

**CITY OF PORTLAND, MAINE
DEVELOPMENT REVIEW APPLICATION
PLANNING DEPARTMENT PROCESSING FORM**

20000119

I. D. Number

Portland Trails

Applicant _____

One India street, Portland, ME 04101

Applicant's Mailing Address _____

Woodard & Curran

Consultant/Agent _____

775-2411 **772-7673**

Applicant or Agent Daytime Telephone, Fax _____

6/23/00

Application Date _____

Near Blueberry road

Project Name/Description _____

, Portland, ME

Address of Proposed Site _____

238-A-006, 245-A-005 & 245-A013

Assessor's Reference: Chart-Block-Lot _____

Proposed Development (check all that apply): New Building Building Addition Change Of Use Residential
 Office Retail Manufacturing Warehouse/Distribution Parking Lot Other (specify) **Wilderness Trail**
 N/A N/A MI
 Proposed Building square Feet or # of Units _____ Acreage of Site _____ Zoning _____

Check Review Required:

Site Plan (major/minor) Subdivision # of lots _____ PAD Review 14-403 Streets Review
 Flood Hazard Shoreland Historic Preservation DEP Local Certification
 Zoning Conditional Use (ZBA/PB) Zoning Variance Other _____

Fees Paid: Site Plan **\$400.00** Subdivision _____ Engineer Review _____ Date: **6/23/00**

DRC Approval Status:

Reviewer **Steve Bushey**

Approved Approved w/Conditions see attache Denied
 Approval Date **7/8/00** Approval Expiration **7/8/01** Extension to _____ Additional Sheets Attached
 Condition Compliance **Steve Bushey** signature _____ date _____

Performance Guarantee Required* Not Required

* No building permit may be issued until a performance guarantee has been submitted as indicated below

<input type="checkbox"/> Performance Guarantee Accepted	_____	_____	_____
	date	amount	expiration date
<input type="checkbox"/> Inspection Fee Paid	_____	_____	
	date	amount	
<input type="checkbox"/> Building Permit	_____		
	date		
<input type="checkbox"/> Performance Guarantee Reduced	_____	_____	_____
	date	remaining balance	signature
<input type="checkbox"/> Temporary Certificate Of Occupancy	_____	<input type="checkbox"/> Conditions (See Attached)	
	date		
<input type="checkbox"/> Final Inspection	_____	_____	
	date	signature	
<input type="checkbox"/> Certificate Of Occupancy	_____		
	date		
<input type="checkbox"/> Performance Guarantee Released	_____	_____	
	date	signature	
<input type="checkbox"/> Defect Guarantee Submitted	_____	_____	
	submitted date	amount	expiration date
<input type="checkbox"/> Defect Guarantee Released	_____	_____	
	date	signature	

CITY OF PORTLAND, MAINE
DEVELOPMENT REVIEW APPLICATION
PLANNING DEPARTMENT PROCESSING FORM
ADDENDUM

20000119

I. D. Number

Portland Trails

Applicant

One India street, Portland, ME 04101

Applicant's Mailing Address

Woodard & Curran

Consultant/Agent

775-2411 772-7673

Applicant or Agent Daytime Telephone, Fax

6/23/00

Application Date

Near Blueberry road

Project Name/Description

, Portland, ME

Address of Proposed Site

238-A-006,245-A-005 & 245-A013

Assessor's Reference: Chart-Block-Lot

DRC Conditions of Approval

The Development Review Coordinator (874-8300 ext.8722) must be notified five (5) working days prior to date required for final site inspection. Please make allowances for completion of site plan requirements determined to be incomplete or defective during the inspection. This is essential as all site plan requirements must be completed and approved by the Development Review Coordinator prior to issuance of a Certificate of Occupancy. Please schedule any property closing with these requirements in mind.

The Development Review Coordinator reserves the right to require additional lot grading or other drainage improvements as necessary due to field conditions.

See attached memos re: erosion control and drainage. The applicant shall be responsible to install and maintain all necessary erosion control measures.

