
MORSES POND BEACH & BATHHOUSE IMPROVEMENTS
SUPPLEMENTARY FEASIBILITY STUDY
TASK 7: BUILDING LOCATION ANALYSIS



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INTRODUCTION



PROJECT BACKGROUND

At the direction of ATM 2024, the NRC created the Morses Pond Beach Advisory Committee (MoPoBAC) to address both the concerns raised by the NRC in January 2024, and to review the overall project for potential issues prior to the Design Phase.

The Committee held site visits and conducted 6 meetings over the Summer of 2024. In August 2024, the MOPOBAC produced a Recommendations Report, which was then accepted by the NRC.

The Committee's findings included recommendations regarding:

- Program changes,
- Scope/cost changes,
- Required site investigations, and
- Environmental/permitting/mitigation concerns



PROJECT TIMELINE

January 18, 2024	Rec Commission presents feasibility study to NRC
January 31, 2024	NRC responds to feasibility study with concerns to be addressed
February 2, 2024	NRC votes to support request from CPC for design funds, contingent on issues being addressed in Design Phase.
March 2024	Town Meeting approves \$925K CPC appropriation for design
May 9, 2024	NRC appoints Morses Pond Beach Advisory Committee. Site walk and 6 meetings between May and December 2024.
August 2024	MOPO Beach Advisory Committee finalizes recommendations
October 2024	NRC votes to carry capital request as Proponent and appoints FMD to manage a supplemental feasibility study.
December 2024	CPC votes to approve \$168k request to NRC for supplemental study
January 2025	PBC advises Designphase funds (previously appropriated) not available to address Feasibilityphase issues.
March 2025	Advisory Committee votes 12-0 in support of supplemental study



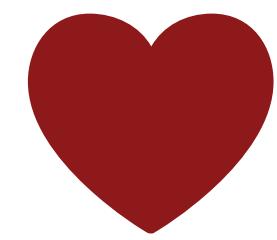
PROJECT TIMELINE

April 1, 2025	Annual Town Meeting
May 21, 2025	Kick- Off Meeting & Site Walk
June 6, 2025	MoPo Beach Advisory Committee Meeting #1
July 29, 2025	MoPo Beach Advisory Committee Meeting #2
August 5, 2025	Invasive species and wildlife assessment performed by W&S
August 6, 2025	Tree inventory performed by Hartney Greymont
August 21, 2025	Phase 1 Environmental Site Assessment field observation
August 21, 2025	Test pits performed by the Town and observed by W&S for stormwater, environmental, and geotechnical analysis
September 3, 2025	Walden Pond Site Visit
September 15, 2025	MoPo Beach Advisory Committee Meeting #3
September 29, 2025- TBD	MoPo Beach Advisory Committee Meeting #4
October 9, 2025	NRC reviews recommendations from MoPoBAC
October 23, 2025	NRC votes on MoPoBAC recommendations

The public is encouraged to provide input at any and all of these meetings



PROJECT GOALS AND OBJECTIVES



The site is very much loved as it is, so a master plan tenet should include preserving and enhancing all that is great.



The bathhouse has outlived its practical and functional life and given the extent of repairs and upgrades required in order to bring the building into full code compliance and functionality, it is more cost effective and practical to demolish the existing building and create a new building.



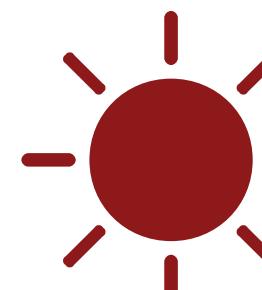
The design shall improve universal access for site amenities, walkways and paths.



Designs should be simple and sustainable, and in keeping with the inherent historical, environmental, cultural, and social site character.



Through the establishment of meadows and native landscape plantings, wildlife habitat can be improved.



New building enhancements should be attractive, low-intensity, and supportive of neighborhood and town-wide use during the summer swimming season.



Improvements to Morses Pond Beach will be designed in a cost-effective and sustainable manner.



MoPoBAC GOAL AND MEMBERSHIP

“Take a collaborative approach amongst all stakeholders to develop an ADA-compliant outcome that meets the programmatic needs for Recreation, environmental impact needs for NRC, operational needs for Recreation staff and customer experience needs for patrons and the Wellesley community at large, while at the same time enhancing the overall natural and aesthetic qualities of the site with a design that is simple, safety oriented and sustainable, and in keeping with the inherent historical, environmental, cultural, and social site character.”

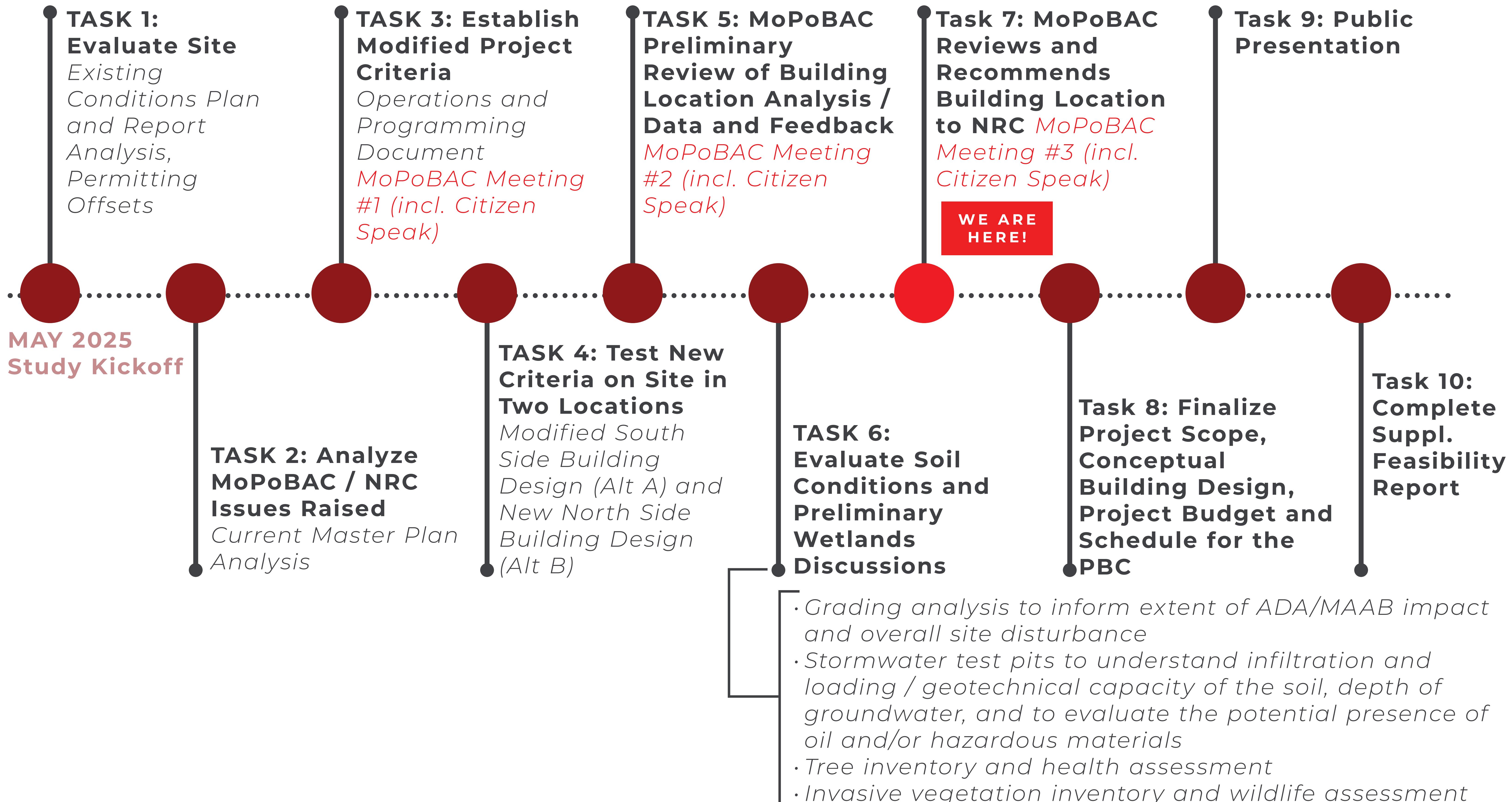
The MoPoBAC includes representation from NRC, Recreation, Select Board, Community Preservation Committee and Citizens.

Committee:

- Jay McHale, Chair
- Tripp Sheehan, ViceChair
- Tom Ulfelder, Select Board
- Stephen Murphy, Community Preservation Committee
- Mark Wolfson, Recreation Commission
- Michelle Jacobs, Precinct B
- Maura Renzella, Youth Commission and Precinct B
- Staff support from NRC, Recreation, DPW, and FMD



SUPPLEMENTARY FEASIBILITY STUDY TASK SUMMARY



EXISTING SITE CONDITIONS

*Photo of the Existing
Bathhouse, July 2019*



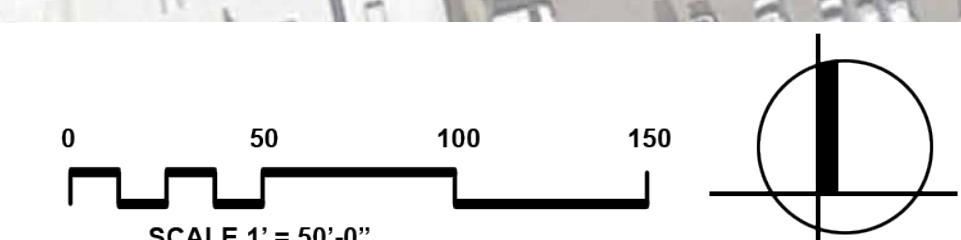
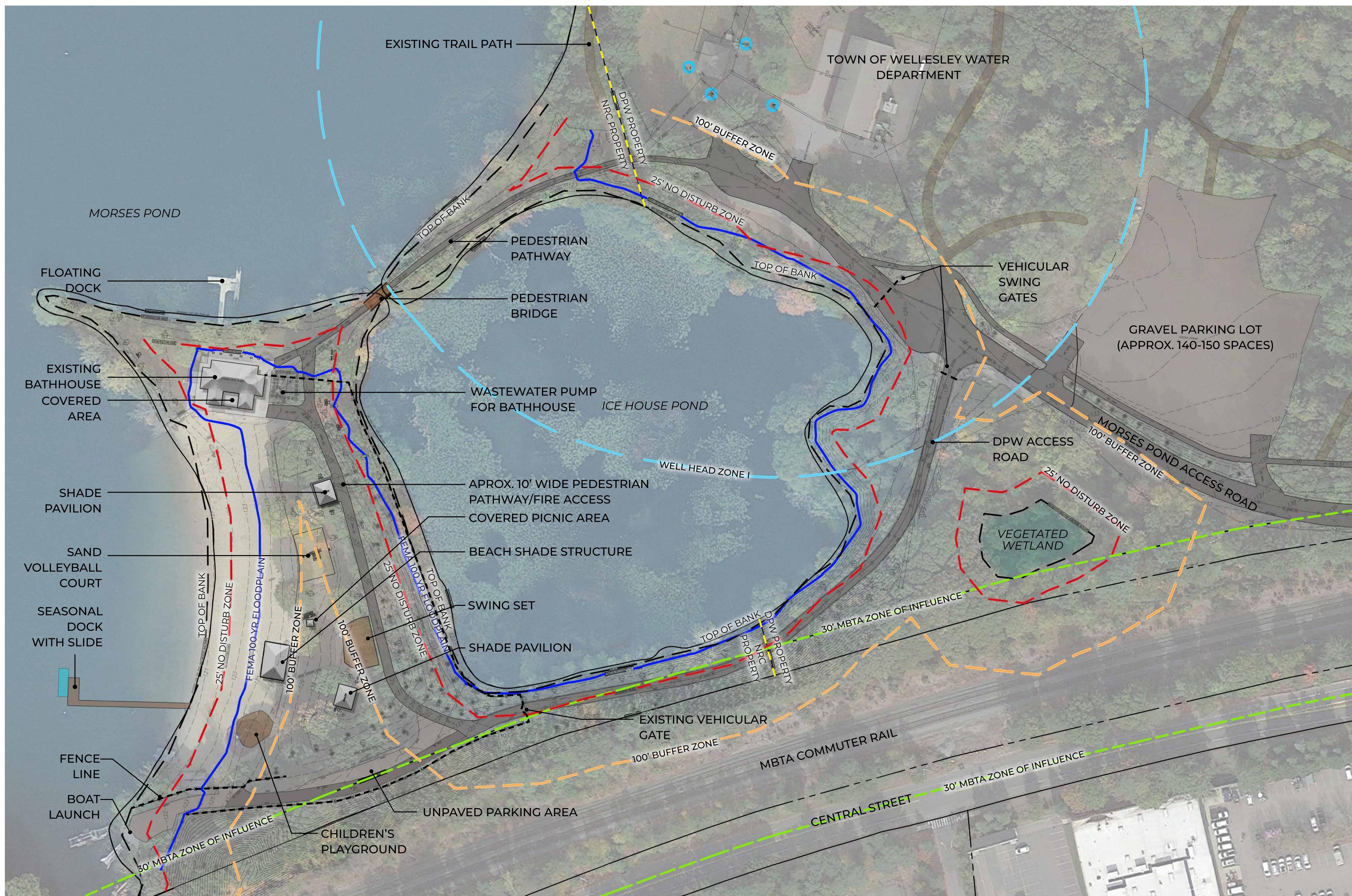
EXISTING CONDITIONS PLAN: SITE HISTORY AS A TOWN BEACH



