Marc Giguere

693 Ocean Avenue
Portland, Maine 04103-2739
(207) 761-6976 h
(207) 874-0604 w
(207) 772-0221 fax

20-May-97

Chair Hagge and Members
of the Portland Planning Board
City Hall
Portland, ME 04101

Re: Cedars Nursing Care Center, 630 Ocean Avenue

Dear Planning Board:

Let me begin by saying that I am appreciative of the concern and diligence with which the Planning Board reviews proposed projects. I must admit that I have never been involved/concerned with community developments as I am with this project.

The project as presented to the Planning Board is enormous and does not resemble the previously submitted and approved Phase II. My main concern is that even with changes suggested by Board, this project will substantially change look and feel of the neighborhood. I purchased the property at 693 Ocean Avenue in March of 1996 and live there happily with my wife Pamela and two year old daughter Noelle. My areas of concern are as follows:

1. residential area encroachment
2. traffic increase
3. wetlands movement/relocation
4. drainage
5. Parking/pavement

RESIDENTIAL AREA ENCROACHMENT

The proposed demolition of two residential structures is residential encroachment. Even more concerning is that the Cedars representatives did not indicate to the board that they also now own the residence on the corner of Ocean and Rainbow Mall Road across from 650 Ocean (yellow house on the same side as Ledgewood). This residence is currently being rented to a couple that will be moving to Falmouth. What is their plan for the use of this property? Will it be another unpermitted use similar to 650 Ocean Avenue property as pointed out by Mr. Cole? The residents of Byfield Road will all feel a significant impact of this proposed project. The bordering woods will be inadequately replaced by a planted area completed with car ports/sheds. Currently, a walk down Rainbow Mall Road is pleasant and peaceful. I urge you to drive by the areas bordering this proposed project.

TRAFFICE INCREASE

There are no sidewalks on Ocean Avenue at present. Soon my two year old will want a bicycle, which I am sure she will get. I am certain that Pam and I will be uncomfortable when she rides down what is already a busy road. Currently, youths living at Wellstone regularly walk in the street on their way to school. The addition of a paved sidewalk may be one part of the solution. The suggestion by Mr. Caron that the city's traffic department to review the impact of this project is an excellent idea. It should be noted that the traffic impact report performed by John L. Murphy, Civil Engineer was done on 4-23-97. I believe that at the time, the bridge on Route 9 in Falmouth was closed and actual traffic patterns may differ substantially from the time reported.

WETLANDS MOVEMENT/RELOCATION

There is limited space even with the newly acquired properties to implement a project of this magnitude in the presence of wetlands. That became apparent when the suggestion to alter the traffic flow was made at the workshop. Further, as pointed out by a Cedars representative "the original Phase II impacted the wetlands like crazy". The proposition of moving wetlands around almost sounds as bad as paving the entire area.

DRAINAGE

Similar to the traffic concerns, and more importantly are the drainage concerns. This area already has people pumping our their basements in heavy rains. This project is located at the bottom of a large hill behind Ledgewood. The relocation of wetlands will inevitably alter drainage flows. I recommend that the Board have direct contact with the appropriate governing entities to thoroughly discuss the implications of this projects. I am skeptical to hear that there will be no additional stress on the current system by the addition of this proposed project. We often see Public Works trucks in the vicinity of the Cedars.

PARKING/PAVEMENT

The provision for parking area indicates a substantial anticipated increase in traffic and usage for the area. I would like to ask that the Cedars define what the anticipated number of people entering and existing the facility on a daily basis versus the existing situation. The term "Adult Daycare" indicates to me that they expected to provide services to a significant number of individuals that won't be full time residents. If this is correct, it will have a significant traffic volume impact.

CONCLUSION

The Phase II project as recently presented to the Planning Board is not the same Phase II as approved by the then existing 1988 Planning Board. Therefore, this project should not be viewed as a reaffirmation of a previously approved project but a new and distinct project. As stated by Cedars representatives, the project has changed dramatically. I am not familiar with the old Phase II, but from my point of view the magnitude of the project is simply too big. Please consider my above concerns individually and as a whole and incorporate as much as possible into the next workshop.

Sincerely,

Marc Giguere

Pamela Giguere

Linda Campitelli
7 Redlon Rd.
Portland, Me. 04102

Mr. Joseph Gray

Planning Board
City Hall-4thFloor
Portland, Me. 04101

Dear Mr. Gray,

Again, I am writing to express my opposition to and abhorrence of Ric Weinschenk's plan to develop Redlon Woods and Wetlands. The subsequent result would be destruction of this most valuable green space.

We are aware of the city's technical codes, the legal codes and the financial codes that help determine the approval or rejection of a plan. However, there is a code which outmasters these and is based on doing what is right. Another code, which supercedes the technical, legal, and financial is a code by which we recognize the importance of and connection to the environment around us. This code has no specific written definition or number in the standards. It possesses a language of its own. We interpret this language by viewing and experiencing these special places, like Redlon Woods and Wetlands. Then we understand the power that lies in its honesty, beauty, elegance , and determination to give us what we cannot man-make.

What is obvious is what we're able to see. What about what we don't see- what is working beneath the surface? And who is responsible when these unknowns surface and create uncontrollable situations from which we can't go back to, retreat from, or correct? Will you be those people? The evidence that has been presented to you over the past several months clearly shows potentially catastrophic affects to this land and to the surrounding neihbors and their property. The developer's people have used words like, "probably," "possibly," and "most likely" instead of guarantees. Let's face it-there are too many uncertainties to say, "I approve." Additionally, there has not been a conclusive

study on the wildlife, vegetation and subsurface drainage, as far as I am concerned.

The true manifestation of the effectiveness of all these codes will be realized after the development and into the future. Usually there is an exchange between two forces and nature is no different. My premonition is the exchange for blasting, cutting down trees, filling, eliminating, digging and paving will be surface and sub-surface drainage problems, flooding, dislocation of animal habitats, and the loss of a beautiful sanctuary. There will be another result-one person will make lots of money.

I believe we all have a responsibility, whenever possible, to prevent harm to our neighbors. I hope you do too. And if we are not the caretakers of this land, who will be? We can always build more houses, but we can never build more land.

Sincerely,

Linda Campitelli

Dawn DeRice
21 Redlon Road
Portland, ME 04102

July 11, 1997

Joseph E. Gray, Jr.
Director of Planning and Urban Development
City Hall, 4th Floor
389 Congress Street
Portland, ME 04101

RE: Redlon Park

Dear Mr. Gray,

I am extremely concerned about the proposed development at the end of Redlon Road. It is my understanding that the majority of water run-off will be directed to Bancroft Street. Houses on Bancroft Street already experience extreme surface and ground water problems as well as icing during the winter. Any plan for additional water directed toward Bancroft Street is ill conceived and asking for trouble. Engineering practices to increase the volume but decrease the flow do little to resolve this problem especially in winter when the retention ponds are full and frozen over. Snow melt and winter rain will defeat these attempts to control what ultimately will be increased water and icing conditions on Bancroft Street.

As mentioned in Bruce Bell's report, this is an existing condition that needs to be fixed before any consideration is given to potentially exacerbating the problem. Bancroft and Capisic Street infrastructure already is overburdened by extreme weather conditions. This is a condition most residents on these streets have tolerated for years. The tolerance level now has been exceeded. The fix is needed now! My concern is there is not enough money in the budget to do it now. There should be no further development considerations until existing conditions are at an acceptable level. Section 14-526 (a) (20) is very specific that there will be ***no*** adverse impact upon the existing groundwater and surface water quantity. The proposal before you cannot make that claim..

I request that the City of Portland fix the problems on Bancroft and Capisic before you give serious consideration to any proposed development of this site regardless of the nature. Fixing this preexisting condition needs to be a prerequisite to any development that could potentially add to the problems stated above. Given these facts, I request that you either reject the proposal now before you, or hold a final decision on the proposal in abeyance until the drainage problems on Bancroft and Capisic Strreets have been fixed.

Sincerely,

Dawn DeRice

Dawn DeRice

21 REDLON ROAD
PORTLAND, ME 04102

SIERRA CLUB - MAINE CHAPTER

192 State Street, Portland, ME 04101-3712 Phone 207-761-5616

July 14, 1997

Joseph E. Gray, Jr.
Director of Planning and Urban Development
City Hall, 4th Floor
389 Congress Street
Portland, ME 04101

Dear Mr. Gray,

I recently met with Bob and Linda Campitelli regarding the proposed Redlon Park PRUD. Because of the importance of the Redlon wetlands, the Executive Committee of the Maine Chapter of the Sierra Club has asked that I appear before the Planning Board on July 22. The Friends of Redlon Woods and Wetlands suggested that I write to you in advance of the hearing.

The Redlon woods and wetlands is one of the last remaining refuges of this size and quality left in Portland. My visit to the woods left me wondering how the developer's inclusion of horseshoe pits and a tennis court will adequately replace the woods' scenic and natural beauty; how they could possibly serve the same restorative and recreational function for the people of Portland; and how they will make up for the loss of habitat for turtle, wild turkey, pheasant, woodpecker and songbirds that set it apart from most of the city's neighborhoods.

This project could also end up costing the city tens of thousands of dollars in stormwater and drainage problems. Public works employees have already expressed serious concern about drainage in the area. Even in the dry conditions during my visit on July 7, one abutter's lawn on Bancroft Street had a small pond.

These wetlands play a crucial role in absorbing and slowing down flood water. Last fall's flood highlighted the importance of this role. Wetlands also improve water quality, acting as a kind of natural sewage treatment plant, trapping excess nutrients and pollutants.

Flood control and water quality are not unquantifiable, mushy reasons for protecting wetlands: They mean dollars and cents to a city that can ill afford to squander any of its resources, natural or financial.

I hope the Maine Chapter of the Sierra Club can be of service to the Planning Board in this process. Please call me at 761-5616 if I can answer any questions.

Sincerely,

Mathew Scease,
Conservation Organizer

Robert M. Provencher
154 Stevens Avenue
Portland, ME 04102

July 12, 1997

Joseph E. Gray, Jr.
Director of Planning and Urban Development
City Hall, 4th Floor
389 Congress Street
Portland, ME 04101

Dear Mr. Gray:

I am writing to you as a conduit to the Portland City Planning Board. **I am a concerned citizen opposed to the proposed Redlon Park development .**

It has become apparent to me that the city planning board's real power is derived from its privileged-duty to interpret and enforce a sometimes vague land use code. The board is responsible for seeing that the spirit of the land use code is adhered to, but in the course of doing so there is sufficient latitude in the code for the board to assume a subjective or political vantage point on issues before it. I believe that this arrangement deserves its place in our world. With the exception of mathematics, there are few things that can be viewed as being as being black or white. The balance is sketched in different shades of gray.

Currently before the planning board is the Redlon Park proposal. The applicant, through his parade of professionals, has attempted to turn this development application into a binary decision process. In my opinion, to view this proposal in such a way would be a mistake. **This proposal is like an onion, with each layer different and enlightening, and at the core is something that is rotten.**

The reasons are many not to develop this site. To list them here would be redundant (*see attached page*). Please advise the planning board to vote this proposal down on July 22, 1997.

Sincerely,

cc: Tom Kane, City Councilor

cc: Andrew D. Russell, Portland Press Herald

REASONS NOT TO APPROVE REDLON PARK **July 1997**

Barry Timson's Geology Report

DEP Tier 3 Appeal Scheduled for Public Hearing in August

Bruce Bell's Report

Pre-existing Drainage Problems at Bancroft and Capisic Streets

Taxpayers Left Holding the Bag at Cottage Park

Sierra Club's Formal Opposition

Improper Use of Little Remaining Urban Green Spaces

Holly Dominie's Report on Scenic Impact

Issues of PRUD Developments in General

Redlon Park's Incongruity with Surrounding Neighborhoods

"Cottage Park Drainage Issues" (*Alex Jaegerman's file @ Planning*)

Challenger Space Shuttle Analogy

Potential Problems in Ledge Blasting

Paper Streets Issues

Deeded Rights of Way Through the Property

Councilor Kane's Opposition

Councilor Rickett's Opposition

Developer's Track Record

The Proper Interpretation of the Land Use Code

The Good Conscience of the Planning Board

...etc.

Anne E. Archambault
154 Stevens Avenue
Portland, ME 04102

July 13, 1997

Joseph E. Gray, Jr.
Director of Planning and Urban Development
City Hall, 4th Floor
389 Congress Street
Portland, ME 04101

Dear Mr. Gray:

I have been reviewing the data surrounding the proposed Redlon Park PRUD. **I am deeply concerned that we are about to give the green light to a project fraught with potential problems.** The site chosen is frankly not well suited for a housing development and parallels the Cottage park site which is widely known as a being a failure because of problems endemic to the site. We are on the verge of repeating that mistake.

I also see a parallel with the dramatic events surrounding the space shuttle Challenger. The standards were known. The failure to meet the standards were in time known by the engineers. The cost and time to fix the non-compliance was deemed too high given no catastrophic event had yet occurred. Politics entered the equation and launches continued. It took the memorable explosion of Challenger to surface the problem and ensure the engineering was done right and requirements outlined in the standards, in this case O-rings, were met. The problem stemmed from non-disclosure of errors of omission turned into errors of commission. NASA lives with the legacy of Challenger.

While not life threatening, **Cottage Park is your Challenger**. It is your demonstration site. The design and engineering for Redlon Park is pretty much the same; however, the Redlon Park site has a harsher environment than Cottage Park. There does not appear to be any demonstration of lessons learned at Cottage Park manifest in the Redlon Park proposal. There have been no perceived potential problems identified with the Redlon Park plan. We all know from the Cottage Park experience that the problems are there. The consequences are as unacceptable to those of us that have to live with the results as Challenger was to her crew and NASA.

The bottom line is that you can only review what is presented. Pay as much attention to what is missing as to what is there. Make sure that design and engineering have taken advantage of lessons learned and have compensated for a more technically demanding environment. Demand an exhaustive analysis to be absolutely sure of the results, knowing, even then , that the site's development is a risky proposition. The planning board has had it's Challenger. We know the results. You cannot allow another to occur. **Alarms are going off all around you.** Listen to them and be as absolutely sure as you can be that you have all the information to make the right decision. Are the standards truly met in your mind? **Don't fall prey to being part of another Cottage Park explosion. Do not build on that legacy.**

Sincerely,

Anne E. Archambault

cc: Tom Kane
71 Rosemont Avenue
Portland, ME 04103

The Portland Newspaper
Attn.: Andrew D. Russell
390 Congress Street
Portland, ME 04101-5009

ATTACHMENT E-1

Roger J Gendron
118 Bancroft Street
Portland, ME 04102-2029

June 18, 1997

Joseph E Gray, Jr.
Director of Planning and Urban Development
City Hall, 4th Floor
389 Congress Street
Portland, ME 04101

Dear Mr. Gray:

On behalf of the Neighbors of Redlon Woods and Wetlands, I am providing, for reference, a written record of the formal presentation given at June 10th Public Hearing in that there is no written transcript of testimony given on that date. Additionally, we contend a number of issues presented for your review during the hearing apply equally to a subdivision as they do for a PRUD. For that reason, we request a copy of the attached be placed on file with other information available to Board Members and the public.

Given our understanding that the developer is going to propose alternatives to his original plan to include a subdivision on June 24th, we respectfully request an opportunity to review these proposals in more detail and be allowed another public hearing to express our views before the Planning Board renders their decision. We have already spent a significant amount of time, energy and money making our case and we are currently gathering additional information germane to this site in general and to additional problems with the latest development proposals in particular. We feel that additional disclosure, based on the latest data, is both prudent and necessary to render a sound decision on this matter.

Sincerely,

Roger J. Gendron

ROGER J. GENDRON

- Neighbors of Redlon Woods and Wetlands -
10 June 1997 Hearing Agenda

Introduction - Bob Campitelli (7 Redlon Road)

Highlight of Major Arguments - Bob Provencher (154 Stevens Ave.)

Water Standards - Barry Timson (Hydrogeologist)

Active & Passive Rec. Spaces - Anne Archambault (154 Stevens Ave.)

Technical Capacity - Ellen Pirone (136 Stevens Ave.)

Drainage Standard - Roger Gendron (118 Bancroft Street)

Financial Standard - Alan Prosser (195 St. John Street)

Environment Criteria - Holly Dominie (Visual Resource Consultant)

Summary - Greg Dismore (25 Motley Street)

Note: While anyone attending will have an opportunity to speak, you are encouraged to keep the number to a minimum because a lengthy hearing will diminish the impact of our prepared presentation. If you are so compelled to speak, be mindful of the fact that you have 3 minutes and that it is critically important that you stick to the criteria and standards contained within the Portland Code which are the only bases the Board can use in rendering its final decision. Above all, do not attack Planning Board members who are chartered to pass judgment on proposals based on the "facts" presented for their consideration.

E-3

AGAINST REDLON PARK

Chairman Hagge, Members of the Board; June 10, 1997

The major arguments against the proposed Planned Residential Unit Development (PRUD), so-called "Redlon Park" are as follows:

(1) - Portland Land Use Code, **Section 14-526, Standards**, sub-paragraph (a) (8): The applicant has not met his burden-of-proof in demonstrating that the proposed project will not create any **significant soil and drainage problems**, both on- and off-site.

(2) - **Section 14-526, Standards**, sub-paragraph **(a) (20)**: The applicant has not met his burden-of-proof in demonstrating that the proposed development shall have no **adverse impact upon the existing natural resources**, including the **amount of groundwater,** both on- and off-site and not **adversely impact upon wetlands.**

(3) - **Section 14-526, Standards, Sub-paragraph (a) (5):** The applicant has not demonstrated that the proposed subdivision will not **overburden the storm drains or public facilities and utilities**...as this standard specifically applies to icing and water pooling problems found on Bancroft St.

(4) - **Section 14-497, General Requirements**, sub-paragraph **(a) (8)**: The applicant has not demonstrated that the PRUD will not have an **undue adverse effect on the scenic or natural beauty of the area.**

(5) - **Section 14-526, Standards**, sub-paragraphs **(a) (14), (c) (3 & 4)**: The applicant has not fulfilled the intended requirements of a PRUD for both **Passive and Active Recreational Open Space.**

(6) - **Section 14-497, General Requirements,** sub-paragraph **(a) (10)**: The applicant has not demonstrated adequate **financial and technical capacity** as relates to **Standards (a) (5), (a) (8)** , as well as our own **proposed initiative that this technically challenging project be tied to a long term performance defect bond of $5,000,000.00 over a five year period of time beyond completion of the project.** We believe that this proposed performance defect bond is endemic of a site with such physical constraints as high ground water table, topography, ledge, intermittent stream, and natural drainage problems.

(7) - Our final argument is an **appeal to the DEP for a Tier II Listing.**

These issues will be presented to you by Geologist Barry Timson, Land-Use Planner Holly Dominie, and members of our neighborhood coalition. These people are here tonight to remind you that Portland's past experiences with similar projects well documented in the public record, may come to seem like a walk in the "Cottage Park", compared to what could occur in this particular application.

Thank You

E-4

Timson & Peters, Inc. ENVIRONMENTAL SERVICES
Environmental Permitting
Geologic Consulting•Wetland Analyses
Environmental Assessments•Groundwater Investigations

June 9, 1997

EWBT-REDLON

Friends of Redlon Park
c/o Robert and Linda Campitelli
7 Redlon Road
Portland, ME 04101

Re: Wetland Alteration and Hydrogeologic Impacts of the Proposed Redlon Park PRUD Development

Dear Mr. and Mrs. Campitelli:

Pursuant to our Agreement between the Friends of Redlon Park and Timson & Peters, Inc., I have reviewed pertinent application materials submitted to the Maine Dept. of Environmental Protection (MDEP) and the City of Portland Planning Board and visited the site of the above-proposed development on two occasions -- once on June 2, 1997 and again on June 7, 1997. Based on this review and other pertinent published map and narrative data regarding the geology of the area, the following are my professional opinions regarding wetland fill and bedrock blasting as proposed by the applicant.

