

**JACKSON'S LANDING PARK  
PROPOSAL FOR IMPROVEMENTS**

**Prepared by the Jackson's Landing Committee  
September, 2006**

# JACKSON'S LANDING PARK PROPOSAL FOR IMPROVEMENTS

Prepared by the Jackson's Landing Committee  
September, 2006

## Table Of Contents

Executive Summary	3
Introduction	4
Purpose And Goals Of The Jackson's Landing Committee	5
Category 1. Engineering/Environment	6
Category 2. Site Planning / Landscape	10
Category 3. Architectural Plans	14
Category 4. Boating Issues	17
Category 5. Master Waterfront Plan for the Town	21
Master Plan Drawings	25
Estimated Cost for Phase I Projects – Categories 1-4	26
Potential Funding Sources For Jackson Landing Improvements	27
Action Plan – Timeline For JLC Recommends And Activities	27
Jackson's Landing Committee Members	28
Appendix	33
I. Summary of Recommendations	
II. Estimated Costs Section Engineering/Environment and Site Planning / Landscape	
III. Estimated Costs for Churchill Rink	

## Executive Summary

This report represents the best thinking of a broad cross section of Durham residents with regard to ways to upgrade the recreational potential of Jackson's Landing. The report also makes recommendations on methods to protect and enhance the natural resources on the site, especially in regard to reducing erosion from the driveway and parking area and accompanying sediment deposition into the tidal Oyster River during times of heavy precipitation.

These recommendations are broken down into 5 categories. These categories and the types of projects that are envisioned under each are:

- (1) **Engineering/Environment** - pave the roadway down to the water; construct underground treatment basins for surface runoff before it enters the River; create new parking across Old Piscataqua Road; improve the boat launch area, etc.
- (2) **Landscape/Site Planning** – create a more park-like feeling with green space, picnic shelters and benches; combine rowing/paddle boating/motor boating use with rental of paddle boats, sailboats, canoes and kayaks; create nature trails and a boardwalk across the salt marsh.
- (3) **Architectural Plans** – upgrade the Town ice rink; build a new two-story boathouse either at the Landing or on Arthur Grant Circle; construct a new skateboard park
- (4) **Boating Issues** - Improve the existing boat dock; construct a new boat dock to be accessible to individuals with disabilities; upgrade the existing boat-launching ramp
- (5) **Development of a Master Waterfront Plan for the Town** - Create some connectivity to other Town parks and to Town sites with a river-walk; improve awareness of the Landing's resources; generate new economic potential for businesses tied to recreational use of our water resources.

Each of these categories covers a description of issues and the current situation at the site, a complete description of suggested improvements as recommended by the public, committee recommended improvements/activities, and drawings and/or maps where appropriate. Estimated costs for the recommended improvements under Phase I projects are included at the end of the report.

Several categories are further sub-divided into to Phase I, Phase II and Phase III projects.

Tying this effort together are Master Plans/Maps that show where the recommendations in each sub-group would take place. These master plans/maps show specifics of what would be done under Phase I and under Phase II if/when sufficient funds are raised to do the work.

The Jackson's Landing Committee does not assume that improvements to the Landing will be funded entirely using tax dollars. Rather it is the intent of the Committee to seek support from a variety of different funding sources, including grants. If successful, the Town will undoubtedly be asked by the funding agencies/groups to provide in-kind work or money as part of a match. Examples of potential funding sources are provided at the end of the report.

## Introduction

Durham is fortunate to have a number of small waterfront properties close to each other and to the downtown area. Jackson's Landing is one of these properties having an area of approximately 12.8 acres. Over the years it has been used for a number of water-related activities. For example, the boat launch area is used regularly by the public for the input of kayaks, canoes and motorboats. In addition, the University of New Hampshire's rowing program and the Great Bay Rowing Club both operate out of a boathouse located at the Landing and both programs are growing in popularity. Ice fishing is a common winter activity. Others come down to the waters edge simply to enjoy the tranquility of the tidal waters and to view the rich and diversified number of plants and animals that call the river home.

Recreational activities not related to the Oyster River also take place at the Landing. Durham built its first outside town rink at the site in 1974. The current facility was completed in 1994, and a new playground facility was constructed on the bluff overlooking the river in 2000. It is clear, therefore, that the Landing has become an important recreational hub for our community.

But increased use and improvement of the Landing has taken place in piecemeal steps without a coordinated overview of how to maximize the recreational potential of the site. In addition, the relatively heavy use of the park has incurred the inevitable wear and tear that afflicts any such recreational property. Thus the recreational potential of the Landing is today a mere shadow of what it could become.

In addition, the exposed silt, sand and gravel of the roadway and parking/turn-around area have directly lead to erosion problems during heavy storm events. The eroded sediment has in turn caused environmental contamination of the River as was documented in the report "Feasibility Study for Re-Establishing a Navigation Channel in the Oyster River and Related Improvements of Wastewater Dilution. An even greater risk to the estuary would be a chemical spill of petroleum products or other chemicals. It is clear therefore, that something needs to be done to improve Jackson's Landing from a standpoint of both environmental and recreational perspectives.

## Purpose and Goals of the Jackson's Landing Committee

In September of 2005, Judith Spang and Dwight Baldwin came to Town Manager Todd Selig to request that they be permitted to submit a preproposal to the NHDES Watershed Assistance and Restoration Program for money to address contamination issues in the Oyster River created by sediment erosion at Jackson's Landing. The deadline for this submission was October 7, 2005. After much discussion between the Town and those proposing to submit the pre-proposal, it was decided that submission in 2005 was premature as there had not been a chance for all parties who might have an interest in upgrading the Jackson's Landing to join in the discussion.

The Town Council thus requested in October that a committee be established whose charge would be to devise a master plan for the development of a vibrant recreational waterfront resource at the Landing. The Jackson's Landing Committee (JLC) was charged with developing a report by late summer of 2006 outlining the group's consensus as to what could be done at the landing to enhance the recreational opportunities and minimize environmental degradation of the Oyster River. It was anticipated at that time that the Town would be in a position to submit a preproposal to the same DES grant program in October of 2006.

