extenuating circumstances contributed to the occurrence, a request for a waiver on the liquidated damages may be appealed in writing, within 30 days to the using agency and the Procurement Department who shall be the final arbiter in such matters.

4.2.5 In the event that the contractor receives an order for services not specifically priced and incorporated into the contract, they must:

- (i) bring this to the immediate attention of the Procurement Dept., and
- (ii) notify the ordering agency in writing and refuse to deliver.

4.2.6 Should services be delivered that are not specifically incorporated and priced into the contract, and/or be delivered without purchase order, the City shall have no obligation for payment.

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4.2.7 **Approval of Work**

All completed work shall be approved by the ordering department prior to approval for payment. Work must be completed in a first class workmanlike manner to the absolute satisfaction of the City. The cost of any faulty or inadequate workmanship will not be paid for by the department and must be assumed by the Contractor.

4.2.8 **Invoices/Receipts**

4.2.8.1 Invoices should be sent in triplicate to the ordering department. One (1) original and two (2) carbon copies of fully itemized invoices (no Photostat copies) in the form noted below will cause a delay in payment. Failure to submit in the form noted below will cause delay in payment.

- (a) After the services has been completed the Contractor must submit three (3) copies of the invoice for payment to the receiving department listed on the purchase order.
- (b) The invoice must correctly reference the purchase order number, the vendor name, address and Federal Employer Identification number.
- (c) Checks will only be made payable to the company name as shown on the purchase order; the invoice must reflect this same company name as the "pay to".
- (d) The invoice must show the quantity and type of item or service and the price.
- (e) The unit of purchase on the invoice must agree with the unit cited on the purchase order. Reference to the specific line item is helpful.

4.3 **Prevailing Wage Provisions.** The contract awarded under these specifications is subject to all provisions of Section 17-107 of the Philadelphia Code entitled Contractors: Labor-Management Relationships. It is also subject to all regulations and procedures adopted thereunder.

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- a. All employees performing work under the contract shall be paid the applicable prevailing wages for the respective occupational classification(s) designated, as set forth in the wage schedule attached; and in addition, be given the applicable current prevailing working conditions during the entire period of work under the contract. Such working conditions are those which are given to employees pursuant to a bona fide collective agreement for the applicable craft, trade, or industry in the Philadelphia area on the date these specifications are issued.
- b. City may withhold from any sums due to the contractor under each contract so much as may be necessary to pay the employees the difference between wages required to be paid thereby and the wages actually paid to such employees, and the City may make such payments directly to the appropriate employees.
- c. Each contractor shall require all subcontractors to comply with and be bound by all of the provisions of this section of the contract & Section 17-107 of the Philadelphia Code.
- d. Every contractor and subcontractor shall keep an accurate record showing the name, address, occupational classification, wages and other benefits paid or provided and number of hours worked for each employee assigned to city-work, and such record shall be preserved for two (2) years from the date of payment. The contractor shall make his employment and accounting records available for inspection by authorized representatives of the Labor Standards of the MDO, at all reasonable hours, and shall permit such representatives to interview employees during working hours on the job.
- e. All contractors and subcontractors performing city-work shall automatically file with the Labor Standards Unit of the MDO, a certified statement setting for the name, address, occupational classification, wages and other benefits paid or provided and number of hours worked with respect to each employee performing city-work. Such statement shall be made weekly for each preceding weekly period. The certification shall affirm that the statement is correct and complete, that the wages set forth therein are not less than those required by the contract for city-work and that the occupational classification set forth for each employee conforms with the work he performed.

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- f. Nothing herein shall preclude the payment by the contractor of wages at rates higher than those specified as the prevailing wages in the applicable attached schedule. However, no increases in any contract price shall be allowed or authorized on account of the payment of wages in excess of those so specified or on account of wage increases granted hereafter. No increases above the amounts specified in the applicable attached schedule will be required by any contract during the term thereof except in the case of an error or omission in such schedule. Such an error or omission shall be called to the attention of the Labor Standards Unit of the MDO, as promptly as possible; but the remedying thereof by the Department shall not constitute grounds for withdrawal of a bid or cancellation of a contract, nor for an increase in the contract price or other claim or recovery against the City nor a ground for failure or refusal to pay the applicable proper prevailing wage to all employees.
- g. The prevailing wages required hereby shall be paid unconditionally without any subsequent deduction or rebate of any kind except in accordance with prevailing payroll deduction practices. Any assignment of wages by an employee for the direct or indirect benefit of the contractor shall constitute a violation of this section; and any purported release of rights hereunder by an employee shall be void and of no effect.
- h. It is the responsibility of all bidders and contractors to inform themselves of all prevailing working conditions, including, without limitation, proper classifications, length of workday and work week, overtime compensation and holiday and vacation rights. All questions shall be referred to the Procurement Department (215) 686-4720/21.

SEE ATTACHED APPLICABLE WAGE SCHEDULE

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CITY OF PHILADELPHIA

Hourly Prevailing Wage Rate Schedule

<u>CLASSIFICATION</u>	<u>Base Rate</u>	<u>Fringe Benefits</u>
Brush/Precommercial Thinner	\$11.84	<u>\$3.50</u>
Choker Setter	\$14.16	<u>\$3.50</u>
Faller/Bucker	\$15.70	<u>\$3.50</u>
Fire Lookout	\$11.84	<u>\$3.50</u>
Forestry Equipment Operator	\$16.46	<u>\$3.50</u>
Forestry/Logging Heavy Equipment Operator	\$18.82	<u>\$3.50</u>
Forestry Technician	\$18.82	<u>\$3.50</u>
General Forestry Laborer	\$12.28	<u>\$3.50</u>
Nursery Specialist	\$16.53	<u>\$3.50</u>
Slash Piler/Burner	\$11.58	<u>\$3.50</u>
Tree Climber	\$12.97	<u>\$3.50</u>
Tree Planter	\$9.46	<u>\$3.50</u>
Tree Planter, Mechanical	\$9.46	<u>\$3.50</u>

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Notes of Interest:

(1) On all overtime hours, fringe benefits will be paid at the Straight (base) rate only.

(2) Contractors are advised to contact the Procurement Department with any questions regarding job classifications, prevailing wage rates, fringe benefits, and area working conditions.

*Procurement Department
Municipal Services Building
1401 J.F.K. Boulevard - 1st Floor
Philadelphia, PA 19102-1670
Telephone Numbers: (215)686-4720/21
Fax Number: (215)686-4767*

4.4 VENDOR ACCEPTANCES - IN SUBMITTING AN EXECUTED BID, THE BIDDER AGREES TO THE CONTRACT MANAGEMENT PROCEDURES IN THIS SECTION.

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SECTION 5: PRICING

(PRICES QUOTED MAY NOT EXCEED THREE (3) DECIMAL PLACES)

Unit pricing quoted below will prevail in case of any discrepancy(ies) between unit price and the extended amount and will be the determining factor in establishing applicable contract amount(s)/award.

Pricing is divided into five distinct groups of projects, each schedule consisting of one to three sites. The bidder may bid on any or all of the five schedules. For every schedule that the bidder wishes to submit a bid, the bidder must write in a cost on ALL line items on the Pricing page. For example, a bidder may wish to submit a bid for Andorra Meadows/Houston Meadow group only. On the Bid Form, the bidder must write in a cost for all line items under both "Andorra Meadow" and "Houston Meadow" as well as a total cost.

NOTE: For Bidding purposes, the City has requested an each price for the following items: 5.1.4.2, 5.1.1.5.2, 5.1.1.6.2, 5.2.4.2, 5.2.5.2.1, 5.2.6.2, 5.2.7.5, 5.3.3, 5.4.4.2, 5.4.6. However, all items listed are actually acres.

Schedule 5.1 ANDORRA MEADOW & HOUSTON MEADOW PROJECT

	Quantity	Unit	Unit Cost	Extended Cost
5.1.1 <u>ANDORRA</u>				
5.1.1.1				
Mobilize and Demobilize from Project Site	1	LO	\$ _____	\$ _____
5.1.1.2				
Provide Protection of Construction Site	1	LO	\$ _____	\$ _____
5.1.1.3 <u>Erosion & Sedimentation controls</u>				
5.1.1.3.1				
Install Stabilized Constr. Entrance	1	LO	\$ _____	\$ _____

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Quantity	Unit	Unit Cost	Extended Cost
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5.1.1.3.2

Install Temp. Access Road (140')

1 LO \$ _____ \$ _____

5.1.1.3.3

Install broad based dip

1 EA \$ _____ \$ _____

5.1.1.3.4

Remove Constr. Entr. & Temp.
Access Rd. and de-compact

1 LO \$ _____ \$ _____

5.1.1.3.5

Seed all areas with winter wheat @ 3 bu/acre (per acre)

33.4 EA \$ _____ \$ _____

5.1.1.4 **ANDORRA ZONE 1 - 13.8 acres (including 9.5 ac of meadow)**

5.1.1.4.1 **Vegetation Clearing**

5.1.1.4.1.1

Cut and remove unmarked trees, shrubs & herbaceous plants
(including woody material mgmt)

1 LO \$ _____ \$ _____

5.1.1.4.1.2

Grind Stumps/Forestry Mow

1 LO \$ _____ \$ _____

5.1.4.2 **Herbicide Treatment (Per Each Acre)**

5.1.4.2.1

Early Summer (June 13 - July 1)

13.8 EA \$ _____ \$ _____

5.1.1.4.2.2

Late Summer (Aug 8 - Aug 28)

13.8 EA \$ _____ \$ _____

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Quantity	Unit	Unit Cost	Extended Cost
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5.1.1.5 **ANDORRA ZONE 2 - 11.6 acres (including 9.0 ac of meadow)**

5.1.1.5.1 **Vegetation Clearing**

5.1.1.5.1.1

Cut and remove unmarked trees,
shrubs & herbaceous plants (including woody material mgmt)

1 LO \$_____ \$_____

5.1.1.5.1.2

Grind Stumps/Forestry Mow

1 LO \$_____ \$_____

5.1.1.5.2 **Herbicide Treatment (Per Each Acre)**

5.1.1.5.2.1

Early Summer (June 13 - July 1)

11.6 EA \$_____ \$_____

5.1.1.5.2.2

Late Summer (Aug 8 - Aug 28)

11.6 EA \$_____ \$_____

5.1.1.6 **ANDORRA ZONE 3 - 8.0 acres (including 2.2 ac of meadow)**

5.1.1.6.1 **Vegetation Clearing**

5.1.1.6.1.1

Cut and remove unmarked trees, shrubs & herbaceous plants
(including woody material mgmt)

1 LO \$_____ \$_____

5.1.1.6.1.2

Grind Stumps/Forestry Mow

1 LO \$_____ \$_____

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	Quantity	Unit	Unit Cost	Extended Cost
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5.2.4.2 **Herbicide Treatment** (Per Each Acre)

5.2.4.2.1

Early Summer (June 13 - July 1)

8.9 EA \$ ____ \$ ____

5.3.4.2.2

Late Summer (Aug 8 - Aug 28)

8.9 EA \$ ____ \$ ____

5.2.5 **V&S ZONE 2 - 11.8 acres (including 9.2 ac of meadow)**

5.2.5.1 **Vegetation Clearing**

5.2.5.1.1

Cut and remove unmarked trees, (including woody material mgmt)

1 LO \$ ____ \$ ____

5.2.5.1.2

Grind Stumps/Forestry Mow

1 LO \$ ____ \$ ____

Herbicide Treatment (Per Each Acre)

5.2.5.2.1

Early Summer (June 13 - July 1)

11.8 EA \$ ____ \$ ____

5.2.5.2.2

Late Summer (Aug 8 - Aug 28)

11.8 EA \$ ____ \$ ____

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	Quantity	Unit	Unit Cost	Extended Cost
5.2.6	<u>V&S ZONE 3 - 11.4 acres (including 5.7 ac of meadow)</u>			
5.2.6.1	Vegetation Clearing			
5.2.6.1.1	Cut and remove unmarked trees, shrubs & herbaceous plants (including woody material mgmt)			
	1	LO	\$_____	\$_____
5.2.6.1.2	Grind Stumps/Forestry Mow			
	1	LO	\$_____	\$_____
5.2.6.2	Herbicide Treatment (Per Each Acre)			
5.2.6.2.1	Early Summer (June 13 - July 1)			
	11.4	EA	\$_____	\$_____
5.2.6.2.2	Late Summer (Aug 8 - Aug 28)			
	11.4	EA	\$_____	\$_____
5.2.6.3	<u>V&S Hazard Tree Removal</u>			
	Remove 30" DBH white ash tree			
	1	LO	\$_____	\$_____
5.2.6.4	<u>V&S Utility Pole Removal</u>			
	Remove and properly dispose of eight (8) utility poles and associated wires			
	1	LO	\$_____	\$_____
5.2.6.5	<u>V&S Planting (plants provided by PPR)</u>			
5.2.6.5.1	Plant #1 & #2 container (per plant)			
	304	EA	\$_____	\$_____
5.2.6.5.2	Plant #3 container (per plant)			
	608	EA	\$_____	\$_____

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	Quantity	Unit	Unit Cost	Extended Cost
5.3 <u>CARPENTER'S WOODS PROJECT</u>				
5.3.1				
Mobilize and Demobilize from Project Site	1	LO	\$_____	\$_____
5.3.2				
Provide Protection of Construction Site	1	LO	\$_____	\$_____
5.3.3				
<u>Erosion & Sedimentation controls</u> (Per Each Acre)				
Seed all areas with winter wheat @ 3 bu/acre	10.7	EA	\$_____	\$_____
5.3.4				
<u>Vegetation Clearing</u>				
5.3.4.1				
Cut and remove designated trees * throughout site (including woody material mgmt.)	1	LO	\$_____	\$_____
5.3.4.2				
Forestry Mow (per Each Acre)	10.7	LO	\$_____	\$_____
5.3.5				
<u>Herbicide Treatment - 18.7 acres</u> (Per Acre)				
5.3.5.1				
Early Summer (June 13 - July 1)	18.7	EA	\$_____	\$_____
5.3.5.2				
Late Summer (Aug 8 - Aug 28)	18.7	EA	\$_____	\$_____

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	Quantity	Unit	Unit Cost	Extended Cost
5.3.5.3				
Basal Bark Trees less than (<) 8" DBH				
	461	EA	\$ _____	\$ _____
5.3.5.4				
Girdle and Basal Bark Trees Most greater than (>) 8" DBH				
	102	EA	\$ _____	\$ _____
5.3.6				
<u>Planting (plants provided by PPR)</u>				
5.3.6.1				
Plant #1 & #2 container(per plant)				
	600	EA	\$ _____	\$ _____
5.3.6.2				
Plant #3 container (per plant)				
	1200	EA	\$ _____	\$ _____
5.3.6.3				
Plant #5 container (per plant)				
	750	EA	\$ _____	\$ _____
5.3.6.4				
Plant #7 container (per plant)				
	450	EA	\$ _____	\$ _____
			\$ _____	
			TOTAL SCHEDULE 5.3	
			CARPENTER'S WOODS	

* Trees to be removed are all marked with a white "X".

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	Quantity	Unit	Unit Cost	Extended Cost
5.4.4	<u>Greenland Nursery ZONE 2 - 6.1 acres</u>			
5.4.4.1	Vegetation Clearing			
5.4.4.1.1	Cut and remove unmarked trees, shrubs & herbaceous plants (including woody material mgmt)			
	1	LO	\$_____	\$_____
5.4.4.1.2	Forestry Mow			
	1	LO	\$_____	\$_____
5.4.5	<u>Herbicide Treatment - 6.1 acres (Per Each Acre)</u>			
5.4.5.1	Early Summer (June 13 - July 1)			
	6.1	EA	\$_____	\$_____
5.4.5.2	Late Summer (Aug 8 - Aug 28)			
	6.1	EA	\$_____	\$_____
5.4.6	<u>Deer Fence Install</u>			
5.4.6.1	Install Interior Deer Fencing (per Linear Foot)			
	1,200 ft	LF	\$_____	\$_____
5.4.6.2	Install Exterior Deer Fencing (per Linear Foot)			
	2,050 ft	LF	\$_____	\$_____
5.4.6.3	Install 12' Width Access Gate			
	4	EA	\$_____	\$_____
5.4.7	Greenland Locust Log Handling Truck and unload Two (2) loads black Locust logs to District #3 HQ			
	1	LO	\$_____	\$_____
GRAND TOTAL SCHEDULE 5.4			\$ _____	
GREENLAND NURSERY				

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	Quantity	Unit	Unit Cost	Extended Cost
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5.5 COMBINED TREE REMOVALS

5.5.1 **Chamounix Drive**

Remove marked trees

54	LO	\$ _____	\$ _____
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5.5.2 **Warner Creek**

Remove marked trees

22	LO	\$ _____	\$ _____
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5.5.3 **Lotus Street**

Remove marked trees

36	LO	\$ _____	\$ _____
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TOTAL SCHEDULE 5.5 \$ _____
COMBINED TREE REMOVAL

EXTENDED TOTAL BID AMOUNT \$ _____

(UNIT PRICE X QUANTITY for all items bid in Schedules 5.1.1. to 5.5.3)

INVITATION AND BID Continuation	CITY OF PHILADELPHIA PROCUREMENT DEPARTMENT PHILADELPHIA, PA 19102 - 1685	BID NUMBER S10F1750	PAGE OF 80 81
		FIRM NAME (Must be filled in)	

ADD ALTERNATIVE - BOCCE WOODS PROJECT

5.6	BOCCE WOODS	Quantity	Measurement	Unit Cost	Extended Cost
5.6.1	<u>Mobilize/Demobilize</u>				
	Mobilize and Demobilize from Project Site	1	LO	\$ _____	\$ _____
5.6.2	<u>Protection of Construction Site</u>				
	Provide Protection of Construction Site	1	LO	\$ _____	\$ _____
5.6.3	<u>Erosion & Sedimentation controls</u>				
	Install/Remove Stabilized Construction Entrance	1	LO	\$ _____	\$ _____
5.6.4	Seed all areas with winter wheat @ 3 bu/acre (per each acre)	8.7	EA	\$ _____	\$ _____
5.6.5	<u>ZONE 1 - 4.9 acres</u> <u>Vegetation Clearing</u>				
	Cut and remove unmarked trees, shrubs & herbaceous plants (including woody material mgmt)	1	LO	\$ _____	\$ _____
5.6.6	Forestry Mow	1	LO	\$ _____	\$ _____
5.6.7	<u>Herbicide Treatment (per Acre)</u>				
	Early Summer (June 13 - July 1)	4.9	EA	\$ _____	\$ _____
5.6.8	Late Summer (Aug 8 - Aug 28)	4.9	EA	\$ _____	\$ _____

INVITATION AND BID Continuation	CITY OF PHILADELPHIA PROCUREMENT DEPARTMENT PHILADELPHIA, PA 19102 - 1685	BID NUMBER S10F1750	PAGE OF 81 81
		FIRM NAME (Must be filled in)	

Quantity Measurement Unit Cost Extended Cost

5.6.9 **ZONE 2 - 3.8 acres**
Vegetation Clearing

Cut and remove unmarked trees,
 shrubs & herbaceous plants
 (including woody material mgmt)

1 LO \$ _____ \$ _____

5.6.10 Forestry Mow 1 LO \$ _____ \$ _____

Herbicide Treatment (per Acre)

5.6.11 Early Summer (June 13 - July 1)
 3.8 EA \$ _____ \$ _____

5.6.12 Late Summer (Aug 8 - Aug 28)
 3.8 EA \$ _____ \$ _____

TOTAL \$ _____
BOCCE WOODS

CITY OF PHILADELPHIA



BID BOND

FOR CITY OF PHILADELPHIA BID NUMBER: _____
(Please Fill In)

KNOW ALL MEN BY THESE PRESENTS, THAT WE _____
_____ as Principal
(hereinafter called the "Principal Obligor"), and

_____ (as Surety) are jointly and severally held and firmly bound unto The City of Philadelphia, in the sum of **TEN PERCENT (10%) OF THE GROSS AMOUNT OF THE BID** lawful money of the United States of America, to be paid to the said City of Philadelphia, its successors and assigns; to which payment, well and truly to be made we do bind ourselves and each of us, our and each of our successors and assigns, jointly and severally, firmly by these presents.

Sealed with our seals and dated the _____ day of _____ two-thousand and ten (2010).

WHEREAS the above bounded Principal Obligor, submitted a bid pursuant to the above-referenced bid number to provide certain goods, services, or equipment to the City of Philadelphia.

NOW THE CONDITION OF THIS OBLIGATION IS SUCH, That if the City of Philadelphia shall accept the bid of the Principal Obligor and the Principal Obligor shall enter into a contract with the City in accordance with the terms of such bid, and furnish such bond or bonds as are specified in the bid documents with good and sufficient surety, for the faithful performance of the contract; or in the event of the failure or refusal of the Principal Obligor to enter into such contract and give such bond or bonds, if the Principal Obligor shall pay to the City the difference between the amount specified in said bid and such larger amount for which the City may legally contract with another party to provide the goods, services, or equipment required by said bid, then this obligation shall be null and void, otherwise to remain in full force and effect.

And for the doing of these acts this instrument or a copy thereof attested as aforesaid shall be full warrant and authority.

CORPORATE SEAL:

PRINCIPAL OBLIGOR:

President/Vice-President (SEAL)

Secretary/Treasurer (SEAL)

SURETY SEAL:

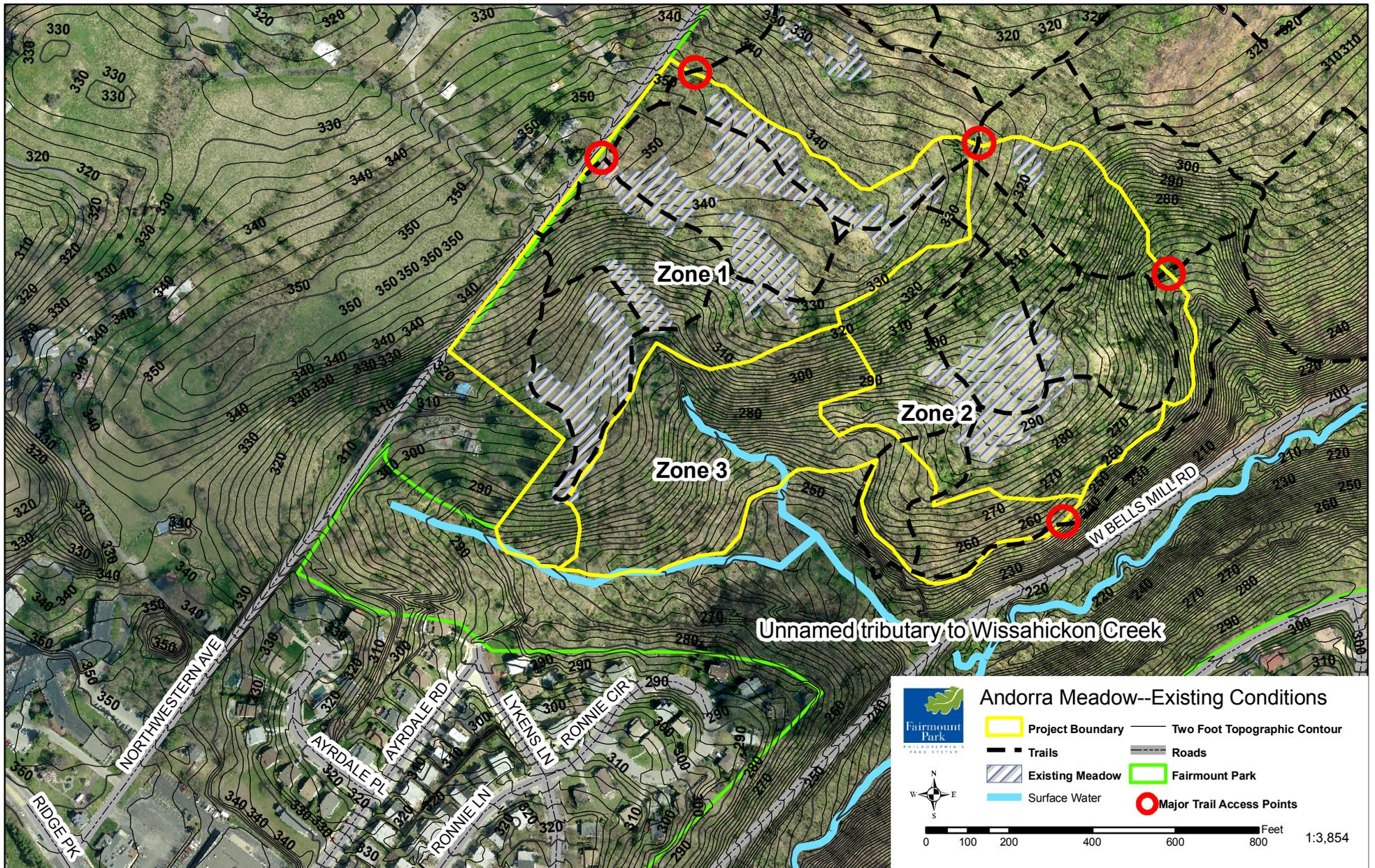
SURETY:

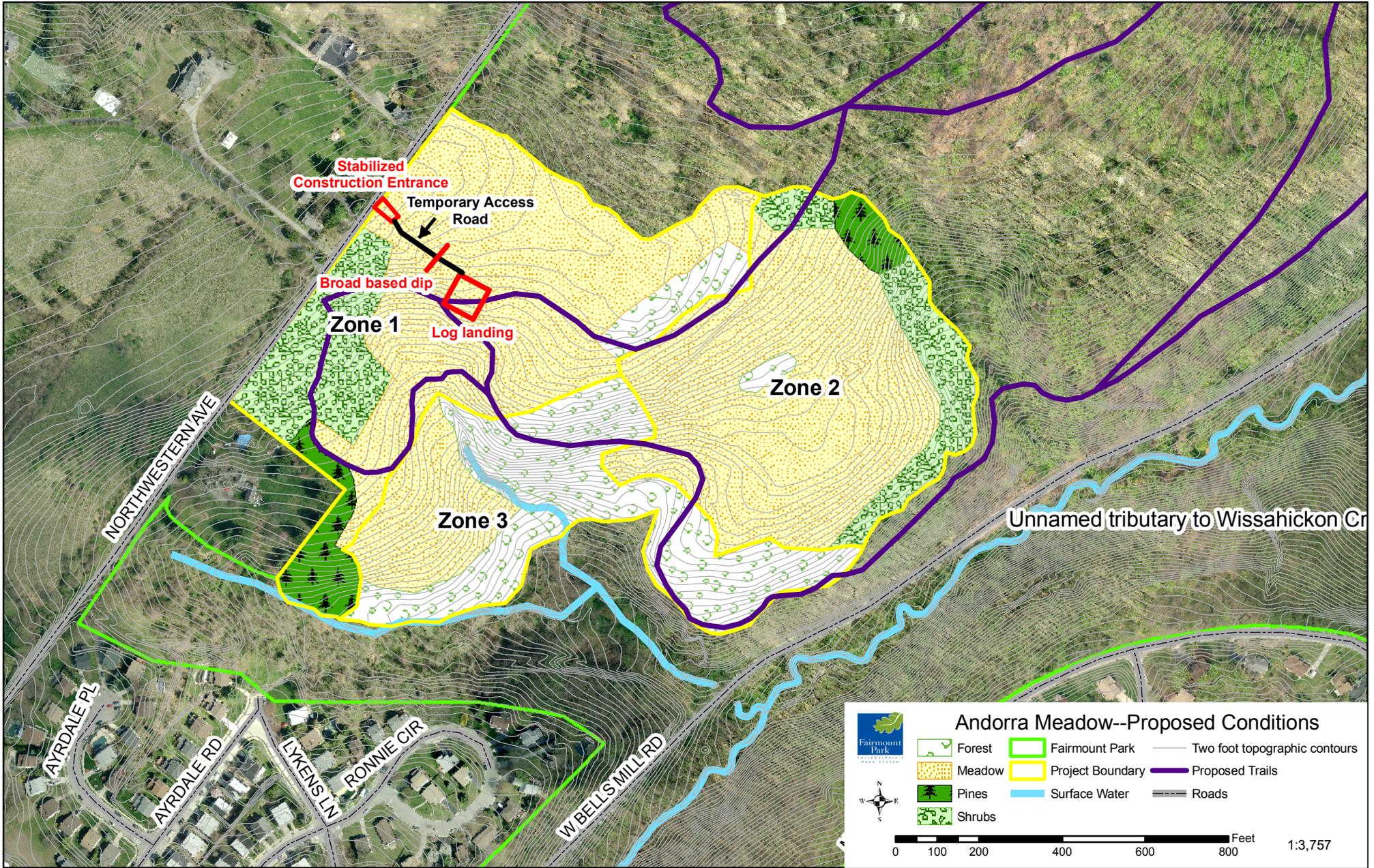
Attorney-In-Fact (SEAL)

INSTRUCTIONS:

- (1) ALL VENDORS MUST UTILIZE THIS BID BOND FORM WHEN SUBMITTING A BID TO THE CITY.
- (2) IF PRINCIPAL OBLIGOR IS AN INDIVIDUAL OR PARTNERSHIP, BID BOND SHOULD BE SIGNED BY OWNER OR AUTHORIZED GENERAL PARTNER. PLEASE IDENTIFY ON THE BID BOND THE TYPE OF BUSINESS (E.G. INDIVIDUAL PROPRIETORSHIP OR PARTNERSHIP) AND TITLE OF PARTY EXECUTING THE BID BOND.
- (3) BID BOND MUST BE EXECUTED BY A SURETY COMPANY DULY AUTHORIZED AND LICENSED TO ACT AS SURETY BY THE PENNSYLVANIA INSURANCE COMMISSIONER PURSUANT TO THE LAWS OF THE COMMONWEALTH OF PENNSYLVANIA.

MAPS
S1OF1750

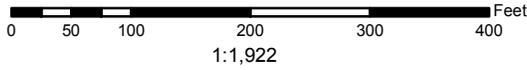






Bocce Woods--Existing Conditions

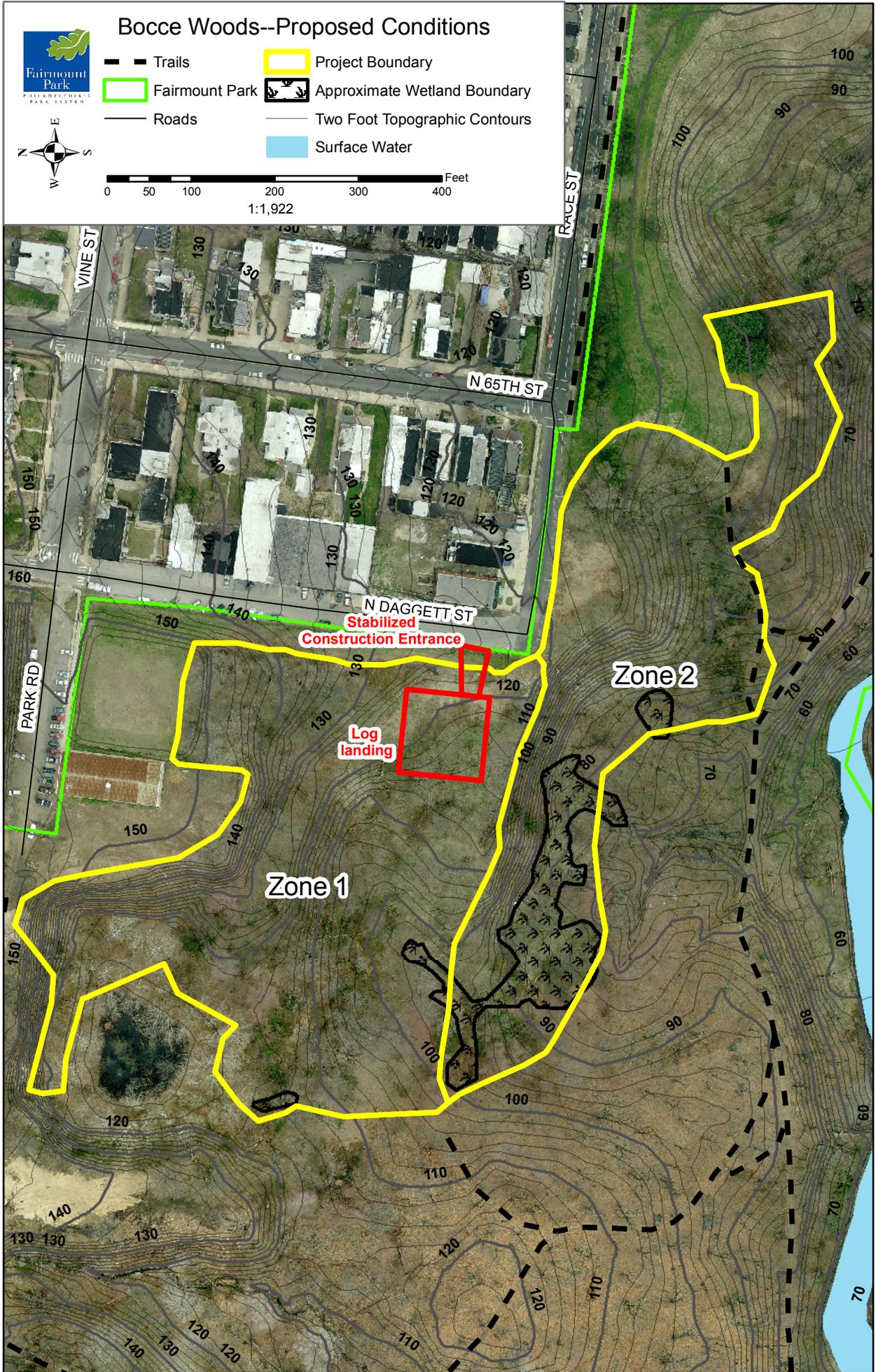
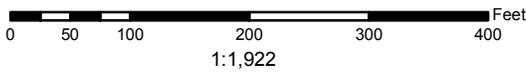
- Trails
- Fairmount Park
- Roads
- Surface Water
- Project Boundary
- Approximate Wetland Boundary
- Two Foot Topographic Contours
- Major trail access points





Bocce Woods--Proposed Conditions

- Trails
- Fairmount Park
- Roads
- Project Boundary
- Approximate Wetland Boundary
- Two Foot Topographic Contours
- Surface Water



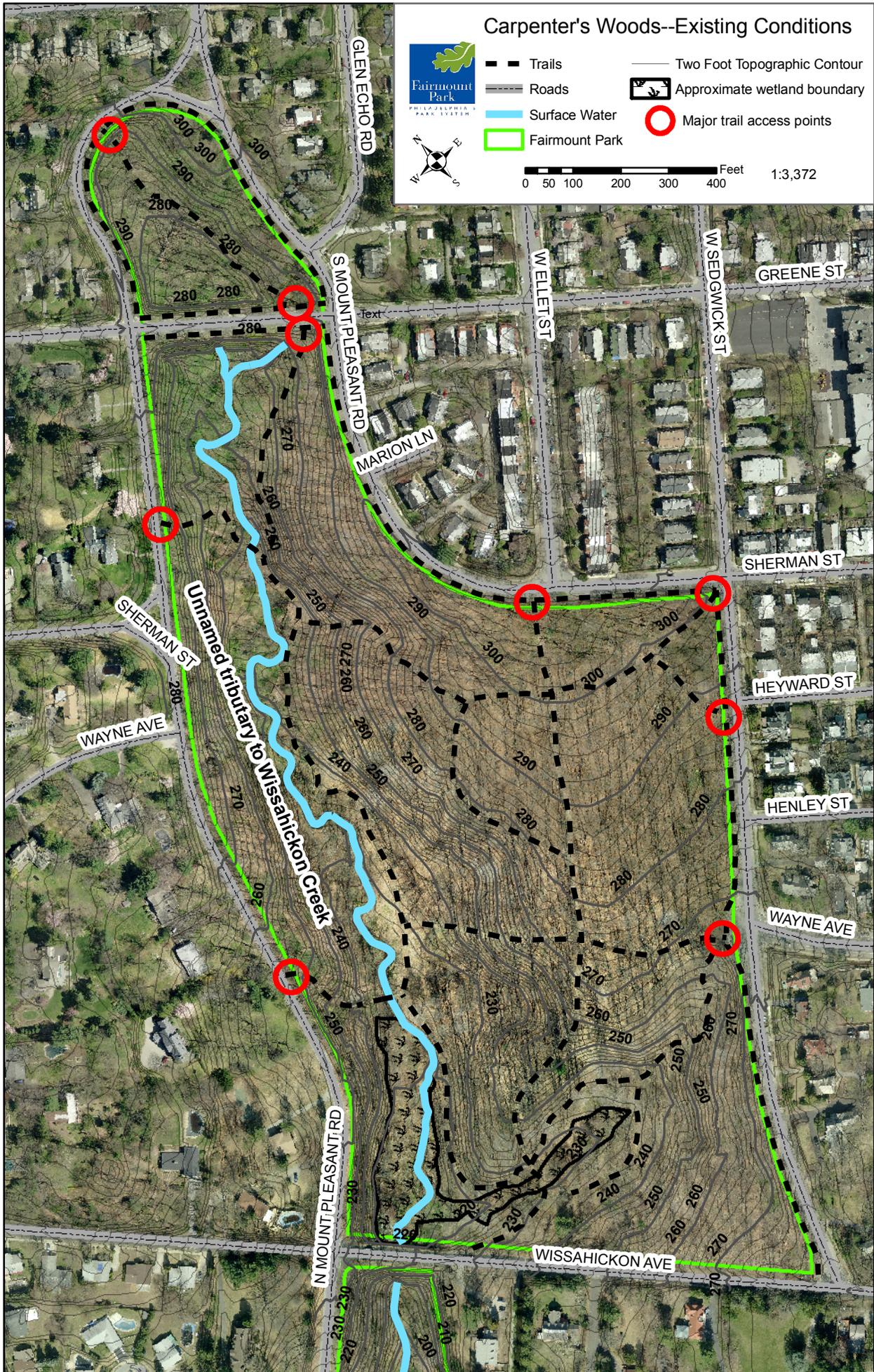
Carpenter's Woods--Existing Conditions



- Trails
- Roads
- Surface Water
- Fairmount Park
- Two Foot Topographic Contour
- Approximate wetland boundary
- Major trail access points



0 50 100 200 300 400 Feet 1:3,372





Carpenter's Woods--Herbicide Areas

- Trails
- Roads
- Surface Water
- Fairmount Park
- Approximate wetland boundary
- Herbicide areas



0 50 100 200 300 400 Feet 1:3,372





Carpenter's Woods--Mowing Areas

- Existing Trails
- Roads
- Fairmount Park
- Surface Water
- Approximate wetland boundary
- Mowing boundary
- Two Foot Topographic Contours



0 50 100 200 300 400 Feet 1:3,372



2.8 acres

40.1 acres

7.7 acres





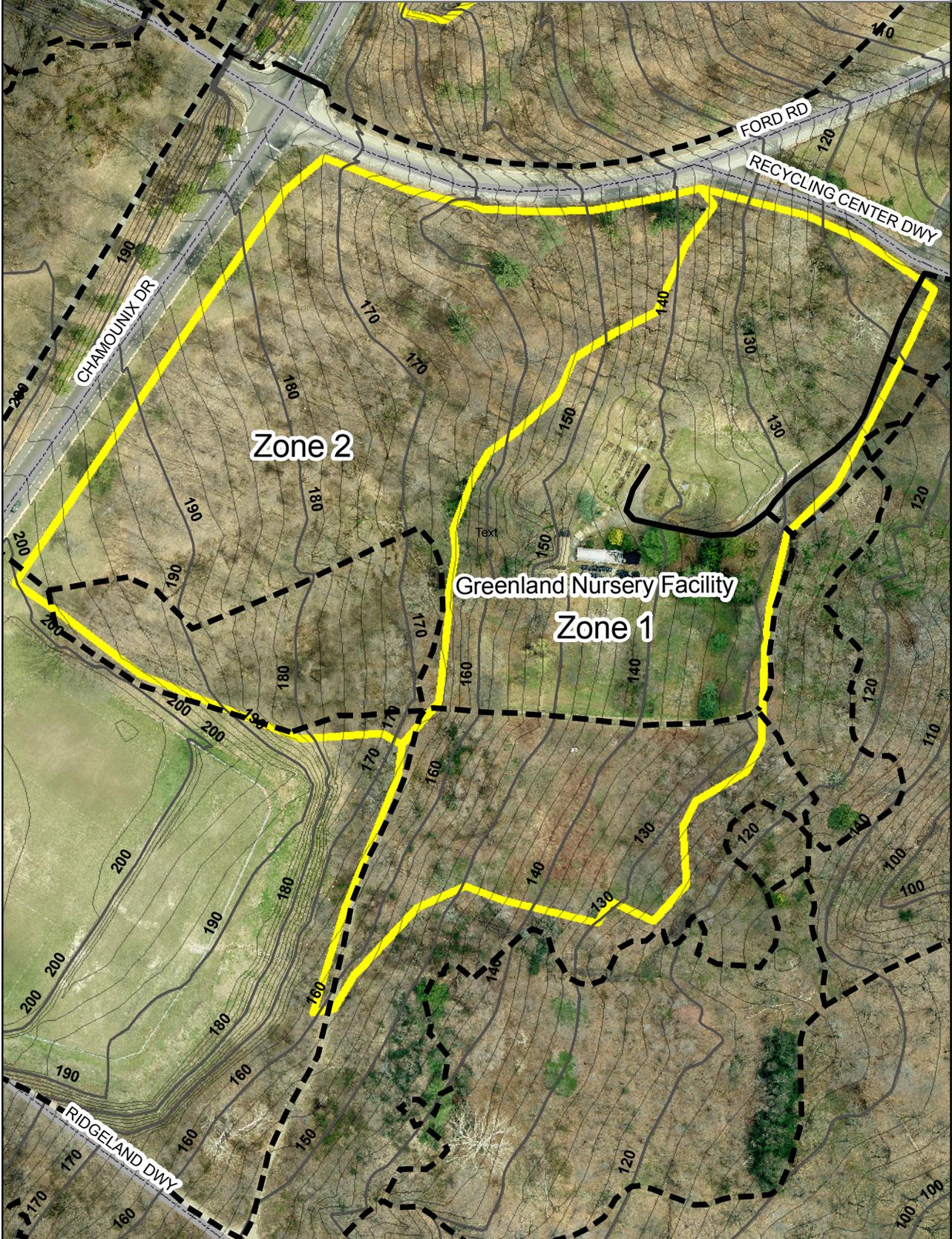


Greenland Nursery--Existing Conditions

- Trails
- Two Foot Topographic Contours
- Driveway
- Roads
- Fairmount Park
- Project Boundary



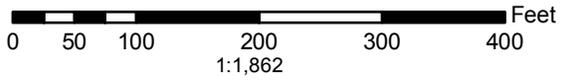
0 50 100 200 300 400 Feet 1:1,913



Greenland Nursery--Proposed Conditions



- Inner Deer Fence
- Outer Deer Fence
- Project Boundary
- Deer Fence approximately 3,250 feet



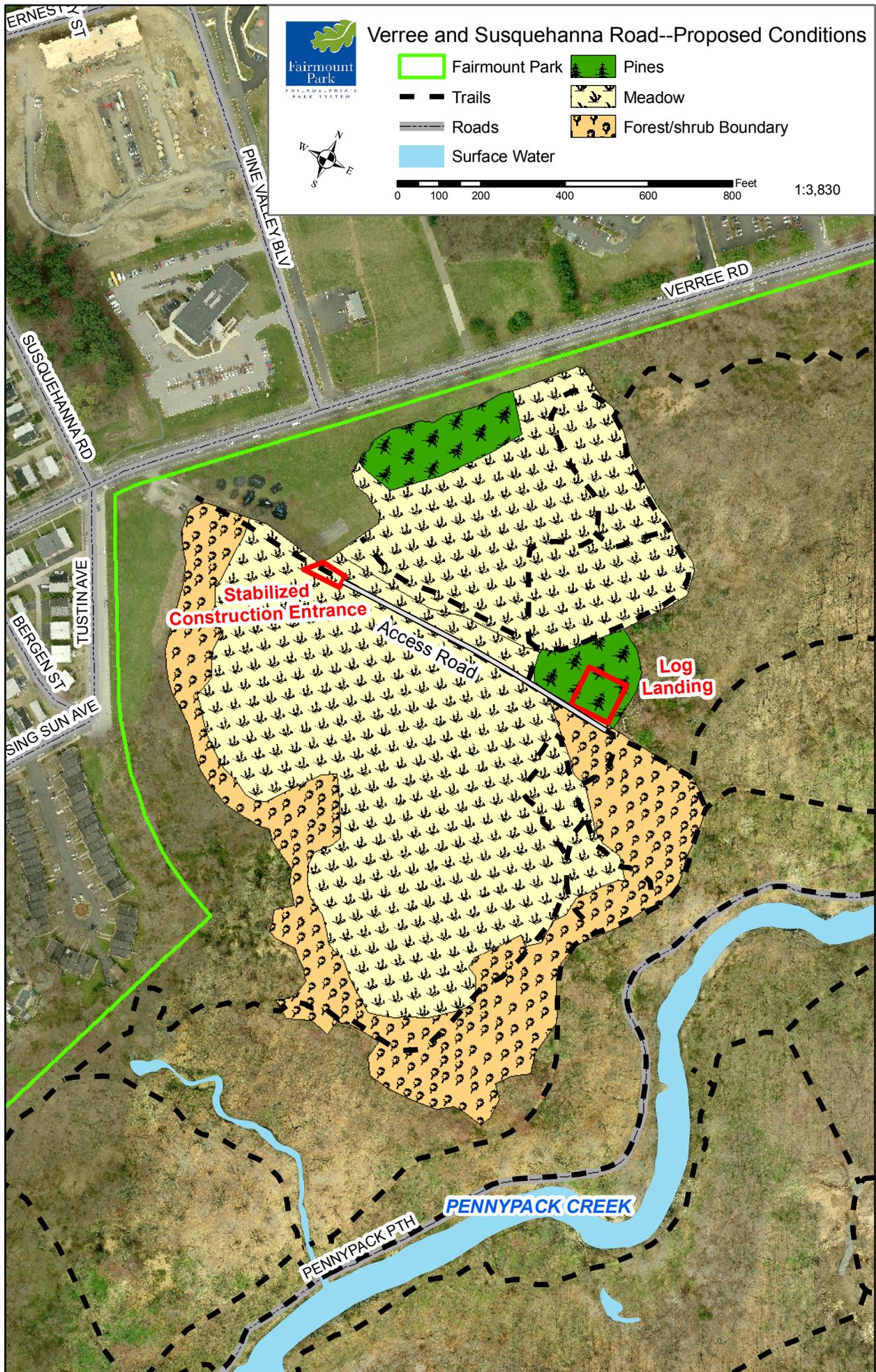
Verree and Susquehanna Road Existing Conditions



- Fairmount Park
- Project boundary
- Trails
- Roads
- Two Foot Topographic Contour
- Existing Meadow
- Major Trail Entrances
- Surface Water
- Utility Poles (Approximate locations)

0 100 200 400 600 800 Feet 1:3,830





ESC PLANS
S1OF1750

Andorra Meadow

3930-FM-WM0155 Rev. 2/2004

Erosion and Sediment Control Plan for a Timber Harvesting Operation

1. GENERAL INFORMATION

6/30/10
Date

A. Location Andorra Meadow, Philadelphia
Municipality Philadelphia
County

B. Timber sale area = 33.4 acres includes approx. 6.1 acres that is currently meadow

C. Landowner Philadelphia Department of Parks and Recreation
Name 215.683.0239
Home Phone 215.683.0239
Work Phone

One Parkway, 10th Floor, 1515 Arch Street
Street Address

Philadelphia, PA 19102
City PA State 19102 Zip Code

D. Person(s) responsible for construction and maintenance of erosion and sediment control BMPs during earth disturbance activities.
(NOTE: If duties are assigned to more than one party, list all others under Section 12 of this plan.)

Mr. Curtis Helm
Name 215.683.0239
Home Phone 215.683.0239
Work Phone

One Parkway, 10th Floor, 1515 Arch Street
Street Address

Philadelphia, PA 19102
City PA State 19102 Zip Code

E. Erosion and Sediment Control Plan prepared by:

Mr. Curtis Helm
Name 215.683.0239
Phone

One Parkway, 10th Floor, 1515 Arch Street
Street Address

Philadelphia, PA 19102
City PA State 19102 Zip Code

2. TOPOGRAPHICAL MAP - See Attachments - Andorra Meadow

The map must include the location of the project with respect to roadways, streams, wetlands, lakes, ponds, floodplains, type and extent of vegetation and other identifiable landmarks. A United States Geologic Service (USGS) quadrangle map may be used to show the existing topographical features of the project site and the immediate surrounding area. The map scale site must be large enough to clearly depict the topographical features of the project. Enlargements of the USGS quadrangle map are sufficient.

The scale and north arrow must be plainly marked. A complete legend of all symbols used on the map must also be included.

3. SOIL MAP - See Attachments - Andorra Meadow

Soils information is available in soil survey reports, published by the USDA Natural Resource Conservation Service in cooperation with Penn State University, College of Agriculture and others. These reports are available for review at the county conservation district offices.

The soils drainage classes must be examined to determine areas with the best drainage for the placement of haul roads and log landings, and to determine proper retirement treatments.

Provide the following soils information for all disturbed areas.

NOTE: Haul road and landing will be constructed within area mapped as Chester silt loam 3-8%, which has a slight erosion potential.

Map Symbols	Soil Series
C e B	Chester Silt Loam, 3-8% Slope
M a C	Manor Loam, 8-15%
M a D	Manor Loam, 15-25%
M c E	Manor/Chester Ext, Stony Loam, 25-50%
H a	Hatboro Silt Loam, 0-2% Slopes

Limiting Characteristics¹ That May Apply to Timber Harvesting Activities (Check as Appropriate)

Erosion Hazards ²		
Slight	Moderate, severe	Seasonably Wet ³
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

¹ Soils with a moderate or severe erosion hazard or seasonably wet are poor choices for log landing and road locations, and, if possible, alternatives should be considered.