Planning Conditions of Approval

Inspections Conditions of Approval

Fire Conditions of Approval

**CITY OF PORTLAND, MAINE
DEVELOPMENT REVIEW APPLICATION
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Portland Trails

Applicant _____

One India street, Portland, ME 04101

Applicant's Mailing Address _____

Woodard & Curran

Consultant/Agent _____

775-2411 772-7673

Applicant or Agent Daytime Telephone, Fax _____

6/23/00

Application Date _____

Near Blueberry road

Project Name/Description _____

, Portland, ME

Address of Proposed Site _____

238-A-006,245-A-005 & 245-A013

Assessor's Reference: Chart-Block-Lot _____

Proposed Development (check all that apply): New Building Building Addition Change Of Use Residential
 Office Retail Manufacturing Warehouse/Distribution Parking Lot Other (specify) **Wilderness Trail**
 N/A _____ N/A _____ MI _____
 Proposed Building square Feet or # of Units _____ Acreage of Site _____ Zoning _____

Check Review Required:

Site Plan (major/minor) Subdivision # of lots _____ PAD Review 14-403 Streets Review
 Flood Hazard Shoreland Historic Preservation DEP Local Certification
 Zoning Conditional Use (ZBA/PB) Zoning Variance Other _____

Fees Paid: Site Plan \$400.00 Subdivision _____ Engineer Review _____ Date: 6/23/00

DRC Approval Status:

Approved Approved w/Conditions see attached Denied
 Reviewer *Steve Dwyer*
 Approval Date 7/8/00 Approval Expiration _____ Extension to _____ Additional Sheets Attached
 Condition Compliance _____ signature _____ date _____

Performance Guarantee Required* Not Required

* No building permit may be issued until a performance guarantee has been submitted as indicated below

<input type="checkbox"/> Performance Guarantee Accepted	_____	_____	_____
	date	amount	expiration date
<input type="checkbox"/> Inspection Fee Paid	_____	_____	
	date	amount	
<input type="checkbox"/> Building Permit	_____		
	date		
<input type="checkbox"/> Performance Guarantee Reduced	_____	_____	_____
	date	remaining balance	signature
<input type="checkbox"/> Temporary Certificate Of Occupancy	_____	<input type="checkbox"/> Conditions (See Attached)	
	date		
<input type="checkbox"/> Final Inspection	_____	_____	
	date	signature	
<input type="checkbox"/> Certificate Of Occupancy	_____		
	date		
<input type="checkbox"/> Performance Guarantee Released	_____	_____	
	date	signature	
<input type="checkbox"/> Defect Guarantee Submitted	_____	_____	_____
	submitted date	amount	expiration date
<input type="checkbox"/> Defect Guarantee Released	_____	_____	
	date	signature	

Site Review Pre-Application
Multi-Family/Attached Single Family Dwellings/Two-Family Dwelling
or Commercial Structures and Additions Thereto

In the interest of processing your application in the quickest possible manner, please complete the information below for Site Plan Review

NOTEIf you or the property owner owes real estate or personal property taxes or user charges on ANY PROPERTY within the City, payment arrangements must be made before permits of any kind are accepted.**

Portland Trails

6/23/00

Applicant One India Street

Application Date Upper Stroudwater Trail

Applicant's Mailing Address Portland, Maine

Project Name/Description near Blueberry Road

Consultant/Agent Woodward + Curran

Address Of Proposed Site Portland, ME

775-2411
 Applicant/Agent Daytime telephone and FAX 772-7673

238/A/6
 Assessor's Reference, Chart#, Block, Lot# # 245/A/15
 # 245/A/13

Proposed Development: (Check all that apply) New Building Building Addition Change of Use Residential Office Retail
 Manufacturing Warehouse/Distribution Other(Specify) Wilderness trail

N/A Proposed Building Square Footage and /or # of Units N/A Acreage of Site moderate industrial Zoning

You must include the following with you application:

- 1) A Copy of Your Deed or Purchase and Sale Agreement
 - 2) 7 sets of Site Plan packages containing the information found in the attached sample plans and checklist. 2 extra Site Plans
- (Section 14-522 of the Zoning Ordinance outlines the process, copies are available for review at the counter, photocopies are \$ 0.25 per page)

I hereby certify that I am the Owner of record of the named property, or that the proposed work is authorized by the owner of record and that I have been authorized by the owner to make this application as his/her authorized agent. I agree to conform to all applicable laws of this jurisdiction. In addition, if an approval for the proposed project or use described in this application is issued, I certify that the Code Official's authorized representative shall have the authority to enter all areas covered by this approval at any reasonable hour to enforce the provisions of the codes applicable to this approval.