The first organizational meeting of the Jackson's Landing Committee was held on November 22, 2005. Anyone with an interest in developing ideas as to how to upgrade the Landing was invited to join the group. The following goal statement was adopted at the first meeting: To implement a master plan for Jackson's Landing that will improve recreation, aesthetics and community development benefits while protecting natural resources in the area.

In the end, a core group of approximately 18 people ( see listing of names in appendix) participated which included members from the Conservation Commission, Park and Recreation Committee, Public Works, Town Council, UNH, Great Bay Rowing and several interested residents. Members included professional architects, a planner, a civil engineer and a landscape architect. The JLC met regularly for almost a year. Fourteen formal committee meetings were held in addition to multiple small task group meetings. Two public meetings were held, one in February and one in September, 2006 to get input from the community at large.

This report represents, therefore, the best thinking of a wide cross section of the public with respect to the upgrading of the Landing. Recommendations for improvements have been divided into 5 categories: (1) Engineering/Environment; (2) Landscape/Site Planning; (3) Architectural Plans; (4) Boating Issues; and (5) Development of a Master Waterfront Plan for the Town. The last area (Number 5) was felt to be important because the Committee had to consider the appropriate use(s) of other waterfront properties owned by the Town when considering appropriate uses of Jackson's Landing. The format of each of these Categories has been kept the same so as to provide continuity. There is some overlap between Categories as the committee found it difficult to separate some activities to just one area.

## Category 1. Engineering/Environment Task Group

### Purpose

The Engineering and Environment Task Group addressed the varied environmental issues and engineering designs necessary to meet the Committee goals.

### Members

Members of the committee include Robbi Woodburn, Mike Sievert, Dwight Baldwin, and Jared Wright-Ward.

### Description of Issue and Current Situation:

The major issue of concern addressed by the committee is environmental quality at the Jackson's Landing recreation area. Currently, surface drainage from the entry drive and lower parking area flows directly across the site, scouring a swale across the gravel lot and down the boat ramp and depositing eroded soils and pollutants directly into the Oyster River. In addition, the large parking area so close to the water's edge brings added concerns of potential spills and other pollutants from vehicles.

In addition to environmental quality, functional aspects were addressed such as number and location of available parking spaces, the lack of accessibility to the docks and promotion of an environmental awareness.

### Public Input

Each category includes a list of suggested improvements which were identified at the February public input sessions or by the Jackson's Landing Committee. Attendees at the public meeting were asked to vote on their top five priorities that were developed at the brainstorming session. This vote ranged from a high of 19 to a low of 0 for any one item. JLC committee members then prioritized all items on a scale of 1 – 5.

The chart below lists the prioritized suggestions related to environmental and engineering issues.

Goal/Activity	JLC Avg. Rating 5=high	Public Votes
<b><u>Waterfront Aesthetics:</u></b>		
Erosion Control	4.7	
Fix boat ramp	4.1	4
Prevent paving and use only permeable surfacing materials	4.0	
Weigh access for people with disabilities. Seek grant funds from NH Disabilities Council to install same.	4.0	
<b><u>New Facilities/Infrastructure:</u></b>		
Add parking, particularly for ice rink – suggested	4.8	

expanding parking to across Old Piscataqua Road and put trailers there		8
Gain space by filling ravine between existing road to boathouse and playground	3.9	
<b><u>Social Issues:</u></b>		
Have an ecological/nature focus on project	4.4	
Include disability or universal access in design	4.1	
Assure access of people with disabilities to boat launch and restrooms	3.9	
Elevate environmental awareness: address concern that increased use could lead to more trash, additional chemicals/oil from motors/boats, etc.	3.7	5
Prioritize choices for site that comply with ordinances and represent suitable uses. Do not present hardship case to allow for other uses.	3.0	2
<b><u>Boating Issues:</u></b>		
Improve boat launch, e.g., fix ramp, add better dock that allows boaters to push boat on/off trailer, increase dock space so visitors may leave boats while visiting town, put it farther out, move it to east side of property	4.4	4
Improve universal access to boating	3.4	
Replace docks or build them out further into the channel	3.3	
Move boat launch to east side of property	3.3	

### **Recommendations**

The task group recommends the following steps to mitigate current poor environmental conditions on site:

1. Collect and treat storm water runoff from all pavements before its dispersal into the river.
2. Utilize erosion control methods to minimize future erosion of soils into the river.
3. Minimize the use of impervious pavements within the shore land setback zone.
4. Relocate parking in the boathouse area across Old Piscataqua Road, where runoff can be controlled and treatment methods established.
5. Restrict parking in the boathouse area for specific water related uses, and for parking for people with disabilities.

6. Upgrade the existing boat ramp to direct drainage back to the site, retain the sides of the ramp to protect against erosion of the banks, and repave the ramp itself in a non-asphalt material such as that recommended by NH Fish and Game.

7. Promote environmental awareness of the value of the Oyster River and its protection through the use of interpretative signs along trails and proposed boardwalk.

## Specifics

### **Parking**

The majority of the parking near the boathouse will be moved from the shore-land zone to areas further upland. The proposed Master Plan illustrates one new parking area on the north side of Old Piscataqua Road in Phase I of the project and a second new area to the east of the entry drive in Phase II. The Phase I parking area will have approximately seventy-one winter time spaces with eleven spaces reserved for boat trailer parking during the Spring and Summer months. Surfacing of these parking areas could be done in stages with gravel used in some areas and asphalt in others.

The Phase I parking area has been located where a small contained wetland currently exists (approximately .5 acres). This location is one of the very few flat areas on site and is directly across the street from the rink and the entry drive. The benefits of removing parking from the shore land zone far outweigh the impact of filling this small wetland area. In addition, the Landscape Task Group has made recommendations for the removal of the large area of fragmities, an invasive species, along the wetland and shore land edge near the boathouse. This removal and revegetation with native species would be a major step in mitigating the impact of the Phase I parking lot on the wetland. A portion of this parking also extends approximately ten feet into the fifty foot wetland setback of a larger wetland to the east. This lot will be paved in asphalt and sheet drained to treatment swales before the water makes its way to the adjacent wetland.