² The degree or ease by which soil particles can be detached from the soil surface. Moderate or severe ratings require additional consideration of soil erosion and sediment control BMPs during logging and road construction.

³ Somewhat poorly drained soils remain wet for a longer period after rain and would be susceptible to disturbance. These soils may be hydric, indicating a possible wetland. They may have to be logged during dry seasons, when the profile may be relatively dry, or when the soils are frozen. They are poor choices for log landing and road locations, and, if possible, alternate areas should be considered.

4. SKETCH MAP - See Attachments - Andorra Meadow

The characteristics of the earth disturbance activity. The limits of the harvesting area must be shown on a map(s). Such information as the limits of clearing and grubbing and the areas of cuts and fills for roads and landings, and other proposed disturbances for the timber harvesting area are to be included. Roads, skid roads and landings located within 50 ft. of a stream bank may require a Department Chapter 105 Water Obstruction and Encroachment. The following should be clearly shown on the sketch map:

- Dimensions
- North Arrow
- Landings
- Haul Roads
- Skid Roads
- Wetland Crossings
- Stream Crossings
- Equipment Maintenance/Fueling Areas
- Existing Roads

5. RUNOFF

The amount of runoff from the timber harvest area and its upstream watershed area. You do not have to provide runoff calculations unless you plan to use BMPs different from those described in Section 8. If you use different BMPs, your calculations must include an analysis showing any impact that runoff may have on existing downstream watercourses and their resistance to erosion.

6. RECEIVING WATERS

All streams in Pennsylvania are classified based upon their designated and existing uses and water quality criteria. Designated uses for waters of this Commonwealth are found in 25 Pa. Code §93.9a-z at <http://www.pacode.com/secure/data/025/chapter93/chap93toc.html>. Existing uses of waters of this Commonwealth are found at the DEP website <http://www.dep.state.pa.us>. Type the phrase "existing use" in the DEP Keyword box. The county conservation district office can also supply this information. List the bodies of water likely to receive direct runoff within or from the timber harvest area.

<u>Name</u>	<u>Designated/Existing Use</u>
Wissahickon Creek	TSF - MF

7. ESTIMATED DISTURBED AREA

	Total Length (ft)	Average Width (ft)	Area (sq ft)
Haul Roads	150 +/-	12	= 1800
Skid Roads	2540	10	= 25,400
Landings	100	100	= 10,000
Total Area (sq. ft.)			= 37,200
			÷ 43,560 sq ft/A = 0.85
			Acres disturbed by earth disturbance activities.

If the total area of earth disturbance activities (sum of area disturbed by haul roads, skid roads and landings) consists of 25 acres or more, an Erosion and Sediment Control Permit must be obtained.

Has application been made for required stream crossing permits? Yes No Not Applicable

At all stream crossing locations, runoff must be directed to a sediment removal area, i.e., filter strip, straw bale, silt fence, sump, a trap for treatment. Waterbars and/or broad based dips should be installed and maintained as required on the approaches to the stream crossing.

NOTE: An unnamed tributary to Wissahickon Creek occurs in the southern portion of the site. The contractor will not cross this intermittent stream and will not operate equipment within 10' of the top of bank. No stream crossings are proposed.

8. DESCRIPTION OF EROSION AND SEDIMENT CONTROL MEASURES

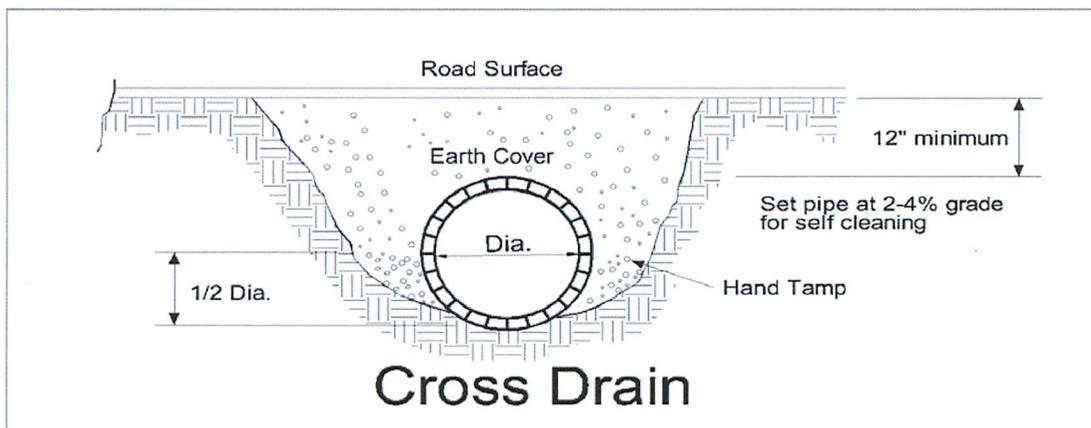
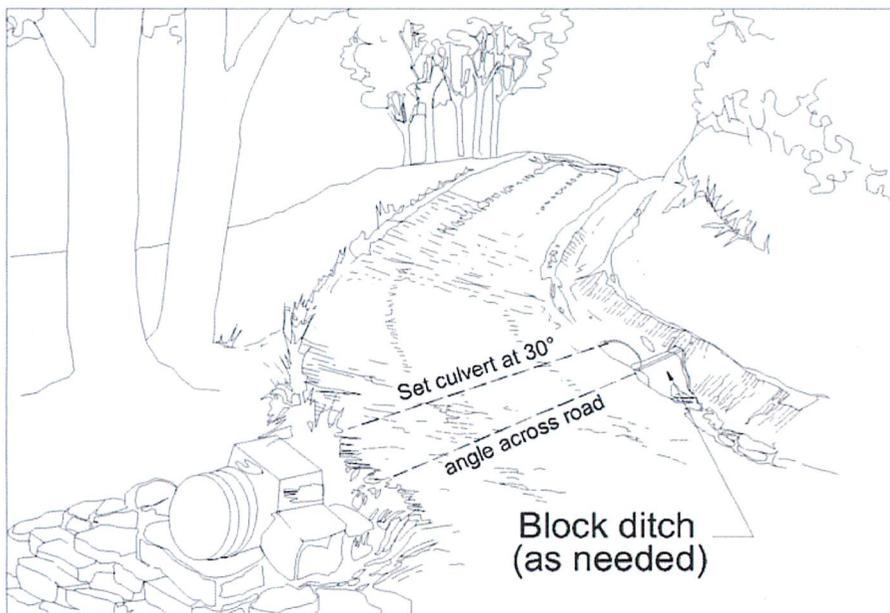
The following standard BMP drawings and recommended spacings (Sections A-H) have been provided to fulfill the requirements of this plan. If you plan to use any of these recommended BMPs, please check the appropriate boxes for Sections A through H. If you plan to use alternative BMPs, you must provide drawings showing the details, specifications and spacing.

A. Cross-drain culvert

Culverts will be installed before the ground freezes. Culverts shall be placed with a slope of 2 to 4 percent and cross the road at a 30-degree downslope angle. Recommend 12" pipe or larger culverts. Will this BMP be used? Yes No Will recommended spacing be used? Yes No

Road Grade (% Slope)	Recommended Spacing (feet)	Alternative Spacing* (feet)
2	500	_____
3	400	_____
4	350	_____
5-6	300	_____
7-8	250	_____
9-11	200	_____
12-13	150	_____
14+	100	_____

*If alternative spacings are used, please make sure reasons for their use are explained.



B. Waterbars

Waterbars on skid roads will be maintained throughout the entire job and installed permanently upon job completion.

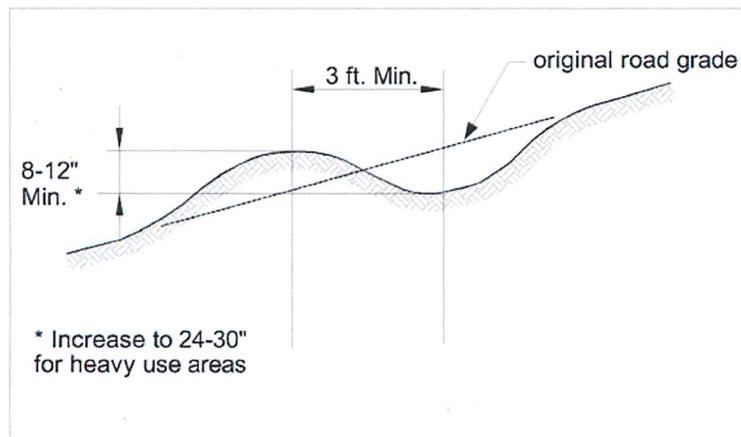
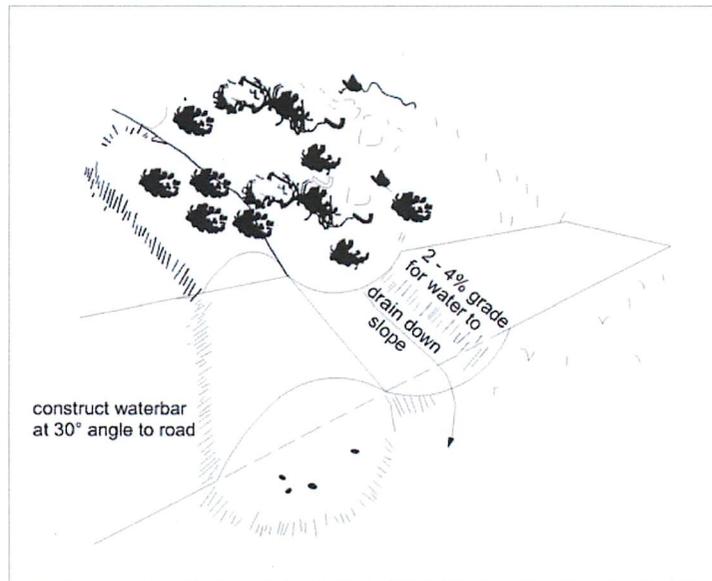
Waterbars will be installed before the ground freezes and will be spaced as indicated below.

Will this BMP be used? Yes No Will recommended spacing be used? Yes No

The existing/extensive network of trails will be used. These trails are stable with little hazard of erosion. This practice will be used if erosion is noted at log landing or along trails used for equipment and material movement. These trails will be removed/closed upon project completion.

Road Grade (% Slope)	Recommended Spacing (feet)	Alternative Spacing* (feet)
2	250	_____
5	135	_____
10	80	_____
15	60	_____
20	45	_____
25	40	_____
30	35	_____
40	30	_____

*If longer spacings are used, please make sure reasons for their use are explained.



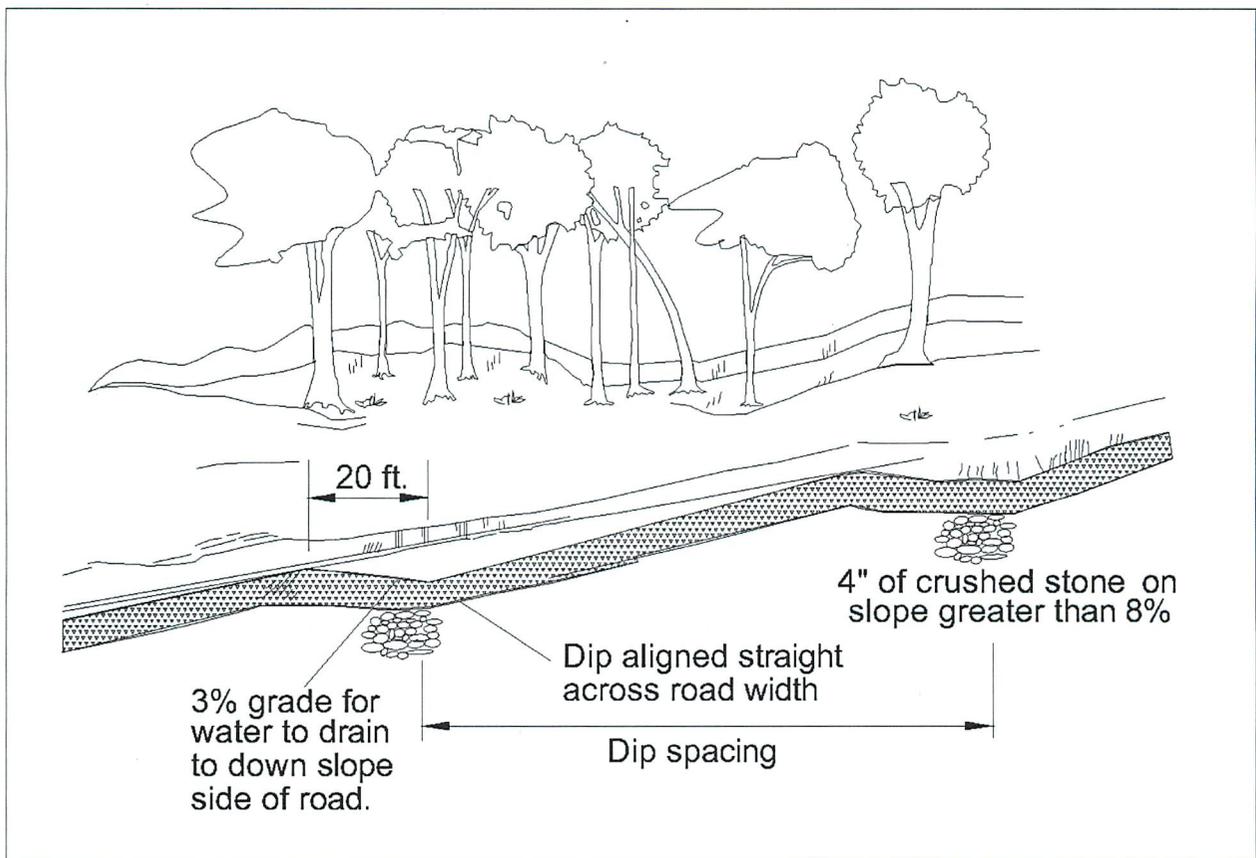
C. Broad-based dips

Broad-based dips will be installed and worked before the ground freezes. Broad-based dips on the road system are planned to be spaced as indicated below.

Will this BMP be used? Yes No Will recommended spacing be used? Yes No **SEE LOCATION ON ATTACHED MAP**

Road Grade (% Slope)	Recommended Spacing (feet)	Alternative Spacing* (feet)
2	300	_____
3	250	_____
4	200	_____
5	180	_____
6	170	_____
7	160	_____
8	150	_____
9-10	140	_____

*If longer spacings are used, please make sure reasons for their use are explained.



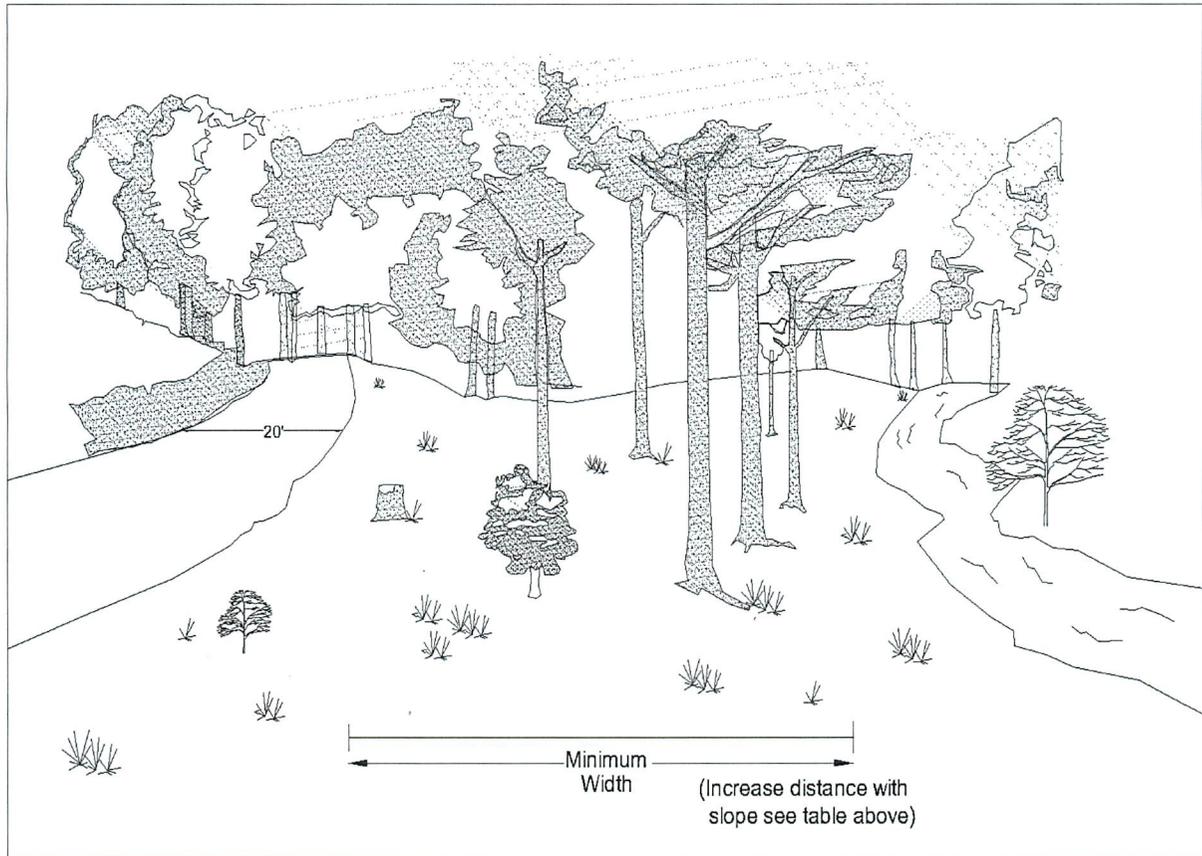
D. Filter strips

Filter strip widths by slope on land between roads and perennial streams.
 The width of the filter strip depends on the slope between the road and the stream.

Will this BMP be used? Yes No **No skid road will be within 100' of the intermittent stream located in the southern portion of the site.**

Slope of Land Between Road and Stream (%)	Minimum width of Filter Strip (feet) +
0	25++
10	45++
20	65
30	85
40	105
50	125
60	145
70	165

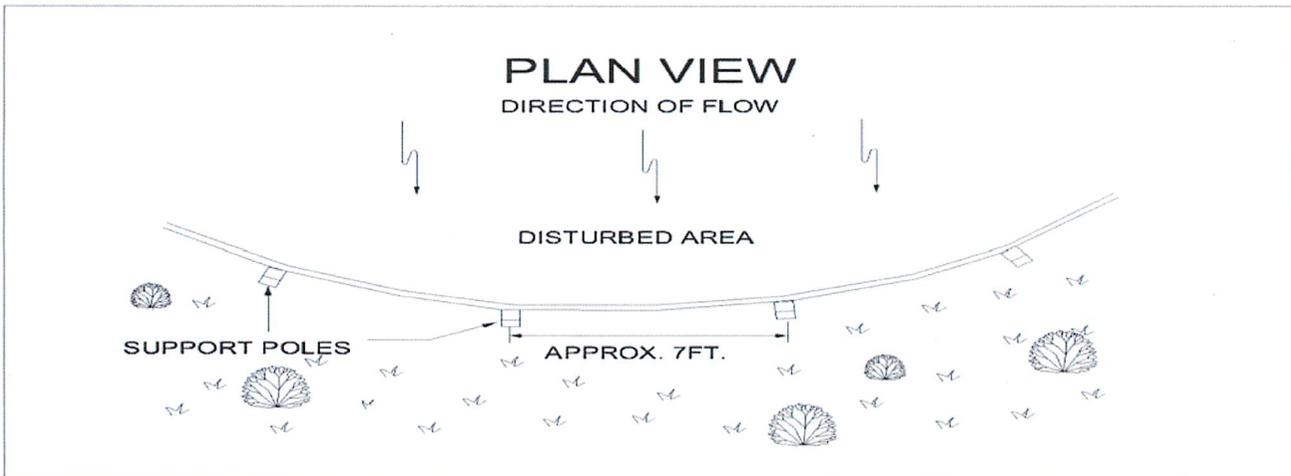
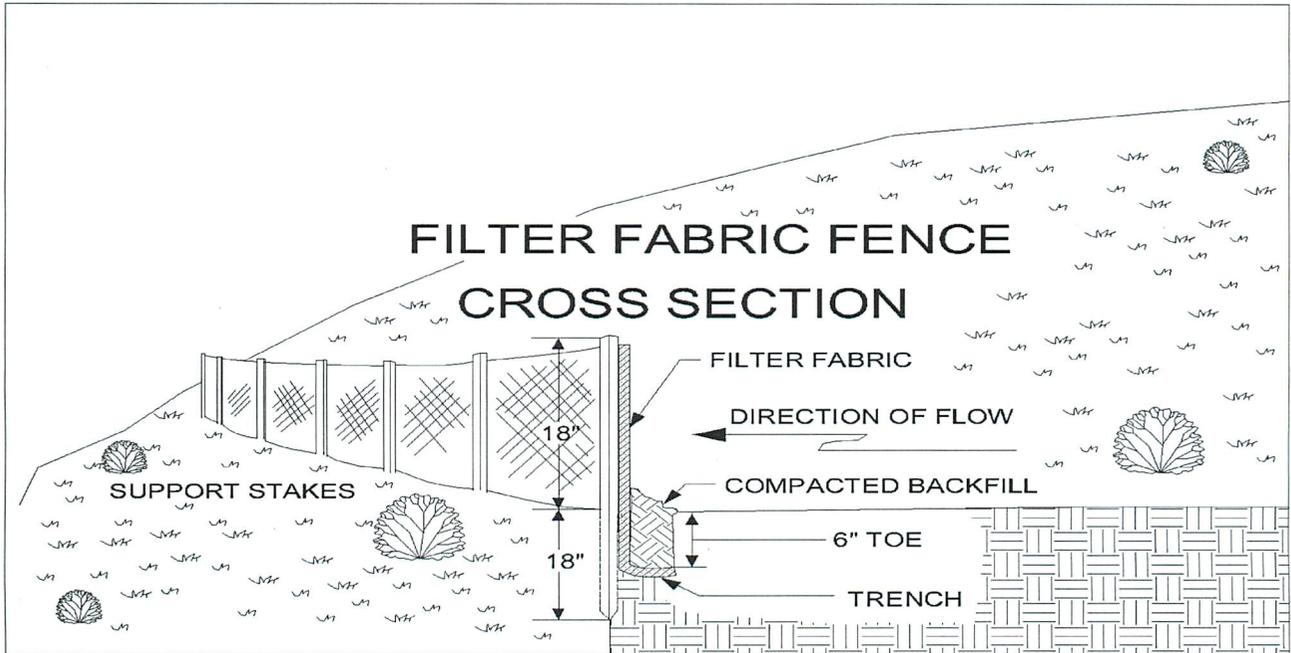
- + Widths should be doubled when the harvesting activity is located on municipal water supplies or where receiving waters have a designated use/existing use of High Quality or Exceptional Value.
- ++ Earth disturbance 50 feet or less from a stream requires a water obstruction and encroachment permit from the appropriate DEP Regional Office, Soils and Waterways Section.



E. Filter Fabric Fence

Filter fabric fence must be installed on contour at the edge of disturbed areas. Both ends of each fence section must be extended upslope at 45 degrees to the main fence alignment. They should not be installed in streams, ditches or other areas of concentrated flow. Install filter fabric fence before the ground freezes.

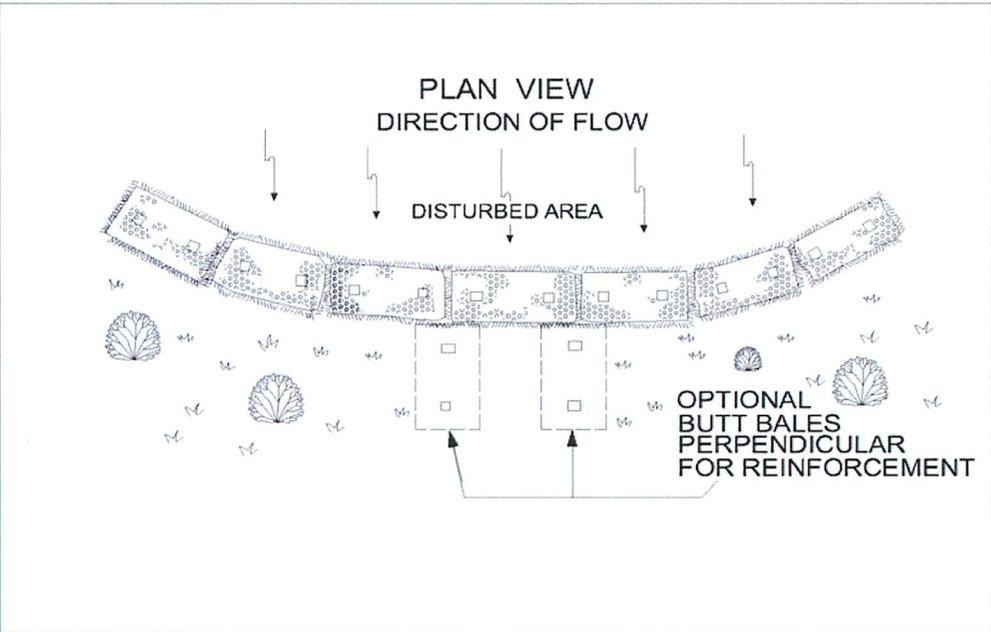
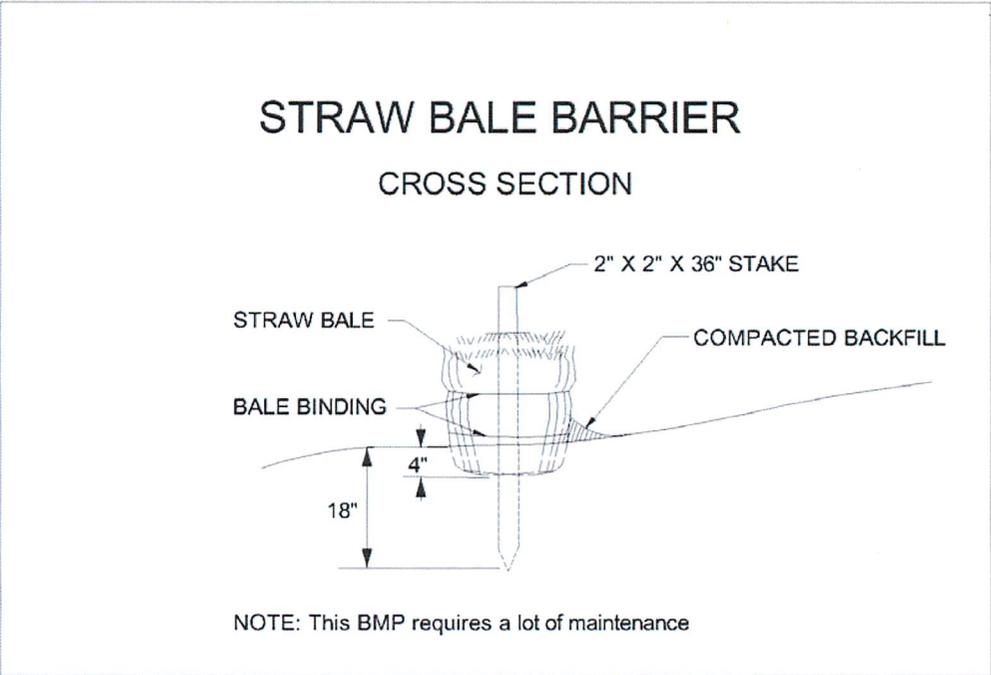
Will this BMP be used? Yes No



F. Straw Bale Barrier

Straw bale barriers shall be placed on contour at the edge of disturbed areas. Both ends of the barrier shall be extended upslope at 45 degrees to the main barrier alignment. Straw bales deteriorate and should be replaced every 3-4 months. They should not be installed in streams, ditches or other areas of concentrated flow.

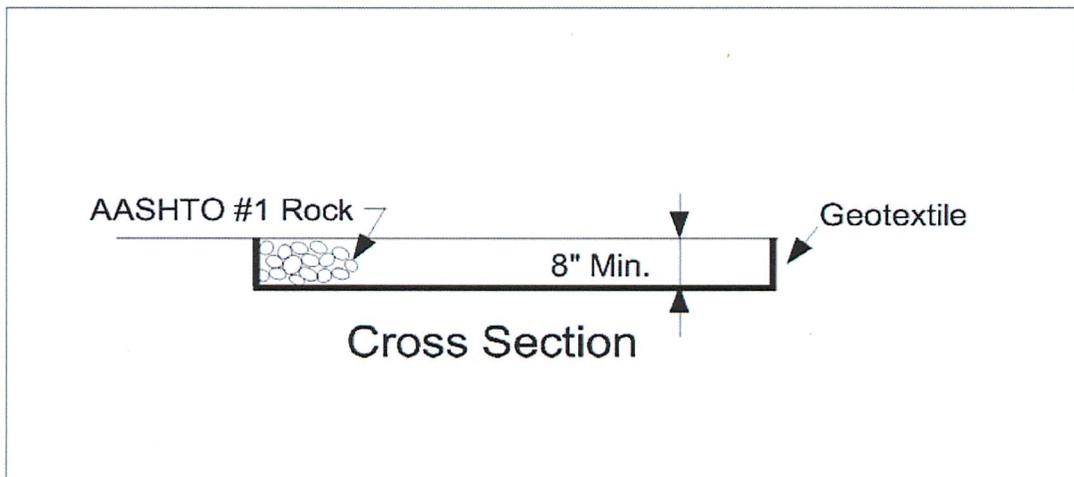
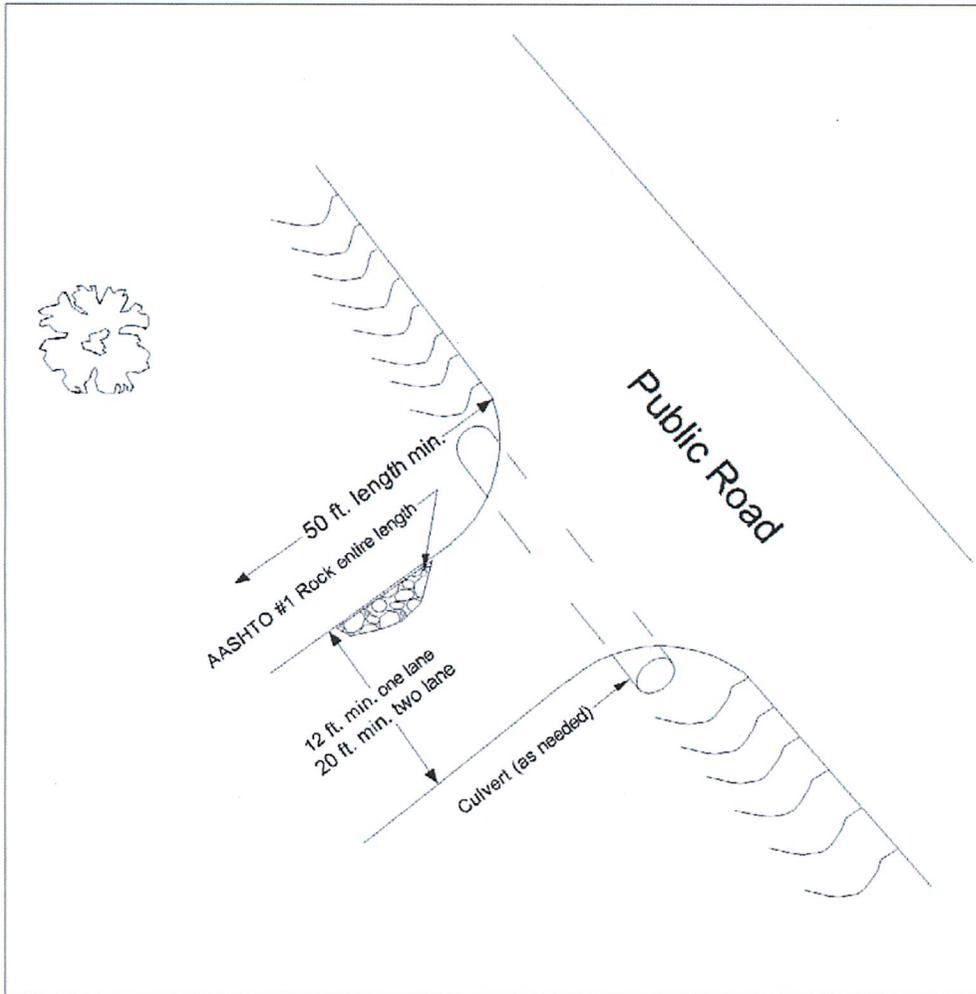
Will this BMP be used? Yes No



G. Stabilized Road Entrance

The purpose is to remove mud from tires and keep it off the road. Construction entrance shall be constantly maintained.

Will this BMP be used? Yes No *One stabilized construction entrance will be installed at project site entrance along Northwestern Ave. See location on map.*



H. Disturbed Area Stabilization (check as appropriate)

	Seeding ^{4,5}	Natural Vegetation ⁵
Log Landing ⁶	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Haul Roads ⁶	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Skid Roads ⁶	<input type="checkbox"/>	<input type="checkbox"/>

Seed mix and seeding rate to be used on critical areas:

All disturbed areas will be seeded with 3 bushels/acre winter wheat to establish rapid cover. All disturbed areas are to be seeded w/warm season grass and/or planted with native trees/shrubs following control of invasive species. Planting is scheduled for Sept/Oct 2011 and permanent seeding in May 2012.

Suggested Seeding Mixes for Landings, Roads and Critical Areas

Mixes	Seeding rate (lb/ acre)	Mixes	Seeding rate (lb/acre)
Permanent		Temporary	
a. Birdsfoot trefoil	8	f. Spring oats	96 (3 bu)
Redtop	3	g. Winter wheat	180 (3 bu)
b. Creeping red fescue*	30	h. Winter rye	168 (3 bu)
Perennial ryegrass	10	i. Annual rye	40
c. Birdsfoot trefoil	8		
Timothy	4		
d. White clover	1		
Kentucky bluegrass	6		
Timothy	2		
e. Annual ryegrass	10		
Redtop	10		
Birdsfoot trefoil	5		

*Recommended for somewhat poor and poorly drained soils in partial shade to full sunlight.

Note: Birdsfoot trefoil, crownvetch, "Lathco" flatpea and white clover seed should be properly inoculated.

9. SCHEDULE AND SEQUENCE OF OPERATIONS

Will this schedule be used? Yes No If not, provide additional information in Section 12.

Starting Date November 1, 2010 Completion Date February 25, 2011

Pre-harvest: Necessary permits will be obtained. Erosion and sediment control BMPs will be installed as specified in this plan. Haul road, landings and skid roads will be constructed.

During harvest: Erosion and sediment control BMPs for haul roads, skid roads and landings shall be maintained. Tops, branches and slash will be removed from ponds, lakes and streams. This plan will be amended or revised to include other BMPs for special or unanticipated circumstances that may occur.

Post harvest: Smooth and reshape roads and landings. Remove culverts and crossings. Install permanent waterbars as specified in this plan. Critical areas will be seeded, fertilized, limed and mulched and garbage/trash removed from the area.

No liming or fertilizing is proposed. the intent is to maintain low fertility in order to discourage reestablishing invasive species.

10. MAINTENANCE

BMPs will be inspected on a weekly basis and after each measurable rainfall event.

Culverts will be cleaned out, repaired or replaced as necessary. N/A

Filter strips will be maintained and respected (timber may be harvested in filter strips).

Haul roads and skid roads will be repaired where signs of accelerated erosion are detected.

Seeding and mulching will be repeated in those areas that appear to be failing or have failed.

Other (describe) "All tops and limbs will be chipped and hauled offsite to the maximum extent practicable"

⁴ Areas to be seeded may require fertilization and liming. Soil testing will provide individualized recommendations for given sites. Recommendations of 300 lbs. of 10-10-10 fertilizer per acre and 2,000 lbs. of lime per acre should be considered to ensure 70% vegetative cover. Seeded areas will be more successful when mulched with a minimum of 2.5 tons of straw or hay per acre. Describe mulching type and rate in Section 12 when used.

⁵ Stabilization of disturbed areas is important. Disturbed areas shall be protected with such BMPs as straw bale barriers, filter fences, mulch, or filter strips, waterbars and other BMPs until vegetation is established. Critical areas such as: highly erodible soils, approaches to stream crossings and landings require establishment of permanent or temporary cover to ensure that erosion does not occur.

⁶ Indicates treatments for individual landings, haul roads or sections, and skid roads identified on the map.

11. SITE CLEANUP

Describe procedures which ensure the proper handling, storage, control, disposal and recycling of timber harvesting materials and waste, including but not limited to fuels, oil, lubricants and other materials brought to the timber harvest site or used in the process of timber harvesting.

- Garbage, fuels or any substance harmful to human, aquatic or fish life, will be prevented from entering springs, streams, ponds, lakes, wetlands or any water course or water body.
- Oils, fuels, lubricants and coolants will be placed in suitable containers and disposed properly.
- All trash and garbage will be collected and disposed properly.
- Other (describe). ***All tops and limbs are to be chipped and hauled offsite.***

12. ADDITIONAL EXPLANATION/COMMENTS (if needed)

See attachment - next page

12. Andorra Meadow Additional Explanations/Comments

The site has been divided into three distinct zones. If project funding is limited, the zones will be completed in the same order as they are currently numbered/ranked.

Beginning on or about November 1, 2010, the project schedule is anticipated to proceed as follows:

1. PPR will contact the E&S control Inspector from the Philadelphia Water Department to arrange a pre-project on-site meeting.
2. Contractor to install Erosion and Sediment control features as outlined in this plan and to include a stabilized construction entrance, temporary access road, broad-based dip and to clear landing area.
3. Clearing /invasive tree removals will begin within the northeastern portions of the site. All logs will be dragged to log landing and either chipped onsite or stockpiled if suitable as sawlogs. All tops will also be dragged to landing and chipped to minimize organic matter within proposed meadow areas.
4. All stumps will be ground out from within areas of proposed meadows.
5. Stabilized construction entrance and temporary access road will be removed and regraded immediately following the removal of all logs and woodchips.
6. All disturbed areas will be temporarily seeded with winter wheat (3 bu./ac.) following completion of site work

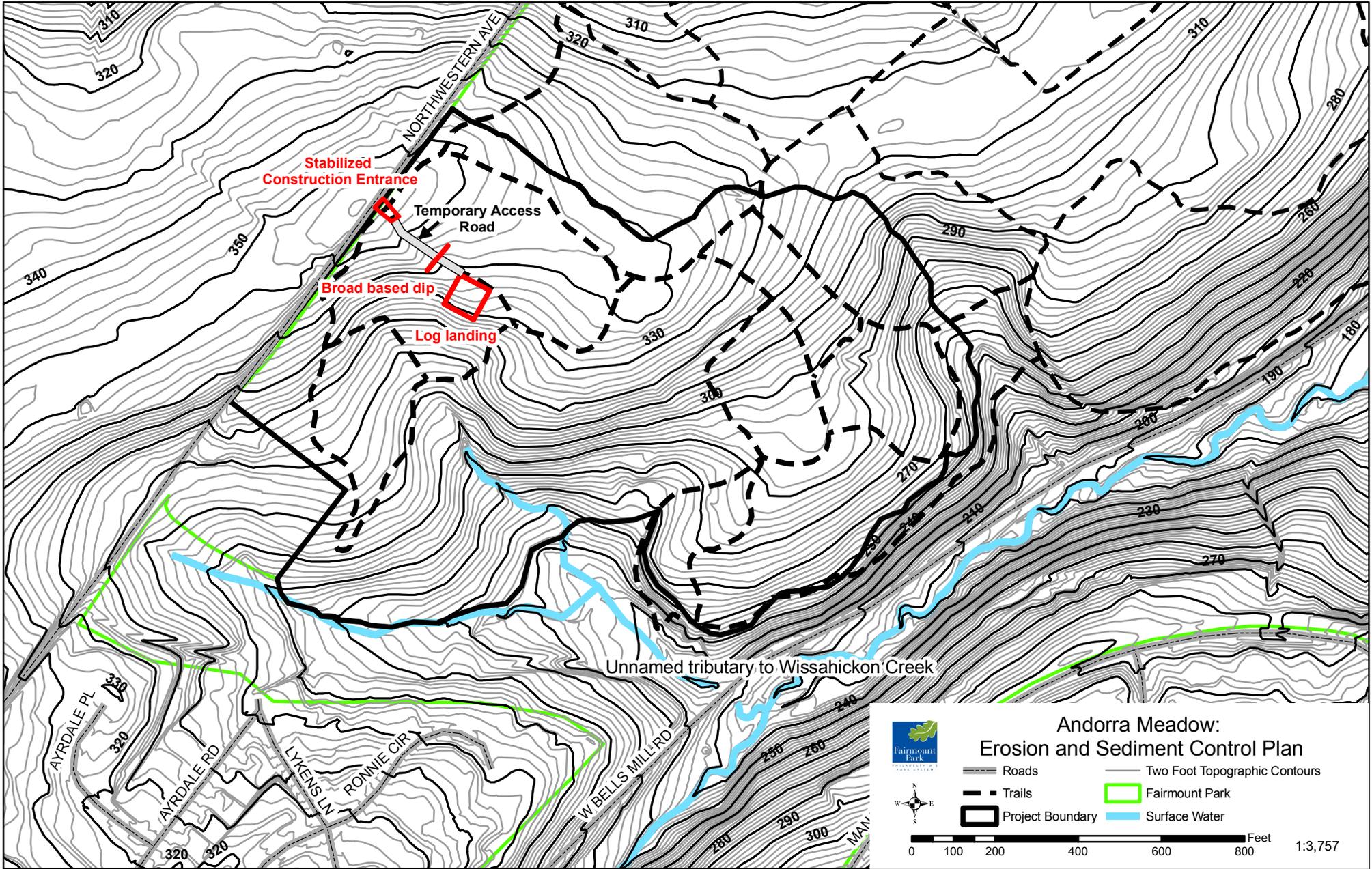
A single intermittent stream is located in the southern portion of the site. No stream crossings are proposed and no equipment will be allowed within 10 ft of the top of bank. No haul roads will be located within 100 feet of this stream corridor.

The amount of tree removal that will occur throughout the site may generally be described as sparse to moderate. No concentrated areas of tree removal are anticipated which will limit the need for dedicated skid trails

The site is currently parkland and is traversed by numerous well used trails. These trails are currently stable and are not subject to erosion. These existing trails will serve as the primary trails for equipment movement. These trails will be eliminated upon project completion. New trails will be construction in accordance with best management practices.

Any wheel ruts left on the site will be graded out at the end of the work

PPR staff will closely monitor the project and evaluate any erosion hazards. We will require the contractor to implement additional soil erosion and sediment control practices as necessary to comply with the "Erosion and Sediment Control Plan for a Timber Harvesting Operation."



Stabilized
Construction Entrance

Temporary Access
Road

Broad based dip

Log landing

Unnamed tributary to Wissahickon Creek

NORTHWESTERN AVE

AYRDALE PL

AYRDALE RD

LYKENS LN

RONNIE CIR

W BELLS MILL RD

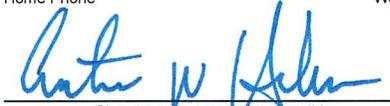
MAN

Bocce Woods

3930-FM-WM0155 Rev. 2/2004

Erosion and Sediment Control Plan for a Timber Harvesting Operation

1. GENERAL INFORMATION

	<u>6/30/10</u> Date
A. Location <u>Bocce Woods, Philadelphia</u> <small>Municipality</small>	<u>Philadelphia</u> <small>County</small>
B. Timber sale area = <u>8.7</u> acres	
C. Landowner <u>Philadelphia Department of Parks and Recreation</u> <small>Name</small>	<u>215.683.0239</u> <small>Home Phone Work Phone</small>
<u>One Parkway, 10th Floor, 1515 Arch Street</u> <small>Street Address</small>	
<u>Philadelphia, PA 19102</u> <small>City State Zip Code</small>	_____ <small>Signature of Landowner</small>
D. Person(s) responsible for construction and maintenance of erosion and sediment control BMPs during earth disturbance activities. (NOTE: If duties are assigned to more than one party, list all others under Section 12 of this plan.)	
<u>Mr. Curtis Helm</u> <small>Name</small>	<u>215.683.0239</u> <small>Home Phone Work Phone</small>
<u>One Parkway, 10th Floor, 1515 Arch Street</u> <small>Street Address</small>	
<u>Philadelphia, PA 19102</u> <small>City State Zip Code</small>	_____ <small>Signature of person(s) responsible</small>
E. Erosion and Sediment Control Plan prepared by:	
<u>Mr. Curtis Helm</u> <small>Name</small>	Phone <u>215.683.0239</u>
<u>One Parkway, 10th Floor, 1515 Arch Street</u> <small>Street Address</small>	
<u>Philadelphia, PA 19102</u> <small>City State Zip Code</small>	_____ <small>Signature of Plan Preparer</small>

2. TOPOGRAPHICAL MAP - See Attachments - Bocce Woods

The map must include the location of the project with respect to roadways, streams, wetlands, lakes, ponds, floodplains, type and extent of vegetation and other identifiable landmarks. A United States Geologic Service (USGS) quadrangle map may be used to show the existing topographical features of the project site and the immediate surrounding area. The map scale site must be large enough to clearly depict the topographical features of the project. Enlargements of the USGS quadrangle map are sufficient.

The scale and north arrow must be plainly marked. A complete legend of all symbols used on the map must also be included.

3. SOIL MAP - See Attachments - Bocce Woods

Soils information is available in soil survey reports, published by the USDA Natural Resource Conservation Service in cooperation with Penn State University, College of Agriculture and others. These reports are available for review at the county conservation district offices.

The soils drainage classes must be examined to determine areas with the best drainage for the placement of haul roads and log landings, and to determine proper retirement treatments.

Provide the following soils information for all disturbed areas.

Map Symbols	Soil Series	Limiting Characteristics ¹ That May Apply to Timber Harvesting Activities (Check as Appropriate)		
		Erosion Hazards ²		
		Slight	Moderate, severe	Seasonably Wet ³
<u>C e B</u>	<u>Chalfont Silt Loam, 0-8% Slopes</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>M a B</u>	<u>Manor Loam, 3-8% Slopes</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>M a D</u>	<u>Manor Loam, 15-25% Slopes</u>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<u>U r A</u>	<u>Urbana Silt Loam, 0-3% Slopes</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<u>G p</u>	<u>Gravel Pit</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

¹ Soils with a moderate or severe erosion hazard or seasonably wet are poor choices for log landing and road locations, and, if possible, alternatives should be considered.

² The degree or ease by which soil particles can be detached from the soil surface. Moderate or severe ratings require additional consideration of soil erosion and sediment control BMPs during logging and road construction.

³ Somewhat poorly drained soils remain wet for a longer period after rain and would be susceptible to disturbance. These soils may be hydric, indicating a possible wetland. They may have to be logged during dry seasons, when the profile may be relatively dry, or when the soils are frozen. They are poor choices for log landing and road locations, and, if possible, alternate areas should be considered.

UdB	Urban Land Chester Complex, 0-8% Slopes
UdC	Urban land Chester Complex, 8-15% Slopes

4. SKETCH MAP - See Attachments - Bocce Woods

The characteristics of the earth disturbance activity. The limits of the harvesting area must be shown on a map(s). Such information as the limits of clearing and grubbing and the areas of cuts and fills for roads and landings, and other proposed disturbances for the timber harvesting area are to be included. Roads, skid roads and landings located within 50 ft. of a stream bank may require a Department Chapter 105 Water Obstruction and Encroachment. The following should be clearly shown on the sketch map:

- Dimensions
- North Arrow
- Landings
- Haul Roads
- Skid Roads
- Wetland Crossings
- Stream Crossings
- Equipment Maintenance/Fueling Areas
- Existing Roads

5. RUNOFF

The amount of runoff from the timber harvest area and its upstream watershed area. You do not have to provide runoff calculations unless you plan to use BMPs different from those described in Section 8. If you use different BMPs, your calculations must include an analysis showing any impact that runoff may have on existing downstream watercourses and their resistance to erosion.

6. RECEIVING WATERS

All streams in Pennsylvania are classified based upon their designated and existing uses and water quality criteria. Designated uses for waters of this Commonwealth are found in 25 Pa. Code §93.9a-z at <http://www.pacode.com/secure/data/025/chapter93/chap93toc.html>. Existing uses of waters of this Commonwealth are found at the DEP website <http://www.dep.state.pa.us>. Type the phrase "existing use" in the DEP Keyword box. The county conservation district office can also supply this information. List the bodies of water likely to receive direct runoff within or from the timber harvest area.

<u>Name</u>	<u>Designated/Existing Use</u>
Cobbs Creek	W M F / M F

7. ESTIMATED DISTURBED AREA

	Total Length (ft)	Average Width (ft)	Area (sq ft)
Haul Roads	50	15	750
Skid Roads			
Landings (1)	100	100	= 10,000
Total Area (sq. ft.)		=	10,750
		÷	43,560 sq ft/A = 0.25 acres
			<small>Acres disturbed by earth disturbance activities.</small>

If the total area of earth disturbance activities (sum of area disturbed by haul roads, skid roads and landings) consists of 25 acres or more, an Erosion and Sediment Control Permit must be obtained.

Has application been made for required stream crossing permits? Yes No Not Applicable

At all stream crossing locations, runoff must be directed to a sediment removal area, i.e., filter strip, straw bale, silt fence, sump, a trap for treatment. Waterbars and/or broad based dips should be installed and maintained as required on the approaches to the stream crossing.

NOTE: Cobbs Creek is located approximately 100 feet south of the project site. The contractor will not cross this creek and will not operate equipment within 100 feet of this creek.