Signature of applicant: <u>[Signature]</u>	Date: <u>6/23/00</u>
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Site Review Fee: Major \$500.00 Minor 400.00

This application is for site review ONLY, a Building Permit application and associated fees will be required prior to construction.

CITY OF PORTLAND, MAINE
SITE PLAN REVIEW (ADDENDUM)
CONDITIONS OF APPROVAL

APPLICANT: Portland Trails

ADDRESS: One Indian Street

SITE ADDRESS/LOCATION: upper Stroudwater trail

DATE: 7/18/00

Review by the Development Review Coordinator is for General Conformance with ordinances and standards only and does not relieve the applicant, his contractors or agents from the responsibility to provide a completely finished site, including but not limited to: increasing or concentrating of all surface runoff onto adjacent or downstream properties, issues regarding vehicle sight distance, location of public utilities and foundation elevations.

CONDITIONS CHECKED OFF BELOW WILL BE ENFORCED FOR YOUR SITE PLAN

1. _____ All damage to sidewalk, curb, street, or public utilities shall be repaired to City of Portland Standards prior to issuance of a Certificate of Occupancy.
2. _____ Two (2) City of Portland approved species and size trees must be planted on your street frontage prior to issuance of a Certificate of Occupancy.
3. _____ Your new street address is now _____, the number must be displayed on the street frontage of your house prior to issuance of Certificate of Occupancy.
4. The Development Review Coordinator (874-8300 ext. 8722) must be notified five (5) working days prior to date required for final site inspection. Please make allowances for completion of site plan requirements determined to be incomplete or defective during the inspection. This is essential as all site plan requirements must be completed and approved by the Development Review Coordinator prior to issuance of a Certificate of Occupancy. Please schedule any property closing with these requirements in mind.
5. _____ Show all utility connections: water, sanitary sewer, storm drain, electric, telephone, cable.
6. _____ A sewer permit is required for your project. Please contact Carol Merritt at 874-8300, ext. 8828. The Wastewater and Drainage section of Public Works must be notified five (5) working days prior to sewer connection to schedule an inspector for your site.
7. _____ A street opening permit(s) is required for your site. Please contact Carol Merritt at 874-8300, ext. 8828. (Only excavators licensed by the City of Portland are eligible.)

8. _____ As-built record information for sewer and stormwater service connections must be submitted to Parks and Public Works Engineering Section (55 Portland Street) and approved prior to issuance of a Certificate of Occupancy.
9. _____ The building contractor shall check the subdivision recording plat for pre-determined first floor elevation and establish the first floor elevation (FFE) and sill elevation (SE) to be set above the finish street/curb elevation to allow for positive drainage away from entire footprint of building.
10. _____ The site contractor shall establish finish grades at the building foundation, bulkhead and basement windows to be in conformance with the first floor elevation (FFE) and sill elevation (SE) set by the building contractor to provide for positive drainage away from entire footprint of building.
11. _____ A drainage plan shall be submitted to and approved by Development Review Coordinator showing first floor elevation (FEE), sill elevation (SE), finish street/curb elevation, lot grading, existing and proposed contours, drainage patterns and paths, drainage swales, grades at or near abutting property lines, erosion control devices and locations and outlets for the drainage from the property.
12. The Development Review Coordinator reserves the right to require additional lot grading or other drainage improvements as necessary due to field conditions.
13. See attached memos re: erosion control and drainage. The applicant shall be responsible to install and maintain all necessary erosion control measures.

cc: Katherine Staples, P.E., City Engineer

CITY OF PORTLAND, MAINE
SITE PLAN REVIEW (ADDENDUM)
CONDITIONS OF APPROVAL

APPLICANT: Portland Trails

ADDRESS: One India Street

SITE ADDRESS/LOCATION: upper Skowhegan trail

DATE: 7/18/00

Review by the Development Review Coordinator is for General Conformance with ordinances and standards only and does not relieve the applicant, his contractors or agents from the responsibility to provide a completely finished site, including but not limited to: increasing or concentrating of all surface runoff onto adjacent or downstream properties, issues regarding vehicle sight distance, location of public utilities and foundation elevations.