The Phase II parking area of twenty six spaces would be located adjacent and parallel to the entry drive between the rink and the boathouse. This parking area would provide direct upper floor access to the future Community Center/Boathouse illustrated in the Phase II – Option A Master Plan sketch. This lot would require a retaining wall and would extend into the ravine just behind the existing boathouse. This ravine also contains a small wetland that was most likely created or enlarged by the installation of a path and culvert near the northeast corner of the boathouse. As part of the parking lot construction, the path would be replaced with a boardwalk and the culvert removed allowing for the free flow of drainage through this area once again. As with the Phase I parking, the benefits of removing parking from the shore land zone and the drainage improvements to this area will outweigh the impact of the parking and retaining wall to this small man-made wetland. This lot will be paved in asphalt and drained into catch

basins. The drainage from this small lot will be treated under the parking lot with a stone treatment area before exiting into the wetland area.

### **Storm water Management and Erosion Control**

The existing entry drive will be paved with asphalt, but its shoulders will be one foot wide and two foot deep crushed stone trench drains with eight inch perforated PVC pipes at the bottom to collect and direct driveway drainage to a proposed underground stone treatment and detention area. A small twelve inch drain in a crushed stone basin will collect any uncollected surface drainage at the end of the driveway. This drainage will also be sent to the underground treatment area.

Once the driveway hits the flat open area of what is currently the boat ramp turnaround area, the pavement will change to a base of 1-1/2" crushed stone topped with 3" of 3/8" crushed stone. This area will have an under drain and will connect to the underground treatment area.

As part of the boat ramp improvements, the grade at the top of the ramp will be raised approximately one foot. This change in the grade will direct any surface drainage back towards the boathouse and onto the proposed lawn area.

In Phase I, all gravel surface to the east of the west edge of the boathouse will be removed and replaced with topsoil and seeding. Below this open grassy area will be the proposed underground two chamber storm water treatment area. Six inches of topsoil will cover three inches of 3/8" crushed stone over twelve inches of 1-1/2" crushed stone sitting on a layer of geotextile fabric. The topsoil provides the good base for the lawn. The 3/8" stone creates a natural filter for fines and the twelve inches of 1-1/2" stone is the treatment area. A berm of clay soils will separate each treatment cell which will be connected by one four inch outlet pipe. The second chamber will have an overflow pipe located at a midway elevation. This system allows storm water to be treated below ground, dropping out pollutants and particulate matter before it makes its way to the Oyster River.

### **Boat Ramp**

The current boat ramp is composed of deteriorating asphalt. Its banks are lined with grass and exposed soils. Drainage from the entry road flows unimpeded across the parking area and down the sides of the ramp scouring the sides and dropping eroded soils and pollutants into the river. As outlined above, the top of the ramp will be regraded to redirect drainage back towards the crushed stone turnaround where it will eventually percolate into the underground treatment area. The sides of the cut in the bank should be faced with a retaining material such as masonry or a boulder retaining wall backed with filter fabric for added soil retention. The ramp itself will be graded to a

maximum of twelve percent and paved with corrugated concrete to provide solid footing and discourage erosion.

### **Accessibility**

The Boating issues Task Group is working with Northeast Passage to plan for and provide accessible dock facilities as part of the proposed Master Plan. All pavements and grading will be designed to accommodate those with disabilities.

## **Category 2. Site Planning / Landscape Task Group**

### **Purpose**

The Site Planning and Landscape Task Group addressed the issues and ideas that will recreate Jackson's Landing into an inviting, aesthetically pleasing place for enjoyment and appreciation of the Oyster River and its natural environment.

### **Members**

Members of the committee include Robbi Woodburn, Mike Lynch, Dwight Baldwin, and Jared Wright-Ward.

### **Description of Issue and Current Situation:**

Following the public input meeting in February it became clear that the public wholeheartedly desires a "people-friendly park" along the Oyster River which provides an aesthetically pleasing place to enjoy the beautiful views, environmental and recreational opportunities provided by the river.

Both passive and active recreational activities were requested including picnic tables, benches, hiking trails, kayak rental and storage capabilities, skate board park and nature trail/boardwalk. The current location of the ice rink, play area and boathouse provide a perfect nucleus around which to build a recreational hub for the town that focuses on the Oyster River.

Others envisioned an environmental theme for the park that highlights the resources provided by the river and surrounding wetland.

Additionally, people envisioned adequate signage along Route 108 that indicates the activities available at the site. Increased accessibility was requested including sidewalk connections from town and the possibility of a bus stop. Enhanced accessibility for those with disabilities was also requested.

All these visions will combine to produce the aesthetically pleasing, active, yet peaceful venue for the residents of Durham that highlights our environmental resources, cultural history, centralizes our recreational activities and provides a richer identity to the town.

**Public Input**

The following table lists suggested improvements related to landscaping and site planning.

