

Proposed Improvements

Casco Bay Island Terminal District Terminal Renovations

Master Plan
June 30, 2012

Casco Bay Island Transit District
Terminal Renovation Project
Master Plan
June 30, 2012

TABLE OF CONTENTS

I.	Directory	
	A.	Master Plan Participants
	B.	Scope of Services
II.	Introduction	
III.	Summary of Findings	
	A.	Terminal Building: Addition and Renovations
	B.	Site Improvements
	C.	Marine Improvements
	D.	Phasing
IV.	Existing Terminal and Site Plan	
V.	Terminal Master Plan	
	A.	Phase 1
	B.	Phase 2
	C.	Site Plan
	D.	Cost Estimate
	E.	Schedule
	F.	Accessibility
	G.	Sustainability
	H.	Permitting & Approvals
VI	Appendix	
	A.	List of Meetings

Casco Bay Island Transit District
Terminal Renovation Project
Master Plan
June 30, 2012

A. MASTER PLAN PARTICIPANTS

CLIENT:

Casco Bay Island Terminal District
P.O. Box 4656
Portland, Maine 04112

Hank Berg, General Manager
Phone: 207-774-7871
email: hankb@cascobaylines.com

Nick Mavodones, Operations Manager
207-774-7871 ext 108
nickm@cascobaylines.com

BUILDING COMMITTEE MEMBERS:

(and also members of Terminal Renovation Committee)

Hank Berg
Nick Mavodones
Bruce Woodman
Nathan Contant

hankb@cascobaylines.com
nickm@cascobaylines.com
brucew@cascobaylines.com
nathanc@cascobaylines.com

TERMINAL RENOVATION COMMITTEE:

Dan Doane (chair)
Charles Burr
Chris Roberts
Mac Mackone
Steve Little
Paul Frager
Graham Hults
Patrick Flynn

ARCHITECT:

Scott Simons Architects
75 York Street
Portland, ME 04101
207-772-4656 Phone
207-828-4656 Fax

Scott Simons, Principal-in-charge
Austin Smith, Project Architect
Chris Berry, Business Manager

scott@simonsarchitects.com
austin@simonsarchitects.com
chris@simonsarchitects.com

Casco Bay Island Transit District
Terminal Renovation Project
Master Plan
June 30, 2012

DESIGN TEAM:

CIVIL/SITE DESIGN/APPROVALS

Woodard & Curran	Barry Sheff, Dave Senus
41 Hutchins Drive	
Portland, Maine 04102	
Phone: 207-774-2112	
email: barry@woodardcurran.com; dsenus@woodardcurran.com	

MARINE ENGINEERING CONSULTANT:

Fay Spofford Thorndike	43 Washington Avenue
5 Burlington Woods	Portland, Maine 04101
Burlington, MA 01803	Paul Pottle
Don Harvie	207-482-4621
Phone: 617-221-1000	
email: ppottle@fstinc.com	

DIVE CONSULTANT:

Childs Engineering
34 William Way
Bellingham, MA 02019
Phone: 508-966-9092
Fax: 508-966-9096

MECHANICAL DESIGN:

Allied Engineering	Ian MacDonald
160 Veranda Street	
Portland, Maine 04103	
Phone: 207-221-0260	
Fax: 603-444-2364	
email: imacdonald@allied-eng.com	

STRUCTURAL DESIGNER:

Becker Structural Engineer	Dan Burne
75 York Street	
Portland, ME 04101	
Phone: 207-879-1838	
Fax: 207-879-1822	
email: dan@beckerstructural.com	

B. CBITD SCOPE OF SERVICES
(excerpted from CBITD Request for Proposal)

October, 2011

State of good repair & Safety

- Replace pilings & dolphins (fendering system)
- Replace/repair trusses at gates
- Repair roof leakage – maintenance area
- Fix water infiltration issues along office wall
- Repair/replace Gate 5 pontoons/ dolphins
- Repair/replace transfer Bridge Apron

Expansion & Improvements

- Overall study of space and function
- Expand bathrooms in terminal
- Expand maintenance shop work space
- Add roof at Gate 4
- Add roof at Gate 5 waiting area
- Expand employee break room
- Add year round freight shed station
- Improvements to storage area for freight from the islands
- Expand administrative office area
- Expand terminal waiting area
- Improve HVAC system
- Expand Operations Agents office
- New entrance for passengers
- 2nd floor addition for offices
- Traffic flow improvements
- Cover freight shed at Gate 4
- Replace/upgrade gate hoists
- Redesign freight shed to better meet Homeland Security regulations by constructing a permanent wall between freight and passenger areas
- Signage