A. Impacts of Wetland Fill

The applicant proposes to fill approximately 13, 200 sq. ft. of forested wetland to provide for driveway crossings, road construction and stormwater runoff detention basin construction.

Based upon my visitations to the site, the applicant's delineation of the wetland appears to be accurate and the area of impact accurately determined. The wetland does contain a defined water course, although by MDEP definition, this water course does not constitute a stream channel. On the evening of June 2, 1997, there was perceptible but sluggish flow in the channel, but by June 7, any flow within the channel had ceased.

However, the fact that flow remained within the channel up through the beginning of June without much precipitation in the immediate past, as well as finding several minor ground water seeps at the base of bedrock outcrops, indicates that an important function of this wetland is control of flood waters,

Office Location: 418 Maine Avenue, Farmingdale, ME 04344
Mailing Address: P.O. Box 150, Hallowell, Maine 04347•(207) 623-0053
FAX•(207) 623-2599

particularly from the discharge of ground water from the fractured bedrock aquifer underlying the thin glacio-marine soils and swamp muck deposits covering the bedrock in the low areas of the site. I also soil cored into the upland soils between the wetland boundary and the exposed bedrock where the internal road for the PRUD is to be located. Although wetland vegetation was not abundant at this location, the soils were saturated at a depth of 6 to 8 inches, again attesting to the fact that the discharge of ground water to this low area is still ongoing.

The bedrock exposed in the Redlon Park site has been mapped and identified by Hussey (1985) as the Vassalboro Formation. The Vassalboro is a medium- to dark gray relatively coarse-grained metamorphic rock which is fractured. The Redlon Park area lies just north of a major regional fault, the Flying Ridge Fault. Because the bedrock is fractured, ground water can move and migrate within the fracture spaces, thus the bedrock is considered a fractured bedrock aquifer from which water can be extracted for drinking water purposes.

Additionally, when considered in relation with the covering geologic surficial materials as mapped by Thompson (1976), the Redlon Park area fractured bedrock exposures are most likely artesian. To the northeast, the Vassalboro Formation crops out on the surface at higher topographic elevations in the Highland/Brighton Corner section of the City. Between this area and the Redlon Park area, the bedrock is overlain by glacio-marine deposits. The glacio-marine deposits are of lower hydraulic conductivity than the underlying fractured bedrock, thus ground water flowing in the fractured bedrock is "confined" to the bedrock as it flows from the Highlands to Redlon Park. Shallow ground water can then discharge from the exposed fractures in Redlon Park, but the discharge is under pressure and, therefore, artesian.

The importance of above the discussion in relation to the proposed development is that bedrock discharge to the wetland can occur long after a storm event recharges the exposed fractured bedrock recharge area in the Highlands neighborhood and that such discharge relationships are not accounted for by normal stormwater runoff models employed to model pre- and post-development runoff conditions. To my knowledge, the Hydrocal program utilized by the developer of Redlon Park does not account for ground water discharge and runoff conditions and, therefore, might underestimate the actual stormwater flows which will need to be conveyed from the site.

With regards to wetland impacts, then, I believe that the flood-storage capacity of the Redlon Park wetland has not been evaluated and remains an unknown. Because of this, the basement flooding problems reported in the neighborhood below the Redlon Park site may be aggravated by the development.

In this regard, the Friends of Redlon Park have a valid issue in appealing the NRPA wetland permit issued by the MDEP and Corps of Engineers to the developer. The developer submitted a Tier 1 wetland fill application on the proviso that the proposed development would not impact a defined stream or the 100-year floodplain. However, Tier 1 and Tier 2 permits are only valid for projects which do

not involve fill in the 100-year floodplain. Although FEMA has not mapped a 100-year floodplain or floodway on this parcel of land, the applicant has now generated minimal flow calculations from which the 100-year floodplain can be determined. Given the availability of this information, it is a high likelihood that the applicant, by developing stormwater detention basins completely across the wetland, is causing fill within the 100-year floodplain. A successful appeal and submission of necessary supporting information for a Tier 3 permit application by the applicant would provide a more complete picture of the impacts on ground and surface water runoff on the wetlands and downgradient neighborhood than has been presented to date.

B. Impacts of Blasting on Abutting Property Owners

The applicant has submitted a letter by R.W. Gillespie & Associates, Inc. in support of their conclusion that blasting of ledge will not impact abutting property owners or structures.

The letter from R.W. Gillespie & Associates adequately identifies the type of bedrock and its fractured condition on the site. I also measured the spacing and orientation of bedrock fractures on several outcrops on my visit to the site on June 7, 1997 and found fracture systems which were primarily subparallel with bedding orientation and fractures at right angles to bedding orientation. However, I also found several primary (extended across entire outcrop face) fracture sets running between N 70 E and S 78 E.

With this existing fracture pattern, hydraulic pathways within the bedrock presently exist between the Redlon Park site and its ground water recharge area to the northeast and between the site and the 2 immediate abutters on Redlon Road 9 (DeRice and Thompson).

Given my previous discussion regarding the hydraulic conductivity of the fractured bedrock and artesian flow within the fractured bedrock aquifer, my concern with the blasting is two-fold.

First, that blasting, even localized, would be sufficient to increase existing fracture openings to locally increase the hydraulic conductivity of the bedrock, thereby increasing ground water flow in and around the basements of the abutters. The DeRice residence is less than 100 feet from the proposed blasting site for the road and the Thompson residence is within approximately 150 feet.

Second, that site blasting will increase ground water discharge to the site overall by enhancing fractured bedrock hydraulic conductivities both laterally and at shallow to intermediate depths (10 to 40 feet).

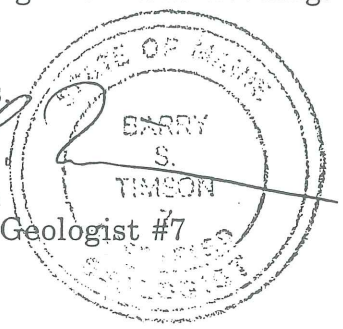
R.W. Gillespie & Associates have recommended a monitoring program to ensure that blasting effects will be minimal or that damage to structures within 500 feet by blasting will be readily identified (and compensated for by the developer ?). This type of monitoring program, however, will not reveal effects on the fractured

bedrock -- effects which could increase basement flooding in nearby abutting dwelling structure basements.

C. Conclusions

Based on my review of the existing application materials, two site visits, and related supporting materials, it is my professional judgment that the applicant of Redlon Park, at this point in time, has not demonstrated that the proposed development will not create any significant soil drainage problems by filling portions of the wetland on site and that no adverse impact will occur to abutting neighbors by locally increasing ground and surface water flow and quantity, thereby increasing basement flooding.

Very truly yours,



Barry S. Timson
Maine Certified Geologist #7

Active & Passive Recreational Spaces:

My name is Anne Archambault. I live with my family at the corner of June Street.

The neighborhood coalition takes issue with Section 14-526 Standards, sub-paragraph (a)(4), section © parts (3) and (4), particularly as it applies to open spaces designated and improved for active recreational use with facilities such as tennis courts, basketball courts, multipurpose athletic fields, swimming pools, and recreational buildings.

We argue that the proposed active and passive spaces are deemed totally inadequate and do not meet the standard criteria. More specifically, a horseshoe throwing pit does not come close to meeting the true intent of the standard. It is unlikely you will find children playing horseshoes much less male and female adults choosing horseshoes as a recreation of choice in an upscale development. Every indication is that the proposed recreational space is a half hearted attempt to minimally meet the standard at minimum cost and space. Our interpretation of the intent is to provide more substantial recreational facilities, as outlined in the standard. These facilities are necessary, required and mandatory. Where are they? We fail to see where this plan even remotely satisfies the standard's requirements. Clearly, the proposed development is in non-compliance with this section of the code. In addition, given the size of the development, se seriously question the developer's ability to use PRUD guidelines as the proper vehicle to develop this site.

THANK YOU.

Technical Capacity:

Section 14-497. General Requirements. (a) Review criteria (10): states: "The subdivider has adequate financial and technical capacity to meet this standard;"

We contend that the developer has not produced adequate burden of proof that he possess the technical capacity to successfully undertake this project. There is serious concern that the lots, as proposed, are buildable and that there is adequate design and engineering knowledge to develop this extremely complex site. The site has been characterized as having "substantial ledge outcroppings and an intermittent stream and associated wetlands running through the center of the site". Additionally, there are pre-existing drainage problems in the area of Bancroft street which, according to the plan, will receive additional water run-off from the development. One assessment was that this proposed development " will be a challenge but will provide an opportunity for creative design and engineering". Creative design and engineering are, to our understanding, unproved technical concepts that carry a commensurate risk. We view the risk as totally unreasonable given the potential extreme consequences.

Historical evidence at Cottage Park points to a number of problems in developing that site with the majority revolving around drainage problems and documented over at least a 2 year period. On-going drainage problems have been referred to by city officials as the "continuing drainage saga going on at the Cottage Park subdivision". Reasons given for these problems include that they were "endemic of a site with these physical constraints i.e.

high groundwater, topography, proximity to ledge". While the developer may claim lessons learned from that experience, which have not been documented, one must note that the Redlon Park proposal faces the same high groundwater, topography, proximity to ledge but is far more complex with greater extremes than those at Cottage Park and is complicated by an intermittent steam and pre-existing drainage problems. Clearly the Redlon Park site is several orders of magnitude greater in complexity leading one to truly question the feasibility its development. "As developed" properties, with steep grade variations, present unique problems to be overcome in both design and engineering. This is far from a cookie cutter operation and it would be difficult to point to a successful development that has all the same extreme environmental elements and pre-existing conditions as we find at this site. While anything is possible with enough time and money, one must return to the reasonableness of this undertaking. We contend the developer has not provided adequate Burden of Proof to substantiate the claim that he has met this technical capacity standard using well established design and engineering practices consistent with unique nature of this site.

Technical Arguments
Redlon Road Project

Portland Land Use Code

Drainage:

Section 114-526 Standards, subparagraph (a): Requirements for approval. The planning board or planning authority shall not approve a site plan unless it meets the following criteria:

(5) The development will not overburden the sewers, sanitary and storm drains, water solid waste disposal or similar public facilities and utilities;

The 18 inch culvert at the intersection of Capisic Street and Bancroft Street is already incapable of handling existing heavy storm water run-off from the existing site. Back-up water adversely affects the residences in the area of both Capisic and Bancroft as a pre-existing condition. Bruce Bell, Public Works Operations Manager, neighbors and I walked the site today. He stated that the State designed the storm water drainage on Capisic Street. The design ties catch basins together in series. In that the 18" culvert ties into the catch basin at the east side corner of Capisic and Bancroft which in turn drains into subsequent catch basins ending up at Capisic Pond, this 18" culvert serves as the entry point within the series. Any blockage in catch basins downstream of the 18 inch culvert will cause water to back up on the adjacent properties in orders of feet deep. Increasing the culvert size into the first catch basin does not resolve the problem. Rectification of just this pre-existing condition would require

major changes to the location's storm drain infrastructure. Responsibility would rest with the City of Portland which does not currently have money budgeted to accommodate a project of this nature. Additionally, the culvert is prone to blockage from debris from the wooded land carried by the intermittent stream that feeds into the system starting at Redlon Road. Local residents have tolerated this condition for some numbers of years but tolerance levels are near the breaking point. Any additional drainage into this location would have a multiplier affect on an already overburdened storm drain system which would be in violation of the standard. We have not seen any guarantees that NO additional water will enter this system as a result of this proposed development and we would be highly skeptical of claims that it would not. Much to the contrary, development proposals have indicated the majority of the storm water would flow to the Bancroft side of the development.

There is no question in our minds that changes to the infrastructure to accommodate increased water run-off would come at public expense as was the case at Cottage Park when long term drainage problems required expenditure of tens of thousands of dollars in infrastructure improvements borne by City of Portland taxpayers.

Section. 14-526 Standards subparagraph (a)
Requirements for approval. The planning board or planning authority shall not approve a site plan unless it meets the following criteria:

(8) The site plan does not create any significant soil and **drainage problems,** whether on- or off-site, and adequately provides for control of erosion and sedimentation during construction and afterward;

(20) The proposed development shall have **no adverse impact upon** the existing natural resources including **groundwater quantity and quality, surface water quantity and quality**, wetlands, unusual natural areas, and wildlife and fisheries habitats. Storm water runoff from paved areas shall be treated to the extent practicable to minimize contaminants;

During the winter, there are significant ice build-up problems on Bancroft Street. This has especially been the case when the ground is frozen and we encounter combinations of snow and rain followed by freezing temperatures. At times, sections of the street are nearly impassable. The Public Work Department is well aware of the problem and has been called upon frequently to clear ice, measured in inches, from the roadway. Proposing to increase the water flow to Bancroft Street will only exacerbate this problem. Again this is a pre-existing condition that has been tolerated up to this point. Drainage from lots 1, 2, and 3 are not planned to flow toward the culvert at the end of Bancroft but rather westward toward the area of Bancroft affected by icing conditions. Any additional water flow in this direction would definitely have an additional adverse impact on this situation and would not conform with the referenced standards. Discussion with Bruce Bell indicate changes to the drainage system along the street could rectify this problem, but they would be expensive and most likely have to be renewed every 15 years. Again there is no budgeted City money earmarked for this purpose.

Regarding Planning Report #21-97 Section IV Subdivision Review Subparagraph 12 Groundwater.

This section states ... the applicant **does not believe** that the proposed development will adversely affect the quality or quantity

of groundwater. Additionally, the R.W Gillespie and Associates report on the potential affects of blasting on groundwater discharges from the adjacent bedrock state "that proper blasting techniques **should not** result in impacts to abutting properties"

Statements such as "does not believe" and "should not" are ambiguous and are not definitive as would be required by the standard. Testimony by Barry Timson conflicts with that outlined by Robert Gillespie which, at a minimum, sheds increased doubt on the affects of ledge blasting on drainage. Given pre-existing conditions, any increased drainage volume will have grave implications for abutters and ultimately for the City and taxpayers. The fact that technical experts disagree on this very critical issue is testimony to the uncertainty and potential risk we would have to assume.

E-15

GOOD EVENING MR HEGEE AND MEMBERS OF THE PLANNING BOARD:

MY NAME IS ALAN PROSSER
I AM A RESIDENT OF PORTLAND AND RESIDE AT 167 ST JOHN ST.
I AM NOT FROM THE NEIGHBORHOOD ADJACTENT TO REDLON PARK BUT
I AM INTERESTED IN SEEING OUR INFORMED AND ENLIGHTENED PLANNING
BOARD MAKE A WELL FOUNDED DECISION AGAINST ALLOWING THE APPLICANT
TO BUILD THE DEVELOPMENT PROPOSED FOR THIS SITE FOR THE FOLLOWING
REASONS:

1 THE SUBDIVIDER HAS NOT DEMONSTARTED ADEQUATE FINANCIAL CAPACITY
TO MEET THE STANDARDS SET OUT BY THE CODE.

SECTION 14-525(C)(10) STATES THAT :
"A LETTER FROM A RESPONSIBLE INSTITUTION STATING THAT IT HAS
REVIEWED THE PLANNED DEVELOPMENT AND WOULD SERIOUSLY CONSIDER
FINANCING IT WHEN APPROVED...."

THE LETTER FROM THE BANK
NOWHERE INDICATES THAT IT HAS REVIEWED THE DEVELOPMENT.
FURTHERMORE THE POTENTIAL LENDER GOES ON TO SAY THAT "THE BANK
WOULD BE WILLING TO FINANCIALLY SUPPORT COTTAGE PART INC..." ARE
WE TO INFER THAT THAT MEANS THEY WOULD FINANCE THE ENTIRE SUBDIVISION?
THEY FURTHER STATE AS A CONDITION OF "FINANCIL SUPPORT" THAT THE
PROJECT BE "FINANCIALLY FEASABLE". IF FINANCING IS CONTINGENT
UPON "FINANCIAL FEASIBILITY" THEN MUST NOT THE APPLICANT CLEARLY
DEMONSTRATE THE FEASABILITY OF HIS PROJECT BEFORE HE IS
"SERIOUSLY CONSIDERED " FOR FINANCING?

NOWHERE IN THE PLANS DOES THE APPLICANT INDICATE FINISHED
GRADE OF ANY OF THE PROPOSED STRUCTURES. CONSIDERING THE FACT
THAT MUCH OF THE TOPOGRAPHY OF THE PROPOSED PROJECT IS LEDGE HOW
CAN THE APPLICANT CLEARLY DEMONSTRATE TO THE LENDER OR ANYOTHER
INSTITUTION THE COST OR "FINANCIAL FEASABILITY" OF THIS PROJECT
WITHOUT FIRST INDICATING THE AMOUNT OF LAND WHICH WILL HAVE TO BE
ADDED OR SUBTRACTED.

THE APPLICANT HAS CLEARLY NOT DEMONSTRARTED ,BEYOND ANY DOUBT,
THAT HE HAS ADEQUATE FINANCIAL CAPACITY TO CARRY OUT THIS
PROJECT...HAS HE?

THE LETTER FROM THE BANK GOES ON TO STATE THAT THE APPLICANT'S
CREDITWORTHINESS HAS NOT AS YET BEEN DETERMINED...."NO
APPLICATIONS NOR DISCUSSIONS REGARDING CREDIT HAVE BEEN MADE". IN
OTHER WORDS WHAT EVER JUDGEMENT THEY HAVE MADE REGARDING THE
"FINANCIAL FEASABILITY" OF THE PROJECT HAS BEEN MADE BASED SOLEY
"AT THE REQUEST"...OF THE APPLICANT.

THE CITY OF PORTLAND'S ENGINEER CHARASCTERIZES THIS DEVELOPER'S
"DEVELOPMENTS AS TYPICALLY BUILT ON MARGINAL SITES." WITH THIS
TYPE OF SITE DEVELOPMENT COME CHALLENGING INFRASTRUCTURE
DEVELOPMENT....IN THIS CASE PUMPING WASTE WATER UPHILL/ BUILDING
ROADWAYS OVER STEEP GRADE CHANGES....MANAGING AN UNKNOWN VOLUME
OF GROUND WATER. WHAT ASSURANCES DO WE HAVE THAT:

E-16

1. THERE WILL NOT BE A TRANFERENCE OF RISK FROM THE DEVELOPER TO THE ASSOCAITION TO THE CITY AS THE PROJECT AGES. ARE PRUDS APPROPRIATE ON SUCH MARGINAL SITES?

what assurances do we have that

2. THE DEVELOPER DEMONSTATE ADEQUATE FINANCIAL CAPACITY NOT ONLY TO BE ABLE TO CONSTRUCT THIS PROPOSED SUBDIVISION BUT ALSO TO HAVE ADEQUATE FINANCIAL CAPACITY TO UPGRADE PUBLIC INFRASTRUCTURE WHICH IT JOINS. WHO WILL PICK UP THE TAB IF ADJOINING FACILITIES NEED TO BE ENHANCED AS OCCURRED AT COTTAGE PARK?

THE COST THE CITY SEEMS TO BE SAVING BY NOT HAVING TO DEVELOP UTILITIES IN THE SHORT RUN MAY ONLY BACK FIRE AS IT HAS TO GO IN AND DO THE JOB PROPERLY AFTER THE DEVELOPER IS NO LONGER FINANCIALLY RESPONSIBLE FOR THJE PROJECT.