<b>Goal/Activity</b>	<b>JLC Avg. Rating 5=high</b>	<b>Public Votes</b>
<b>Waterfront Aesthetics:</b>		
Make it more of a park like feel with green space, picnic shelters and benches	4.9	
Make waterfront more "people-friendly", with a softer, more park-like feel	4.1	2
Prevent paving and use only permeable surfacing materials	4.0	
Weigh access for people with disabilities. Seek grant funds from NH Disabilities Council to install same.	4.0	
Install picnic tables by water	3.9	1
Increase "kid-friendliness", such as adding kayak classes, providing better/easier access to water that is less sloped and not near marshes	3.1	
<b>New Facilities/Infrastructure:</b>		
Add parking, particularly for ice rink – suggested expanding parking to across Old Piscataqua Road and put trailers there	4.8	8
Add benches, lighting and water fountain	4.0	
Gain space by filling ravine between existing road to boathouse and playground	3.9	
Add public restrooms (with shower) and improve existing ones, e.g., add mirror	3.8	4
Build skateboard park, blend in	2.9	6
<b>Recreational Spaces:</b>		
Create nature trail	4.7	10
More tree planting and landscaping	4.6	
Board walk/trail to east knoll to increase natural area. Include fitness stations	4.3	
<b>Social Issues:</b>		
Have an ecological/nature focus on project	4.4	
Tie together plans for all town-owned waterfront properties/parks	4.1	8

Include disability or universal access in design	4.1	
Assure handicapped access to boat launch and restrooms	3.9	
Elevate environmental awareness: address concern that increased use could lead to more trash, additional chemicals/oil from motors/boats, etc.	3.7	5
Create some connectivity to Town with signs, etc. – river walk feel	3.6	
Prioritize choices for site that comply with ordinances and represent suitable uses. Do not present hardship case to allow for other uses.	3.0	2
Improve awareness of site's resources and promote an outdoor, healthier lifestyle. For instance, encourage an anti-obesity theme. One idea was to add signage at Route 108 to advertise site to newcomers or town residents who are unaware of the site's attractions.	2.9	6
<b>Boating Issues:</b>		
Combine rowing/paddle boating/motor boating use with paddle boat rental and sailboat rental, kayak racks, lessons	4.6	19
Improve boat launch, e.g., fix ramp, add better dock that allows boaters to push boat on/off trailer, increase dock space so visitors may leave boats while visiting town, put it farther out, move it to east side of property	4.4	4
Expand current or build new boathouse, with good architecture	4.2	
Add signage regarding tides to aid boat launching and improve safety	3.5	
Improve handicapped access to boating	3.4	
Have kayaks racks available for residents.	3.4	
Replace docks or build them out further into the channel	3.3	
Move boat launch to east side of property	3.3	
<b>Ice Rink and ORYA:</b>		
Post signage indicating rink hours	3.4	
Create more space around the rink to make improvements	3.4	
<b>Miscellaneous:</b>		
Grade/fill gully to gain space	3.5	
Ensure access, e.g., bus, shuttle	2.9	

### Recommendations

1. Remove the majority of the parking in the boathouse area to upland locations closer to the ice rink allowing for more green space along the waterfront.

2. Minimize paved surfaces and allow access to the waterfront area for vehicles with boat trailers and parking for people with disabilities.
3. Reduce conflicts between boat ramp users and park users through adequate site planning. Create specific and clear boat trailer parking areas separate from boathouse loading areas and green space areas.
4. Provide safe, environmentally sound parking areas with easy pedestrian access to the whole site.
5. Create landscaped areas with lawn, trees, benches and tables that encourage sitting, picnicking and relaxing along the waterfront.
6. Remove the Fragmities that have invaded the wetland area immediately adjacent to the boathouse.
7. Connect all the varied places of the site with a walking trail and boardwalk system.
8. Rebuild the existing boat ramp to reduce its environmental impact and also to make it more aesthetically pleasing.
9. Add a new second dock for small watercraft and which will be accessible for those with disabilities and provide added launching space for anticipated growth in use of the park.
10. Create a signage system for the site to include identification signs at Route 108, directional signage at parking area and educational information throughout the site.

## **Specifics**

### **Parking**

As detailed in the Engineering and Environment Task Group report, the majority of the parking near the boathouse will be moved from the shore-land zone to areas further upland. This allows for more green-space waterfront. Depending on the option, boat trailer parking and accessible parking spaces for those with disabilities will be the only spaces provided at the lower area. As the amount of traffic using the lower portion of the site will be minimized, the existing entry drive will become a much safer pedestrian connection from the ice rink, playground and park lots to the waterfront. Signage indicating the pedestrian nature of the drive will be utilized to slow the traffic that does use this path.

### **Pavements**

The entry drive will be paved in asphalt to minimize ongoing maintenance costs and create adequate drainage as described in the Engineering and Environment Task Group report. The boat ramp turn around area will be paved with crushed stone and

under drained to an underground treatment (see Engineering and Environment Task Group report) area below the proposed lawn to the southeast of the boathouse. Both new parking areas will be paved with asphalt. The phase one parking to the north of Old Piscataqua Road will sheet drain to treatment swales before exiting into the adjacent wetland. The phase two parking area between the boathouse and the ice rink will drain into catch basins that will lead to an underground stone treatment area located within the retaining wall that separates the parking from the adjacent wetland area.

### **Landscaping**

In Phase I, the area to the south and east of the boathouse will be loamed and seeded to create a large soft lawn area illustrated in the Phase I master plan sketch. Benches and picnic tables, flanked by salt tolerant shade trees will surround this curvilinear lawn space providing shaded seating overlooking the river.

The large area of Fragmities (an invasive grass) adjacent to the boathouse in the wetland area is to be removed and replanted with more appropriate native wetland plantings.

Both parking areas will be planted with shade trees as is required by the Town of Durham.

A lighted flagpole will be located at the end of the peninsula adjacent to the boat ramp.

### **Signage**

A system of aesthetically pleasing signs is recommended to provide direction and interpretation of the varied assets of the site. It is important that residents of Durham know the site is there and ready for their use. They need to know where to go when they arrive and that, as they use the site, they become aware of the history and ecological value of this beautiful natural resource.

### **Trails**

A proposed hiking trail/ boardwalk will provide an opportunity to educate the public regarding the environmental aspects of the site as well as a little bit about the history of the land itself.

## **Category 3. Architectural Plans**

### **Task Group: Architecture/Engineering**

This group considered enhancements to existing structures and the design and costs associated with new facilities that would provide safe and enjoyable recreational buildings for Durham residents.

**Task Group Members:**

Jared Wright-Ward, Mike Hoffman, Mike Mullany, Richard S. Szilagyi and Nick Isaak.