8. DESCRIPTION OF EROSION AND SEDIMENT CONTROL MEASURES

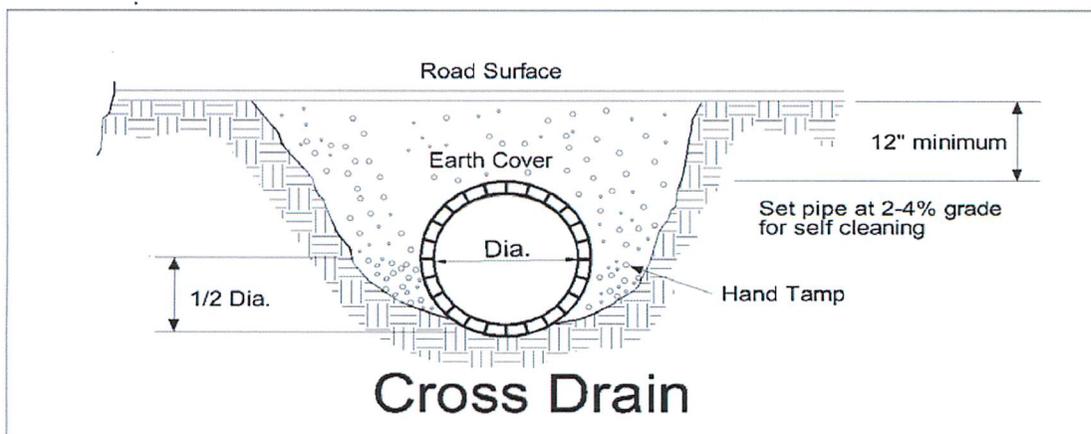
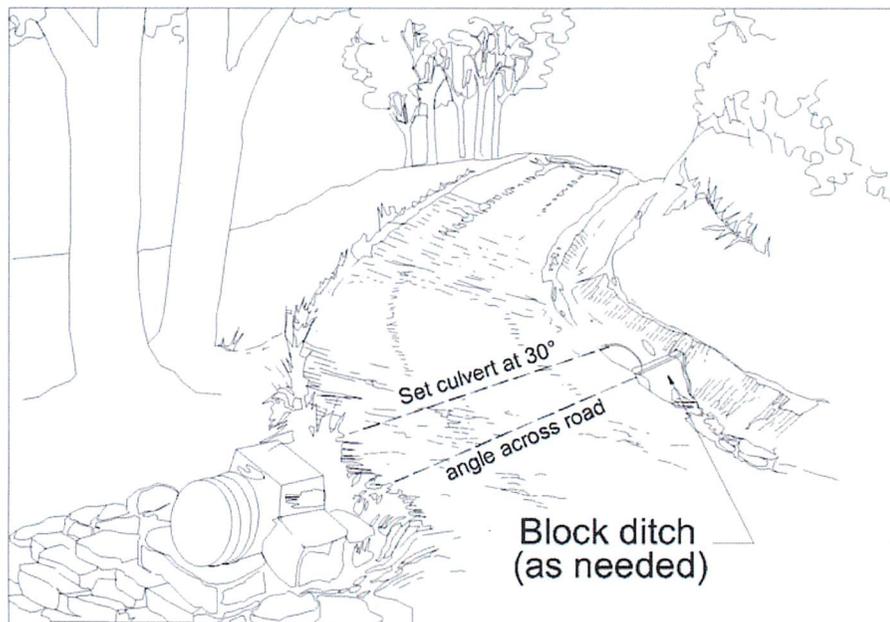
The following standard BMP drawings and recommended spacings (Sections A-H) have been provided to fulfill the requirements of this plan. If you plan to use any of these recommended BMPs, please check the appropriate boxes for Sections A through H. If you plan to use alternative BMPs, you must provide drawings showing the details, specifications and spacing.

A. Cross-drain culvert

Culverts will be installed before the ground freezes. Culverts shall be placed with a slope of 2 to 4 percent and cross the road at a 30-degree downslope angle. Recommend 12" pipe or larger culverts. Will this BMP be used? Yes No Will recommended spacing be used? Yes No

Road Grade (% Slope)	Recommended Spacing (feet)	Alternative Spacing* (feet)
2	500	_____
3	400	_____
4	350	_____
5-6	300	_____
7-8	250	_____
9-11	200	_____
12-13	150	_____
14+	100	_____

*If alternative spacings are used, please make sure reasons for their use are explained.



B. Waterbars

Waterbars on skid roads will be maintained throughout the entire job and installed permanently upon job completion.

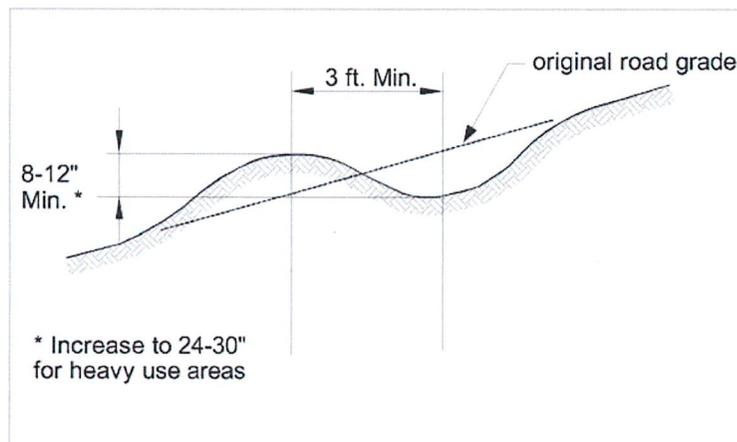
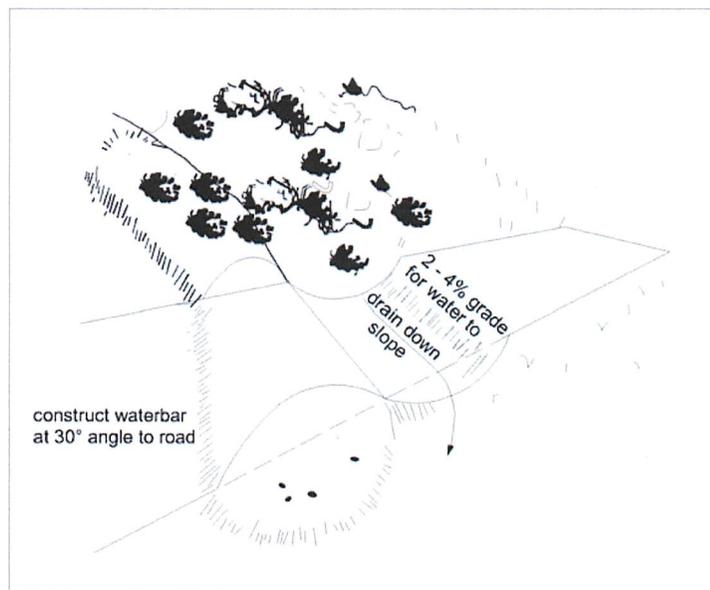
Waterbars will be installed before the ground freezes and will be spaced as indicated below.

Will this BMP be used? Yes No Will recommended spacing be used? Yes No

This practice will be used if erosion is noted at log landings or along trails used for equipment and material movement.

Road Grade (% Slope)	Recommended Spacing (feet)	Alternative Spacing* (feet)
2	250	_____
5	135	_____
10	80	_____
15	60	_____
20	45	_____
25	40	_____
30	35	_____
40	30	_____

*If longer spacings are used, please make sure reasons for their use are explained.



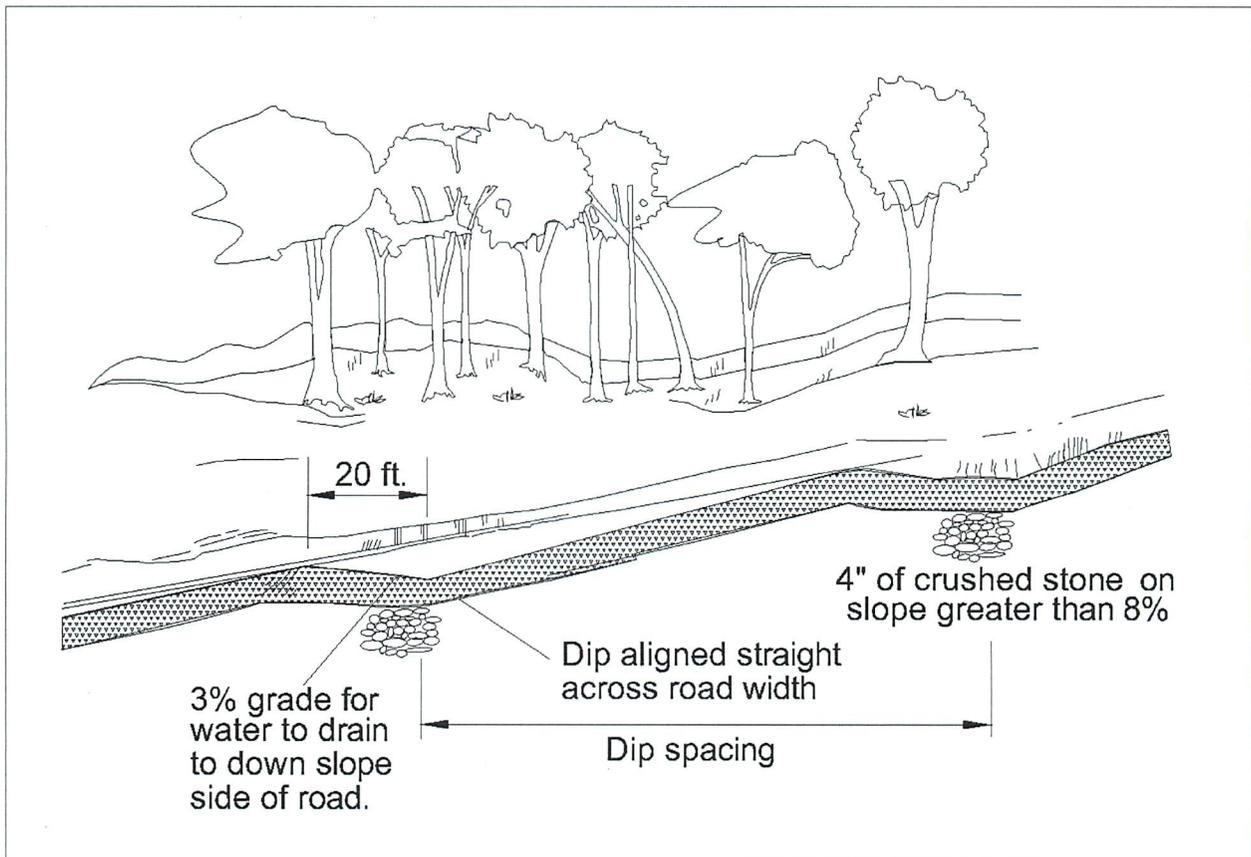
C. Broad-based dips

Broad-based dips will be installed and worked before the ground freezes. Broad-based dips on the road system are planned to be spaced as indicated below.

Will this BMP be used? Yes No Will recommended spacing be used? Yes No

Road Grade (% Slope)	Recommended Spacing (feet)	Alternative Spacing* (feet)
2	300	_____
3	250	_____
4	200	_____
5	180	_____
6	170	_____
7	160	_____
8	150	_____
9-10	140	_____

*If longer spacings are used, please make sure reasons for their use are explained.



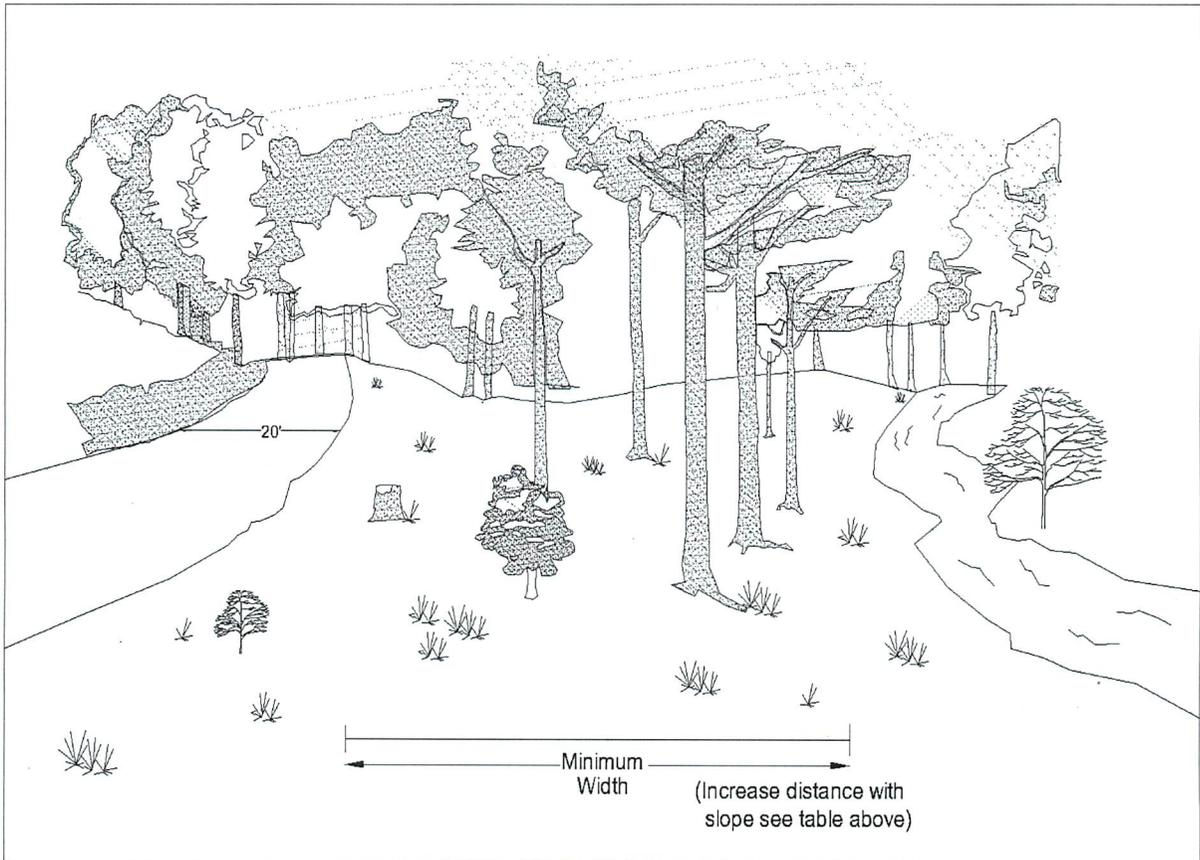
D. Filter strips

Filter strip widths by slope on land between roads and perennial streams.
 The width of the filter strip depends on the slope between the road and the stream.

Will this BMP be used? Yes No *No equipment will be operated within 100 feet of Cobbs Creek which is south of the project site.*

Slope of Land Between Road and Stream (%)	Minimum width of Filter Strip (feet) +
0	25++
10	45++
20	65
30	85
40	105
50	125
60	145
70	165

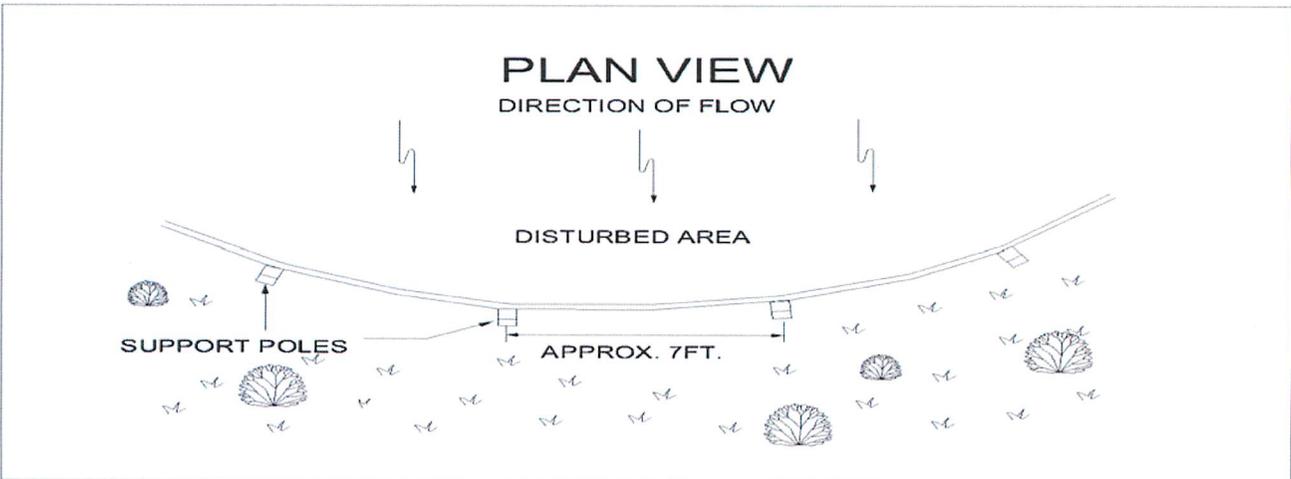
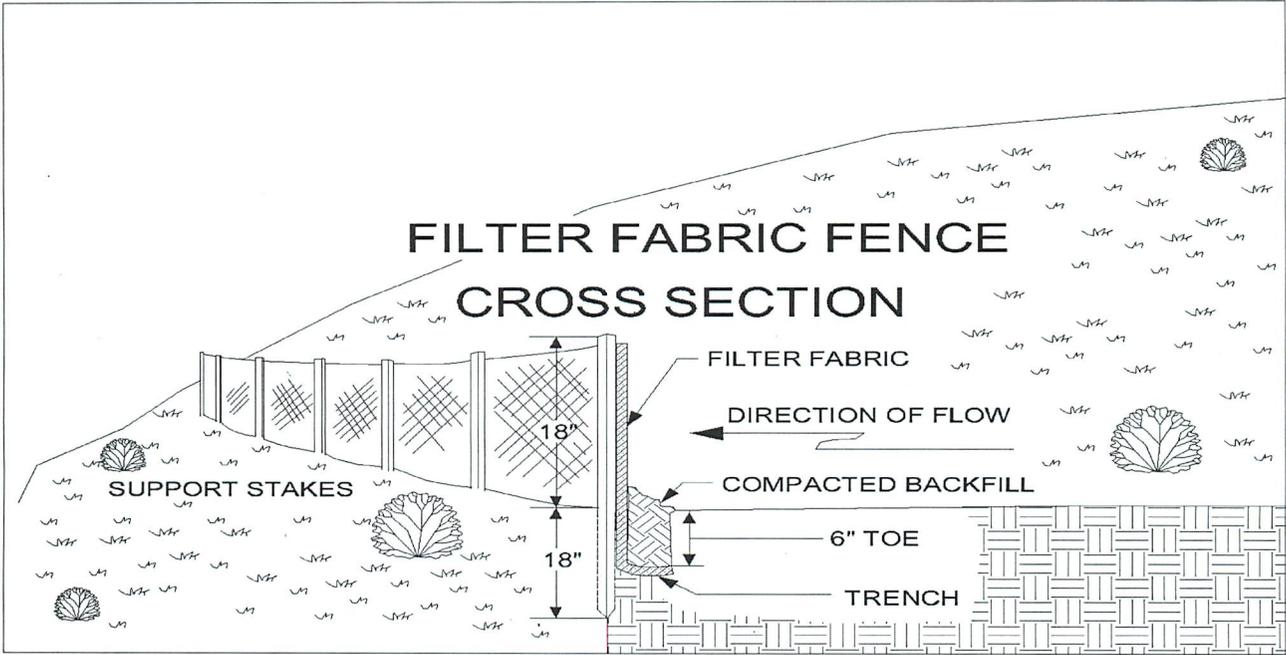
- + Widths should be doubled when the harvesting activity is located on municipal water supplies or where receiving waters have a designated use/existing use of High Quality or Exceptional Value.
- ++ Earth disturbance 50 feet or less from a stream requires a water obstruction and encroachment permit from the appropriate DEP Regional Office, Soils and Waterways Section.



E. Filter Fabric Fence

Filter fabric fence must be installed on contour at the edge of disturbed areas. Both ends of each fence section must be extended upslope at 45 degrees to the main fence alignment. They should not be installed in streams, ditches or other areas of concentrated flow. Install filter fabric fence before the ground freezes.

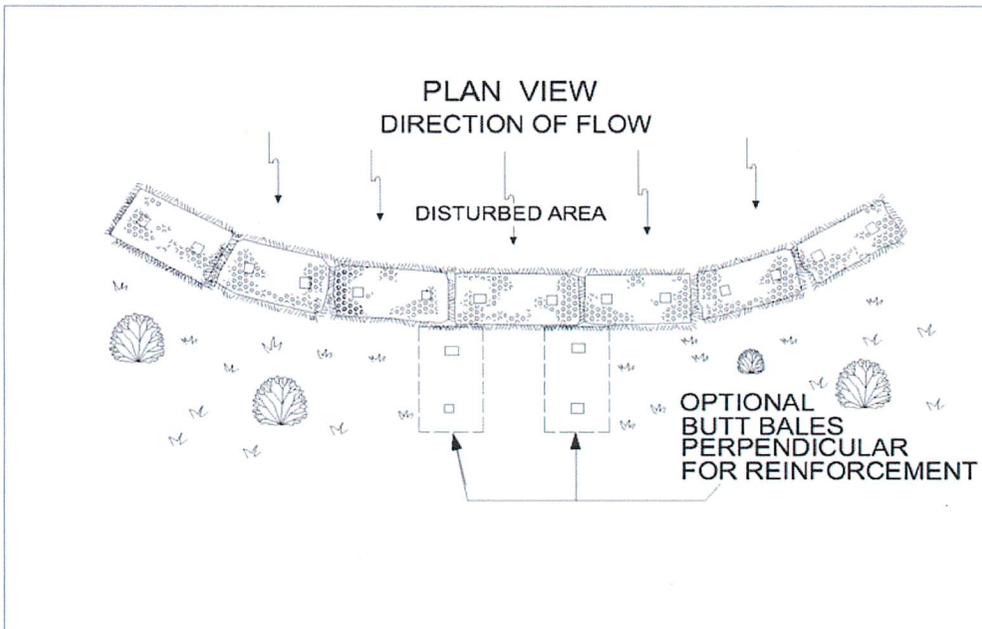
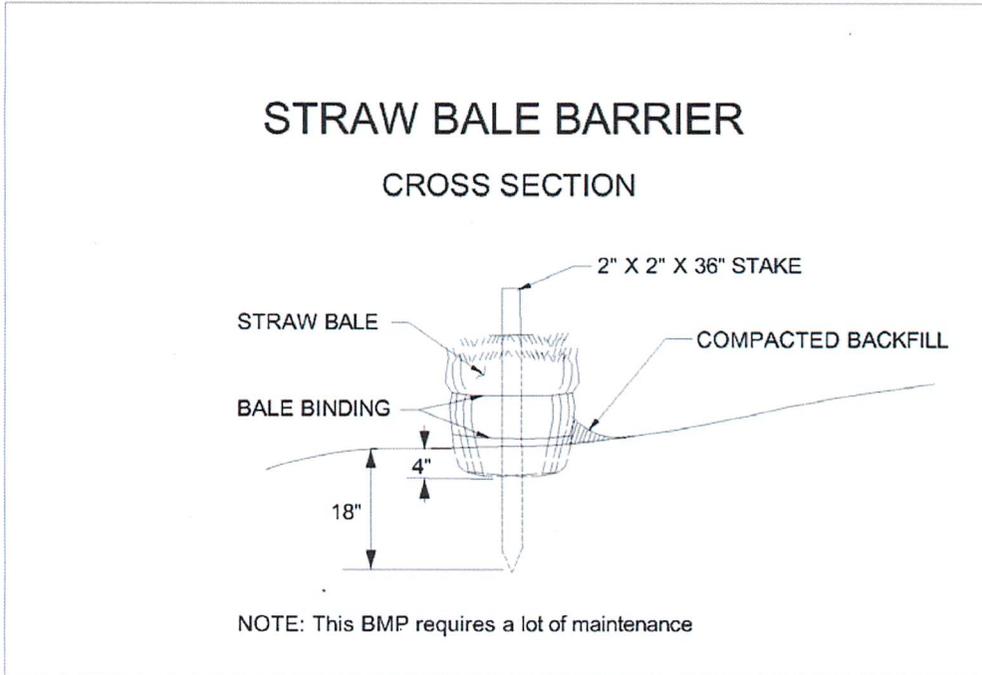
Will this BMP be used? Yes No



F. Straw Bale Barrier

Straw bale barriers shall be placed on contour at the edge of disturbed areas. Both ends of the barrier shall be extended upslope at 45 degrees to the main barrier alignment. Straw bales deteriorate and should be replaced every 3-4 months. They should not be installed in streams, ditches or other areas of concentrated flow.

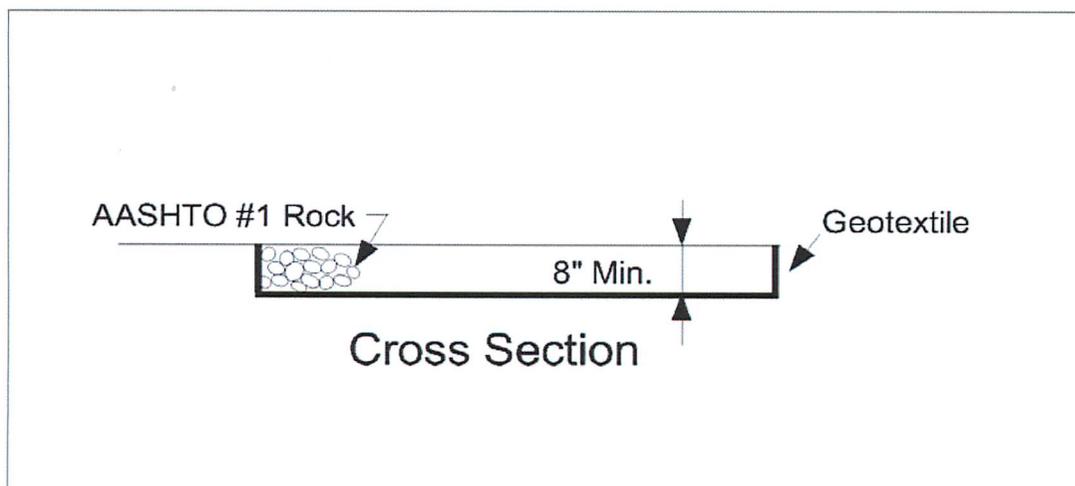
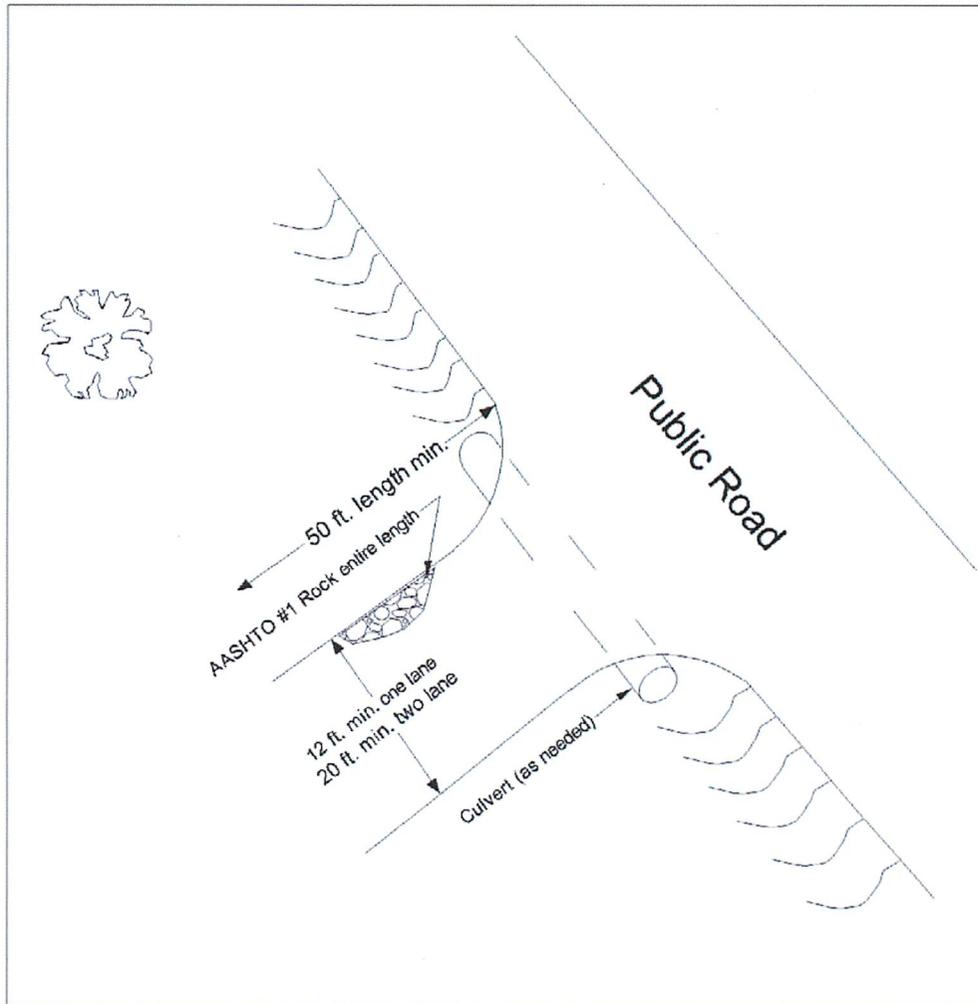
Will this BMP be used? Yes No



G. Stabilized Road Entrance

The purpose is to remove mud from tires and keep it off the road. Construction entrance shall be constantly maintained.

Will this BMP be used? Yes No **At site entrance along North Daggett Street. See location on map.**



H. Disturbed Area Stabilization (check as appropriate)

	Seeding ^{4,5}	Natural Vegetation ⁵
Log Landing ⁶	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Haul Roads ⁶	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Skid Roads ⁶	N/A <input type="checkbox"/>	<input type="checkbox"/>

Seed mix and seeding rate to be used on critical areas:

All disturbed areas will be seeded with 3 bushels/acre of winter wheat to establish quick cover and control erosion.

Suggested Seeding Mixes for Landings, Roads and Critical Areas

Mixes	Seeding rate (lb/ acre)	Mixes	Seeding rate (lb/acre)
Permanent		Temporary	
a. Birdsfoot trefoil	8	f. Spring oats	96 (3 bu)
Redtop	3	g. Winter wheat	180 (3 bu)
b. Creeping red fescue*	30	h. Winter rye	168 (3 bu)
		i. Annual rye	40
Perennial ryegrass	10		
c. Birdsfoot trefoil	8		
Timothy	4		
d. White clover	1		
Kentucky bluegrass	6		
Timothy	2		
e. Annual ryegrass	10		
Redtop	10		
Birdsfoot trefoil	5		

*Recommended for somewhat poor and poorly drained soils in partial shade to full sunlight.

Note: Birdsfoot trefoil, crownvetch, "Lathco" flatpea and white clover seed should be properly inoculated.

9. SCHEDULE AND SEQUENCE OF OPERATION

Will this schedule be used? Yes No If not, provide additional information in Section 12.

Starting Date: November 1, 2010

Completion Date: February 25, 2011

- Pre-harvest:** Necessary permits will be obtained. Erosion and sediment control BMPs will be installed as specified in this plan. Haul road, landings and skid roads will be constructed.
- During harvest:** Erosion and sediment control BMPs for haul roads, skid roads and landings shall be maintained. Tops, branches and slash will be removed from ponds, lakes and streams. This plan will be amended or revised to include other BMPs for special or unanticipated circumstances that may occur.
- Post harvest:** Smooth and reshape roads and landings. Remove culverts and crossings. Install permanent waterbars as specified in this plan. Critical areas will be seeded, fertilized, limed and mulched and garbage/trash removed from the area.

No liming or fertilizing is proposed. The intent is to maintain low fertility in order to discourage reestablishing invasive species.

10. MAINTENANCE

BMPs will be inspected on a weekly basis and after each measurable rainfall event.

Culverts will be cleaned out, repaired or replaced as necessary. N/A

Filter strips will be maintained and respected (timber may be harvested in filter strips).

Haul roads and skid roads will be repaired where signs of accelerated erosion are detected.

Seeding and mulching will be repeated in those areas that appear to be failing or have failed.

Other (describe)

⁴ Areas to be seeded may require fertilization and liming. Soil testing will provide individualized recommendations for given sites. Recommendations of 300 lbs. of 10-10-10 fertilizer per acre and 2,000 lbs. of lime per acre should be considered to ensure 70% vegetative cover. Seeded areas will be more successful when mulched with a minimum of 2.5 tons of straw or hay per acre. Describe mulching type and rate in Section 12 when used.

⁵ Stabilization of disturbed areas is important. Disturbed areas shall be protected with such BMPs as straw bale barriers, filter fences, mulch, or filter strips, waterbars and other BMPs until vegetation is established. Critical areas such as: highly erodible soils, approaches to stream crossings and landings require establishment of permanent or temporary cover to ensure that erosion does not occur.

⁶ Indicates treatments for individual landings, haul roads or sections, and skid roads identified on the map.

11. SITE CLEANUP

Describe procedures which ensure the proper handling, storage, control, disposal and recycling of timber harvesting materials and waste, including but not limited to fuels, oil, lubricants and other materials brought to the timber harvest site or used in the process of timber harvesting.

- Garbage, fuels or any substance harmful to human, aquatic or fish life, will be prevented from entering springs, streams, ponds, lakes, wetlands or any water course or water body.
- Oils, fuels, lubricants and coolants will be placed in suitable containers and disposed properly.
- All trash and garbage will be collected and disposed properly.
- Other (describe). All tops and limbs will be chipped and hauled offsite to the maximum extent practicable

12. ADDITIONAL EXPLANATION/COMMENTS (if needed)

See attachment - next page

12. Bocce Woods - Additional Explanations/Comments

The site has been divided into two distinct zones. If project funding is limited, the zones will be completed in the same order as they are currently numbered/ranked.

Beginning on or about November 1, 2010, the project schedule is anticipated to proceed as follows:

1. PPR will contact the E&S control Inspector from the Philadelphia Water Department to arrange a pre-project on-site meeting.
2. Contractor to install Erosion and Sediment control features as outlined in this plan and to include a stabilized construction entrance and to clear landing area.
3. Clearing /invasive tree removals will begin within the northwestern portions of the site. All logs will be dragged to log landing near site center and either chipped onsite or stockpiled if suitable as sawlogs. All tops will also be dragged to landing and chipped to minimize organic matter within proposed meadow areas.
4. Stabilized construction entrance and log landing will be removed and/or regraded immediately following the removal of all logs and woodchips.
5. All disturbed areas will be temporarily seeded with winter wheat (3 bu./ac.) following completion of site work

Cobbs Creek is located approximately 100 feet south of the project site. No stream crossings are proposed and no equipment is anticipated to move beyond the project limits. No haul roads will be located within 100 feet of the Creek.

The amount of tree removal that will occur throughout the site may generally be described as sparse to moderate. No concentrated areas of tree removal are anticipated which will limit the need for dedicated skid trails

The site is currently parkland and is traversed by numerous well used trails. These trails are currently stable and are not subject to erosion. These existing trails will serve as the primary trails for equipment movement. These trails will be restored to pre-existing condition or better following project completion.

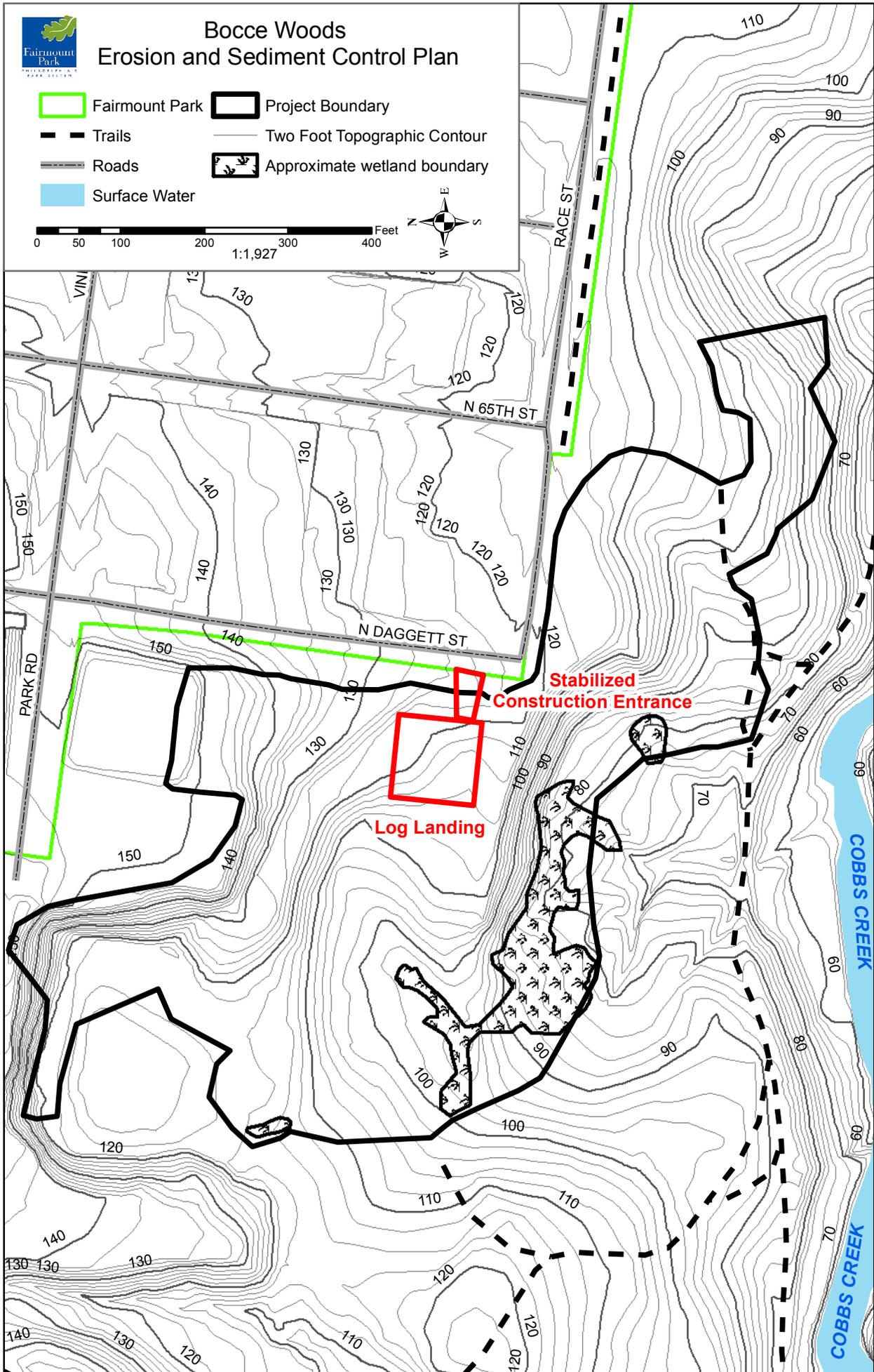
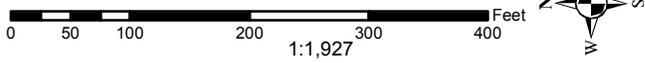
Any wheel ruts left on the site will be graded out at the end of the work

PPR staff will closely monitor the project and evaluate any erosion hazards. We will require the contractor to implement additional soil erosion and sediment control practices as necessary to comply with the "Erosion and Sediment Control Plan for a Timber Harvesting Operation."



Bocce Woods Erosion and Sediment Control Plan

- Fairmount Park
- Project Boundary
- Trails
- Two Foot Topographic Contour
- Roads
- Approximate wetland boundary
- Surface Water

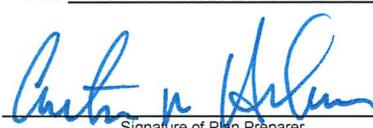


Carpenter's Woods

3930-FM-WM0155 Rev. 2/2004

Erosion and Sediment Control Plan for a Timber Harvesting Operation

1. GENERAL INFORMATION

	<u>6/30/10</u> Date
A. Location <u>Carpenter's Woods, Philadelphia</u> <small>Municipality</small>	<u>Philadelphia</u> <small>County</small>
B. Timber sale area = <u>10.7</u> acres	
C. Landowner <u>Philadelphia Department of Parks and Recreation</u> <small>Name</small>	<u>215.683.0239</u> <small>Home Phone Work Phone</small>
<u>One Parkway, 10th Floor, 1515 Arch Street</u> <small>Street Address</small>	
<u>Philadelphia, PA 19102</u> <small>City State Zip Code</small>	_____ <small>Signature of Landowner</small>
D. Person(s) responsible for construction and maintenance of erosion and sediment control BMPs during earth disturbance activities. (NOTE: If duties are assigned to more than one party, list all others under Section 12 of this plan.)	
<u>Mr. Curtis Helm</u> <small>Name</small>	<u>215.683.0239</u> <small>Home Phone Work Phone</small>
<u>One Parkway, 10th Floor, 1515 Arch Street</u> <small>Street Address</small>	 _____ <small>Signature of person(s) responsible</small>
<u>Philadelphia, PA 19102</u> <small>City State Zip Code</small>	
E. Erosion and Sediment Control Plan prepared by:	
<u>Mr. Curtis Helm</u> <small>Name</small>	<u>215.683.0239</u> <small>Phone</small>
<u>One Parkway, 10th Floor, 1515 Arch Street</u> <small>Street Address</small>	 _____ <small>Signature of Plan Preparer</small>
<u>Philadelphia, PA 19102</u> <small>City State Zip Code</small>	

2. TOPOGRAPHICAL MAP - See Attachments - Carpenter's Woods

The map must include the location of the project with respect to roadways, streams, wetlands, lakes, ponds, floodplains, type and extent of vegetation and other identifiable landmarks. A United States Geologic Service (USGS) quadrangle map may be used to show the existing topographical features of the project site and the immediate surrounding area. The map scale site must be large enough to clearly depict the topographical features of the project. Enlargements of the USGS quadrangle map are sufficient.

The scale and north arrow must be plainly marked. A complete legend of all symbols used on the map must also be included.

3. SOIL MAP - See Attachments - Carpenter's Woods

Soils information is available in soil survey reports, published by the USDA Natural Resource Conservation Service in cooperation with Penn State University, College of Agriculture and others. These reports are available for review at the county conservation district offices.

The soils drainage classes must be examined to determine areas with the best drainage for the placement of haul roads and log landings, and to determine proper retirement treatments.

Provide the following soils information for all disturbed areas.

NOTE: No landing or haul road is proposed, existing network of trails will be used for any skidding. Most work will be focused on site perimeters.

Map Symbols	Soil Series	Limiting Characteristics ¹ That May Apply to Timber Harvesting Activities (Check as Appropriate)		
		Erosion Hazards ²		Seasonably Wet ³
		Slight	Moderate, severe	
<u>MaB</u>	<u>Manor Loam, 3-8% Slopes</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>McE</u>	<u>Manor & Chester extremely Stony Loam, 25-50% Slopes</u>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<u>MbD</u>	<u>Manor Extremely Stony Loam, 8-25% Slopes</u>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<u>Ub</u>	<u>Urban Land, 0-8% Slopes</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>Ha</u>	<u>Hatboro Silt Loam</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

¹ Soils with a moderate or severe erosion hazard or seasonably wet are poor choices for log landing and road locations, and, if possible, alternatives should be considered.

² The degree or ease by which soil particles can be detached from the soil surface. Moderate or severe ratings require additional consideration of soil erosion and sediment control BMPs during logging and road construction.

³ Somewhat poorly drained soils remain wet for a longer period after rain and would be susceptible to disturbance. These soils may be hydric, indicating a possible wetland. They may have to be logged during dry seasons, when the profile may be relatively dry, or when the soils are frozen. They are poor choices for log landing and road locations, and, if possible, alternate areas should be considered.

4. SKETCH MAP - See Attachments - Carpenter's Woods

The characteristics of the earth disturbance activity. The limits of the harvesting area must be shown on a map(s). Such information as the limits of clearing and grubbing and the areas of cuts and fills for roads and landings, and other proposed disturbances for the timber harvesting area are to be included. Roads, skid roads and landings located within 50 ft. of a stream bank may require a Department Chapter 105 Water Obstruction and Encroachment. The following should be clearly shown on the sketch map:

- Dimensions
- North Arrow
- Landings
- Haul Roads
- Skid Roads
- Wetland Crossings
- Stream Crossings
- Equipment Maintenance/Fueling Areas
- Existing Roads

5. RUNOFF

The amount of runoff from the timber harvest area and its upstream watershed area. You do not have to provide runoff calculations unless you plan to use BMPs different from those described in Section 8. If you use different BMPs, your calculations must include an analysis showing any impact that runoff may have on existing downstream watercourses and their resistance to erosion.

6. RECEIVING WATERS

All streams in Pennsylvania are classified based upon their designated and existing uses and water quality criteria. Designated uses for waters of this Commonwealth are found in 25 Pa. Code §93.9a-z at <http://www.pacode.com/secure/data/025/chapter93/chap93toc.html>. Existing uses of waters of this Commonwealth are found at the DEP website <http://www.dep.state.pa.us>. Type the phrase "existing use" in the DEP Keyword box. The county conservation district office can also supply this information. List the bodies of water likely to receive direct runoff within or from the timber harvest area.

<u>Name</u>	<u>Designated/Existing Use</u>
Unnamed Tributary to Wissahickon Creek	T S F , M F

7. ESTIMATED DISTURBED AREA

	Total Length (ft)	Average Width (ft)	Area (sq ft)
Haul Roads	N/A		
Skid Roads	N/A		=
Landings (1)	N/A		=
Total Area (sq. ft.) =			43,560 sq ft/A =

Acres disturbed by earth disturbance activities.

If the total area of earth disturbance activities (sum of area disturbed by haul roads, skid roads and landings) consists of 25 acres or more, an Erosion and Sediment Control Permit must be obtained.

Has application been made for required stream crossing permits? Yes No Not Applicable

At all stream crossing locations, runoff must be directed to a sediment removal area, i.e., filter strip, straw bale, silt fence, sump, a trap for treatment. Waterbars and/or broad based dips should be installed and maintained as required on the approaches to the stream crossing.

NOTE: An unnamed tributary of the Wissahickon Creek roughly bisects the site. The contractor will not cross this stream and will not operate equipment within 10' of the top of bank. No stream crossings are proposed. The majority of the proposed tree removal will occur proximal to the perimeter of the site. It is anticipated that most work will be performed by staging equipment along the adjacent paved roads or along existing trails.

8. DESCRIPTION OF EROSION AND SEDIMENT CONTROL MEASURES

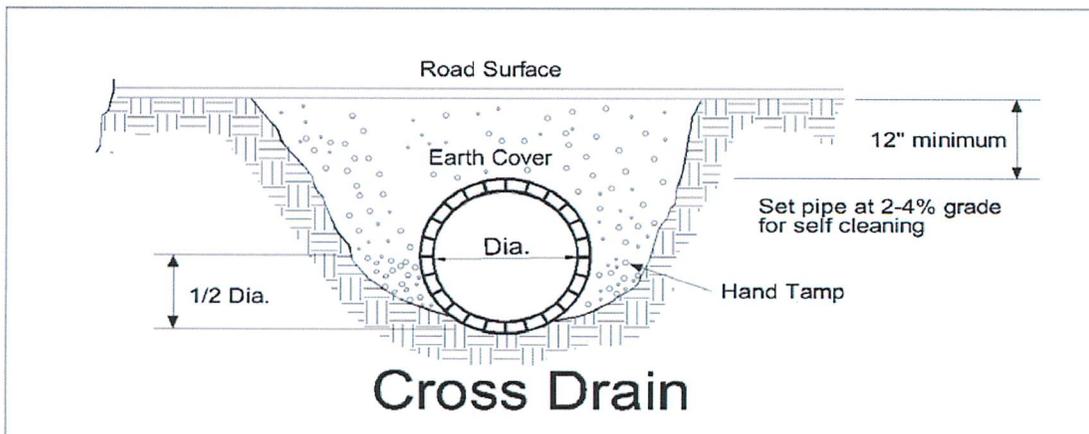
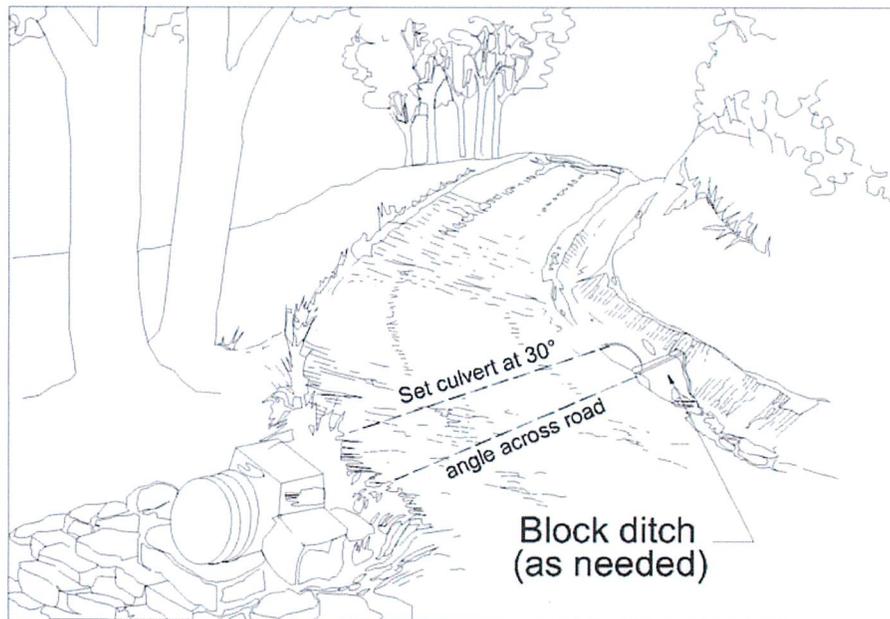
The following standard BMP drawings and recommended spacings (Sections A-H) have been provided to fulfill the requirements of this plan. If you plan to use any of these recommended BMPs, please check the appropriate boxes for Sections A through H. If you plan to use alternative BMPs, you must provide drawings showing the details, specifications and spacing.