AS A CONDITION OF APPROVAL
WE PROPOSE A MINIMUM $5 MILLION BOND OVER A 5 YEAR PERIOD AFTER THE COMPLETION OF THE PROJECT TO COVER THESE POSSIBLE EVENTUALI-TIES.

GIVEN THE FACT THAT THIS IS A PRUD AND NOT A SUBDIVISION WITH PUBLIC UTILITIES SHOULD THE UNANSWERED QUESTIONS CONCERNING THE APPLICANTS ADEQUATE FINANCIAL CAPACITY BECOME REALITY ...AS THEY HAVE BEFORE...WHO WILL PICK UP THE TAB THIS TIME. FOOL ME ONCE SHAME ON YOU...FOOL ME TWICE SHAME ON ME.

E-17

Testimony of
Holly Dominie, Visual Resource Consultant
H. Dominie, Inc., Readfield, Maine

CONCERNING THE REDLON PARK SUBDIVISION

Presented to the Portland Planning Board
June 10, 1997

H. Dominie's Credentials

Hello. My name is Holly Dominie. As you have heard, I am here tonight at the request of the neighbors concerned with the proposed Redlon Park Subdivision. They hired me to evaluate the potential impacts of the subdivision on the scenic and natural beauty of their neighborhood.

For those of you who do not know me, I am president of H. Dominie, Inc., a land planning consulting firm located in Readfield, Maine. While I undertake many types of projects, I may be known most widely for my work in visual resource assessment.

As former director of the natural resources unit of the State Planning Office, I and my staff developed the first objective studies in Maine of visual resources, identifying the most scenic lakes and coastal areas. I have since conducted visual resource inventories for communities such as Cape Elizabeth and Monmouth and for such organizations as Acadia National Park and Maine Coast Heritage Trust. I have also prepared visual impact studies or peer reviews for major projects before the Board of Environmental Protection and the Land Use Regulation Commission.

Visual Resource Assessment is an Objective Discipline

I tell you about my background because I want you to know that objective methods exist for evaluating visual resources. You have heard the old adage that "beauty is in the eye of the beholder." I am here to say that while as individuals we do form our own opinions about what is beautiful, considerable research over the past 3 decades on human perceptions shows us that, as a group, we tend to agree upon what we think is most or least beautiful. And we are deeply affected by our visual surroundings -- not only by what we see on vacations but especially in our everyday lives.

Subdivision Review Criteria

The proposal before you will irrevocably change an area that has a strong influence on how residents of surrounding area feel about their neighborhood and about this City. You must make a judgment on this matter using the criteria stipulated in Section 14.497 of the subdivision code. Under this provision, the applicant must demonstrate that the project:

> will have no undue adverse effect on the scenic or natural beauty (or) aesthetics . . . of the area.

How does one determine this?

I suggest that you do so by considering the answers to the following questions:

1. Are any special views or exceptional visual features associated with the project?

2. What is the character of the land?

3. What are the expected visual impacts of the project on scenic or natural beauty and aesthetics?

Views and Features

First the views and features. This property has no views of the kind that we are accustomed to thinking of as "scenic." One can't see the ocean or a river, the mountains, a historic district or harbor, or a farm or pasture from a public viewpoint.

Instead, the views are all close at hand and available from backyards and at the ends of dead end streets such as Redlon Road. They are "everyday" views but they are non-the-less important to the psychological well-being of residents of the neighborhood.

And the property has several features that contribute to its natural beauty:

- significant outcrops of ledge (see page 1 of photos, separate handout)
- wildflowers such as lady slippers and bird on the wing (see page 2 of the photos)
- the wetland and stream area (see page 3 of the photos)
- mature white pines, red pine, cherry and other hardwoods

Visual Character

Next lets consider the visual character of the property. It is quite unique when one considers how developed Portland is. One can see from photo 1 that, for the densely developed neighborhoods that ring the property, it visually functions as a big outdoor room.

The trees are mature enough to allow one to see through the forest some distance and to walk easily without being restricted by undergrowth. Depending upon the season, one can escape the bustle of the city into a quiet outdoor space that awakens one's senses to the natural beauty, and plants and critters found there. While this type of landscape may have been typical before 1900, it is now scarce in Portland. It is especially scarce in the Rosemont neighborhood where the project is proposed.

Indeed, Portland's *Green Spaces, Blue Edges Plan* documents the scarcity of open space in this part of the City. Rosemont has only 8.5 acres of publicly owned open space per 1000 population, and these few publicly owned acres are located on the outskirts of the neighborhood, as shown in the attached map taken from the plan. They are not located within walking distance of most of the homes and residents are

cut off from the most important open spaces by several major arteries.

This property is one of the few remnants of undeveloped land left as one can see from the map showing the close knit geometric pattern of roads. All the good land and even the marginal properties have already been developed.

Visual Impacts

So this brings us to the last question, the impacts of the project on scenic and natural beauty and aesthetics. I want to leave you with two conclusions about this matter:

1. The psychological value of the natural beauty of this area to the well-being of neighborhood residents is significant and should be safeguarded.

   Portland's site plan review code recognizes that "development of private land can have a profound impact on . . . environmental qualities conducive to the well-being of citizens" (Sec. 14-521). Research on visual perceptions shows that natural beauty and green space are essential to human well-being. For instance, studies have shown that patients convalescing in hospitals surrounded by green space, get well more quickly than those without.

   It is time to draw the line with this project. If Portland develops every last scrap of ledge and wetland, the City will continue to lose residents to the surrounding suburban and rural communities where green space renews their spirits -- and the city will continue to see its socioeconomic diversity erode.

   I urge you to conserve the natural beauty and values of this property.

2. My second conclusion is that the site layout before you is flawed from an aesthetic point of view.

   People who purchased homes on Redlon Avenue had the expectation that if development occurred in the woods beyond them, the street would be extended in the straight direction indicated by the paper street shown on the original subdivision plan. The proposal before you begins the new road with a right angle turn. This will have the effect of projecting car lights at night into Louis and Alice Thompson's house at the edge of the proposed elbow turn. And there is very little buffer area available within the proposed layout for planting adequate vegetative screening to offset this problem.

   The possibility also exists that snow could be dumped from bucket loaders at the end of Redlon Road causing disruptive vehicular noise and lights -- or that transformers or other unsightly utilities could be located there.

I urge your serious consideration of all of the issues I have raised in rendering your decision. And I'll be happy to answer any questions you may have.

ATTACHMENT B-1

PINKHAM & GREER
CONSULTING ENGINEERS, INC.

170 U.S. Route One
Falmouth, Maine 04105
Tel: 207.781.5242
Fax: 207.781.4245

July 15, 1997
File: 97115

Mr. Rick Knowland
Senior Planner
CITY OF PORTLAND
389 Congress Street
Portland, ME 04101

RE: REDLON PARK

Dear Rick:

Enclosed are revised drawings for Redlon Park. As much as practicable, we have addressed the staff comments raised in your memo of 7-9-97, your letter of 7-8-97, Steve Bushey's memos of 7-7 and 7-11-97 and Tony Lombardo's memo dated 7-11-97. As there are many overlapping and redundant comments, I have summarized the changes or responses below without specific reference to a memo or letter.

1. The CMP transformer locations were selected by the developer to accommodate the project's power needs and to fit in with the development as a whole. We have complied with the staff's request to make sure they are not visible from adjacent properties, see new locations.

2. The entire right-of-way that is shaded on C-1 will be a pedestrian right-of-way. This allows connection to the Motley Street right-of-way through the project.

3. The stone dust path has been changed to a curbed sidewalk along Redlon Park Road. The curb inlet details have been modified to add the granite transition sections.

4. Some minor regrading takes place in the no-cut zone as indicated on Sheet C-3. We anticipate minor regrading in these areas to ensure the surface water flows as desired. We feel these are compatible and will work to save as many trees as possible. This is balanced with the strong message sent by staff to ensure no excess drainage affects abutting properties, see revised C-3.

5. Adding a berm along the west end of the site and creating an additional detention basin is not possible and unwarranted. This would require additional fill and disturbance of the wetland area. The additional ponding area will have little effect on the Bancroft Street properties, as they are currently impacted by off-site drainage areas in the 2-year storm. Below is a table showing the reductions in peak flows towards the west with the current design. As you can see, we have significantly reduced the peak flows, 23% to 48%, in the westerly direction. Attached are revised drainage drawings for Steve Bushey's review.

PINKHAM & GREER
CONSULTING ENGINEERS, INC.

FLOW WEST OF SITE			
STORM FREQUENCY	2-YEAR	10-YEAR	25-YEAR
EXISTING	3.17	7.43	9.61
PROPOSED	2.43	4.23	4.89
% REDUCTION	23%	43%	48%

6. We have made the minor revisions in the contours on Lots 4, 5, 6 and 7 as noted by Steve Bushey.

7. We have changed the pavement thickness to 1 1/2" as requested.

8. We have extended the snow plow turn-around 31 feet along Redlon Park Road, as requested. We have not widened the pavement in this area as it would adversely impact the Derice property and associated buffer, for very little gain. The City's plow will leave a snow bank when it turns around. By adding more pavement, the snow bank would only be minimally reduced. The snow bank will be removed when Redlon Park Road is plowed, the same as any side street or driveway in the City.

9. The 6" gravity sewer has been labeled with a slope and invert and the sump removed from the profile view.

10. We have not reconfigured Lot 2. The Motley Street connection can be made within the right-of-way shown. Attached is a sketch of the pavement.

11. A detail of the Derice fence is shown on the drawings.

12. R. W. Gillespie will have an employee on site at the start of the blasting program and will check it periodically as the work progresses. A report by R. W. Gillespie will be submitted to the City at the conclusion of the blasting.

13. We have surveyed the rim and inverts of the 18" pipe at the corner of Bancroft and Capisic Streets and the sill elevations or basement elevations of the three homes on the corner. Below is the relative elevations for your review:

PINKHAM & GREER
CONSULTING ENGINEERS, INC.

ELEVATIONS

Ditch at back of lawn	92.3
Invert of 18" in lawn	92.2
Invert of 18" in CB	91.0
CB Rim	94.4
CB Outlet	89.1
164 Bancroft Street Sill	100.4
154 Bancroft Street Basement Slab	95.6
119 Capisic Street Sill	101.0 ±
Overflow Elevation to Bancroft Street	95.2

As you can see from the data, first floor elevations are well above the road. Basement elevations are at the overflow elevation or very near to it.

We have not located any of the basement drains. If they discharge to the back yards, they are flat and below the pond elevation created by the 18" pipe. This is an existing problem that could be helped by these homes using sump pumps or check valves.

Our responsibility as an "up-stream" development is to ensure we do not make the problem worse. We have demonstrated this by the drainage model showing reduced pond elevation and a significant (28% to 48%) reduction in peak flows.

As for the supposed additional flow created by blasting, this flow will not be created as the fractures in the rock will be very local. Please keep in mind that surface water analysis typically deals with cubic feet per second and bedrock flows are gallons per minute. The existing 2-year flow would be 3.17 cfs which expressed in gallons per minute would be 1,422 gpm. As you can see, the relative comparison of groundwater flows to surface flows is several magnitudes of order different. The groundwater flow will not affect the stormwater analysis.

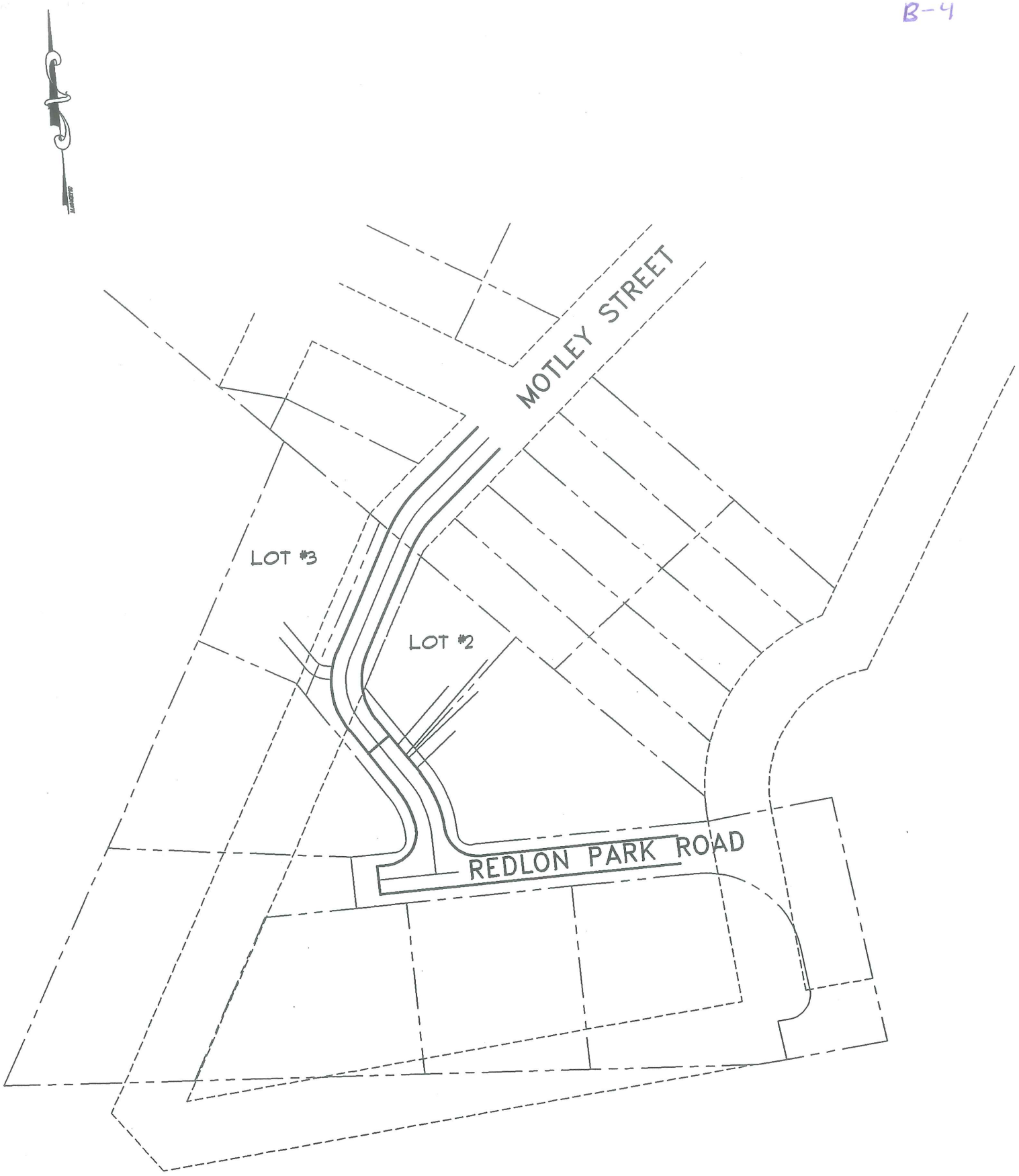
Sincerely,

PINKHAM AND GREER

Thomas S. Greer, P.E.

TSG/dp
Attachments

B-4



POSSIBLE MOTLEY STREET LAYOUT

7/15/97

1" = 100'

B-5

Tompkins, Clough, Hirshon & Langer, P.A.
COUNSELORS AT LAW
Three Canal Plaza
Post Office Box 15060
Portland, Maine 04112-5060

BRUCE M. TOMPKINS
LAWRENCE R. CLOUGH
DAVID M. HIRSHON
LEONARD W. LANGER
MARSHALL J. TINKLE

TELEPHONE: 207-874-6700
FAX: 207-874-6705

July 17, 1997

Cyrus Hagge, Chairman
Planning Board
City of Portland
Room 213
389 Congress Street
Portland, ME 04101

Re: Redlon Park Subdivision

Dear Mr. Hagge:

As you know, this office represents Cottage Park, Inc. with respect to its pending application for approval of a seven lot PRUD. This will confirm that the applicant will be submitting for approval by the Board a proposed right-of-way for pedestrians and bicyclists. If the private roadway subject to this easement is eventually connected to Motley Street, the City will be granted an easement for vehicular passage.

Should you have any questions, please call.

Sincerely,

David M. Hirshon

DMH/lmb

B-6

PINKHAM & GREER
CONSULTING ENGINEERS, INC.

June 18, 1997
File: 97115

Mr. Rick Knowland
Senior Planner
CITY OF PORTLAND
389 Congress Street
Portland, ME 04101

RE: REVISED PLANS AND DRAINAGE CALCULATIONS, REDLON PARK PRUD

Dear Rick:

As a result of the public hearing, we have revised the plans and the drainage calculations to reflect the comments raised by the Board. The revisions are as follows:

1. The road configuration and right-of-way was revised to allow the future road connection to Motley Street as well as to Caroline Street. This changed the access to Lot 1 thereby reducing the wetland impact and removed "the causeway look" of the two driveways to Lots 2 and 3.

2. We have provided a stone dust walkway from the end of Redlon Road to the end of Motley Street. This provides for clear pedestrian access all the way through the site.

3. We have provided 23,000 square feet of public open space and provided a basketball court for the residents of the neighborhood. This provides one of the uses specified in the PRUD standards and a total area ten times the size required.

As a result of these changes, the size of each lot was recalculated and a new grading plan was prepared for each lot. The lot grading meets the general guidelines that we discussed at a recent staff meeting.

These changes specifically address the Board's comments. We feel that this project, as now designed, meets the technical standards of the site plan, subdivision and PRUD sections of the ordinance.

PINKHAM & GREER
CONSULTING ENGINEERS, INC.

We have revised the drainage calculations to reflect the new layout. The changes are as follows:

1. We have deleted Pond 1 as the driveway to Lot 1 was deleted.

2. We have revised the storage capacity of Pond 2 to reflect the new configuration.

3. We have revised the area flowing to Pond 2 to account for the revised lot grading.

The results to the analysis remain the same:

1. The peak flows leaving the site are reduced and;

2. The ponding along Bancroft Street is reduced for the 10 and 25 year storms.

Let me know if you have any questions.

Sincerely,

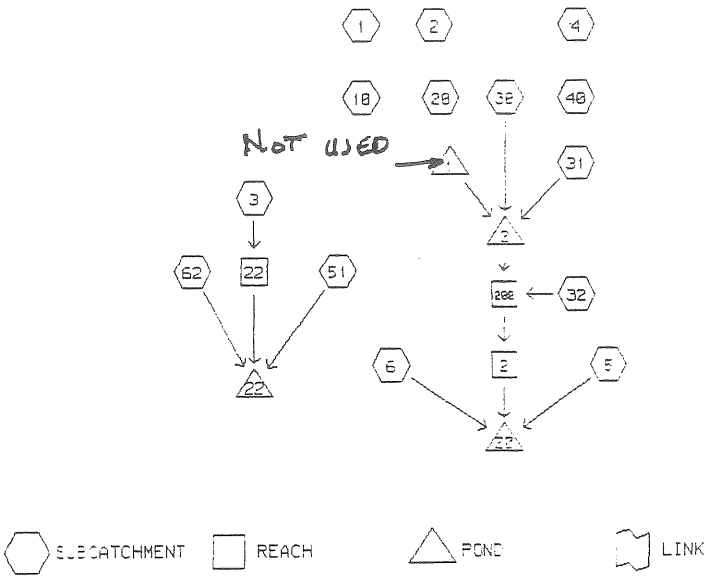
PINKHAM AND GREER

Thomas S. Greer, P.E.

TSG/dp

Copy: Ric Weinschenk, Cottage Park Inc.
Tony Lombardo, City of Portland
Steve Bushey, DeLuca Hoffman Associates, Inc.