**Description of Issue and Current Situation:**

The group explored ways to improve the two main buildings currently occupying the site, Churchill Rink and the Durham /UNH boathouse. Both buildings are extensively used, and are in need of repair, expansion and improvement. Also, thought was given to the design of the new boathouse to include bays for the storage of boats as well as rest rooms and activity rooms on the second floor.

**Public Input**

The chart below lists the suggested improvements related to environmental and engineering issues.

Goal/Activity	JLC Avg. Rating 5=high	Public Votes
<b><u>New Facilities/Infrastructure:</u></b>		
Add parking, particularly for ice rink – suggested expanding parking to across Old Piscataqua Road and put trailers there	4.8	8
Gain space by filling ravine between existing road to boathouse and playground	3.9	
Add public restrooms (with shower) and improve existing ones, e.g., add mirror	3.8	4
Build recreational center (with offices, multipurpose room, meeting/activities room	3.7	4
<b><u>Boating Issues:</u></b>		
Combine rowing/paddle boating/motor boating use with paddle boat rental and sailboat rental, kayak racks, lessons	4.6	19
Promote UNH/Town partnership	4.6	2
Improve boat launch, e.g., fix ramp, add better dock that allows boaters to push boat on/off trailer, increase dock space so visitors may leave boats while visiting town, put it farther out, move it to east side of property	4.4	4
Expand current or build new boathouse, with good architecture	4.2	

## **Recommendations - Architectural Plans**

### **Churchill Rink Enhancements**

Churchill Rink has a long list of possible improvements so the project was divided into three phases. The first phase concentrates on safety concerns, and expanding the ORYA office space. The second phase relocates the locker rooms; The final phase deals with personal comfort by adding bleachers, closing in the rink and adding heating and insulation.

#### **Phase I**

- 1) Move zamboni room to northeast corner
- 2) Relocate heating units to northeast corner
- 3) Use existing zamboni room as storage room for ORYA
- 4) Add on to existing office space to include new entrance to the ice rink and expanded office space for ORYA

#### **Phase II**

- 1) Relocate/build new locker rooms

#### **Phase III**

- 1) Add bleachers at northwest corner
- 2) Add walls and insulation to completely enclose the arena
- 3) Add heating units for new bleachers

### **Durham/UNH Boathouse (New Construction)**

- 1) Raise old building and erect a new boathouse

After careful consideration the committee recommends the existing boathouse be demolished and a new building be erected that would meet the needs of Durham's burgeoning waterfront community.

Our vision is that this would become a multi-use facility that would serve as a home for water sports equipment like kayaks, canoes, and racing crew boats for Durham boat clubs and UNH. The new second floor could be used as a community center and for other town related functions. This space might also be open to revenue generating activities like wedding receptions, company functions, and private parties.

Features would include four 80' x 25' bays for storage of crew racing boats and a smaller 40' x 25' bay for kayaks and canoes that could be rented by Durham residents. The second floor amenities would include restrooms/changing rooms, activity room, veranda, storage room, porch, office spaces, and a kitchen.

**Drawings**

See Attached

**Estimated Costs**

See estimated costs in appendix

**Category 4. Boating Issues**

**Purpose**

The Boating Issues Task Group addressed the concerns of the boating community.

**Members**

Members of the committee include Pete Cathey, Marc Lessard, and Laurie Potter.

**Description of Issue and Current Situation:**

The major issue of concern which influenced the work of this task group was the need for is continued and improved access to the waterfront at Jackson’s Landing. The channel in the river is silting in, reducing access to the river during low tides. Access to the river for rowing and power boating is constricted to a seven hour window around high tide, whereas for canoes or kayaks, the river is accessible at all times if the paddler knows and respects the river channel. Erosion issues and environmental degradation mitigation is addressed in other task group reports, but many recommendations of this task group presume that the restricted access due to siltage will be arrested or reversed.

Thus, in addition to support for dredging the river to eliminate the tide’s affect on access for motor boats and rowing shells, the group examined other needs such as a canoe/kayak/paddle boat rental program in conjunction with UNH, improvements to the existing UNH/public boathouse which could accommodate both additional boat space and offices/multi-purpose room, an adaptive boating program, new parking configuration (including spaces for boat trailers), repair to the boat launch ramp, improvements to and possible relocation of the docks, and promotion of boating and river safety through posting information such as the tide schedule, boat launch schedule, and boater safety warnings.

**Public Input**

The chart below lists the suggested improvements related to boating issues.

Goal/Activity	JLC Avg. Rating 5=high	Public Votes 0 - 19
<b><u>Waterfront Aesthetics:</u></b>		
Fix boat ramp	4.1	4

Weigh access for people with disabilities. Seek grant funds from NH Disabilities Council to install same.	4.0	
Increase "kid-friendliness", such as adding kayak classes, providing better/easier access to water that is less sloped and not near marshes	3.1	
<b><u>New Facilities/Infrastructure:</u></b>		
Build recreational center (with offices, multipurpose room, meeting/activities room)	3.7	4
<b><u>Recreational Spaces:</u></b>		
Accommodate fishing	3.0	1
<b><u>Social Issues:</u></b>		
Include disability or universal access in design	4.1	
Assure handicapped access to boat launch and restrooms	3.9	
Prioritize choices for site that comply with ordinances and represent suitable uses. Do not present hardship case to allow for other uses.	3.0	2
<b><u>Boating Issues:</u></b>		
Combine rowing/paddle boating/motor boating use with paddle boat rental and sailboat rental, kayak racks, lessons	4.6	19
Promote UNH/Town partnership	4.6	2
Dredge river to maintain and improve water-based uses	4.4	10
Improve boat launch, e.g., fix ramp, add better dock that allows boaters to push boat on/off trailer, increase dock space so visitors may leave boats while visiting town, put it farther out, move it to east side of property	4.4	4
Expand current or build new boathouse, with good architecture	4.2	
Add hardware to docks (cleats, etc.)	3.9	
Provide tidal information on sign to aid boat launching	3.9	
Mark channel of river	3.6	1
Add signage regarding tides to aid boat launching and improve safety	3.5	
Improve handicapped access to boating	3.4	
Have kayaks racks available for residents.	3.4	
Replace docks or build them out further into the channel	3.3	
Move boat launch to east side of property	3.3	

