Creating a Community Vision for the Future of Mitchell Field

The Mitchell Field Master Plan - Summary
September 13, 2007

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Architecture | Community Design | Preservation

Background Brief:

Mitchell Field is "the most priceless piece of real estate that the Town has."[1]

Deliberations over the future of Mitchell Field have been ongoing since the Town acquired the property in 2001. Past recommendation have been forthcoming the Harpswell Conservation Commission, the Recreation Committee, the Affordable Housing Committee, and others. Although each past effort has been worthy and represent much work from interested citizens, none have taken a holistic view of the future of the overall site.

The Mitchell Field Committee (MFC) was established by the Town to oversee a Master Planning process that incorporated vigorous community input to create a comprehensive community vision for future development at this precious civic asset.[2] The MFC has been respectful of past planning efforts and has sought to understand past recommendations as part of their deliberations. The MFC has also sought to bring a "fresh look" to Mitchell Field and began soliciting community input in the summer of 2006 with a survey that recorded ideas from nearly 100 citizens. Work proceeded through most of 2006 and winter '07 with careful review of environmental and physical conditions of the site. The MFC and town staff worked carefully with staff from the Maine Department of Environmental Protection to understand opportunities and constraints of the property.

This background effort by the MFC formed a foundation to launch an intensive community planning effort in spring, '07. The Town selected a proposal from planning consultant *Holt & Lachman Architects + Planners* in spring, '07 to assist the MFC and town staff in this effort. During the summer of '07 the MFC and town worked with the consultant and sponsored a series of informational public meetings, interactive public forums, and an all-day community design workshop to inform, involve and incorporate public opinion in drafting the Master Plan that is presented here. *[See Overview of the Planning Process for more information about these meetings. More complete descriptions and findings from the public process are included in various Appendix reports, attached]*

The Recommendations outlined in this Report are the result of this two year process. The recommendations strive to balance a variety of interests including: public access to the waterfront and passive recreation opportunity for citizens; potential for a public boat launch and other future marine opportunity for the public; appropriately scaled and designed mixed-income housing development; and opportunity for marine related businesses. The Master Plan provides a conceptual framework and schematic site plan for integrating these uses. The Plan is not prescriptive; implementation of any segment of this plan will require further design development, policy decisions, and review by the town and public.

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[1] Selectman Chatterjee during Select Board meeting of July 20, 2006, according to Town minutes

[2] "The mission of the Mitchell Field Committee shall be to develop a comprehensive master plan for the Mitchell Field. Specifically, the Committee shall advise and work with the town planner and professional consultants to promote and ensure maximum public participation in the creation of the master plan. The master plan shall include proposals for the former Navy housing, the pier, the water tower and any existing buildings or structures as well as all open space, fields and wooded acreage." – as updated on 5/03/07

Principles for Development:

The following Principles for Development of Mitchell Field were informed by community participation at Forum # 2 and at the Community Design Workshop. *[See Appendixes B and F for further information]*

- Any development on the site, public or private, should leave the vast majority of the parcel in public, open space for passive recreation
- Any private development on the waterfront will be balanced by opportunity for public use and public access
- Involve citizens in every step of the decision-making process
- Promote public access to the water
- Maintain options for future generations
- Develop with sensitivity to the environment
- Balance economic development and conservation
- Mix of development should pay for itself or add to tax base
- Foster community cohesion

General Considerations to site development:

The following General Considerations were informed by community participation, especially from the Community Design Workshop. *[See Appendixes D, E, H, and I for further information]*

- Maintain a buffer between abutters and Mitchell Field
- Any development of marine businesses on the waterfront must share the deepwater access with opportunity for public use
- Protect and enhance public access to the beach area to the south of the pier
- Keep fields between the road and waterfront largely open and undeveloped – for passive and light intensity recreation use
- Promote shared uses of infrastructure (i.e., development of septic systems, parking, etc)
- Defer investments (for improvements or demolition) into the pier structure until a specific use warrants such an investment
- Reserve the perimeter road as a primarily pedestrian recreation path. Occasional vehicle use for property maintenance and emergency access would be allowed.
- Any building development, public or private, should be reviewed for architectural compatibility to the surrounding context

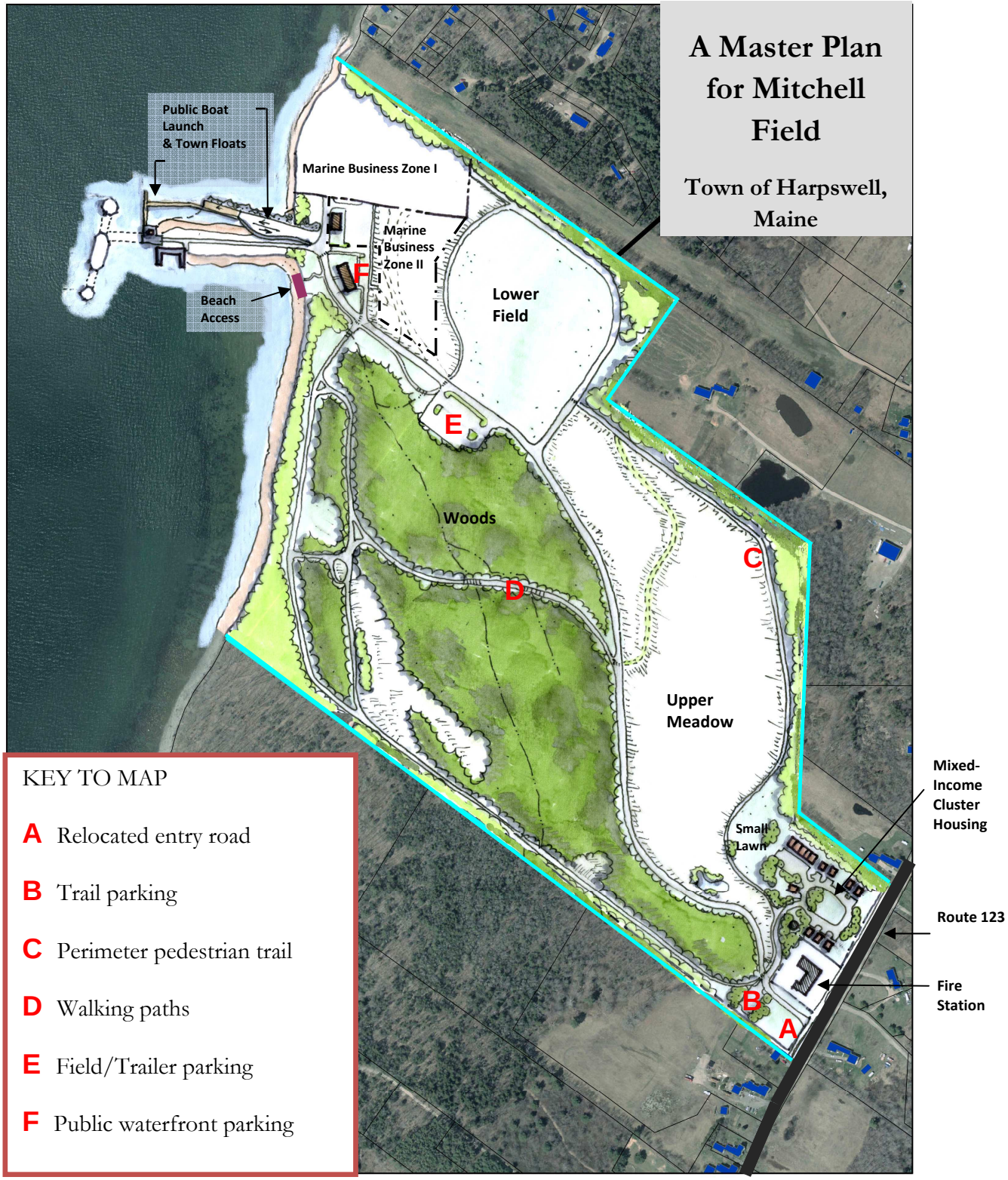
Desired Uses:

The following uses were informed by community participation, especially from the Community Design Workshop. *[See Appendixes D, E, H, & I]*

- Open space, trails, and passive recreation
- Public access to the waterfront for recreation
- Opportunity for public boat launch
- Public parking for recreation and waterfront access
- Cluster housing development for mixed-income (market and "workforce" housing[3])
- Opportunity for a marine related businesses

[3] 2006 median price home in Harpswell, or market-rate, was $335,000. "Workforce" housing is generally termed affordable for the median income for a community, based on percentage of income. For Harpswell, an affordable home for a median income family (@ $43,930 in 2006) would be priced at $154,000.

Overview Map



Overview of Mitchell Field Master Plan:

From Map Key:

A. Relocate Entry Road
   - Entry road is relocated to the south of the Fire Station, allowing better site lines at Route 123, and providing land area to the north of the Fire Station for housing development.

B. Trail Parking Area
   - Paved parking area allows for public access when Mitchell Field is gated from traffic.

C. Perimeter Trail
   - The existing perimeter road is primarily used as a non-motorized recreation trail. Where the existing perimeter road is interrupted (e.g., with development of the cluster housing), a new 12' wide perimeter recreation trail would be constructed to maintain continuity.

D. Walking Paths
   - Informal foot paths requiring minimal maintenance.

E. Field/Trailer Parking
   - Gravel parking in current parking area for both vehicles and boat trailer parking.

F. Public Waterfront Parking Area
   - Public parking adjacent to existing building (# 126). The building could be developed for public use such as bathrooms, storage of maintenance equipment, and vending.

G. Public Access to Beach
   - Pedestrian ramp provides safe access to beach area and provides a carry-in for kayakers.

❖ Small Lawn
   - A small lawn behind the housing development (which also serves as a common septic field) gives citizens a picnic/play area close to the head-of-trail parking. Lawn receives upgrades and regular mowing to provide public picnic/play/gathering area.

❖ Woods
   - Woods, approximately 40 acres, remain underdeveloped with informal walking trails.

❖ Upper Meadow
   - Upper Meadow is maintained in current condition. Spot grading/filling may be indicated.

❖ Lower Field
   - Lower Field receives minimal mowing/maintenance to provide area suitable for informal recreation. Spot grading/filling/loam/seed may be indicated. (e.g., picnics, Frisbee, etc.)

❖ Mixed-Income Cluster Housing
   - The Mixed-Income Cluster Housing area is approximately 4 acres. Both detached single family houses and townhouses dwellings provide a variety of housing types.

❖ Public Boat Launch Facility
   - Boat launch to north of causeway takes advantage of existing infrastructure for public access.

❖ Public Floats & Pier
   - The Pier upgrades includes minor repairs to the causeway, renovations to a portion of the pier (including restoring a utility shed), and installation of a float docking system. The main pier is gated to defer expensive repairs while keeping the pier for potential future use.

❖ Marine Business Zones
   - Zone I sets aside approximately 5 acres for a large marine business opportunity
   - Zone II sets aside approximately 4 acres for an additional marine business opportunity.

Roadside Development / Mixed-Income Cluster Housing:

Please Note: Site plan above is conceptual only and meant to illustrate how housing could be clustered on the site. Alternative housing arrangements are possible.[4]

1. Relocated entry Road provides better site lines to Route 123 and consolidates land for housing development.

   1.1. Requires construction of 650 linear feet of new road. This expense should be the responsibility of the housing developer as part of a negotiated land-lease agreement.[5]

[4] The master plan process explored two other alternative arrangements for cluster housing (See Appendix K).

[5] See Probable Costs Section at the end of this report for all costs and suggestions for responsible parties.

2. Trailside parking for 20 cars.

   2.1. Asphalt parking near road and at starting point for the loop trail gives citizens access to Mitchell Field, even when gates.

3. The gate allows that Mitchell Field could be closed to vehicles while still giving access to the housing development.

4. New entry road is designed to bypass the pump house (building # 161) which received recent updates including new power and water connections to wells/tower. This structure may serve an eventual water distribution system.

5. The Perimeter Trail (adjacent to the Public Lawn) is a new 12' wide (minimum) hard surface recreation trail that connects to the existing perimeter road. Construction of the common septic system/public lawn behind the cluster housing development will require demolition of approximately 500 linear feet of the existing perimeter road, and conversely, construction of approximately 500 linear feet of new perimeter trail. It is recommended that the cost of both demolition and construction of this segment of the perimeter trail would be the responsibility of the housing developer.