A. Cross-drain culvert

Culverts will be installed before the ground freezes. Culverts shall be placed with a slope of 2 to 4 percent and cross the road at a 30-degree downslope angle. Recommend 12" pipe or larger culverts. Will this BMP be used? Yes No Will recommended spacing be used? Yes No

Road Grade (% Slope)	Recommended Spacing (feet)	Alternative Spacing* (feet)
2	500	_____
3	400	_____
4	350	_____
5-6	300	_____
7-8	250	_____
9-11	200	_____
12-13	150	_____
14+	100	_____

*If alternative spacings are used, please make sure reasons for their use are explained.



B. Waterbars

Waterbars on skid roads will be maintained throughout the entire job and installed permanently upon job completion.

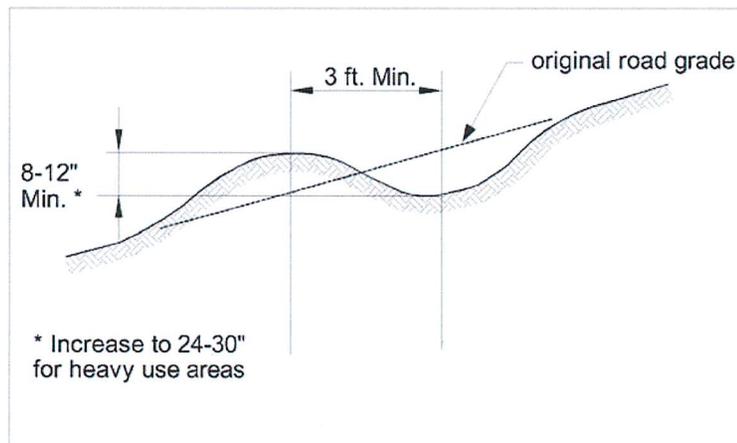
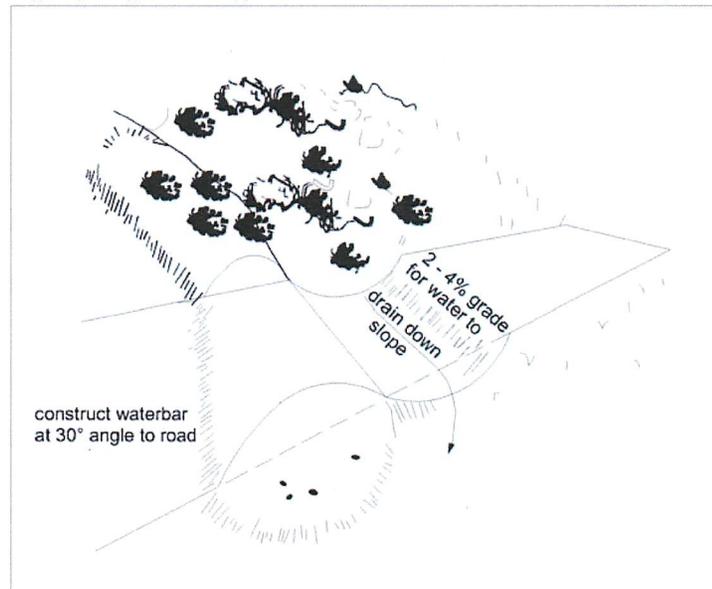
Waterbars will be installed before the ground freezes and will be spaced as indicated below.

Will this BMP be used? Yes No Will recommended spacing be used? Yes No

This practice will be used if erosion is noted along existing trails to be used for equipment and material movement.

Road Grade (% Slope)	Recommended Spacing (feet)	Alternative Spacing* (feet)
2	250	_____
5	135	_____
10	80	_____
15	60	_____
20	45	_____
25	40	_____
30	35	_____
40	30	_____

*If longer spacings are used, please make sure reasons for their use are explained.



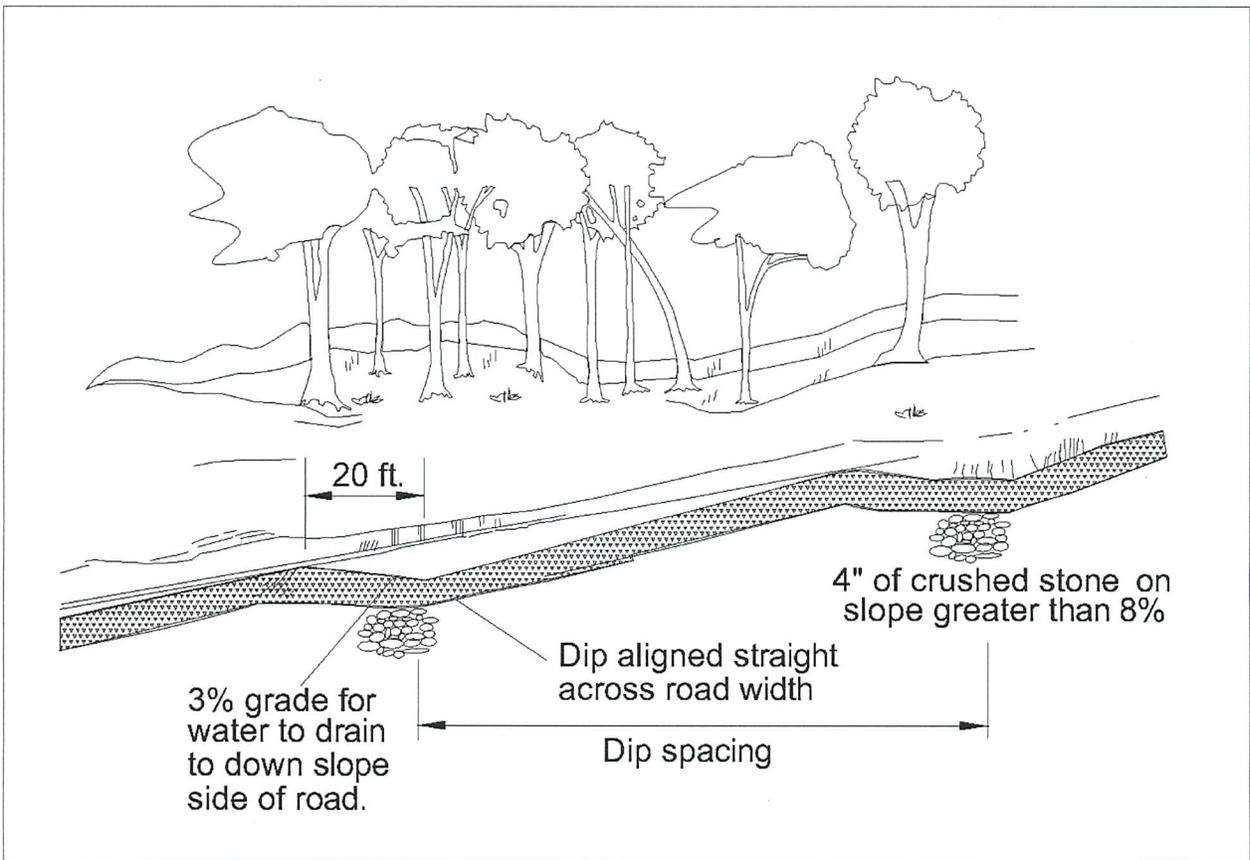
C. Broad-based dips

Broad-based dips will be installed and worked before the ground freezes. Broad-based dips on the road system are planned to be spaced as indicated below.

Will this BMP be used? Yes No Will recommended spacing be used? Yes No

Road Grade (% Slope)	Recommended Spacing (feet)	Alternative Spacing* (feet)
2	300	_____
3	250	_____
4	200	_____
5	180	_____
6	170	_____
7	160	_____
8	150	_____
9-10	140	_____

*If longer spacings are used, please make sure reasons for their use are explained.



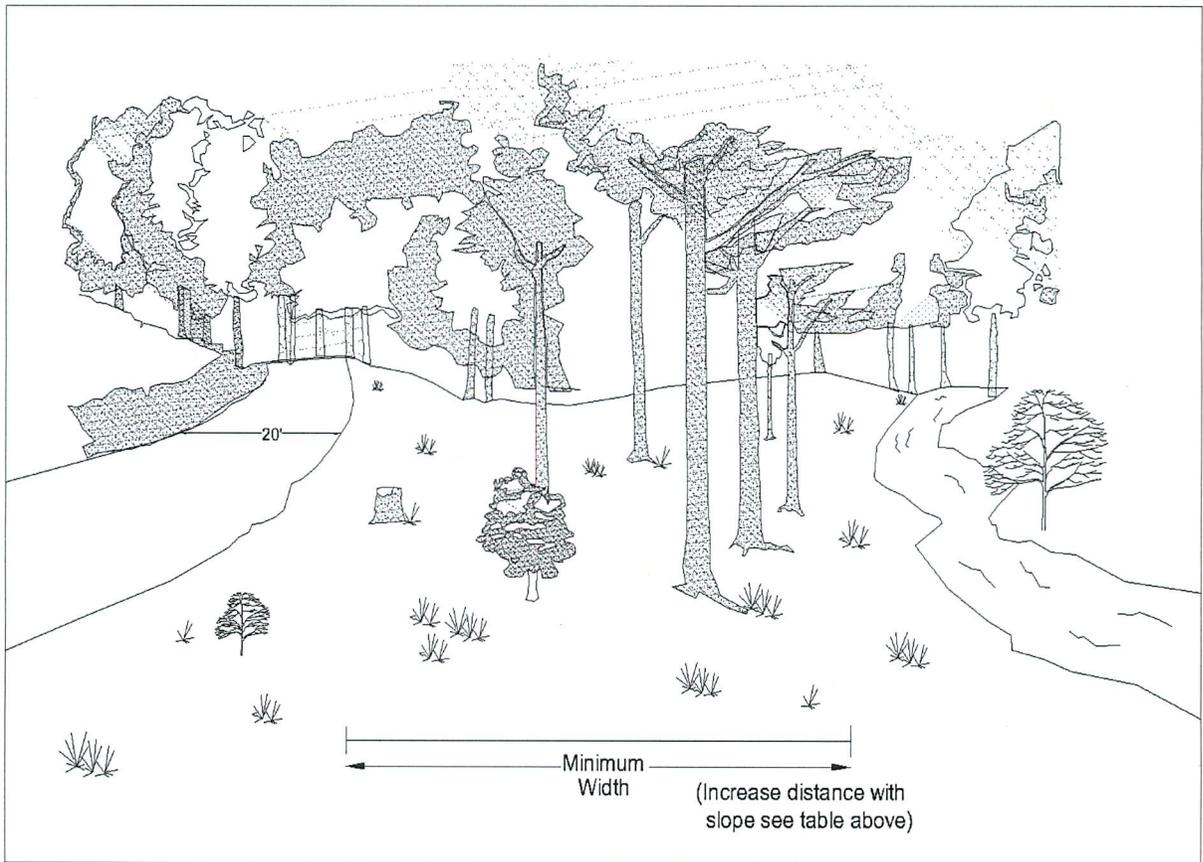
D. Filter strips

Filter strip widths by slope on land between roads and perennial streams.
 The width of the filter strip depends on the slope between the road and the stream.

Will this BMP be used? Yes No *Work will be staged from site perimeter roads and existing trail network. No new access roads are proposed.*

Slope of Land Between Road and Stream (%)	Minimum width of Filter Strip (feet) +
0	25++
10	45++
20	65
30	85
40	105
50	125
60	145
70	165

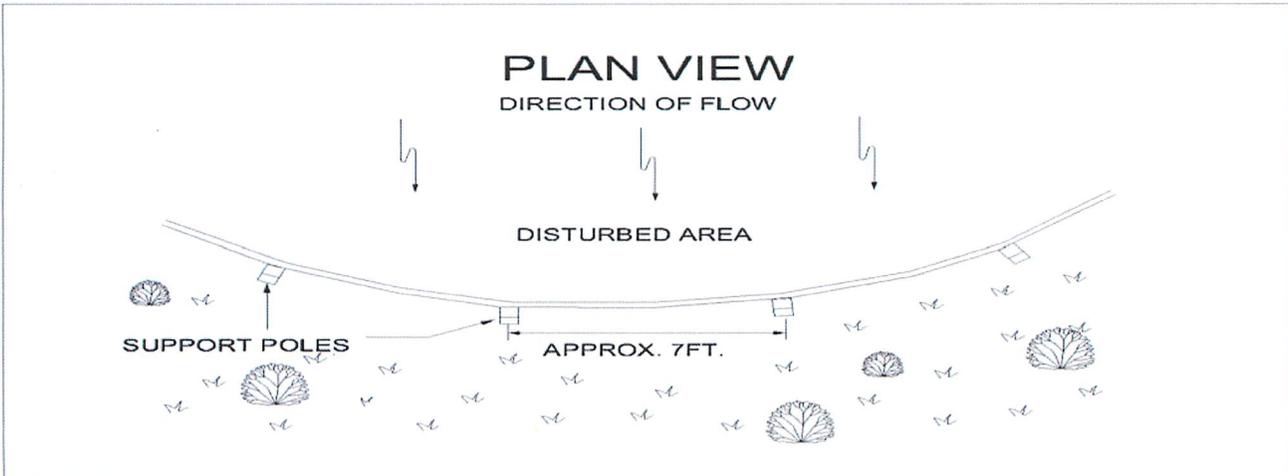
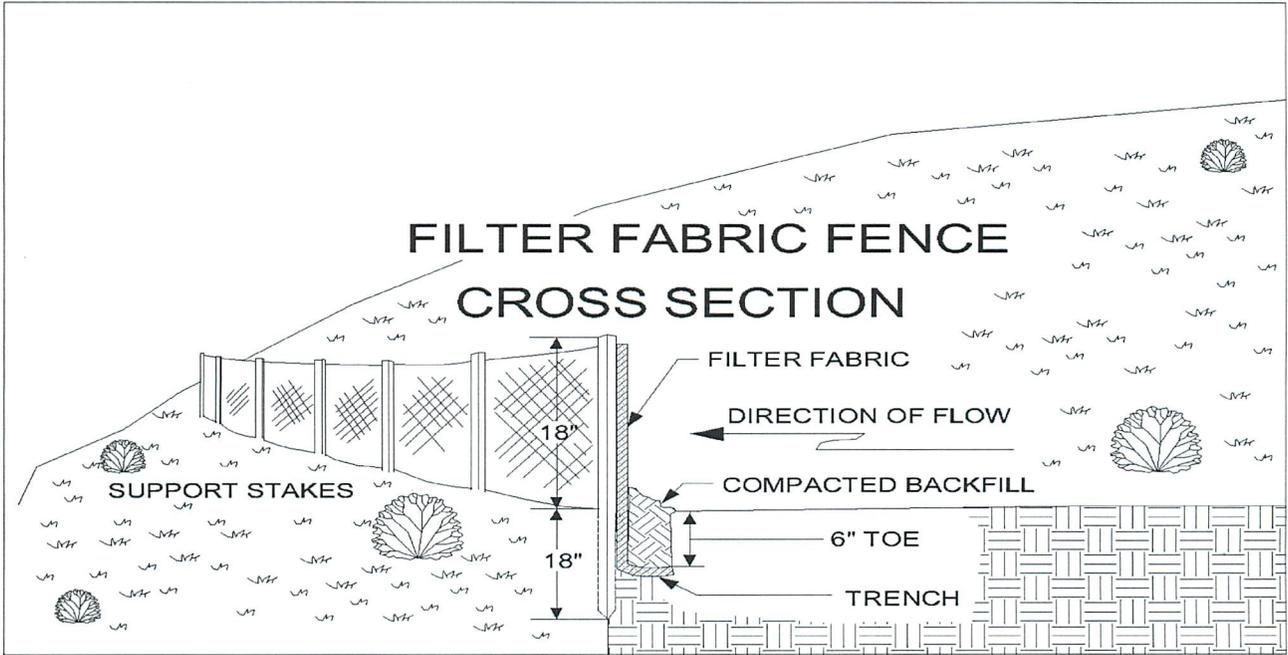
- + Widths should be doubled when the harvesting activity is located on municipal water supplies or where receiving waters have a designated use/existing use of High Quality or Exceptional Value.
- ++ Earth disturbance 50 feet or less from a stream requires a water obstruction and encroachment permit from the appropriate DEP Regional Office, Soils and Waterways Section.



E. Filter Fabric Fence

Filter fabric fence must be installed on contour at the edge of disturbed areas. Both ends of each fence section must be extended upslope at 45 degrees to the main fence alignment. They should not be installed in streams, ditches or other areas of concentrated flow. Install filter fabric fence before the ground freezes.

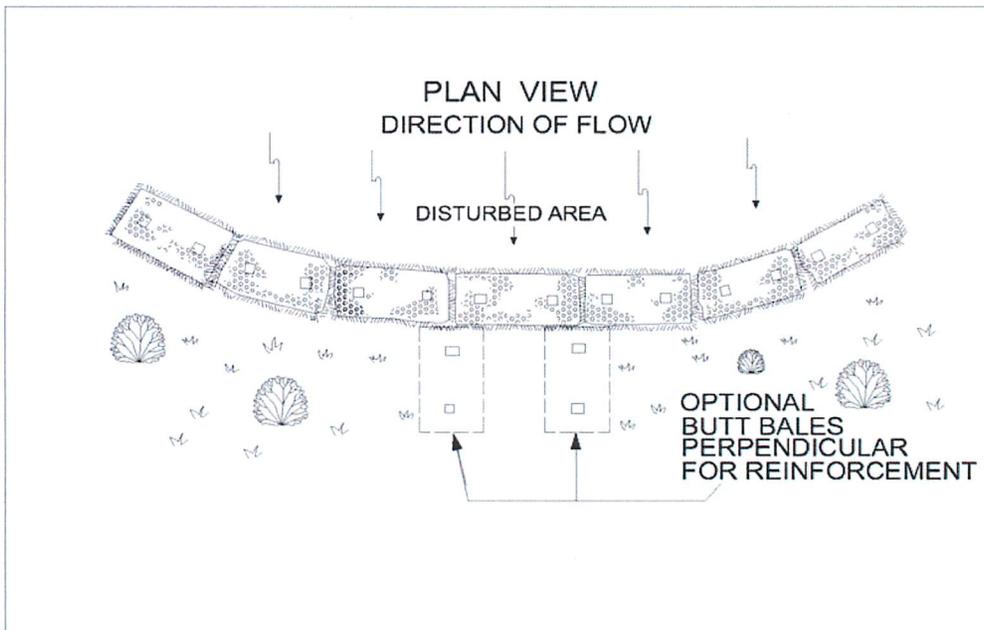
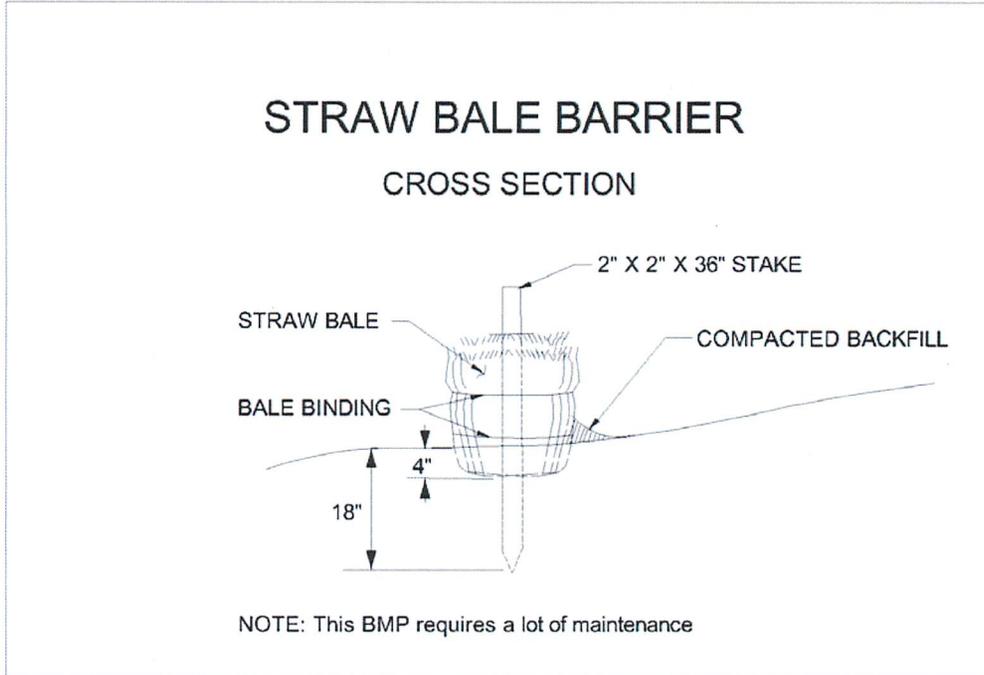
Will this BMP be used? Yes No



F. Straw Bale Barrier

Straw bale barriers shall be placed on contour at the edge of disturbed areas. Both ends of the barrier shall be extended upslope at 45 degrees to the main barrier alignment. Straw bales deteriorate and should be replaced every 3-4 months. They should not be installed in streams, ditches or other areas of concentrated flow.

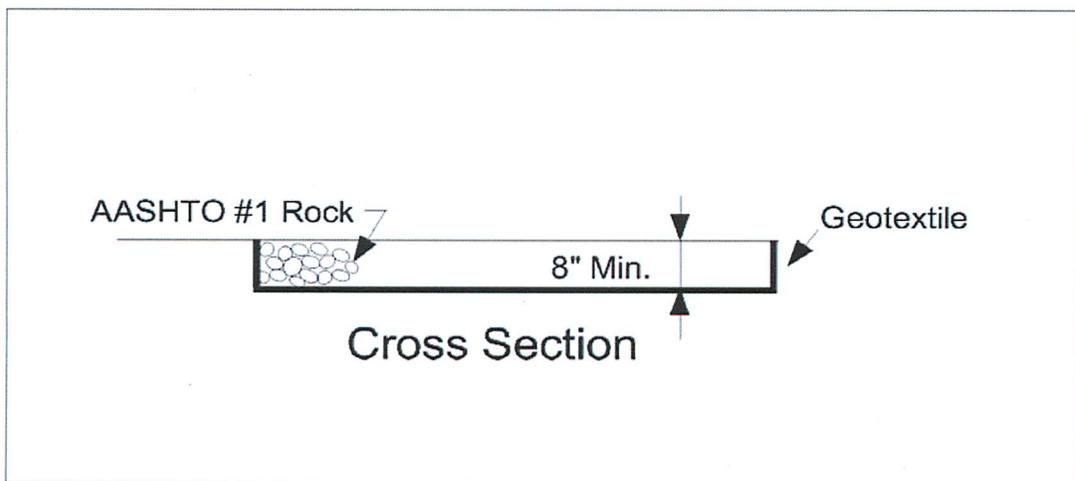
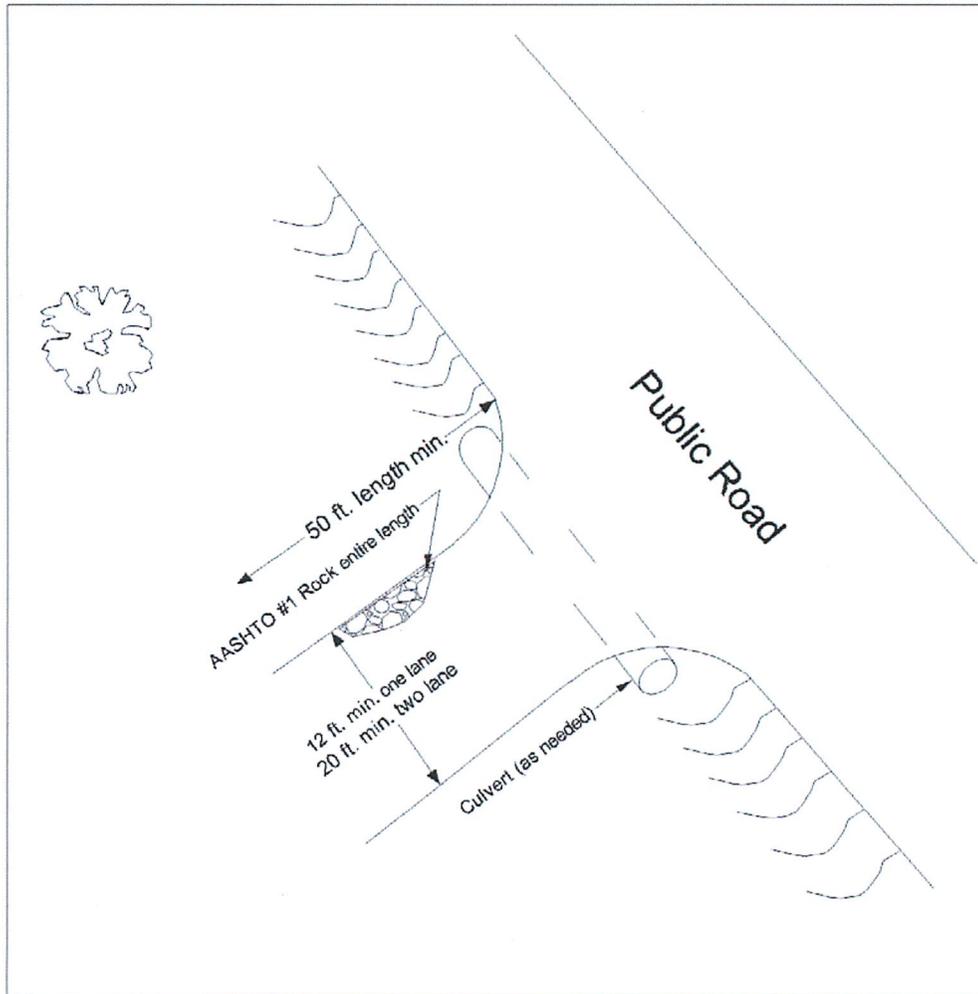
Will this BMP be used? Yes No



G. Stabilized Road Entrance

The purpose is to remove mud from tires and keep it off the road. Construction entrance shall be constantly maintained.

Will this BMP be used? Yes No



H. Disturbed Area Stabilization (check as appropriate)

Seeding^{4,5} Natural Vegetation⁵

Log Landing⁶ N/A

Haul Roads⁶ N/A

Skid Roads⁶ N/A

Suggested Seeding Mixes for Landings, Roads and Critical Areas

Mixes	Seeding rate (lb/ acre)	Mixes	Seeding rate (lb/acre)
Permanent		Temporary	
a. Birdsfoot trefoil	8	f. Spring oats	96 (3 bu)
Redtop	3	g. Winter wheat	180 (3 bu)
b. Creeping red fescue*	30	h. Winter rye	168 (3 bu)
		i. Annual rye	40
Perennial ryegrass	10		
c. Birdsfoot trefoil	8		
Timothy	4		
d. White clover	1		
Kentucky bluegrass	6		
Timothy	2		
e. Annual ryegrass	10		
Redtop	10		
Birdsfoot trefoil	5		

*Recommended for somewhat poor and poorly drained soils in partial shade to full sunlight.

Note: Birdsfoot trefoil, crownvetch, "Lathco" flatpea and white clover seed should be properly inoculated.

Seed mix and seeding rate to be used on critical areas:

All disturbed areas will be seeded with 3 bushels/acre of winter wheat to establish rapid cover. All disturbed areas are to be planted with native trees/shrubs following control of invasive species. Planting is scheduled for Sept/Oct 2011.

9. SCHEDULE AND SEQUENCE OF OPERATIONS

Will this schedule be used? Yes No If not, provide additional information in Section 12.

Starting Date: September 13, 2010 Completion Date: February 25, 2011

- Pre-harvest:** Necessary permits will be obtained. Erosion and sediment control BMPs will be installed as specified in this plan. Haul road, landings and skid roads will be constructed.
- During harvest:** Erosion and sediment control BMPs for haul roads, skid roads and landings shall be maintained. Tops, branches and slash will be removed from ponds, lakes and streams. This plan will be amended or revised to include other BMPs for special or unanticipated circumstances that may occur.
- Post harvest:** Smooth and reshape roads and landings. Remove culverts and crossings. Install permanent waterbars as specified in this plan. Critical areas will be seeded, fertilized, limed and mulched and garbage/trash removed from the area.

No liming or fertilizing is proposed. The intent is to maintain low fertility in order to discourage reestablishing invasive species.

10. MAINTENANCE

- BMPs will be inspected on a weekly basis and after each measurable rainfall event.
- Culverts will be cleaned out, repaired or replaced as necessary. N/A
- Filter strips will be maintained and respected (timber may be harvested in filter strips).
- Haul roads and skid roads will be repaired where signs of accelerated erosion are detected.
- Seeding and mulching will be repeated in those areas that appear to be failing or have failed.
- Other (describe)

⁴ Areas to be seeded may require fertilization and liming. Soil testing will provide individualized recommendations for given sites. Recommendations of 300 lbs. of 10-10-10 fertilizer per acre and 2,000 lbs. of lime per acre should be considered to ensure 70% vegetative cover. Seeded areas will be more successful when mulched with a minimum of 2.5 tons of straw or hay per acre. Describe mulching type and rate in Section 12 when used.

⁵ Stabilization of disturbed areas is important. Disturbed areas shall be protected with such BMPs as straw bale barriers, filter fences, mulch, or filter strips, waterbars and other BMPs until vegetation is established. Critical areas such as: highly erodible soils, approaches to stream crossings and landings require establishment of permanent or temporary cover to ensure that erosion does not occur.

⁶ Indicates treatments for individual landings, haul roads or sections, and skid roads identified on the map.

11. SITE CLEANUP

Describe procedures which ensure the proper handling, storage, control, disposal and recycling of timber harvesting materials and waste, including but not limited to fuels, oil, lubricants and other materials brought to the timber harvest site or used in the process of timber harvesting.

- Garbage, fuels or any substance harmful to human, aquatic or fish life, will be prevented from entering springs, streams, ponds, lakes, wetlands or any water course or water body.
- Oils, fuels, lubricants and coolants will be placed in suitable containers and disposed properly.
- All trash and garbage will be collected and disposed properly.
- Other (describe): **All tops and limbs will be chipped and hauled offsite to the maximum extent practicable**

12. ADDITIONAL EXPLANATION/COMMENTS (if needed)

See attachment - next page

12. Carpenter's Woods Additional Explanations/Comments

Beginning on or about September 13, 2010, the project schedule is anticipated to proceed as follows:

1. PPR will contact the E&S control Inspector from the Philadelphia Water Department to arrange a pre-project on-site meeting.
2. Clearing /invasive tree removals will begin within the northern portion of the site. All logs/brush will be dragged to site perimeter and chipped. The majority of trees that will be removed are Norway maple. No logs are anticipated to be suitable as sawlogs. All logs/tops will be chipped to minimize organic matter within forest floor.
3. No stabilized construction entrance, haul roads or skid trails are proposed; however, existing trails will be used for equipment access. All trails will be regraded and restored immediately following the removal of all logs and woodchips.
4. All disturbed areas will be temporarily seeded with winter wheat (3 bu./ac.) following completion of site work

The majority of the trees to be cleared occur along the perimeter of the site. Most trees will be accessible from the paved roads that surround the site. The need to access the interior of the site for tree removal should be limited.

The site is currently parkland and is traversed by numerous well used trails. These trails are currently stable and are not subject to erosion. These existing trails will serve as the primary trails for equipment movement.

The amount of tree removal that will occur throughout the site may generally be described as sparse. Only trees located within range of a "target" such as paved road, utility wires or trails will be felled and removed. All other trees, approximately 250, will be girdled. No concentrated areas of tree removal are anticipated which will limit the need for dedicated skid trails.

A stream corridor bisects the project site, flowing in a southerly direction. No stream crossings are proposed and no equipment will be allowed within 10 ft of the top of bank. No haul roads will be located within 100 feet of this stream corridor.

A wetland parallels the stream within the southern portion of the site. The wetland boundary as depicted is an approximate boundary and represents the maximum extent of the wetland. This boundary is based on a delineation performed by DPR staff March 31, 2010.

All trees felled within any wetland areas must be winched out beyond these limits prior to skidding. Conditions permitting (dry or frozen soil), mowing equipment may be operated within the wetland areas in order to eliminate invasive shrubs and small trees. If conditions do not permit, trees and shrubs must be cut and removed manually.

Any wheel ruts left on the site will be graded out at the end of the work. Any broad based dips that are damaged by equipment will be reconstructed by the contractor during the project and upon completion of the project.

PPR staff will closely monitor the project and evaluate any erosion hazards. We will require the contractor to implement additional soil erosion and sediment control practices as necessary to comply with the "Erosion and Sediment Control Plan for a Timber Harvesting Operation."



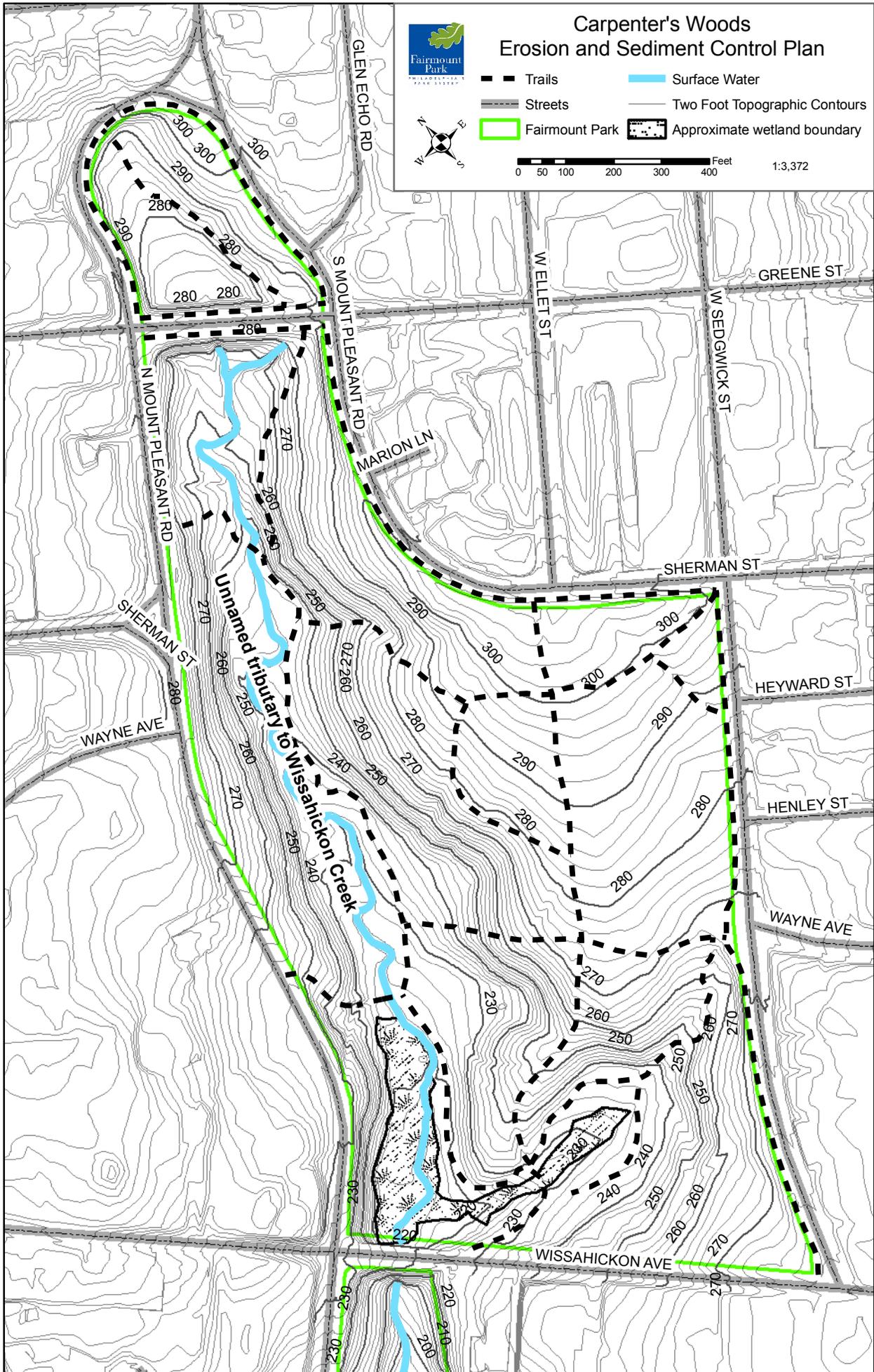
Carpenter's Woods Erosion and Sediment Control Plan

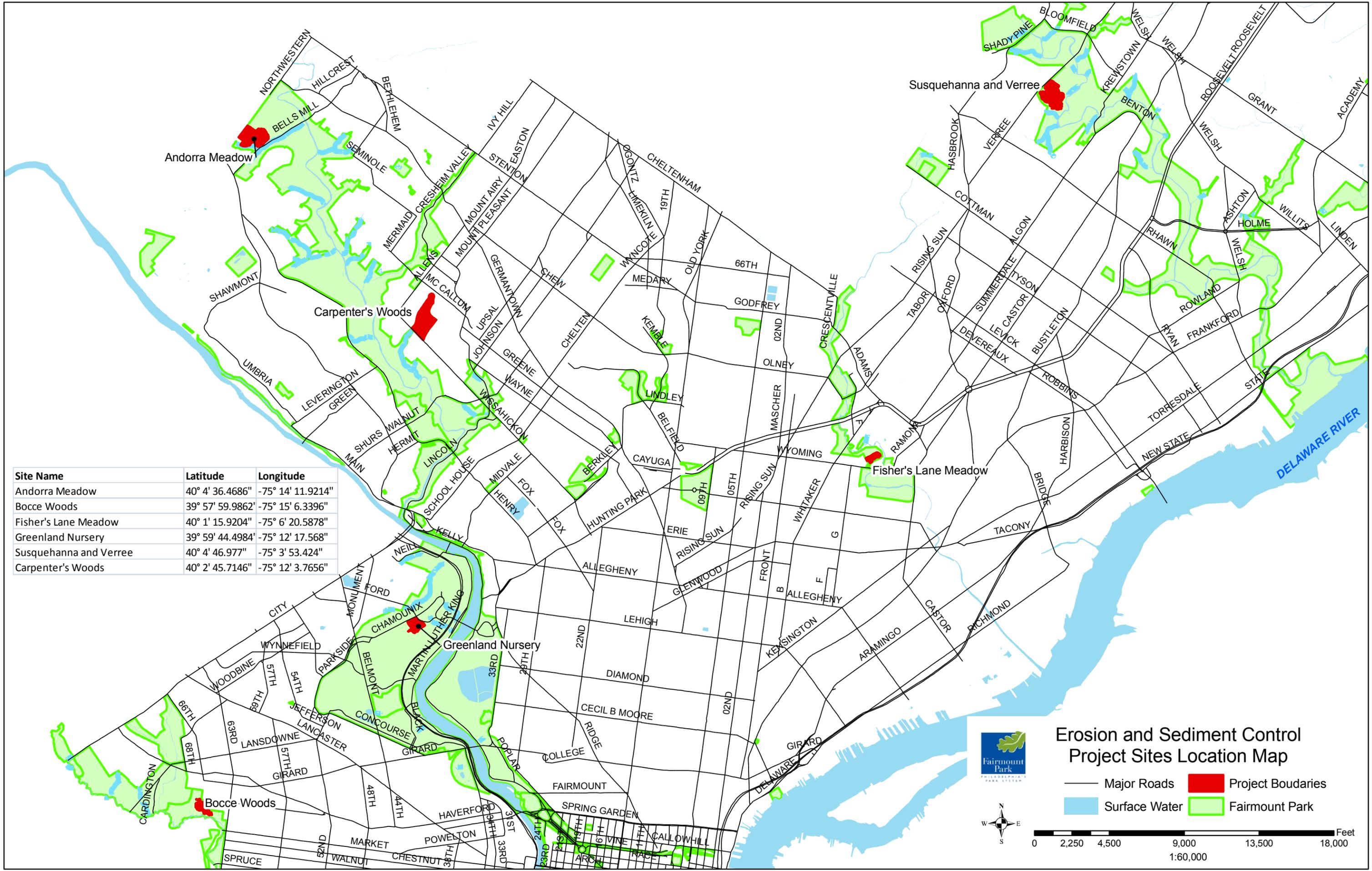
- Trails
- Streets
- Fairmount Park
- Surface Water
- Two Foot Topographic Contours
- Approximate wetland boundary



0 50 100 200 300 400 Feet

1:3,372



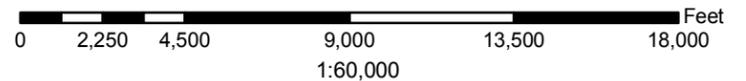


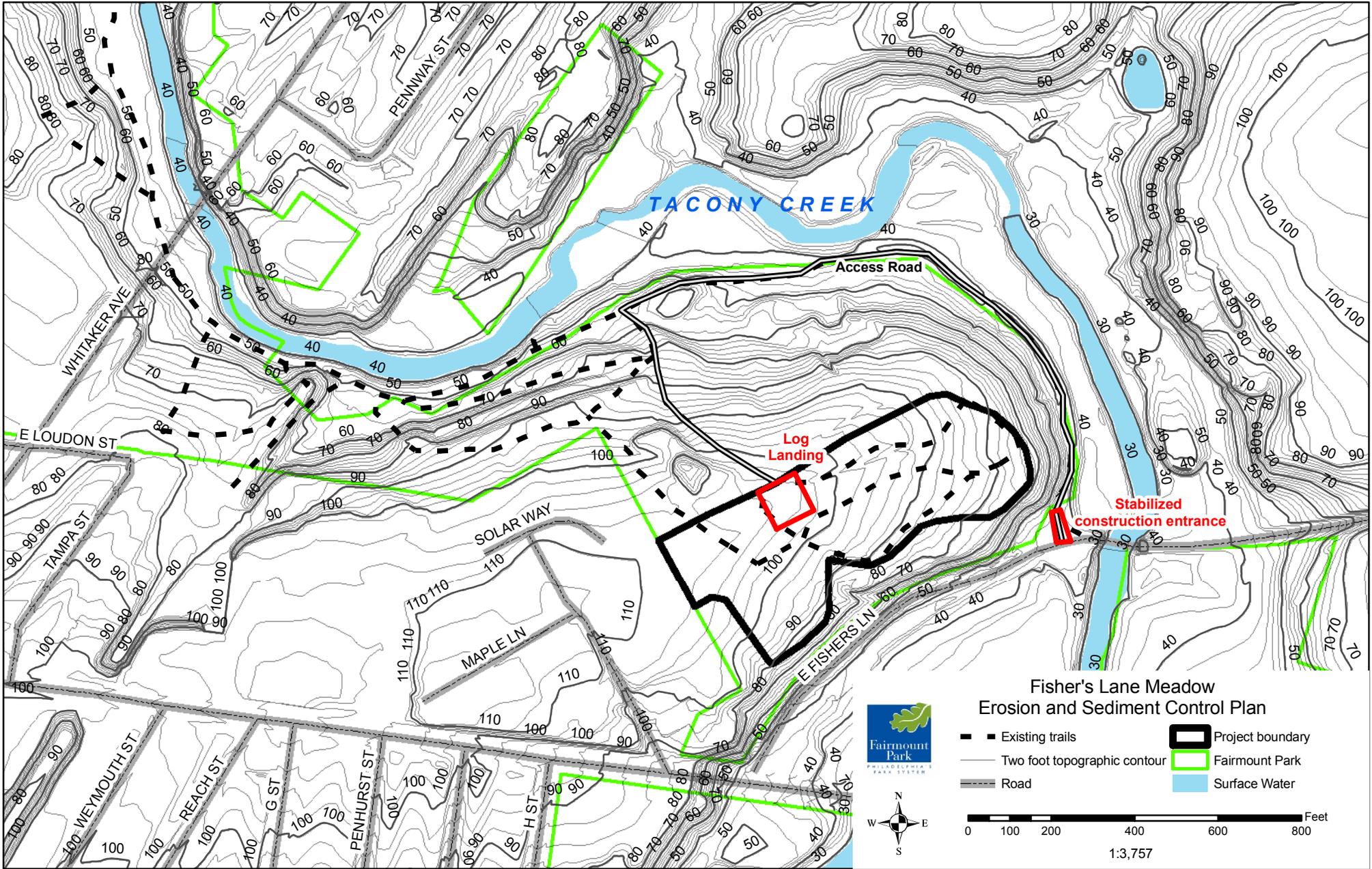
Site Name	Latitude	Longitude
Andorra Meadow	40° 4' 36.4686"	-75° 14' 11.9214"
Bocce Woods	39° 57' 59.9862"	-75° 15' 6.3396"
Fisher's Lane Meadow	40° 1' 15.9204"	-75° 6' 20.5878"
Greenland Nursery	39° 59' 44.4984"	-75° 12' 17.568"
Susquehanna and Verree	40° 4' 46.977"	-75° 3' 53.424"
Carpenter's Woods	40° 2' 45.7146"	-75° 12' 3.7656"



Erosion and Sediment Control Project Sites Location Map

- Major Roads
- Surface Water
- Project Boudaries
- Fairmount Park





TACONY CREEK

Access Road

Log Landing

Stabilized construction entrance

WHITAKER AVE

E LOUDON ST

SOLAR WAY

MAPLE LN

E FISHERS LN

TAMPA ST

WEYMOUTH ST

REACH ST

G ST

PENHURST ST

H ST

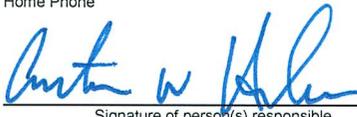
PENWAY ST

Fisher's Lane Meadow

3930-FM-WM0155 Rev. 2/2004

Erosion and Sediment Control Plan for a Timber Harvesting Operation

1. GENERAL INFORMATION

	<u>6/30/10</u> Date
A. Location <u>Fisher's Lane Meadow, Philadelphia</u> <small>Municipality</small>	<u>Philadelphia</u> <small>County</small>
B. Timber sale area = <u>12.5</u> acres	
C. Landowner <u>Philadelphia Department of Parks and Recreation</u> <small>Name</small>	<u>215.683.0239</u> <small>Home Phone Work Phone</small>
<u>One Parkway, 10th Floor, 1515 Arch Street</u> <small>Street Address</small>	
<u>Philadelphia, PA 19102</u> <small>City State Zip Code</small>	_____ <small>Signature of Landowner</small>
D. Person(s) responsible for construction and maintenance of erosion and sediment control BMPs during earth disturbance activities. (NOTE: If duties are assigned to more than one party, list all others under Section 12 of this plan.)	
<u>Mr. Curtis Helm</u> <small>Name</small>	<u>215.683.0239</u> <small>Home Phone Work Phone</small>
<u>One Parkway, 10th Floor, 1515 Arch Street</u> <small>Street Address</small>	 _____ <small>Signature of person(s) responsible</small>
<u>Philadelphia, PA 19102</u> <small>City State Zip Code</small>	
E. Erosion and Sediment Control Plan prepared by:	
<u>Mr. Curtis Helm</u> <small>Name</small>	<u>215.683.0239</u> <small>Phone</small>
<u>One Parkway, 10th Floor, 1515 Arch Street</u> <small>Street Address</small>	 _____ <small>Signature of Plan Preparer</small>
<u>Philadelphia, PA 19102</u> <small>City State Zip Code</small>	

2. TOPOGRAPHICAL MAP - See Attachments - Fisher's Lane Meadow

The map must include the location of the project with respect to roadways, streams, wetlands, lakes, ponds, floodplains, type and extent of vegetation and other identifiable landmarks. A United States Geologic Service (USGS) quadrangle map may be used to show the existing topographical features of the project site and the immediate surrounding area. The map scale site must be large enough to clearly depict the topographical features of the project. Enlargements of the USGS quadrangle map are sufficient.

The scale and north arrow must be plainly marked. A complete legend of all symbols used on the map must also be included.

3. SOIL MAP - See Attachments - Fisher's Lane Meadow

Soils information is available in soil survey reports, published by the USDA Natural Resource Conservation Service in cooperation with Penn State University, College of Agriculture and others. These reports are available for review at the county conservation district offices.

The soils drainage classes must be examined to determine areas with the best drainage for the placement of haul roads and log landings, and to determine proper retirement treatments.

Provide the following soils information for all disturbed areas.

NOTE: All work will be performed within areas mapped as Chalfont silt loam 3-8% slopes and Manor loam, 3-8% slopes which have a slight hazard of erosion.

Map Symbols	Soil Series	Limiting Characteristics ¹ That May Apply to Timber Harvesting Activities (Check as Appropriate)		
		Erosion Hazards ²		Seasonably Wet ³
		Slight	Moderate, severe	
<u>C e B</u>	<u>Chalfont Silt Loam, 3-8% Slopes</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>M a B</u>	<u>Manor Loam, 3-8% Slopes</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>M c E</u>	<u>Manor and Chester Extremely Stony Loam, 25-50% Slopes</u>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

¹ Soils with a moderate or severe erosion hazard or seasonably wet are poor choices for log landing and road locations, and, if possible, alternatives should be considered.

² The degree or ease by which soil particles can be detached from the soil surface. Moderate or severe ratings require additional consideration of soil erosion and sediment control BMPs during logging and road construction.

³ Somewhat poorly drained soils remain wet for a longer period after rain and would be susceptible to disturbance. These soils may be hydric, indicating a possible wetland. They may have to be logged during dry seasons, when the profile may be relatively dry, or when the soils are frozen. They are poor choices for log landing and road locations, and, if possible, alternate areas should be considered.