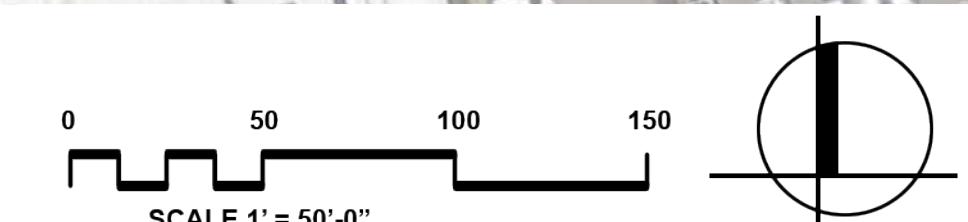
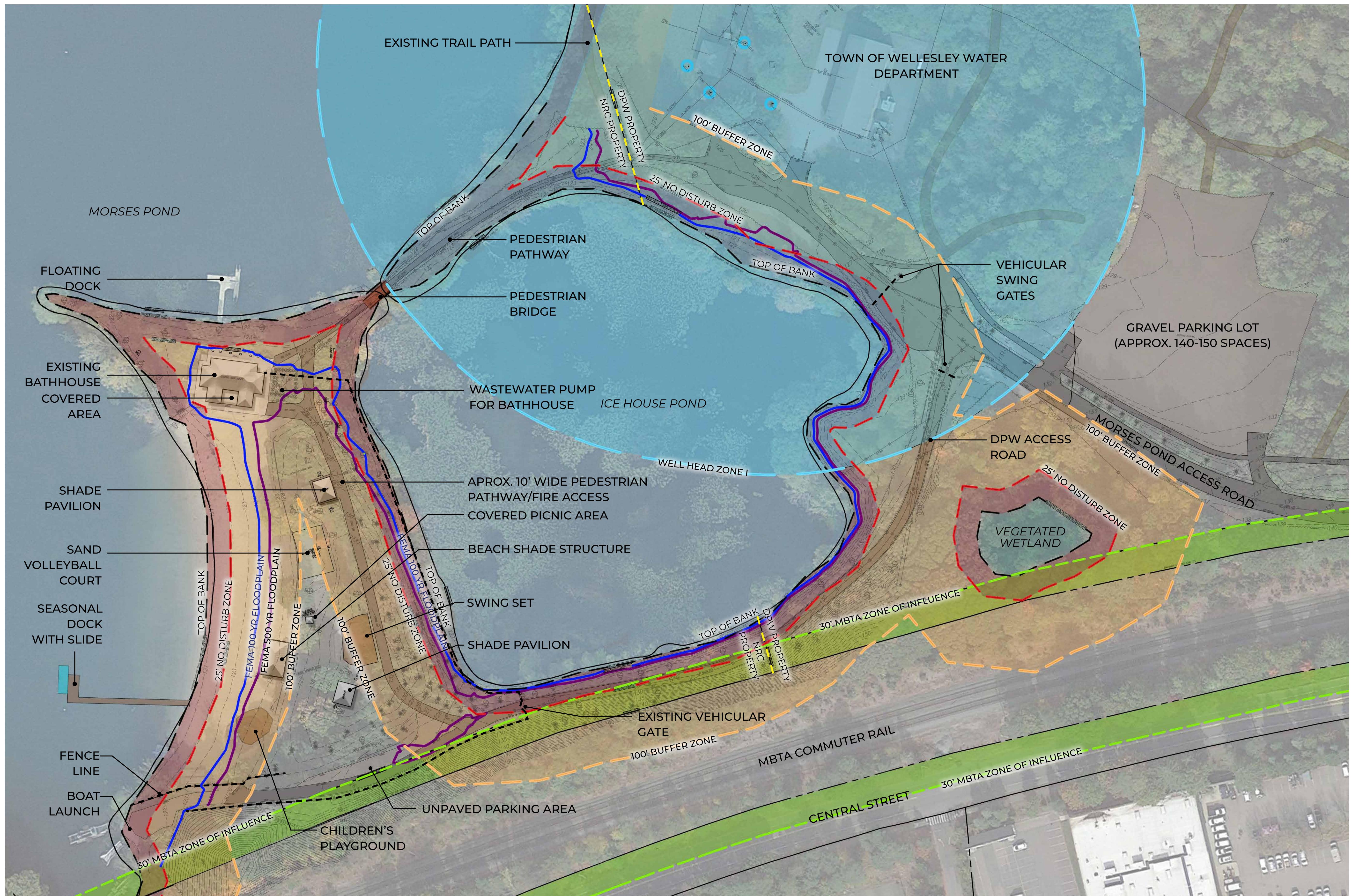
EXISTING CONDITIONS PLAN: BUILDING AND AMENITIES INVENTORY

TASK 1

Evaluate Site
Existing Conditions
Plan and Report
Analysis



EXISTING CONDITIONS PLAN: PERMITTING OFFSETS



MORSES POND BEACH & BATHHOUSE IMPROVEMENTS, WELLESLEY, MA

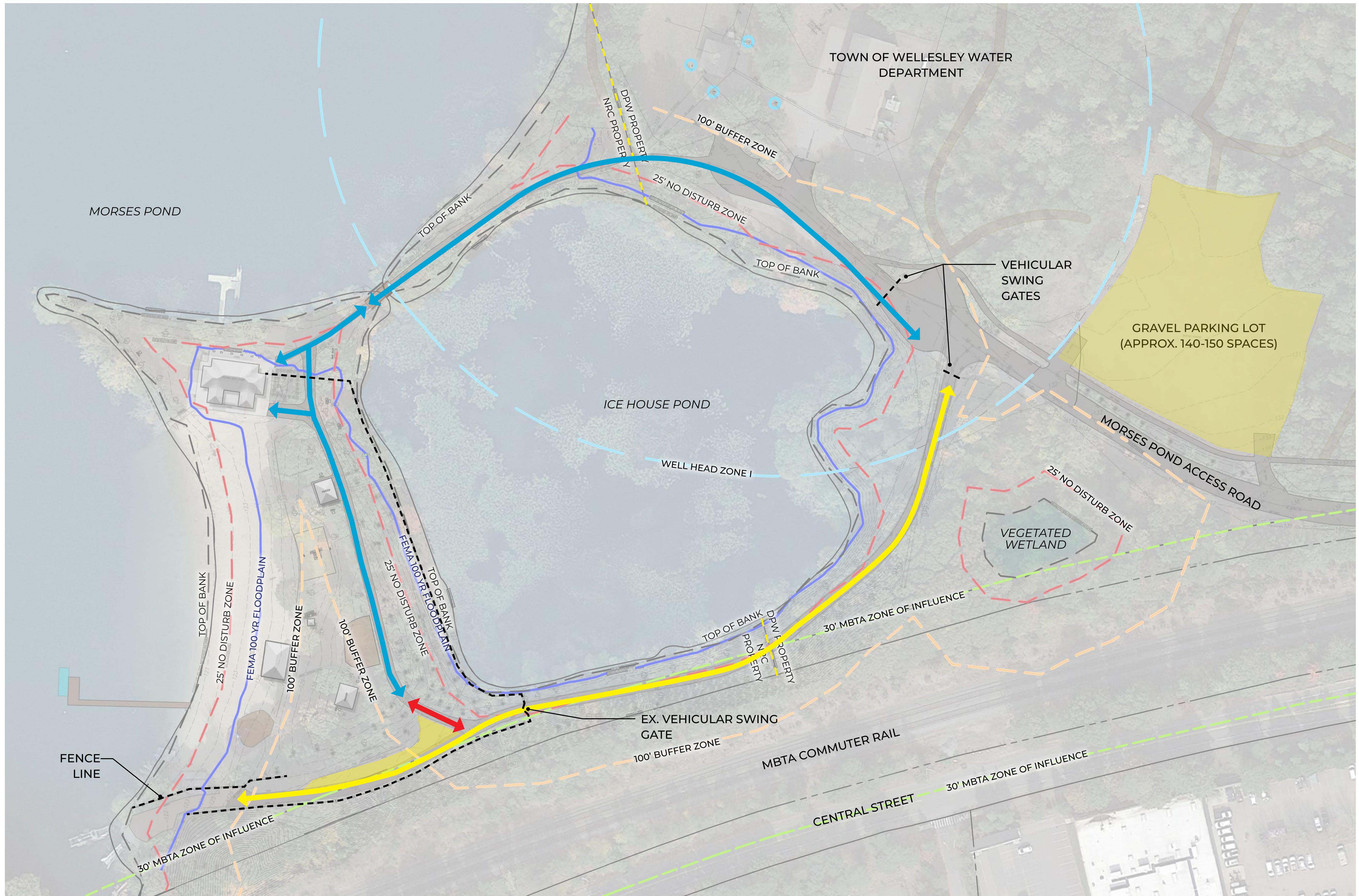
SUPPLEMENTARY FEASIBILITY STUDY \ TASK 7: BUILDING LOCATION ANALYSIS

- 13 - Existing Site Conditions

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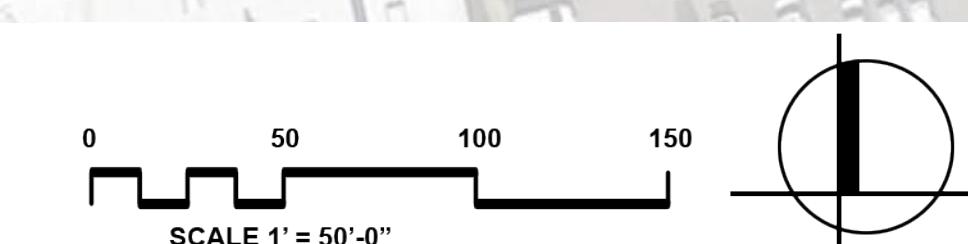
Weston & Sampson™

EXISTING CONDITIONS PLAN: PEDESTRIAN AND VEHICULAR CIRCULATION

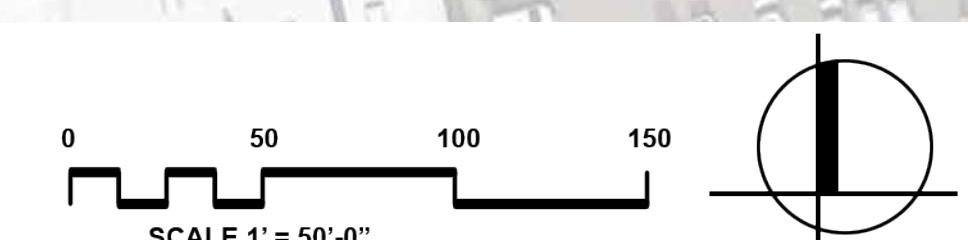


LEGEND

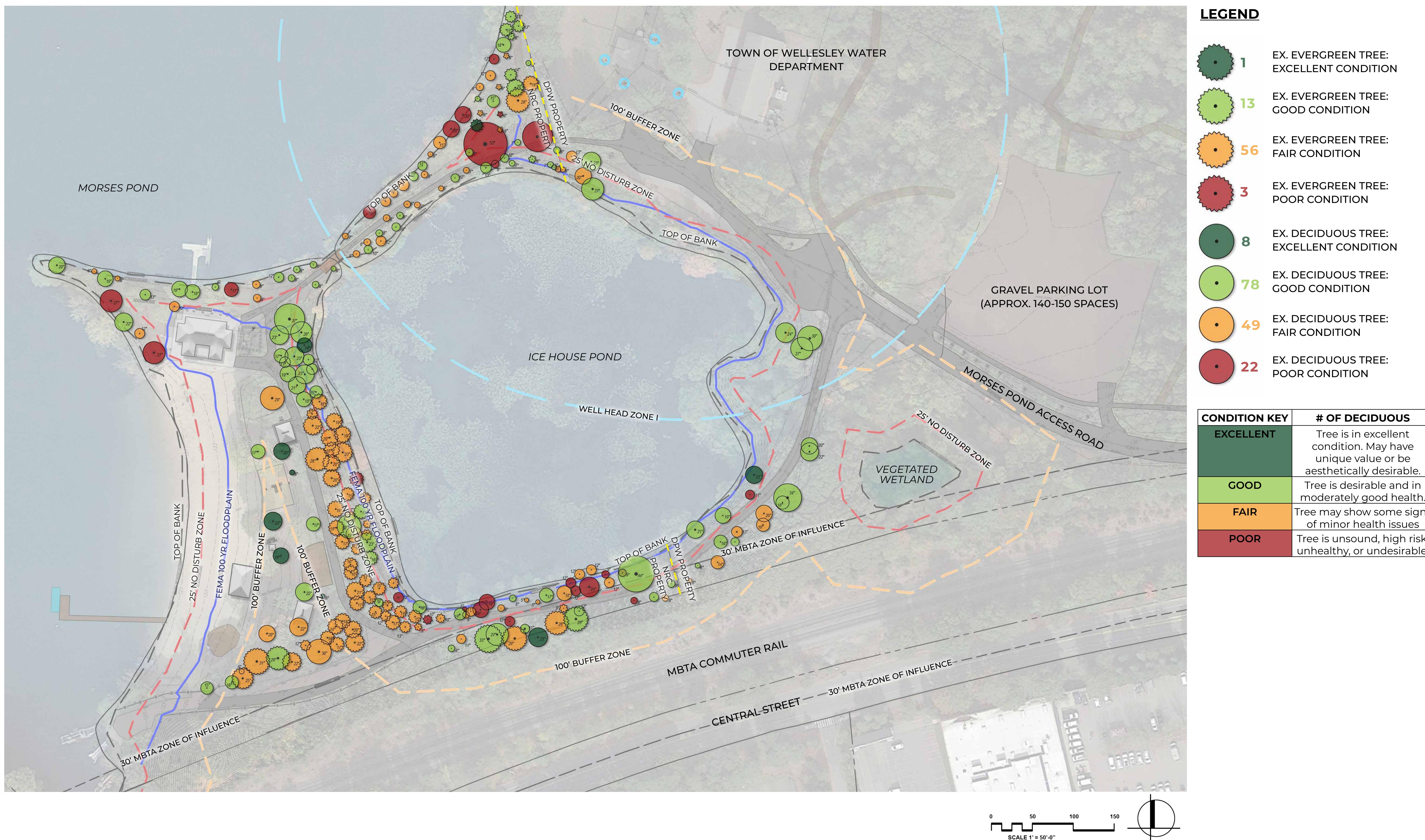
- EX. FENCE LINE
- ACCESSIBLE PEDESTRIAN ROUTE (< 5%)
- NON-ACCESSIBLE PEDESTRIAN ROUTE (> 5%)
- VEHICULAR ROUTE