6. The housing access road provides access to the cluster housing development. The road curves into the housing site to maintain a sense of privacy to home dwellers. An ample easement and buffer is provided to the existing water tower to allow the town to access the tower for testing/maintenance.[6]

7. The Mixed-Income Cluster Housing Development is concentrated on approximately 4 acres of land, including the approximate 1 acre easement for development of the septic field.

   7.1. This schematic site plan shows how a densely developed cluster housing development could provide a mix of housing types (townhouses and small, detached single family houses) to provide a range of affordability and life-style choices. House lots are small (approximately 4,000 square feet), as are building footprints. Houses face a central common/green to reinforce the sense of neighborliness and reflect a traditional New England form that blends well with the surrounding community. The relative density of the housing provides for efficient use of land, and lower site development and common infrastructure costs, helping to maintain affordability. Appropriate design guidelines ensure that development is compatible with surrounding context.

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[6] Review of existing documents by engineers at SYTDesign indicates that the water tower appears to be in serviceable condition, although this would need to be verified by extensive field testing and inspections. This testing and verification was outside the scope of the Master Plan study. It is recommended that the town pursue testing at an appropriate time as development proceeds at Mitchell Field.

Mixed-Income Cluster Housing – General Considerations

The Harpswell Comprehensive Plan recognizes and commits to meeting the challenge of affordable housing, and sets the goal of providing 5 to 10 units of affordable housing per year.[7] The concern for affordable housing was also heard throughout the Mitchell Field planning process, and most people supported inclusion of affordable/mixed-income housing. *[See Appendixes E & G for more information]*

The cluster housing schematic for Mitchell Field provides 14 dwellings on approximately 4 acres, with 50% open/common space. Appropriate site plan standards should be developed or adopted from cluster development ordinances to guide planning and review of potential development.[8]

Policy Considerations:

It is beyond the scope of the Master Plan to set policy on a range of issues, including housing. The Town should establish policy to determine the range and terms of affordability and types of ownership that it wishes to promote with Mitchell Field. For instance, these might include that 50% of the houses are affordable for median income residents and that 50% be sold at market rate; or that the single family homes provide ownership opportunity, and the townhouses are rentals. Additionally, the Town should set policy on whether the land for housing, or any other function, should be sold outright, or leased to developers. Even if the master plan is adopted, the Town will have to establish a new process to establish policy to guide development and negotiations, and all subsequent proposed policy should be reviewed and approved by the public.

Design Considerations:

Architectural Design Guidelines should be developed to ensure that the housing development is compatible with the surrounding community. Though detailed design guidelines are beyond the scope of the Mitchell Field Master Planning process, some overview design guidelines would likely include:

- Common front yard setbacks that keep houses close to the road
- Inclusion of front porches and requirements that main entries face the common areas
- Specification of traditional forms in roof pitch, proportional dimensions of windows.
- Specification on using traditional building materials (or materials that are compatible with traditional materials)
- Covenants that control style and heights of fences, out buildings, and outside improvements to ensure development of a cohesive neighborhood

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[7] In 2006 the median income in Harpswell was $45,930, yet the median sales price of a home was $335,000. According to guidelines, an affordable house price for someone earning Harpswell's median income would be $154,000. By this standard, 90% of all homes sold in Harpswell that year were unattainable by the median income earner. (Information from the Maine State Housing Authority). For further reading about housing needs in Harpswell, see Harpswell 2005 Comprehensive Plan, Part 1, pages 33-36

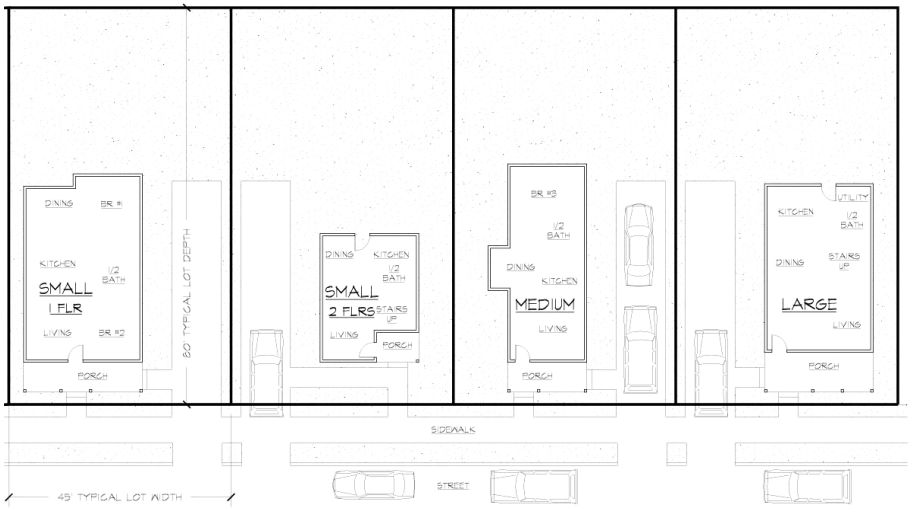
[8] Holt & Lachman Architects + Planners developed a cluster zoning provision which was adopted by the City of Augusta, Maine in 2006. This ordinance, or the cluster model ordinance developed by GrowSmart of Massachusetts, provides examples of site plan standards that could be appropriate for Mitchell Field.