4. SKETCH MAP - See Attachments - Fisher's Lane Meadow

The characteristics of the earth disturbance activity. The limits of the harvesting area must be shown on a map(s). Such information as the limits of clearing and grubbing and the areas of cuts and fills for roads and landings, and other proposed disturbances for the timber harvesting area are to be included. Roads, skid roads and landings located within 50 ft. of a stream bank may require a Department Chapter 105 Water Obstruction and Encroachment. The following should be clearly shown on the sketch map:

- Dimensions
- North Arrow
- Landings
- Haul Roads
- Skid Roads
- Wetland Crossings
- Stream Crossings
- Equipment Maintenance/Fueling Areas
- Existing Roads

5. RUNOFF

The amount of runoff from the timber harvest area and its upstream watershed area. You do not have to provide runoff calculations unless you plan to use BMPs different from those described in Section 8. If you use different BMPs, your calculations must include an analysis showing any impact that runoff may have on existing downstream watercourses and their resistance to erosion.

6. RECEIVING WATERS

All streams in Pennsylvania are classified based upon their designated and existing uses and water quality criteria. Designated uses for waters of this Commonwealth are found in 25 Pa. Code §93.9a-z at <http://www.pacode.com/secure/data/025/chapter93/chap93toc.html>. Existing uses of waters of this Commonwealth are found at the DEP website <http://www.dep.state.pa.us>. Type the phrase "existing use" in the DEP Keyword box. The county conservation district office can also supply this information. List the bodies of water likely to receive direct runoff within or from the timber harvest area.

<u>Name</u>	<u>Designated/Existing Use</u>
Tacony Creek / Frankford Creek	W W F / M F

7. ESTIMATED DISTURBED AREA

	Total Length (ft)	Average Width (ft)	Area (sq ft)
Haul Roads	N/A		
Skid Roads	N/A		
Landings (1)	100	100	= 10,000
Total Area (sq. ft.)		=	10,000 ÷
			43,560 sq ft/A = 0.23
<small>Acres disturbed by earth disturbance activities.</small>			

If the total area of earth disturbance activities (sum of area disturbed by haul roads, skid roads and landings) consists of 25 acres or more, an Erosion and Sediment Control Permit must be obtained.

Has application been made for required stream crossing permits? Yes No Not Applicable

At all stream crossing locations, runoff must be directed to a sediment removal area, i.e., filter strip, straw bale, silt fence, sump, a trap for treatment. Waterbars and/or broad based dips should be installed and maintained as required on the approaches to the stream crossing.

NOTE: No surface waters or wetlands are located onsite. No crossings are proposed. It is unlikely that any runoff from the site will reach the Tacony Creek. Tacony creek is located approximately 220' east of the project site.

8. DESCRIPTION OF EROSION AND SEDIMENT CONTROL MEASURES

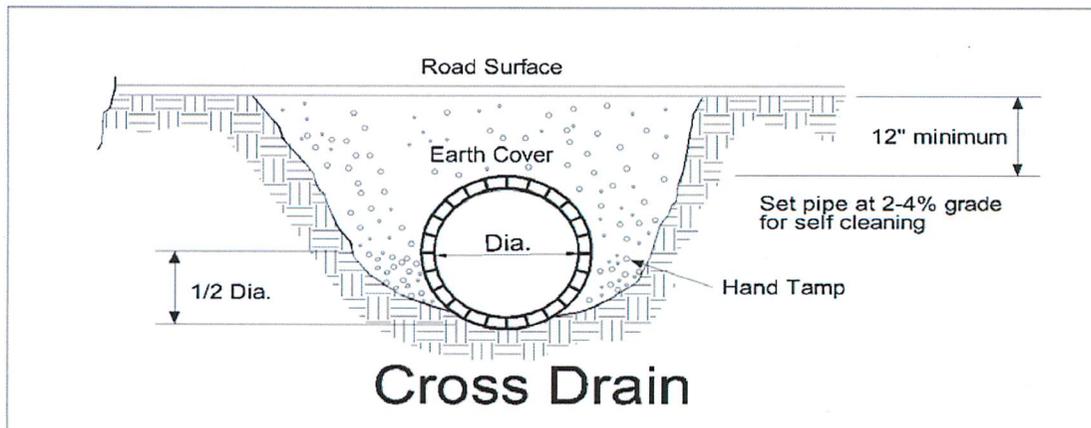
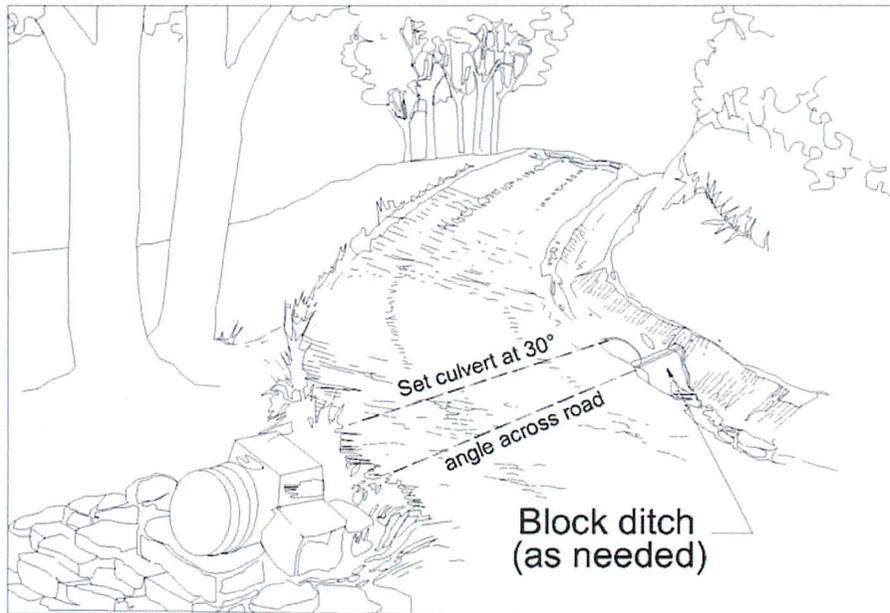
The following standard BMP drawings and recommended spacings (Sections A-H) have been provided to fulfill the requirements of this plan. If you plan to use any of these recommended BMPs, please check the appropriate boxes for Sections A through H. If you plan to use alternative BMPs, you must provide drawings showing the details, specifications and spacing.

A. Cross-drain culvert

Culverts will be installed before the ground freezes. Culverts shall be placed with a slope of 2 to 4 percent and cross the road at a 30-degree downslope angle. Recommend 12" pipe or larger culverts. Will this BMP be used? Yes No Will recommended spacing be used? Yes No

Road Grade (% Slope)	Recommended Spacing (feet)	Alternative Spacing* (feet)
2	500	_____
3	400	_____
4	350	_____
5-6	300	_____
7-8	250	_____
9-11	200	_____
12-13	150	_____
14+	100	_____

*If alternative spacings are used, please make sure reasons for their use are explained.



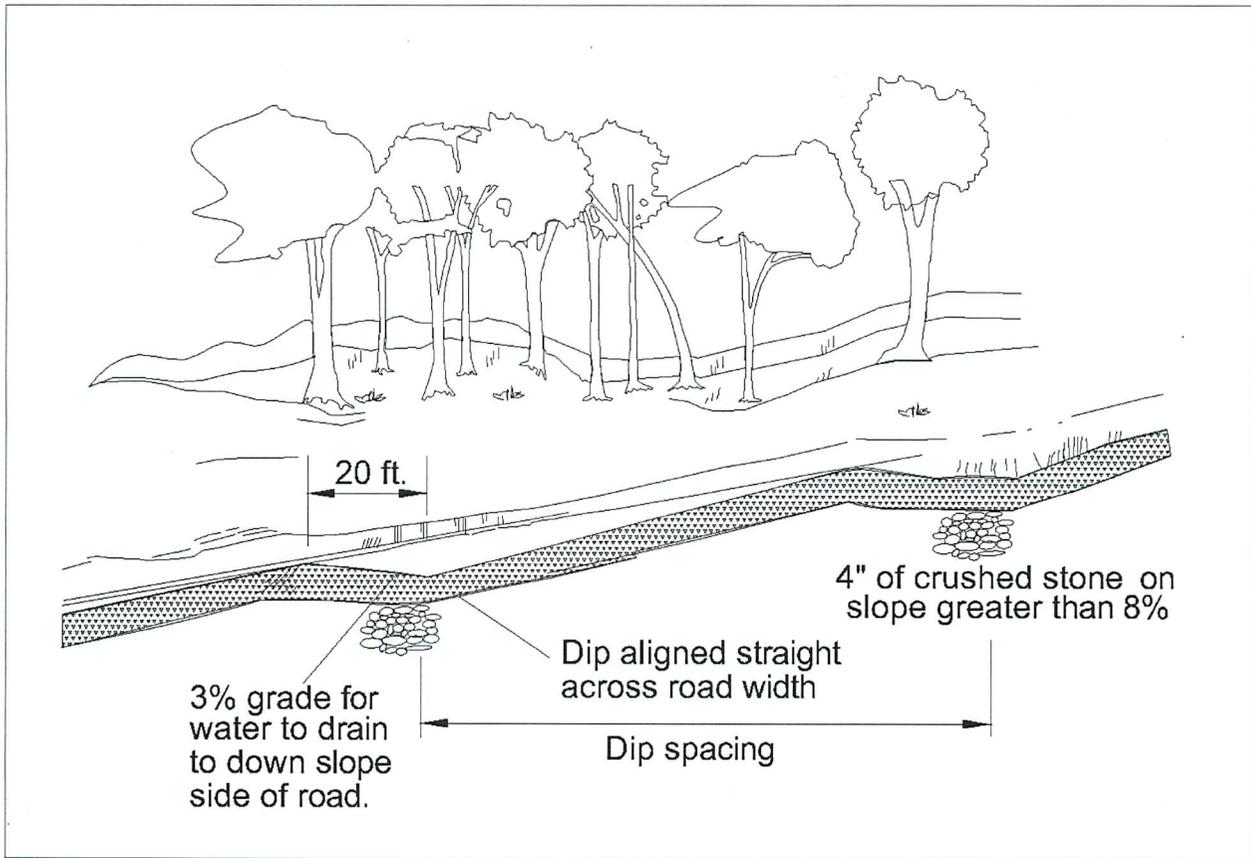
C. Broad-based dips

Broad-based dips will be installed and worked before the ground freezes. Broad-based dips on the road system are planned to be spaced as indicated below.

Will this BMP be used? Yes No Will recommended spacing be used? Yes No

Road Grade (% Slope)	Recommended Spacing (feet)	Alternative Spacing* (feet)
2	300	_____
3	250	_____
4	200	_____
5	180	_____
6	170	_____
7	160	_____
8	150	_____
9-10	140	_____

*If longer spacings are used, please make sure reasons for their use are explained.



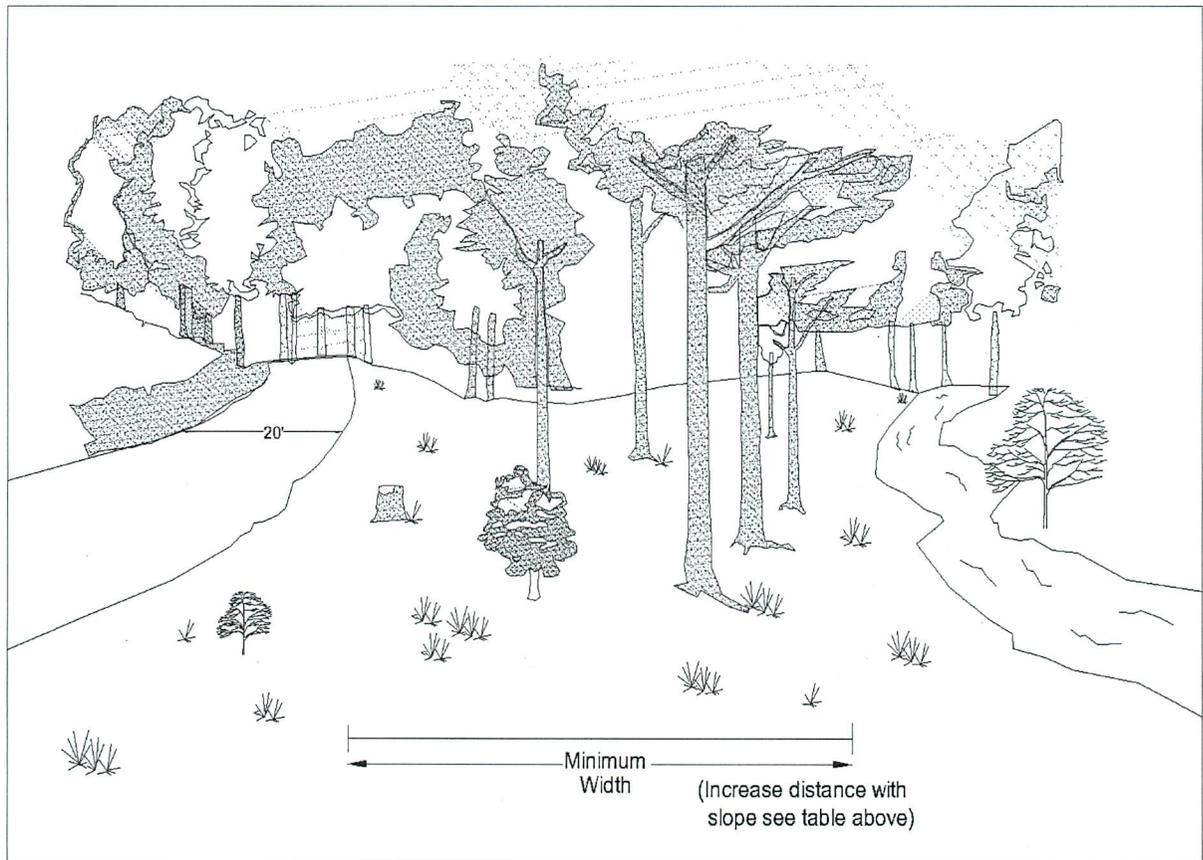
D. Filter strips

Filter strip widths by slope on land between roads and perennial streams.
 The width of the filter strip depends on the slope between the road and the stream.

Will this BMP be used? Yes No **No equipment will be operated within 200+ feet of Tacony Creek which is east of the project site.**

Slope of Land Between Road and Stream (%)	Minimum width of Filter Strip (feet) +
0	25++
10	45++
20	65
30	85
40	105
50	125
60	145
70	165

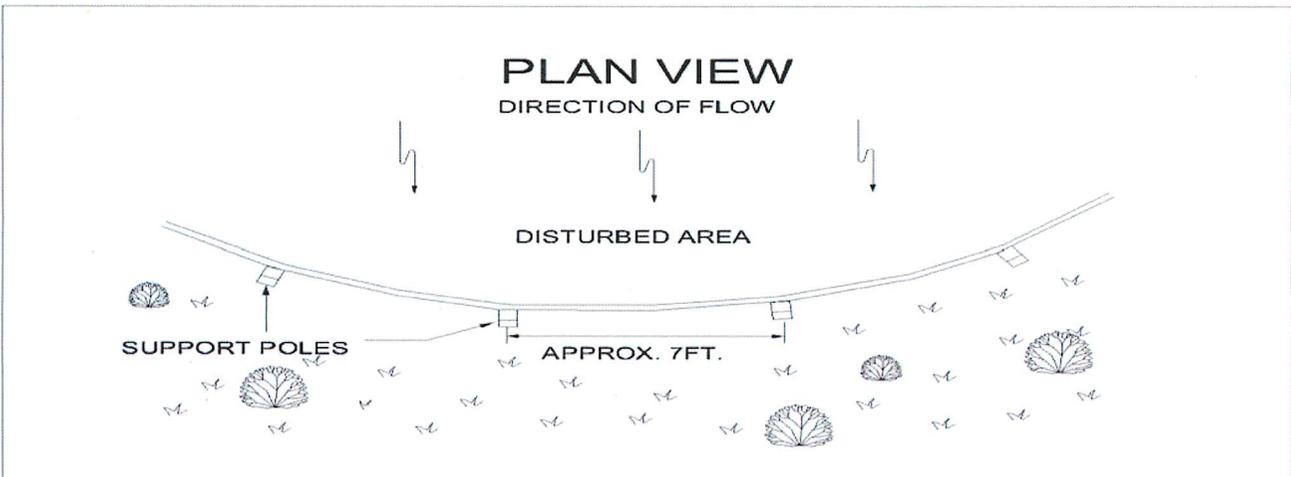
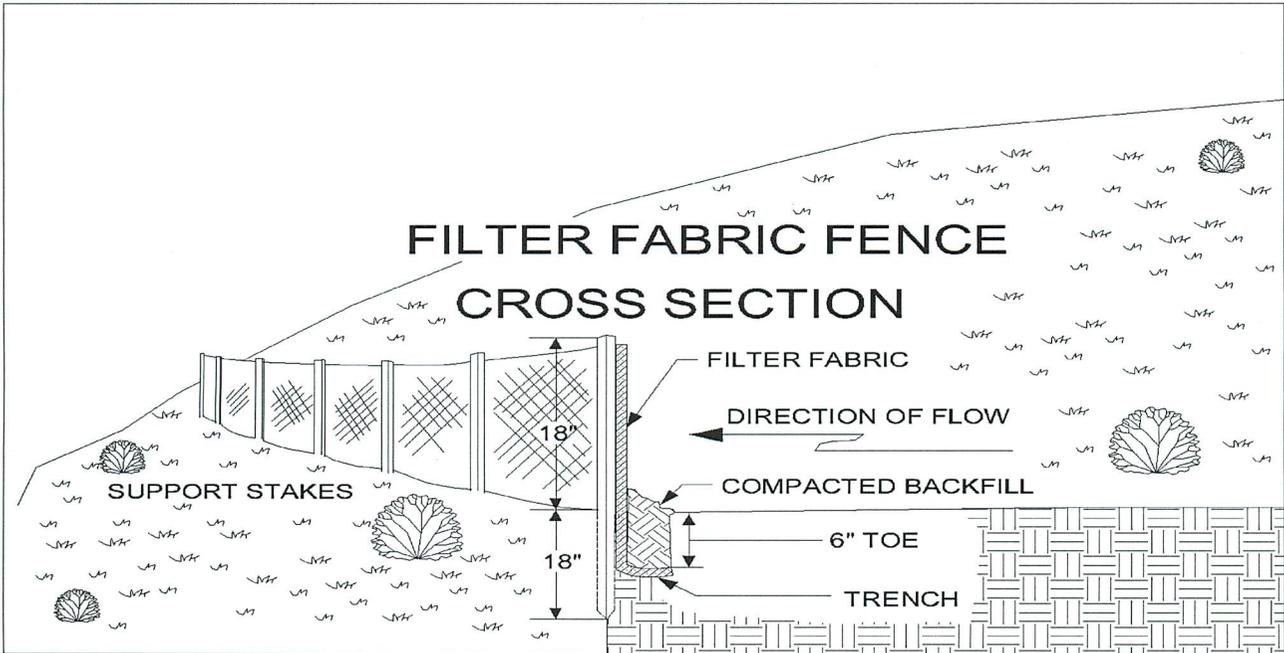
- + Widths should be doubled when the harvesting activity is located on municipal water supplies or where receiving waters have a designated use/existing use of High Quality or Exceptional Value.
- ++ Earth disturbance 50 feet or less from a stream requires a water obstruction and encroachment permit from the appropriate DEP Regional Office, Soils and Waterways Section.



E. Filter Fabric Fence

Filter fabric fence must be installed on contour at the edge of disturbed areas. Both ends of each fence section must be extended upslope at 45 degrees to the main fence alignment. They should not be installed in streams, ditches or other areas of concentrated flow. Install filter fabric fence before the ground freezes.

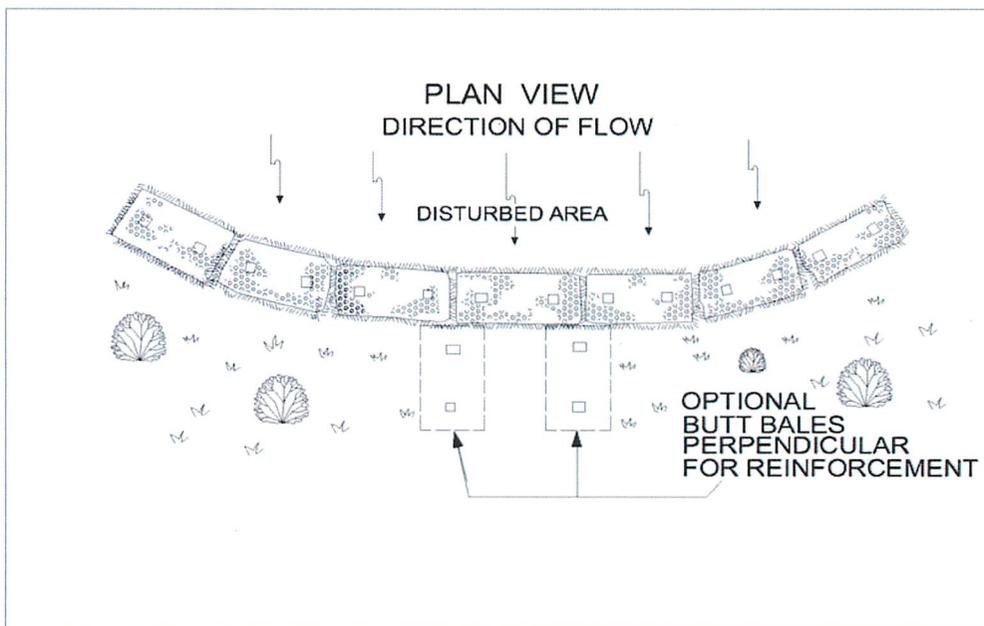
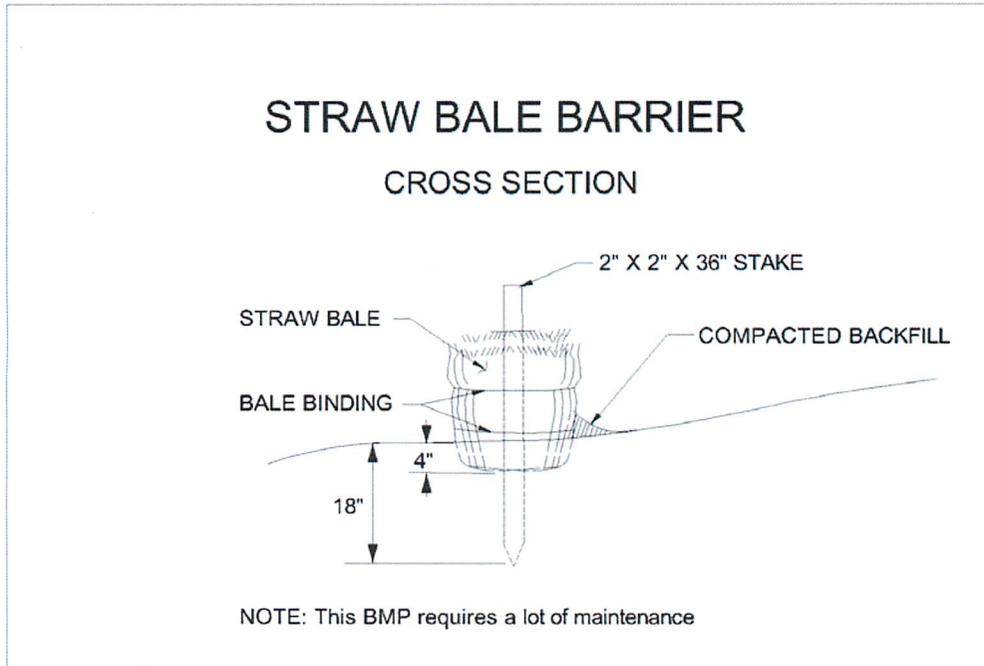
Will this BMP be used? Yes No



F. Straw Bale Barrier

Straw bale barriers shall be placed on contour at the edge of disturbed areas. Both ends of the barrier shall be extended upslope at 45 degrees to the main barrier alignment. Straw bales deteriorate and should be replaced every 3-4 months. They should not be installed in streams, ditches or other areas of concentrated flow.

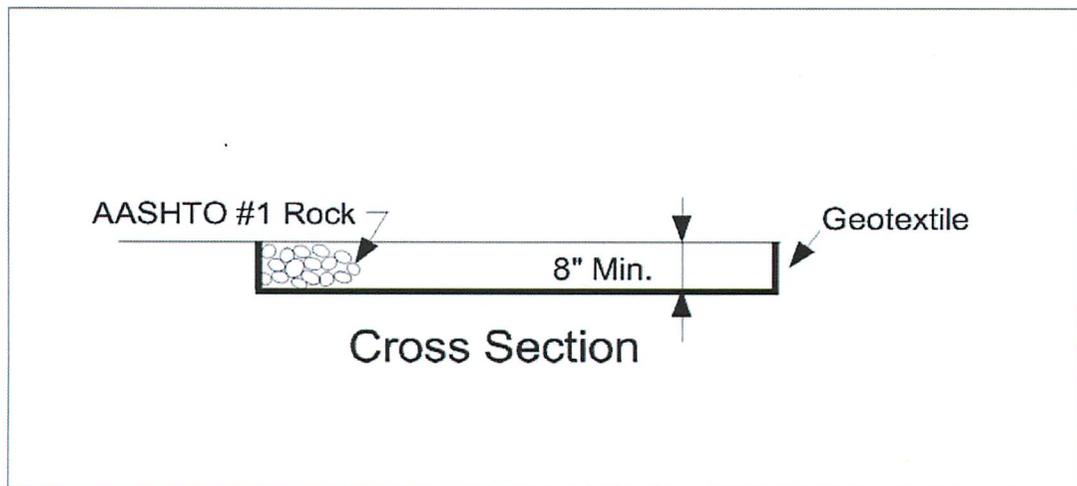
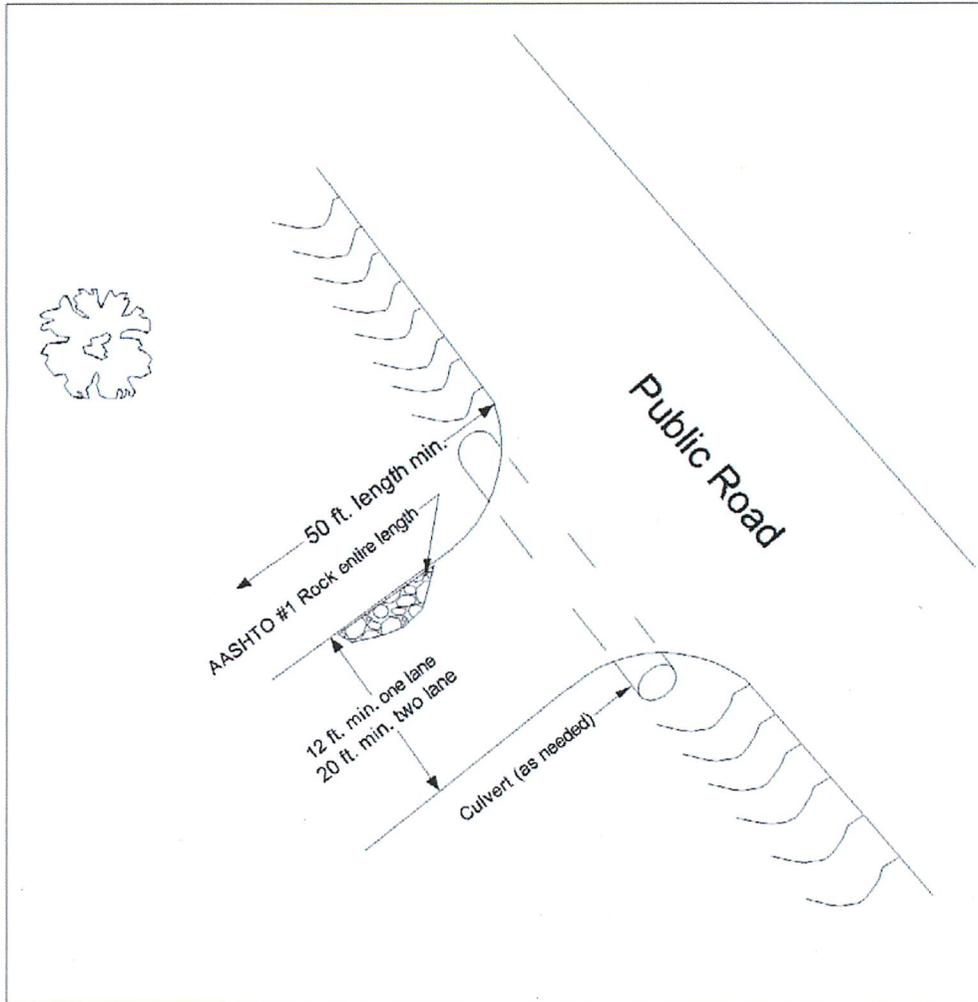
Will this BMP be used? Yes No



G. Stabilized Road Entrance

The purpose is to remove mud from tires and keep it off the road. Construction entrance shall be constantly maintained.

Will this BMP be used? Yes No **At site entrance along Fisher's Lane. See location on map.**



H. Disturbed Area Stabilization (check as appropriate)

	Seeding ^{4,5}	Natural Vegetation ⁵
Log Landing ⁶	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Haul Roads ⁶	N/A <input type="checkbox"/>	<input type="checkbox"/>
Skid Roads ⁶	N/A <input type="checkbox"/>	<input type="checkbox"/>

Seed mix and seeding rate to be used on critical areas:

All disturbed areas will be seeded with 3 bushels/acre of winter wheat to establish quick cover and control erosion. All disturbed areas are to be seeded with warm season grasses following control of invasive species. Seeding anticipated May 2012.

Suggested Seeding Mixes for Landings, Roads and Critical Areas

Mixes	Seeding rate (lb/ acre)	Mixes	Seeding rate (lb/acre)
Permanent		Temporary	
a. Birdsfoot trefoil	8	f. Spring oats	96 (3 bu)
Redtop	3	g. Winter wheat	180 (3 bu)
b. Creeping red fescue*	30	h. Winter rye	168 (3 bu)
		i. Annual rye	40
Perennial ryegrass	10		
c. Birdsfoot trefoil	8		
Timothy	4		
d. White clover	1		
Kentucky bluegrass	6		
Timothy	2		
e. Annual ryegrass	10		
Redtop	10		
Birdsfoot trefoil	5		

*Recommended for somewhat poor and poorly drained soils in partial shade to full sunlight.

Note: Birdsfoot trefoil, crownvetch, "Lathco" flatpea and white clover seed should be properly inoculated.

9. SCHEDULE AND SEQUENCE OF OPERATIONS

Will this schedule be used? Yes No If not, provide additional information in Section 12.

Starting Date: September 13, 2010 Completion Date: February 25, 2011

- Pre-harvest:** Necessary permits will be obtained. Erosion and sediment control BMPs will be installed as specified in this plan. Haul road, landings and skid roads will be constructed.
- During harvest:** Erosion and sediment control BMPs for haul roads, skid roads and landings shall be maintained. Tops, branches and slash will be removed from ponds, lakes and streams. This plan will be amended or revised to include other BMPs for special or unanticipated circumstances that may occur.
- Post harvest:** Smooth and reshape roads and landings. Remove culverts and crossings. Install permanent waterbars as specified in this plan. Critical areas will be seeded, fertilized, limed and mulched and garbage/trash removed from the area.

No liming or fertilizing is proposed. The intent is to maintain low fertility in order to discourage reestablishing invasive species.

10. MAINTENANCE

BMPs will be inspected on a weekly basis and after each measurable rainfall event.

Culverts will be cleaned out, repaired or replaced as necessary. N/A

Filter strips will be maintained and respected (timber may be harvested in filter strips).

Haul roads and skid roads will be repaired where signs of accelerated erosion are detected.

Seeding and mulching will be repeated in those areas that appear to be failing or have failed.

Other (describe)

⁴ Areas to be seeded may require fertilization and liming. Soil testing will provide individualized recommendations for given sites. Recommendations of 300 lbs. of 10-10-10 fertilizer per acre and 2,000 lbs. of lime per acre should be considered to ensure 70% vegetative cover. Seeded areas will be more successful when mulched with a minimum of 2.5 tons of straw or hay per acre. Describe mulching type and rate in Section 12 when used.

⁵ Stabilization of disturbed areas is important. Disturbed areas shall be protected with such BMPs as straw bale barriers, filter fences, mulch, or filter strips, waterbars and other BMPs until vegetation is established. Critical areas such as: highly erodible soils, approaches to stream crossings and landings require establishment of permanent or temporary cover to ensure that erosion does not occur.

⁶ Indicates treatments for individual landings, haul roads or sections, and skid roads identified on the map.

11. SITE CLEANUP

Describe procedures which ensure the proper handling, storage, control, disposal and recycling of timber harvesting materials and waste, including but not limited to fuels, oil, lubricants and other materials brought to the timber harvest site or used in the process of timber harvesting.

- Garbage, fuels or any substance harmful to human, aquatic or fish life, will be prevented from entering springs, streams, ponds, lakes, wetlands or any water course or water body.
- Oils, fuels, lubricants and coolants will be placed in suitable containers and disposed properly.
- All trash and garbage will be collected and disposed properly.
- Other (describe)- All tops and limbs will be chipped and hauled offsite to the maximum extent practicable

12. ADDITIONAL EXPLANATION/COMMENTS (if needed)

See attachment - next page

12. Fisher's Lane Meadow - Additional Explanations/Comments

Beginning on or about September 13, 2010, the project schedule is anticipated to proceed as follows:

1. PPR will contact the E&S control Inspector from the Philadelphia Water Department to arrange a pre-project on-site meeting.
2. Contractor to install Erosion and Sediment control features as outlined in this plan and to include a stabilized construction entrance along East Fisher Lane and a log landing area within the project site.
3. Clearing /invasive tree removals will be initiated within eastern and western ends of site and work toward log landing near site center. All logs will be dragged to log landing and either chipped onsite or stockpiled if suitable as sawlogs. All tops will also be dragged to landing and chipped to minimize organic matter within proposed meadow areas.
4. All stumps will be ground out from within areas of proposed meadows.
5. Stabilized construction entrance will be removed and regraded immediately following the removal of all logs and woodchips.
6. All disturbed areas will be temporarily seeded with winter wheat (3 bu./ac.) following completion of site work

There are no surface waters or wetlands located onsite. Tacony Creek is located approximately 220 feet east of the eastern extent of the site.

The majority of the project site is considered flat to gently sloping with soils mapped as either Chalfont silt loam, 3-8% slopes (CeB) or Manor loam, 3-8% slopes (MaB), which each have a slight hazard of erosion. It is unlikely that any runoff from the site will reach the Tacony Creek.

The amount of tree removal that will occur throughout the site may generally be described as sparse. No concentrated areas of tree removal are anticipated which will limit the need for dedicated skid trails

An existing access road off of East Fisher Lane will provide access to the site. No new access road will be required. This access road includes several broad based dips (rolling dips) which will be maintained and restored if damaged

The site is currently parkland and is traversed by numerous well used trails. These trails are currently stable and are not subject to erosion. These existing trails will serve as the primary trails for equipment movement.

Any wheel ruts left on the site will be graded out at the end of the work

PPR staff will closely monitor the project and evaluate any erosion hazards. We will require the contractor to implement additional soil erosion and sediment control practices as necessary to comply with the "Erosion and Sediment Control Plan for a Timber Harvesting Operation."

Greenland Nursery

3930-FM-WM0155 Rev. 2/2004

Erosion and Sediment Control Plan for a Timber Harvesting Operation

1. GENERAL INFORMATION

6/30/10

Date

A. Location Greenland Nursery, Philadelphia
Municipality

Philadelphia
County

B. Timber sale area = 12.5 acres

C. Landowner Philadelphia Department of Parks and Recreation
Name

215.683.0239
Home Phone Work Phone

One Parkway, 10th Floor, 1515 Arch Street
Street Address

Philadelphia, PA 19102
City State Zip Code

Signature of Landowner

D. Person(s) responsible for construction and maintenance of erosion and sediment control BMPs during earth disturbance activities.
 (NOTE: If duties are assigned to more than one party, list all others under Section 12 of this plan.)

Mr. Curtis Helm
Name

215.683.0239
Home Phone Work Phone

One Parkway, 10th Floor, 1515 Arch Street
Street Address

Philadelphia, PA 19102
City State Zip Code


Signature of person(s) responsible

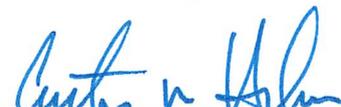
E. Erosion and Sediment Control Plan prepared by:

Mr. Curtis Helm
Name

Phone 215.683.0239

One Parkway, 10th Floor, 1515 Arch Street
Street Address

Philadelphia, PA 19102
City State Zip Code


Signature of Plan Preparer

2. TOPOGRAPHICAL MAP - See Attachments - Greenland Nursery

The map must include the location of the project with respect to roadways, streams, wetlands, lakes, ponds, floodplains, type and extent of vegetation and other identifiable landmarks. A United States Geologic Service (USGS) quadrangle map may be used to show the existing topographical features of the project site and the immediate surrounding area. The map scale site must be large enough to clearly depict the topographical features of the project. Enlargements of the USGS quadrangle map are sufficient.

The scale and north arrow must be plainly marked. A complete legend of all symbols used on the map must also be included.

3. SOIL MAP - See Attachments - Greenland Nursery

Soils information is available in soil survey reports, published by the USDA Natural Resource Conservation Service in cooperation with Penn State University, College of Agriculture and others. These reports are available for review at the county conservation district offices.

The soils drainage classes must be examined to determine areas with the best drainage for the placement of haul roads and log landings, and to determine proper retirement treatments.

Provide the following soils information for all disturbed areas.

NOTE: Log loading will be constructed within area mapped as Manor loam, 3-8% slopes, which has a slight risk of erosion.

Map Symbols	Soil Series
M a B	<u>Manor Loam, 3-8% Slopes</u>
M a C	<u>Manor Loam, 8-15% Slopes</u>
M a D	<u>Manor Loam, 15-25% Slopes</u>
M c E	<u>Manor and Chester Extremely Stony Loam, 25-50% Slopes</u>
U b C	<u>Urban Land Chester Complex, 8-15% Slopes</u>

Limiting Characteristics¹ That May Apply to Timber Harvesting Activities (Check as Appropriate)

Erosion Hazards ²		
Slight	Moderate, severe	Seasonably Wet ³
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

¹ Soils with a moderate or severe erosion hazard or seasonably wet are poor choices for log landing and road locations, and, if possible, alternatives should be considered.

² The degree or ease by which soil particles can be detached from the soil surface. Moderate or severe ratings require additional consideration of soil erosion and sediment control BMPs during logging and road construction.

³ Somewhat poorly drained soils remain wet for a longer period after rain and would be susceptible to disturbance. These soils may be hydric, indicating a possible wetland. They may have to be logged during dry seasons, when the profile may be relatively dry, or when the soils are frozen. They are poor choices for log landing and road locations, and, if possible, alternate areas should be considered.

4. SKETCH MAP - See Attachments - Greenland Nursery

The characteristics of the earth disturbance activity. The limits of the harvesting area must be shown on a map(s). Such information as the limits of clearing and grubbing and the areas of cuts and fills for roads and landings, and other proposed disturbances for the timber harvesting area are to be included. Roads, skid roads and landings located within 50 ft. of a stream bank may require a Department Chapter 105 Water Obstruction and Encroachment. The following should be clearly shown on the sketch map:

- Dimensions
- North Arrow
- Landings
- Haul Roads
- Skid Roads
- Wetland Crossings
- Stream Crossings
- Equipment Maintenance/Fueling Areas
- Existing Roads

5. RUNOFF

The amount of runoff from the timber harvest area and its upstream watershed area. You do not have to provide runoff calculations unless you plan to use BMPs different from those described in Section 8. If you use different BMPs, your calculations must include an analysis showing any impact that runoff may have on existing downstream watercourses and their resistance to erosion.

6. RECEIVING WATERS

All streams in Pennsylvania are classified based upon their designated and existing uses and water quality criteria. Designated uses for waters of this Commonwealth are found in 25 Pa. Code §93.9a-z at <http://www.pacode.com/secure/data/025/chapter93/chap93toc.html>. Existing uses of waters of this Commonwealth are found at the DEP website <http://www.dep.state.pa.us>. Type the phrase "existing use" in the DEP Keyword box. The county conservation district office can also supply this information. List the bodies of water likely to receive direct runoff within or from the timber harvest area.

<u>Name</u>	<u>Designated/Existing Use</u>
Unnamed Tributary to Schuylkill River	WWF / MF

7. ESTIMATED DISTURBED AREA

	Total Length (ft)	Average Width (ft)	Area (sq ft)
Haul Roads	100	12	= 1,200
Skid Roads	1,100	10	= 11,000
Landings (1)	100	100	= 10,000
Total Area (sq. ft.) =			22,200 ÷ 43,560 sq ft/A = 0.51
<small>Acres disturbed by earth disturbance activities.</small>			

If the total area of earth disturbance activities (sum of area disturbed by haul roads, skid roads and landings) consists of 25 acres or more, an Erosion and Sediment Control Permit must be obtained.

Has application been made for required stream crossing permits? Yes No Not Applicable

At all stream crossing locations, runoff must be directed to a sediment removal area, i.e., filter strip, straw bale, silt fence, sump, a trap for treatment. Waterbars and/or broad based dips should be installed and maintained as required on the approaches to the stream crossing.

NOTE: No streams or wetlands occur onsite. Nearest stream is an unnamed tributary to the Schuylkill River that is located approximately 500 feet east of the site. A second unnamed tributary to the Schuylkill is located approximately 700 feet to the north of the site. No runoff from the site will enter either tributary.

8. DESCRIPTION OF EROSION AND SEDIMENT CONTROL MEASURES

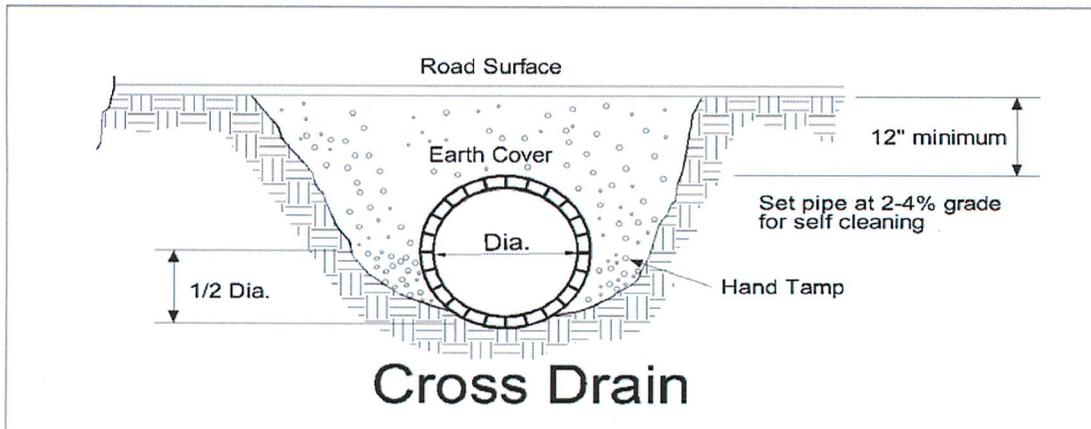
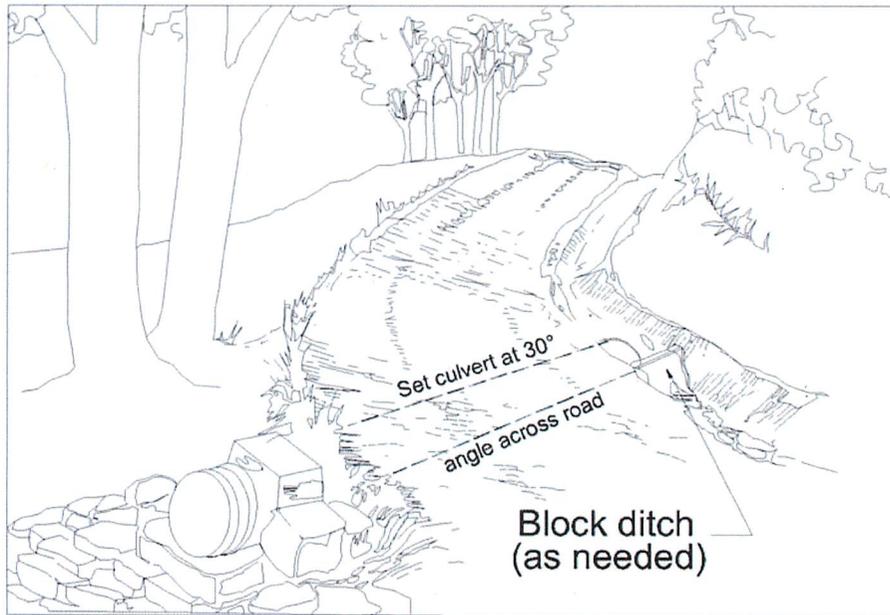
The following standard BMP drawings and recommended spacings (Sections A-H) have been provided to fulfill the requirements of this plan. If you plan to use any of these recommended BMPs, please check the appropriate boxes for Sections A through H. If you plan to use alternative BMPs, you must provide drawings showing the details, specifications and spacing.

A. Cross-drain culvert

Culverts will be installed before the ground freezes. Culverts shall be placed with a slope of 2 to 4 percent and cross the road at a 30-degree downslope angle. Recommend 12" pipe or larger culverts. Will this BMP be used? Yes No Will recommended spacing be used? Yes No

Road Grade (% Slope)	Recommended Spacing (feet)	Alternative Spacing* (feet)
2	500	_____
3	400	_____
4	350	_____
5-6	300	_____
7-8	250	_____
9-11	200	_____
12-13	150	_____
14+	100	_____

*If alternative spacings are used, please make sure reasons for their use are explained.



B. Waterbars

Waterbars on skid roads will be maintained throughout the entire job and installed permanently upon job completion.

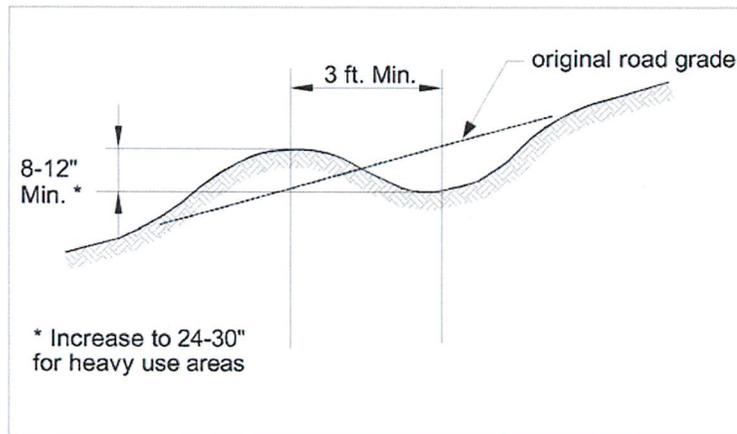
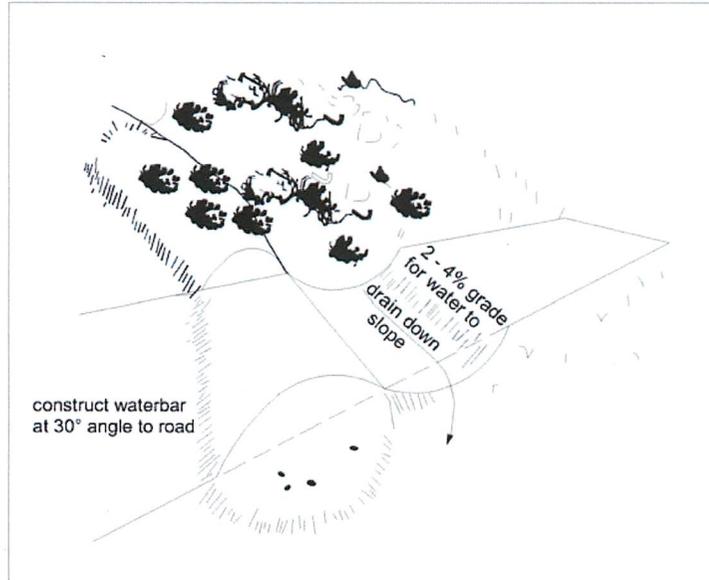
Waterbars will be installed before the ground freezes and will be spaced as indicated below.

Will this BMP be used? Yes No Will recommended spacing be used? Yes No

This practice will be used if erosion is noted at log landings or along trails used for equipment and material movement.

Road Grade (% Slope)	Recommended Spacing (feet)	Alternative Spacing* (feet)
2	250	_____
5	135	_____
10	80	_____
15	60	_____
20	45	_____
25	40	_____
30	35	_____
40	30	_____

*If longer spacings are used, please make sure reasons for their use are explained.