WATERS-ED ROUTING ==========



SUBCATCHMENT 1 = SOUTH EAST AREA ->

SUBCATCHMENT 2 = SOUTH WEST AREA ->

SUBCATCHMENT 3 = CENTER OF SITE -> REACH 22

SUBCATCHMENT 4 = NORTH AREA ->

SUBCATCHMENT 5 = NORTH OF CAPISIC -> POND 20

SUBCATCHMENT 6 = SOUTN OF BOLTON -> POND 20

SUBCATCHMENT 10 = PROPOSED SOUTH EAST AREA ->

SUBCATCHMENT 20 = PROPOSED SOUTH WEST AREA ->

SUBCATCHMENT 30 = PROPOSED CENTER EAST AREA -> POND 2

SUBCATCHMENT 31 = PROPOSED CENTER MIDDLE AREA -> POND 2

SUBCATCHMENT 32 = PROPOSED CENTER WEST AREA -> REACH 200

SUBCATCHMENT 40	= PROPOSED NORTH AREA	->	
SUBCATCHMENT 51	= NORTH OF CAPSIC	->	POND 22
SUBCATCHMENT 62	= SOUTH OF BANCROFT	->	POND 22
REACH 2	= CHANNEL TO POND	->	POND 20
REACH 22	= CHANNEL TO POND	->	POND 22
REACH 200	= EXISTING DITCH TO PROPERTY LINE	->	REACH 2
POND 1	= LOT 1 DRIVE CULVERT OMITTED	->	POND 2
POND 2	= LOT 2 & 3 DRIVE CULVERT — CHANGED TO ROAD	->	REACH 200
POND 20	= BANCROFT POND TURN-A-ROUND	->	
POND 22	= BANCROFT POND	->	

B-10

RUNOFF BY SCS TR-20 METHOD: TYPE III 24-HOUR RAINFALL= 5.5 IN, SCS U.H.

RUNOFF SPAN = 10-20 HRS, dt= .10 HRS, 101 POINTS

SUBCAT NUMBER	AREA (ACRE)	Tc (MIN)	--GROUND COVERS (%CN)--				WGT'D CN	C	PEAK (CFS)	Tpeak (HRS)	VOL (AF)
1	.41	11.7	100%75	-	-	-	75	-	1.11	12.12	.09
2	.34	11.2	100%75	-	-	-	75	-	.93	12.12	.07
3	3.80	14.5	74%75	26%79	-	-	76	-	9.61	12.16	.86
4	.44	24.5	100%75	-	-	-	75	-	.90	12.30	.10
5	4.80	35.4	100%74	-	-	-	74	-	8.07	12.45	1.02
6	3.40	31.7	100%74	-	-	-	74	-	6.04	12.40	.72
10	.18	11.7	0%74	100%75	-	-	75	-	.49	12.12	.04
20	.34	14.1	6%98	29%74	65%75	-	76	-	.87	12.15	.08
30	1.81	11.7	4%98	88%75	8%79	-	76	-	5.05	12.12	.41
31	1.52	6.2	13%79	40%75	26%74	21%98	80	-	5.22	12.04	.38
32	.79	17.1	19%98	38%74	25%75	18%75	79	-	2.11	12.20	.19
40	.37	24.5	46%74	54%75	-	-	75	-	.76	12.30	.08
51	4.93	35.4	100%74	-	-	-	74	-	8.29	12.45	1.04
62	3.40	31.7	100%74	-	-	-	74	-	6.04	12.40	.72

B-41

REACH ROUTING BY STOR-IND+TRANS METHOD

REACH NO.	DIAM (IN)	BOTTOM WIDTH (FT)	DEPTH (FT)	SIDE SLOPES (FT/FT)		n	LENGTH (FT)	SLOPE (FT/FT)	PEAK VEL. (FPS)	TRAVEL TIME (MIN)	PEAK Qout (CFS)
2	-	3.0	3.0	.20	.20	.035	300	.0267	2.9	1.7	4.85
22	-	3.0	3.0	.20	.20	.035	300	.0266	3.5	1.4	9.42
200	-	2.0	2.0	.25	.25	.040	180	.0050	1.5	2.0	4.89

POND ROUTING BY STOR-IND METHOD

POND NO.	START ELEV. (FT)	FLOOD ELEV. (FT)	PEAK ELEV. (FT)	PEAK STORAGE (AF)	PEAK FLOW Qin (CFS)	PEAK FLOW Qout (CFS)	PEAK FLOW Qpri (CFS)	PEAK FLOW Qsec (CFS)	Qout ATTEN. (%)	Qout LAG (MIN)
1	69.0	74.0	0.0	0.00	0.00	0.00			0	0.0
2	66.0	72.0	68.8	.26	9.76	3.07			69	24.3
20	51.0	56.0	54.0	.37	16.81	11.78	11.78		37	24.1
22	51.0	56.0	54.3	.44	21.27	12.45	12.45		41	24.2

REDUCE POND ELEVATION BY 0.3 FEET FOR 25 YEAR STORM

PEAK HEIGHT FOR 25 YEAR STORM.

B-12

RUNOFF BY SCS TR-20 METHOD: TYPE III 24-HOUR RAINFALL= 4.7 IN, SCS U.H.

RUNOFF SPAN = 10-20 HRS, dt= .10 HRS, 101 POINTS

SUBCAT NUMBER	AREA (ACRE)	Tc (MIN)	--GROUND COVERS (%CN)--				WGT'D CN	C	PEAK (CFS)	Tpeak (HRS)	VOL (AF)
1	.41	11.7	100%75	-	-	-	75	-	.85	12.12	.07
2	.34	11.2	100%75	-	-	-	75	-	.72	12.12	.06
3	3.80	14.5	74%75	26%79	-	-	76	-	7.43	12.17	.67
4	.44	24.5	100%75	-	-	-	75	-	.69	12.31	.07
5	4.80	35.4	100%74	-	-	-	74	-	6.16	12.46	.78
6	3.40	31.7	100%74	-	-	-	74	-	4.61	12.41	.55
10	.18	11.7	0%74	100%75	-	-	75	-	.37	12.12	.03
20	.34	14.1	6%98	29%74	65%75	-	76	-	.67	12.16	.06
30	1.81	11.7	4%98	88%75	8%79	-	76	-	3.90	12.12	.32
31	1.52	6.2	13%79	40%75	26%74	21%98	80	-	4.12	12.04	.31
32	.79	17.1	19%98	38%74	25%75	18%75	79	-	1.66	12.20	.15
40	.37	24.5	46%74	54%75	-	-	75	-	.58	12.31	.06
51	4.93	35.4	100%74	-	-	-	74	-	6.33	12.46	.80
62	3.40	31.7	100%74	-	-	-	74	-	4.61	12.41	.55

B-13

REACH ROUTING BY STOR-IND+TRANS METHOD

REACH NO.	DIAM (IN)	BOTTOM WIDTH (FT)	DEPTH (FT)	SIDE SLOPES (FT/FT)		n	LENGTH (FT)	SLOPE (FT/FT)	PEAK VEL. (FPS)	TRAVEL TIME (MIN)	PEAK Qout (CFS)
2	-	3.0	3.0	.20	.20	.035	300	.0267	2.8	1.8	4.16
22	-	3.0	3.0	.20	.20	.035	300	.0266	3.3	1.5	7.27
200	-	2.0	2.0	.25	.25	.040	180	.0050	1.5	2.1	4.23

POND ROUTING BY STOR-IND METHOD

POND NO.	START ELEV. (FT)	FLOOD ELEV. (FT)	PEAK ELEV. (FT)	PEAK STORAGE (AF)	PEAK FLOW Qin (CFS)	PEAK FLOW Qout (CFS)	PEAK FLOW Qpri (CFS)	PEAK FLOW Qsec (CFS)	Qout ATTEN. (%)	Qout LAG (MIN)
1	69.0	74.0	0.0	0.00	0.00	0.00			0	0.0
2	66.0	72.0	68.4	.19	7.64	2.77			64	21.9
20	51.0	56.0	53.3	.23	14.83	10.40	10.40		30	20.4
22	51.0	56.0	53.5	.27	16.30	10.80	10.80		34	20.8

REDUCE POND BY 0.2
FOR 10 YEAR STORM.

RUNOFF BY SCS TR-20 METHOD: TYPE III 24-HOUR RAINFALL= 3.0 IN, SCS U.H.

RUNOFF SPAN = 10-20 HRS, dt= .10 HRS, 101 POINTS

SUBCAT NUMBER	AREA (ACRE)	Tc (MIN)	--GROUND COVERS (%CN)--				WGT'D CN	C	PEAK (CFS)	Tpeak (HRS)	VOL (AF)
1	.41	11.7	100%75	-	-	-	75	-	.35	12.13	.03
2	.34	11.2	100%75	-	-	-	75	-	.30	12.13	.02
3	3.80	14.5	74%75	26%79	-	-	76	-	3.17	12.18	.29
4	.44	24.5	100%75	-	-	-	75	-	.29	12.33	.03
5	4.80	35.4	100%74	-	-	-	74	-	2.48	12.49	.33
6	3.40	31.7	100%74	-	-	-	74	-	1.85	12.44	.23
10	.18	11.7	0%74	100%75	-	-	75	-	.15	12.13	.01
20	.34	14.1	6%98	29%74	65%75	-	76	-	.28	12.18	.03
30	1.81	11.7	4%98	88%75	8%79	-	76	-	1.65	12.13	.14
31	1.52	6.2	13%79	40%75	26%74	21%98	80	-	1.88	12.05	.15
32	.79	17.1	19%98	38%74	25%75	18%75	79	-	.76	12.21	.07
40	.37	24.5	46%74	54%75	-	-	75	-	.24	12.33	.03
51	4.93	35.4	100%74	-	-	-	74	-	2.55	12.49	.34
62	3.40	31.7	100%74	-	-	-	74	-	1.85	12.44	.23

REACH ROUTING BY STOR-IND+TRANS METHOD

REACH NO.	DIAM (IN)	BOTTOM WIDTH (FT)	DEPTH (FT)	SIDE SLOPES (FT/FT)		n	LENGTH (FT)	SLOPE (FT/FT)	PEAK VEL. (FPS)	TRAVEL TIME (MIN)	PEAK Qout (CFS)
2	-	3.0	3.0	.20	.20	.035	300	.0267	2.5	2.0	2.38
22	-	3.0	3.0	.20	.20	.035	300	.0266	2.5	2.0	2.98
200	-	2.0	2.0	.25	.25	.040	180	.0050	1.3	2.4	2.43

B-17

POND ROUTING BY STOR-IND METHOD

POND NO.	START ELEV. (FT)	FLOOD ELEV. (FT)	PEAK ELEV. (FT)	PEAK STORAGE (AF)	PEAK FLOW Qin (CFS)	PEAK FLOW Qout (CFS)	PEAK FLOW Qpri (CFS)	PEAK FLOW Qsec (CFS)	Qout ATTEN. (%)	Qout LAG (MIN)
1	69.0	74.0	0.0	0.00	0.00	0.00			0	0.0
2	66.0	72.0	67.2	.07	3.42	1.75			49	15.9
20	51.0	56.0	52.3	.04	6.66	6.43	6.43		3	5.4
22	51.0	56.0	52.3	.04	6.72	6.48	6.48		4	5.6

NO CHANGE 2YR STORM.

ATTACHMENT C-1

Gerber - Jacques Whitford
Robert G. Gerber, Inc. - Jacques Whitford, Inc.
Consulting Engineers, Geologists and Environmental Scientists
174 South Freeport Road
Freeport, ME U.S.A. 04032
Tel: 207-865-6138
Fax: 207-865-1071

July 15, 1997
File 971062

Mr. Richard Knowland
City of Portland
389 Congress Street
Portland, Maine 04101

Subject: Redlon Park Development, Portland, Maine
Evaluation of Potential Blasting and Groundwater Impacts

Dear Mr Knowland:

We have completed our evaluation of the Redlon Park PRUD subdivision with respect to Blasting and Groundwater issues. This letter report summarizes our review of the materials you provided and our site visit, and contains our conclusions.

Executive Summary

We conclude that the formation of new fractures from blasting will be limited to the immediate area of the shot. New fractures that are formed from blasting may extend 10 to 20 feet from the blast limits and may increase the permeability of the rock in their vicinity. However, the amount of groundwater the rock can transmit is a function of the recharge available to the rock which is limited due to the high degree of impervious cover, the existing stormwater system, and other suburban ground cover features. We do not believe there will be a net increase in groundwater flow into the abutter's basements due to rock blasting.

With respect to stormwater, the proposed development does not appear to increase the peak stormwater runoff rates based on information you provided. However, the time to peak and the volume of total runoff will increase slightly as a result of the project. To the extent that existing icing and ponding on Bancroft Street are caused by runoff from the wetland swale leaving the proposed development on the west side, then the development may exacerbate this slightly.

Background

Cottage Park, Inc., (Ric Weinschenk) has proposed to develop a Planned Residential Unit Development (PRUD) to be located at the end of Redlon Road on the west side of Stevens Avenue in Portland, Maine. The parcel is 4.43 acres and will accommodate 7 house lots. Pinkham and Greer, of Falmouth, developed the site plans and performed the stormwater calculations and other analyses for the project. R.W. Gillespie & Assoc., of Sanford, evaluated potential effects of blasting on local groundwater conditions and provided general

recommendations on blast design for Pinkham and Greer. Timson and Peters, Inc., of Hallowell, was hired by the abutters to provide an independent evaluation of the proposed subdivision. Finally, we were hired by the City of Portland to help the City evaluate the development's impact given the information available from all parties.

Site Visit and Information Review

On Monday, July 14, 1997, Olivier Muff visited the site to observe the geologic conditions with respect to soils, rock, groundwater, and vegetation. Before getting into the detailed geology of the site, Mr. Muff made some general observations that may be helpful:

- The forested area between Bancroft St. and Stevens Ave. encompasses a larger area than the planned development. We estimate based on the abutter's index map on Sheet C1 that the development area is less than ½ of the forested area.
- The topography over the entire forested area includes a number of outcropping rock ridges within as well as outside the PRUD area.
- Drainage problems currently exist on Bancroft Street. We observed small areas of ponded water along the east side of Bancroft Street the afternoon after an extended dry period and a light evening rain.
- The forested area is attractive for its mature tree growth and minimal ground vegetation (as pointed out by Holly Dominie's visual impact study). Evidence of use by residents includes a small number of paths and two or three fire circles strewn with beer and soda containers, trash, and seating areas.

General Geology: We agree with Timson as well as Gillespie's review of the site geology which identifies rock on site as the Vassalboro Formation which is weathered and fractured to some depth. We also agree that the overlying surficial soils include glaciomarine fine soils and limited swamp muck deposit.

Stormwater Discharge: As identified by Timson, the Hydrocal program used by Pinkham and Greer to calculate stormwater discharge does not account for groundwater discharge. However, the program leaves this component out for both the pre and post development calculations. Groundwater discharge is a baseflow phenomenon (flow through and below the ground surface). There is often a time lag between a storm event and the resulting discharge from groundwater due to that storm event. The overall stormwater flow component may be higher for both the pre- and post-development calculations when the groundwater component is added in. In any event, the groundwater component in the post-development condition will be lower than in the pre-development condition.

Based on the watersheds defined and analyzed by Pinkham and Greer, we agree that the post-development peak flows may be less than or equal to the pre-development peak flows. The total runoff volume will be greater for the post development scenario due to an increase in impervious cover (e.g. 13% for the 25-year storm in basins 30+31+32).

Blasting Impact on Residences and Groundwater Flow: Pinkham and Greer expects to remove up to 1600 cy of rock by blasting. For reference, 1600 cy of rock is equivalent to a volume of about 1 acre x 1 foot deep (or ½ an acre x 2' deep). Gillespie has proposed a blasting program to keep peak particle velocities (ppv - the speed at which the rock or buildings vibrate) to below "0.1 inches per second (ips) at any structure." The US Bureau of Mines standard for blasting is to maintain ppv below 2.0 inches per second. Standard residential blasting criteria are often as low as 0.75 ips to prevent damage to drywall and 0.50 ips to prevent damage to plaster. If Gillespie's proposal is met, we conclude that it is unlikely blasting will have an effect on neighboring structures.

Because the rock on the site is already well fractured and weathered, we agree with Gillespie's conclusion that "formation of new fractures will be limited to the immediate area of the shot. These new fractures which are formed may extend 10 to 20 feet from the blast limits and may increase the permeability of the rock in their vicinity. However, the amount of water the rock can transmit is still limited to the amount of recharge available to the rock. The recharge area supplying the rock will decrease somewhat if the paving for the proposed development is completed. Based on the site plans, it does not appear that there will be any new large areas of exposed rock created. Therefore, we do not believe there will be a net increase in groundwater flow into the abutter's basements due to rock blasting except on extraordinary geologic conditions which are not easily measurable by practical methods.

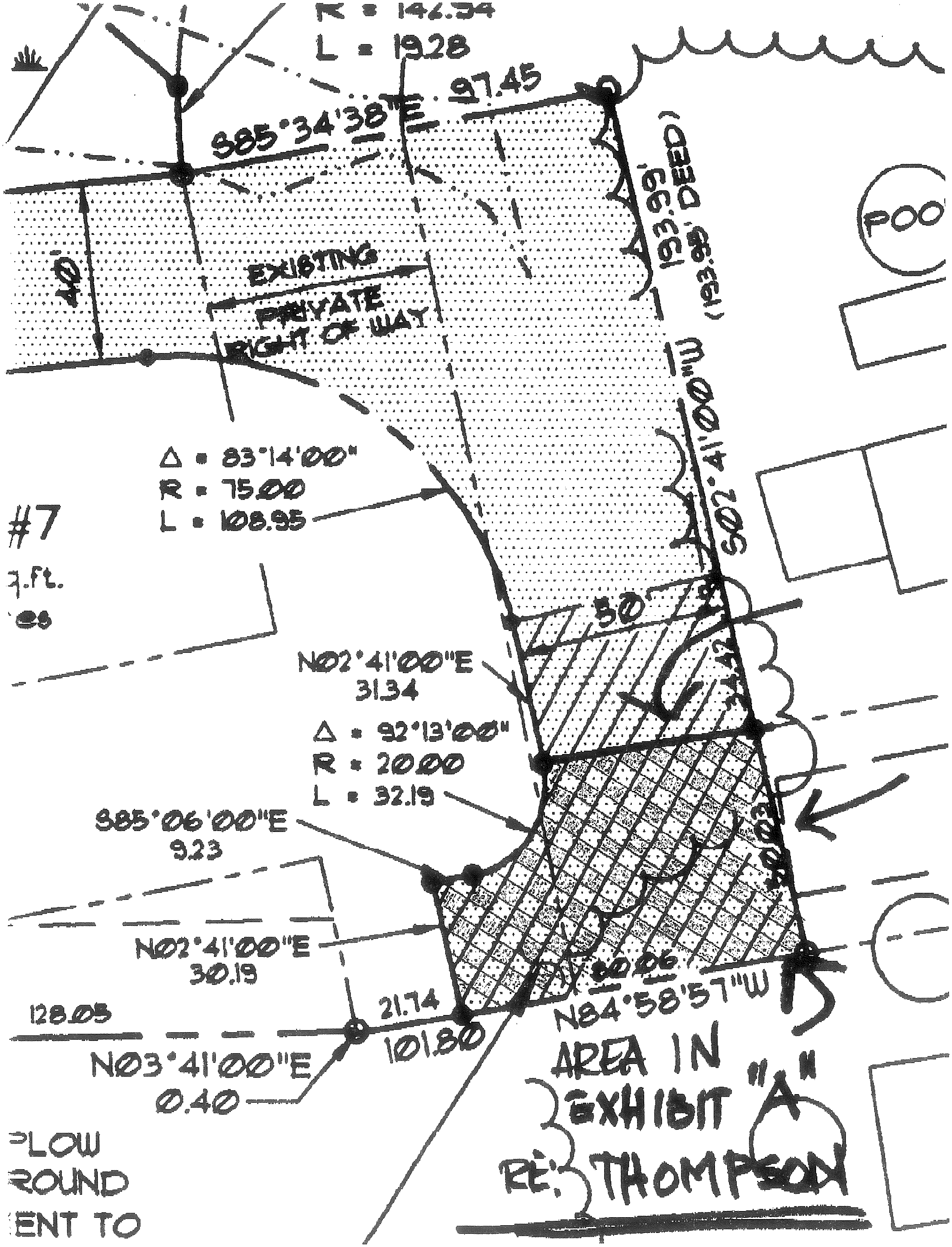
Conclusions

The proposed development does not appear to increase the peak stormwater runoff flow rates based on information you provided. However, typical to the development of previously undeveloped land, the time to peak and the volume of total runoff will increase slightly as a result of the project. To the extent that existing icing and ponding on Bancroft Street are caused by runoff from the wetland swale leaving the proposed development on the west side, then the development may exacerbate this slightly.