Design Considerations – illustrated:

i. Central Green and Common Open Spaces

Homes surround a central common/green to provide a traditional village character to the development.

ii. Lot sizes and relationship to the street



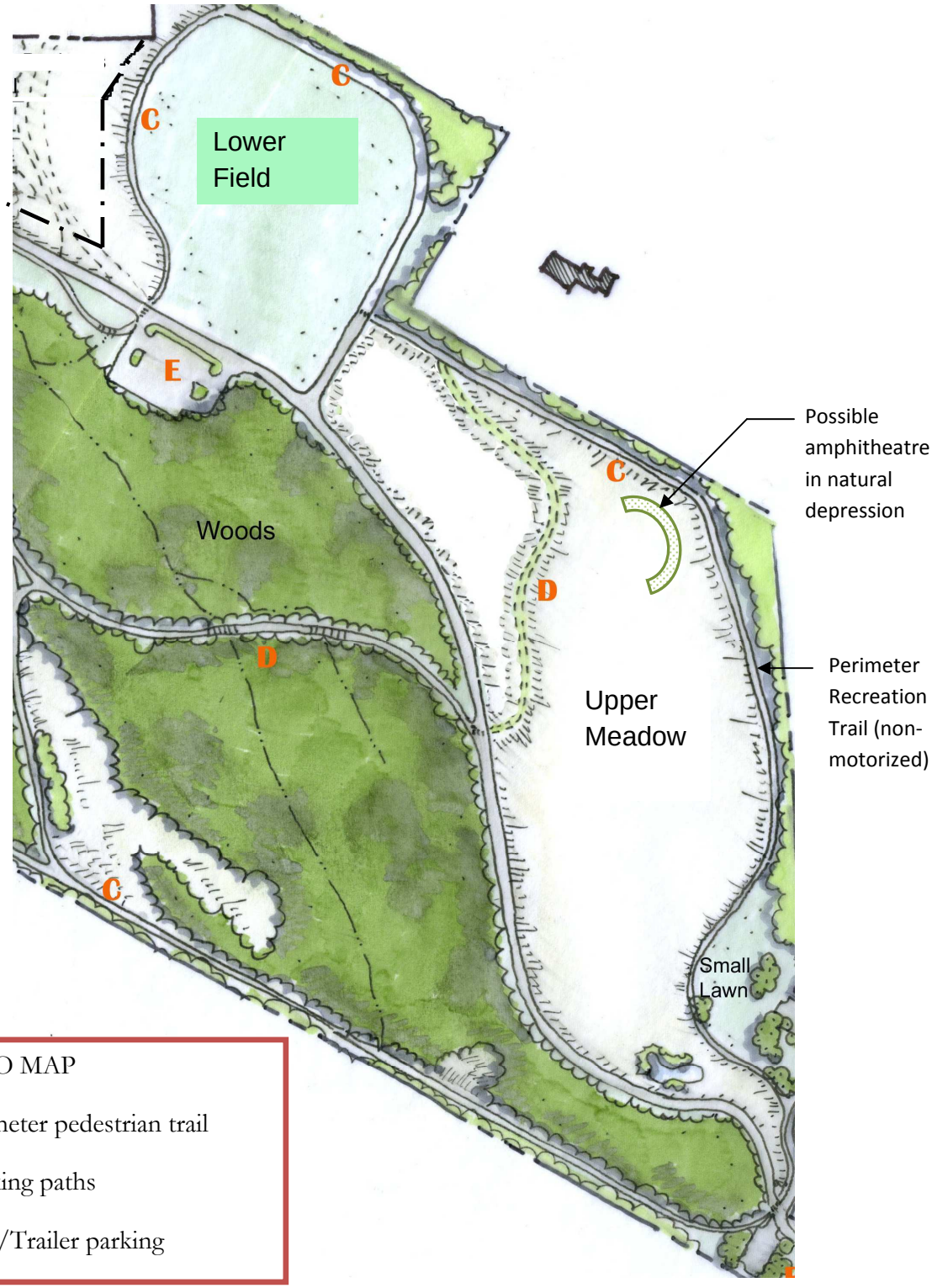
Standardize lots sizes (45' x 80' – shown) and establish common front yard setback to ensure houses address the street and common area to emphasize the "village quality" of the development.

iii. Building design

Traditional New England housing forms that promote a sense of belonging and community:

- *Front porches*
- *Pitched roofs*
- *Double-hung windows*
- *Traditional building materials*

Recreation & Open Space:



KEY TO MAP

C Perimeter pedestrian trail

D Walking paths

E Field/Trailer parking

Overview of Recreation and Open Space Areas:

The Recreation and Open Space elements of the Mitchell Field Master Plan have been informed by public input from the Forums and the Community Design Workshop *[See Appendixes B, D, G, & I]*. In addition, these recommendations are consistent with past findings from previous planning efforts including recommendations from the Revised Long Term Plan for Fuel Depot Recreation Areas (from December, 2003)[9], the Recreation Committee study of Mitchell Field, the May 2007 Recreation and Open Space Survey[10], and the Recommendations for Fuel Depot Implementation from the Harpswell Conservation Commission.

1. **The Upper Meadow**, approximately 20 acres, is left in its current condition with minimal spot grading/filling/loaming as required. This area should be maintained as it is currently being done, with a couple of mowing per season. A natural depression in the northeast corner suggests a potential location for an amphitheatre for performances.
2. **The Woods**, approximately 40 acres, is left in its current condition. The Woods can contain simple walking trails/foot paths that connect the open space with the perimeter walking trail.
3. **The Small Lawn,** approximately 1 acre, is directly behind the cluster housing development, doubles as the community septic field which, it is assumed, will be developed by the housing developer and maintained by a homeowners' association. The town will retain rights for the public to use this lawn area for passive recreation. The Small Lawn is located near the roadside parking and head of the trail system, and provides patrons with a big view of the overall site.
4. **The Lower Field**, approximately 6 acres, is adjacent to the largest parking area and provides a location for larger public activities and festivals. This area could also accommodate an area for community gardens, picnic pavilions, and other simple outdoor amenities.
5. **The Perimeter Trail** uses the existing loop perimeter road as a non-motorized recreation trail. Where development of housing or marine businesses interrupt the loop road/trail, the developer will be responsible for building a minimum 12' wide connector bypass to maintain the continuity of the perimeter system. Benches should be placed at intervals along the perimeter trail to allow for patrons to rest and enjoy views.
6. **The Walking Paths** are simple, minimally maintained footpaths to allow for exploring the whole site.
7. **The Field/Boat Trailer Parking** is a gravel parking area that is developed in an existing turn-around location. This provides central parking for patrons to access the Great Lawn and trails, and in easy walking distance to the waterfront/beach area. There are 36 dedicated vehicular parking spots, with 14 boat trailer queuing/parking spots. The boat trailer spots can also double as vehicular parking when not being used for boats, offering approximately 50 parking spaces.
8. **Additional small recreation opportunities** such as community garden plots, flower coops, skating parks, basketball shooting hoops, seasonal skating rink, etc. were mentioned as desirable uses in community meetings. The master plan acknowledges that these small recreational opportunities could be incorporated into various areas at Mitchell Field (i.e., land next to the trailhead parking area, or peripheries of the property along the perimeter trail, etc.), but does not specify where these smaller activities should go. Future implementation plans or committees can designate areas for these uses consistent with the overall intent of the master plan.