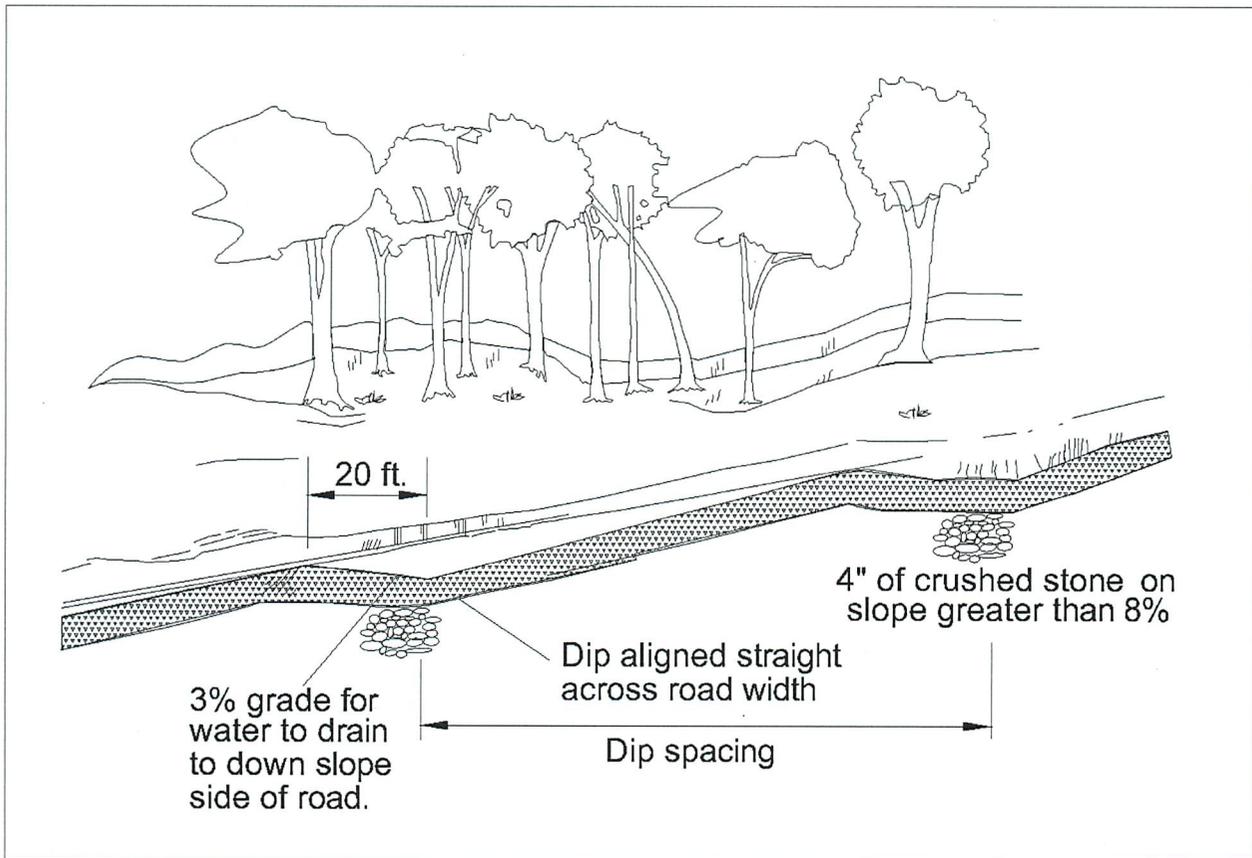
C. Broad-based dips

Broad-based dips will be installed and worked before the ground freezes. Broad-based dips on the road system are planned to be spaced as indicated below.

Will this BMP be used? Yes No Will recommended spacing be used? Yes No

Road Grade (% Slope)	Recommended Spacing (feet)	Alternative Spacing* (feet)
2	300	_____
3	250	_____
4	200	_____
5	180	_____
6	170	_____
7	160	_____
8	150	_____
9-10	140	_____

*If longer spacings are used, please make sure reasons for their use are explained.



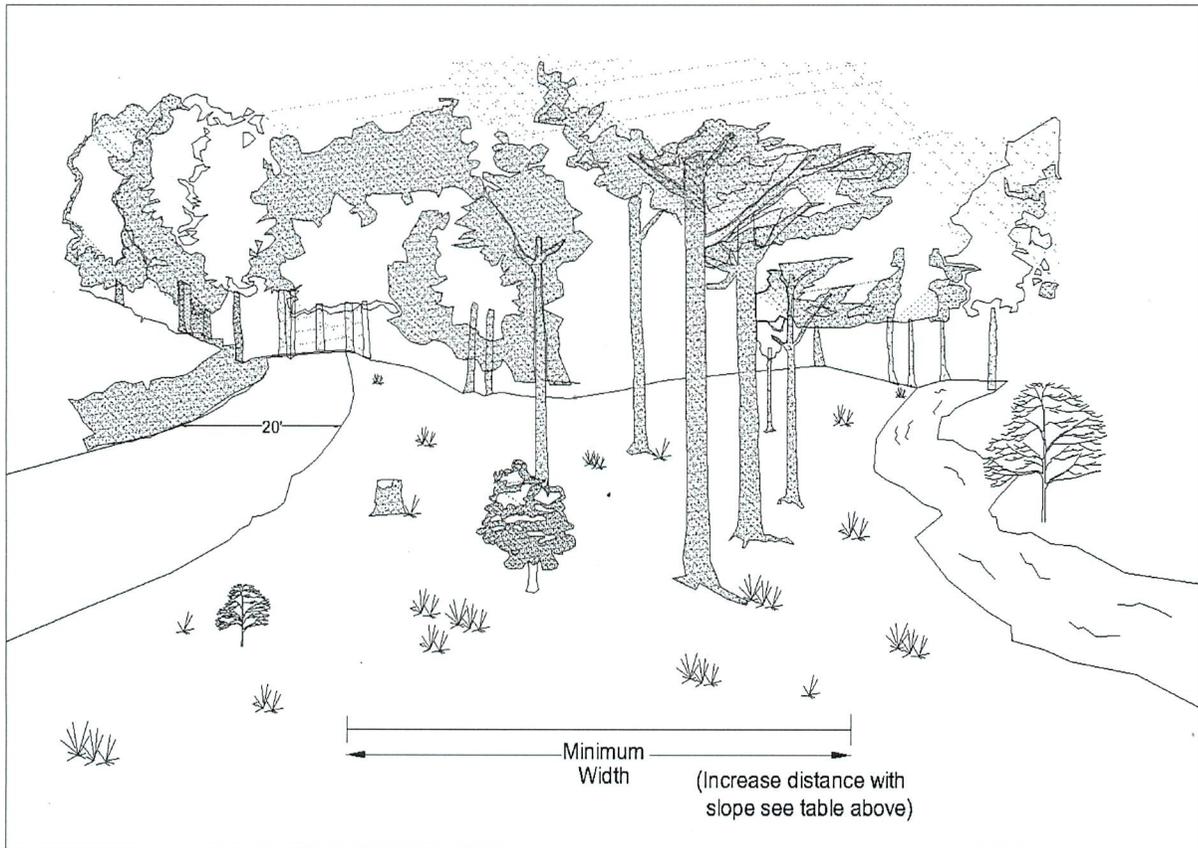
D. Filter strips

Filter strip widths by slope on land between roads and perennial streams.
 The width of the filter strip depends on the slope between the road and the stream.

Will this BMP be used? Yes No *No equipment will be operated within 500+ feet of unnamed tributary to Schuylkill River.*

Slope of Land Between Road and Stream (%)	Minimum width of Filter Strip (feet) +
0	25++
10	45++
20	65
30	85
40	105
50	125
60	145
70	165

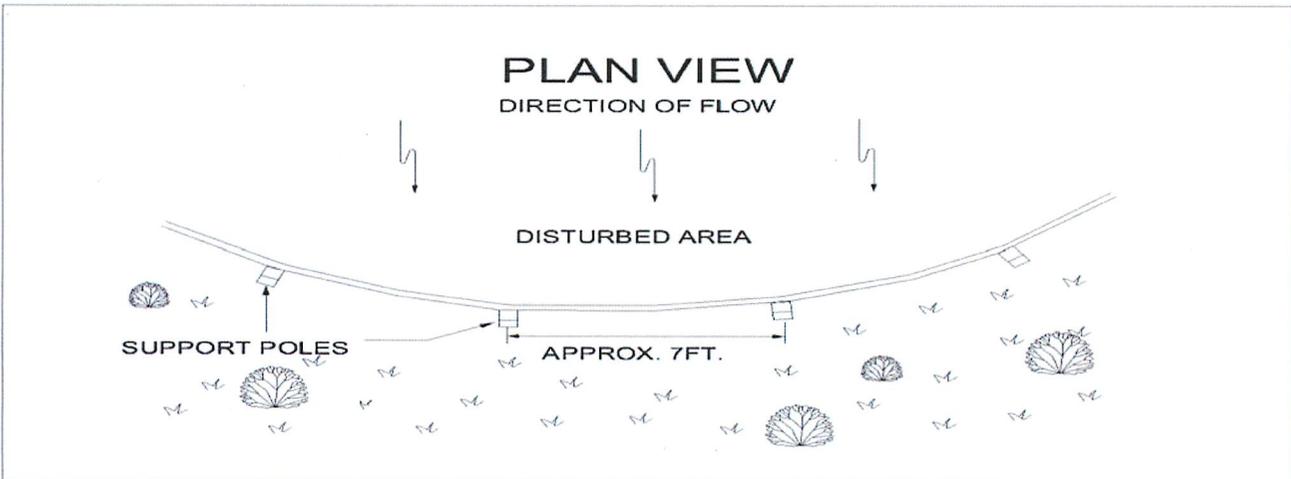
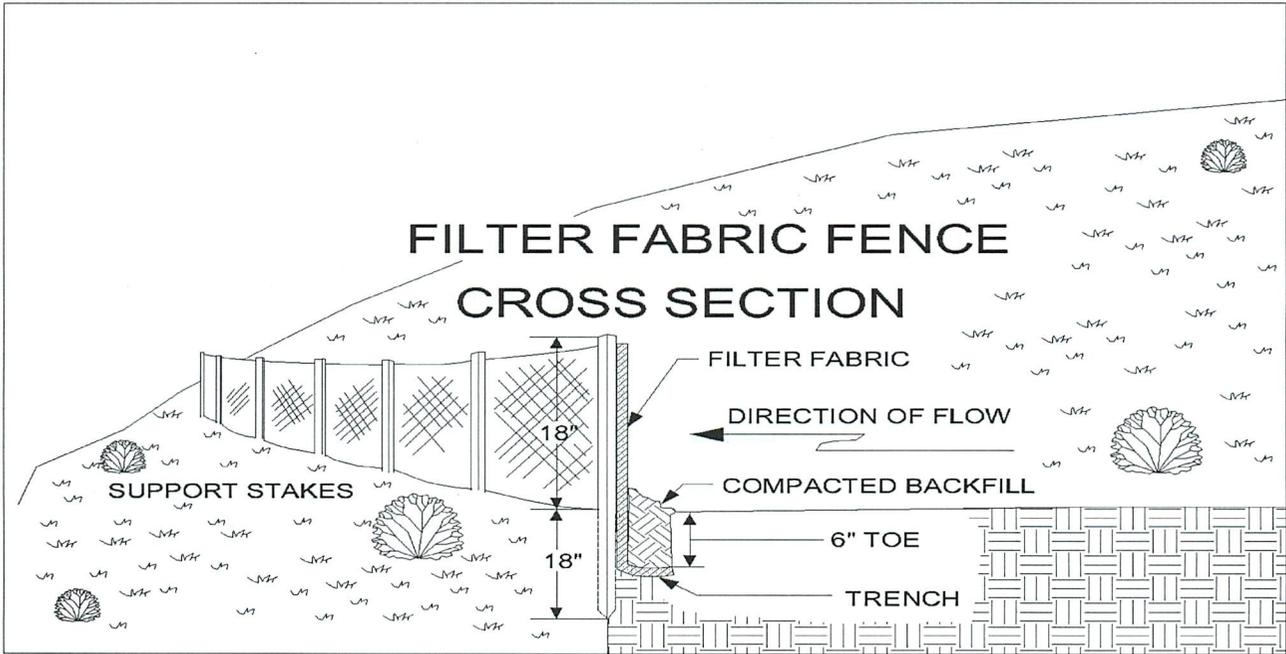
- + Widths should be doubled when the harvesting activity is located on municipal water supplies or where receiving waters have a designated use/existing use of High Quality or Exceptional Value.
- ++ Earth disturbance 50 feet or less from a stream requires a water obstruction and encroachment permit from the appropriate DEP Regional Office, Soils and Waterways Section.



E. Filter Fabric Fence

Filter fabric fence must be installed on contour at the edge of disturbed areas. Both ends of each fence section must be extended upslope at 45 degrees to the main fence alignment. They should not be installed in streams, ditches or other areas of concentrated flow. Install filter fabric fence before the ground freezes.

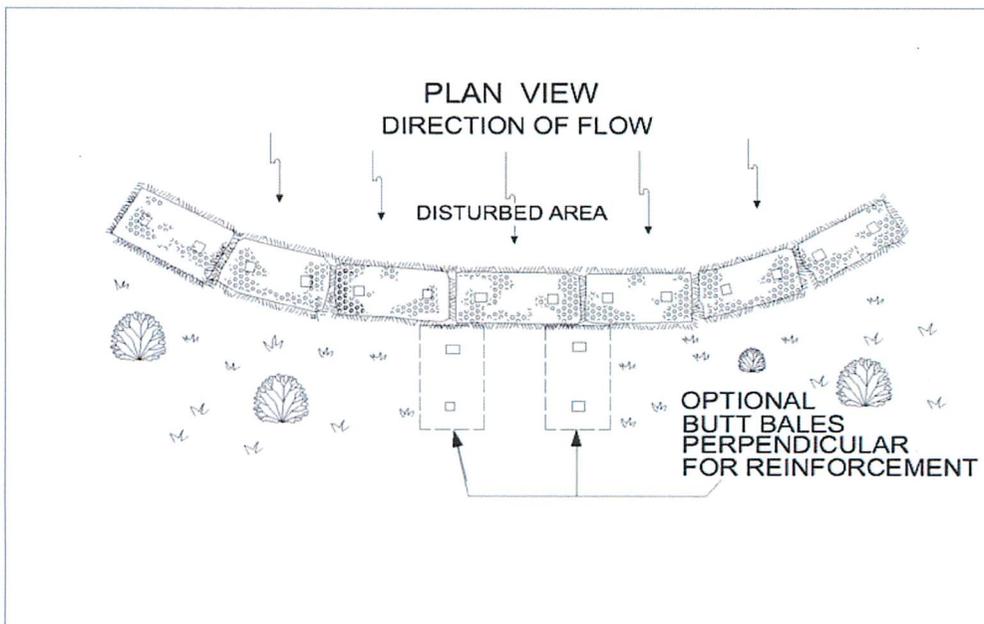
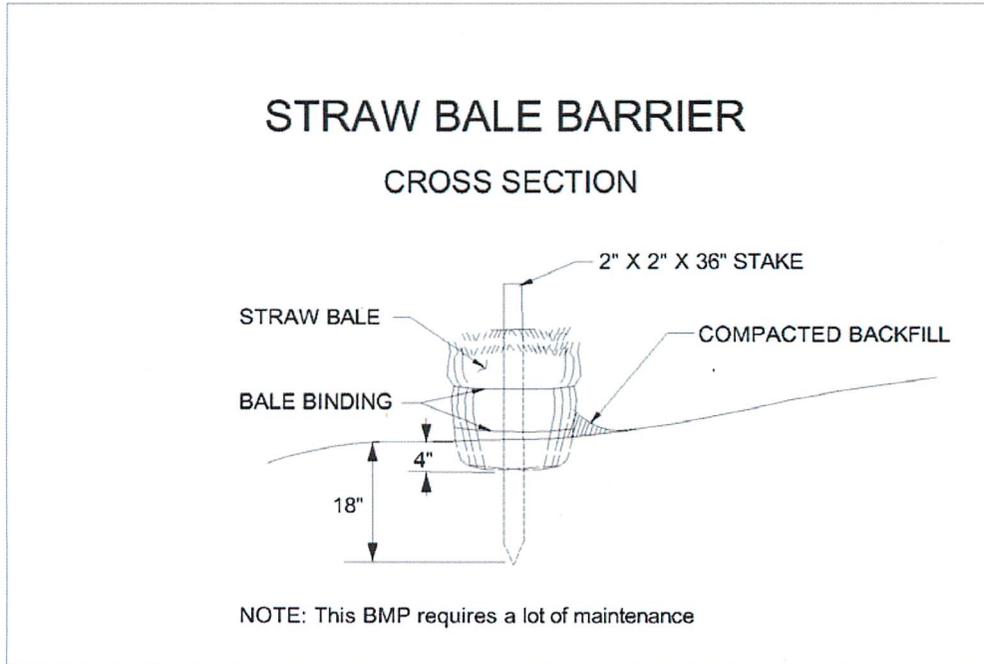
Will this BMP be used? Yes No



F. Straw Bale Barrier

Straw bale barriers shall be placed on contour at the edge of disturbed areas. Both ends of the barrier shall be extended upslope at 45 degrees to the main barrier alignment. Straw bales deteriorate and should be replaced every 3-4 months. They should not be installed in streams, ditches or other areas of concentrated flow.

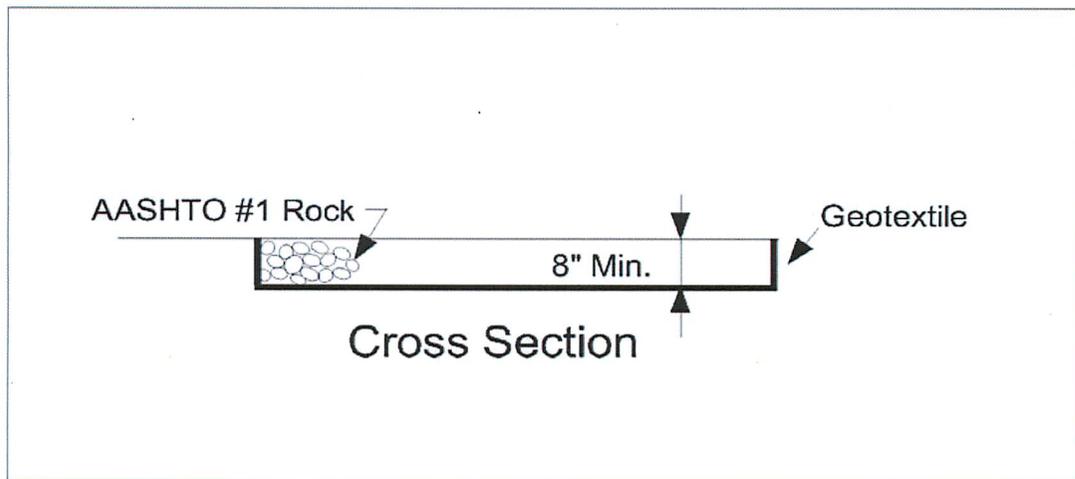
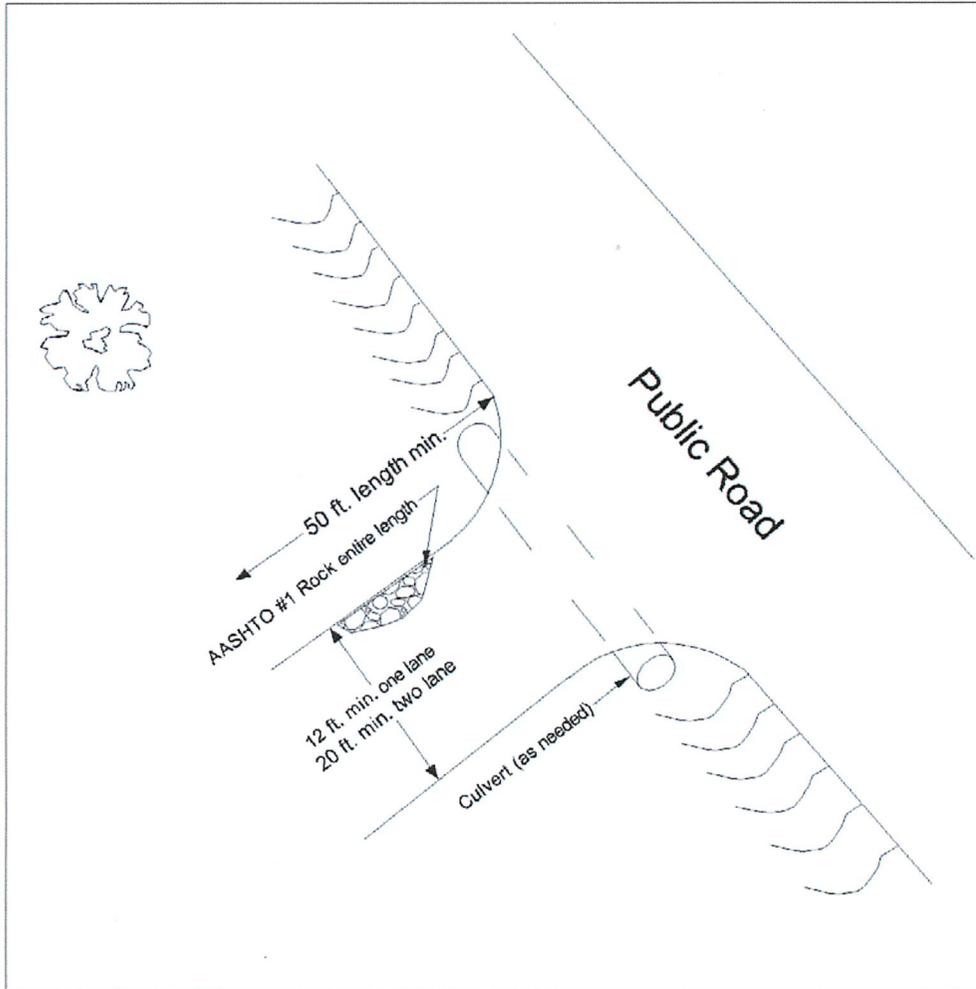
Will this BMP be used? Yes No



G. Stabilized Road Entrance

The purpose is to remove mud from tires and keep it off the road. Construction entrance shall be constantly maintained.

Will this BMP be used? Yes No **At site entrance off of Ford Road. See location on map.**



H. Disturbed Area Stabilization (check as appropriate)

	Seeding ^{4,5}	Natural Vegetation ⁵
Log Landing ⁶	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Haul Roads ⁶	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Skid Roads ⁶	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Seed mix and seeding rate to be used on critical areas:

All disturbed areas will be seeded with 3 bushels/acre of winter wheat to establish quick cover and control erosion.

Suggested Seeding Mixes for Landings, Roads and Critical Areas			
Mixes	Seeding rate (lb/acre)	Mixes	Seeding rate (lb/acre)
Permanent		Temporary	
a. Birdsfoot trefoil	8	f. Spring oats	96 (3 bu)
Redtop	3	g. Winter wheat	180 (3 bu)
b. Creeping red fescue*	30	h. Winter rye	168 (3 bu)
Perennial ryegrass	10	i. Annual rye	40
c. Birdsfoot trefoil	8		
Timothy	4		
d. White clover	1		
Kentucky bluegrass	6		
Timothy	2		
e. Annual ryegrass	10		
Redtop	10		
Birdsfoot trefoil	5		

*Recommended for somewhat poor and poorly drained soils in partial shade to full sunlight.

Note: Birdsfoot trefoil, crownvetch, "Lathco" flatpea and white clover seed should be properly inoculated.

9. SCHEDULE AND SEQUENCE OF OPERATIONS

Will this schedule be used? Yes No If not, provide additional information in Section 12.

Starting Date: November 1, 2010 Completion Date: February 25, 2011

- Pre-harvest:** Necessary permits will be obtained. Erosion and sediment control BMPs will be installed as specified in this plan. Haul road, landings and skid roads will be constructed.
- During harvest:** Erosion and sediment control BMPs for haul roads, skid roads and landings shall be maintained. Tops, branches and slash will be removed from ponds, lakes and streams. This plan will be amended or revised to include other BMPs for special or unanticipated circumstances that may occur.
- Post harvest:** Smooth and reshape roads and landings. Remove culverts and crossings. Install permanent waterbars as specified in this plan. Critical areas will be seeded, fertilized, limed and mulched and garbage/trash removed from the area.

No liming or fertilizing is proposed. The intent is to maintain low fertility in order to discourage reestablishing invasive species.

10. MAINTENANCE

BMPs will be inspected on a weekly basis and after each measurable rainfall event.

Culverts will be cleaned out, repaired or replaced as necessary. N/A

Filter strips will be maintained and respected (timber may be harvested in filter strips).

Haul roads and skid roads will be repaired where signs of accelerated erosion are detected.

Seeding and mulching will be repeated in those areas that appear to be failing or have failed.

Other (describe)

⁴ Areas to be seeded may require fertilization and liming. Soil testing will provide individualized recommendations for given sites. Recommendations of 300 lbs. of 10-10-10 fertilizer per acre and 2,000 lbs. of lime per acre should be considered to ensure 70% vegetative cover. Seeded areas will be more successful when mulched with a minimum of 2.5 tons of straw or hay per acre. Describe mulching type and rate in Section 12 when used.

⁵ Stabilization of disturbed areas is important. Disturbed areas shall be protected with such BMPs as straw bale barriers, filter fences, mulch, or filter strips, waterbars and other BMPs until vegetation is established. Critical areas such as: highly erodible soils, approaches to stream crossings and landings require establishment of permanent or temporary cover to ensure that erosion does not occur.

⁶ Indicates treatments for individual landings, haul roads or sections, and skid roads identified on the map.

11. SITE CLEANUP

Describe procedures which ensure the proper handling, storage, control, disposal and recycling of timber harvesting materials and waste, including but not limited to fuels, oil, lubricants and other materials brought to the timber harvest site or used in the process of timber harvesting.

- Garbage, fuels or any substance harmful to human, aquatic or fish life, will be prevented from entering springs, streams, ponds, lakes, wetlands or any water course or water body.
- Oils, fuels, lubricants and coolants will be placed in suitable containers and disposed properly.
- All trash and garbage will be collected and disposed properly.
- Other (describe)- All tops and limbs will be chipped and hauled offsite to the maximum extent practicable

12. ADDITIONAL EXPLANATION/COMMENTS (if needed)

See attachment - next page

12. Greenland Nursery Additional Explanations/Comments

The site has been divided into two distinct zones. If project funding is limited, the zones will be completed in the same order as they are currently numbered/ranked.

Beginning on or about November 1, 2010, the project schedule is anticipated to proceed as follows:

1. PPR will contact the E&S control Inspector from the Philadelphia Water Department to arrange a pre-project on-site meeting.
2. Contractor to install Erosion and Sediment control features as outlined in this plan and to include a stabilized construction entrance and a log landing area. The SCE will be constructed adjacent to an existing gravel access road.
3. Clearing /invasive tree removals will begin within the western and southwestern portions of the site. All logs will be dragged to log landing and either chipped onsite or stockpiled if suitable as sawlogs. All tops will also be dragged to landing and chipped to minimize the accumulation of organic matter.
4. Stabilized construction entrance and log landing will be removed and regraded immediately following the removal of all logs and woodchips.
5. All disturbed areas will be temporarily seeded with winter wheat (3 bu./ac.) following completion of site work

No streams or wetland are located onsite. The nearest streams are each unnamed tributaries to the Schuylkill River which are 500 feet and 700 feet east and north of the site, respectively. No sediment from the site is expected to reach either of these features.

The amount of tree removal that will occur throughout the site may generally be described as sparse to moderate with a few concentrated areas of tree removal. A single dedicated skid trail will be located bisecting the northwestern and southwestern portions of the site

The site is currently an active PDPR greenhouse facility and includes a gravel driveway and several cleared access routes. These existing driveways and access roads will serve as the primary routes for equipment movement.

Any wheel ruts left on the site will be graded out at the end of the work

PPR staff will closely monitor the project and evaluate any erosion hazards. We will require the contractor to implement additional soil erosion and sediment control practices as necessary to comply with the "Erosion and Sediment Control Plan for a Timber Harvesting Operation."

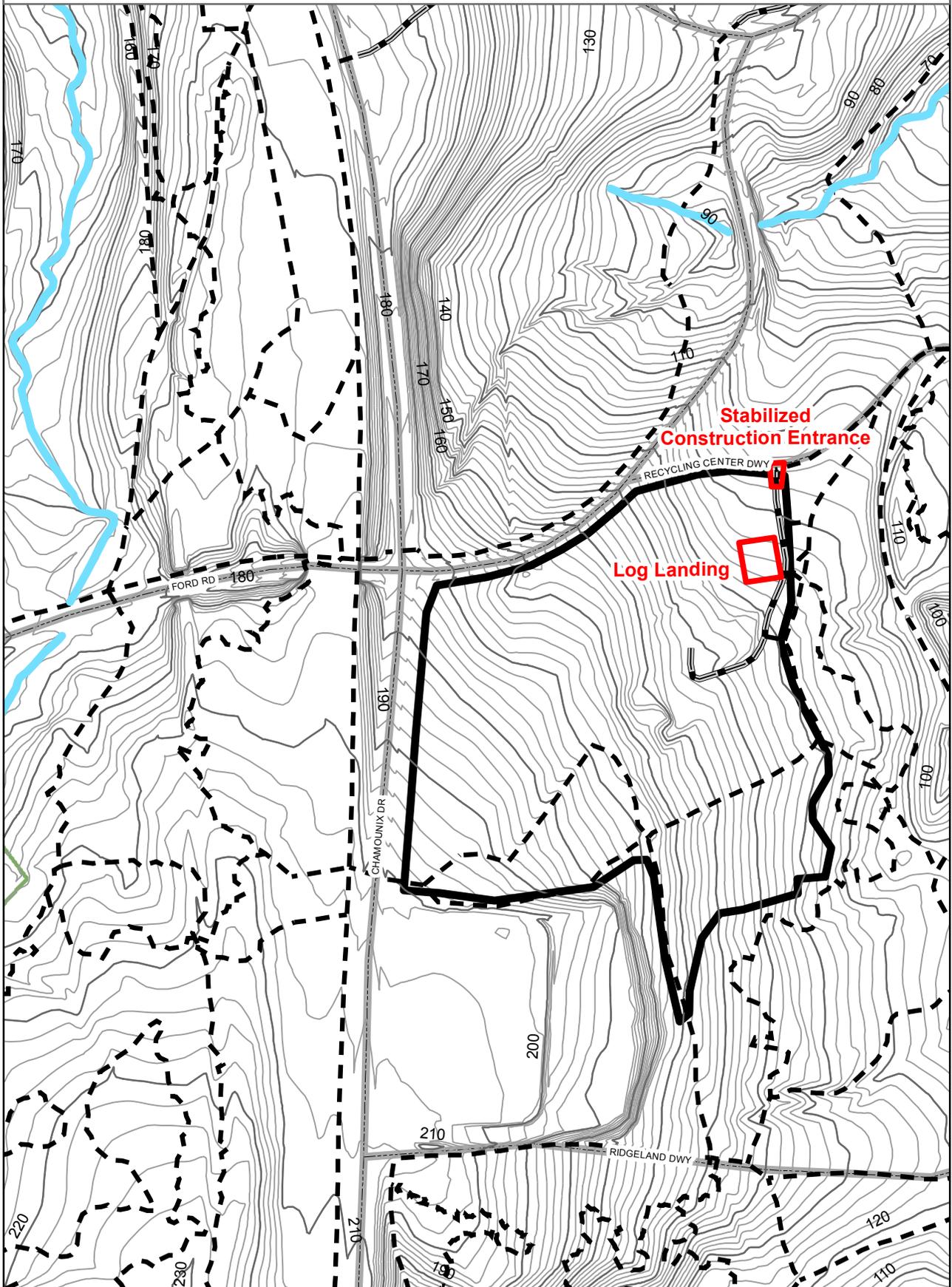


Greenland Nursery Erosion and Sediment Control Plan

- Existing Trails
- Roads
- Project Boundary
- Driveway
- Two Foot Topographic Contours
- Surface Water



1:3,259

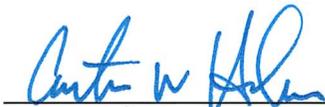


Verree & Susquehanna

3930-FM-WM0155 Rev. 2/2004

Erosion and Sediment Control Plan for a Timber Harvesting Operation

1. GENERAL INFORMATION

	<u>6 / 3 0 / 1 0</u> Date
A. Location <u>Verree & Susquehanna Roads, Philadelphia</u> <small>Municipality</small>	<u>Philadelphia</u> <small>County</small>
B. Timber sale area = <u>32.1</u> acres including 23 acres dominated by invasive shrubs.	
C. Landowner <u>Philadelphia Department of Parks and Recreation</u> <small>Name</small>	<u>215.683.0239</u> <small>Home Phone Work Phone</small>
<u>One Parkway, 10th Floor, 1515 Arch Street</u> <small>Street Address</small>	
<u>Philadelphia, PA 19102</u> <small>City State Zip Code</small>	_____ <small>Signature of Landowner</small>
D. Person(s) responsible for construction and maintenance of erosion and sediment control BMPs during earth disturbance activities. (NOTE: If duties are assigned to more than one party, list all others under Section 12 of this plan.)	
<u>Mr. Curtis Helm</u> <small>Name</small>	<u>215.683.0239</u> <small>Home Phone Work Phone</small>
<u>One Parkway, 10th Floor, 1515 Arch Street</u> <small>Street Address</small>	
<u>Philadelphia, PA 19102</u> <small>City State Zip Code</small>	_____ <small>Signature of person(s) responsible</small>
E. Erosion and Sediment Control Plan prepared by:	
<u>Mr. Curtis Helm</u> <small>Name</small>	<u>215.683.0239</u> <small>Phone</small>
<u>One Parkway, 10th Floor, 1515 Arch Street</u> <small>Street Address</small>	
<u>Philadelphia, PA 19102</u> <small>City State Zip Code</small>	_____ <small>Signature of Plan Preparer</small>

2. TOPOGRAPHICAL MAP - See Attachments - Verree & Susquehanna

The map must include the location of the project with respect to roadways, streams, wetlands, lakes, ponds, floodplains, type and extent of vegetation and other identifiable landmarks. A United States Geologic Service (USGS) quadrangle map may be used to show the existing topographical features of the project site and the immediate surrounding area. The map scale site must be large enough to clearly depict the topographical features of the project. Enlargements of the USGS quadrangle map are sufficient.

The scale and north arrow must be plainly marked. A complete legend of all symbols used on the map must also be included.

3. SOIL MAP - See Attachments - Verree & Susquehanna

Soils information is available in soil survey reports, published by the USDA Natural Resource Conservation Service in cooperation with Penn State University, College of Agriculture and others. These reports are available for review at the county conservation district offices.

The soils drainage classes must be examined to determine areas with the best drainage for the placement of haul roads and log landings, and to determine proper retirement treatments.

Provide the following soils information for all disturbed areas.

Map Symbols	Soil Series	Limiting Characteristics ¹ That May Apply to Timber Harvesting Activities (Check as Appropriate)		
		Erosion Hazards ²		
		Slight	Moderate, severe	Seasonably Wet ³
M a B	<u>Manor Loam, 3-8% Slopes</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
M a C	<u>Manor Loam, 8-15% Slopes</u>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
M b D	<u>Manor Extremely Stony Loam, 8-25% Slopes</u>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
C e B	<u>Chester Silt Loam, 3-8% Slopes</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

¹ Soils with a moderate or severe erosion hazard or seasonably wet are poor choices for log landing and road locations, and, if possible, alternatives should be considered.

² The degree or ease by which soil particles can be detached from the soil surface. Moderate or severe ratings require additional consideration of soil erosion and sediment control BMPs during logging and road construction.

³ Somewhat poorly drained soils remain wet for a longer period after rain and would be susceptible to disturbance. These soils may be hydric, indicating a possible wetland. They may have to be logged during dry seasons, when the profile may be relatively dry, or when the soils are frozen. They are poor choices for log landing and road locations, and, if possible, alternate areas should be considered.

4. SKETCH MAP - See Attachments - Verree & Susquehanna

The characteristics of the earth disturbance activity. The limits of the harvesting area must be shown on a map(s). Such information as the limits of clearing and grubbing and the areas of cuts and fills for roads and landings, and other proposed disturbances for the timber harvesting area are to be included. Roads, skid roads and landings located within 50 ft. of a stream bank may require a Department Chapter 105 Water Obstruction and Encroachment. The following should be clearly shown on the sketch map:

- Dimensions
- North Arrow
- Landings
- Haul Roads
- Skid Roads
- Wetland Crossings
- Stream Crossings
- Equipment Maintenance/Fueling Areas
- Existing Roads

5. RUNOFF

The amount of runoff from the timber harvest area and its upstream watershed area. You do not have to provide runoff calculations unless you plan to use BMPs different from those described in Section 8. If you use different BMPs, your calculations must include an analysis showing any impact that runoff may have on existing downstream watercourses and their resistance to erosion.

6. RECEIVING WATERS

All streams in Pennsylvania are classified based upon their designated and existing uses and water quality criteria. Designated uses for waters of this Commonwealth are found in 25 Pa. Code §93.9a-z at <http://www.pacode.com/secure/data/025/chapter93/chap93toc.html>. Existing uses of waters of this Commonwealth are found at the DEP website <http://www.dep.state.pa.us>. Type the phrase "existing use" in the DEP Keyword box. The county conservation district office can also supply this information. List the bodies of water likely to receive direct runoff within or from the timber harvest area.

<u>Name</u>	<u>Designated/Existing Use</u>
Pennypack Creek	T S F, M F

7. ESTIMATED DISTURBED AREA

	Total Length (ft)	Average Width (ft)	Area (sq ft)
Haul Roads	N/A		
Skid Roads	5150	10	= 51,500
Landings (1)	100	100	= 10,000
Total Area (sq. ft.)		=	61,500
		÷	43,560 sq ft/A
		=	1.4 acres
<small>Acres disturbed by earth disturbance activities.</small>			

If the total area of earth disturbance activities (sum of area disturbed by haul roads, skid roads and landings) consists of 25 acres or more, an Erosion and Sediment Control Permit must be obtained.

Has application been made for required stream crossing permits? Yes No Not Applicable

At all stream crossing locations, runoff must be directed to a sediment removal area, i.e., filter strip, straw bale, silt fence, sump, a trap for treatment. Waterbars and/or broad based dips should be installed and maintained as required on the approaches to the stream crossing.

NOTE: No streams or wetlands onsite. Pennypack Creek is located 200-300 feet south of project site.

8. DESCRIPTION OF EROSION AND SEDIMENT CONTROL MEASURES

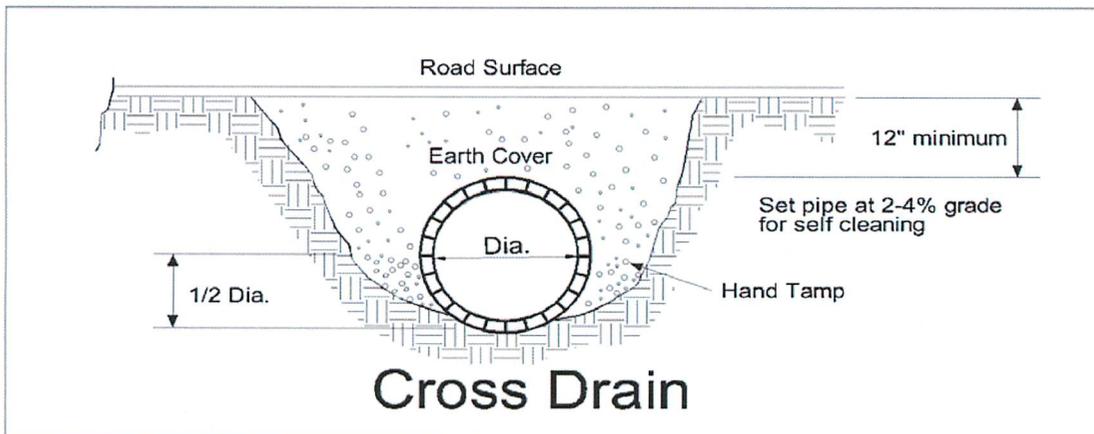
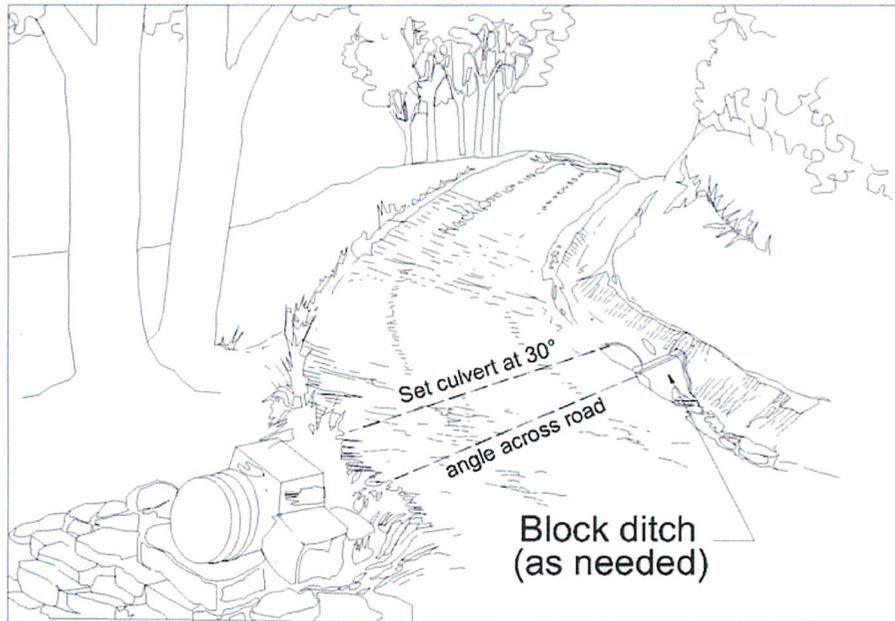
The following standard BMP drawings and recommended spacings (Sections A-H) have been provided to fulfill the requirements of this plan. If you plan to use any of these recommended BMPs, please check the appropriate boxes for Sections A through H. If you plan to use alternative BMPs, you must provide drawings showing the details, specifications and spacing.

A. Cross-drain culvert

Culverts will be installed before the ground freezes. Culverts shall be placed with a slope of 2 to 4 percent and cross the road at a 30-degree downslope angle. Recommend 12" pipe or larger culverts. Will this BMP be used? Yes No Will recommended spacing be used? Yes No

Road Grade (% Slope)	Recommended Spacing (feet)	Alternative Spacing* (feet)
2	500	_____
3	400	_____
4	350	_____
5-6	300	_____
7-8	250	_____
9-11	200	_____
12-13	150	_____
14+	100	_____

*If alternative spacings are used, please make sure reasons for their use are explained.



B. Waterbars

Waterbars on skid roads will be maintained throughout the entire job and installed permanently upon job completion.

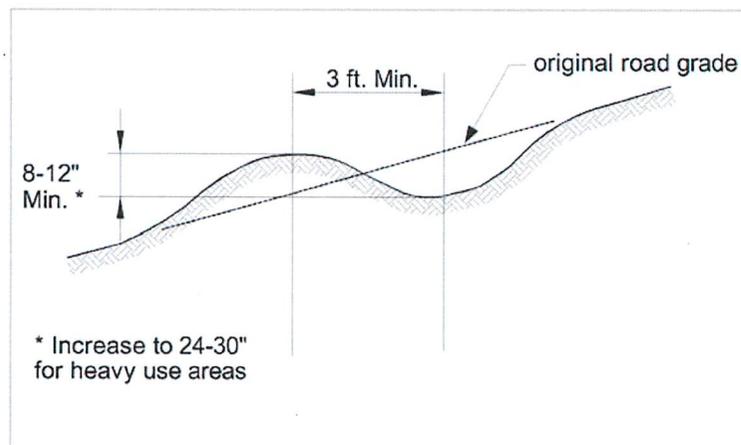
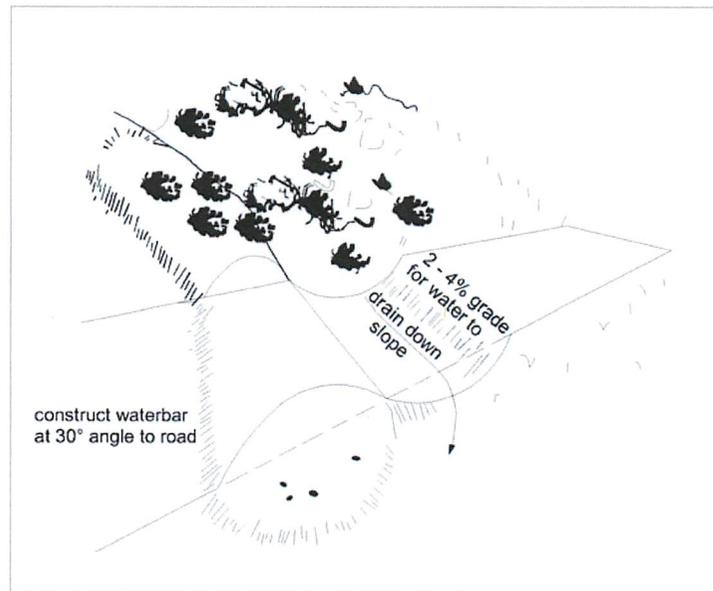
Waterbars will be installed before the ground freezes and will be spaced as indicated below.

Will this BMP be used? Yes No Will recommended spacing be used? Yes No

This practice will be used if erosion is noted at log landings or along trails used for equipment and material movement.

Road Grade (% Slope)	Recommended Spacing (feet)	Alternative Spacing* (feet)
2	250	_____
5	135	_____
10	80	_____
15	60	_____
20	45	_____
25	40	_____
30	35	_____
40	30	_____

*If longer spacings are used, please make sure reasons for their use are explained.



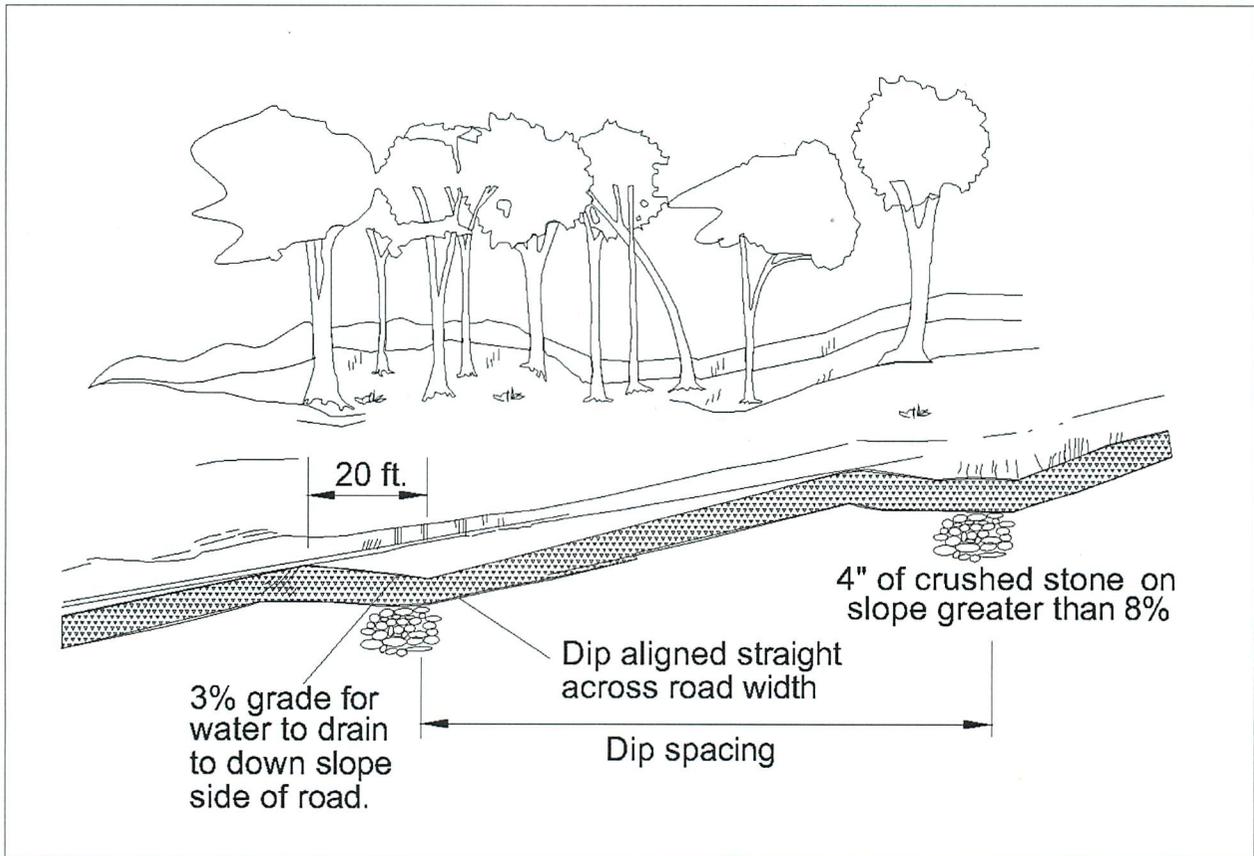
C. Broad-based dips

Broad-based dips will be installed and worked before the ground freezes. Broad-based dips on the road system are planned to be spaced as indicated below.

Will this BMP be used? Yes No Will recommended spacing be used? Yes No

Road Grade (% Slope)	Recommended Spacing (feet)	Alternative Spacing* (feet)
2	300	_____
3	250	_____
4	200	_____
5	180	_____
6	170	_____
7	160	_____
8	150	_____
9-10	140	_____

*If longer spacings are used, please make sure reasons for their use are explained.



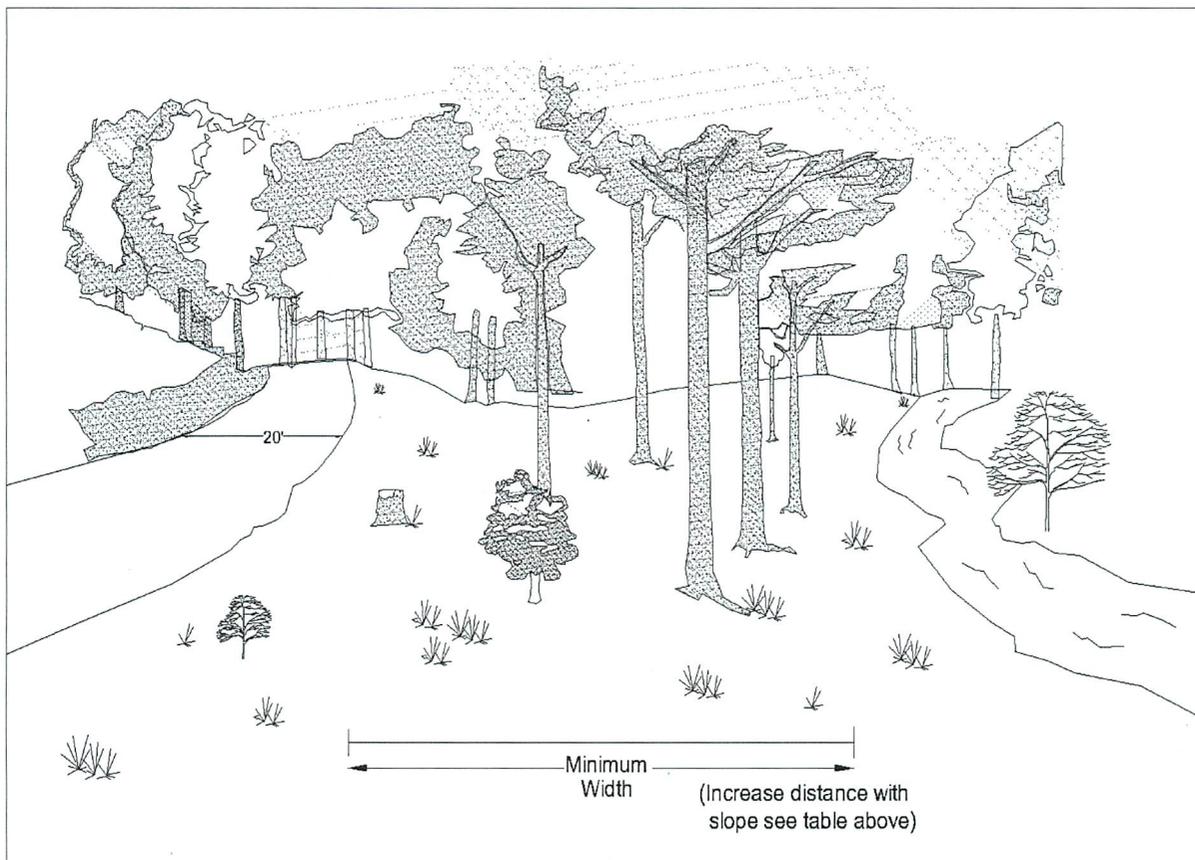
D. Filter strips

Filter strip widths by slope on land between roads and perennial streams.
 The width of the filter strip depends on the slope between the road and the stream.