CONDITIONS CHECKED OFF BELOW WILL BE ENFORCED FOR YOUR SITE PLAN

1. _____ All damage to sidewalk, curb, street, or public utilities shall be repaired to City of Portland Standards prior to issuance of a Certificate of Occupancy.
2. _____ Two (2) City of Portland approved species and size trees must be planted on your street frontage prior to issuance of a Certificate of Occupancy.
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- 10. _____ The site contractor shall establish finish grades at the building foundation, bulkhead and basement windows to be in conformance with the first floor elevation (FFE) and sill elevation (SE) set by the building contractor to provide for positive drainage away from entire footprint of building.
- 11. _____ A drainage plan shall be submitted to and approved by Development Review Coordinator showing first floor elevation (FEE), sill elevation (SE), finish street/curb elevation, lot grading, existing and proposed contours, drainage patterns and paths, drainage swales, grades at or near abutting property lines, erosion control devices and locations and outlets for the drainage from the property.
- 12. The Development Review Coordinator reserves the right to require additional lot grading or other drainage improvements as necessary due to field conditions.
- 13. See attached memos re: erosion control and drainage. The applicant shall be responsible to install and maintain all necessary erosion control measures.

cc: Katherine Staples, P.E., City Engineer

June 22, 2000

Mr. Richard Knowland
Senior Planner
City of Portland Planning Department
Portland City Hall
389 Congress Street
Portland, Maine 04101

Re: Proposed Upper Stroudwater Trail Site Plan Review

Dear Rick:

Portland Trails is pleased to submit this filing for City review of the proposed Upper Stroudwater Trail. Our discussions with the DEP indicate that this project will be subject to Tier I review. Concurrent with that review process, we are submitting the attached information for review by the City of Portland.

Portland Trails hopes to begin work on the Upper Stroudwater Trail beginning July 8th, pending appropriate approvals from the DEP and the City of Portland. The proposed Upper Stroudwater Trail will run from the Turnpike right-of-way to the Westbrook-Portland city boundary along the Stroudwater River Corridor. The trail alignment of the trail corridor and design of all trail structures have been developed to be consistent with the features of the Lower Stroudwater Trail which was permitted by the DEP and City in 1997.

Portland Trails believes that the Upper Stroudwater Trail will be an asset to the quality of life within Portland for the following reasons:

- **Permitted Use.** The proposed trail project is located entirely within the boundaries of the City of Portland. The trail is designed and developed expressly for educational and non-motorized recreational purposes. The proposed trail lies within the Resource Protection Zone, and is a permitted use under Article III, Division 19, Section 14-321.2a: bikeways, pedestrian trails, and walkways, under Chapter 14, Land Use, of the Code of Ordinances, City of Portland, Maine. No structures are proposed aside from the bridges, boardwalks, walkways, culverts, benches, and educational postings proposed along the trail. Standards of the shoreland zone and floodplain management area, Division 26 and 26.5 will be adhered to.

- **No Reduction in Flood Carrying Capacity.** All of the bridges and boardwalks are located within the 100-year flood plain and are designed so as to not increase, restrict or impede the flow of the Stroudwater River during flooding. Minimal fill will be used to construct the trail. The fill is not anticipated to have any material effect on runoff or river flows. The bridges and boardwalks will be elevated above wetland areas so as to not disturb vegetation. Wooden planking used on boardwalks and bridges will be tethered to posts with 10' of ¼" braided steel cable to anchor each section in a flood event. This will

allow sections of the bridges and boardwalks to float at times of flooding, yet remain tethered to the posts.

- **Educational Purpose.** The proposed trail will serve an important educational purpose. It is designed to explore the diversity of the riparian zone, leading across wetlands, uplands, woodlands, and in several areas along the edge of the Stroudwater River itself. The existence of the Regional Waste Systems (RWS) incinerator and recycling facility provides a unique educational opportunity for trail users. Coordinating with RWS, Portland Trails has explored the possibility of educational signage, joint trail walks, and tours of the RWS facility allowing for a unique educational perspective on the tension between our disposable, consumer culture and the finite ecological resources that exist within Maine's largest urban center.