Energy efficiency improvements

- Improve HVAC system
- Improve lighting

Most important improvements

- Replace dolphins and pilings (fendering system)
- Repair/replace trusses at gates
- Repair roof leakage – maintenance area
- Repair/replace Gate 5 pontoons/dolphins
- Repair/replace transfer Bridge Apron
- Overall study of space and function
- Expand bathrooms in terminal



II. INTRODUCTION

The existing Casco Bay Lines Ferry Terminal was built in 1988, moving from its cramped location on Custom House Wharf to City owned property along the western edge of the Maine State Pier. At that time, the CBITD was serving a smaller population; the waterfront was largely a working waterfront and the island populations were comprised of fishermen and mostly local residents. The major points of departure were Gates 1, 2, and 3 and the boats were between 70' and 80' in length. At that time it made sense to locate the terminal waiting room in the middle of the facility, close to those Gates.

Fast forward to 2011 and much has changed. Nearly one million people now use the ferry service, more than double the number the terminal was designed for in 1988. An additional 50,000 people flow through the terminal each year, using the restrooms, visiting the Maine State Pier, and sightseeing along the waterfront. The amount of freight being handled by the ferries has increased dramatically and vehicular traffic on the east side of the terminal is congested all summer long. The car ferry travels to Peaks Island seven days a week with multiple runs, and island visitors that used to come only for the summer now visit during the fall and winter weekends as well. To handle the increased traffic, CBITD has built several new boats. The newer boats are longer, ranging from 100' to 120' in length, causing increased pressure on the already crowded edge of the wharf.

As use of the terminal has increased, more and more people and freight are being serviced by the larger ferryboats. Today Gates 4 and 5 are the most heavily used gates. Passengers sitting in the waiting room of the Ferry Terminal cannot see their gate or boat's arrival, so they choose to wait outside, often in inclement weather. In the summer, because the waiting room and ticketing area are so undersized, there is frequently a long line of passengers waiting to buy tickets.

The southern end of the terminal building, the part of the building closest to Gates 4 & 5, houses the mechanical room, freight room, and staff break room, making it impossible to expand the existing waiting room in that direction. The volume of freight has increased dramatically, especially in the summer, making it more and more difficult for passengers to get to the boats safely. Of particular concern are the public restrooms; they are unsatisfactory in number and configuration, especially after a cruise run. The homeless population habitually uses them, and their poor condition is a recurrent complaint by islanders and visitors alike.

In the Fall of 2011 the CBITD issued an RFP for terminal and marine improvements. Scott Simons Architects (SSA) was selected to prepare a Master Plan for the terminal, and to address the facility needs that have developed over time with the increased passenger and freight use. Working collaboratively with the Building Committee over a period of six months, SSA developed a Master Plan that provides a roadmap for improvements over the next ten years. SSA conducted programming interviews to understand the history of the Ferry Terminal Building and its use over the past twenty-four years. We interviewed captains, deckhands, operations agents, management, and took ferry rides to observe the operations. We met with the Terminal Renovation Committee on a number of occasions, presented the Master Plan to the Board and held preliminary meetings with City Planning staff. We presented a draft of the Master Plan to Peaks Island Residents for feedback; other island resident meetings are planned in the near future.

III. SUMMARY OF FINDINGS

The Master Plan addresses the major needs of the facility and recommends renovations to the terminal building, improvements to the marine infrastructure, and upgrades to site to enable CBITD to improve service to the island populations and tourists more efficiently and effectively in the coming years. The completed renovations will also position the CBITD ferry terminal to be one of Portland's "must-see" destinations. The following six areas of improvements highlight the major recommendations outlined in the Master Plan that follows.