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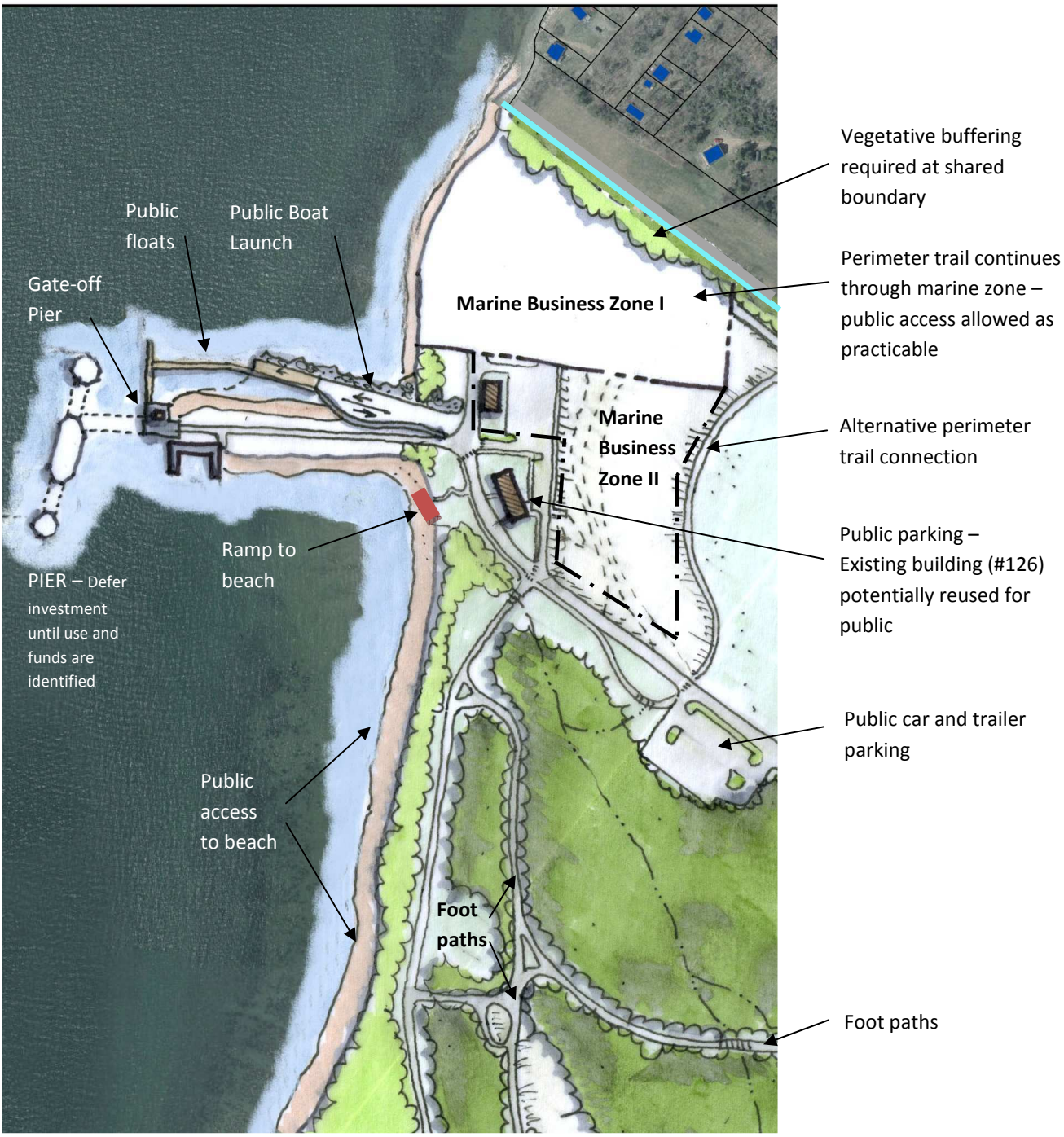
[9] The 2003 Revised Long Term Plan calls for trails and picnic tables on the south side of the site; and beach access, a public boat ramp, a kayak launch, and picnic tables on the waterfront. These are reflected in the Master Plan.

[10] The 2007 Recreation and Open Space Survey found that improved access to the water is the highest priority recreation and open space issue, a priority for half the town taxpayers. The Survey also showed higher rankings for passive recreation and intrinsic open space than for building new facilities.

Waterfront – Overview Map



Overview of Waterfront

The Waterfront recommendations have been informed by public input from the Forums and Community Design Workshop *[See Appendixes B, D, E, F, G, H & I]*. Additionally, in May 2007, the Town was presented with a request from the Washburn & Doughty Company to lease a portion of Mitchell Field for the operation of a ship-building facility. A citizens' vote in June 2007 directed the Town to commence negotiations with

the Company about a potential lease of a portion of the Mitchell Field waterfront for a ship-building operation, and further directed that the master planning for Mitchell Field integrate a consideration for a ship-building operation into its process. Most participants in the Master Planning process were either enthusiastic about or willing to entertain a ship-building operation at Mitchell Field as long as impacts could be understood and managed, and as important, as long as other present and future opportunities could be maintained and shared on the waterfront.

The resultant master plan for the waterfront aims to balance marine business opportunities, public access to the deepwater resource, practical solutions for addressing the dilapidation of the pier, and public access to the water for recreational purposes. The overview of the waterfront plan includes:

1. **Public access/passive recreation:** The beach area to the south of the causeway/pier is for public access and passive recreation. A simple ramp system provides safe, accessible public access as well as providing carry-in launching for kayaks & canoes.

   1.1. Maintain perimeter pedestrian trail along the waterfront ledge to the south of the pier, and where possible, perimeter trail/easements though any future marine operation on the waterfront. Any future private development on the waterfront would need to accommodate such public access where practicable, and would be required to construct alternative perimeter trail connections.

   1.2. The beach south of the pier is for public access and passive recreation. Pedestrian trail connections and safe pedestrian passages from parking areas to the beach ramp are to be encouraged. A simple ramp to the beach provides safe access for pedestrians and for kayak carry-in.