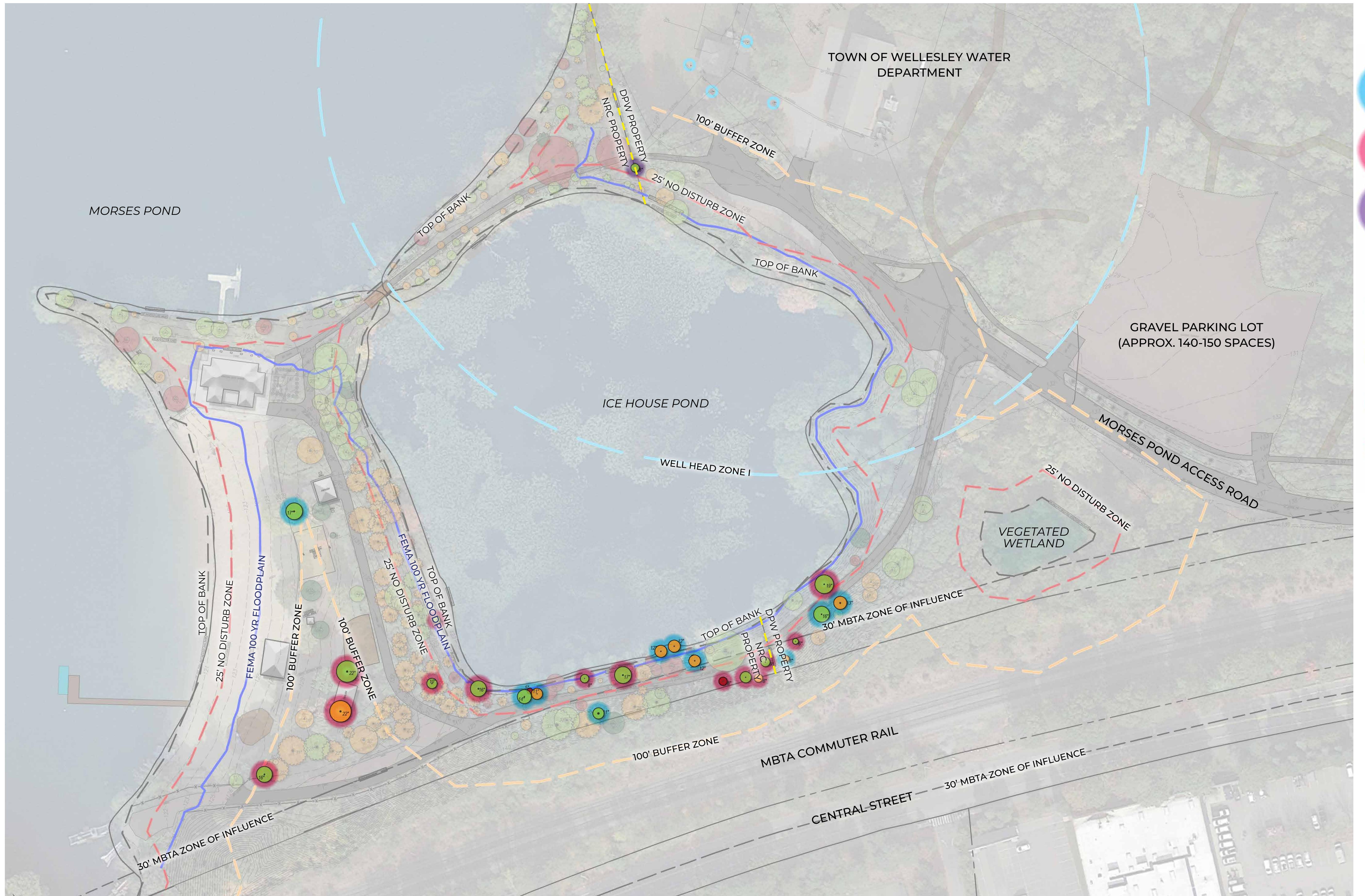
EXISTING CONDITIONS PLAN: EXISTING SIGNIFICANT TREES



EXISTING CONDITIONS PLAN: EXISTING TREE CONDITIONS



EXISTING CONDITIONS PLAN: EXISTING INVASIVE TREES



LEGEND

INVASIVE SPECIES IDENTIFICATION

- 11 EXISTING BLACK LOCUST (BL)
- 14 EXISTING NORWAY MAPLE (NM)
- 1 EXISTING TREE OF HEAVEN (TOH)

INVASIVE TREE CONDITION

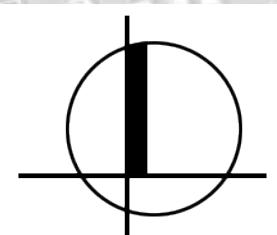
- 0 EX. TREE: EXCELLENT CONDITION
- 16 EX. TREE: GOOD CONDITION
- 8 EX. TREE: FAIR CONDITION
- 2 EX. TREE: POOR CONDITION

CONDITION	# OF BL	# OF NM	# OF TOH
EXCELLENT	0	0	0
GOOD	4	11	1
FAIR	6	2	0
POOR	1	1	0
TOTAL:	11	14	1

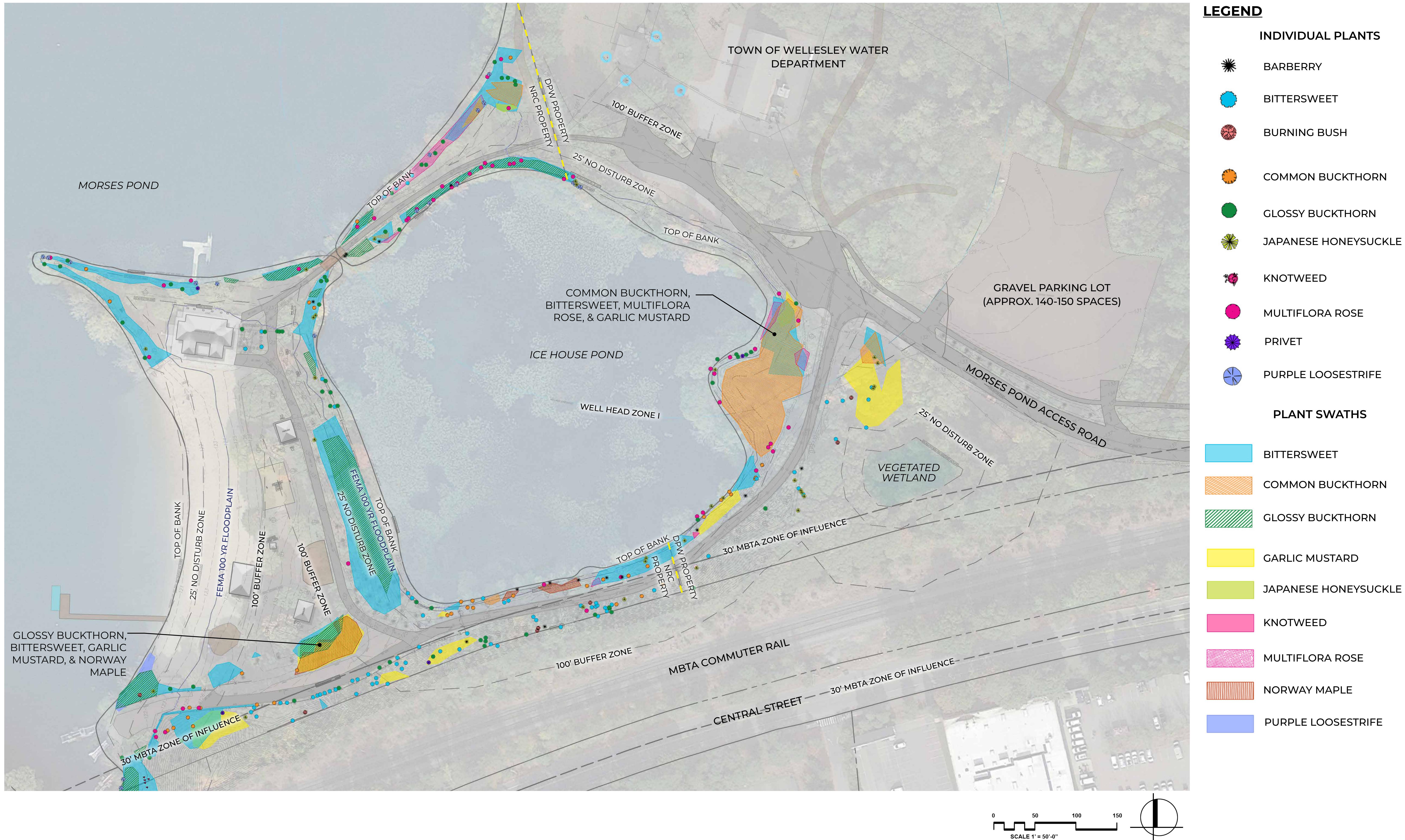
CONDITION KEY	# OF DECIDUOUS
EXCELLENT	Tree is in excellent condition. May have unique value or be aesthetically desirable.
GOOD	Tree is desirable and in moderately good health.
FAIR	Tree may show some signs of minor health issues
POOR	Tree is unsound, high risk, unhealthy, or undesirable.

Invasive trees were inventoried by Weston & Sampson on August 6, 2025. Additional invasive trees were identified during this effort that were located beyond the project limits and/or had a dbh of 3" or less.

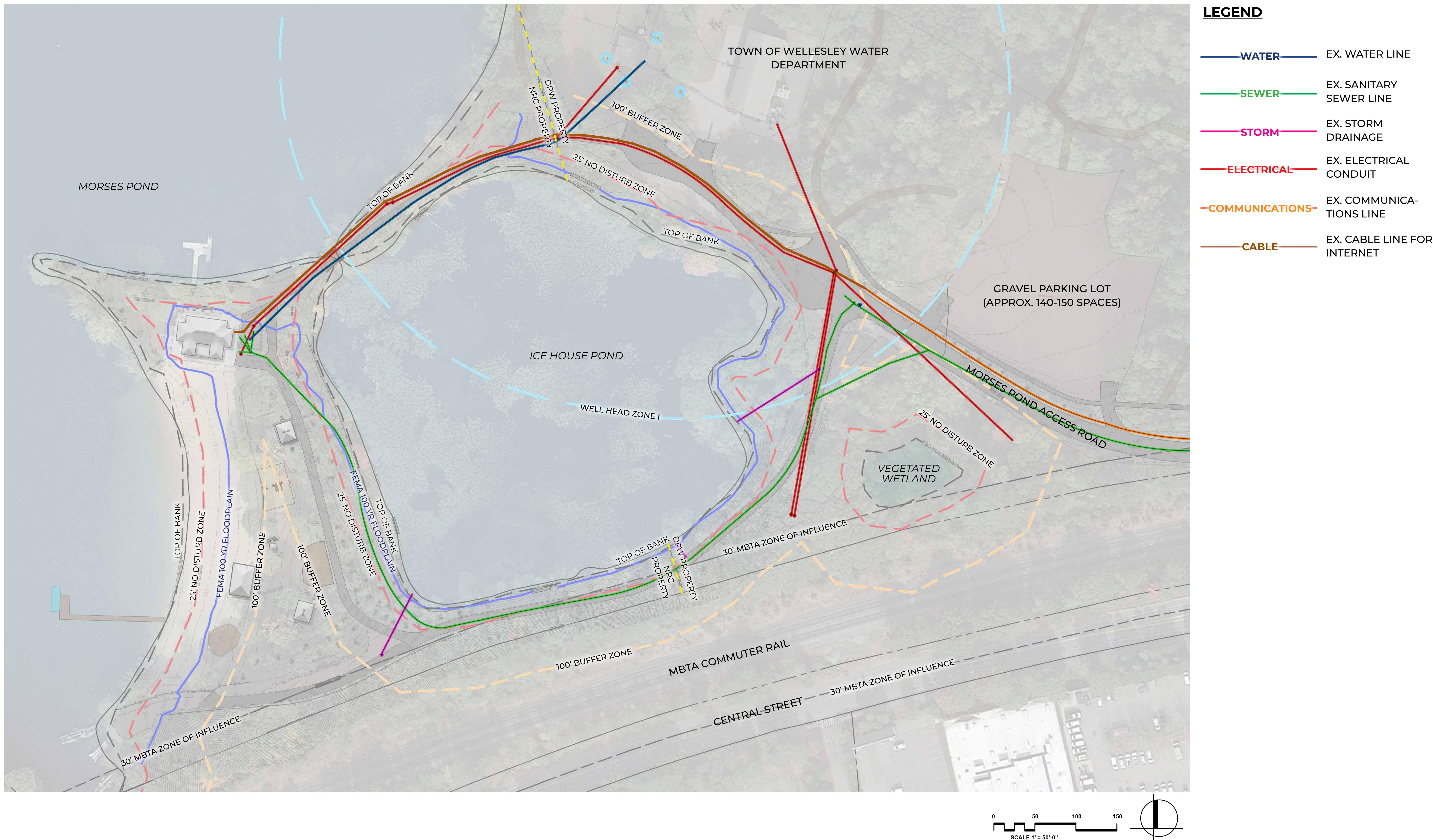
0
50
100
150
SCALE 1' = 50'-0"