We do not believe blasting at the site, if conducted as proposed and according to state and local requirements, will have an impact on abutters or regional groundwater conditions.

Our work should be understood in the context in which we have performed it. We have estimated likely values for hydrogeologic parameters based on limited data. Our work is based on observations at discrete points and inferences regarding conditions between those points. Those inferences are based on our geologic judgment. Soil and geologic conditions may change over relatively short distances. These changes could affect system performance in ways we cannot foresee. We have also relied on data collected by others and on their expertise in the design of systems and structures. If their interpretations or measurements are not accurate, it may alter our analyses and conclusions.

This report was prepared for the exclusive use of our client. We have based our work on our understanding of the requests made by our client. No other warranty, expressed or implied, is


R = 142.34
L = 19.28
97.45
S85°34'38"E
193.99'
(193.98' DEED)
POO
40'
EXISTING
PRIVATE
RIGHT OF WAY
S02°41'00"W
Δ = 83°14'00"
R = 75.00
L = 108.95
#7
50'
N02°41'00"E
31.34
Δ = 92°13'00"
R = 20.00
L = 32.19
S85°06'00"E
9.23
N02°41'00"E
30.19
128.05
21.74
101.80
N84°58'57"W
N03°41'00"E
0.40
AREA IN
EXHIBIT "A"
RE: THOMPSON
PLOW
ROUND
ENT TO

O:\WP\DONNA\DEED\COTTAGE.QUI
11.10.1999

QUITCLAIM DEED
(Without Covenant)

KNOW ALL MEN BY THESE PRESENTS, THAT **COTTAGE PARK, INC.**, a Maine Corporation with a place of business in Portland, County of Cumberland, and State of Maine, in consideration of one dollar and other valuable consideration paid by **CITY OF PORTLAND**, a municipal corporation, whose mailing address is 389 Congress Street, Portland, Maine 04101, the receipt whereof it does hereby acknowledge, does hereby remise, release, bargain, sell and convey, and forever quitclaim unto the said **CITY OF PORTLAND**, its successors and assigns forever the property described in Schedule A, attached hereto and incorporated herein.

Meaning and intending to convey and hereby conveying any interest the Grantor may have in premises identified as Redlon Road.

To have and to hold the same, together with all the privileges and appurtenances thereunto belonging, to the said **CITY OF PORTLAND**, its successors and assigns forever.

IN WITNESS WHEREOF, the said **COTTAGE PARK, INC.** as Grantor, relinquishing and conveying all rights by descent and all other rights in the above-described premises, has hereunto set its seal this 18 day of the month of NOVEMBER, A.D. 1999.

Signed, Sealed and Delivered
in presence of

_____

COTTAGE PARK, INC.

By: _____

RIC WEINSCHENK
(type or print name)
Its PRESIDENT

O:\WP\DONNA\DEED\COTTAGE.QUI
11.10.1999

STATE OF MAINE
CUMBERLAND, ss.

Nov. 18, 1999

Personally appeared the above-named Ric Weinschenk, in his capacity as the President of Cottage Park, INC. and acknowledge the foregoing instrument to be his free act and deed and the free act and deed of Cottage Park, INC.

Before me,

Elizabeth L. Boynton
~~Notary Public~~ / Attorney at Law

Elizabeth L. Boynton
Printed Name

SCHEDULE A

A certain lot or parcel of land situated at the terminus of Redlon Road as accepted by the City of Portland on July 6, 1965 and recorded in the City Clerk's Office in Volume 72, Page 268 in said City, County of Cumberland, State of Maine and being bounded and described as follows:

Beginning at a 5/8" capped iron rod set at the northwesterly terminus of said Redlon Road at the southwesterly corner of land, now or formerly, of Dawn L. DeRice;

Thence through land of the Grantor here on a course of N 84º 58' 57" W a distance of fifty feet (50.0') to a point thence continuing through land of said Grantor on a course of S2º 41' 00" W a distance of fifty and three one hundredth feet (50.03') to land now or formerly of Louis D. Thompson;

Thence by land of said Thompson on a course of S 84º 58' 57" E a distance of fifty feet (50.0') to a point and the terminus of said Redlon Road;

Thence by said Terminus on a course of N 2º 41' 00" E a distance of fifty and three one hundredth feet (50.03') to the point of beginning.

The above described courses refer to Magnetic North.

O:\WP\DONNA\DEED\WEINSCHE.DED

RECEIVED
RECORDED REGISTRY OF DEEDS
1999 DEC -9 PM 3:23
CUMBERLAND COUNTY
John B O'Brien

CITY OF PORTLAND

DEPARTMENT OF PUBLIC WORKS
OPERATIONS / ENGINEERING SECTION
55 PORTLAND STREET
PORTLAND, MAINE 04101
(207) 874-8300 Telephone
(207) 874-8852 FAX Line

FAX TRANSMITTAL COVER PAGE

DATE: 11/9/1999

SEND TO Donna K.

COMPANY/ORGANIZATION: Corp Council

FAX NUMBER: 874-8497

FROM: J. Robbin

TELEPHONE/EXTENSION: (207) 874-8846 8837

NUMBER OF PAGES INCLUDING COVER SHEET 2

OPTIONAL MESSAGE I'll hang on to the Orginal in case you need any interpertation. Jim

O:\ENGSHARE\JANE\FAXCOVER.doc

Kic Weinschenk
To
City of Portland

Schedule A

A certain lot or parcel of land situated at the terminus of Reddon Road as accepted by the City of Portland on June 6, 1965 and Recorded in the City Clerks Office in Volume 72, Page 166 in said City, County of Cumberland, State of Maine and being bounded and described as follows:

Beginning at an 5/8" capped iron rod set at the northwesterly terminus of said Reddon Road at the southeasterly corner of land now or formerly of Dawn L. DeBick;

Thence through land of the Grantor herein on a course of S 84° 58' 57" E a distance of fifty (50.0') feet to a point;

Thence continuing through land of said Grantor on a course of S 2° 4' 00" W a distance of ~~50.0~~ Fifty and three one hundredths (50.03') feet to land, now or formerly of Louis D. Thompson;

Thence by land of said Thompson on a course of S 84° 58' 57" E a distance of ~~50.0~~ fifty (50.0') feet to a Point and the Terminus of said Reddon Road;

Thence by said Terminus on a course of N 2° 4' 00" E a distance of Fifty and three ~~one~~ hundredths (50.03') feet to the Point of Beginning.

The above described Courses refer to Magnetic North.

CITY OF PORTLAND, MAINE

PLANNING BOARD

July 24, 1997

Mr. Ric Weinschenk
Cottage Park Inc.
91 Summer Place
Portland ME 04101

RE: Redlon Park Subdivision; Redlon Road

Dear Mr. Weinschenk:

On July 22, 1997 the Portland Planning Board voted 4-2 (Caron and Rodriguez opposed; Carroll absent) on the following motions regarding the 7 lot Redlon Park planned residential unit development:

1. That the plan was in conformance with the Subdivision Review Ordinance of the City Land Use Code with the following conditions:

   i. That executed copies of submitted easements, drainage maintenance agreement and landscape maintenance agreement be submitted for staff review and approval.

   ii. That whatever rights the applicant may have at the end of Redlon Road shall be dedicated to the City as a continuation of the Redlon Road right-of-way, at least to the end of the Thompson property.

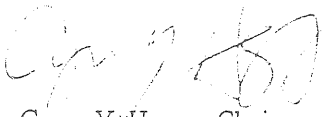
   iii. The Homeowners Association shall acquire and maintain a spare pump for the sanitary waste system.

   iv. There shall be a five year extended stormwater management performance guarantee in an amount equal to the dollar cost estimate of the drainage related improvements included in the regular performance guarantee. During the five year period commencing with the release of the regular performance guarantee for site improvements, a drainage monitoring program will be undertaken by the City to evaluate post construction drainage and stormwater conditions for a variety of storm events as they occur. The extended stormwater management performance guarantee resources may be used by the City to mitigate any unforeseen problems, deficiencies, or defects of the stormwater management program and infrastructure on the site, as may be determined to be necessary by the Planning and Public Works authorities and access to the site for these purposes shall be provided by the applicant or the Homeowner's Association to the City or its agents for the purposes so specified.

A. letter from Tom Green or surveyor stating that location shown on plan of paper sheets is correct.
B. Label R.o.W along Eunice Frye home.
C. Need Tony to look at plan. locate ROWs - survey date for sheets.
D. Natalie will check into dedication / NLB has easements
E. This dev. subject to Landscape drainage maint. agreement.

If there are any questions regarding the Board's actions, please contact the planning staff.

Sincerely,



Cyrus Y. Hagge, Chair
Portland Planning Board

cc: Joseph E. Gray, Jr., Director of Planning and Urban Development
Alexander Jaegerman, Chief Planner
Richard Knowland, Senior Planner
P. Samuel Hoffses, Chief of Building Inspections
Marge Schmuckal, Zoning Administrator
Kathi Staples PE, City Engineer
Acting Development Review Coordinator
William Bray, Deputy Director of Public Works
Jeff Tarling, City Arborist
Natalie Burns, Associate Corporation Counsel
Lt. Gaylen McDougall, Fire Prevention
Mary Gresik, Building Permit Secretary
Kathleen Brown, Assistant Director of Economic Development
Susan Doughty, Assessor's Office
Approval Letter File
Tom Greer, Pinkham and Greer, 170 US Route One, Falmouth ME 04105

Telephone Memo

Client: City of Portland.

Person Contacted: Jim Wendel

Job #: 1350.10

Date: 12-4-2000

Comments: Jim Called me to let me Know that He was Contacted by Rick Watley OF Wonsheuker office. He was asking Jim if He Remembered a conversation about Surface Treatment for Berms at the Willows & Redbox. Jim told Rick that He only remembers a conversation about Berms near the Italian Heritage center that Have a proposed fence and the Conversation was that Maintainance of grass would be Next to impossible. They had Discussed the possibility of Mulch Rather than grass. Nothing was in writing Nor was anything actually approved.

Gordon Smith
Signed

DISTRIBUTION:

CHRIS EARL

Steve Bushey

1352.02

ATTACHMENT B-1

PINKHAM & GREER
CONSULTING ENGINEERS, INC.

170 U.S. Route One
Falmouth, Maine 04105
Tel: 207.781.5242
Fax: 207.781.4245

June 18, 1997
File: 97115

Mr. Rick Knowland
Senior Planner
CITY OF PORTLAND
389 Congress Street
Portland, ME 04101

RE: REVISED PLANS AND DRAINAGE CALCULATIONS, REDLON PARK PRUD

Dear Rick:

As a result of the public hearing, we have revised the plans and the drainage calculations to reflect the comments raised by the Board. The revisions are as follows:

1. The road configuration and right-of-way was revised to allow the future road connection to Motley Street as well as to Caroline Street. This changed the access to Lot 1 thereby reducing the wetland impact and removed "the causeway look" of the two driveways to Lots 2 and 3.

2. We have provided a stone dust walkway from the end of Redlon Road to the end of Motley Street. This provides for clear pedestrian access all the way through the site.

3. We have provided 23,000 square feet of public open space and provided a basketball court for the residents of the neighborhood. This provides one of the uses specified in the PRUD standards and a total area ten times the size required.

As a result of these changes, the size of each lot was recalculated and a new grading plan was prepared for each lot. The lot grading meets the general guidelines that we discussed at a recent staff meeting.

These changes specifically address the Board's comments. We feel that this project, as now designed, meets the technical standards of the site plan, subdivision and PRUD sections of the ordinance.

PINKHAM & GREER
CONSULTING ENGINEERS, INC.

We have revised the drainage calculations to reflect the new layout. The changes are as follows:

1. We have deleted Pond 1 as the driveway to Lot 1 was deleted.

2. We have revised the storage capacity of Pond 2 to reflect the new configuration.

3. We have revised the area flowing to Pond 2 to account for the revised lot grading.

The results to the analysis remain the same:

1. The peak flows leaving the site are reduced and;

2. The ponding along Bancroft Street is reduced for the 10 and 25 year storms.

Let me know if you have any questions.

Sincerely,

PINKHAM AND GREER

Thomas S. Greer, P.E.

TSG/dp

Copy: Ric Weinschenk, Cottage Park Inc.
Tony Lombardo, City of Portland
Steve Bushey, DeLuca Hoffman Associates, Inc.

SUBCATCHMENT 40	= PROPOSED NORTH AREA	->	
SUBCATCHMENT 51	= NORTH OF CAPSIC	->	POND 22
SUBCATCHMENT 62	= SOUTH OF BANCROFT	->	POND 22
REACH 2	= CHANNEL TO POND	->	POND 20
REACH 22	= CHANNEL TO POND	->	POND 22
REACH 200	= EXISTING DITCH TO PROPERTY LINE	->	REACH 2
POND 1	= LOT 1 DRIVE CULVERT OMITED	->	POND 2
POND 2	= LOT 2 & 3 DRIVE CULVERT — CHANGED TO ROAD	->	REACH 200
POND 20	= BANCROFT POND TURN-A-ROUND	->	
POND 22	= BANCROFT POND	->	

B-5

RUNOFF BY SCS TR-20 METHOD: TYPE III 24-HOUR RAINFALL= 5.5 IN, SCS U.H.

RUNOFF SPAN = 10-20 HRS, dt= .10 HRS, 101 POINTS

SUBCAT NUMBER	AREA (ACRE)	Tc (MIN)	--GROUND COVERS (%CN)--				WGT'D CN	C	PEAK (CFS)	Tpeak (HRS)	VOL (AF)
1	.41	11.7	100%75	-	-	-	75	-	1.11	12.12	.09
2	.34	11.2	100%75	-	-	-	75	-	.93	12.12	.07
3	3.80	14.5	74%75	26%79	-	-	76	-	9.61	12.16	.86
4	.44	24.5	100%75	-	-	-	75	-	.90	12.30	.10
5	4.80	35.4	100%74	-	-	-	74	-	8.07	12.45	1.02
6	3.40	31.7	100%74	-	-	-	74	-	6.04	12.40	.72
10	.18	11.7	0%74	100%75	-	-	75	-	.49	12.12	.04
20	.34	14.1	6%98	29%74	65%75	-	76	-	.87	12.15	.08
30	1.81	11.7	4%98	88%75	8%79	-	76	-	5.05	12.12	.41
31	1.52	6.2	13%79	40%75	26%74	21%98	80	-	5.22	12.04	.38
32	.79	17.1	19%98	38%74	25%75	18%75	79	-	2.11	12.20	.19
40	.37	24.5	46%74	54%75	-	-	75	-	.76	12.30	.08
51	4.93	35.4	100%74	-	-	-	74	-	8.29	12.45	1.04
62	3.40	31.7	100%74	-	-	-	74	-	6.04	12.40	.72

B-6

REACH ROUTING BY STOR-IND+TRANS METHOD

REACH NO.	DIAM (IN)	BOTTOM WIDTH (FT)	DEPTH (FT)	SIDE SLOPES (FT/FT)		n	LENGTH (FT)	SLOPE (FT/FT)	PEAK VEL. (FPS)	TRAVEL TIME (MIN)	PEAK Qout (CFS)
2	-	3.0	3.0	.20	.20	.035	300	.0267	2.9	1.7	4.85
22	-	3.0	3.0	.20	.20	.035	300	.0266	3.5	1.4	9.42
200	-	2.0	2.0	.25	.25	.040	180	.0050	1.5	2.0	4.89

B-7

POND ROUTING BY STOR-IND METHOD

POND NO.	START ELEV. (FT)	FLOOD ELEV. (FT)	PEAK ELEV. (FT)	PEAK STORAGE (AF)	PEAK FLOW Qin (CFS)	PEAK FLOW Qout (CFS)	PEAK FLOW Qpri (CFS)	PEAK FLOW Qsec (CFS)	Qout ATTEN. (%)	Qout LAG (MIN)
1	69.0	74.0	0.0	0.00	0.00	0.00			0	0.0
2	66.0	72.0	68.8	.26	9.76	3.07			69	24.3
20	51.0	56.0	54.0	.37	18.81	11.78	11.78		37	24.1
22	51.0	56.0	54.3	.44	21.27	12.45	12.45		41	24.2

REDUCE POND ELEVATION BY 0.3 FEET FOR 25 YEAR STORM

PEAK HEIGHT FOR 25 YEAR STORM.

B-8

RUNOFF BY SCS TR-20 METHOD: TYPE III 24-HOUR RAINFALL= 4.7 IN, SCS U.H.

RUNOFF SPAN = 10-20 HRS, dt= .10 HRS, 101 POINTS

SUBCAT NUMBER	AREA (ACRE)	Tc (MIN)	--GROUND COVERS (%CN)--				WGT'D CN	C	PEAK (CFS)	Tpeak (HRS)	VOL (AF)
1	.41	11.7	100%75	-	-	-	75	-	.85	12.12	.07
2	.34	11.2	100%75	-	-	-	75	-	.72	12.12	.06
3	3.80	14.5	74%75	26%79	-	-	76	-	7.43	12.17	.67
4	.44	24.5	100%75	-	-	-	75	-	.69	12.31	.07
5	4.80	35.4	100%74	-	-	-	74	-	6.16	12.46	.78
6	3.40	31.7	100%74	-	-	-	74	-	4.61	12.41	.55
10	.18	11.7	0%74	100%75	-	-	75	-	.37	12.12	.03
20	.34	14.1	6%98	29%74	65%75	-	76	-	.67	12.16	.06
30	1.81	11.7	4%98	88%75	8%79	-	76	-	3.90	12.12	.32
31	1.52	6.2	13%79	40%75	26%74	21%98	80	-	4.12	12.04	.31
32	.79	17.1	19%98	38%74	25%75	18%75	79	-	1.66	12.20	.15
40	.37	24.5	46%74	54%75	-	-	75	-	.58	12.31	.06
51	4.93	35.4	100%74	-	-	-	74	-	6.33	12.46	.80
62	3.40	31.7	100%74	-	-	-	74	-	4.61	12.41	.55

B-9

REACH ROUTING BY STOR-IND+TRANS METHOD

REACH NO.	DIAM (IN)	BOTTOM WIDTH (FT)	DEPTH (FT)	SIDE SLOPES (FT/FT)		n	LENGTH (FT)	SLOPE (FT/FT)	PEAK VEL. (FPS)	TRAVEL TIME (MIN)	PEAK Qout (CFS)
2	-	3.0	3.0	.20	.20	.035	300	.0267	2.8	1.8	4.16
22	-	3.0	3.0	.20	.20	.035	300	.0266	3.3	1.5	7.27
200	-	2.0	2.0	.25	.25	.040	180	.0050	1.5	2.1	4.23

POND ROUTING BY STOR-IND METHOD

POND NO.	START ELEV. (FT)	FLOOD ELEV. (FT)	PEAK ELEV. (FT)	PEAK STORAGE (AF)	PEAK FLOW Qin (CFS)	PEAK FLOW Qout (CFS)	PEAK FLOW Qpri (CFS)	PEAK FLOW Qsec (CFS)	Qout ATTEN. (%)	Qout LAG (MIN)
1	69.0	74.0	0.0	0.00	0.00	0.00			0	0.0
2	66.0	72.0	68.4	.19	7.64	2.77			64	21.9
20	51.0	56.0	53.3	.23	14.83	10.40	10.40		30	20.4
22	51.0	56.0	53.5	.27	16.30	10.80	10.80		34	20.8

REDUCE POND BY 0.2
FOR 10 YEAR STORM.