   1.3. Small parking and kayak drop-off. This provides 10 parking spaces. The existing building at this location (# 126) could be recycled for public use (bathrooms; storage of maintenance equipment; potential vending operation).

2. **Pubic Boat Launch, Pier upgrades & float system:** Public access and use of the pier structure must be maintained. Shared use of the pier by private marine businesses will be negotiated and is encouraged as long as it does not unduly impede public use and access.

   2.1. The Public Boat Launch is located on the north side of the causeway, taking advantage of the existing causeway structure, the deeper water, and the relative shelter.

   2.2. The Pier upgrades include minor repairs to the causeway, renovations to a portion of the pier (including restoring a utility shed). Repairs to the main pier are deferred until a use and funding can be identified; instead, the pier is gated to prohibit access.

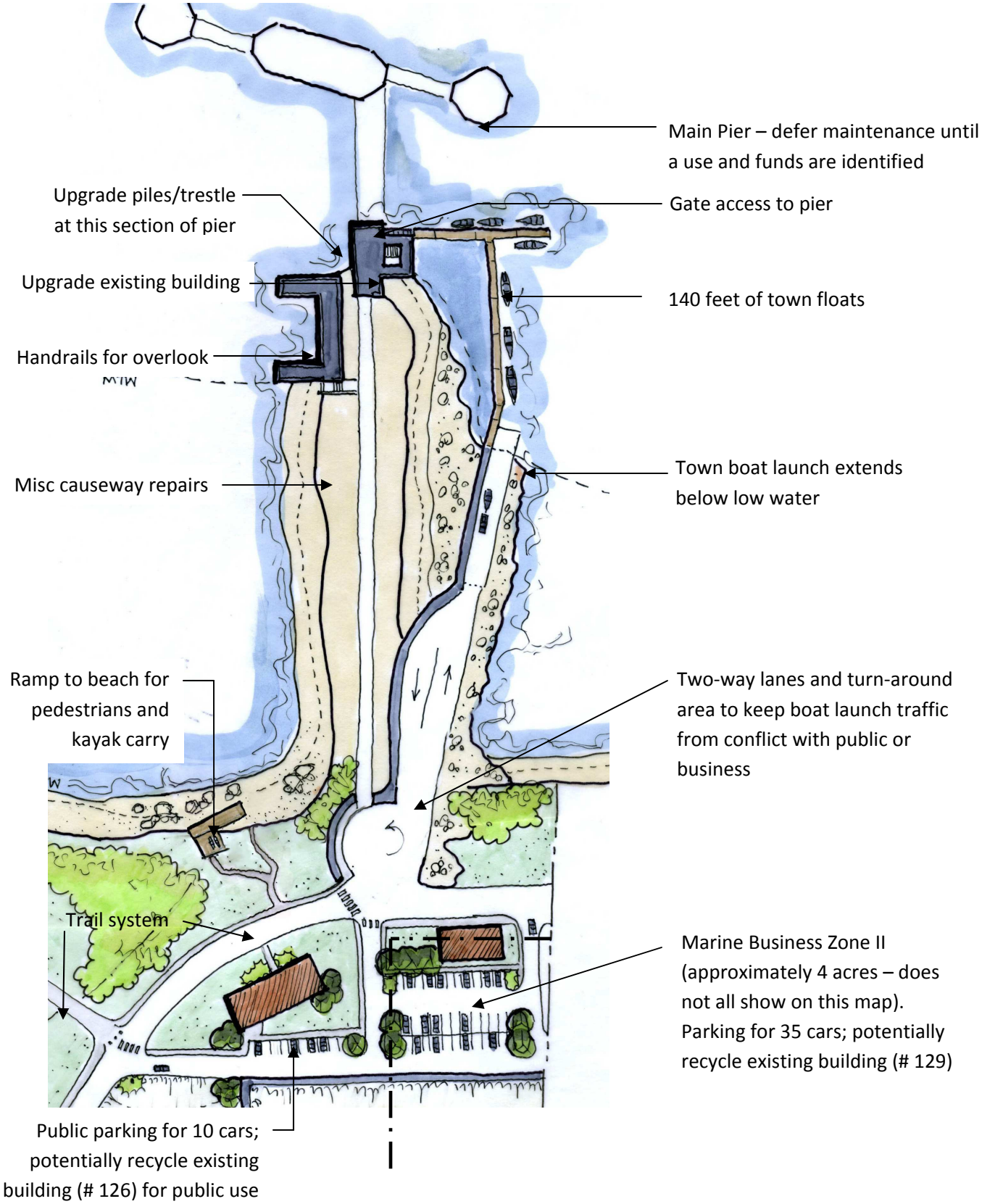
   2.3. The floating dock system is a seasonal system that can be expanded or arranged as needed. A ramp is included to access the docks from the pier or from the boat ramp.

3. **Marine Business Zones:** The master plan sets aside two marine business zones. This land use is envisioned to provide the majority of revenues to the town so that overall development of Mitchell Field will pay for itself or add to the tax base.

   3.1. Zone I on the map is the larger area (approximately 5 acres) which limits waterfront frontage to 550 feet. This leaves some deepwater frontage access for other uses and a public boat launch. This zone provides for a business (such as a boatbuilding operation) that requires direct water access and a larger area for buildings(s) and staging of materials.

   3.2. Zone II is a similarly sized area (approximately 4 acres) that offers multiple smaller marine business opportunities. These businesses do not require exclusive waterfront footage but will be close enough to the shorefront to use common facilities. The existing building (# 129) is possibly reused by one of these marine-related businesses. During the planning process, fishing-related, marine research, marine education, boat accessories and aquaculture were mentioned as possible businesses that could be solicited to use this area.