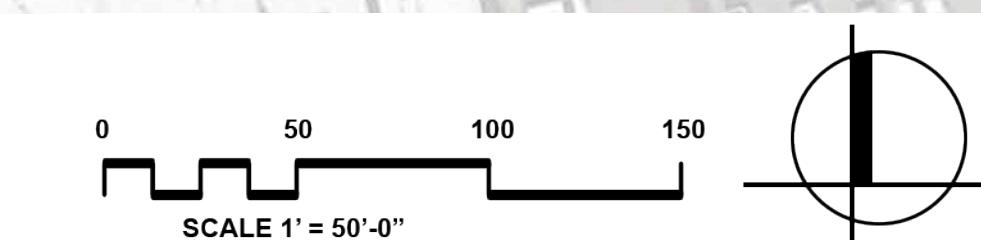
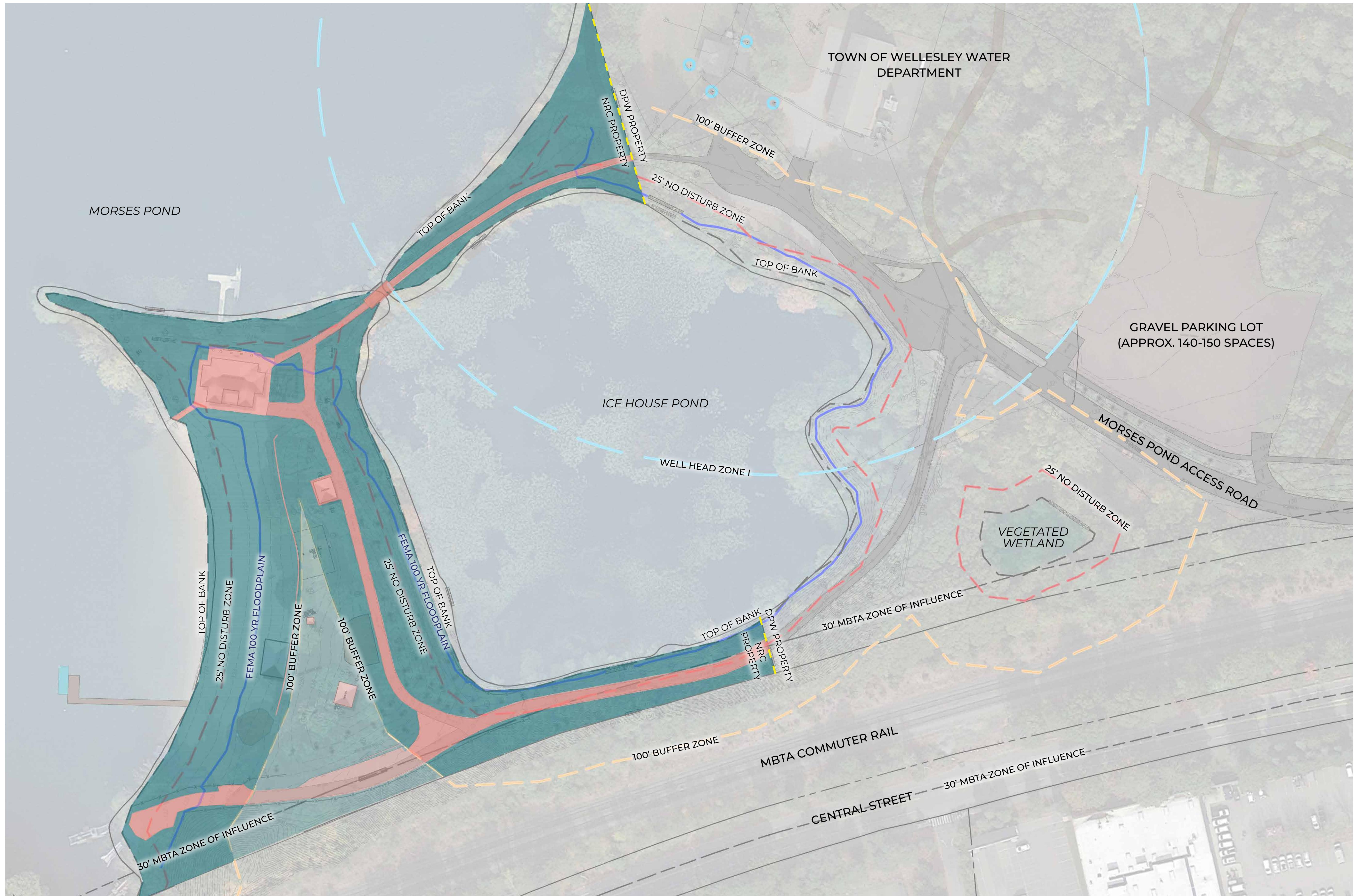
EXISTING CONDITIONS PLAN: EXISTING INVASIVE PLANTS



EXISTING CONDITIONS PLAN: EXISTING UTILITIES



EXISTING CONDITIONS PLAN: IMPERVIOUS / PERVIOUS COVER



CURRENT MASTER PLAN ANALYSIS

*Illustrative Rendering of
the Current Master Plan,
from 2024*



CURRENT MASTER PLAN

TASK 2

Analyze MoPoBAC / NRC Issues Raised Current Master Plan Analysis

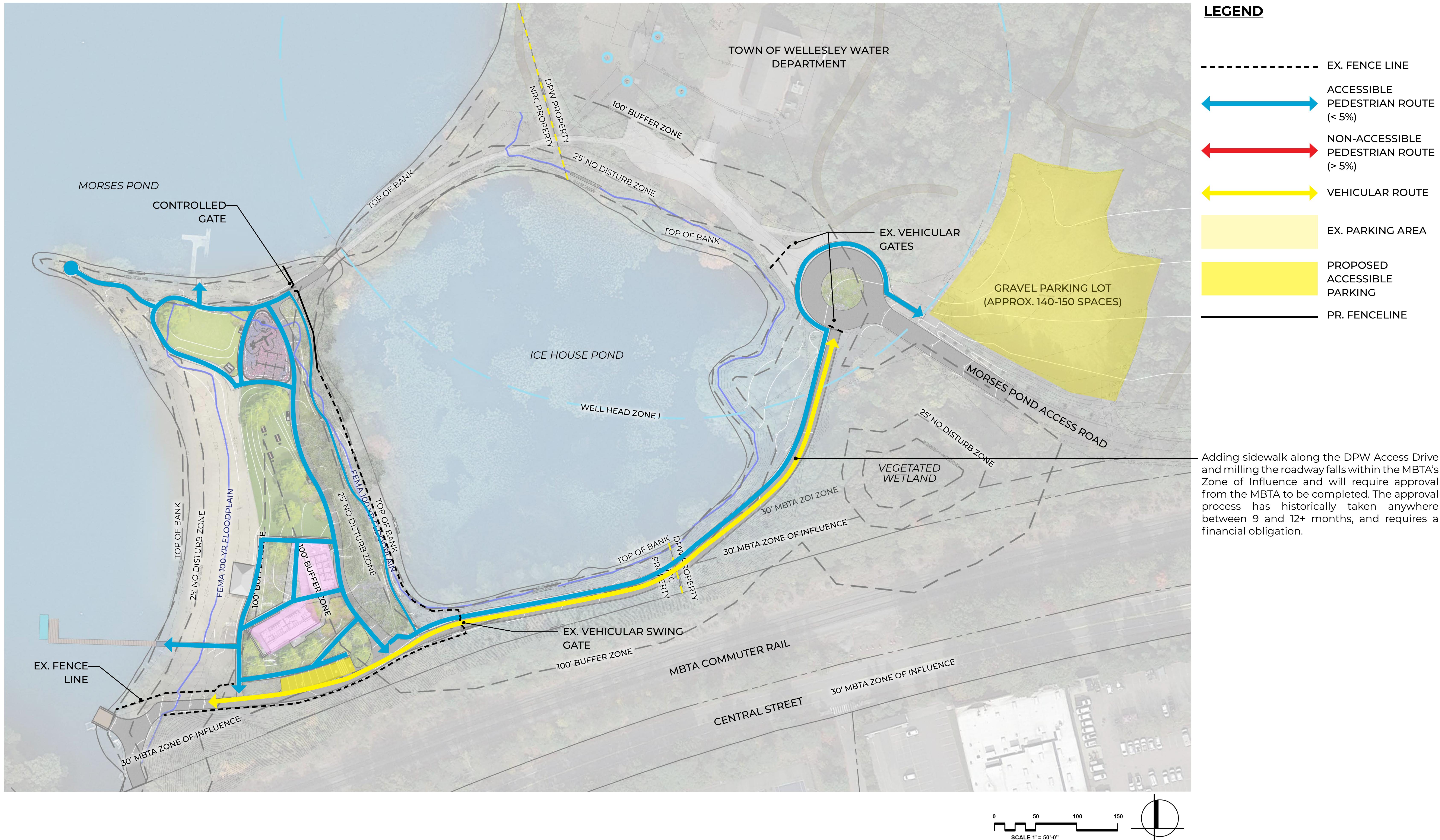


The Master Plan produced during the 2024 study was completed prior to the realignment of the seasonal dock location. Additionally, the boardwalk along the beach was value engineered out of the design after the study was finalized.

The Master Plan to the left reflects the new location of the seasonal dock and the removal of the previously proposed boardwalk to make up what is now referred to as the Current Master Plan. Permitting offsets have also been included on this plan.



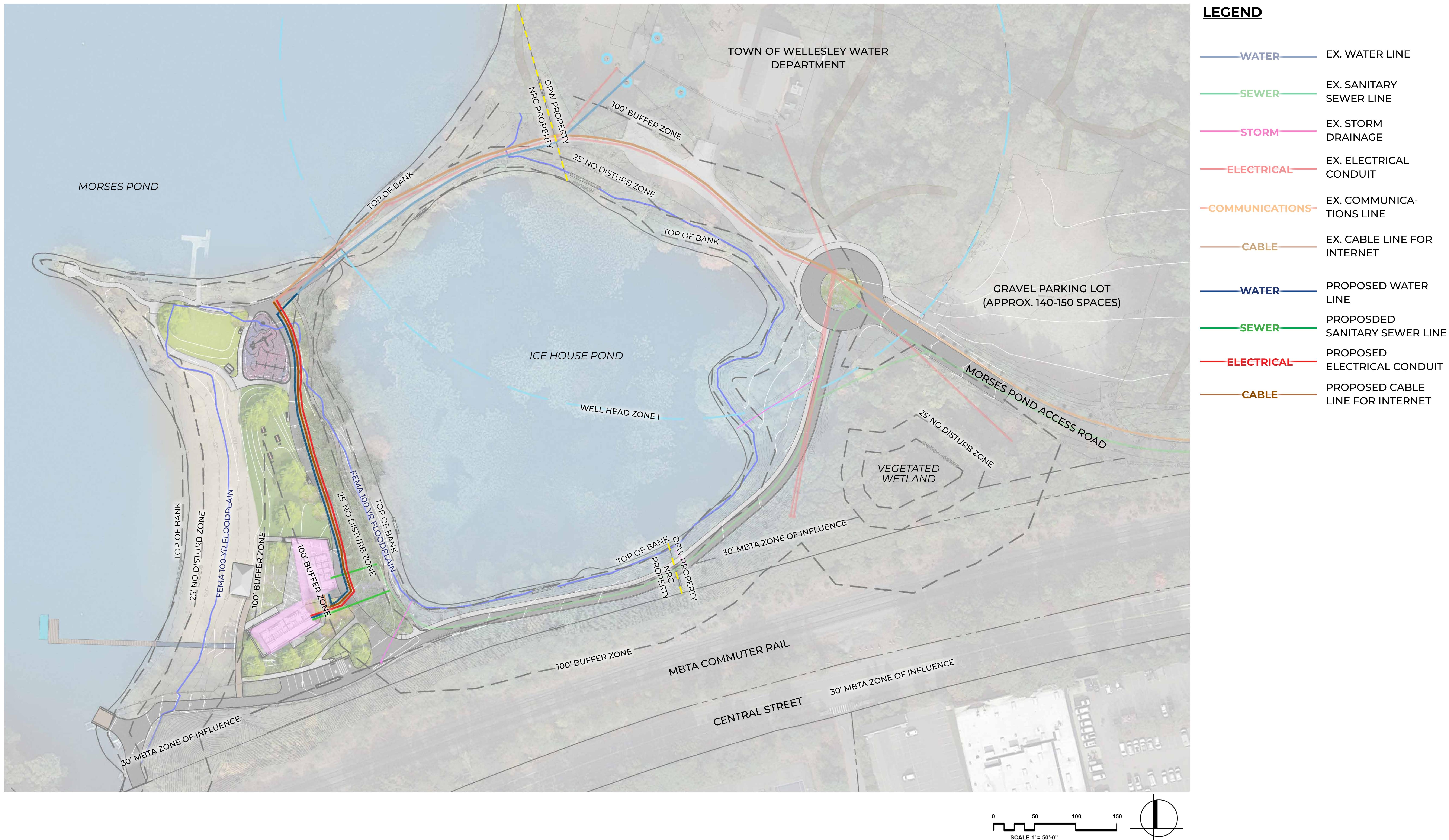
CURRENT MASTER PLAN: PEDESTRIAN AND VEHICULAR CIRCULATION



CURRENT MASTER PLAN: TREE IMPACTS



CURRENT MASTER PLAN: UTILITIES



CURRENT MASTER PLAN: IMPERVIOUS / PEROVIOUS COVER



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SUPPLEMENTARY FEASIBILITY STUDY \ TASK 7: BUILDING LOCATION ANALYSIS