1. The estimated cost of the complete terminal renovation, inclusive of the marine related improvements, is \$5,600,000 but the funding identified to date is only \$3,000,000. As a result the project was divided into two phases. Phase One will be funded with the identified \$3,000,000 and includes the marine related improvements, facility maintenance repairs, the addition to the south end of the terminal, and a portion of the existing facility improvements. Phase Two incorporates the remainder of the facility improvements and will require a future funding source.
2. Based on our observations of the existing use of the CBITD ferry terminal, our studies of the existing conditions, and our conversations with the staff and users of the terminal, we are able to confirm that the items listed in the scope of services in the RFP need to be addressed in this Master Plan to insure the long term health of the facility and its operation.
3. The existing Ferry Terminal Building is a long narrow building built on a parcel of land leased by the City of Portland. Over time, the center of gravity in the terminal has shifted from Gates 1,2, and 3 to Gates 4 and 5. As passenger traffic and freight traffic has increased, the facility has been strained; the waiting room is too small and no longer in the optimum location, the ticket window is not well situated for efficiency, and the restrooms are inadequate. The Master Plan recommends building an approximately 4,533 SF addition to the existing terminal in Phase One. The addition will include a new, larger waiting room, new, larger public restrooms, and a new, more efficiently laid out ticketing operation and offices. Some minor interior renovations are also included in Phase One. More substantial interior renovations are included in Phase Two.
4. There are maintenance issues that need attention, including water infiltration along the wall of the administrative offices and leaks in the roof. The roof trusses at Gates 1, 2, and 3 needs to be repaired and there is an area of uneven concrete between the terminal and the parking garage that needs to be replaced. The Master Plan recommends addressing these maintenance issues in Phase One.
5. The increased vehicular traffic on the site has created congestion. Passenger, taxi, and bus drop-offs and pick-ups occur in the same area as freight movement. Conditions are frequently unsafe for pedestrians exiting from the boats. The Master Plan recommends widening the walkway along the east side of the terminal building, re-configuring of the vehicular access areas on the south side of the terminal, adding a dedicated bus drop off island, and other safety improvements to separate the pedestrian and vehicular traffic on the east side of the terminal. The Master Plan recommends undertaking a portion of these improvements in Phase One and a portion in Phase Two.
6. Extensive marine related improvements are needed at the terminal, including replacement of the fendering system along Gates 1, 2, and 3, repair of the pontoons and dolphins at Gate 5, and repair of the transfer bridge apron at Gate 5. The Master Plan recommends undertaking all the marine related improvements in Phase One.

Casco Bay Island Transit District
Terminal Renovation Project
Master Plan
June 30, 2012

A. Terminal Building: Addition and Renovations

The Master Plan envisions moving the passenger waiting area from its current location to the south end of the building to provide passengers with a direct view to their boats, the water, and the surrounding waterfront. Phase One proposes removing the existing maintenance area and mechanical room to create space for a 4,533 SF addition that would house an expanded waiting room, more efficient ticket and freight offices, and larger, more serviceable restrooms. The new waiting room is envisioned as a 20-foot high light-filled space surrounded by windows with views to the water and the boats. The operations agents' office is designed to have access both to the ticket window in the waiting room and the freight desk in the freight drop-off area. The addition will have new public restrooms located in direct sight of the operations agents' office, for much improved supervision. The restrooms will be larger than the existing bathrooms with more stalls for both men and women. The materials used in the restrooms will be durable and easy to clean. Highly visible signage, such as a large digital screen listing boat schedules and gate information, will be located over the ticket window, and informational kiosks will provide instant communication for passengers. The new waiting room will be visible from Commercial Street, signaling the presence of the ferry terminal to first-time visitors.

The size of the freight area remains the same in Phase One but gains space and efficiency due to better flow of materials and room for more carts to accommodate the increase in shipping activity. Direct access to the operations agents' office will allow improved oversight of the freight area, especially in the colder months. The mechanical room, physical plant office, maintenance office and supplies will be relocated to vacated portions of the existing terminal in Phase One. The freight area will be enlarged in Phase Two when the physical plant office is relocated to the north end of the existing terminal building. The existing public conference room will be converted to an office storage room in Phase One, and the new maintenance and storage area in Phase Two.

Water infiltration issues along the east wall will be addressed in Phase One, as well as heating and ventilation issues. In Phase Two the existing passenger waiting area will be reconfigured to create a new public meeting/conference room, taking advantage of the existing windows and light. The existing doors to the waiting area will be used to provide an entrance to the public meeting room, and there will be a new entrance to the administrative assistant's office for reception of visitors and vendors.

In Phase One the administrative offices will remain in the same location with only minor changes. In Phase Two there will be more extensive renovations, to create room for growth and improved traffic flow.