Waterfront Detail:
Recreational Access; Pier Structure; Public Boat Launch; Small Marine Business Zone



Waterfront Element		Description
Marine Businesses (Zone II) Undefined – Marina, Aquaculture, Fishing related, Marine research, Boat accessories, etc.	Building	Recycle existing building: 1920 square feet Or – developer demolish and build new
	Shore frontage	None. Shared access with public launch and pier
	Acreage	4 acres +/- with parking
	Parking	35 cars – shared use with Town when possible
Town Facilities	Building	Recycle existing: • Shed on pier for harbormaster • Building on land for public restroom, classroom, storage, etc.
	Shore frontage	South of Pier (including bluffs) Frontage for Town Boat Launch to north of pier
	Boat Ramp	Boat launch to deep water to north of pier Carry-in only for kayak/canoe to south of pier
	Parking	10 cars at shorefront parking area 35 – 85: Weekend shared with business Overflow (35 cars/15 trailers) at mid-field
Reuse of Existing Pier	Town Pier	Improve section of pier (approximately 50 LF) to provide 6 to 8 feet @ low water
	Town Floats	Seasonal floats to parallel to shore – access from pier or from boat launch
	Future use of pier	Not yet identified – restrict access and defer investment until a use and a developer emerges to make improvements, and funding can be identified

Waterfront Detail: Marine Business Zone II

Waterfront Element		Description
Large Marine Business (Zone I)	Building	Up to 175' x 250' w/ 175'x175' apron
	Shore frontage	550 linear feet
Larger marine business (e.g., boatbuilding) which required waterfront access and land area for support buildings and lay-down	Acreage	5 acres +/-
	Parking	50 cars (could be terraced from field above building) – shared use with Town when possible. The master plan encourages that this parking be kept away from the waterfront, potentially being located uphill from business buildings and within the business zone

General Considerations for Marine Business Zone I:

Approximately 5 acres are set aside for a large marine related business opportunity that requires deepwater access. The waterfront frontage is limited to no more than approximately 550 feet which will allow enough remaining deepwater frontage for the public boat launch and public access.

All site development and improvements for a facility in the Marine Business Zone should be integrated within the whole Mitchell Field Plan, and to the extent possible, the private development(s) should contribute to the goals for public access and amenities in the Mitchell Field Plan. For instance, development of septic systems, utility connections, road improvements and vehicular access to the site should allow for use of town facilities as well. Parking associated with the private development should be made available for town use when possible.

Other considerations for all private development on the waterfront:

1. Boat Launch & Pier access: Shared use of the public boat launch facility could be arranged as long as it does not impede with public use and access. Consider requiring private development contributions to construction and/or maintenance of the boat launch and pier.
2. Waterfront access: Consider requiring that private development provide public access and use of private parking on off-hours/weekend, if practical. Require that privately developed structures be screened from the public beach and to abutting neighbors.
3. Importance of conservation: The Master Plan calls for approximately 100 acres left for conservation and recreation; Private development of architecture & landscape should reflect this with a design that is compatible and disappears into the landscape, potentially bermed into the slope to reduce the building's visible massing.
4. The Master Plan include housing at top of the Field and change in the entrance road: such change should be considered and integrated into any waterfront development.
5. Sewer and utility connections: Private development will require using and/or installing utility connections (electrical service to be underground). Such utility connections and development of septic systems should be integrated with the Mitchell Field master plan. To the extent possible, the Town should have rights to take advantage of private development utility connections and septic systems for public benefit.
6. Parking & road configuration: Design for all components as an integral unit, including main road connections, coordination of deliveries to limit impact on public access and pedestrian safety.
7. Rehab of existing buildings: The master plan suggests that some buildings on the waterfront may be worth recycling for private or public purposes. If the Town should negotiate to lease a building to a private developer on a short-term basis, the Town should require that building upgrades be made and the buildings returned to the Town in good condition and ready for public use.

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Additional Images & Views: Waterfront

Bird's eye view looking south showing pier, town floats and boat launch, and potential marine development.

View from water looking down pier.

Bird's eye view looking north at pier and Mitchell Field.

NOTE: IMAGES ARE CONCEPTUAL & FOR ILLUSTRATIVE PURPOSES ONLY.

Probable Costs

Please Note*: Costs have been provided for planning purposes only.** *Adoption of the master plan does* ***not *commit the Town to making expenditures. Each element of the plan will require additional design and plan development, and each element will be subject to additional Town review and approval.*

Probable costs have been estimated for public improvements at Mitchell Field, as well as the expected private developers' investment for on leased land. Some developer build-out will require moving, improving or reconstructing public amenities at Mitchell Field, in which case it is assumed that the burden for funding the moving/improving/reconstructing of public amenities will rest with the developer.

In the tables listed below[11], probable costs are outlined for build-out of private businesses, along with a proposed list of public amenities or improvements that would be assigned to the developer as part of a land-lease agreement. The spreadsheets indicate that a private developer would contribute between 6% and 9% of their business build-out investment towards public improvements at Mitchell Field. In addition, it is assumed that private developers would be responsible for developing or bringing utility connections to their site, and that the Town would have rights to benefit from those connections. For instance, the developer at Marine Business Zone I should design and build a septic system that will accommodate the needs of their business, as well as have the capacity to accommodate modest public use in the future; or, that the main road upgrade that would be required to accommodate heavy trucks/traffic would be paid for by the developer. Another example would be that the housing developer who will benefit from the consolidation of land resulting from moving the entry road and public parking will be responsible for rebuilding the entry road and parking.

Cluster Housing - Development Costs & Public Amenity Contribution		Unit	Unit Cost	DRAFT PLAN	
				QTY	Total
Developer's cost to build cluster housing plan	8 Single family dwellings @ 1,250 SF/each	SF	$125	10000	$1,250,000
	6 Townhouse dwellings @ 1,000 SF/each	SF	$125	6000	$750,000
	Common septic system for 14 dwellings	1	$98,000	1	$98,000
	Sewer force main	LF	$55	600	$33,000
	Parking	per 1000	$7,900	9	$71,100
	New roadway	LF	$96	800	$76,800
	Lighting	per fixture	$2,600	4	$10,400
	Grading, loam, seed and mulch	per 1000 SF	$650	80	$52,000
	trees and landscaping			allowance	$50,000
	Water line (1" pipe)	200 LF	$750	?	
	Underground electric service	LF	$38	?	
	Underground electric Pad - serves 4 dwellings	per Pad	$2,300	4	$9,200
	Private Development cost for housing				$2,400,500
Developer's contribution to public amenities at Mitchell Field	Remove/reclaim roadway at current entry to	LF	$21	750	$15,750
	Restore vegetation in reclaimed roadway	LF	$26	750	$19,500
	New Trail system to complete perimeter trail	LF	$18	500	$9,000
	Upper public parking area	per 1000 SF	$7,900	5	$39,500
	Lighting @ upper parking area	per fixture	$2,600	2	$5,200
	New roadway at new entry to MF	LF	$96	650	$62,400
	Developer's contribution to MF Plan				$151,350

The upper portion of the table (left) show costs directly related to building the cluster housing development (taxable). The lower portion of the table show developer expenses that pay for public amenities at Mitchell Field for the Town's benefit.