RUNOFF BY SCS TR-20 METHOD: TYPE III 24-HOUR RAINFALL= 3.0 IN, SCS U.H.

RUNOFF SPAN = 10-20 HRS, dt= .10 HRS, 101 POINTS

SUBCAT NUMBER	AREA (ACRE)	Tc (MIN)	--GROUND COVERS (%CN)--				WGT'D CN	C	PEAK (CFS)	Tpeak (HRS)	VOL (AF)
1	.41	11.7	100%75	-	-	-	75	-	.35	12.13	.03
2	.34	11.2	100%75	-	-	-	75	-	.30	12.13	.02
3	3.80	14.5	74%75	26%79	-	-	76	-	3.17	12.18	.29
4	.44	24.5	100%75	-	-	-	75	-	.29	12.33	.03
5	4.80	35.4	100%74	-	-	-	74	-	2.48	12.49	.33
6	3.40	31.7	100%74	-	-	-	74	-	1.85	12.44	.23
10	.18	11.7	0%74	100%75	-	-	75	-	.15	12.13	.01
20	.34	14.1	6%98	29%74	65%75	-	76	-	.28	12.18	.03
30	1.81	11.7	4%98	88%75	8%79	-	76	-	1.65	12.13	.14
31	1.52	6.2	13%79	40%75	26%74	21%98	80	-	1.88	12.05	.15
32	.79	17.1	19%98	38%74	25%75	18%75	79	-	.76	12.21	.07
40	.37	24.5	46%74	54%75	-	-	75	-	.24	12.33	.03
51	4.93	35.4	100%74	-	-	-	74	-	2.55	12.49	.34
62	3.40	31.7	100%74	-	-	-	74	-	1.85	12.44	.23

REACH ROUTING BY STOR-IND+TRANS METHOD

REACH NO.	DIAM (IN)	BOTTOM WIDTH (FT)	DEPTH (FT)	SIDE SLOPES (FT/FT)		n	LENGTH (FT)	SLOPE (FT/FT)	PEAK VEL. (FPS)	TRAVEL TIME (MIN)	PEAK Qout (CFS)
2	-	3.0	3.0	.20	.20	.035	300	.0267	2.5	2.0	2.38
22	-	3.0	3.0	.20	.20	.035	300	.0266	2.5	2.0	2.98
200	-	2.0	2.0	.25	.25	.040	180	.0050	1.3	2.4	2.43

POND ROUTING BY STOR-IND METHOD

POND NO.	START ELEV. (FT)	FLOOD ELEV. (FT)	PEAK ELEV. (FT)	PEAK STORAGE (AF)	PEAK FLOW Qin (CFS)	PEAK FLOW Qout (CFS)	PEAK FLOW Qpri (CFS)	PEAK FLOW Qsec (CFS)	Qout ATTEN. (%)	Qout LAG (MIN)
1	69.0	74.0	0.0	0.00	0.00	0.00			0	0.0
2	66.0	72.0	67.2	.07	3.42	1.75			49	15.9
20	51.0	56.0	52.3	.04	6.66	6.43	6.43		3	5.4
22	51.0	56.0	52.3	.04	6.72	6.48	6.48		4	5.6

NO CHANGE 2YR STORM.

ATTACHMENT C-1

CITY OF PORTLAND, MAINE
M E M O R A N D U M

TO: Chairman Hagge and Members of the Planning Board

FROM: Natalie L. Burns, Associate Corporation Counsel

DATE: June 13, 1997

RE: **Redlon Park**

At the Board's last meeting, several members of the Board raised concerns about different subdivision and site plan issues arising out of the application. It is my understanding that the applicant has submitted a revised plan that may address some or all of the concerns. In this memorandum, I will list the concerns raised by the Board, along with the sections of the ordinance to which the concerns relate, and discuss the procedure that may be followed at the meeting on June 24.

At the next meeting, the Board will hear again from the applicant. If there are substantial changes, you may wish to reopen public comment, limited to the changes. At the end of your deliberations, you may choose to make one of three motions: to table the application to another meeting, to approve the application under the site plan and subdivision ordinances (with or without conditions), or to deny the project. If you make either a motion to approve or a motion to deny, you must have four votes for a final action. If you do not have four votes for a motion to approve or a motion to deny, you should follow that vote with the opposite motion. If that also fails to receive four votes, the application will be tabled to your next meeting.

The following is a list of concerns expressed by one or more members of the Board, along with the applicable ordinance section:

1. The applicant has failed to make connections to surrounding streets. These connections are required by §14-498(b)(2), the subdivision technical standards. The proposed plan isolates this project from surrounding land with a proposal for dead end street that do not allow for current or future connections to existing streets in the area, rather than providing ingress and egress for surrounding acreage tracts, as required by the ordinance and the City's Technical and Design Standards and Guidelines.

2. The layout and design of the street system, with its lack of street connections also fails to meet the requirements of the City's Transportation Plan, which is an element of the City's Land Use Plan. As a result, the plan does not meet the subdivision review standard set forth in §14-497(10) of the Portland City Code.

3. The proposed plan does not provide for sidewalks on the

private streets within the development. This is an area where persons other than residents of the proposed development have the right to walk. The proposed streets are narrow and curved and the lack of sidewalks will create a hazard for pedestrians and motorists due to the design of the private streets. This does not meet the site plan review requirement of §14-526(a)(1).

4. The design and layout of the proposed development does not take advantage of the topography of the site. The driveways for lots 2, 3, and 4 as proposed resemble causeways rather than small driveways, and do not complement the layout and design of the rest of the site. Many of the lots as shown have significant encumbrances such as drainage and pedestrian rights that should be located within commonly owned areas. The plan fails to incorporate the large amount of ledge as a design feature of the project. The plan does not take advantage of a shared infrastructure for many items, including drainage, parking, and open space, instead relying on individual lots to provide these facilities. This does not comply with the requirements of §14-526(a)(14).

5. The plan does not provide sufficient recreation and open space amenities. The ordinance requires active recreation improvements such as tennis courts, basketball courts, multipurpose athletic fields, swimming pools and recreational buildings. The applicant's only proposal for active recreation amenities is a horseshoe pit. This is not similar in quality to the illustrative list contained in the ordinance. Even if it were considered an acceptable active recreation amenity, both the size and the fact that this is the only proposed active recreation amenity are insufficient for the development of this large a parcel of land. The plan only provides one bench to satisfy the passive recreation open space requirement. This is also an insufficient amount of passive recreation amenities for a development of a parcel of land of this size. The ordinance does not permit the substitution of private yards for commonly held active and passive recreational amenities in a PRUD. As a result, the plan does not comply with §14-526(a)(14)(c)(3)& (4) of the Code.

Natalie L. Burns

Natalie L. Burns
Associate Corporation Counsel

NLB:lab

cc: Gary C. Wood, Corporation Counsel
Joseph E. Gray, Jr., Director of Planning & Urban Development
Alexander Jaegerman, Chief Planner
Richard Knowland, Senior Planner

ATTACHMENT D-1

CITY OF PORTLAND
Planning and Urban Development Department

MEMORANDUM

TO: Richard Knowland, Senior Planner

FROM: Steve Bushey, Development Review Coordinator SB (SAP)

DATE: June 19, 1997

RE: Redlon Road - Revised Plan Submission

I have received revised drawings and a June 18, 1997 letter. Due to the short period of time between today and the June 24, 1997 Planning board meeting, it is unlikely that I will be able to adequately review the new submission and provide comments for the applicant's or Planning Board's review.

It is also my understanding that Mr. Bruce Bell, Operations Manager, for the Portland Public Works has issued a letter to Mr. Joseph Gray of the Planning Department regarding drainage issues in the Bancroft/Capisic Street area. I would appreciate a copy of that letter, if possible, as it may provide additional information as to the project's impacts to drainage in the area.

O:\PLAN\DEVREV\PROJECTS\REDLONRD\MEMOS\DRC6-24.SAP

Gerber - Jacques Whitford
Robert G. Gerber, Inc. - Jacques Whitford, Inc.
Consulting Engineers, Geologists and Environmental Scientists
174 South Freeport Road
Freeport, ME U.S.A. 04032
Tel: 207-865-6138
Fax: 207-865-1071

July 15, 1997
File 971062

Mr. Richard Knowland
City of Portland
389 Congress Street
Portland, Maine 04101

Subject: Redlon Park Development, Portland, Maine
Evaluation of Potential Blasting and Groundwater Impacts

Dear Mr Knowland:

We have completed our evaluation of the Redlon Park PRUD subdivision with respect to Blasting and Groundwater issues. This letter report summarizes our review of the materials you provided and our site visit, and contains our conclusions.

Executive Summary

We conclude that the formation of new fractures from blasting will be limited to the immediate area of the shot. New fractures that are formed from blasting may extend 10 to 20 feet from the blast limits and may increase the permeability of the rock in their vicinity. However, the amount of groundwater the rock can transmit is a function of the recharge available to the rock which is limited due to the high degree of impervious cover, the existing stormwater system, and other suburban ground cover features. We do not believe there will be a net increase in groundwater flow into the abutter's basements due to rock blasting.

With respect to stormwater, the proposed development does not appear to increase the peak stormwater runoff rates based on information you provided. However, the time to peak and the volume of total runoff will increase slightly as a result of the project. To the extent that existing icing and ponding on Bancroft Street are caused by runoff from the wetland swale leaving the proposed development on the west side, then the development may exacerbate this slightly.

Background

Cottage Park, Inc., (Ric Weinschenk) has proposed to develop a Planned Residential Unit Development (PRUD) to be located at the end of Redlon Road on the west side of Stevens Avenue in Portland, Maine. The parcel is 4.43 acres and will accommodate 7 house lots. Pinkham and Greer, of Falmouth, developed the site plans and performed the stormwater calculations and other analyses for the project. R.W. Gillespie & Assoc., of Sanford, evaluated potential effects of blasting on local groundwater conditions and provided general

recommendations on blast design for Pinkham and Greer. Timson and Peters, Inc., of Hallowell, was hired by the abutters to provide an independent evaluation of the proposed subdivision. Finally, we were hired by the City of Portland to help the City evaluate the development's impact given the information available from all parties.

Site Visit and Information Review

On Monday, July 14, 1997, Olivier Muff visited the site to observe the geologic conditions with respect to soils, rock, groundwater, and vegetation. Before getting into the detailed geology of the site, Mr. Muff made some general observations that may be helpful:

- The forested area between Bancroft St. and Stevens Ave. encompasses a larger area than the planned development. We estimate based on the abutter's index map on Sheet C1 that the development area is less than ½ of the forested area.
- The topography over the entire forested area includes a number of outcropping rock ridges within as well as outside the PRUD area.
- Drainage problems currently exist on Bancroft Street. We observed small areas of ponded water along the east side of Bancroft Street the afternoon after an extended dry period and a light evening rain.
- The forested area is attractive for its mature tree growth and minimal ground vegetation (as pointed out by Holly Dominie's visual impact study). Evidence of use by residents includes a small number of paths and two or three fire circles strewn with beer and soda containers, trash, and seating areas.

General Geology: We agree with Timson as well as Gillespie's review of the site geology which identifies rock on site as the Vassalboro Formation which is weathered and fractured to some depth. We also agree that the overlying surficial soils include glaciomarine fine soils and limited swamp muck deposit.

Stormwater Discharge: As identified by Timson, the Hydrocal program used by Pinkham and Greer to calculate stormwater discharge does not account for groundwater discharge. However, the program leaves this component out for both the pre and post development calculations. Groundwater discharge is a baseflow phenomenon (flow through and below the ground surface). There is often a time lag between a storm event and the resulting discharge from groundwater due to that storm event. The overall stormwater flow component may be higher for both the pre- and post-development calculations when the groundwater component is added in. In any event, the groundwater component in the post-development condition will be lower than in the pre-development condition.

Based on the watersheds defined and analyzed by Pinkham and Greer, we agree that the post-development peak flows may be less than or equal to the pre-development peak flows. The total runoff volume will be greater for the post development scenario due to an increase in impervious cover (e.g. 13% for the 25-year storm in basins 30+31+32).

Blasting Impact on Residences and Groundwater Flow: Pinkham and Greer expects to remove up to 1600 cy of rock by blasting. For reference, 1600 cy of rock is equivalent to a volume of about 1 acre x 1 foot deep (or ½ an acre x 2' deep). Gillespie has proposed a blasting program to keep peak particle velocities (ppv - the speed at which the rock or buildings vibrate) to below "0.1 inches per second (ips) at any structure." The US Bureau of Mines standard for blasting is to maintain ppv below 2.0 inches per second. Standard residential blasting criteria are often as low as 0.75 ips to prevent damage to drywall and 0.50 ips to prevent damage to plaster. If Gillespie's proposal is met, we conclude that it is unlikely blasting will have an effect on neighboring structures.

Because the rock on the site is already well fractured and weathered, we agree with Gillespie's conclusion that "formation of new fractures will be limited to the immediate area of the shot. These new fractures which are formed may extend 10 to 20 feet from the blast limits and may increase the permeability of the rock in their vicinity. However, the amount of water the rock can transmit is still limited to the amount of recharge available to the rock. The recharge area supplying the rock will decrease somewhat if the paving for the proposed development is completed. Based on the site plans, it does not appear that there will be any new large areas of exposed rock created. Therefore, we do not believe there will be a net increase in groundwater flow into the abutter's basements due to rock blasting except on extraordinary geologic conditions which are not easily measurable by practical methods.

Conclusions

The proposed development does not appear to increase the peak stormwater runoff flow rates based on information you provided. However, typical to the development of previously undeveloped land, the time to peak and the volume of total runoff will increase slightly as a result of the project. To the extent that existing icing and ponding on Bancroft Street are caused by runoff from the wetland swale leaving the proposed development on the west side, then the development may exacerbate this slightly.

We do not believe blasting at the site, if conducted as proposed and according to state and local requirements, will have an impact on abutters or regional groundwater conditions.

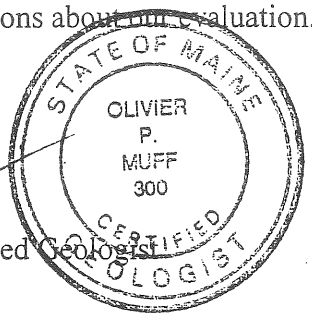
Our work should be understood in the context in which we have performed it. We have estimated likely values for hydrogeologic parameters based on limited data. Our work is based on observations at discrete points and inferences regarding conditions between those points. Those inferences are based on our geologic judgment. Soil and geologic conditions may change over relatively short distances. These changes could affect system performance in ways we cannot foresee. We have also relied on data collected by others and on their expertise in the design of systems and structures. If their interpretations or measurements are not accurate, it may alter our analyses and conclusions.

This report was prepared for the exclusive use of our client. We have based our work on our understanding of the requests made by our client. No other warranty, expressed or implied, is

made. Assumptions, measurements, and data used for the investigation are stated herein; conditions other than those stated may alter the conclusions.

We trust the information we have provided will help you and the planning board arrive at a decision that will serve the needs of the City and its residents. Please call Ollie Muff or Lissa Robinson if you have questions about our evaluation.

Sincerely,
Jacques Whitford Inc.



Olivier Muff, P.E. & Certified Geologist
Geologic Engineer

Robert G. Gerber, P.E. & Certified Geologist
Senior Consultant

PINKHAM & GREER
CONSULTING ENGINEERS, INC.

170 U.S. Route One
Falmouth, Maine 04105
Tel: 207.781.5242
Fax: 207.781.4245

FILE COPY

4 Attachment 1c

April 8, 1997
File: 97115

Ms. Dawn Hallowell
MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
312 Canco Road
Portland, ME 04103

RE: TIER 1 APPLICATION, REDLON PARK FOR COTTAGE PARK INC.

Dear Dawn:

I would like to thank you for meeting with Ric Weinschenk and me on site last Friday to review the project. As a result of our meeting, we have prepared a Tier 1 Application for the project's 13,200 square feet of impact.

Some of the impact is only temporary. We are constructing short stone walls to minimize the extend of the fill. A 5 foot strip adjacent to the stone walls will be disturbed as part of the construction, but will remain a wetland after the project is completed.

We have taken the following steps in minimizing the impact:

1. We have relocated the access road to the south to avoid running in the center of the site. The road is strategically located between the rock slope and the wetland.

2. We have combined the location of driveways to Lots 2 and 3 to minimize the fill area.

3. We have provided short stone walls along the wetlands to reduce the impact by 6 to 9 feet on each side.

4. We have configured Lots 4 and 5 to move the driveways away from the wetlands as soon as possible.

6. We have included cutting restrictions in the Home Owner's Association Agreement to retain as much of the tree cover as practicable. This will also diminish long term impacts to the wetlands by the residents.

PINKHAM & GREER

CONSULTING ENGINEERS, INC.

These measures and standard site planning have diminished the impacts to 13,200 square feet as shown on the enclosed sketches.

Please let me know if your require full size drawings or other information. Thank you again for your help.

Sincerely,

PINKHAM AND GREER

Thomas S. Greer, P.E.

TSG/dp

Enclosure

DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP)

APPLICATION FORM for FRESHWATER WETLAND ALTERATION

(For Tier 1 and Tier 2 Review under 38 M.R.S.A. Sec. 480-X)

- PLEASE TYPE OR PRINT IN *BLACK INK ONLY* (3 COPIES, PLEASE BEAR DOWN)
- SEE ATTACHED INSTRUCTIONS

1. Name of Applicant:	COTTAGE PARK INC.	4. Name of Agent: (if applicable)	
2. Applicant's Mailing Address:	91 SUMMER PLACE PORTLAND, ME 04103	5. Agent's Mailing Address:	
3. Applicant's Daytime Phone No: (with area code)	(207) 828-3900	6. Agent's Daytime Phone No: (with area code)	
7. Statement of Authorization:	I hereby authorize the above named person to act in my behalf as my agent in the processing of this application. *Signature of Applicant:*		

8. Name of Wetland (if known):	UNNAMED	9. Amount of Impact (Sq. Ft.):	13,200	10. Previous Wetland Alteration?	☐ Yes ☒ No

11. Type of Wetland (Check all that apply):	☒ Forested ☐ Scrub Shrub ☐ Emergent ☐ Wet Meadow ☐ Peatland	☐ Open Water VEGETATIVE TYPE: ☒ Deciduous ☐ Coniferous/Fir ☐ Other_____	12. Fee Schedule:	TIER 1 ☐ 0 - 4,999 sq.ft. = $35 ☐ 5,000 - 9,999 sq.ft. = $75 ☒ 10,000 - 14,999 sq.ft. = $150 TIER 2 ☐ 15,000 - 19,999 sq.ft. = $190 ☐ 20,000 - 43,560 sq.ft.(1 acre) = 2¢/sq.ft.