In Phase One, the crew break room will be relocated to the opposite end of the terminal, where the current restrooms will be converted into showers and toilets for employees. In Phase Two a larger break room for all employees will be created to provide an opportunity for employees from administration, boat crews, and shore-side staff to interact and eat together, instead of separately as they do now.

B. Site Improvements:

The traffic and parking area on the east side of the terminal building is long and narrow. CBITD shares some of the site with the City of Portland. One of the goals of the Master Plan is to improve traffic flow and safety from Commercial Street to the passenger and freight drop-off areas, to have well-defined pedestrian pathways for passengers exiting the boats, and to create clearer delineation for the car ferry staging. There is also a need for more short-term parking as well as drop-off and pickup locations for buses and taxis.

The Master Plan recommends staying with three lanes of car ferry staging, which is adequate most of the year and leaves most of the employee parking and the handicap parking in place. The existing granite curbed island will remain in place with an added barrier or fence to prevent pedestrians from crossing the island. Designated walkways on either end of the island and a covered walkway along the terminal building to the parking garage will help guide pedestrian traffic safely

Casco Bay Island Transit District
Terminal Renovation Project
Master Plan
June 30, 2012

around the vehicular traffic. Changes in paving and installation of speed bumps are being considered at key points, as are improved directional signs to better manage vehicular traffic. A new short-term parking area and bus stop located near Compass Park will provide much needed additional short term parking while still providing an adequate turning radius for the tractor trailers that visit the Ferry Terminal and the wholesale fish business located on the Maine State Pier.

One designated taxi waiting space will be provided in the short-term parking area while others will wait in a queue along the Whale Wall of the Maine State Pier. The site will continue to have conflicts due to the multiple users but many of the conflicts can be managed by moving freight in between boat departures, managing truck delivery schedules, and by making the changes proposed in the Master Plan.

Other recommended site improvements include relocating the dumpsters and other items currently stored outside to other locations on the site, to provide a clearer view to the water from the passenger waiting room. Greater visibility from Commercial Street is also desirable; the tall volume of the new passenger waiting room will make the terminal more visible from the street; improved signage will also better guide tourists to the new waiting room and ticket windows. The majority of the site improvements will be undertaken in Phase Two.

C. Marine Improvements:

When the CBITD relocated to its current location in 1988, much of the existing facility associated with the Maine State Pier was rehabilitated or upgraded to fit the operation. The marine investigation and assessment conducted by FST revealed that most of the key fendering elements and supporting structure are reaching the end of their useful lives and will continue to deteriorate without replacement of certain elements and enhancement to the overall system. The report recommends the replacement of a significant portion of the fixed fender system from Gates 1 through 4. It also calls for a complete repainting of the pontoon supporting the transfer bridge, reconditioning the attachment component and replacing the apron used to transition from the bridge to the ferry at Gate 5. Many of the existing dolphins at Gate 5 have key components of the base structure that are salvageable, but the fenders need to be replaced. The Master Plan recommends that all of the marine related improvements be undertaken in Phase One. Undertaking these improvements in one phase will save on costs, both for mobilization and construction efficiency.