<b>Miscellaneous:</b>		
Improve relationship between town and UNH sports to coordinate recreational uses at one facility, such as boating and other outdoor lifestyle choices	4.2	5

### **Recommendations – Boating Issues**

As part of the master plan effort, the task group recommends the following steps to improve recreational boating at the Landing:

1. Arrest or reverse silting in of the river to allow boating to continue at Jackson's Landing.
2. Promote recreational boating through introduction of a rental program for kayaks, canoes, and potentially paddle boats. Program would be a joint effort between the town and UNH.
3. Ensure the recreational boating program is accessible to all people and promotes adaptive programming.
4. Expand or replace existing boathouse to accommodate growing demand for boat housing. New boathouse should include office space for boating program administration (including canoe/kayak/crew needs), bathrooms, and indoor workout space for crew teams, and potentially community room that could be used by the town or rented for parties to generate revenue for the facility.
5. Improve the existing boat ramp and mooring facilities.
6. Create adequate space for boat trailer parking in relocated parking once boathouse area parking is converted to green space.
7. Improve/add signage about boater safety, tide schedule, and boat launch details.

### **Specifics**

#### **Improved Recreational Boating Programming**

The task group recommends expansion of the current programming which includes the UNH crew team, a community rowing program (Great Bay Rowing) to add canoe and kayak rentals, an adaptive canoe and kayak program, and potentially paddle boats.

UNH currently has about two dozen canoes and kayaks that could be made available for this programming, and is willing to discuss its role in staffing a program. The program would be similar to the amenities at Mendum's Pond.

### **Improved Boathouse**

The Boating Issue Task group notes that current boathouse space does not house all existing equipment, training needs or administrative function for the three rowing programs now using the current boathouse. As a consequence, the Town Council approved a temporary tent in the spring 2006 for the storage of small boats. It is clear, therefore, that the current space would be inadequate to serve the canoe/kayak rental program discussed above.

Thus the Task Group recommends that the Town consider the replacement of the current boathouse with a structure, which would meet the growing boat-storage requirements at the Landing (see drawings in Category 3 – Architectural Plans). Not only would this new structure provide the space needs for boating-related activities, but would also provide the Town some meeting rooms on the second level which could be used for municipal functions or leased for private functions thereby generating some revenue. The Task Group favors building the new facility at Jackson's Landing if the river channel was deepened. If dredging were not possible, then the Group recommends construction at the proposed Durham business park on the Arthur Grant Circle where the window for launching boats is wider because of deeper water. Cost for construction of this new facility would be significant, and the Task Group anticipates the launching of a capital campaign to help raise these funds.

### **Dredge River**

A significant factor that affects discussion of recreational boating potential at Jackson's Landing is the limited access to the river because of shallow-water conditions. Currently the boaters launching powerboats and the rowing teams are only able to during a seven-hour window around the two daily high tides. This window has been drastically reduced over the past twelve years, and will continue to narrow if the problems of siltation are not addressed. Thus, to maximize boating use of the river and to justify the construction of a new boathouse at Jackson's Landing, the channel must be dredged.

### **Boat Ramp**

The current boat ramp is discussed in other committee reports from an environmental perspective. However, for boaters, this committee recommends additional improvements. There should be: (1) a dock alongside the ramp to permit boaters to launch boats without entering the water; (2) additional dock space or mooring sites for visitors to temporarily leave boats; and (3) additional and better cleats for securing boats.

## **Adaptive Boating**

As part of their mission, the UNH-based Northeast Passage promotes opportunities for individuals with disabilities to enjoy outdoor recreation. The program is part of UNH and is interested in opportunities at the Landing to promote boating for adaptive boaters.

## **Signage**

Some signs currently exist at the site, prompting visitors to remove their trash and describing the length of the pavement for the boat ramp. A public information board is installed outside the boathouse door. All signage would benefit from improvements.

The committee recommends construction of a small kiosk or installation of bulletin boards on the new boathouse that holds updated tide calendars, emergency numbers, posters describing boat safety and steps boaters can take to minimize introduction of non-native species into the river. Signs describing where boat trailers should be parked in the new parking areas as described in the other committee reports will also be needed.

## **Category 5. Development of a Master Waterfront Plan for the Town**

### **Purpose:**

This Category is intended to look at Jackson's Landing from a broader context, and consider how improvements there could be planned so that they compliment other town sites.

### **Task Group Members:**

Nick Issac, John Parry (with Parks and Recreation Committee input)

### **Description of Issue and Current Situation**

Durham is blessed to have a number of small waterfront properties in close proximity to each other and to downtown Durham. These areas include Wagon Hill Park, Grant Circle, Jackson's Landing, Old Town Landing, Mill Pond, the Milne Property and the Mill Pond Center for the Arts (privately owned).

There exists a significant opportunity to link these parks to each other, our downtown, business areas, residential neighborhoods and the University. Creating a better connection between these parks and other areas would have many benefits, such as better access to the waterfront for recreation, a significant attraction for visitors and

business patrons and increased cultural opportunities. Unfortunately these sites are underutilized and the potential for them to be an environmental, cultural and economic asset has not been a priority.

In addition to these opportunities for connections, there is a need to coordinate and balance uses on the various sites to insure that these uses compliment each other, and that each site is used in an efficient and appropriate way, while also protecting the natural resources on each site.

**Public Input:**

The following table lists suggested improvements related to waterfront master planning issues.