13. Location of Project (Town/City):	PORTLAND	14. Tax Map#	193
		15. Tax Lot #	E7
16. Detailed Directions to the Project:	TAKE STEVENS AVENUE TO REDLON ROAD, REDLON ROAD TO THE END.		
17. Purpose and Description of Project: (attach sheet if necessary)	7 LOT RESIDENTIAL SUBDIVISION		

- I have read the criteria for eligibility (on the reverse page) and affirm that my project meets all the requirements including eligibility, avoidance, minimization, erosion control, water quality and classification standards, and buffer strips.
- I have submitted a copy of this application, including attachments, to the municipality in which the project is located.
- I authorize staff of State and Federal agencies, having jurisdiction over this activity, to access the project site for the purpose of determining compliance with the rules.
- **I have attached 2 copies of all of the required submissions listed below.** (see instruction sheet)

18. TIER 1	TIER 2		
☒ Fee	☐ Fee	☐ Copy of Public Notice	☐ Statement/Copy of cover letter to Maine Historic Preservation Commission
☒ Location Map	☐ Location Map	☐ Erosion Control Plan	
☐ Photos of Area (optional)	☐ Photos of Area (optional)	☐ Alternatives Analysis	
☒ Plan or Drawing (8 1/2" x 11")	☐ Plan or Drawing (8 1/2" x 11")	☐ Compensation Plan (if required)	
	☐ Professional Certification	☐ Description of Previously Mined Peatland (if required)	

✧ *NOTIFICATION FORMS CANNOT BE ACCEPTED WITHOUT THE NECESSARY ATTACHMENTS* ✧

19. Signature of Applicant:	FOR COTTAGE PARK, INC. BY ITS PRESIDENT	20. Date:	4.8.97

Keep the bottom copy as your record of application. Send the form with attachments via Certified Mail or hand deliver to the Maine Dept. of Environmental Protection **at the appropriate regional office listed below.** Permits are valid for two years.

AUGUSTA DEP
17 STATE HOUSE STATION
AUGUSTA, ME 04333-0017
(207) 287-2111

PORTLAND DEP
312 CANCO ROAD
PORTLAND, ME 04103
(207) 822-6300

BANGOR DEP
106 HOGAN ROAD
BANGOR, ME 04401
(207) 941-4570

PRESQUE ISLE DEP
1235 CENTRAL DRIVE
PRESQUE ISLE, ME 04769
(207) 764-0477

FOR OFFICE USE ONLY	CK #	Staff:	Staff:	Staff:	Site Visit:
APP #:	FP:	Rec'd Date:	Accep. Date:	Defic. Date:	Compli. Inspec.:

INSTRUCTIONS
FOR THE
TIER 1 AND TIER 2 APPLICATION FORM

This application is a joint application form for the Department of Environmental Protection (Department) and the U.S. Army Corps of Engineers (Corps). The instructions for this application are listed below. The Block numbers in the instructions match the Block numbers on the form. If, after reading these instructions, you have questions, please call the nearest Department office.

Block 1. Name of Applicant. Write in the name of the landowner or a person that has a legal interest in the property. If the landowner is an agency, company, corporation, or other organization, please include the organization's name and the name of a staff person we can contact about the project.

Block 2. Applicant's Mailing Address. Write in the full mailing address of the applicant. The Department and the Corps will mail copies of any letters we write about the project to this address.

Block 3. Applicant's Daytime Phone No. Write in the applicant's daytime telephone number, including the area code. This should be a number where the applicant can usually be reached during normal working hours. If the applicant can not be reached during normal working hours, it may be helpful to have an agent (see Block 4).

Block 4. Name of Agent. The Department and the Corps do not require an agent for this application. If the applicant has chosen to have an agent, please provide the name of the person(s) chosen to represent the applicant in the application process. The agent can be an attorney, contractor, engineer, or other person(s) willing to provide assistance. Department and/or Corps staff will contact the agent first if we have questions. The applicant will always be sent a copy of any letters written about the project.

Block 5. Agent's Mailing Address. Please write in the full mailing address of the agent. The Department and/or the Corps will send any original letters to this address.

Block 6. Agent's Daytime Phone No. Write in the full telephone number where the agent can be reached during normal business hours. The Department and/or Corps will use this telephone number if we have any questions about the application. Quick answers can help minimize delays in the application process.

Block 7. Statement of Authorization. The applicant must sign this Block if an agent has been chosen to represent them. This authorization only allows the agent to answer questions and act on the applicant's behalf during the application process. The applicant is still responsible for making sure the project meets all of the requirements for a Tier 1 or Tier 2 review.

Block 8. Name of Wetland. Since most wetlands are unnamed, this Block will not usually be filled in. However, if you do know that the wetland has a name, please write it into the Block. Examples of wetland names include The Great Heath and Caribou Bog and they are shown sometimes on the U.S.G.S. topo map.

Block 9. Amount of Impact. Please include the amount of wetland area that will be altered for the project. This figure includes all areas affected both temporarily and permanently by the activity. The impacted area may be greater than just the area where a project physically takes place. Alteration means causing any change to the wetland and includes dredging, bulldozing, removing or displacing soil, sand, vegetation, or other materials, draining or dewatering, filling, or any construction, repair, or modification of any permanent structure in, on, or over the wetland. Please use the total footprint area of all alterations measured in square feet.

Block 10. Previous Wetland Alteration. If any wetland area has been altered on the property, before this application was submitted, please check YES. If you check YES, please attach a separate sheet labeled "Block 10" and provide information on the size of the previous wetland alteration, the date(s) when the alteration occurred, and whether State and/or Federal permits were obtained for the activity. Please include permit numbers, if known.

TIER 2: Attach

- A check for the right fee as explained for Block 12.

- The appropriate United States Geological Survey Map (U.S.G.S topo map, 7 1/2 minute if available) with the project location clearly marked and labeled on the map. A photocopy of the topo map is sufficient provided it is clear and readable.

- **OPTIONAL:** Color photos showing the wetland in the project area. Label each photo with the applicant's name, town where located, and the date taken. Although optional, pictures may simplify and quicken our review.

- A top view drawing of the entire project must include: existing and proposed fill, excavation, roads, and structures; wetland boundaries and wetland types in the project area; any surface water bodies within 100 feet of the activity; and 25 foot wide buffer strips between the project and any river, stream, or brook. Also include a cross sectional drawing of any fill or excavated areas. All drawings must be drawn to scale; and be labeled with the applicant's name, appropriate scale, and date. **Please note that the Corps requires all drawings to be submitted on 8 1/2" x 11" paper.**

- A written certification by a knowledgeable professional experienced in wetland science that the project will not alter, or cause to be altered, a wetland of special significance as described in 38 M.R.S.A Sec. 480-X(4) or (5). See the reverse side of application form for a listing of these wetlands.

- Documentation that public notice of Intent to File has been provided for the proposed project in accordance with Department rules. A public notice is required for all projects requiring Tier 2 review. A blank Notice of Intent to File form is provided in this application packet for your use.

- A narrative and drawing showing the proposed erosion control plan. The narrative should include a sequence for construction and provisions for installing and maintaining erosion control measures. The drawing must show the location of all proposed erosion control measures.

- A statement describing why the project cannot be located completely in upland areas, and any alternatives that exist for the project that would either avoid or minimize the amount of wetland alteration.

- A plan for compensating for degraded or lost functions and values of the freshwater wetland when required by and in accordance with rules adopted by the department. When compensation is required, the Department strongly recommends the applicant request a pre-application meeting to discuss permitting requirements.

- For work in previously mined peatlands, provide information on the past mining activity such as the area and depth to which peat has been excavated from the site, any restoration work on the site, and the current condition of the site.

- A copy of this application, including attachments, must be sent to the Maine Historic Preservation Commission (MHPC) before, or at the same time, the application is filed with the DEP. The applicant should submit a copy of the cover letter to the MHPC or a signed statement that this has been done. The address is: Earle G. Shettleworth, Jr., MHPC, 65 State House Station, Augusta, ME 04333-0065.

Block 19. Signature of Applicant. The application must be signed by the landowner or other authorized party (agent). By signing the form, you are certifying the proposed project will meet all requirements, as listed on the application form. You are also affirming that you have all the required property rights to undertake the project. Please read the back side of the application carefully before you sign the application. Unsigned applications will be returned.

Block 20. Date. Please write in the date the application is signed.

IF YOU HAVE ANY QUESTIONS, PLEASE CALL THE NEAREST DEP OFFICE. OFFICE LOCATIONS AND TELEPHONE NUMBERS ARE LISTED ON THE APPLICATION FORM.

Erosion Control for Homeowners

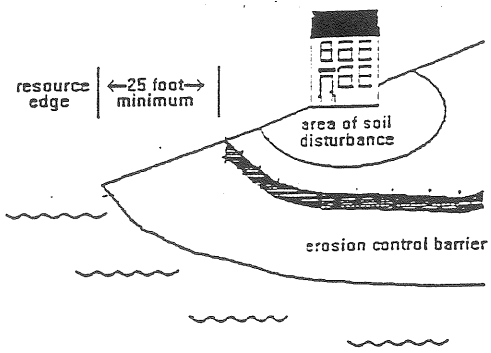
Before Construction

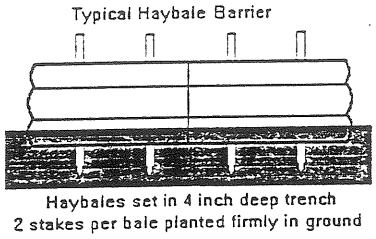
1. If you have hired a contractor, make sure you have discussed your permit-by-rule with them. Talk about what measures they plan to take to control erosion. Everybody involved should understand what the resource is and where it is located. Most people could identify the edge of a lake or a river. The edges of wetlands, however, are often not obvious. Your contractor may be the person actually pushing dirt around but you are both responsible for complying with the permit-by-rule.

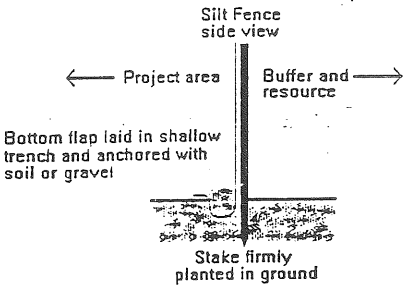
2. Call around and find sources for your erosion controls. You will probably need silt fence, hay bales and grass seed or conservation mix. Some good places to check are feed stores, hardware stores, landscapers and contractor supply houses. It is not always easy to find hay or straw during late winter and early spring. It may also be more expensive during those times of year. Plan ahead. Purchase a supply early and keep it under a tarp.

3. Before any soil is disturbed, make sure an erosion control barrier has been installed. The barrier can be either a silt fence, a row of staked hay bales, or both. Use the drawings below as a guide for correct installation and placement. The barrier should be placed as close as possible to the activity.

If a contractor is installing the barrier, double check it as a precaution. Erosion control barriers should be installed "on the contour", meaning at the same level along the land slope, whenever possible. This keeps stormwater from flowing to the lowest point of the barrier where it builds up and overflows or destroys it.







During Construction

1. Use lots of hay or straw mulch on disturbed soil. The idea behind mulch is to prevent rain from striking the soil directly. It is the force of raindrops striking the soil that causes a lot of erosion. More than 90% of erosion is prevented by keeping the soil covered.

2. Inspect your erosion control barriers frequently. This is especially important after a rainfall. If there is muddy water leaving the project site, then your erosion controls are not working as intended. In that situation, stop work and figure out what can be done to prevent more soil from getting past the barrier.

(over)

THIS 'NOTICE OF INTENT TO FILE' FORM AND INSTRUCTIONS ARE DESIGNED SPECIFICALLY FOR USE WITH APPLICATIONS PROPOSING FRESHWATER WETLAND ALTERATION THAT IS ELIGIBLE FOR TIER 1 OR TIER 2 REVIEW ONLY.

To provide proper public notice in accordance with Department rules, the applicant (or authorized agent) must doing the following:

1. Send by certified mail a completed copy of the Notice of Intent to File to the owners of the property abutting the land upon which the project site is located within thirty days prior to the filing of the application;

2. Send by certified mail a completed copy of the Notice of Intent to File, along with a copy of this application, to the town clerk or city clerk of the municipality(ies) where the project is located within thirty days prior to the filing of the application;

3. Publish a Notice of Intent to File once in a newspaper circulated in the area where the project site is located within thirty days prior to the filing of the application;

4. If the project involves filling or dewatering 1 acre or more of freshwater wetland, hold a public informational meeting in accordance with Chapter 2, Rules Concerning the Processing of Applications, Section 8, prior to filing the application.

NOTICE OF INTENT TO FILE

Please take notice that **Cottage Park Inc, 91 Summer Place, Portland, Maine, 04103 828-3900,** is intending to file a Natural Resources Protection Act permit application with the Maine Department of Environmental Protection pursuant to the provision of 38 M.R.S.A. §§ 480-A through 480-V on or about **April 9, 1997.**

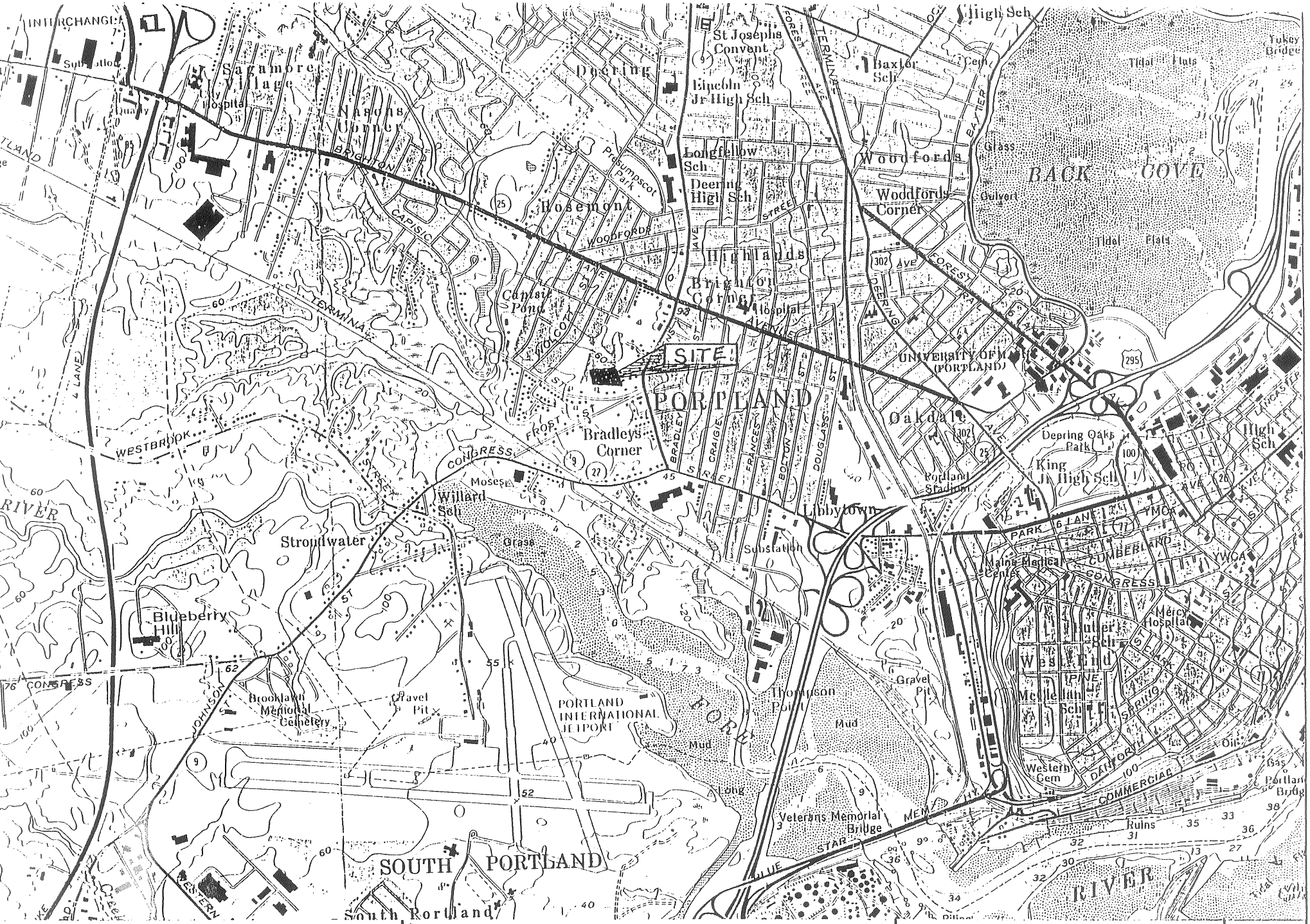
The application is for **the construction of a seven (7) lot subdivision with three (3) driveways crossing an unnamed wetland. The project is located off the end of Redlon Road.**

A request for a public hearing or a request that the Board of Environmental Protection assume jurisdiction over this application must be received by the Department, in writing, no later than 20 days after the application is found by the Department to be complete and is accepted for processing. A public hearing may or may not be held at the discretion of the Commissioner or Board of Environmental Protection. Public comment on the application will be accepted throughout the processing of the applications.

The application will be filed for public inspection at the Department of Environmental Protection's office in Portland, Maine, during normal working hours. A copy of the application may also be seen at the municipal offices in Portland, Maine.