D. Phasing:

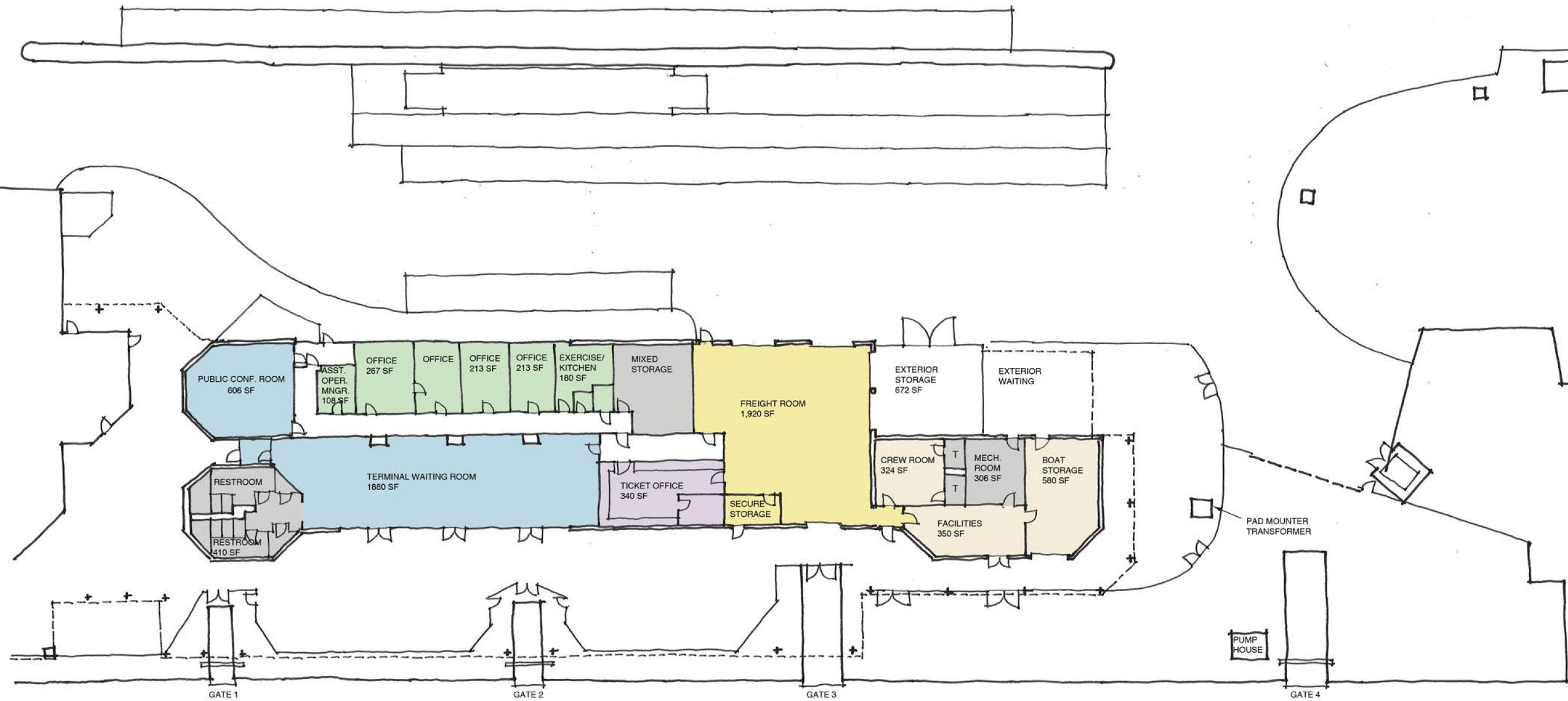
The Master Plan provides the roadmap for the overall terminal renovation: the practicalities of funding make phasing of the project a necessity. Phase One includes the relocation of the mechanical room and the maintenance area so that the new terminal waiting room, new ticket and freight offices, and public restrooms can be constructed. The existing facility will have minimal renovations in Phase One, only those required to accommodate the immediately impacted program areas that include the maintenance offices, storage, and the crew's quarters. The Marine Improvements will all be performed in Phase One, in part due to the deteriorated condition of many of the piles and the cost savings gained by undertaking the work in one phase.

Phase Two includes the majority of the site improvements and the more extensive renovations to the existing terminal building to increase operational efficiency.

When the project is completed, the Casco Bay Island Transit District will provide vastly improved indoor and outdoor waiting areas for passengers, new public restrooms, improved freight handling capabilities, improvements to the marine infrastructure, a new addition to the terminal that is energy efficient, and a safer, more efficient operation.

Casco Bay Island Transit District
Terminal Renovation Project
Master Plan
June 29, 2012