Will this BMP be used? Yes No **No equipment will be operated within 200+ feet of Pennypack Creek which is south of the project site.**

Slope of Land Between Road and Stream (%)	Minimum width of Filter Strip (feet) +
0	25++
10	45++
20	65
30	85
40	105
50	125
60	145
70	165

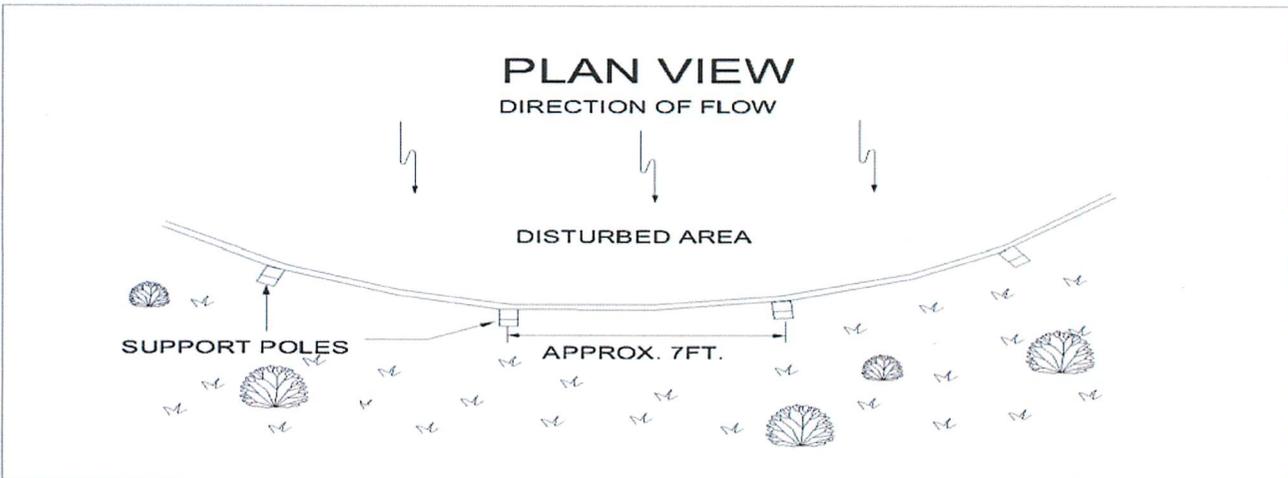
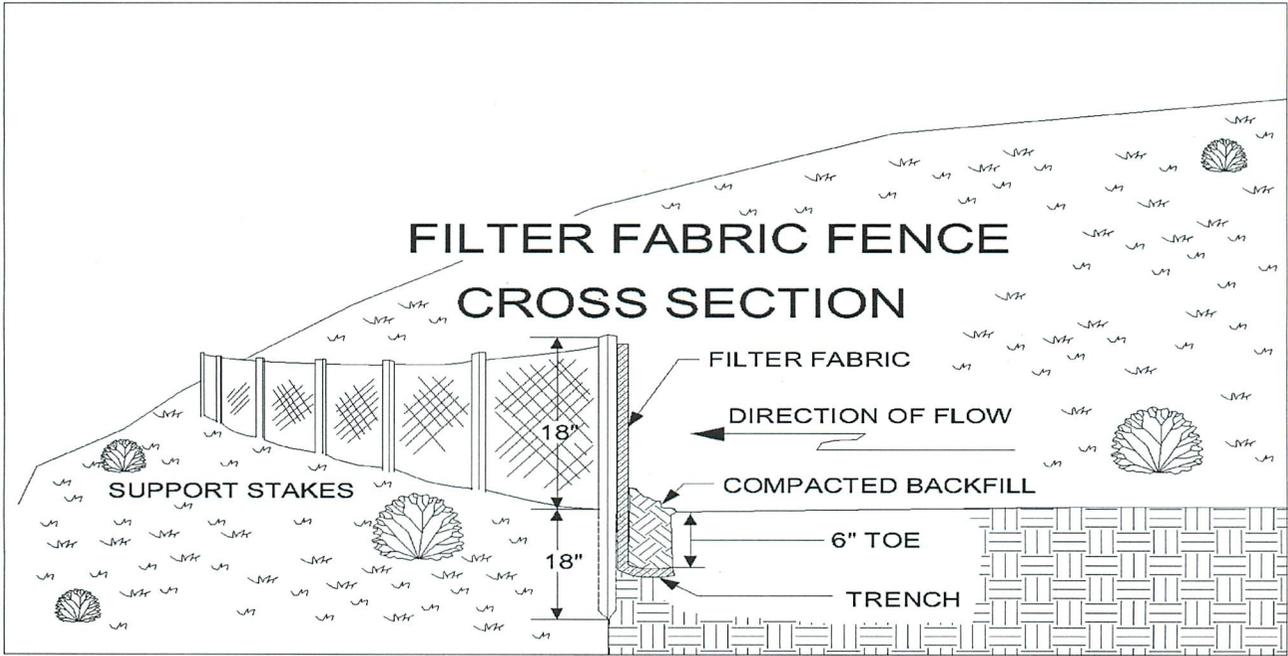
- + Widths should be doubled when the harvesting activity is located on municipal water supplies or where receiving waters have a designated use/existing use of High Quality or Exceptional Value.
- ++ Earth disturbance 50 feet or less from a stream requires a water obstruction and encroachment permit from the appropriate DEP Regional Office, Soils and Waterways Section.



E. Filter Fabric Fence

Filter fabric fence must be installed on contour at the edge of disturbed areas. Both ends of each fence section must be extended upslope at 45 degrees to the main fence alignment. They should not be installed in streams, ditches or other areas of concentrated flow. Install filter fabric fence before the ground freezes.

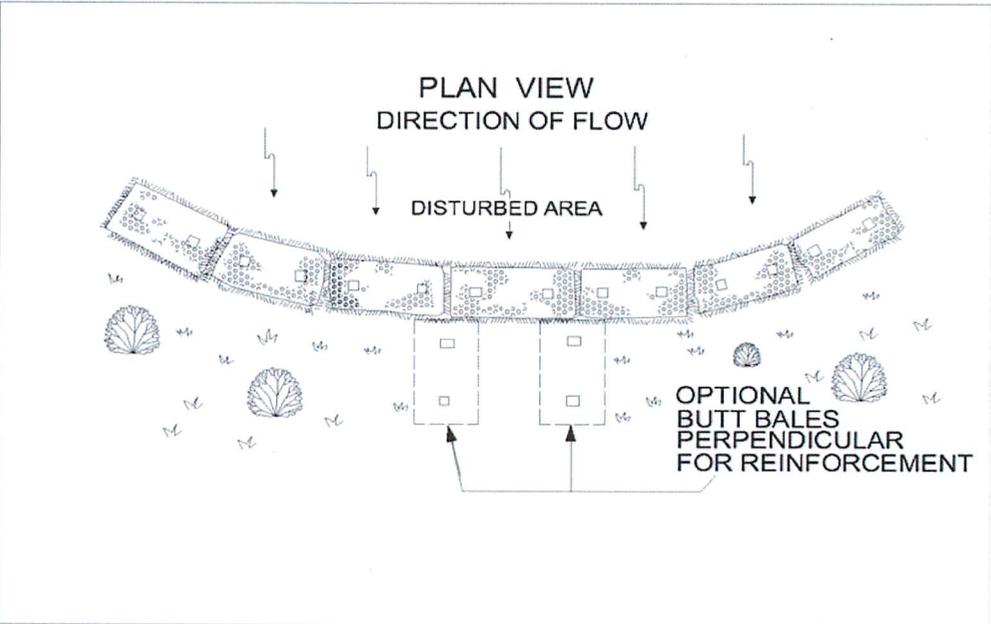
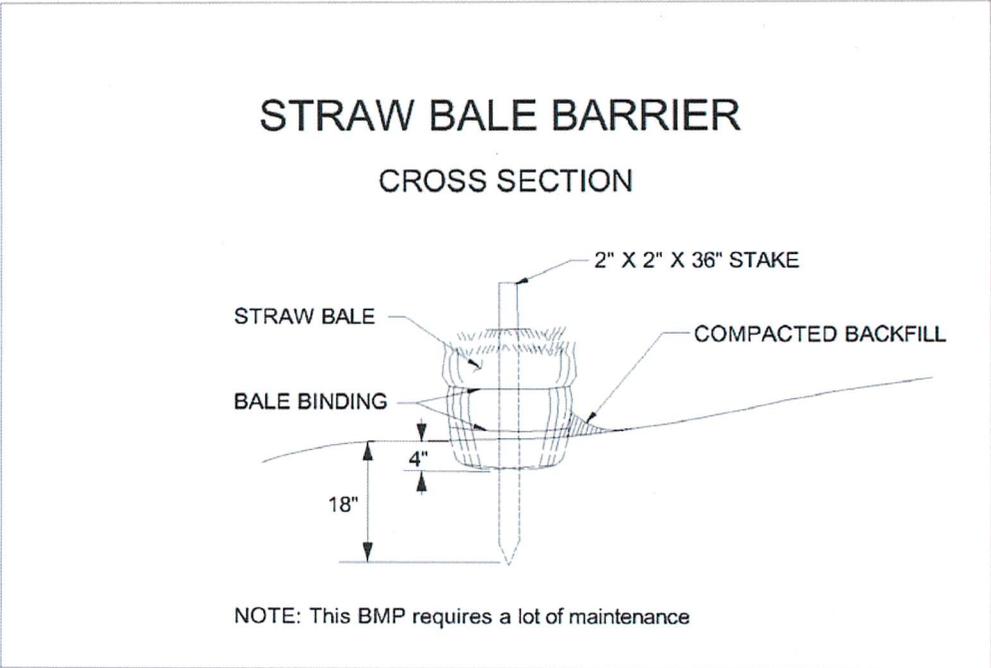
Will this BMP be used? Yes No



F. Straw Bale Barrier

Straw bale barriers shall be placed on contour at the edge of disturbed areas. Both ends of the barrier shall be extended upslope at 45 degrees to the main barrier alignment. Straw bales deteriorate and should be replaced every 3-4 months. They should not be installed in streams, ditches or other areas of concentrated flow.

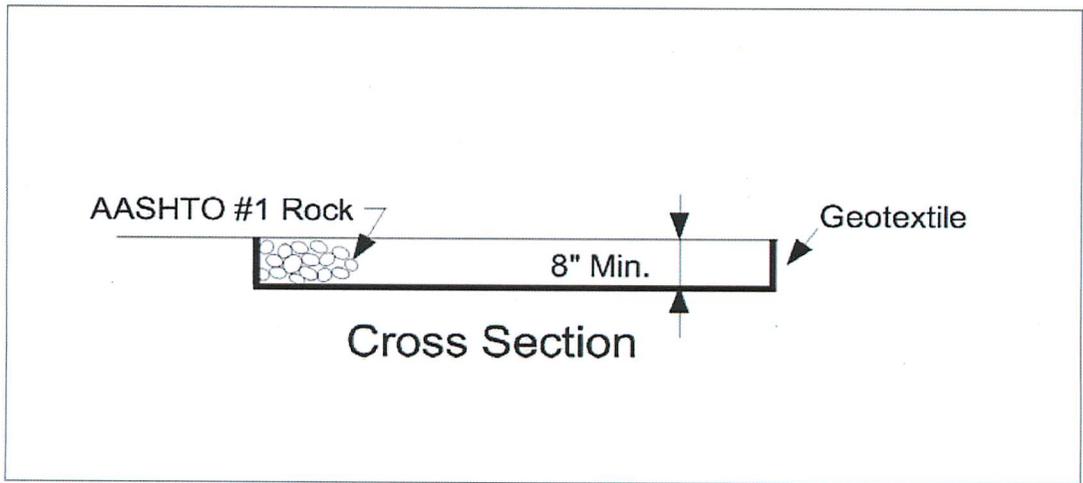
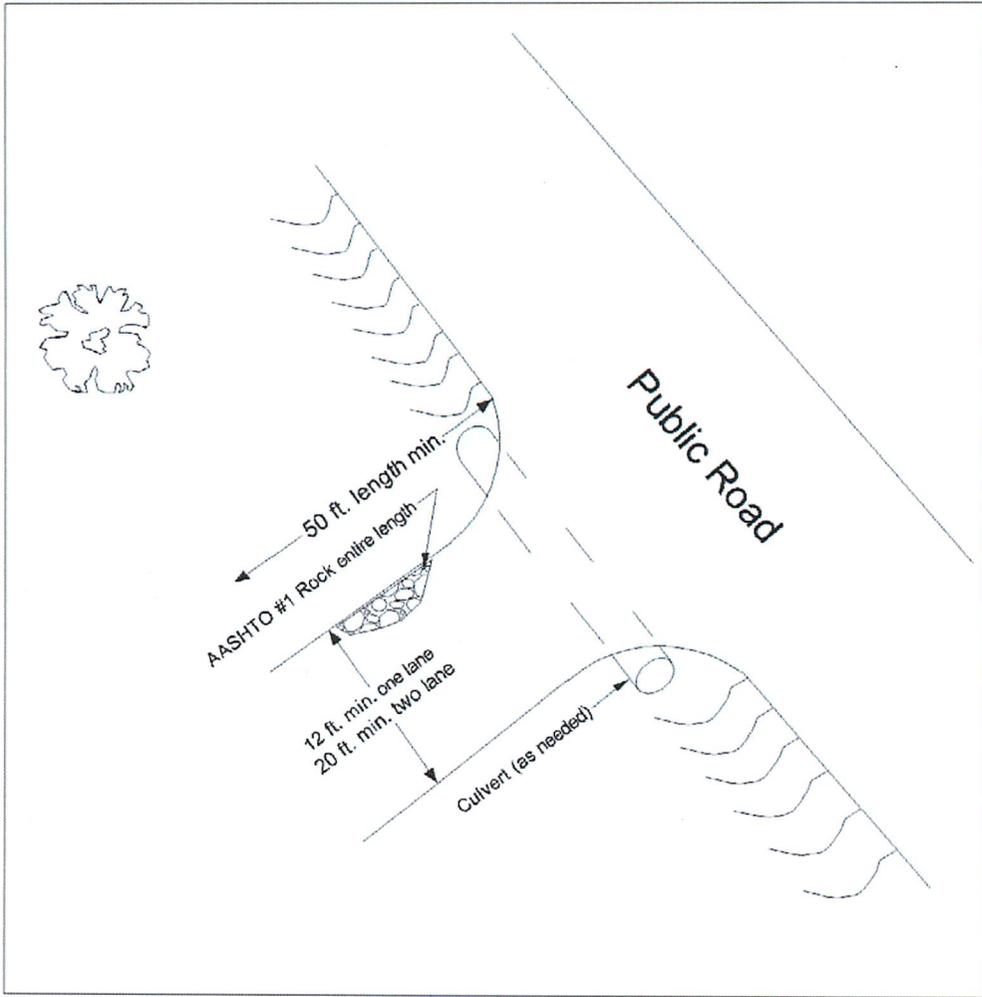
Will this BMP be used? Yes No



G. Stabilized Road Entrance

The purpose is to remove mud from tires and keep it off the road. Construction entrance shall be constantly maintained.

Will this BMP be used? Yes No **At site entrance along Verree Road. See location on map.**



H. Disturbed Area Stabilization (check as appropriate)

Seeding^{4,5} Natural Vegetation⁵

Log Landing⁶

Haul Roads⁶ N/A

Skid Roads⁶

Seed mix and seeding rate to be used on critical areas:

All disturbed areas will be seeded with 3 bushels/acre of winter wheat to establish rapid cover. All disturbed areas are to be seeded w/warm season grasses and/or planted with native trees/shrubs following control of invasive species. Planting is scheduled for Sept/Oct 2011 and permanent seeding in May 2012.

Suggested Seeding Mixes for Landings, Roads and Critical Areas			
Mixes	Seeding rate (lb/acre)	Mixes	Seeding rate (lb/acre)
Permanent		Temporary	
a. Birdsfoot trefoil	8	f. Spring oats	96 (3 bu)
Redtop	3	g. Winter wheat	180 (3 bu)
b. Creeping red fescue*	30	h. Winter rye	168 (3 bu)
Perennial ryegrass	10	i. Annual rye	40
c. Birdsfoot trefoil	8		
Timothy	4		
d. White clover	1		
Kentucky bluegrass	6		
Timothy	2		
e. Annual ryegrass	10		
Redtop	10		
Birdsfoot trefoil	5		

*Recommended for somewhat poor and poorly drained soils in partial shade to full sunlight.

Note: Birdsfoot trefoil, crownvetch, "Lathco" flatpea and white clover seed should be properly inoculated.

9. SCHEDULE AND SEQUENCE OF OPERATIONS

Will this schedule be used? Yes No If not, provide additional information in Section 12.

Starting Date: November 1, 2010

Completion Date: February 25, 2011

- Pre-harvest:** Necessary permits will be obtained. Erosion and sediment control BMPs will be installed as specified in this plan. Haul road, landings and skid roads will be constructed.
- During harvest:** Erosion and sediment control BMPs for haul roads, skid roads and landings shall be maintained. Tops, branches and slash will be removed from ponds, lakes and streams. This plan will be amended or revised to include other BMPs for special or unanticipated circumstances that may occur.
- Post harvest:** Smooth and reshape roads and landings. Remove culverts and crossings. Install permanent waterbars as specified in this plan. Critical areas will be seeded, fertilized, limed and mulched and garbage/trash removed from the area.

No liming or fertilizing is proposed. The intent is to maintain low fertility in order to discourage reestablishing invasive species.

10. MAINTENANCE

BMPs will be inspected on a weekly basis and after each measurable rainfall event.

Culverts will be cleaned out, repaired or replaced as necessary. N/A

Filter strips will be maintained and respected (timber may be harvested in filter strips).

Haul roads and skid roads will be repaired where signs of accelerated erosion are detected.

Seeding and mulching will be repeated in those areas that appear to be failing or have failed.

Other (describe)

⁴ Areas to be seeded may require fertilization and liming. Soil testing will provide individualized recommendations for given sites. Recommendations of 300 lbs. of 10-10-10 fertilizer per acre and 2,000 lbs. of lime per acre should be considered to ensure 70% vegetative cover. Seeded areas will be more successful when mulched with a minimum of 2.5 tons of straw or hay per acre. Describe mulching type and rate in Section 12 when used.

⁵ Stabilization of disturbed areas is important. Disturbed areas shall be protected with such BMPs as straw bale barriers, filter fences, mulch, or filter strips, waterbars and other BMPs until vegetation is established. Critical areas such as: highly erodible soils, approaches to stream crossings and landings require establishment of permanent or temporary cover to ensure that erosion does not occur.

⁶ Indicates treatments for individual landings, haul roads or sections, and skid roads identified on the map.

11. SITE CLEANUP

Describe procedures which ensure the proper handling, storage, control, disposal and recycling of timber harvesting materials and waste, including but not limited to fuels, oil, lubricants and other materials brought to the timber harvest site or used in the process of timber harvesting.

- Garbage, fuels or any substance harmful to human, aquatic or fish life, will be prevented from entering springs, streams, ponds, lakes, wetlands or any water course or water body.
- Oils, fuels, lubricants and coolants will be placed in suitable containers and disposed properly.
- All trash and garbage will be collected and disposed properly.
- Other (describe). All tops and limbs will be chipped and hauled offsite to the maximum extent practicable

12. ADDITIONAL EXPLANATION/COMMENTS (if needed)

See attachment - next page

12. Verree & Susquehanna Roads Additional Explanations/Comments

This site has been divided into three distinct zones. If project funding is limited, the zones will be completed in the same order as they are currently numbered/ranked.

Schedule

1. The clearing phase of the project is scheduled to begin November 1, 2010 and be completed by February 25, 2011
2. During September/October 2010, PPR will contact the E&S control Inspector from the Philadelphia Water Department to arrange a pre-project on-site meeting and review ESC plan.
3. November 2010 the contractor will install Erosion and Sediment control features as outlined in this plan. This site will include a stabilized construction entrance (if needed) and a log landing area.
4. Clearing /invasive tree removals will begin within the northeastern portion of the site (Zone 1). All logs will be dragged to log landing and either chipped onsite or stockpiled if suitable as sawlogs. All tops will also be dragged to landing and chipped to minimize organic matter within proposed meadow areas (+/- 23 acres).
5. All stumps will be ground out from within areas of proposed meadows.
6. The stabilized construction entrance (if needed) and log landing will be removed immediately following the removal of all woody debris (logs and woodchips).
7. All skid trails will be regraded to remove ruts.
8. All disturbed areas will be temporarily seeded with winter wheat (3 bu./ac.) following completion of site work

General

No streams or wetlands are located onsite. The Pennypack Creek is located 200-300 feet south of the site. The project is not anticipated to pose any significant risk of soil erosion or sedimentation to the Pennypack Creek.

The project site topography is considered flat to gently sloping. Little or no disturbance will occur within areas of moderate or steep slopes.

An existing gravel /partially paved road roughly bisect the site. This road will provide the primary haul route into and out of the project site. No haul road will be required.

The amount of tree removal that will occur throughout the site may generally be described as sparse. No concentrated areas of tree removal are anticipated which will limit the need for dedicated skid trails

The site is currently parkland and is traversed by numerous well used trails. These trails are currently stable and are not subject to erosion. These existing trails will serve as the primary trails for equipment movement.

Any wheel ruts left on the site will be graded out at the end of the work

PPR staff will closely monitor the project and evaluate any erosion hazards. We will require the contractor to implement additional soil erosion and sediment control practices as necessary to comply with the "Erosion and Sediment Control Plan for a Timber Harvesting Operation."

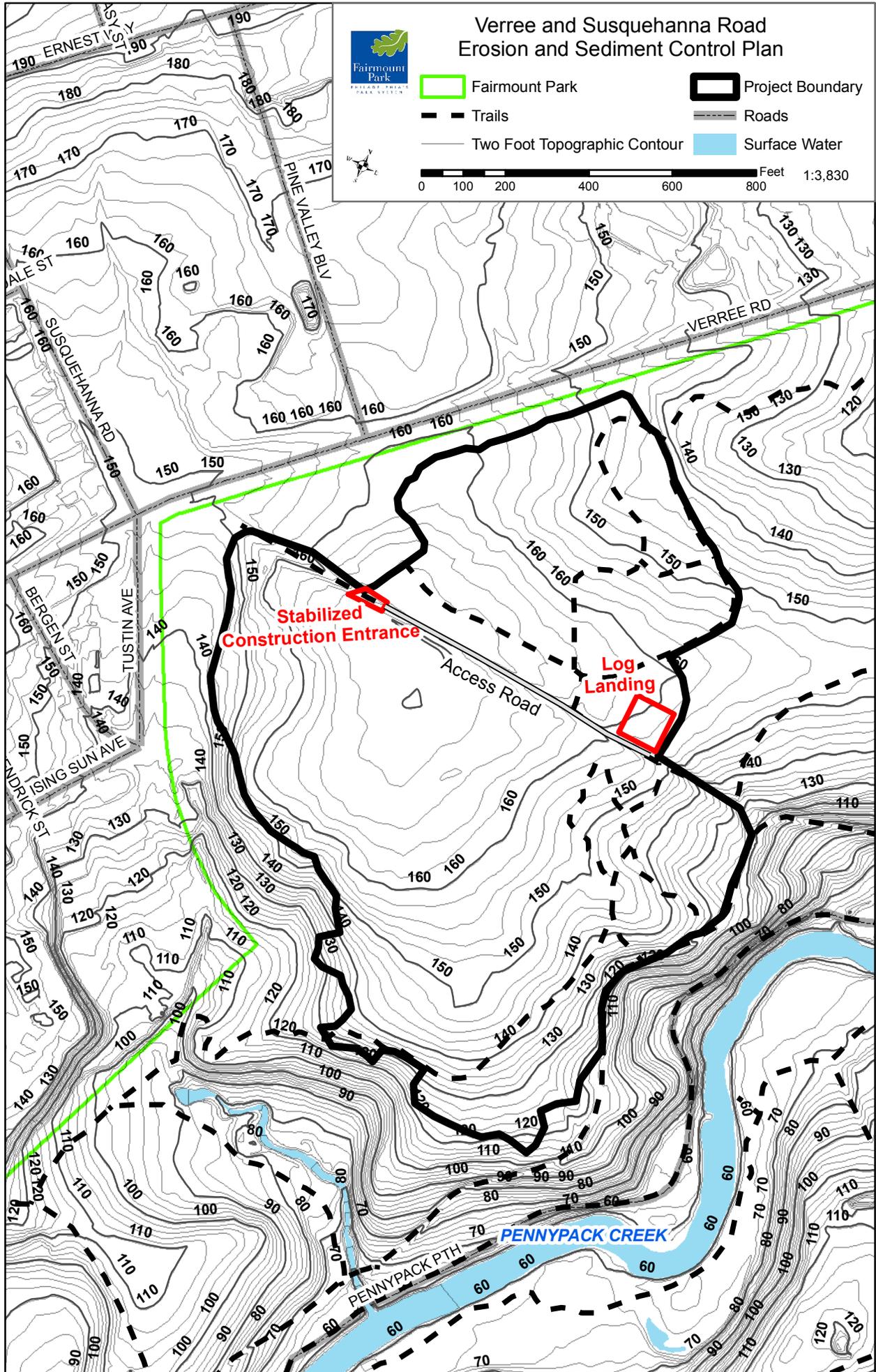


Verree and Susquehanna Road Erosion and Sediment Control Plan

- Fairmount Park
- Project Boundary
- Trails
- Roads
- Two Foot Topographic Contour
- Surface Water



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Attention Bidder:

This bid document may not contain all of the documents that you will need to complete the bid submission. On occasion, it is not possible to include the following:

Exhibits

Drawings

Attached specifications

Attached documents

If you have not received a corresponding attachment, drawing or exhibit that is referenced in the bid document you may obtain it by contacting the Public Information Unit at 215-686-4720.



CITY OF PHILADELPHIA

INSTRUCTIONS FOR GETTING PAID

BY THE CITY OF PHILADELPHIA

The City attempts to process invoices in a timely manner. Delays can occur because of incomplete or inaccurate invoicing information. Please make sure that all your invoices contain the following information to help the City in paying you as quickly as possible.

- 1. AFTER THE DELIVERY OR SERVICES HAS BEEN COMPLETED YOU MUST SUBMIT THREE (3) COPIES OF AN INVOICE FOR PAYMENT TO THE RECEIVING DEPARTMENT LISTED ON THE PURCHASE ORDER.**
- 2. THE INVOICE MUST CORRECTLY REFERENCE THE PURCHASE ORDER NUMBER, THE VENDOR NAME, ADDRESS AND FEDERAL EMPLOYER IDENTIFICATION NUMBER.**
- 3. CHECKS WILL ONLY BE MADE PAYABLE TO THE COMPANY NAME AS SHOWN ON THE PURCHASE ORDER; THE INVOICE MUST REFLECT THIS SAME COMPANY NAME AS THE "PAY TO".**
- 4. THE INVOICE MUST SHOW THE QUANTITY AND TYPE OF ITEM OR SERVICE AND THE PRICE.**
- 5. THE UNIT OF PURCHASE ON THE INVOICE MUST AGREE WITH THE UNIT CITED ON THE PURCHASE ORDER. REFERENCE TO THE SPECIFIC LINE ITEM IS HELPFUL.**

Paying vendors is the responsibility of the *receiving* City Department(s), not the Procurement Department. Vendors should bring any problems concerning payments to the attention of the appropriate City receiving department. The name and number of the contact person can generally be found on the purchase order. If all necessary paperwork has been submitted to the department and questions still remain, vendors should contact:

**City of Philadelphia
Accounting Verification
Room 1340 Municipal Services Building
1401 J.F.K. Blvd.
Philadelphia, PA 19102
Tel. 215 686 6365**

VENDORS INTERESTED IN RECEIVING PAYMENTS ELECTRONICALLY MUST COMPLETE AN ACH VENDOR ENROLLMENT AND CHANGE FORM. THIS FORM CAN BE DOWNLOADED FROM WWW.PHILA.GOV/BIDS.

BIDDERS GUIDELINES*

The following list will assist you in the preparation of your bid.

- Read the entire bid so that you fully understand all the requirements.
- All bids must be submitted to the City no later than the time and date stated as the bid opening.
- Note the City Anti-Discrimination Policy. If Office of Economic Opportunity Participation is required be sure to fill out all appropriate forms. If you have questions call OEO at (215) 686-6232.
- Make sure you submit the appropriate Bid Security and Bid Submission Fee with your bid. Refer to Section 1 of the bid and the Conditions of Bidding sheet.
- Bidder must meet **all** qualifications.
- If an alternate to any item is being offered, you must follow the instructions in paragraph 2 of the Conditions of Bidding sheet.
- Does the bid require a site inspection, attendance at a Pre-Bid Meeting, samples, financial information or other data you must provide?
- Have you signed and returned all Addenda?
- If the bid is going to be awarded as a whole, you must bid on all items. See Section 3 of the bid: Bid Evaluation and Award.
- Bidders' attention is directed to the Conditions of Bidding sheet regarding the Master Performance Bond.
- Bids and pricing must be written in ink or typed. FAXed bids will not be accepted.
- **Do not** submit counter terms or conditions. **Your bid will be rejected**.
- Have you signed the Contract Page and affixed your Corporate Seal as required?
- **Do not** combine check amounts: All checks should be individual and specific.
- Please double check all mathematical calculations for errors.

If you have questions call Public Information at (215) 686-4720.

*This information is provided for guidance only and does not preclude your responsibility to read fully and respond to all portions of this bid.



**CITY OF PHILADELPHIA
PROCUREMENT DEPARTMENT
Public Information Unit**

ATTENTION VENDORS

If your company would like to receive the results of a particular bid, the Public Information Unit of the Procurement Department will forward this information to you at a **\$10.00 fee, company check or money order only, no personal checks or cash, for each bid number requested.** Please be advised that bid tabulations **are not available** by telephone. If you have any questions, Please call 215-686-4755 or 215-686-4756.

BID RESULTS REQUEST FORM

Please complete form below. Only one (1) request per form.

Date of Request: _____

Bid Number Requested: _____ Opening Date: _____

Company Name: _____

Company Representative: _____

Address: _____

Telephone No.: _____ Fax No.: _____

Mail this Request to the address below and enclose the following items:

- Company check or Money Order payable to **“City of Philadelphia”**
- A self-addressed stamped envelope which is at least 9 ½ ” x 12 ½ ” or larger for each Bid requested.

Failure to send either of the above items, will void your request.

Mail Request To:

The Procurement Department Public Information Unit
Attention: Bid Results
1401 JFK Blvd.
Room 170B
Philadelphia, PA 19102

COMPANY CHECK OR MONEY ORDER ONLY



CITY OF PHILADELPHIA

Procurement Department
120 Municipal Services Building
Philadelphia, PA 19102-1685
(215) 686-4720
(215) 686-4716 Fax

Hugh Ortman
Procurement Commissioner

Master Bid Security Program for Service, Supplies and Equipment Bids Period of Coverage: July 1, 2010 – June 30, 2012

(Bids for Professional Consulting Services, Public Works, Construction and Demolition [wrecking and building removal] are not covered under the Master Bid Security Program)

Dear Vendor:

The Philadelphia City Charter requires that each bid submission over \$30,000 be accompanied by a certified check in the amount specified in the bid invitation. This requirement can be met for most bids if the Bidder is covered under the City's Master Bid Security Program. This program provides bid security coverage for Service, Supply and Equipment bids that have a total dollar value of over \$30,000 up to \$500,000.

To file for coverage under the Bid Security Program, for the period **July 1, 2010 to June 30, 2012**, complete the enclosed application and return it with a check for **\$175.00**. Make the check payable to "City of Philadelphia". It is **non-refundable**. To clarify the precise use of the check, enter the words "**Bid Security Program**" **2010–2012** on the face of the check.

If you do not become a participant in the program at this time, you may still submit bids. However, they must be accompanied by a certified check in the amount specified in the Terms and Conditions of Bidding.

For additional information or inquiries regarding this program, please contact: The Public Information Unit at (215) 686-4719, (215) 686-4720 or (215) 686-4721.

IF A RECEIPT IS REQUESTED, PLEASE ENCLOSE A SELF-ADDRESSED STAMPED ENVELOPE.

Forward Check with Application to
CITY OF PHILADELPHIA
MASTER BID SECURITY PROGRAM
170A Municipal Services Building
Philadelphia, PA 19102-1685

Company Name: _____

Fed EIN/SSN: _____

Street Address _____

City, State, Zip: _____

Contact Person: _____

Telephone No: (____) _____ Fax No: (____) _____

A. Check payable to the City of Philadelphia in the amount of \$175.00 for 7/1/10 to 6/30/12
DO NOT SEND CASH. NO PERSONAL CHECKS.

Internal Use Only

Rcvd. ___/___/___ Pymt. Type _____ Ck. Amt. \$ _____ Ck.# _____



CITY OF PHILADELPHIA

Office of the Director of Finance
Room 1330, Municipal Services Bldg.
1401 John F. Kennedy Boulevard
Philadelphia, Pa 19102-1685

Rob Dubow
Director of Finance

The City of Philadelphia is pleased to announce a **Vendor Information Payment System (VIPS)** which will allow businesses such as yours to inquire about the status of invoices billed against purchase orders and professional services contracts. The only requirement is that your invoices utilize a unique number – either alpha, numeric or a combination of the two.

This system will be operational twenty four hours a day, seven days a week. All you have to do is dial **215-686-5968**, and follow the prompts to get an up-to-date status on your payments.

Enclosed for your convenience is an easy to use reference guide which provides a brief overview of what you can expect. I urge you to give it a try and see for yourself how easy it is to use. If you should happen to experience any problems, or if you would like to comment on this system, please call the **Office of the Director of Finance** at **215-686-6167**.

I believe that you will find this way of obtaining payment information convenient and easy to use.

Vendor Information Payment Reference Guide

- 1- Call 215-686-5968.
- 2- After the prompts, enter the 8 numeric characters that uniquely identifies your purchase order.
- 3- Select one of the three inquiry options:
 - ▶ a) by your purchase order.
 - ▶ b) by your company.
 - ▶ c) by your specific invoice number.
 - (Numeric invoice numbers only)



CITY OF PHILADELPHIA

PROCUREMENT DEPARTMENT
120 Municipal Services Building
Philadelphia, Pa 19102-1685

Hugh Ortman
Procurement Commissioner

Dear Valued Vendor,

The City of Philadelphia is pleased to announce a new online **Vendor Invoice Information (VII) Website** which will allow businesses such as yours to inquire about the status of invoices billed against purchase orders and professional services contracts. The only requirement is that your invoices utilize a unique number – alpha, numeric or a combination of the two.

This system will be operational twenty four hours a day, seven days a week. All you have to do is log on to the City of Philadelphia website: www.phila.gov, click on “Vendor Invoice Information” under the “Help Me” section of the home page, enter your Federal Employer Identification Number (FEIN) and a valid active purchase order. Then, agree to a waiver statement and follow the prompts to get an up-to-date status on your payments.

You are urged to give it a try and see for yourself how easy it is to use. If you should happen to experience any problems, or if you would like to comment on this new system, please e-mail us using the question and comment field provided on the site.

We believe that you will find this new way of obtaining payment information convenient and easy to use.

TERMS AND CONDITIONS OF BIDDING AND CONTRACT

BID SUBMISSION

1. PREPARATION AND SUBMISSION OF BID.

All bids must be written in ink or typewritten and made on the forms issued and signed in ink by a person with legal authority to bind the bidder. The contract awarded hereunder shall consist of the Invitation and Bid, all addenda thereto issued by the City, all exhibits and attachments issued and/or accepted by the City and these Terms and Conditions of Bidding and Contract (the "Contract"). It is the sole responsibility of the bidder to ensure that it has received any and all addenda and the Procurement Commissioner may in his/her sole discretion reject any bid for which all addenda have not been executed and returned in accordance with the instructions provided therein. No bid may be considered if received after the date and time for the opening of bids established by the Invitation and Bid, nor may any bid be modified after that date and time. The time of bid opening shall be the time displayed on the City's official bid clock located at the bid room. In the event of any discrepancy between actual time and the City's official bid clock, the latter shall determine the time of bid opening.

2. BID SECURITY. Unless the bidder is enrolled under the City's Annual Master Bid Security Program or an individual bid bond is required in the Invitation and Bid, all bids must be accompanied by a Certified Check, Treasurer's Check, Cashier's Check, Bank Money Order, or United States Postal Money Order made payable to the order of "The City of Philadelphia" in the proper amount as shown below:

AMOUNT OF BID OR ESTIMATED CONTRACT	AMOUNT OF CERTIFIED CHECK
\$ 30,000.00 or less	No Check Required
\$ 30,000.01 - \$ 99,999.99	\$ 500.00
\$100,000.00 - \$249,999.99	\$2,000.00
\$250,000.00 - \$499,999.99	\$4,000.00
\$500,000.00 or more	\$6,000.00

When computing amount of Bid for Certified Check purposes, do NOT deduct for trade-ins.

Any bid in excess of \$500,000 is not covered by the Annual Master Bid Security Program, and bidder must submit a certified check, treasurer's check, cashier's check, bank money order, or United States postal money order made payable to the order of "The City of Philadelphia" in the required amount.

Once the lowest responsive and responsible bidder has been determined all other bidders will receive a refund in the amount of the bid security submitted. Bid security submitted by the lowest responsive and responsible bidder will be refunded after receipt of all duly executed Contract documents, required fees, bonds or other performance security. Funds submitted for the Master Bid Security Program are not refundable.

3. BID PROCESSING FEE. In addition to bid security and any other fee or monies required to be submitted with the bid, the bid shall be accompanied by a non-refundable processing fee in the form of a separate standard check, bank money order or United States postal money order made payable to the order of "City of Philadelphia" in an amount based on the gross amount of the bid in accordance with the formula below. Cash is not acceptable.

AMOUNT OF BID OR ESTIMATED CONTRACT	AMOUNT OF PROCESSING FEE
\$ 30,000.00 or less	No Check Required
\$ 30,000.01 - \$ 100,000.00	\$ 10.00
\$ 100,000.01 - \$ 300,000.00	\$ 30.00
\$ 300,000.01 - \$ 500,000.00	\$ 50.00
\$ 500,000.01 - \$1,000,000.00	\$100.00
\$1,000,000.01 - \$2,000,000.00	\$200.00
\$2,000,000.01 - \$3,000,000.00	\$300.00
\$3,000,000.01 - \$4,000,000.00	\$400.00
\$4,000,000.01 - \$5,000,000.00	\$500.00
\$5,000,000.01 or more	\$600.00

4. SPECIFICATIONS. When a formal, numbered, specification is referred to in the Invitation and Bid, no deviation therefrom will be permitted, except if/as indicated in the Invitation and Bid and the bidder will be required to furnish articles and/or services in conformity with that specification. When catalogues, model numbers, trade names, or cuts are listed in the Invitation and Bid, they are, unless otherwise specified, included for the purposes of furnishing bidders with information concerning the style, type or kind of article and/or service desired. A bidder may offer an article and/or service which he/she certifies to be equal or better in quality, performance and other essential characteristics. If submitting an alternate, the bidder must specify the alternate (e.g., make and model #) in the bid and submit with the bid a complete description of the article (including any technical literature) and/or service proposed to be furnished. Failure to do so will require the bidder to furnish the article and/or service specified in the Invitation and Bid. The Procurement Commissioner reserves the sole right to determine whether alternates offered are equal or better. Unless otherwise provided in the bid specifications, all items offered by the bidder must be new. A "new" item is one which will be used first by the City. This clause shall not be construed to prohibit bidders from offering goods, supplies, equipment, or materials containing recycled materials or printing with recycled content; bidders intending to provide goods made with recycled materials should notify the Procurement Department.

5. PATENTS. The successful bidder shall be solely responsible for all royalties and charges that may be due to any patent holder for or on account of the use of any patented appliance, product or processes. Evidence of such payment shall be submitted upon request of the Procurement Commissioner and failure to submit such evidence may, in the sole discretion of the Procurement Commissioner, result in rejection of the bid or constitute an event of default, entitling the City to all rights and remedies as provided herein in Section 16 and/or 18.

6. LOCAL BIDDING PREFERENCE
 In accordance with Chapter 17-109 of the Philadelphia Code relating to Local Bidding Preferences for Procurement Contracts, this bid may be subject to a 5% local bid preference. In order to determine eligibility to receive the 5% preference, if applicable, bidder or subcontractor must be certified at the time of the bid opening and must submit with the bid, the Local Business Entity Certification Number* as issued by the Procurement Department for the prime contractor or the applicable subcontractor.

TERMS AND CONDITIONS OF BIDDING AND CONTRACT

*Note: If you wish to apply for Local Business Entity (LBE) certification, go to www.phila.gov/bids. Please allow sufficient time prior to bidding for processing of the LBE application.

EVALUATION AND AWARD

7. TYPES OF BIDDER RESTRICTED. Bidders must not be a party to more than one bid for the same article or service. A violation of this condition may, in the sole discretion of the Procurement Commissioner, result in rejection of any or all such bids in which the bidder has an interest.

8. RESPONSIVENESS. Subject to the right of the Procurement Commissioner to waive non-responsiveness as set forth below in this Section, these Terms and Conditions of Bidding and Contract and the specifications and requirements included in the Invitation and Bid are mandatory and must be strictly followed by all bidders in the preparation and submission of their bids. After bids are opened, the Procurement Department, and other City departments or agencies where appropriate or specified, shall review all bids for responsiveness to these Terms and Conditions of Bidding and Contract and the specifications and requirements included in the Invitation and Bid.

Any bid which is incomplete, obscure, conditional, or unbalanced, which contains additions not called for, or irregularities of any kind, including alterations or erasures, or which fails to conform in any respect to these Terms and Conditions of Bidding and Contract and the specifications and requirements included in the Invitation and Bid is non-responsive and shall be rejected, except where the Procurement Commissioner, in his/her sole discretion, determines that the non-responsiveness is not material to the Invitation and Bid or that a waiver of the non-responsiveness is otherwise permitted by the Invitation and Bid, by these Terms and Conditions of Bidding and Contract or by law. The Procurement Department's determination of non-responsiveness shall be final and any bid rejected as non-responsive shall not be eligible for contract award.

9. RESPONSIBILITY. Unless otherwise specified, after bids are opened, the Procurement Department, and other City departments or agencies where appropriate or specified, shall review and may investigate the responsibility, including, but not limited to, the qualifications, references, capacity and ability to perform the Contract resulting from the Invitation and Bid in accordance with its terms, and integrity, of the lowest responsive bidder. All determinations of bidder responsibility shall be vested in the sole discretion of the Procurement Commissioner and other City officials. Any bidder who is deemed not responsible shall be ineligible for award of the Contract.

Bidders deemed not responsible will be notified of such determination and the reasons therefore in writing by the Procurement Department, and shall have the right to contest the determination by submitting to the Procurement Department, within forty-eight (48) hours after receipt of its written determination, a written request for reconsideration that includes information relating to the bidder's qualifications and responsibility and demonstrating the insufficiency of the reasons stated in the written determination finding the bidder not

responsible. Any further determination of a contesting bidder's responsibility shall be vested in the sound discretion of the Procurement Commissioner and other City officials.

10. CANCELLATION AND AWARD. The Procurement Commissioner, in his/her sole discretion, may cancel any Invitation and Bid prior to bid opening. After bid opening, the Procurement Commissioner, in his/her sole discretion, may reject all bids, if deemed in the best interest of the City. In all cases where a Contract award is made by the Procurement Department, the bidder is bound by the terms and conditions of the Invitation and Bid upon the submission of its bid. All bids are valid for a period of not less than 60 days, or as otherwise specified in the Invitation and Bid. If the bid has not been awarded within the specified period of time, the bid shall be valid for subsequent award only upon the express consent of the bidder, with no change to the submitted bid. Any price increases/decreases expressly provided for in the Invitation and Bid will be allowed. All Contract awards shall be made by the Procurement Department upon written notice to the bidder that is determined by the Procurement Department to be the lowest responsive and responsible bidder.

11. QUANTITIES AWARDED. For requirements contracts only, the articles and quantities of such articles as set forth in the Invitation and Bid are estimates and the Procurement Commissioner, in his/her sole discretion, may make an award for all or some of the articles bid and in such quantities as the Procurement Commissioner shall deem appropriate. For firm limit contracts, it is the City's intent to award based upon the quantities set forth in the Invitation and Bid, but the City reserves the right to award more or less.

12. DELIVERY, PRICE INCREASES AND TIE BIDS. All articles must be delivered at the price(s) bid, FOB Destination. Bids containing reservations of the right to increase the price(s) bid, including, but not limited to, late payment charges, will not be considered, except where the Procurement Commissioner, in his/her sole discretion, finds it in the City's best interest to do so. In the event of an absolute tie, the award decision will be made in the best interests of the City as determined by the Procurement Commissioner.

CONTRACT EXECUTION AND CONFORMANCE

13. CONTRACTS. Awards of contracts in amounts less than or equal to \$30,000 shall become contracts binding upon the City upon written notice of award by the Procurement Commissioner. Awards of contracts in amounts greater than \$30,000 shall not become contracts binding upon the City until after written notice of award is made and until after all of the following conditions have been satisfied:

- a. Successful bidder posts sufficient performance security, as required in the Invitation and Bid, within the time specified in the written notice of award;
- b. Successful bidder posts a payment bond or other payment security, if and as required by the Invitation and Bid, within the time specified in the written notice of award;

TERMS AND CONDITIONS OF BIDDING AND CONTRACT

c. Approval of the Contract as to form by the City's Law Department;

d. Certification by the Director of Finance and City Controller as to the availability of funds; and

e. Execution of the Contract by the Procurement Commissioner.

The Procurement Commissioner may, in his/her sole discretion, cancel any Contract award if any of the above conditions (a-e) are not satisfied, or if the Procurement Commissioner, in his/her sole discretion, determines cancellation to be in the best interests of the City. The bidder agrees that in the event of such cancellation, it shall not have any claim against the City, including any claim for breach of contract or of any other legal duty, or for lost profits, costs, damages, or expenses of any kind.

14. PERFORMANCE SECURITY. The City of Philadelphia requires performance security for contracts greater than \$30,000. If the amount of the contract to be awarded is greater than \$30,000 but less than or equal to \$500,000, the successful bidder is required to participate in the City's Master Performance Security Program by paying to the City a non-refundable fee of \$5.00 per thousand dollars of the contract amount for firm limit contracts and \$4.00 per thousand dollars of the contract amount for requirements contracts, or as otherwise specified. If the amount of the contract to be awarded is in excess of \$500,000 the successful bidder is required to furnish an individual performance bond, issued by a surety approved by the City on a form prepared by the City's Law Department and in the amount specified in the notice of contract award. The successful bidder is also required to pay a bond preparation fee to the City's Law Department in an amount prescribed by Chapter 17-700 of The Philadelphia Code; a schedule of such fees may be obtained from the Procurement Department's Public Information Office.

15. INSURANCE. Unless otherwise specified, the successful bidder (referred to in this Section as "Contractor") shall, at its sole cost and expense, procure and maintain in full force and effect, during the entire period of the Contract (including any applicable warranty and/or renewal periods), the minimum types of insurance specified below. All insurance shall be procured from reputable insurers authorized to do business in the Commonwealth of Pennsylvania and shall be acceptable to the City. All insurance required herein shall be written on an "occurrence" basis and not a "claims-made" basis. The City of Philadelphia, its officers, employees, and agents are to be named as additional insured on all policies required hereunder, except the Workers' Compensation and Employers' Liability. Also, an endorsement is required stating that the coverage afforded these parties as additional insured will be primary to any other coverage available to them. The City's coverage as an additional insured shall be primary coverage. The insurance shall provide for at least thirty (30) days prior written notice to be given to the City in the event coverage is materially changed, canceled or non-renewed. Certificates of insurance evidencing the required coverages shall be submitted to the City within fifteen (15) days of notice of contract award. The City reserves the right to require the Contractor to furnish certified copies of the original

policies of all insurance required hereunder at any time upon fifteen (15) days prior written notice. The insurance requirements set forth herein are not intended and shall not be construed to modify, limit, or reduce the indemnifications made in this Contract by the Contractor to the City of to limit the Contractor's liability under this Contract to the limits of the policies of insurance required to be maintained by the Contractor hereunder.