- 26 - Current Master Plan Analysis

LEGEND

28,560 sf

IMPERVIOUS AREA - INSIDE 100' WETLAND BUFFER

11,280 sf

IMPERVIOUS AREA - OUTSIDE 100' WETLAND BUFFER

130,015 sf

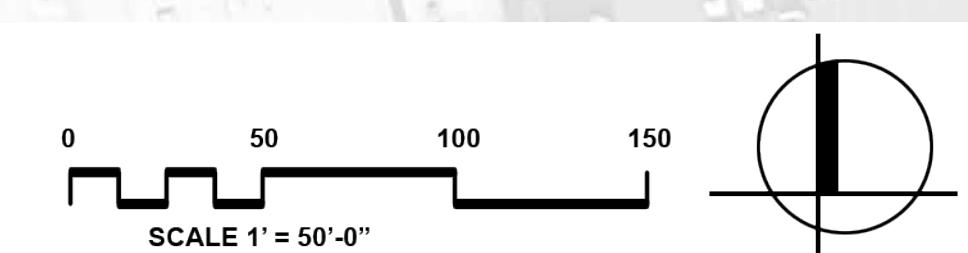
PERVIOUS AREA

- INSIDE 100'
- WETLAND BUFFER

17,505 sf

PERVIOUS AREA

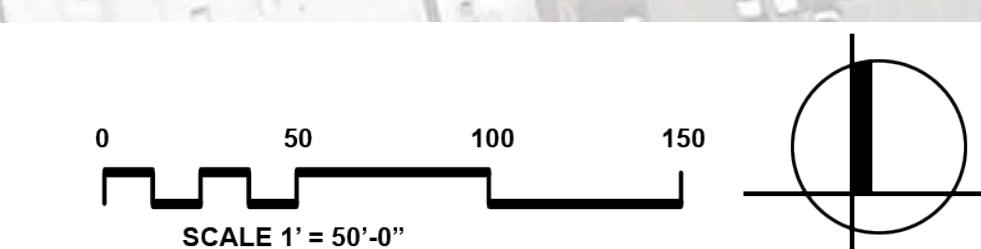
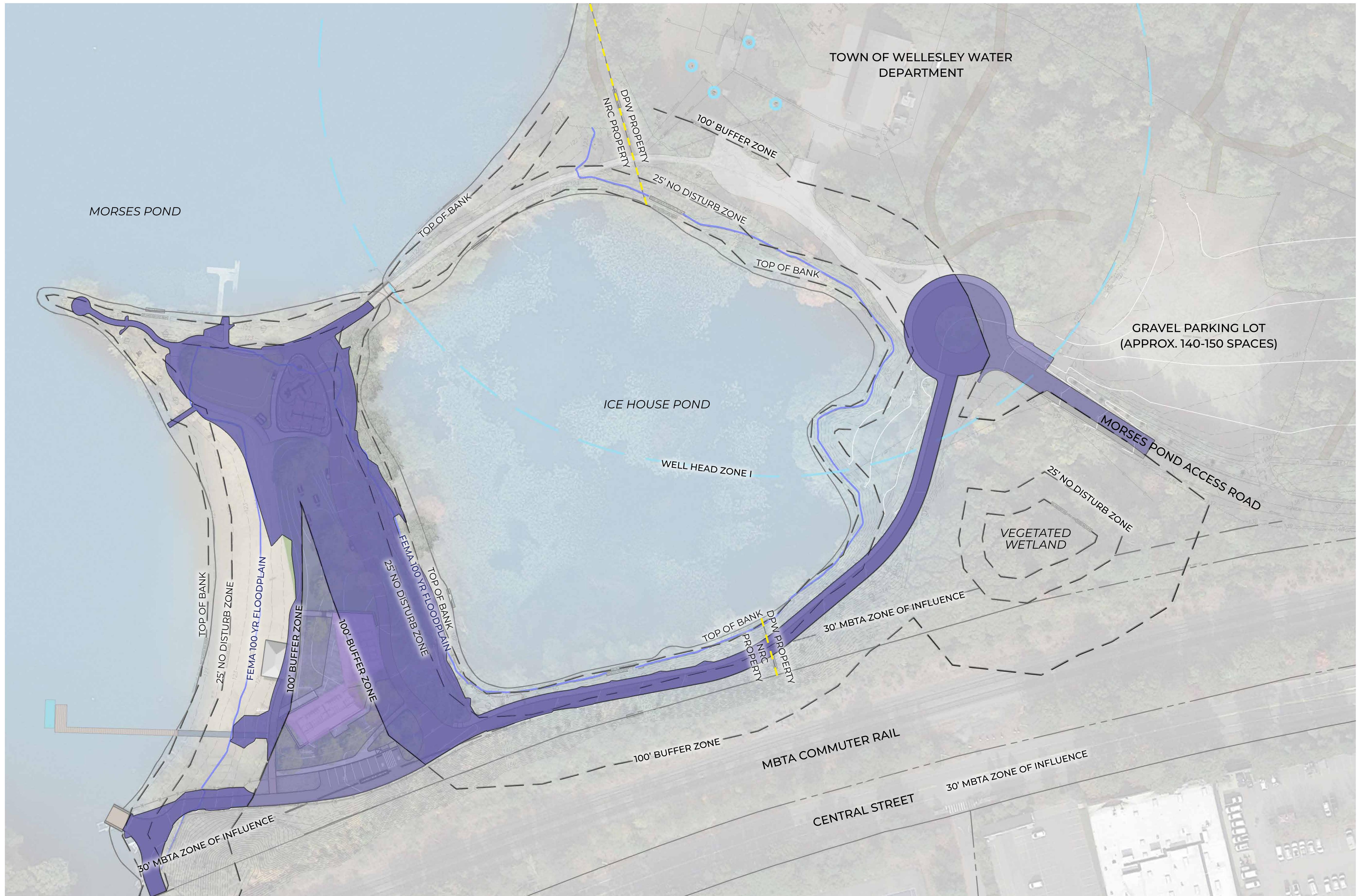
- OUTSIDE 100'
- WETLAND BUFFER



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CURRENT MASTER PLAN: DISTURBANCE



CURRENT MASTER PLAN: ANALYSIS SUMMARY

	EXISTING CONDITIONS PLAN	CURRENT MASTER PLAN	NET CHANGE
BUILDING LOCATION	North side	South side	N/A
BUILDING SQUARE FOOTAGE	2,572 sf	3,191 sf	+619 sf
IMPERVIOUS AREA - INSIDE 100' WETLAND BUFFER	24,074 sf	28,560 sf	+4,486 sf
PERVIOUS AREA - INSIDE 100' WETLAND BUFFER	134,501 sf	130,015 sf	-4,486 sf
TOTAL IMPERVIOUS AREA	28,715 sf	39,840 sf	+11,125 sf
TOTAL PERVIOUS AREA	158,645 sf	147,520 sf	-11,125 sf
OVERALL CUT / FILL	N/A	7,050.9 cy cut / 1,201.3 cy fill	5,849.6 cy net cut
CUT / FILL WITHIN THE 100 YR. FEMA FLOODPLAIN	N/A	458.8 cy cut / 68 cy fill	390.9 cy net cut
DEDICATED LAWN AREA	Peninsula Lawn: 13,274 sf, Beach Lawn: 28, 598 sf, Total: 41,872 sf	Peninsula Lawn: 15,380 sf, Beach Lawn: 21,384 sf, Total: 36,764 sf	-5,108 sf
RELOCATED AMENITIES	N/A	N/A	N/A
PARKING	<ul style="list-style-type: none"> • Gravel pull off area • No ADA parking 	<ul style="list-style-type: none"> • 7 parking spaces • 2 ADA parking spaces 	+9 spaces
DECIDUOUS TREES - INSIDE THE 100' WETLAND BUFFER	149	123	-26
DECIDUOUS TREES - OUTSIDE THE 100' WETLAND BUFFER	8	2	-6
TOTAL DECIDUOUS TREES	157(existing)	125 (remain)	-32 (5 invasive)
EVERGREEN TREES - INSIDE THE 100' WETLAND BUFFER	66	45	-21
EVERGREEN TREES - OUTSIDE THE 100' WETLAND BUFFER	7	0	-7
TOTAL EVERGREEN TREES	73 (existing)	45 (remain)	-28
UTILITY IMPACTS	N/A	Additional water line & electrical conduit from the north to the southern location	+/- 300 linear feet (Electrical) +/- 300 linear feet (Water)
VEHICULAR CIRCULATION	Southern path	Southern path	N/A
PEDESTRIAN CIRCULATION	<ul style="list-style-type: none"> • Main pedestrian access at the northern end • Restricted access to Ice House Pond loop path during beach season • Main beach path is not accessible at southern end 	<ul style="list-style-type: none"> • Beach access is through the southern bathhouse • Northern access would be gated • Full access to Ice House Pond loop path year round through fenced off secondary pond path • All paths are accessible 	<ul style="list-style-type: none"> • 1 access point at the south end • Full access to Ice House Pond loop path only during off season • All paths are accessible
AREA OF DISTURBANCE	N/A	116,922 sf (87,764 sf inside 100' wetland buffer)	+116,922 sf
PERMITTING IMPACTS	N/A	<ul style="list-style-type: none"> • Wildlife assessment is required (greater than 5,000 sf of alteration within the 100' wetland buffer) • A stormwater report is required (net increase in impervious within the 100' wetland buffer) • Minor compensatory storage is necessary within the 100 Yr. FEMA Floodplain (greater than 5,000 sf of alteration) • Planting one native replacement tree for each tree removed - 47 Native Trees Total • Zone of Influence permit required (project schedule to accommodate review periods) 	N/A



MODIFIED PROJECT CRITERIA

*View of the beach,
June 2019*



MODIFIED PROJECT CRITERIA: BATHHOUSE PROGRAM

TASK 3

Establish Modified Project Criteria

Operations and Programming Document

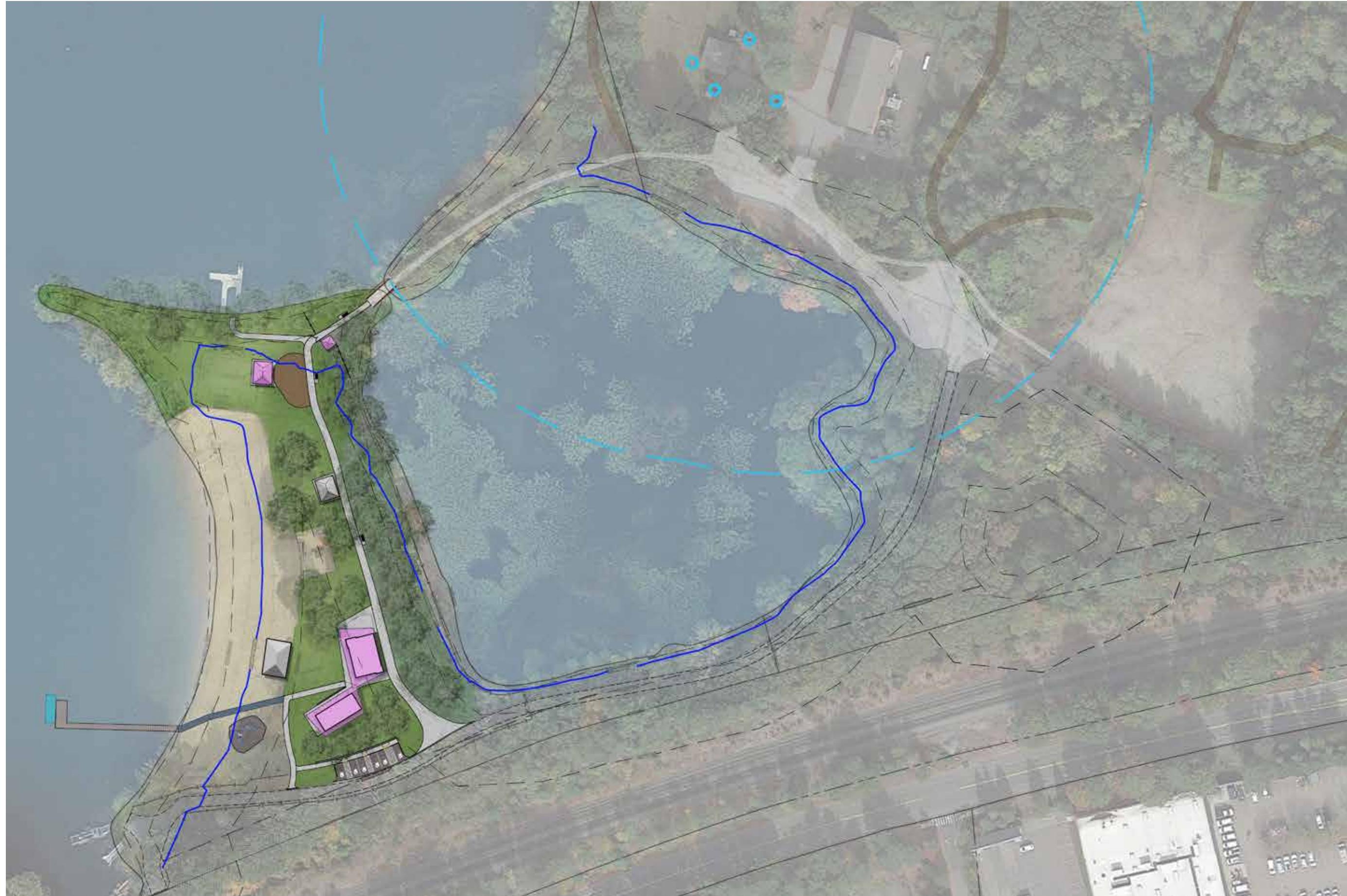
BUILDING PROGRAM	EX. BATHHOUSE PROGRAM (nsf)	CURRENT MASTER PLAN BATHHOUSE PROGRAM (nsf)	REVISED BATHHOUSE PROGRAM FOR NEW CRITERIA TESTING (nsf)	NET REDUCTION - CURRENT TO REVISED (nsf)	NET REDUCTION - CURRENT TO REVISED (%)	
<u>Interior Spaces</u>						
Public Uses	825	1200	720	480	40%	
Women's Bathroom	426	465	300	165	35%	• 6 stalls + 3 changing areas to 3 stalls + 2 changing areas
Men's Bathroom	325	465	300	165	35%	• 3 stalls, 3 urinals + 3 changing areas to 3 stalls/urinals + 2 changing areas
Accessible / Family Bathrooms	74	140	120	20	14%	• Includes 2 separate Family toilets
Concession		130		130	100%	• eliminated, vending remains
Staff Uses	732	825	620	205	25%	
Guardroom	206	265	250	15	6%	
Lifeguard changing rooms	242	included in the Guardroom nsf				• consolidated into the Guardroom
First Aid	110	295	130	165	56%	
Office/Gatekeeper	174	165	160	5	3%	
Beach manager's office (formerly: Town)		100	80	20	20%	
Mechanical	62	144	100	44	31%	
Storage	444	740	644	96	13%	
Grossing Factor		290.9	146	82.5	28%	
TOTAL INTERIOR SPACES	2063	3199.9	2230	907.5	28%	
TOTAL EXTERIOR SPACES	868	3450	2540	910	26%	

Exterior space is considered the deck area, which includes a water fountain, rinse station, and lifeguard break area

blue = Previously proposed as conditioned spaces, TBD

* included but no associated nsf



**ALTERNATIVE A: MODIFIED SOUTH
SIDE BUILDING DESIGN**

Reduced square footage buildings located in the same orientation and location (south side) as the Current Master Plan

**ALTERNATIVE B: NEW NORTH SIDE
BUILDING DESIGN**

Reduced square footage buildings located generally in the same location as the existing bathhouse building (north side)



MODIFIED PROJECT CRITERIA: BOTH ALTERNATIVE A AND B ADDRESS ISSUES RAISED

MoPoBAC Recs	Supplemental Study Schemes: Alternative A and B	How Recommendations are Addressed
1. Remove Ice House Pond footpaths	Removed N/S path along the west side of Ice House Pond and the sidewalk along the South drive. Made pedestrian access to the Beach from the North path and ADA vehicular access (only) from South drive.	Reduces Project scope/cost and environmental impact.
2. Reduce impervious surface footprint of the buildings	Reduced size of Building by having less toilets (still above Code minimum) and removed built indoor boat storage	Less impact on stormwater and preserves more natural open space.
3. Reduce impervious surface footprint of the uncovered patio area	Reduced built patio area around buildings.	Less impact on stormwater and preserves more natural open space.
4. Minimize site grading requirements	Alt A and B test smaller footprint options with different degrees of grading requirement.	Smaller footprint of disturbed area reduces grading requirements from the Current Master Plan.
5.1. Wetlands considerations and mitigation	Alt A and B test smaller footprint options with different degrees of wetlands impact and mitigation requirements	<ul style="list-style-type: none"> Native tree replacements Wildlife assessment required Minor compensatory storage requirements A stormwater report may not be needed (net decrease in impervious within the 100' wetland buffer)
5.2. Low-impact sustainable design	This is the Design intent and will be pursued as part of Design Phase work.	TBD. To be reviewed with NRC in the Design Phase.
5.3. Impact of the potential increase beyond current seasonal use	No Change in Use. Replacing current functions and seasonal use (only).	No special permitting or additional studies required for extended hours or seasons.
5.4. Ownership, Maintenance and Budgeting	NRC proposed NRC Ownership but leased to Recreation for maintenance	TBD. Decision not part of this Study and will be based on discussions between NRC/DPW and Recreation/FMD.
5.5. NRC engagement with Recreation	Recreation part of MoPoBAC.	Supplemental Study benefits from more input.
6. Determine whether any 'Change in Use' is planned	No Change in Use. Replacing current functions.	No special permitting or additional studies required for extended hours or seasons.
7. Evaluate Accommodations for Food Trucks	MoPoBAC to determine if part of Project scope.	Lockable power hook ups will be provided at the exterior of each building.