IV. EXISTING TERMINAL AND SITE PLAN

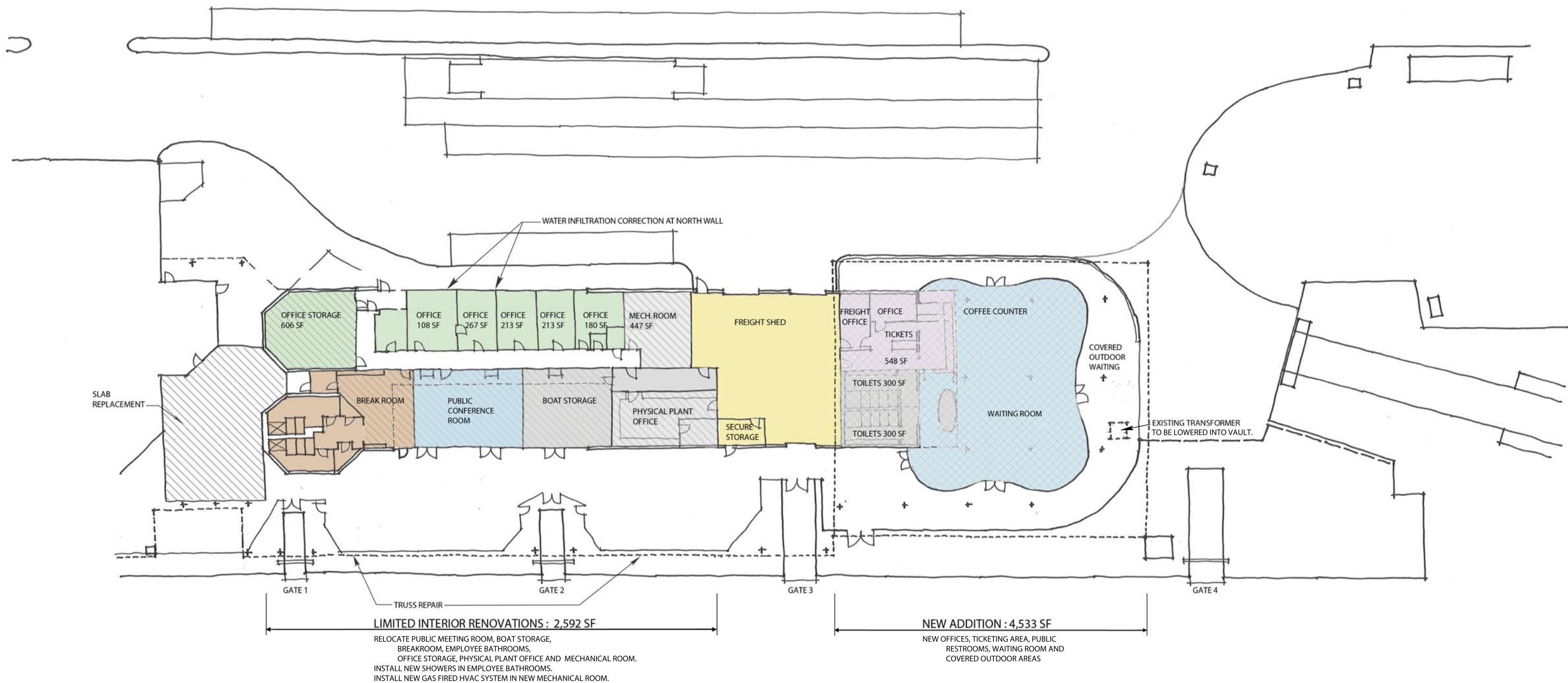


CASCO BAY ISLAND TRANSIT DISTRICT
Terminal Master Plan : Existing Site & Floor Plan
ScottSimonsArchitects
29 June 2012