(a) WORKERS COMPENSATION AND EMPLOYERS LIABILITY

(1) Workers' Compensation – Statutory limits

(2) Employers Liability - \$100,000 Each Accident – Bodily Injury by Accident; \$100,000 Each Employee – Bodily Injury by Disease; \$500,000 Policy Limit – Bodily Injury by Disease

(3) Other states insurance including Pennsylvania

(b) GENERAL LIABILITY INSURANCE

(1) Limit of Liability: \$1,000,000 per occurrence combined single limit for bodily injury (including death) and property damage liability.

(2) Coverage: Premises operation: Blanket Contractual liability; Personal Injury liability; Products and completed operations; Independent Contractors; Employees as additional insured; Cross liability; Broad form property damage (including loss of use) liability; Asbestos abatement liability coverage (Note: Required for asbestos abatement projects only).

(c) AUTOMOBILE LIABILITY

(1) Limit of Liability: \$1,000,000 per occurrence combined single limit for bodily injury (including death) and property damage liability.

(2) Coverage: owned, non-owned and hired vehicles.

16. INDEMNIFICATION. All bidders shall indemnify, defend and hold harmless the City, its officers, employees and agents from and against any and all losses, costs (including, but not limited to, litigation and settlement costs and counsel fees), claims, suits, actions, damages, liabilities and expenses, occasioned wholly or in part by the bidder's act or omission or fault or negligence or the act or omission or fault or negligence of bidder's agents, subcontractors (including suppliers), employees or servants in connection with the Contract, including, but not limited to, those acts or omissions or faults or negligence in connection with loss of life, bodily injury, personal injury, damage to property, contamination or adverse effects on the environment, the bidder's default under the Contract, losses incurred by the City's Master Performance Security Program, failure to pay subcontractors and suppliers and any infringement or violation of any proprietary right (including, but not limited to, patent, copyright, trademark, service mark and trade secret). This obligation to indemnify, defend and hold harmless the City, its officers, employees and agents shall survive the termination of the Contract resulting from the Invitation and Bid.

17. FAILURE TO EXECUTE CONTRACT. Any bidder not lawfully released from its bid, who refuses to execute a contract in accordance with its bid or who fails, refuses or is unable to furnish any required payment security, performance security or insurance, as may be required by the Invitation and Bid and/or these Terms and Conditions of Bidding and Contract, shall be liable for the entire amount of its bid security, as liquidated damages to the City; or if bid security is furnished under the Annual Master Bid Security

TERMS AND CONDITIONS OF BIDDING AND CONTRACT

Program, for 10% of the amount of its bid, as liquidated damages to the City; or where the damages are readily ascertainable by the City, for the actual loss, cost or damage incurred by the City as a result of its failure to execute the contract or to furnish such bonds, performance security or insurance.

18. ASSIGNMENT. The successful bidder shall not assign the Contract resulting from the Invitation and Bid, or any part of the Contract, or any right to any monies to be paid under the Contract, or delegate performance of the Contract, without obtaining the prior written consent of the Procurement Commissioner. The decision whether to consent to an assignment is within the Procurement Commissioner's sole discretion. In no case shall the Procurement Commissioner's consent to the assignment of any monies to be paid under the Contract relieve the bidder from faithful performance of any of its obligations under the Contract or change any of the terms and conditions of the Contract. Any purported assignment in violation of this provision shall be of no effect.

19. DEFAULT. All work performed and goods and services rendered by a successful bidder (referred to in this Section as "Contractor") under any Contract resulting from the Invitation and Bid shall strictly conform to these Terms and Conditions of Bidding and Contract and the specifications and requirements contained in the Invitation and Bid. The successful bidder shall comply with all applicable federal, state and local laws, statutes and ordinances and the regulations of all governmental departments, boards, agencies, and commissions. The following shall constitute events of default under any Contract resulting from the Invitation and Bid:

a. Failure by Contractor to comply with any provision or Section of the Contract, including the bid specifications contained in the Invitation and Bid and these Terms and Conditions of Bidding and Contract and/or failure by Contractor to comply with any federal, state and local law, statute, ordinance or regulation of any governmental department, board, agency and commission.

b. Falseness of any representation or warranty made in the Contract or other document(s) submitted to the City by Contractor in connection with the Invitation and Bid.

c. Failure by Contractor to pay its suppliers or subContractors, misappropriation of any funds provided under the Contract or failure to notify City upon discovery of any misappropriation.

d. A violation of law by Contractor which results in its making a guilty plea, a plea of nolo contendere, or conviction of a criminal offense by Contractor, its directors, employees, or agent or indictment or charges, in the sole judgment of the Procurement Commissioner, adversely affect the performance of the Contract.

e. Failure by Contractor to comply with the Mayoral Executive Order establishing the City's antidiscrimination policy relating to the participation of minority, woman and disabled owned disadvantaged business enterprises.

f. The Procurement Department's determination that the Contractor is not a responsible bidder on the

Invitation and Bid, where such determination is made, and is based upon, information received after award of the Contract and/or after execution of the Contract by the Procurement Commissioner and/or after satisfaction of any or all other conditions of a binding Contract set forth in Section 2 above.

g. Any other act or omission identified in these Terms and Conditions of Bidding and Contract or elsewhere in the Invitation and Bid as an event or condition constituting default.

Upon the occurrence of an event of default, the Procurement Commissioner, in his/her sole discretion, may require Contractor to cure the default within a period of time to be determined by the Procurement Commissioner, or terminate the Contract in whole or in part and exercise any one or more of the following remedies (which remedies may be concurrent and shall be in addition to and not in lieu of the remedies available to the City at law, in equity, under any bond(s) filed in connection with the contract or under other sections of these Terms and Conditions of Bidding and Contract and Contract):

a. Purchase goods and/or services from others in substitution of goods or services that were not furnished or performed by Contractor or that were defective or otherwise in violation of any provision of the Contract; the cost of such substituted goods and services shall be the sole responsibility of Contractor and Contractor agrees to pay immediately, upon receipt of the City's invoice, the difference between the Contract price and the substituted product or service cost, plus any other loss, cost or damages incurred by the City.

b. Appropriate to the payment of the difference between the Contract price and the cost of such substitute goods or services, and the amount of any other loss, cost or damage incurred by the City as a result of the default, any monies which may then be due and payable to Contractor under this Contract or any other Contract that Contractor then has with the City.

The City shall notify Contractor in writing of such termination, which shall be effective as of the date specified in the notice of termination (the "Termination Date"). The Procurement Commissioner may, in his/her sole discretion, require Contractor to continue to furnish all goods and perform all services required under the Contract until the Termination Date, in which case, subject to the remedies enumerated above, the successful bidder shall be paid in accordance with the Contract therefore. If the City requires Contractor to cure the event(s) of default, or to continue to furnish goods or services until the Termination Date, and Contractor refuses or fails to do so, then such failure shall itself be deemed an event of default under this Section, for which the City may exercise any of its rights hereunder.

20. PAYMENT FOR EQUIPMENT. Unless otherwise provided in the bid specifications, when equipment involves installation, (which shall also be interpreted to mean erection and/or setting up or placing in position for service or use) and/or testing, and where such installation or testing is delayed though no fault of the contractor, contractor shall be entitled to a payment equal to 50% of the price bid when such equipment is delivered on site and to a further payment equal to an additional 25% of the price bid when the equipment is

TERMS AND CONDITIONS OF BIDDING AND CONTRACT

installed and ready for test. The balance shall be paid only after the equipment is tested and found to be satisfactory by the City. If the equipment must be tested, but installation is not required to be made by the supplier or if the equipment must be installed but testing is not required, and the installation or testing is delayed through no fault of the contractor, contractor shall be entitled to a payment equal to 75% of the price bid at the time of delivery and the balance shall be paid after satisfactory testing and/or installation, as required.

TAX MATTERS

21. TAX EXEMPTION. The City of Philadelphia is exempt from the payment of any federal excise or transportation taxes and any Pennsylvania sales tax. The price bid must be net, exclusive of taxes. However, when under established trade practice any federal excise tax is included in list prices, bidder may quote the list price and shall show separately the amount of the federal tax, either as a flat sum or as a percentage of the list price, which shall be deducted by the City. In the event bidder pays any sales or use tax, bidder hereby assigns to City, or City's agent, all of its rights, title and interest in any sales or use tax which may be refunded as a result of the purchase of any articles furnished in connection with the Contract and bidder, unless directed by the City, shall not file a claim for any sales or use tax refund subject to this assignment. Bidder authorizes the City, in City's name or the name of bidder, to file a claim for refund of any sales or use tax subject to this assignment.

22. TAX INDEBTEDNESS. The City of Philadelphia does not wish to do business with tax delinquents or other businesses indebted to the City. In furtherance of this policy, the following certifications have been developed and shall form a part of any Contract resulting from the Invitation and Bid. The successful bidder or other entity Contracting with the City is referred to below as the "Contractor".

a. Contractor's Certification of Non-Indebtedness - Contractor hereby certifies and represents that Contractor and Contractor's parent company(ies) and subsidiary(ies) are not currently indebted to the City of Philadelphia (the "City") and will not at any time during the term of this Contract (including any extensions or renewals thereof) be indebted to the City, for or on account of any delinquent taxes (including, but not limited to, taxes collected by the City on behalf of the School District), liens, judgments, fees or other debts for which no written agreement or payment plan satisfactory to the City has been established. In addition to any other rights or remedies available to the City at law or in equity, Contractor acknowledges that any breach or failure to conform to this certification may, at the option of the City, result in the withholding of payments otherwise due to Contractor and, if such breach or failure is not resolved to the City's satisfaction within a reasonable time frame specified by the City in writing, may result in the offset of any such indebtedness against said payments and/or the termination of this Contract for default (in which case Contractor shall be liable for all costs, losses and other damages resulting from the termination).

b. Subcontractor's Certification of Non-Indebtedness - Contractor shall require all subcontractors performing work in connection with this Contract ("subcontractor"

shall also include suppliers providing goods or materials) to be bound by the following provision, and Contractor shall cooperate fully with the City in exercising the rights and remedies described below or otherwise available at law or in equity:

"Subcontractor hereby certifies and represents that subcontractor and subcontractor's parent company(ies) and subsidiary(ies) are not currently indebted to the City of Philadelphia ("City"). and will not at any time during the term of Contractor's Contract with the City (the "Contract"), including any extensions or renewals thereof, be indebted to the City, for or on account of any delinquent taxes (including, but not limited to, taxes collected by the City on behalf of the School District of Philadelphia), liens, judgments, fees or other debts for which no written agreement or payment plan satisfactory to the City has been established. In addition to any other rights or remedies available at law or in equity, subcontractor acknowledges that any breach or failure to conform to this certification may, at the option of the City, result in the withholding of payments otherwise due to subcontractor for services rendered in connection with the Contract and, if such breach or failure is not resolved to the City's satisfaction within a reasonable time frame specified by the City in writing, may result in the offset of any such indebtedness against said payments otherwise due to subcontractor and/or the termination of subcontractor for default (in which case subcontractor shall be liable for all costs, losses and other damages resulting from the termination)."

23. TAX REQUIREMENTS. Any person or entity who bids on and/or is awarded a contract by the City and/or School District of Philadelphia, is subject to Philadelphia's business tax ordinances and regulations. The City Solicitor has determined that anyone who is awarded a contract by the City and/or School District pursuant to a bid has entered into a contract within the City, and the subsequent delivery of goods into the City or performance of services within the City constitutes doing business in the City and subjects the successful bidder, including but not limited to, one or more of the following taxes:

- a. Business Privilege Tax
- b. Net Profits Tax
- c. City Wage Tax

The successful bidder, if not already paying the aforesaid taxes, is required to apply to the Department of Revenue, 1401 John F. Kennedy Blvd., Public Service Concourse, Municipal Services Building, Philadelphia, PA 19102 for a tax identification number and to file appropriate business tax returns as provided by law. Questions should be directed to the Business and Earnings Tax Unit at (215) 686-6600.

GENERAL INFORMATION

24. COMPLIANCE WITH LAWS. All goods and services and all documents and other materials furnished under the Contract shall conform with all applicable federal, state and local laws, statutes and ordinances and the applicable rules, regulations, methods and procedures of all governmental boards, bureaus, offices, commissions and other agencies. Contractor shall maintain during the term of the Contract all licenses, and authorizations required by

TERMS AND CONDITIONS OF BIDDING AND CONTRACT

any applicable federal, state or local law or regulation. Applicable law shall include, without limitation, the laws stated in paragraphs 25 through 29 herein.

25. NONDISCRIMINATION.

a. Any Contract awarded pursuant to the Invitation and Bid is entered into under the terms of the Philadelphia Home Rule Charter and in its performance, Contractor shall not discriminate nor permit discrimination against any person because of race, color, religion, national origin, or sex. Such discrimination shall constitute an event of default under this Contract entitling City to terminate this Contract forthwith. This right of termination shall be in addition to any other rights or remedies as provided herein in Section 19 or otherwise available to the City at law or in equity.

b. In accordance with Chapter 17-400 of The Philadelphia Code, Contractor agrees that its payment or reimbursement of membership fees or other expenses associated with participation by its employees in an exclusionary private organization, insofar as such participation confers an employment advantage or constitutes or results in discrimination with regard to hiring, tenure of employment, promotions, terms, privileges or conditions of employment, on the basis of race, color, sex, sexual orientation, gender identity, religion, national origin or ancestry, shall constitute an event of default under this Contract and shall entitle the City to all rights and remedies as provided herein in Section 19 or otherwise available to the City at law or in equity. Contractor agrees to include the immediately preceding sentence, with appropriate adjustments for the identity of the parties, in all subcontracts which are entered into pursuant to this Contract. Contractor further agrees to cooperate with the Commission on Human Relations of the City of Philadelphia in any manner which the said Commission deems reasonable and necessary for the Commission to carry out its responsibilities under Chapter 17-400 of The Philadelphia Code. Failure to so cooperate shall constitute an event of default under this Contract entitling the City to all rights and remedies as provided herein in Section 19 or otherwise available to the City at law or in equity.

26. ETHICS REQUIREMENTS. To preserve the integrity of City employees and maintain public confidence in the competitive bidding system, the City intends to vigorously enforce the various ethics laws as they relate to City employees in the bidding and execution of City contracts. Such laws are in three categories:

a. Gifts. Executive Order No. 02-04 prohibits City employees from soliciting or accepting anything of value from any person or entity seeking to initiate or maintain a business relationship with the City of Philadelphia, its departments, boards, commissions, and agencies. Bidder understands and agrees that if it offers anything of value to a City official or employee under circumstances where the receipt of such item would violate the provisions of this Executive Order shall be subject to sanctions with respect to future City Contracts. Such sanctions may range from disqualification from participation in a particular Contract to debarment, depending on the nature of the violation. All bidders, agents or intermediaries who are solicited for gifts or gratuities by City employees are urged to report these incidents to the Inspector

General, Aramark Tower, Third Floor, 1101 Market Street, Philadelphia, PA 19107.

b. City Employee Interest in City Contracts. In accordance with Section 10-1112 of The Philadelphia Home Rule Charter, no bid shall be accepted from, or Contract awarded to, any City employee or official, or any firm in which a City employee or official has a direct or indirect financial interest. All bidders are required to disclose any current City employees or officials who are employees or officials of the bidder's firm, or who otherwise would have a financial interest in the Contract.

c. Conflict of Interest. Both the State Ethics Act and the City Ethics Code prohibit a public employee from using his/her public office or any confidential information gained thereby to obtain financial gain for himself/herself a member of his/her immediate family, or a business with which he/she or a member of his/her immediate family is associated. "Use of public office" is avoided by the employee or official publicly disclosing the conflict and disqualifying himself/herself from official action in the matter, as provided in The Philadelphia Code Section 20-608.

27. NORTHERN IRELAND. Section 17-104(2)(b) of The Philadelphia Code prohibits the City from accepting bids from companies that do business in Northern Ireland, unless that business has implemented the fair employment principles embodied in the MacBride Principles. In furtherance of this ordinance, bidder makes the following certification and representations:

a. In accordance with Section 17-104 of the Philadelphia Code, bidder by execution of its bid certifies and represents that (i) bidder (including any parent company, subsidiary, exclusive distributor, or company affiliated with Bidder) does not have, and will not have at any time during the term of any Contract resulting from this bid (including any extensions thereof), any investments, licenses, franchises, management agreements or operations in Northern Ireland, and (ii) no product to be provided to the City under any resulting Contract will originate in Northern Ireland, unless Bidder has implemented the fair employment principles embodied in the MacBride Principles.

b. In the performance of any Contract resulting from this bid, Bidder agrees that it will not utilize any suppliers or subcontractors at any tier (i) who have (or whose parent subsidiary, exclusive distributor of company affiliate have) any investments, licenses, franchises, management agreements or operations in Northern Ireland or (ii) who will provide products originating in Northern Ireland unless said supplier or subcontractor has implemented the fair employment principles embodied in the MacBride Principles. Bidder further agrees to include provisions with this subparagraph (b), with appropriate adjustments for the identity of the parties, in all subcontracts and supply agreements which are entered into in connection with the performance of any resulting Contract.

TERMS AND CONDITIONS OF BIDDING AND CONTRACT

c. Bidder agrees to cooperate with the City's Director of Finance in any manner which the said Director deems reasonable and necessary to carry out the Director's responsibilities under Section 17-104 of The Philadelphia Code. Bidder expressly understands and agrees that any false certification or representation in connection with this subparagraph (c) and/or any failure to comply with the provisions of this subparagraph (c) shall constitute a substantial breach of any Contract resulting from the Invitation and Bid entitling the City to all rights and remedies provided in this bid or otherwise available in law (including, but not limited to, Section 17-104 of the Philadelphia Code) or at equity. In addition, it is understood that false certification or representation is subject to prosecution under IS Pa.C.S. Section 4904.

28. BUSINESS, CORPORATE AND SLAVERY ERA INSURANCE DISCLOSURE. In accordance with Section 17-104 of The Philadelphia Code, the successful bidder, after award of the Contract, will complete an affidavit certifying and representing that the bidder (including any parent company, subsidiary, exclusive distributor or company affiliated with bidder) has searched any and all records of the bidder or any predecessor business entity regarding records of investments or profits from slavery or slaveholder insurance policies during the slavery era. The names of any slaves or slaveholders described in those records must be disclosed in the affidavit.

The bidder expressly understands and agrees that any false certification or representation in connection with this Paragraph and/or any failure to comply with the provisions of this Paragraph shall constitute a substantial breach of this Contract entitling the City to all rights and remedies provided in this Contract or otherwise available in law (including, but not limited to, Section 17-104 of The Philadelphia Code) or equity and the Contract will be deemed voidable. In addition, it is understood that false certification or representation is subject to prosecution under Title 18 Pa.C.S.A. Section 4904.

29. PHILADELPHIA 21ST CENTURY MINIMUM WAGE STANDARD. If Contractor is an Employer, as defined in Philadelphia Code Section 17-1302(5) and 17-1303, Contractor shall comply with the minimum compensation standards by providing to those employees an hourly wage, excluding benefits, at least 150 percent of the federal minimum wage, and health benefits to each full-time, non-temporary, non-seasonal covered Employee, as more fully set forth at Philadelphia Code Chapter 17-1300. By submission of its Bid, Contractor so acknowledges and certifies its compliance with Chapter 17-1300 and shall promptly provide to the City, at its request, all documents and information further verifying its compliance with the requirements of this Chapter. Furthermore, Contractor shall notify each affected employee what wages are required to be paid.

The Office of Labor Standards may grant a partial or total waiver of Chapter 17-1300 based on specific stipulated reasons elaborated in Section 17-1304.

**TERMS AND CONDITIONS OF BIDDING AND CONTRACT
SIGNING OF BIDS**

This contract consists of the Invitation and Bid (including exhibits and attachments), any addenda thereto issued by the City and the foregoing Terms and Conditions of Bidding and Contract (collectively, the "contract") and contains all the terms, conditions and requirements agreed upon by the parties. The terms "contract" and "agreement," whether capitalized or uncapitalized, shall have the foregoing meaning wherever they are used in the invitation and Bid, addenda thereto, the Terms and Conditions of Bidding and Contract, and this page. No other contract or agreement, oral or otherwise, regarding the subject matter of the contract shall be deemed to exist or to bind any party hereto or to vary any of the terms contained in the contract.

This contract may not be changed, amended or renewed, in whole or in part, except by a written amendment signed by the parties. No waiver by the City of any breach or noncompliance by the undersigned with any provision of this contract shall relieve the undersigned of any of its obligations or representations made under this contract.

This contract and all disputes arising under this contract shall be governed, construed and decided in accordance with the laws of the Commonwealth of Pennsylvania. The parties agree that any lawsuit, action, claim or legal proceeding involving, directly or indirectly, any matter arising out of or related to this contract or the relationship created or evidenced thereby, shall be brought exclusively in the United States District Court for the Eastern District of Pennsylvania or the Court of Common Pleas of Philadelphia County. It is the express intent of the parties that jurisdiction over any lawsuit, action, claim, or legal proceeding shall lie exclusively in either of these two forums. The parties further agree not to raise any objection to any lawsuit, action, claim or legal proceeding which is brought in either of these two forums and the parties expressly consent to the jurisdiction and venue of these two forums. The parties further agree that service of original process in any such lawsuit, action, claim or legal proceeding may be duly affected by mailing a copy thereof, by certified mail, postage prepaid to the addresses specified in the Invitation and Bid and/or this page.

NOTE: ANY BID THAT IS NOT EXECUTED IN ACCORDANCE WITH THE INSTRUCTIONS PROVIDED BELOW OR THAT DOES NOT INCLUDE STREET ADDRESS, CITY, STATE AND PHONE NUMBER, MAY, IN THE SOLE DISCRETION OF THE PROCUREMENT COMMISSIONER, BE REJECTED.

SIGNING OF BIDS:

If bid is by an **INDIVIDUAL** or a **PARTNERSHIP**, or if the bid does not exceed \$30,000, date and sign the bid here, with the original signatures, in ink.

This _____ day of _____ 20

(Signature of Owner, Partner)

(Type or Print Name and Title)

(Business Name of Bidder)

(Address, including Zip Code)

(Telephone Number, including Area Code)

If the bid is a **CORPORATION**, date and sign the bid here with original signatures, in ink, by (a) President or Vice President of the Corporation AND (b) Secretary, Assistant Secretary, Treasurer or Assistant Treasurer of the Corporation; and (c) affix the seal of the Corporation. If the form is not signed by the President or a Vice President and Secretary, Assistant Secretary, Treasurer or Assistant Treasurer, attach a duly certified corporate resolution authorizing the person signing in place of such officers to execute this bid for the corporation.

This _____ day of _____ 20

CORPORATE SEAL

(Corporate or Business Name of Bidder)

(Address, including Zip Code)

(Telephone Number, including Area Code)

(Signature of President or Vice President)

(Signature of Secy., Asst. Secy., Treas. or Asst. Treas.)

(Type or Print Name and Title)

(Type or Print Name and Title)

APPROVED AS TO FORM

CONTRACT EXECUTION

(Assistant City Solicitor)

(Procurement Commissioner)

**ADDENDUM TO CONTRACT
SUPPLEMENTAL TERMS AND CONDITIONS FOR ARRA FUNDED CONTRACTS
SUBJECT TO COMPETITIVE SEALED BID BY CITY'S PROCUREMENT
DEPARTMENT**

Background

The City of Philadelphia (the "City") has entered into a certain grant agreement (the "Grant Agreement") with the Commonwealth of Pennsylvania (the "Commonwealth") or the federal government to carry out services and/or provide materials specified therein pursuant to the ARRA, subject to certain terms and conditions. This Contract is funded in whole or in part with funds received by the City under the Grant Agreement, under and subject thereto. In carrying out services and/or providing materials funded with ARRA funds under this Contract, Contractor shall comply with all applicable provisions of the Grant Agreement, a copy of which is incorporated herein and made a part hereof by reference and any Applicable Law(s) referenced therein to the extent applicable. Copies of the full Grant Agreement are available upon request.

1. **Definitions.** The following definitions shall apply to this Addendum:

- A. "ARRA" or "Act" means the American Recovery and Reinvestment Act of 2009, Pub. Law 111-5.
- B. "ARRA Funds" means funds expended or obligated from appropriations authorized by the ARRA.
- C. "Authorized Parties" has the meaning set forth in Paragraph 5 of this Addendum.
- D. Capitalized terms not defined in this Addendum shall have the meaning attributed to them in the General Provisions.

2. **Prohibition on Use of ARRA Funds.** Contractor acknowledges that it is familiar with the ARRA and the expenditures authorized under that Act to be paid for with ARRA Funds. Contractor, for itself and its Subcontractor(s), agrees that no ARRA funds paid to Contractor under this Contract shall be used for any casino or other gambling establishment, aquarium, zoo, golf course, or swimming pool, or for any other item, or activity prohibited by the ARRA.

3. **Prohibition Against Misuse of Funds, Dishonest Practices and other Forms of Misconduct.** Contractor agrees, for itself and any Subcontractor(s) engaged by Contractor, that the following best practices and ethical standards shall govern the performance of work and the provision of any services or materials under this Contract:

(A) All compensation paid under this Contract shall only be used to reimburse for actual, bona fide work, services or materials authorized by, and provided pursuant to this Contract or any Amendment thereto.

(B) All payments made by Contractor to any Subcontractor(s) or other entities in any way related to this Contract shall be made only for bona fide services or materials provided in the ordinary course of such Subcontractor's business and shall be supported by invoices and related documentation. Such invoices shall provide sufficient detail to determine the nature, scope or quantity of the services or materials. Subject to prior City approval, Contractor may

utilize brokers or middle persons to arrange for work, services, supplies, goods, materials or equipment in furtherance of this Contract; however Contractor shall not utilize any brokers or middle persons that are not acting in the ordinary course of their bona fide ongoing business concerns in brokering such services or materials. Contractor shall inform all Subcontractors and other entities receiving payments under this Contract that such payments will be publicly disclosed and will be subject to possible investigation and audit as provided in Paragraph 5 of this Addendum.

(C) Contractor will adhere to the highest standards of ethics, transparency and accountability in the performance of this Contract and will make best efforts to ensure that such standards are upheld by Contractor's principals, directors, employees, Subcontractors and agents. Contractor will immediately report any suspected acts of fraud, corruption, abuse, conflict of interest, bribery or similar misconduct involving ARRA funds under this Contract to the Inspector General of the City of Philadelphia. By way of illustration and not in limitation of the ethical standards to be upheld in the performance of this Contract, the following are examples of conduct that will be considered in violation of such standards:

- (i) Attempts to bribe City employees or officials;
- (ii) Submission of inflated or otherwise fraudulent invoices;
- (iii) Falsification of any documents or records related to this Contract;
- (iv) Fraud by Contract personnel to gain business advantage;
- (v) Collusive purchasing practices by personnel on this Contract;
- (vi) Theft or embezzlement of City funds by Contract personnel;
- (vii) Use of Contract funds to pay ghost employees or ghost Subcontractors;
- (viii) Contractor collusion with City employees or officials;
- (ix) Actions that constitute a false claim under the U.S. False Claims Act, 31 U.S.C. Section 3729 *et seq.*

4. **Reporting Requirements / Maintenance of Records.** Contractor understands and acknowledges that the City must comply with all current and future reporting requirements established by the ARRA and federal or Commonwealth of Pennsylvania agencies having jurisdiction over ARRA Funds. Contractor agrees that it will cooperate with the City and provide to the City the data and information necessary to comply with ARRA Section 1512 as well as, in addition, any other information requested by the City.

5. **Investigation, Audit and Access to Records.** Contractor acknowledges and agrees that the Commonwealth of Pennsylvania, the United States Comptroller General or representative, the appropriate Inspector General appointed under Section 3 or 8G of the United States Inspector General Act of 1978, the Inspector General of the City of Philadelphia, the Chief Integrity Officer of the City of Philadelphia and/or their designees, or any other person appointed by the Mayor of the City of Philadelphia to a position relating to the promotion and assurance of integrity, ethics, transparency and accountability in the City's contracting process ("Authorized Parties") shall have the same rights of investigation and access to Contractor's records as are set forth in the Contract pertaining to Contractor's obligations to maintain and provide access to contract-related documents. Contractor shall fully cooperate with any investigation related to this Contract initiated by any of the Authorized Parties. By way of supplementation and not in limitation of these rights, the investigative, audit and review rights and privileges held by the

Authorized Parties in fulfilling their responsibilities to promote integrity in the City's contracting process shall include the following:

(A) Access to any records of Contractor, or those of its Subcontractors, and any state or local agency administering this Contract that pertain or relate to this Contract; and

(B) Access to interview any officer, director, employee or agent of the Contractor or any of its Subcontractors, at their place of employment or at such other reasonable location as the Authorized Parties shall determine.

6. **Invoice Retention.** In addition to any records retention requirement otherwise provided in the Contract, Contractor shall maintain all invoices related to this Contract for a period of five (5) years following expiration or termination of this Contract. Such invoices shall provide sufficient detail to determine what the Contractor has purchased and the scope or quantity of the services or materials. However, if any litigation, claim or audit is commenced prior to expiration of said five (5) year period, then the invoices shall be retained until all litigation, claims or audit findings have been completely terminated or resolved, without right of further appeal, or if Applicable Law requires a longer period, then the invoices shall be retained for such longer period.

7. **Events of Default.** In addition to Events of Default otherwise set forth in the Contract, violations of any of the provisions of this Addendum shall constitute an Event of Default entitling the City to pursue, in its sole discretion, the remedies set forth in the Contract or such remedies as are available at law or in equity. In addition, misuse of Contract proceeds or other acts in violation of Paragraphs 2, 3, 4 and 5 of this Addendum shall entitle the City to pursue, in its sole discretion, the additional remedies set forth in Paragraph 8 of this Addendum pertaining to the City's recovery of liquidated damages. In the interest of promoting timely compliance with the requirements of the ARRA and protecting the integrity of any investigation initiated by the Authorized Parties, Contractor shall not have the opportunity of notice and cure as is otherwise provided under this Contract for violations of the provisions of Paragraphs 2, 3 and 5 of this Addendum.

8. **Liquidated Damages.** In addition to all remedies available to the City under this Contract or at law and in equity, the City shall have the additional remedies provided in this Paragraph in connection with Events of Default for violation of the provisions contained in Paragraphs 2, 3, 4 and 5 of this Addendum. Contractor acknowledges that ensuring the use of ARRA Funds in compliance with the ARRA (Paragraphs 2 and 4) and promoting the integrity of the City's contracting process (Paragraphs 3 and 5) are important objectives to the City and that misuse of proceeds paid to Contractor, and any Subcontractor under this Contract, or other improper conduct by Contractor, and any Subcontractor, in violation of these provisions, poses a risk of damages incurred by the City that are unpredictable or incapable of precise measurement (for example, loss of future federal and state funds, damage to the City's reputation; damage to the morale of City employees; reduced participation by the business community in City contracts). Therefore, Contractor and the City agree that the following calculations of damages shall serve as liquidated damages, and not a penalty, intended as a reasonable forecast of just compensation for which Contractor shall be liable to compensate the City for any Event of Default arising under Paragraphs 2, 3, 4 or 5, as the case may be, of this Addendum:

A. If Contractor is determined to have made payments or committed acts or omissions in violation of Paragraphs 2, 3, 4 or 5 of this Addendum, then Provider shall pay liquidated damages to the City in the aggregate amount of ten percent (10%) of the amount of compensation authorized under this Contract and any Change Order or Amendment thereto.

B. The amount of liquidated damages due under this Paragraph 8 shall not exceed Fifty Thousand Dollars (\$50,000); except that this limitation shall not apply if the City is determined to be ineligible for future funds by any federal or Commonwealth of Pennsylvania agency having jurisdiction over ARRA Funds, for the failure to meet any ARRA-related obligation, in whole or in part because of Contractor's failure to perform its obligations under Paragraphs 2,3,4 or 5 of this Addendum.

C. In addition to the payment of liquidated damages provided above, if it is determined that Contractor has violated the provisions contained in Paragraph 2, 3, 4 or 5 of this Addendum, Contractor shall reimburse the City for the City's costs of any investigation and/or prosecution undertaken or initiated by the Authorized Parties, and shall repay to the City the full amount of funds misused or inadequately documented.

D. In the case of any damages for which Contractor is liable under this Paragraph 8, the City may apply the amount of such damages as a credit against pending or future invoices under this Contract, and may declare any such damages not so credited to be immediately due and payable to the City.

9. **Wage Rate Requirements.** Contractor agrees that it and any of its Subcontractors shall, to the extent applicable, comply with ARRA Section 1606 and that, notwithstanding any other provision of law and in a manner consistent with other provisions of ARRA, all laborers and mechanics employed by contractors and subcontractors on projects funded directly by or assisted in whole or in part by and through the federal government pursuant to ARRA and shall be paid wages at rates not less than those prevailing on projects of a character similar in the locality as determined by the United States Secretary of Labor in accordance with Subchapter IV of Chapter 31 of Title 40, United States Code (Davis-Bacon Act). It is understood that the Secretary of Labor has the authority and functions set forth in Reorganization Plan Numbered 14 or 1950 (64 Stat. 1267; 5 U.S.C. App) and Section 3145 of Title 40, United States Code.

10. **Whistleblower Protection.** Contractor agrees that both it and any subcontractors shall comply with Section 1553 of the ARRA, which prohibits all non-federal contractors from discharging, demoting or otherwise discriminating against any employee for disclosures by the employee that the employee reasonably believes are evidence of (1) gross mismanagement of a contract relating to ARRA funds; (2) gross waste of ARRA funds; (3) a substantial and specific danger to public health or safety related to the implementation or use of ARRA funds; (4) an abuse of authority related to implementation or use of ARRA funds; or (5) a violation of law, rule or regulation related to an agency contract (including the competition for or negotiation of a contract) awarded or issued relating to ARRA funds. Contractor agrees that it and any subcontractors shall post notice of the rights and remedies available to employees under Section 1553 of Title XV of Division A of the ARRA.

11. **Current and Future Requirements.** Contractor understands and acknowledges that the federal recovery funding process is still evolving and that new requirements for ARRA

compliance may be forthcoming from the federal government, the Commonwealth and/or the City. In such event, any such new requirement(s) will automatically become a material part of this Addendum. Contractor hereby agrees that both it and any Subcontractors will be bound by and shall comply with all current ARRA requirements, whether or not specifically set forth herein and any such future requirements during the term hereof without the necessity of either party executing any further legal instrument(s).

12. **Required Use of American Iron, Steel and Other Manufactured Goods.** Contractor agrees that in accordance with ARRA, Section 1605, neither it nor its subcontractors will use ARRA funds for a project for the construction, alteration, maintenance or repair of a public building or public work unless all of the iron, steel and manufactured goods used in the project are produced in the United States in a manner consistent with United States obligations under international agreements. This requirement may be waived only by the ARRA granting federal department as set forth in ARRA Section 1605.

Subsections I and II below apply in the alternative:

1. *The following shall apply for Projects using ARRA funds for the construction, alteration, maintenance, or repair of a public building or public work when:*

- the estimated value of the project is less than \$7,443,000; or
- the procurement is being conducted by local governments and municipalities; or
- the specific item being procured is not covered under the World Trade Organization Agreement on Government Procurement or other international procurement agreement. (e.g. mass transit or highway procurements, dredging service procurements, or national defense-related procurements).

(a) Requirement. All iron, steel, and other manufactured goods used as construction material for the construction, alteration, maintenance, or repair of a public building or public work must be produced in the United States. This requirement shall be applied in a manner that is consistent with the laws and agreements of the United States and the Commonwealth of Pennsylvania.

(b) Definitions.

1. "Building or work" means construction, maintenance, alteration, or repair. The terms include, without limitation, buildings, structures, and improvements of all types, such as bridges, dams, plants, highways, parkways, streets, subways, tunnels, sewers, mains, power lines, pumping stations, heavy generators, railways, airports, terminals, docks, piers, wharves, ways, lighthouses, buoys, jetties, breakwaters, levees, canals, dredging, shoring, rehabilitation and reactivation of plants, scaffolding, drilling, blasting, excavating, clearing, and landscaping. The manufacture or furnishing of materials, articles, supplies, or equipment (whether or not a Federal or State agency acquires title to such materials, articles, supplies, or equipment during the course of the manufacture or furnishing, or owns the materials from which they are manufactured or furnished) is not "building" or "work" within the meaning of this definition unless conducted in connection with and at the site of such building or work as is described in the foregoing sentence, or under the United States Housing Act of 1937 and the Housing Act of 1949 in the construction or development of the project.

2. "Construction material" means an article, material, or supply brought to the construction site by the Contractor or any Subcontractor for incorporation into the building or work. The term also includes an item brought to the site preassembled from articles, materials, or supplies. However, emergency life safety systems, such as emergency lighting, fire alarm, and audio evacuation systems, that are discrete systems incorporated into a public building or work and that are produced as complete systems, are evaluated as a single and distinct construction material regardless of when or how the individual parts or components of those systems are delivered to the construction site. Materials purchased directly by the Government are supplies, not construction material.

3. "Domestic construction material" means:

- (i) An unmanufactured construction material mined or produced in the United States; or
- (ii) A construction material manufactured in the United States.

4. "Foreign construction material" means a construction material other than a domestic construction material.

5. "Manufactured good or product" means a good or product used as construction material in a project that is the result of processing materials by way of machinery and/or labor that produce a substantially different article. Where the basic character, function, or kind of material processed remains the same, it is not manufactured.

6. "Manufactured construction material" means any construction material that is not unmanufactured construction material".

7. "Public building or public work" means building or work, the construction, alteration, maintenance, or repair of which is carried on directly by authority of, or with funds of, a Federal agency to serve the interest of the general public regardless of whether title thereof is in a Federal agency.

8. "Steel" means an alloy that includes at least 50 percent iron, between .02 and 2 percent carbon, and may include other elements.

9. "Unmanufactured construction material" means raw material brought to the construction site for incorporation into the building or work that has not been:

- (i) Processed into a specific form and shape; or
- (ii) Combined with other raw material to create a material that has different properties than the properties of the individual raw materials.

10. "United States" means the 50 States, the District of Columbia,

(c) Domestic preference.

1. This Contract implements Section 1605 of ARRA, by requiring that all iron, steel, and other manufactured goods used as construction material in the project are produced in the United States.

2. The Contract shall use only domestic construction material in performing this project, except as provided in paragraph (c)(3) and (c)(4) of this term and condition.

3. This requirement does not apply to the construction material or components listed by the Government as follows:

[City to list applicable excepted materials or indicate "none"]

4. The award official may add other foreign construction material to the list in paragraph (c)(3) of this requirement if the Federal government determines that:

- (i) The cost of domestic construction material would be unreasonable. The cost of domestic iron, steel, or other manufactured goods used as construction material in the project is unreasonable when the cumulative cost of such material will increase the cost of the overall project by more than 25 percent;
- (ii) The construction material is not mined, produced, or manufactured in the United States in sufficient and reasonably available quantities and of a satisfactory quality; or
- (iii) The application of the restriction of section 1605 of ARRA to a particular construction material would be inconsistent with the public interest.

(d). Request for determination of inapplicability of Section 1605 of ARRA.

1. (i) Any request to use foreign construction material in accordance with paragraph (c)(4) of this clause shall include adequate information for Government evaluation of the request, including-

- (a) A description of the foreign and domestic construction materials;
- (b) Unit of measure;
- (c) Quantity;
- (d) Price;
- (e) Time of delivery or availability;
- (f) Location of the construction project;
- (g) Name and address of the proposed supplier; and
- (h) A detailed justification of the reason for use of foreign construction materials cited in accordance with paragraph (b)(4) of this clause.

- (ii) A request based on unreasonable cost shall include a reasonable survey of the market and a completed price comparison table in the format in paragraph (e) of this clause.
- (iii) The price of construction material shall include all delivery costs to the construction site and any applicable duty.
- (iv) Any request for a determination submitted after award shall explain why the Contractor could not reasonably foresee the need for such determination and could not have requested the determination before award. If the recipient does not submit a satisfactory explanation, the award official need not make a determination.

2. If the Federal government determines after award that an exception to section 1605 of ARRA applies, the award official will amend the award to allow use of the foreign construction material. When the basis of the exception is non-availability or public interest, the amended

award shall reflect adjustment of the award amount or redistribution of budgeted funds, as appropriate, to cover costs associated

with acquiring or using the foreign construction material. When the basis for the exception is the unreasonable price of a domestic construction material, the award official shall adjust the award amount or redistribute budgeted funds, as appropriate, by at least the differential established in 2 CFR 176.11 O(a).

3. Unless the Federal government determines that an exception to section 1605 of ARRA applies, use of foreign construction material is noncompliant with section 1605 of ARRA.

(e) Data. To permit evaluation of requests under paragraph (d) of this clause based on unreasonable cost, the Recipient shall include the following information and any applicable supporting data based on the survey of suppliers:

Foreign and Domestic Construction Materials Price Comparison

Construction Material Description	Unit of Measure	Quantity	Price (Dollars)*
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Item 1:

Foreign construction material Domestic
construction material

Item 2:

Foreign construction material
Domestic construction material

1. [List name, address, telephone number, email address, and contact for suppliers surveyed. Attach copy of response; If oral, attach summary.]
2. [Include other applicable supporting information.]
3. [* Include all delivery costs to the construction site.]

II. The following shall, in addition to the Pennsylvania Steel Products Procurement Act, 73 P.S. Sections 1881-1887, apply for Projects using ARRA funds for the construction, alteration, maintenance, or repair of a public building or public work with an estimated value of \$7,443,000 or more:

(a) Requirement. All iron and steel used in the construction, reconstruction, alteration or repair of a public building or public work must be manufactured in the United States. All other manufactured goods used as construction material for the construction, alteration, maintenance, or repair of a public building or public work must be produced in the United States or a designated country. This requirement shall be applied in a manner that is consistent with the laws and agreements of the United State and the Commonwealth of Pennsylvania.

(b) Definitions. As used in this Contract:

1. "Building or work" includes, without limitation, buildings, structures, and improvements of all types, such as bridges, dams, plants, highways, parkways, streets, subways, tunnels, sewers, mains, power lines, pumping stations, heavy generators, railways, airports, terminals, docks, piers,

wharves, ways, lighthouses, buoys, jetties, breakwaters, levees, canals, dredging, shoring, rehabilitation and reactivation of plants, scaffolding, drilling, blasting, excavating, clearing, and landscaping. The manufacture or furnishing of materials, articles, supplies, or equipment (whether or not a Federal or State agency acquires title to such materials, articles, supplies, or equipment during the course of the manufacture or furnishing, or owns the materials from which they are manufactured or furnished) is not "building" or "work" within the meaning of this definition unless conducted in connection with and at the site of such building or work as is described in the foregoing sentence, or under the United States Housing Act of 1937 and the Housing Act of 1949 in the construction or development of the project.

2. "Construction material" means iron, steel, and other manufactured goods used as construction material brought to the construction site by the Contractor for incorporation into the building or work. The term also includes an item brought to the site preassembled from articles, materials, or supplies. However, emergency life safety systems, such as emergency lighting, fire alarm, and audio evacuation systems, that are discrete systems incorporated into a public building or work and that are produced as complete systems, are evaluated as a single and distinct construction material regardless of when or how the individual parts or components of those systems are delivered to the construction site. Materials purchased directly by the Government are supplies, not construction material.

3. "Designated country" means: Aruba, Australia, Austria, Belgium, Bulgaria, Chile, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hong Kong, Hungary, Iceland, Ireland, Israel, Italy, Japan, Korea (Republic of), Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Singapore, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, and United Kingdom.

4. "Designated country construction material" means a construction material that

- (i) Is wholly the growth, product, or manufacture of a designated country; or
- (ii) In the case of a construction material that consists in whole or in part of materials from another country, has been substantially transformed in a designated country into a new and different construction material distinct from the materials from which it was transformed.

5. "Domestic construction material" means:

- (i) An unmanufactured construction material mined or produced in the United States; or

(ii) A construction material manufactured in the United States.

6. "Foreign construction material" means a construction material other than a domestic construction material.

7. "Manufactured construction material" means any construction material that is not unmanufactured construction material."

8. "Public building or public work" means building or work, the construction, alteration, maintenance, or repair of which, as defined herein, is carried on directly by authority of, or with funds of, a Federal agency to serve the interest of the general public regardless of whether title thereof is in a Federal agency.

9. "Steel" means an alloy that includes at least 50 percent iron, between .02 and 2 percent carbon, and may include other elements.

10. "Unmanufactured construction material" means raw material brought to the construction site for incorporation into the building or work that has not been—

(i) Processed into a specific form and shape; or

(ii) Combined with other raw material to create a material that has different properties than the properties of the individual raw materials.

11. "United States" means the 50 States, the District of Columbia, and outlying areas including:

(i) Commonwealths: (a) Puerto Rico; (b) The Northern Mariana Islands;

(ii) Territories: (a) American Samoa; (b) Guam; (c) U.S. Virgin Islands; and

(iii) Minor outlying islands: (a) Baker Island; (b) Howland Island; (c) Jarvis Island; (d) Johnston Atoll; (e) Kingman Reef; (f) Midway Islands; (g) Navassa Island; (h) Palmyra Atoll; (i) Wake Atoll.

(c) Construction materials.

1. This Contract implements:

(i) Section 1605(a) of the American ARRA, by requiring that all iron, steel, and other manufactured goods used as construction material in the project are produced in the United States; and

(ii) Section 1605(d), which requires application of the Buy American requirement in a manner consistent with U.S. obligations under international agreements. The restrictions of section 1605 of ARRA do not apply to designated country construction materials. The Buy American requirement in section 1605 shall not be applied where the iron, steel or manufactured goods used as construction material in the project are from a Party to an international agreement that obligates the recipient to treat the goods and services of that Party the same as domestic goods and services,

or where the iron, steel or manufactured goods used as construction material in the project are from a least developed country. This obligation shall only apply to projects with an estimated value of \$7,443,000 or more.

2. The Contractor shall use only domestic or designated country construction material in performing the work funded in whole or part with this award, except as provided in paragraphs (c)(3) and (c)(4) of this document.

3. The requirement in paragraph (c)(2) of this term and condition does not apply to the construction materials or components listed by the Government as follows:

[City to list applicable excepted materials or indicate "none"]

4. The City may add other construction material to the list in paragraph (c)(3) of this award term and condition if the Federal government determines that:

- (i) The cost of domestic construction material would be unreasonable. The cost of domestic iron, steel, or other manufactured goods used as construction material in the project is unreasonable when the cumulative cost of such material will increase the overall cost of the project by more than 25 percent;
- (ii) The construction material is not mined, produced, or manufactured in the United States in sufficient and reasonably available commercial quantities of a satisfactory quality; or
- (iii) The application of the restriction of section 1605 of ARRA to a particular construction material would be inconsistent with the public interest.

(d) Request for determination of inapplicability of section 1605 of ARRA or the Buy American Act.

1. (i) Any request to use foreign construction material in accordance with paragraph (c) (4) of this document shall include adequate information for Government evaluation of the request, including-

- (a) A description of the foreign and domestic construction materials;
- (b) Unit of measure;
- (c) Quantity;
- (d) Price;
- (e) Time of delivery or availability;
- (j) Location of the construction project;
- (g) Name and address of the proposed supplier; and
- (h) A detailed justification of the reason for use of foreign construction materials cited in accordance with paragraph(c)(4) of this clause.

(ii) A request based on unreasonable cost shall include a reasonable survey of the market and a completed price comparison table in the format in paragraph (e) of this clause.

- (iii) The price of construction material shall include all delivery costs to the construction site and any applicable duty.
 - (iv) Any request for a determination submitted after award shall explain why the recipient could not reasonably foresee the need for such determination and could not have requested the determination before award. If the recipient does not submit a satisfactory explanation, the award official need not make a determination.
2. If the Federal government determines after award that an exception to section 1605 of ARRA applies and the award official will amend the award to allow use of the foreign construction material. When the basis of the exception is non-availability or public interest, the amended award shall reflect adjustment of the award amount or redistribution of budgeted funds, as appropriate, to cover costs associated with acquiring or using the foreign construction material. When the basis for the exception is the unreasonable price of a domestic construction material, the award official shall adjust the award amount or redistribute budgeted funds, as appropriate, by at least the differential established in paragraph (c)(4)(i) of this Contract.
3. Unless the Federal government determines that an exception to the section 1605 of ARRA applies, use of foreign construction material other than designated country construction material is noncompliant with the applicable Act.

(e) Data. To permit evaluation of requests under paragraph (d) of this clause based on unreasonable cost, the applicant shall include the following information and any applicable supporting data based on the survey of suppliers:

FOREIGN AND DOMESTIC CONSTRUCTION MATERIALS PRICE COMPARISON

Construction Material Description	Unit Measure	of Quantity	Price (Dollars) *
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Item 1:

Foreign construction material
Domestic construction material

Item 2:

Foreign construction material
Domestic construction material

[List name, address, telephone number, email address, and contact for suppliers surveyed. Attach copy of response; if oral, attach summary.]

[Include other applicable supporting information.]

[* Include all delivery costs to the construction site).]

13. **Trafficking in Persons.** Pursuant to 22 U.S.C.S. Section 7101 et. seq., Contractor and its employees and subcontractors may not:

- i. Engage in severe forms of trafficking in persons during the period of time that the contract is in effect;
- ii. Procure a commercial sex act during the period of time that the contract is in effect;
- iii. Use forced labor in the performance of the contract or any subcontract(s).

14. **Availability of Funding.** Contractor acknowledges that Services or Materials supported with temporary federal funds made available by the ARRA will not be continued with Commonwealth of Pennsylvania or City financed appropriations once the temporary ARRA funds are expended.

15 . **Effect of this Addendum.** Except as provided by this Addendum, the remaining terms and conditions of this Contract shall be and remain in full force and effect. In the event of any conflict between the terms and conditions stated in this Addendum and the terms and conditions stated elsewhere in this Contract, the terms and conditions stated in this Addendum shall prevail.