Written public comments may be sent to:

Department of Environmental Protection
Bureau of Land and Water Quality
State House Station 17
Augusta, ME 04333-0017



GRAPHIC SCALE: 1" = 2000'

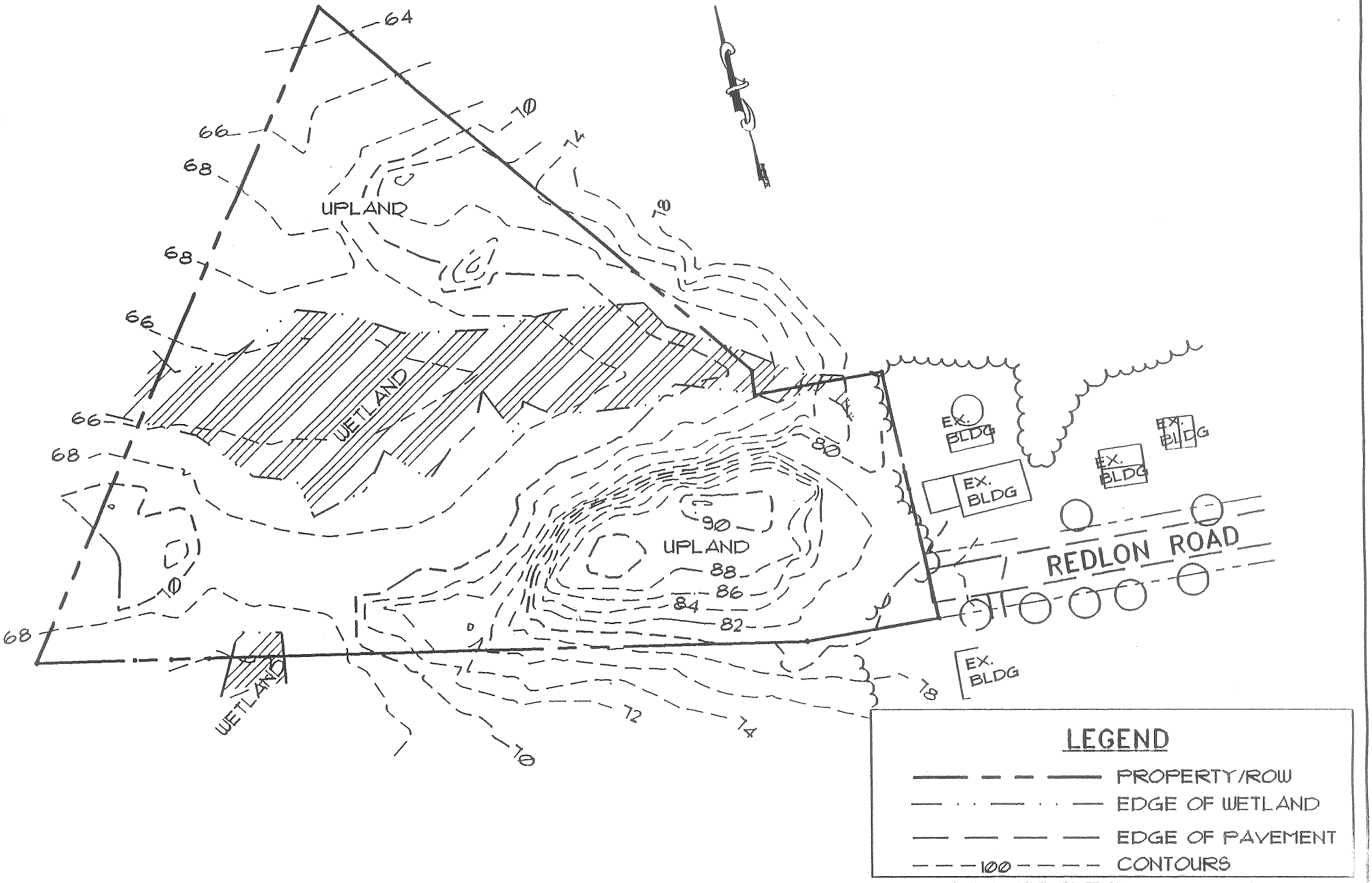
LOCATION MAP

DATE: MARCH 28, 1997

PROJECT: 97115

COTTAGE PARK, INC.
PORTLAND, MAINE

REDLON PARK
PORTLAND, CUMBERLAND COUNTY, MAINE



100 0 50 100 200

GRAPHIC SCALE: 1" = 100'

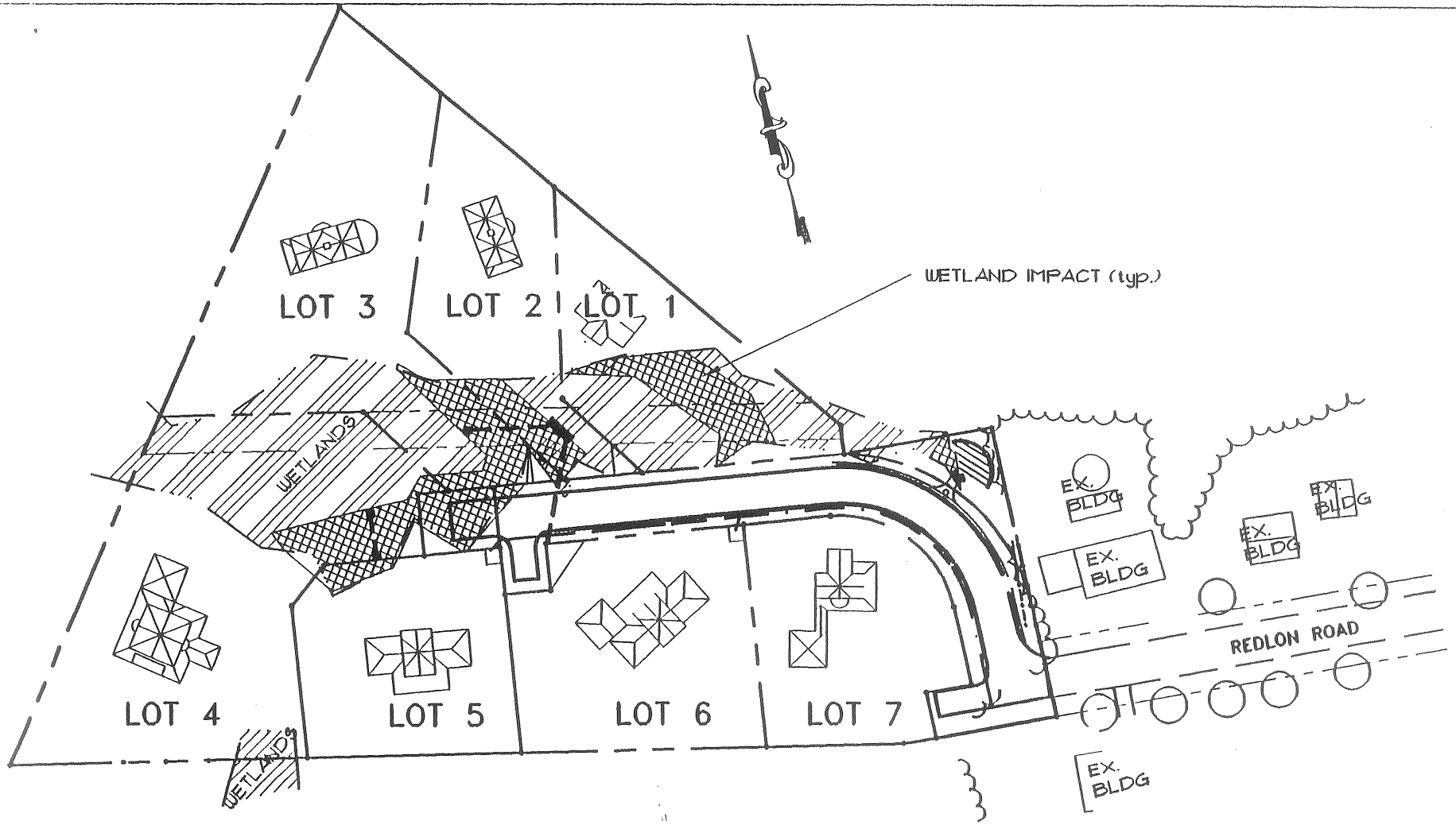
EXISTING CONDITIONS

DATE: MARCH 28, 1997

PROJECT: 97115

COTTAGE PARK, INC.
PORTLAND, MAINE

REDLON PARK
PORTLAND, CUMBERLAND COUNTY, MAINE



LEGEND

EXISTING		PROPOSED	
— — — —	PROPERTY/ROW	— — — —	PROPERTY/ROW
— · — · —	EDGE OF WETLAND	— — — —	EASEMENT
— — — —	EDGE OF PAVEMENT	———	EDGE OF PAVEMENT
•	IRON PIN	•	IRON PIN

00 0 50 100 200

GRAPHIC SCALE: 1"=100'

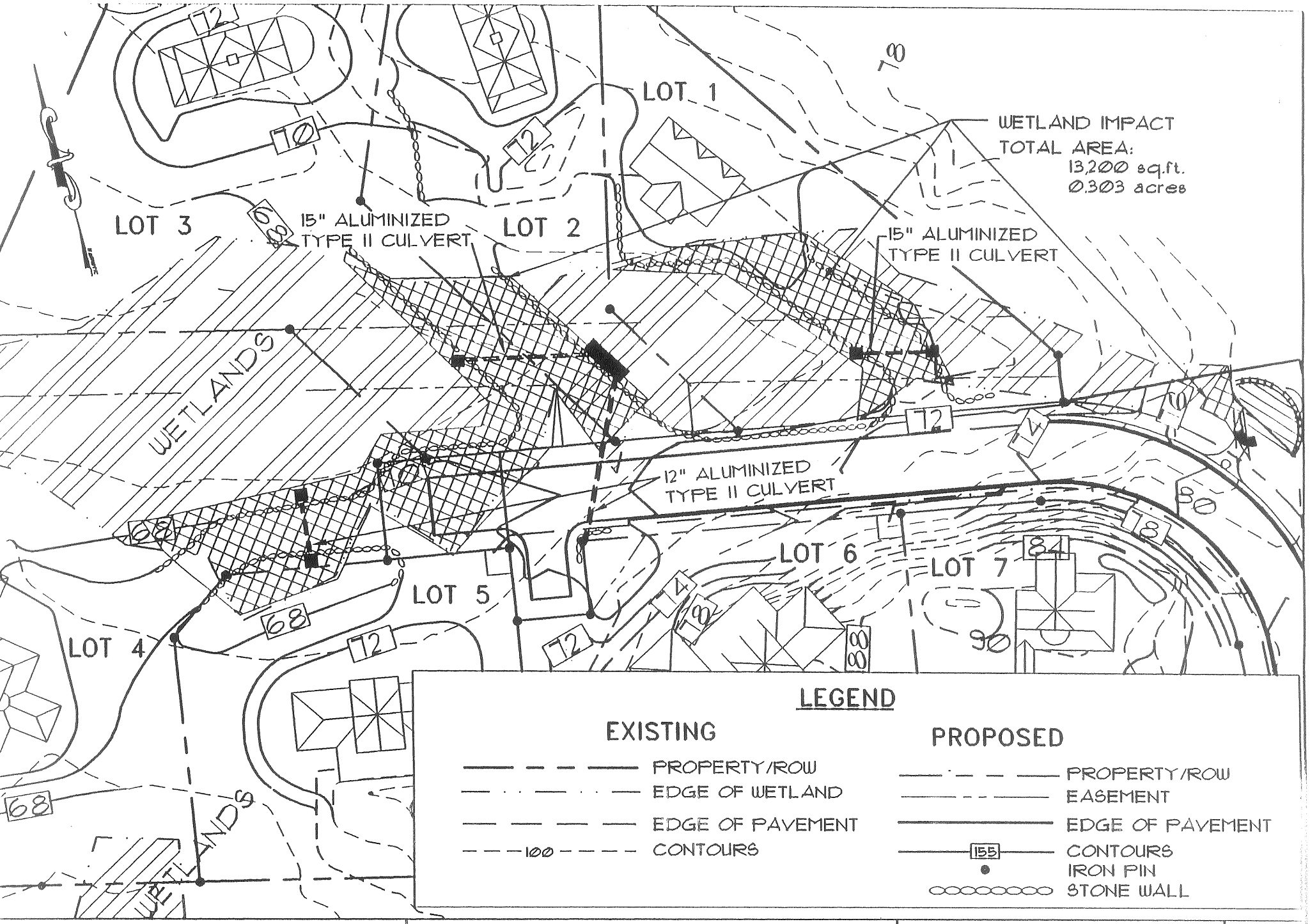
PROPOSED CONDITIONS

DATE: MARCH 28, 1997

PROJECT: 97115

COTTAGE PARK, INC.
PORTLAND, MAINE

REDLON PARK
PORTLAND, CUMBERLAND COUNTY, MAINE



50 0 25 50 100

GRAPHIC SCALE: 1"=50'

WETLAND IMPACT PLAN

DATE: MARCH 28, 1997

PROJECT: 97115

COTTAGE PARK, INC.
PORTLAND, MAINE

REDLON PARK
PORTLAND, CUMBERLAND COUNTY, MAINE

✓Sheila Anne Leadbetter
83 Capisic Street
Portland, ME 04102

✓Eunice Frye
37 Capisic Street
Portland, ME 04102

✓Dawn L. Derice
21 Redlon Road
Portland, ME 04102

✓Robert J. Cheney
West River Road
West Buxton, ME 04093

✓William J. & Anne A. Bacon
63 Capisic Street
Portland, ME 04102

✓Louis D. Thompson
29 Redlon Road
Portland, ME 04102

✓Ruth S. Norris
14 June Street
Portland, ME 04101

✓Stuart B. Herrick
130 Bancroft Street
Portland, ME 04102

1352.02

RIC WEINSCHENK/BUILDERS, Inc.
91 SUMMER PLACE, PORTLAND, MAINE 04103
Phone (207) 828-3000 Fax (207) 775-7703

FAX

To Sarah Hopkins

Attn

From Rick Wortley

Date 11-18-99

Pages 1 thru 5

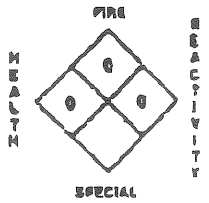
Re Attachments for culvert note on REDLON ROAD memo

Post-it® Fax Note 7671	Date	# of pages ▶
To Steve Bushey	From Sarah	
Co./Dept.	Co.	
Phone # 879 0896	Phone #	
Fax # 879 0851	Fax #	

Material Safety Data Sheet for CONTECH Products

Product Name: ALUMINUM-COATED STEEL PRODUCTS, Type 2, all grades, "Aluminized Steels"

NFPA 704 RATING



Manufacturing Facility, Company, or Subsidiary: Several Facilities
Address: 1001 Grove Street, Middletown, Ohio 45044
Phone: During normal business hours 513/425-2178 After hours/Emergency 1-800-255-3924
Date of Preparation: October 1, 1985 SSF Revised 10/1/93 DLM

SECTION I — COMPONENT DATA:

Chemical Components	C.A.S. Number	% Wt.
Primary Metals: Iron	7439-89-6	70-99
Metallic Coating: Aluminum	7429-90-5	◄1-30

Additional Coatings:
A thin coating of a mixture of rust preventative oil, and mineral oil and solvents (◄1% total weight of product) may be added as a surface treatment.

SECTION II — PHYSICAL DATA:

Boiling Point (°F): Not Applicable (N/A)
Vapor Density (Air = 1): N/A
Specific Gravity (H_2O = 1): Approx. 8
Evaporative Rate (Ethyl Ether = 1): N/A
Vapor Pressure (mmHg @ 20° C): N/A
Solubility in Water: N/A
Percent Volatile By Volume: N/A
pH Information: N/A

Appearance and Odor: Odorless solid with metallic lustre. Available as sheets and strip.

SECTION III — FIRE & EXPLOSION HAZARD DATA:

Flash Point(° F): N/A
Flammability Limits (%/Vol): LEL: N/A
Auto-Ignition Temperature (° F): N/A
Special Fire-Fighting Instructions: N/A
Method Used: N/A
UEL: N/A
Extinguishing Media: No fire or explosion hazards.
Unusual Fire and Explosion Hazards: N/A

SECTION IV — REACTIVITY DATA:

Stability (conditions to avoid): Stable
Incompatibility (materials to avoid): None

Hazardous Decomposition Products: Metal fumes and certain noxious gases, such as CO, may be produced during welding or burning operations. See Sections V and IX for further information.

Hazardous Polymerization: Will not occur.

SECTION V — HEALTH HAZARD DATA:

Primary Route(s) of Entry: Inhalation, skin contact.

Effects of Exposure: No toxic effects would be expected from its inert solid form. Prolonged, repeated overexposures to fumes or dusts generated during heating, cutting, brazing or welding may cause adverse health effects associated with the following constituents:

Inhalation:
Iron: Siderosis, no fibrosis.
Aluminum: No known health effects. Generally considered to be in the nuisance dust category.
Oil Mist: Pulmonary effects.

Skin Contact:
May cause irritation. Oil mist may cause dermatitis.

Eye Contact:
May cause irritation.

Ingestion:
May cause irritation of the mouth and throat.

Medical Conditions Known to be Aggravated by Exposure to this Material:
Persons with lung disorders or diseases or skin disorders may be at an added risk as a result of overexposure to this material.

W.H. [redacted] COMPANY

**** COD ORDER ****
PAGE# 1

06/09/98

0047608

One Runway Road • P.O. Box 2800 • South Portland, ME 04116-2800
207-883-6371 • Fax 207-883-3703

SOLD TO:
RICK WEINSCHENK BUILDERS
PICK-UP SO. PORTLAND LOCATION
SO. PORTLAND ME 04116

SHIP TO:
RICK WEINSCHENK BUILDERS
PICK-UP SO. PORTLAND LOCATION
SO. PORTLAND ME 04116

C0898JW	0013	PICK	P-S	( )	
	06/09/98	00591	Lee	JIM	COD

PRODUCT NUMBER	ORDER QTY	SHIPPED QTY	UM	DESCRIPTION		EXTENDED	T
908085	4	4	PC	CULVERT ALZ II 12"x20' 18G.052	004	108.40	Y
05307	3	3	EA	CULVERT BAND 12" H-6	004	5.42	Y

6000
2100

Reed Seymour

C O D ORDER D ORDER

W.H. [redacted] COMPANY *** COD ORDER ***

[redacted]

SHIP TO:
WEINSHANK BUILDERS
PICK-UP SO. PORTLAND LOCATION
SO. PORTLAND ME 04116

SOLD TO:
WEINSHANK BUILDERS
PICK-UP SO. PORTLAND LOCATION
SO. PORTLAND ME 04116

C0698JN	0013	PICK UP-S		
REDLON	06/23/98		JIM	6/23/98 COD

PRODUCT NUMBER	QUANTITY ORDERED	QUANTITY SHIPPED	U/M	DESCRIPTION		UNIT PRICE	TAX
308065	2	2	PC	CULVERT ALZ II 12"x20 18G.052	004	108.40	Y

6000
2100

NOV-19-99 08:42 AM PLANNING DEPARTMENT 7568258 P.05

Nov 18 99 10:47a Ric Weinschenk/ Wortley 207-775-7703 p.2

W. H. [illegible] COMPANY

COD ORDER
PAGE# 1

6000

04/06/96

0046474

HY

One Runway Road • P. O. Box 2800 • South Portland, ME 04116-2800
207-883-6371 • Fax 207-883-3763

WEINSHANK BUILDERS
PICK UP: SOUTH PORTLAND
SOUTH PORTLAND ME 04116-2800

828-3900

WEINSHANK BUILDERS
PICK UP: SOUTH PORTLAND
SOUTH PORTLAND ME 04116-2800

00498DP	0013	PICK UP-S		
	04/09/96	00189 LDF	DAN	COD

PRODUCT NUMBER	QUANTITY ORDERED	QUANTITY SHIPPED	U/M	DESCRIPTION		UNIT PRICE	TAX
[illegible]3088	2	2	PC	CULVERT ALZ II 15"x10' 18G.052	004	66.80	Y
[illegible]5408	1	1	EA	CULVERT BAND 15" H-6	004	6.68	Y

MEMORANDUM

TO: Sarah Hopkins, Senior Planner

FROM: Steve Bushey, P.E., Acting Development Review Coordinator

DATE: October 28, 1999

RE: Redlon Park – Site Review

DeLuca-Hoffman Associates, Inc. staff have reviewed the construction of the Redlon Park Drive and associated infrastructure improvements. The following comments are offered:

1. Per the standard Type 'E' catch basin detail on Sheet C7 of the approved plans, a granite catch basin stone and stone transitions should be provided at each catch basin. None have been provided.

2. The catch basins are located improperly and not according to the plan. They should be relocated per plan to be 11' off centerline.

3. The catch basin grates are not standard City of Portland types. These should be replaced to meet City Standards and in accordance with the details.

4. The landscaping has not been completed.

5. The culvert #4 has a damaged outlet.

6. The bituminous curb does not match the plan requirements. MDOT Type 3A was required and Cape Cod Style was installed.

7. The rip rap pads at the culverts should be a minimum of 15" deep with a D_{50} = 6" stone size (median stone size). Some of the riprap appears too small and not deep enough. These should be repaired.

8. All culverts were to be Aluminized Type II or concrete. It is uncertain if they are aluminized or not. The Contractor should verify.

9. The finish course of paving should be placed.

10. The fence along the easterly boundary should be installed.

11. Record drawings should be completed by the Contractor and provided to the City for archiving.

12. The Contractor/Developer should provide a surveyor's certification that all property monumentation has been installed according to the plan.

13. The basketball court and chain link fence have not been constructed.

14. The sanitary manhole frame and cover at the end of Redlon Road (public way) should be adjusted as it appears to be too high.

15. Upon completion of the work, the Contractor should remove all temporary erosion control measures including silt fence, presuming the area is stabilized.

c: Tony Lombardo, Public Works
Todd Merkle, Public Works
Nancy Knauber, Public Works