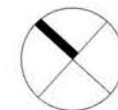


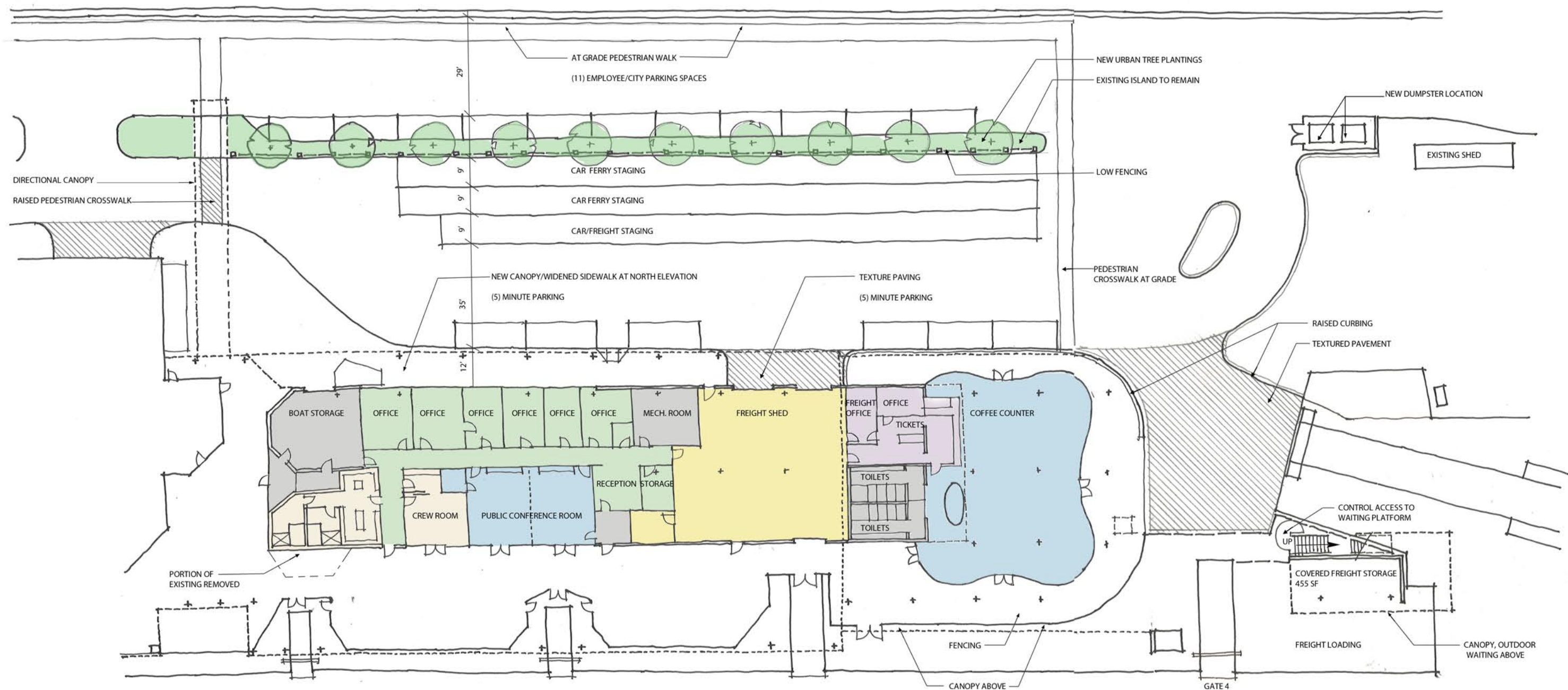
Casco Bay Island Transit District
Terminal Renovation Project
Master Plan
June 29, 2012

V. TERMINAL MASTER PLAN



CASCO BAY ISLAND TRANSIT DISTRICT
Terminal Master Plan : Phase 1
ScottSimonsArchitects
 29 June 2012





INTERIOR RENOVATIONS

REMOVE EXISTING BUS WAITING ROOM, CORNER OF BATHROOMS, TICKET WINDOWS AND TICKET OFFICE.
 PROVIDE MEW CONSTRUCTION TO CREATE NEW ENTRY TO OFFICE AREA,
 RECEPTION, PUBLIC CONFERENCE ROOMS, CREW ROOM, LOCKER ROOM,
 BATHROOMS, AND BOAT STORAGE.
 ENLARGE OFFICES AND FREIGHT SHED.

CASCO BAY ISLAND TRANSIT DISTRICT
 Terminal Master Plan : Phase 2
 ScottSimonsArchitects
 29 June 2012



Total Cost of Master Plan Improvements	\$ 5,600,000.00
Master Plan & Preliminary Investigations	
Master Plan	\$ 43,859.82
FST Site Investigation + Report	\$ 29,036.99
Sub-total	\$ 72,896.81
Phase One Construction Costs:	
Marine Improvements, including contingency	\$ 785,000.00
Mechanical/Electrical Sprinkler Relocation	\$ 100,000.00
Minor Interior Renovations: 2,592 x \$32/SF Partitions, (2) Doors, Lighting, Mech. Sprinkler Modification, (2) Showers	\$ 82,944.00
Slab Replacement & Trusses at Gates 1,2,&3	\$ 32,000.00
New Addition: Ticket Office, Restrooms, Waiting Area 4,533 x \$309 SF	\$ 1,400,000.00
10% Construction Contingency	\$ 157,574.19
Phase One Fee for Marine Improvements, Approvals, and Architectural/Engineering	\$ 369,585.00
Sub-total: Cost of Phase One Improvements	\$ 2,927,103.19
Total: Master Plan & Cost of Phase One	\$ 3,000,000.00
Additional Funding Required for Phase Two	\$ 2,600,000.00

Revised Schedule
Casco Bay Island Transit District

[illegible]

Casco Bay Island Transit District
Terminal Renovation Project
Master Plan
June 30, 2012

F. Accessibility

For each phase of the Master Plan and each portion of construction, handicapped accessibility should be improved. Casco Bay Island Transit District is committed to providing full access to passengers, staff and members of the general public to all of its current and future programs.