The location of the proposed trail, adjacent to the Stroudwater River in several sections, is integral to the trail's educational purpose. The proposed trail corridor allows for observation of a beaver lodge (on the opposite river bank), oxbows created by the changing river channel, avian life along the river corridor, as well as the workings of a river corridor / watershed throughout the seasons (with the exception of the Inland Fisheries and Wildlife parcel as noted below). The trail corridor has been located and will be constructed to minimize the impact on wetlands and the river corridor within the flood plain while maximizing the trail's value as an educational resource.

Pursuant to Chapter 310 (5)(C)(6)(d), Portland Trails is seeking an exception with the DEP from performing a functional assessment or compensation for the proposed trail on the basis of its being a walkway for public educational purposes. Our conversations with the DEP indicate that this project is undergoing a standard Tier I review.

- **Minimal Impact on Wildlife.** The proposed trail project has been designed and will be developed expressly for educational and non-motorized recreational purposes. The trail corridor will be 4' wide. Given the scope of the trail project, its intended uses, and the anticipated level of use, no significant impact on surrounding wildlife is anticipated.

Portland Trails has worked with the Department of Inland Fisheries and Wildlife to develop a use plan for the trail which adheres to Inland Fisheries and Wildlife's guidelines for the conservation and recreational easement it holds on the Hutchins Property. Specifically, Inland Fisheries and Wildlife recommended a trail alignment near the Stroudwater River. Accordingly, the proposed location of the trail corridor best meets the needs of Inland Fisheries and Wildlife and has been approved by them. Further, Portland Trails has agreed to limit trail access on the Inland Fisheries and Wildlife portion of the trail to the non-winter months in accordance with the wishes of Inland Fisheries and Wildlife.

- **Minimal Disturbance of Wetlands.** No wetlands, surface or groundwater bodies or other significant natural resources will be impacted as a result of the trail project, other than the less than 1,240 square foot area of wetlands impacted by bridge and boardwalk posts, wooden walkways and culverted drainages. It is critical to note that the bridge and

boardwalk structures will be elevated above wetland areas so as to not disturb vegetation. Sufficient elevation (18 inches and 24 inches, depending upon vegetation) will be maintained to minimize shading and allow for ground vegetation. The only disturbance associated with these structures will be the ground supports elevating the decking. Attachment A provides a detailed description of the cumulative mitigating effect of the boardwalks and bridges over the course of the trail corridor.

Project Description

Trail Corridor. The proposed trail corridor runs along easements and licenses held by Portland Trails on Sturbridge Yankee Workshop, City of Portland, and Regional Waste Systems parcels of land as well as a Department of Inland Fisheries and Wildlife conservation and recreation easement. A detailed description of the proposed trail, as it heads upriver from the Turnpike to the Portland – Westbrook city line is provided below.

Turnpike Right-of-Way

The trail corridor passes underneath the Turnpike adjacent to the abutments of the bridges (one northbound and one southbound) that span the Stroudwater River. This alignment follows along the top of the bluff overlooking the Stroudwater River, leaving existing erosion control and drainage features undisturbed. The trail corridor is entirely above the flood plain and does not impact any wetlands on this parcel of land.

Wetlands

None

Structures

None

Sturbridge Yankee Workshop

The trail corridor follows along the top of the bluff overlooking the Stroudwater River. Existing erosion control and drainage features will not be disturbed by the proposed trail alignment. The trail corridor is entirely above the flood plain and does not impact any wetlands on this parcel of land.

Wetlands

None

Structures

Stairs – outside of the floodplain.

City of Portland

As the trail enters the City of Portland parcel, the trail corridor descends a gently sloping bank toward the Stroudwater River. The trail runs alongside an existing storage shed and along a paved/gravel parking area, past an existing Portland Water District Pump House. The descent down the bluff places the proposed trail within the 100-year flood plain for the first time. However, given the previous development on this parcel, Portland Trails believes that the proposed trail will have no impact as it passes along the existing paved/gravel parking area, adjacent to the City of Portland and Portland Water District structures, until it reaches the brook and wetlands at the upstream edge of this parcel.

The brook and neighboring lowlands at the upstream edge of the parcel denote the first wetland to be crossed by the proposed trail. The brook and associated wetlands will be spanned with a combination boardwalk/bridge to minimize the impact on wetlands and allow unimpeded flow of the brook and, during flooding, the Stroudwater River. The impact of this brook/wetlands crossing is mitigated by the design of a 75-foot long bridge/boardwalk structure. The structure will be sufficiently elevated to allow wetlands vegetation to remain intact. As described above, the bridge and boardwalk will be designed and constructed so as to not impede, restrict or increase river flow during flooding.