ALTERNATIVE A: MODIFIED SOUTH SIDE BUILDING DESIGN

*View from the south side
of Morses Pond Beach
toward the water*



ALTERNATIVE A: MODIFIED SOUTH SIDE BUILDING DESIGN



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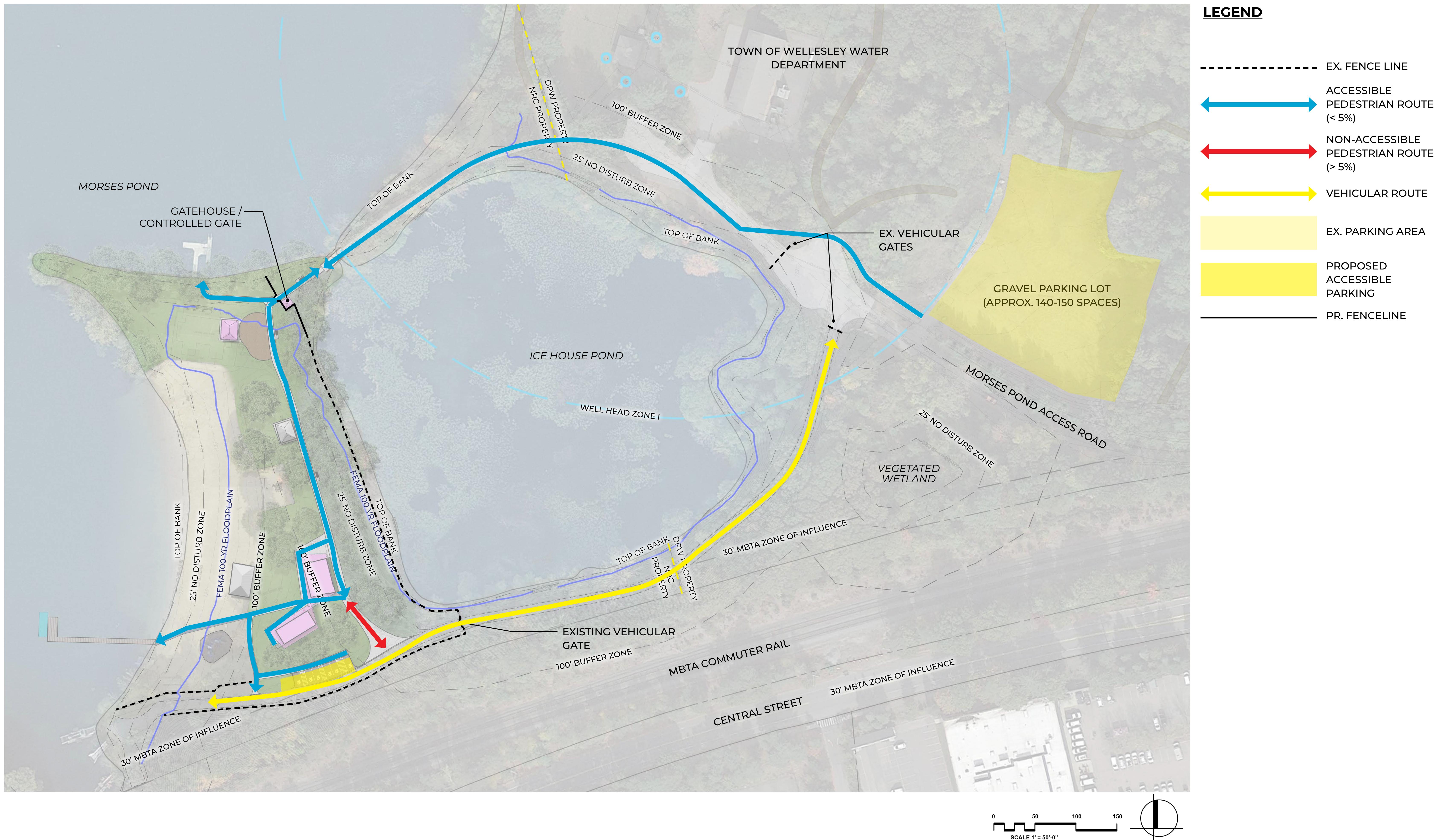
SUPPLEMENTARY FEASIBILITY STUDY \ TASK 7: BUILDING LOCATION ANALYSIS

-34- ALTERNATIVE A: MODIFIED SOUTH SIDE BUILDING DESIGN

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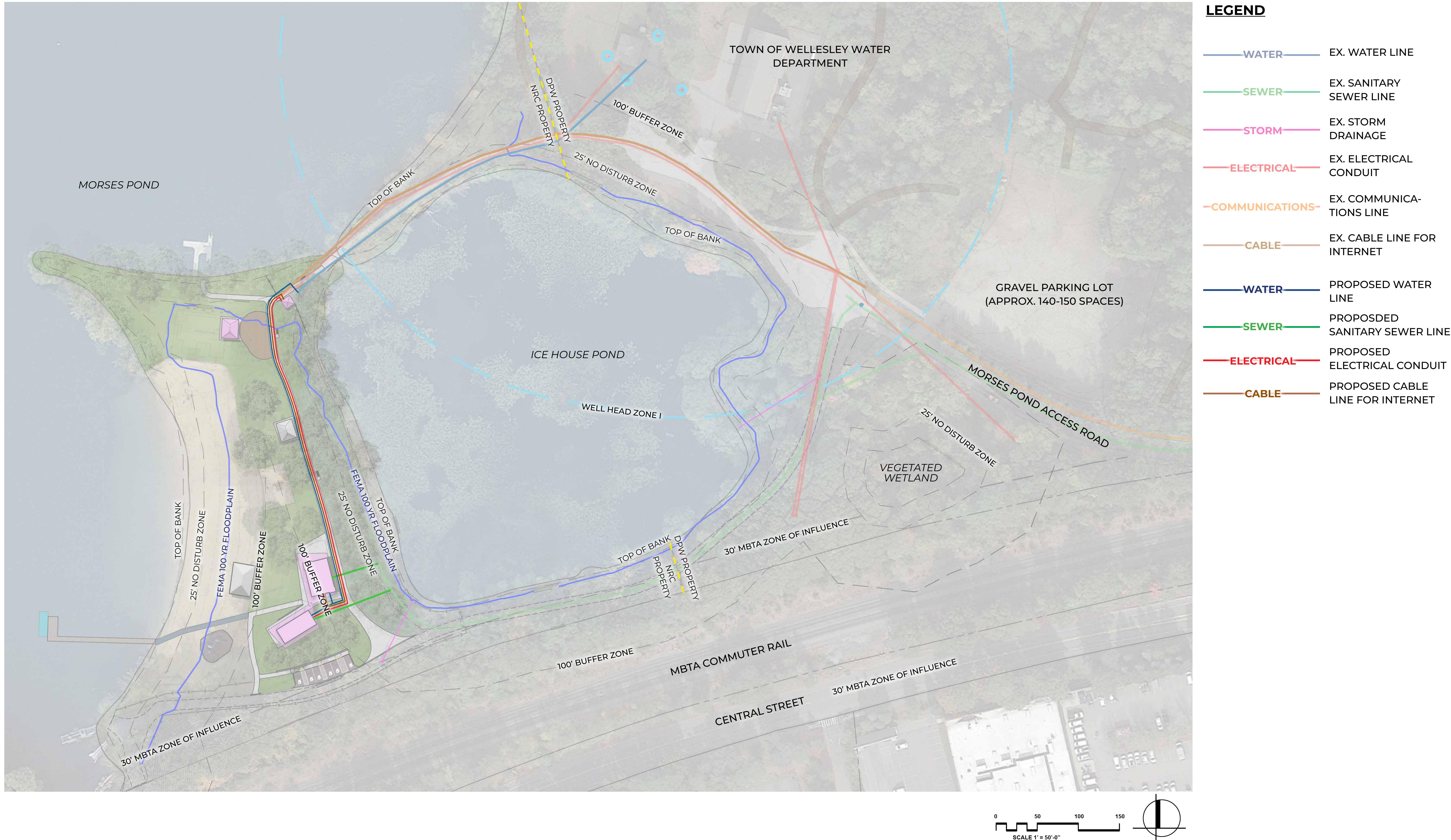
ALTERNATIVE A: PEDESTRIAN AND VEHICULAR CIRCULATION



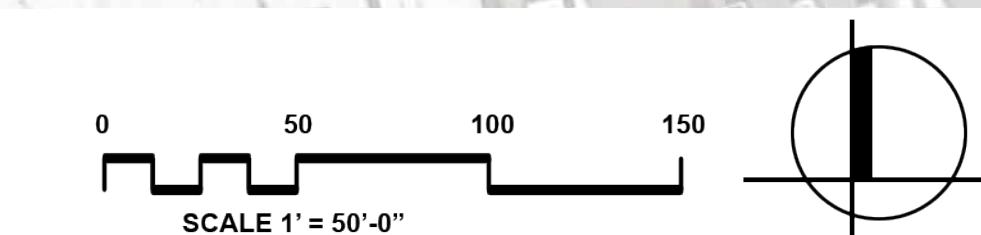
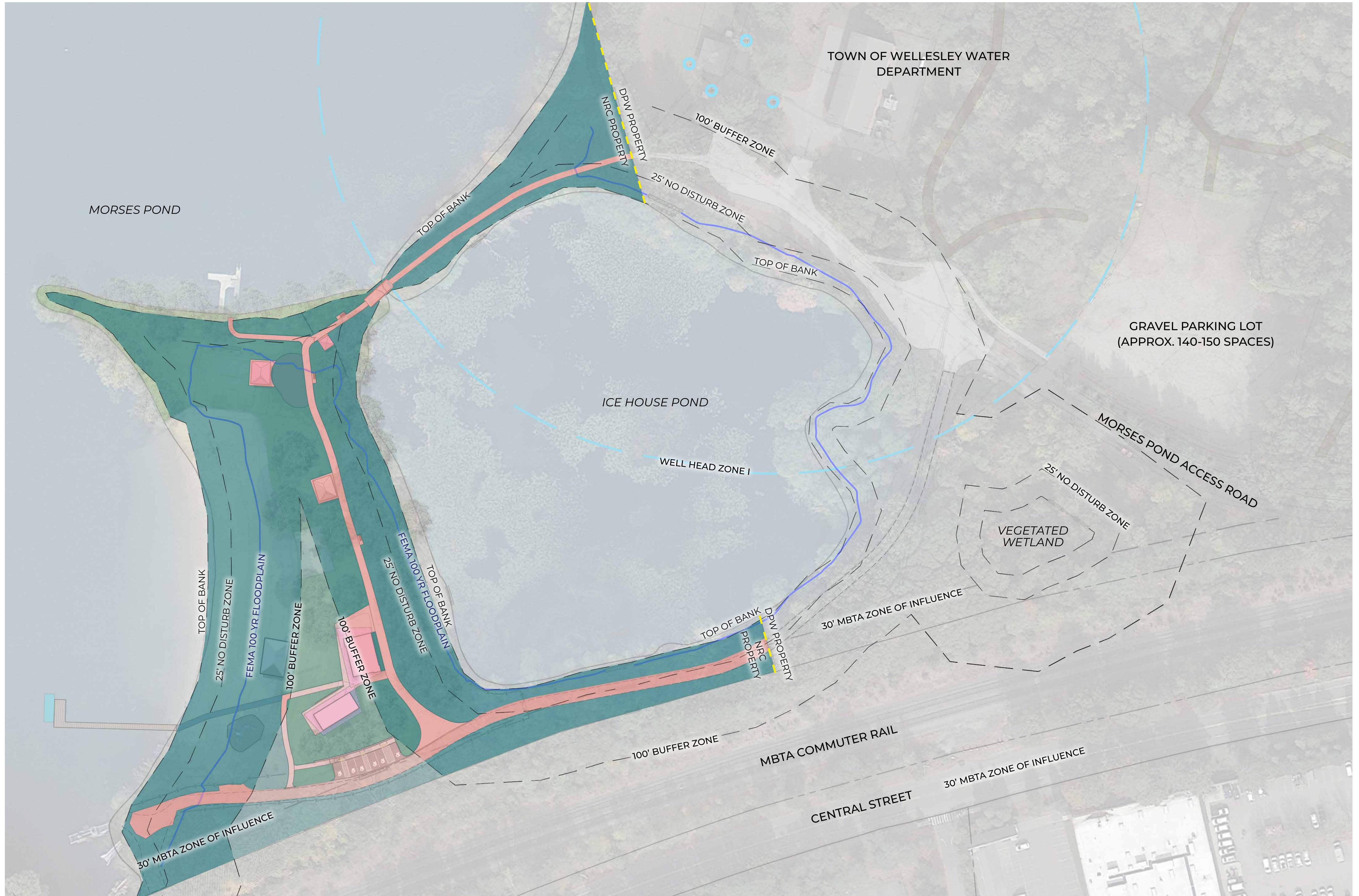
ALTERNATIVE A: TREE IMPACTS