Goal/Activity	JLC Avg. Rating 5=high	Public Votes
Consider Old Town Landing for some of these uses.	2.8	
Tie together plans for all town-owned waterfront properties/parks	4.1	8
Include disability or universal access in design	4.1	
Create some connectivity to Town with signs, etc. – river walk feel	3.6	
Improve awareness of site's resources and promote an outdoor, healthier lifestyle. For instance, encourage an anti-obesity theme. One idea was to add signage at Route 108 to advertise site to newcomers or town residents who are unaware of the site's attractions.	2.9	6
Promote UNH/Town partnership	4.6	2
Dredge river to maintain and improve water-based uses	4.4	10
Improve boat launch, e.g., fix ramp, add better dock that allows boaters to push boat on/off trailer, increase dock space so visitors may leave boats while visiting town, put it farther out, move it to east side of property	4.4	4
Mark channel of river	3.6	1
Use ice arena more in off season – create more community interaction	3.9	
Improve relationship between town and UNH sports to coordinate recreational uses at one facility, such as boating and other outdoor lifestyle choices	4.2	5
Ensure access, e.g., bus, shuttle	2.9	

## **Recommended Improvements/activities:**

### **Promote Linkages Between Town Properties and Key public Areas are;**

1. Create an "Oyster River Greenway" plan which shows a walking & bike trail system connecting these parks with each other, downtown and key neighborhood access points. A logical corridor currently exists for this which could be enhanced (see Map).
2. Place signs at key locations, which would include maps showing the greenway within the larger context of Durham (to help visualize connections). Signs would also include historical and environmental interpretation. Place signs on Main St. to direct people to parks.
3. Install a designed walkway with landscaping and benches to create a feeling of connectivity along the route.
4. Design linkages between sites so that they are bike friendly. Extend sidewalk all the way to the ice rink (it currently ends on Main St.). Place bike racks at each site.
5. Create a walking/bike trail from Jackson's Landing to Arthur Grant Circle along the town right of way adjacent to Rt. 4.
6. Establish a Wildcat Transit Stop and shelter at Jackson's Landing.

### **Enhance water connections between these sites by making improvements that enhance boating.**

1. Place signs at logical waterfront docking/landing points at each site that identify the parks and show connections.
2. Improve boat docks to make docking more efficient for canoes, kayaks and motor boats.
3. Creating docking space so that people could dock, use park, use facilities, walk into town to visit businesses, etc.
4. Improve boating accessibility by marking the river channel and providing information on tides and access points. Such improvements would help to attract boaters, and bring economic benefits to Durham.

### **Continue Planning Efforts to Strengthen Partnerships and Linkages**

1. Explore new and creative uses, partnerships, etc. at Jackson's Landing and other sites to attract new users and generate support and income (Example; strengthen

partnerships with UNH, Use the ice arena for off season events such as hosting the farmers market).

2. Promote the capital improvement plan developed for gasoline alley which proposes improvements along this corridor. These improvements could also enhance the connection between Jackson's Landing and Downtown.

3. Develop a plan for each park to better coordinate and balance uses on the various sites to insure that these uses compliment each other.

4. Inventory, plan and maintain all trails in Durham to create walking/biking linkages between key residential and use sites

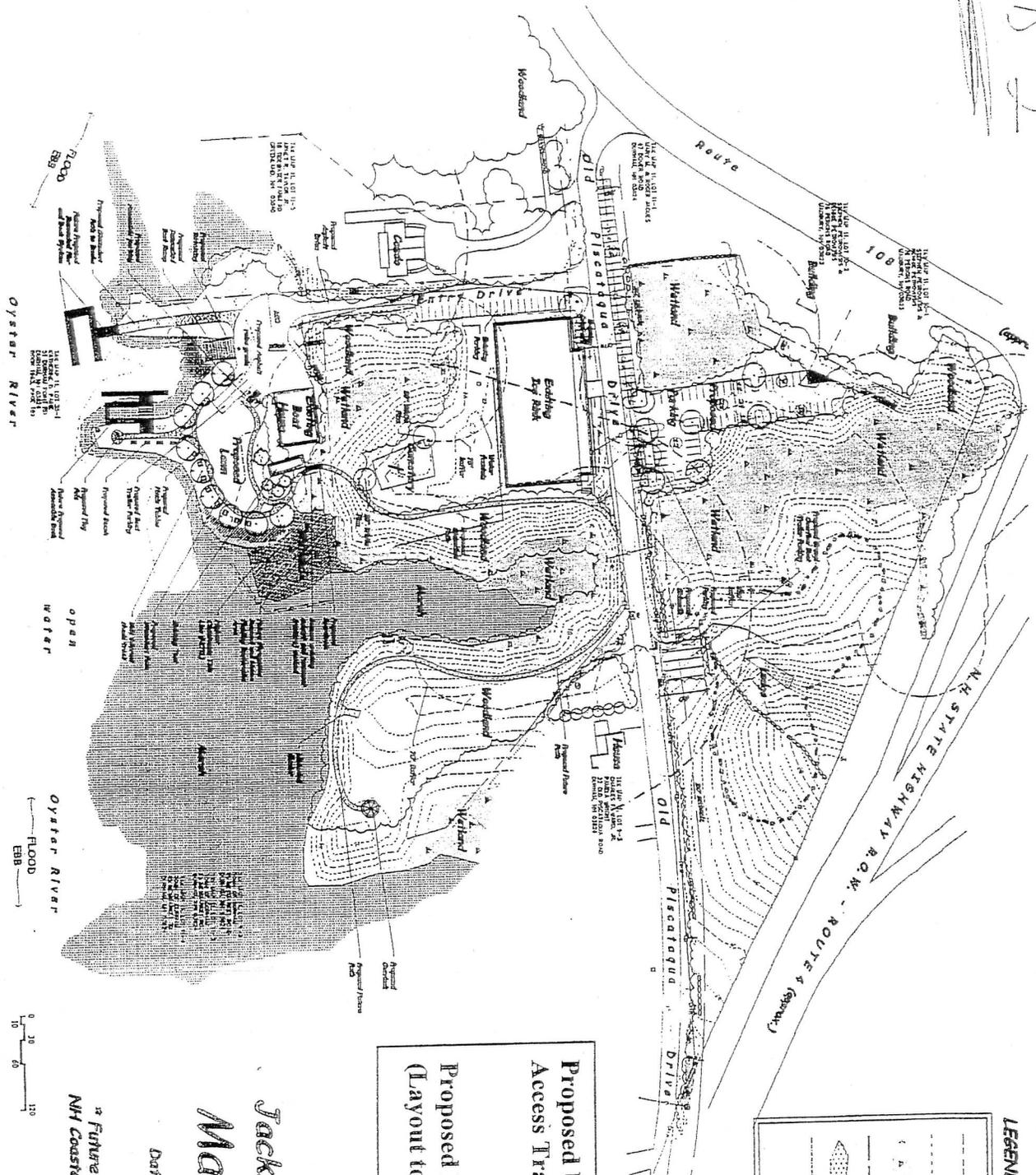
5. Emphasize the need to include Durham's water-front Parks in the upcoming Town Master Plan revision to enhance recreational use, improve economic development, and to ensure that these town properties receive the necessary financial resources to maintain them.