<u>Wetlands</u>	<u>Structures</u>
One 75' crossing	One 75' bridge/boardwalk

Regional Waste Systems

The brook spanned by the bridge/boardwalk structure described above signifies the boundary between the City of Portland and Regional Waste Systems (RWS) parcels. At the end of the 75-foot trail structure, the trail passes onto a bank above the river channel. At this point, the trail corridor emerges from the flood plain to pass immediately adjacent to the RWS facility, heading upstream. Several wetlands, created by drainage from the RWS structure and parking lot, are crossed by the trail using a combination of boardwalks and culverts with fill.

At the upstream edge of the RWS parcel the trail turns toward the river channel, entering the flood plain once again. A final wetland on the RWS parcel is spanned with a boardwalk structure before the trail enters the Inland Fisheries and Wildlife easement. The trail alignment through the RWS parcel was chosen to minimize the amount of trail corridor constructed in wetlands and the floodplain, given the constraints posed by the existing RWS facility. The design of the proposed trail structures further mitigates the impact of the trail corridor along the length of this parcel.

<u>Wetlands</u>	<u>Structures</u>
One 5' crossing	Culvert and gravel
One 65' crossing	20' boardwalk w/ 45' culvert and gravel
One 45' crossing	10' boardwalk w/ 35' culvert and gravel
One 25' crossing	One 25' boardwalk

Inland Fisheries and Wildlife

Once the trail corridor enters the Inland Fisheries and Wildlife easement, it heads gradually inland, away from the river channel. This alignment was selected to minimize the number of wetland crossings required. However, the proposed trail does then move toward the river, crossing several wetlands.. Portland Trails believes this alignment is necessary to balance three imperatives: (i) minimizing the impact on wetlands and the river corridor within the flood plain; (ii) adhering to Inland Fisheries

and Wildlife's preferred trail alignment, and (iii) developing a trail with the greatest value to educators and students alike.

Mitigating the impact on wetlands and the river corridor is achieved via the design of the proposed trail and accompanying trail structures. As previously noted, bridges and boardwalks will be elevated above wetland areas with wooden planking tethered to the support posts to anchor the "float away" decking in a flood event. This will allow sections of the bridges and boardwalks to float above the 100-year flood elevation and remain tethered to the posts so as to not increase, restrict or impede the flow of the river during flooding. An added benefit is the reduced square footage of wetland affected by a boardwalk crossing. A limited amount of gravel fill will be used along the proposed trail corridor to stabilize trail surfaces and cover culverts. This fill is not anticipated to have any material effect of runoff or river flows due to the small volume of fill to be used and its low profile on the ground surface.

As the summary below indicates, the wetlands within the Inland Fisheries and Wildlife easement are spanned using a variety of mechanisms, including 95 linear feet of "bog bridge" (wooden structures placed on the ground surface to stabilize soils), 1300 linear feet of culvert with gravel fill, and 50 linear feet of boardwalk/bridge elevated 18 inches to three feet off the ground.

Within the Inland Fisheries and Wildlife easement, the trail climbs out of the floodplain after crossing a brook and gains elevation to the pipeline right-of-way. The remaining portion of the trail corridor from the pipeline to the Westbrook line is entirely above the flood plain. Also of note is the fact that from the pipeline right-of-way to the Westbrook line, the proposed trail follows an existing trail that has been used for walking, mountain biking and cross-country skiing.

<u>Wetlands</u>	<u>Structures</u>
One 45' crossing	One 45' bog bridge
One 80' crossing	One 30' boardwalk w/ 50' bog bridge
One 10' crossing	Culvert and gravel
One 110' crossing	One 110' culvert(s) and gravel
One 20' crossing	One 20' bridge
One 10' crossing	Culvert and gravel

Construction Techniques. While the Lower Stroudwater Trail required machinery during construction, all trail materials on the Upper Stroudwater Trail will be hand placed, using established low-impact trail building techniques and appropriate erosion controls, including silt fences where appropriate. This low impact trail design is feasible because we expect much of the proposed trail to be less utilized than the Lower Stroudwater Trail due to its location and distance from existing and proposed trails in the Portland Trails trail network.