All new construction and site design should conform to or exceed the Americans with Disabilities Act of 1999, Title III and the Maine Human Rights Act, Title V, revised September 1995. Any addition to existing terminal will be fully handicap accessible and any significantly renovated terminal areas will also be made accessible. All plans shall be reviewed and approved by the State Fire Marshall, Department of Public Safety, for compliance with handicapped accessibility.

G. Renovation Sustainability

The Ferry Terminal Renovation will be designed to meet the City of Portland's sustainability standards, incorporating thermal pane glass, daylighting, energy efficient lighting, and advanced envelope construction.

While we do not expect the project to seek LEED certification due to budget constraints, we will explore the many options available in the renovation of the Ferry Terminal to help improve its efficiency and performance, and to provide a thoughtful response to various environmental, social, and political climates. Every effort will be made to meet as many of the LEED standards as possible.

The U.S. Green Building Council administers the LEED program (Leadership in Energy and Environmental Design) in an effort to encourage sustainable building practices. The following categories of "green" buildings are elements of the certification process:

- Building material measures including VOC control and material source, reuse and recycled content.
- Construction waste management
- Energy saving measures including green lights, passive heating and cooling, waste heat recovery and renewable energy sources
- Building rehabilitation
- Indoor air quality
- Landscaping including erosion control and microclimate control
- Recycling provisions for occupants
- Operations and maintenance measures
- CFC, HCFC, and Halon elimination
- Siting measures including infill, small footprint and rehabilitation
- Transportation measures
- Water conservation including fixtures, grey water use, cooling towers and xeriscaping
- Water quality focusing on surface water runoff control
- Use of alternative fueling facilities

The goal is to have "green" buildings that are highly energy efficient, have a high indoor environmental quality, are resource efficient, and sensitive to its effects on local and systemic surroundings.

H. Permitting and Approvals

The Terminal Renovation Project will need to be approved by review boards including the following:

1. City of Portland Site Plan Review
2. Board of Harbor Commissioners
3. Maine DEP Site Location of Development Permit Minor Amendment
4. Maine DEP Natural Resources Protection Act (NRPA) Permit by Rule
5. ACOE Maine General Permit
6. National Environmental Policy Act (NEPA) Permitting
7. Department of Public Safety/State Fire Marshall
8. City of Portland/Building Permit

The project will also need to be reviewed by Homeland Security to make sure the renovations meet current security standards. Woodard and Curran will be responsible for managing the Approvals process.

Casco Bay Island Transit District
Terminal Renovation Project
Master Plan
June 30, 2012

VI. APPENDIX

Casco Bay Island Transit District
Terminal Renovation Project
Master Plan
June 30, 2012

COMMITTEE MEETINGS:

Hank, Nick, Nathan Contant, Bruce Woodman + Design Team

12.07.2011 12.16.2011 01.04.2012
01.18.2012 02.02.2012 03.29.2012
05.02.2012 (site charrette including Gretchen and Meghan)
06.06.2012

PROGRAMMING MEETINGS:

12.20.2011 Meeting w/ Larry Legere; meeting w/ Bruce Woodman
12.27.2011 Car Ferry to Peaks w/ Bill, Gretchen
12.29.2011 Meeting w/ Nick
01.03.2012 Meeting w/ Hank
01.6.2012 5:05am sunrise cruise w/ Gene
01.11.2012 Meeting w/ Roki; meeting w/ Barbara
01.11.2012 MEP tour w/ Allied Engineering/Bruce Woodman
01.16.2012 Meeting w/ Caity

MEETING WITH PEAKS ISLAND RESIDENTS

02.15.2012

TERMINAL RENOVATON COMMITTEE MEETINGS:

02.08.2012 6.25.2012

PRESENTATIONS TO CASCO BAY ISLAND TRANSIT DISTRICT BOARD OF DIRECTORS

02.23.2012 6.28.2012