**Drawing/Map**

See Attached

## Master Plan Drawings

FIELD 2



**LEGEND**

	70' Buffer (Perch)
	Vertical Edge
	Vertical
	200' Shoreland Zone (Perch)
	Marsh
	Highwater Observance The Line (0071)
	Open Water

**Proposed Universal Access Trail**

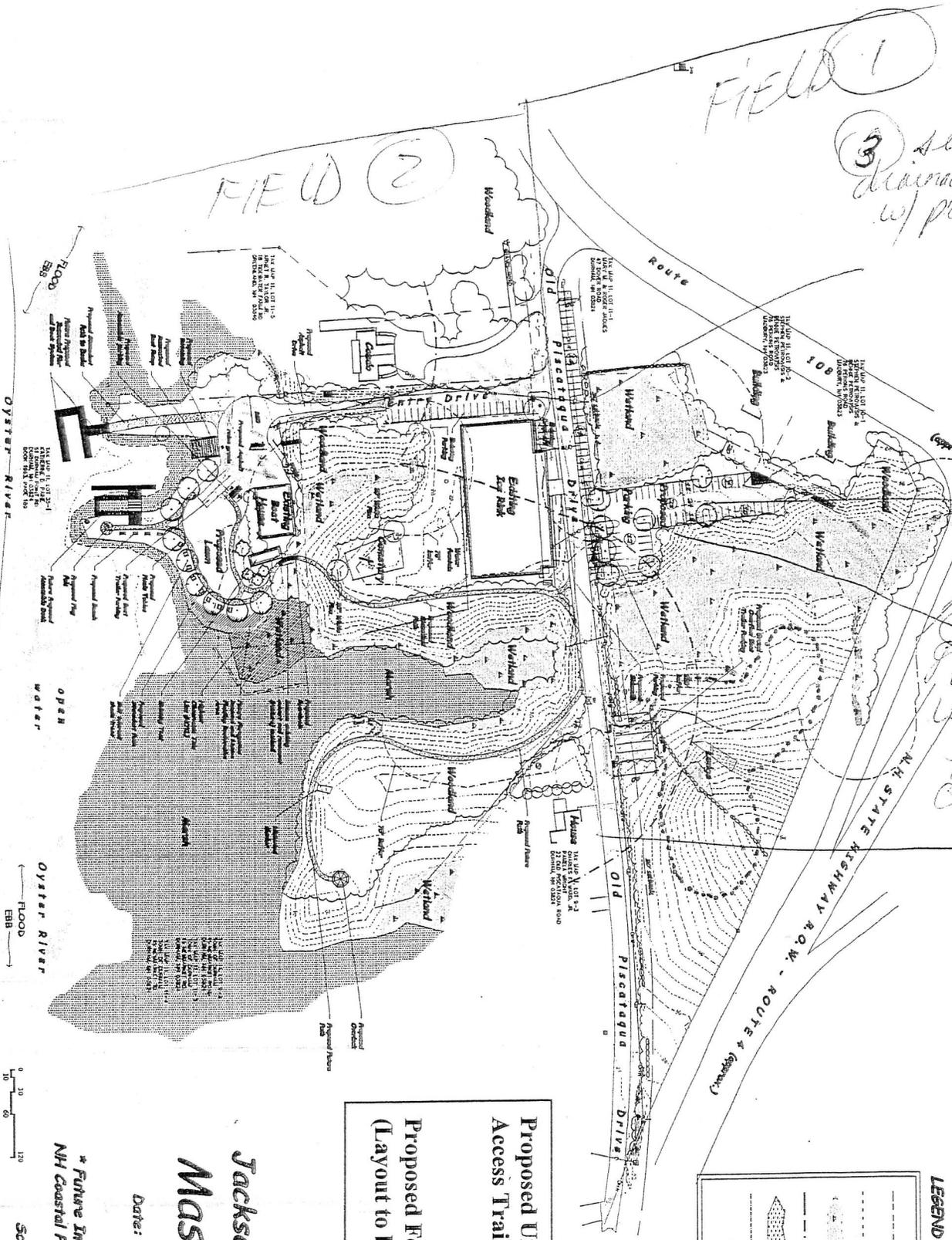
**Proposed Footpath**  
(Layout to be determined)

**Jackson's Landing Master Plan**

Date: February 5, 2007

*Future Improvements not part of NH Coastal Program Grant Application*

Scale: 1"=60'-0"



FIELD 1

FIELD 2

3 sub-surface drainage area w/ pavement

1 HVA new parking area

2 grassed w/ or lined w/ for runoff control

**LEGEND**

	75' Buffer (Overbank)
	Wetland Edge
	Wetland
	500' Structural Zone (Overbank)
	Marsh
	Lightest Obstructions 750 lbs (20713)
	Open Water

**Proposed Universal Access Trail**

**Proposed Footpath** (Layout to be determined)

**Jackson's Landing Master Plan**

Date: February 5, 2007

\* Future Improvements not part of NH Coastal Program Grant Application

Scale: 1"=60'-0"