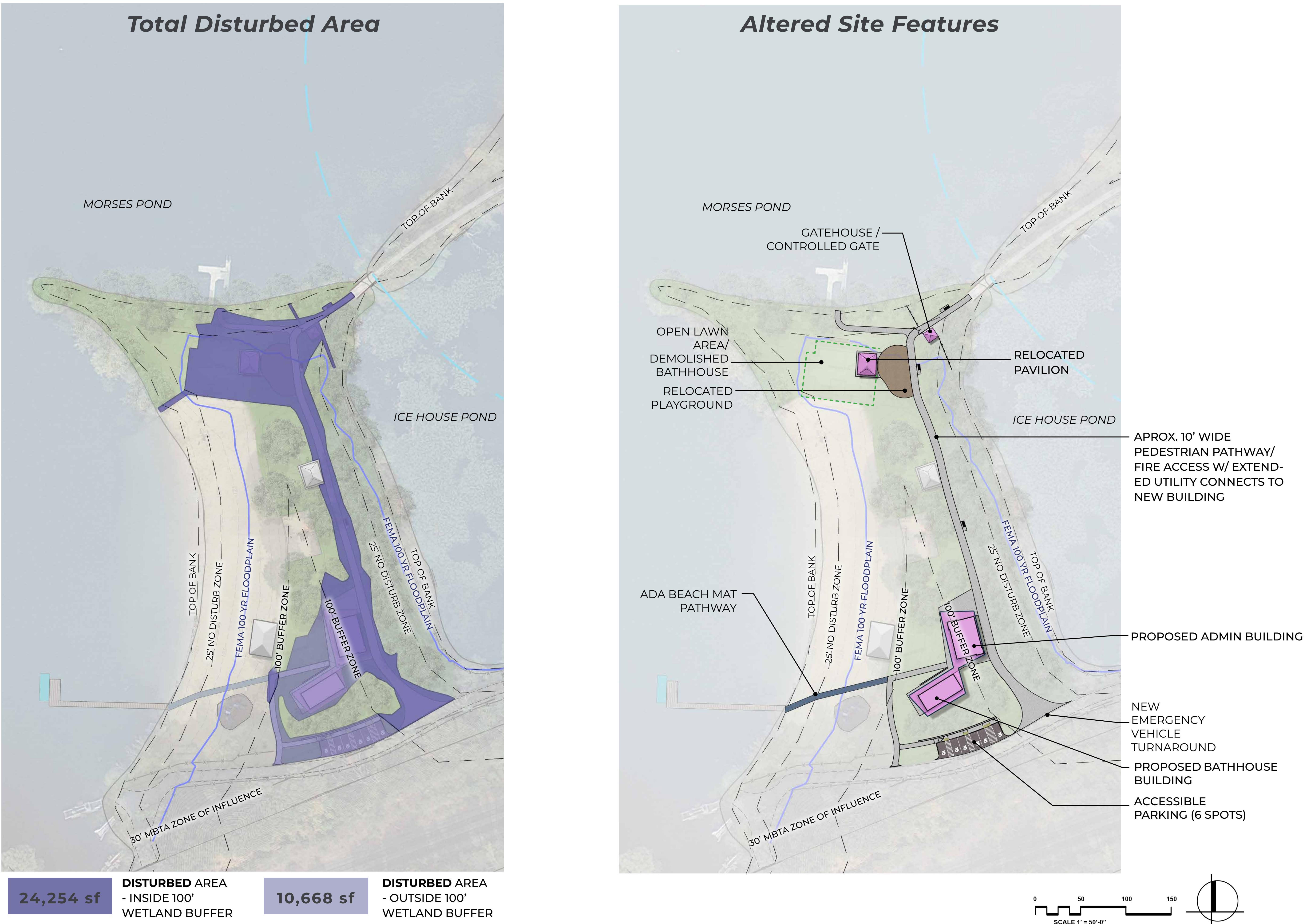
ALTERNATIVE A: UTILITIES



ALTERNATIVE A: IMPERVIOUS / PERVIOUS COVER



ALTERNATIVE A: OVERALL DISTURBANCE SUMMARY



ALTERNATIVE A: ANALYSIS SUMMARY

	EXISTING CONDITIONS PLAN	ALTERNATIVE A: MODIFIED SOUTH SIDE BUILDING	NET CHANGE
BUILDING LOCATION	North side	South side	N/A
BUILDING SQUARE FOOTAGE	2,572 sf	2,230 sf	-342 sf
IMPERVIOUS AREA - INSIDE 100' WET-LAND BUFFER	24,074 sf	20,034 sf	-4,040 sf
PERVIOUS AREA - INSIDE 100' WETLAND BUFFER	134,501 sf	138,541 sf	+4,040 sf
TOTAL IMPERVIOUS AREA	28,715 sf	28,418 sf	-297 sf
TOTAL PERVIOUS AREA	158,645 sf	158,942 sf	+297 sf
OVERALL CUT / FILL	N/A	885.5 cy cut / 79.8 cy fill	805.7 cy net cut
CUT / FILL WITHIN THE 100 YR. FEMA FLOODPLAIN	N/A	27.8 cy cut/ 71.9 cy fill	44.1 cy net fill
DEDICATED LAWN AREA	Peninsula Lawn: 13,274 sf, Beach Lawn: 28, 598 sf, Total: 41,872 sf	Peninsula Lawn: 18,056 sf, Beach Lawn: 23,860 sf, Total: 41,916 sf	+44 sf
RELOCATED AMENITIES	N/A	<ul style="list-style-type: none"> · Swing set · Southern permanent pavilion 	<ul style="list-style-type: none"> · Swing set · Southern permanent pavilion
PARKING	<ul style="list-style-type: none"> · Gravel pull off area · No ADA parking 	<ul style="list-style-type: none"> · 6 ADA parking spaces 	+6 spaces
DECIDUOUS TREES - INSIDE THE 100' WET-LAND BUFFER	149	145	-4
DECIDUOUS TREES - OUTSIDE THE 100' WETLAND BUFFER	8	5	-3
TOTAL DECIDUOUS TREES	157(existing)	150 (remain)	-7(2 invasive)
EVERGREEN TREES - INSIDE THE 100' WETLAND BUFFER	66	64	-2
EVERGREEN TREES - OUTSIDE THE 100' WETLAND BUFFER	7	6	-1
TOTAL EVERGREEN TREES	73 (existing)	70 (remain)	-3
UTILITY IMPACTS	N/A	Additional water line & electrical conduit from the north to the southern location	\pm 300 linear feet (Electrical) \pm 300 linear feet (Water)
VEHICULAR CIRCULATION	Southern path	Southern path	N/A
PEDESTRIAN CIRCULATION	<ul style="list-style-type: none"> · Main pedestrian access at the northern end · Restricted access to Ice House Pond loop path during beach season · Main beach path is not accessible at southern end 	<ul style="list-style-type: none"> · Pedestrian access is through the northern gatehouse · Southern access is monitored by the bathhouse / restricted by fencing and gates · Restricted access to Ice House Pond loop path during beach season · Accessible path provided from parking to the building plaza and pathway system within the beach 	<ul style="list-style-type: none"> · Main access at the northern end · Restricted access to Ice House Pond loop path during beach season · Accessible paths to all site amenities
AREA OF DISTURBANCE	N/A	34,922 sf (24,254 sf inside 100' wetland buffer)	+34,922 sf
PERMITTING IMPACTS	N/A	<ul style="list-style-type: none"> · Wildlife assessment is required (greater than 5,000 sf of alteration within the 100' wetland buffer) · A stormwater report may not be needed (net decrease in impervious within the 100' wetland buffer) · Minor compensatory storage is necessary within the 100 Yr. FEMA Floodplain (greater than 5,000 sf of alteration) · Planting one native replacement tree for each tree removed - 6 native trees total 	N/A

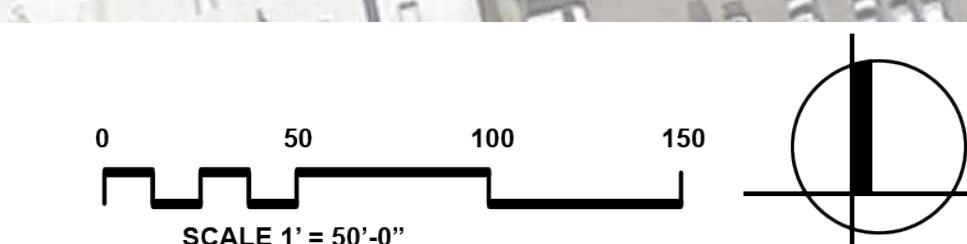


ALTERNATIVE B: NEW NORTH SIDE BUILDING DESIGN

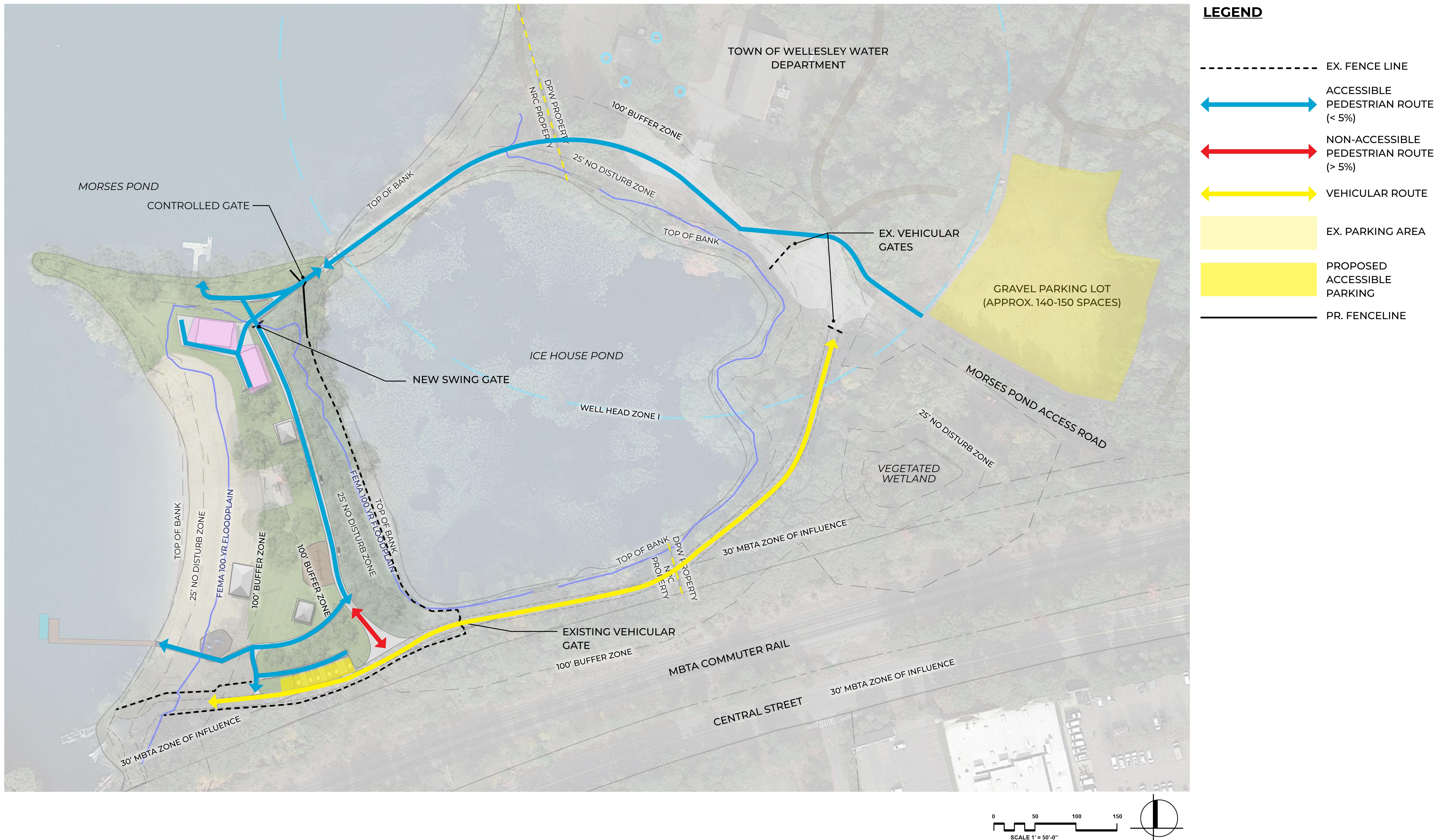
*View from the north side of
Morses Pond Beach toward the
water*