Portland Trails will be responsible for all phases of development and maintenance of the trail. A nascent stewardship program is in place, bringing together residents of the areas along the Stroudwater River, abutting landowners, and the resources and membership of Portland Trails. This stewardship effort holds great promise for conserving the Stroudwater River corridor as an ecological, educational, and recreational resource.

The proposed trail corridor will be cleared to a 5 foot width (in contrast to the Lower Stroudwater Trail which is cleared to an 8 –10 foot width) while the trail itself will be 4 feet wide. From the Turnpike right-of-way to the edge of the City of Portland parcel, a trail 4 feet wide will be graveled. As previously noted, this section of trail does not cross any wetlands. Heading upstream, along the RWS and Inland Fisheries and Wildlife land, the 4 foot-wide trail will be lightly covered with organic mulch that does not compact the roots of nearby trees. In select locations, the wood chip trail cover will be augmented by gravel and geotextile to provide a more resilient trail surface within the trail corridor. Along the entire trail corridor, the trail will be cleared and constructed with hand tools.

Trail Structure Design. The proposed trail structures will be similar in design and materials to those employed on the Lower Stroudwater Trail. Two proposed bridges (one spanning the brook between the City of Portland and RWS parcels and one spanning a brook on the Inland Fisheries and Wildlife easement just downstream of the pipeline) will be elevated 3' to 6' above drainage flows to accommodate a minimum of a 25-year storm event. These structures will have railings that comply with the City of Portland Building Code. Wooden boardwalks will be elevated 18" above wetlands.

Wooden decking will be laid across joists and the joists will be supported by 2.5" diameter steel pipe or 4" x 4" wooden posts. The structure will rely on posts or sleepers set below frost depth. Another four boardwalks will be constructed in sections, and will be designed in the same manner as the bridges with the exception of closely spaced 2.5" diameter galvanized steel posts that will be set into the ground.

The bridges and boardwalks will be elevated above wetland areas and the wooden planking will be tethered to the posts with 10' of ¼" braided steel cable to anchor the section in a flood event. This will allow sections of the bridges and boardwalks to float above the 100-year flood elevation and remain tethered to the posts, where waters up to 6' deep may cover portions of the trail. All of the bridges and boardwalks are located within the 100-year flood plain and are designed so as to not increase, restrict or impede the flow of the river during flooding.

A limited amount of gravel/mulch fill will be used along the proposed trail corridor to stabilize trail surfaces and cover culverts. This fill is not anticipated to have any material effect of runoff or river flows. A total of five wetlands areas will be crossed in full or part by culverts and gravel. The remaining crossings will feature wooden structures along the ground designed to allow drainage and minimize the impact of foot and bike traffic on trail surfaces.

As a result of these design features, the total disturbance to wetland areas will be less than 1,240 square feet. The wetlands disturbance will consist of elevated post supports of

bridges and boardwalks, wooden structures on the ground, and culverts with fill, similar to the Lower Stroudwater Trail. No wetlands, surface or groundwater bodies or other significant natural resources will be impacted as a result of the trail project, other than less than 1,240 square feet impacted by bridge and boardwalk posts, wooden walkways and culverted drainages. Care will be taken to construct the trail on stable ground, and no public utility services will be required for the construction, maintenance, or use of the trail.

Project Workplan/Map. The attached workplan/map provides the following information: (i) the location of the Stroudwater River; (ii) the location of the proposed trail corridor; and (iii) easement and property owners' boundaries

Given the negligible impact on the flood carrying capacity of the Stroudwater River from the proposed trail and trail structures, the minimal wetlands disturbance (<1,240 square feet), and the consistent design features between the Upper and Lower Stroudwater Trails, the applicant believes that the proposed project has been conceived in compliance with existing site review and resource protection ordinances of the City of Portland. Accordingly, we hope to begin preliminary work along the trail corridor on July 8th.

All of us associated with the Upper Stroudwater River Trail at Portland Trails look forward to working with you to build upon the success of the Lower Stroudwater Trail. If the City requires any additional information beyond that contained in this document, please feel free to contact me at 775-2411.

Sincerely yours,



Nan Cumming
Executive Director