This is a hypothetical scenario, indicating a potential negotiating position for the Town to cover costs of public improvements with private development money. This is not a mandate of the Master Plan.

[11] Sources for costs: SYTDesign spreadsheets designed for the Mitchell Field Master Plan, and from Baker Design. The costs are preliminary in nature and subject to further development and verification as the project gains more certainty. Costs do not include "soft costs" (i.e., engineering, testing, architecture, permitting, etc., usually budgeted at + 10%) or budget contingency (usually set at 10% - 25%). Probable costs for developer investment for private business build-out are offered as a rough guide only.

(probable costs – continued)

Waterfront Elements - Developer Costs for businesses		Unit	Unit Cost	DRAFT PLAN QTY	DRAFT PLAN Total
Marine Business 1 (Shipyard)	Building	SF	$80	43750	$3,500,000
	Apron	SF	$5	30625	$153,125
	Marine Railway	LF	$1,000	250	$250,000
	Parking	Per Car	$2,000	50	$100,000
	Septic system (based in 65 employees @ 15 GPD per employees)	1	$9,000	14	$126,000
	Sewer force main	LF	$55	300	$16,500
	Water lines	200 LF	$750	?	
	Underground electric service	LF	38	?	
	Private Development cost to build marine business # 1 (not including cost for utilities and septic)				$4,003,125
Marine Business 2 (use to be determinted)	Building Upgrade	SF	$50	1920	$96,000
	Retaining Wall at Parking Area	SF	$20	1400	$28,000
	Parking	Per Car	$2,000	35	$70,000
	Private Development cost to build marine business # 2 (not including cost for utilities and septic)				$194,000
	Potential Private Development (See Note 1)				**$4,197,125**

Private Developer contribution to Public Amenities @ MF		Unit	Unit Cost	DRAFT PLAN QTY	DRAFT PLAN Total
Town Facilities	Existing Bldg Upgrade (in exchange for short-term lease of building)	SF	$50	1800	$90,000
	Retaining Wall	SF	$20	350	$7,000
	Utilities (lighting, etc)	LS	$30,000	1	$30,000
	Public parking @ waterfront (asphalt lot)	Per Car	$2,000	10	$20,000
	Resurface main roadway	LF	$45	2500	$112,500
					$259,500
Reuse of Existing Pier Structures	Misc Causeway Improvements	LS	$10,000	1	$10,000
	Existing Bldg Upgrade (HbrMaster)	SF	$75	300	$22,500
	Handrail/stairs for Overlook	LF	$50	100	$5,000
	Upgrade Pile Supported Trestle	SF	$50	1800	$90,000
	Add Gate	EA	$1,000	1	$1,000
	Pier Utilities	LS	$20,000	1	$20,000
					$148,500
Demolition of Existing Pier Structures	Remove Pile Supported Trestle	SF	$25	0	$0
	Remove (recycle) catwalk	LS	$10,000	0	$0
	Remove South Dolphin	LS	$100,000	0	$0
	Remove Main Pier Cells	CY	$330,000	0	$0
	Remove North Dolphin	CY	$100,000	0	$0
					$0
	Waterfront developers participation in MP Plan				$408,000

The upper portion of the table above show costs directly related to building the marine business development (taxable). The lower portion of the table show developer(s) expenses that pay for public amenities at Mitchell Field for the Town's benefit.

This is a hypothetical scenario, indicating a potential negotiating position for the Town to cover costs of public improvements with private development money. This is not a mandate of the Master Plan.

(probable costs – continued)

After assigning public improvements to the responsible developer, there are still a number of proposed public amenities and improvements that would need to be funded from other sources. These amenities/costs can be phased in as funding is identified, either through Town allocations, grants (as could be the case with the public boat launch,[12] or with contributions from private development.

Public investment @ MF not covered by developer contribution		Unit	Unit Cost	DRAFT PLAN	
				QTY	Total
Town Waterfront Facilities					
	Boat Ramp	SF	$25	8250	$206,250
	Kayak Carry In / Beach Access	LS	$10,000	1	$10,000
					$216,250
Reuse of Existing Pier Structure					
	Add Town Floats	LF	$280	140	$39,200
	Gangway	Ea	$7,000	1	$7,000
	Boat Ramp Floats	LF	$200	320	$64,000
	Pier Utilities	LS	$20,000	1	$20,000
					$130,200
Recreation & Open Space Improvements					
	Mid-field Parking (gravel lot)	Per Car	$1,000	50	$50,000
	Reclaim fields to lawns	acre	waiting	6	
					$50,000
					$396,450

NOTES:

A. Boat Ramp cost for providing to deep water @ low tide. A much less expensive launch could be shorter for high-tide use only.

B. Town floats could be much less expensive if built with donated labor or trade school students, as was done in Falmouth.

Potential Revenue:

In addition to the potential participation from private developers to the Mitchell Field plan, as outlined above, the Town should expect to generate a revenue stream from private development through land-lease agreements, and taxes on building value. The above charts indicate a range of building value that could be expected from private development.

Land-lease agreements would be negotiated on a case-by-case basis, and should be informed by an assessment of the land value, impacts of proposed businesses on the public aspect of the Mitchell Field plan, while balancing the overall contribution that a business could make on further goals identified in the Town's comprehensive plan.

It should be emphasized again: The adoption of the master plan does not obligate the Town to make any expenditure. The master plan provides a framework for envisioning how a range of development, public and private, can be physically integrated at Mitchell Field. Each component of the plan will require further study, policy choices, and decision-making by the Town and citizens.

[12] State grants are available for construction of boat launches. It should be noted that State funds would require that a boat launch at Mitchell Field become available for Maine citizens. Currently the Town policy is that Mitchell Field is for use of Town citizens and guests.