ALTERNATIVE B: NEW NORTH SIDE BUILDING DESIGN



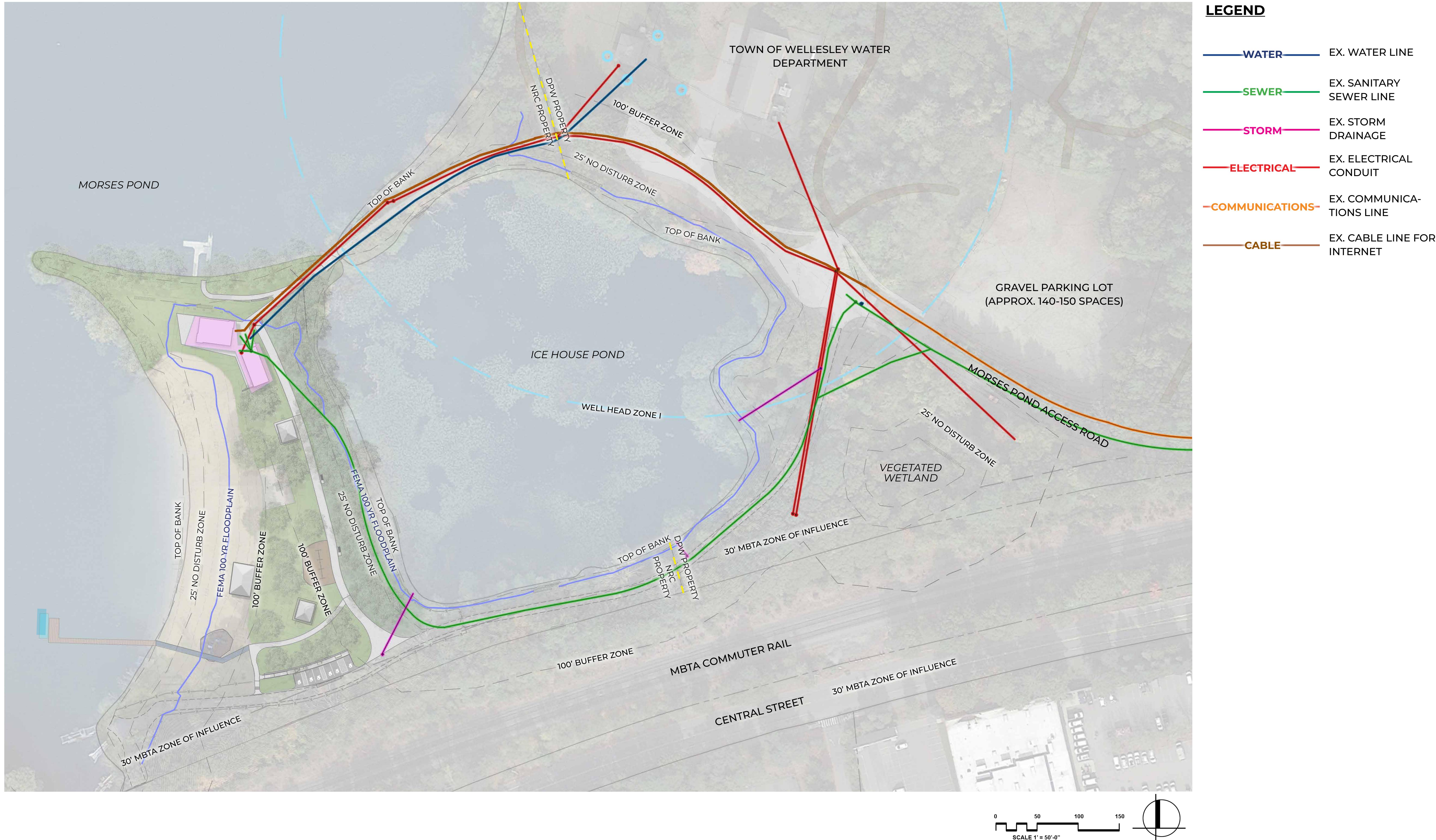
ALTERNATIVE B: PEDESTRIAN AND VEHICULAR CIRCULATION



ALTERNATIVE B: TREE IMPACTS



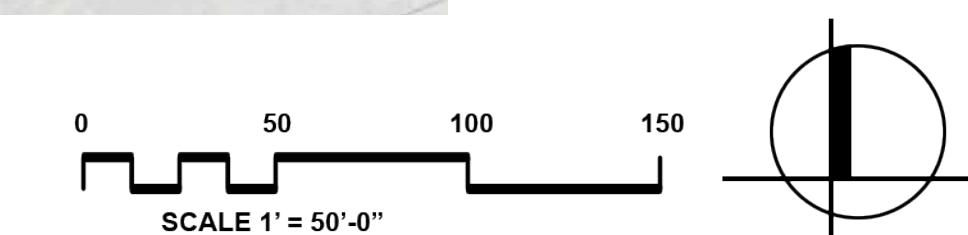
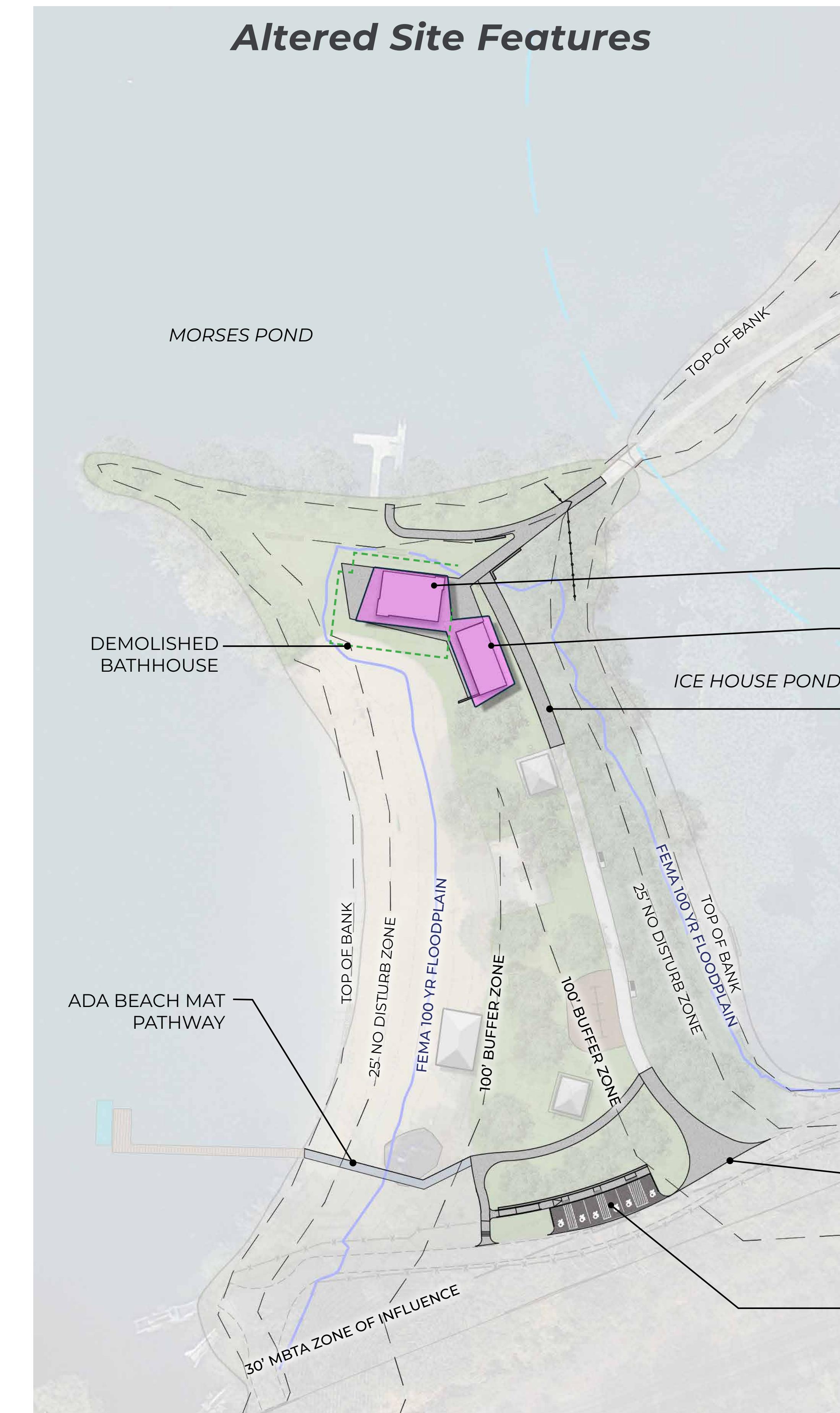
ALTERNATIVE B: UTILITIES



ALTERNATIVE B: IMPERVIOUS / PERVIOUS COVER



ALTERNATIVE B: OVERALL DISTURBANCE SUMMARY



ALTERNATIVE B: ANALYSIS SUMMARY

	EXISTING CONDITIONS PLAN	ALTERNATIVE B: NEW NORTH SIDE BUILDING	NET CHANGE
BUILDING LOCATION	North side	North side	N/A
BUILDING SQUARE FOOTAGE	2,572 sf	2,230 sf	-342 sf
IMPERVIOUS AREA - INSIDE 100' WET-LAND BUFFER	24,074 sf	22,881 sf	-1,193 sf
PERVIOUS AREA - INSIDE 100' WETLAND BUFFER	134,501 sf	135,694 sf	+1,193 sf
TOTAL IMPERVIOUS AREA	28,715 sf	29,399 sf	+684 sf
TOTAL PERVIOUS AREA	158,645 sf	157,961 sf	-684 sf
OVERALL CUT / FILL	N/A	438 cy cut / 82 cy fill	356 cy net cut
CUT / FILL WITHIN THE 100 YR. FEMA FLOODPLAIN	N/A	55.4 cy cut, 14.2 cy fill	41.2 cy net cut
DEDICATED LAWN AREA	Peninsula Lawn: 13,274 sf, Beach Lawn: 28, 598 sf, Total: 41,872 sf	Peninsula Lawn: 14,821 sf, Beach Lawn: 26,106 sf, Total: 40, 927 sf	-945 sf
RELOCATED AMENITIES	N/A	N/A	N/A
PARKING	<ul style="list-style-type: none"> • Gravel pull off area • No ADA parking 	<ul style="list-style-type: none"> • 6 ADA parking spaces 	+6 spaces
DECIDUOUS TREES - INSIDE THE 100' WET-LAND BUFFER	149	147	-2
DECIDUOUS TREES - OUTSIDE THE 100' WETLAND BUFFER	8	8	0
TOTAL DECIDUOUS TREES	157(existing)	155 (remain)	-2
EVERGREEN TREES - INSIDE THE 100' WETLAND BUFFER	66	66	0
EVERGREEN TREES - OUTSIDE THE 100' WETLAND BUFFER	7	6	-1
TOTAL EVERGREEN TREES	73 (existing)	72(remain)	-1
UTILITY IMPACTS	N/A	Minimal: Hookups to new buildings	Minimal
VEHICULAR CIRCULATION	Southern path	Southern path	N/A
PEDESTRIAN CIRCULATION	<ul style="list-style-type: none"> • Main pedestrian access at the northern end • Restricted access to Ice House Pond loop path during beach season • Main beach path is not accessible at southern end 	<ul style="list-style-type: none"> • Pedestrian access is through the northern bathhouse • Southern access is restricted by fencing and gates • Restricted access to Ice House Pond loop path during beach season • Accessible path provided from parking to the main beach path 	<ul style="list-style-type: none"> • Main access at the northern end • Restricted access to Ice House Pond loop path during beach season • Accessible paths to all site amenities
AREA OF DISTURBANCE	N/A	25,515 sf (19,638 inside 100' wetland buffer)	+25,515 sf
PERMITTING IMPACTS	N/A	<ul style="list-style-type: none"> • Wildlife assessment is required (greater than 5,000 sf of alteration within the 100' wetland buffer) • A stormwater report may not be needed (net decrease in impervious within the 100' wetland buffer) • Minor compensatory storage is necessary within the 100 Yr. FEMA Floodplain (greater than 5,000 sf of alteration) • Planting one native replacement tree for each tree removed - 2 Native Trees Total 	N/A



ALTERNATES COMPARISON SUMMARY

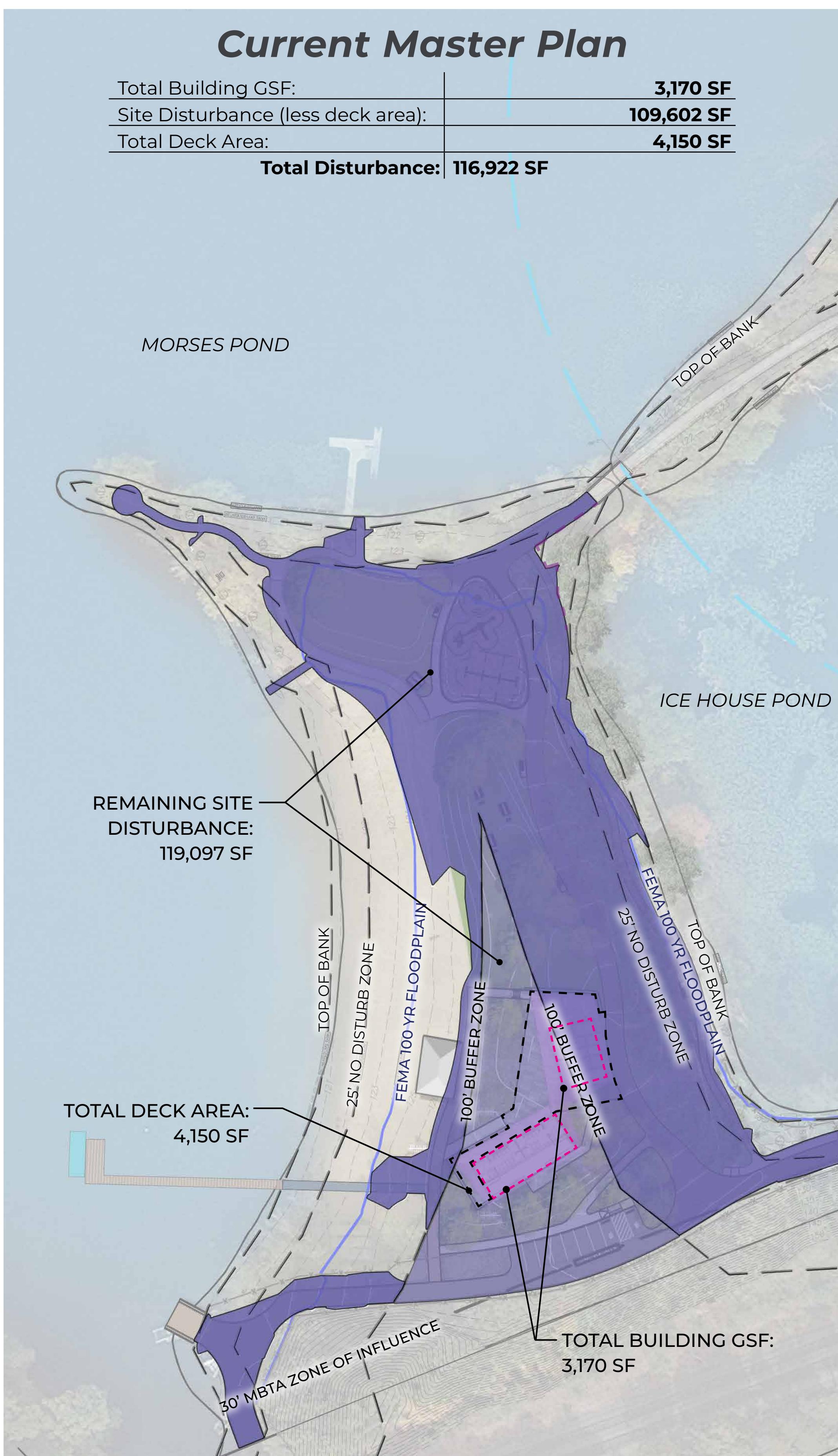
*Test pits performed in
August 2025*



ALTERNATES COMPARISON: OVERALL PROJECT AREA REDUCTION

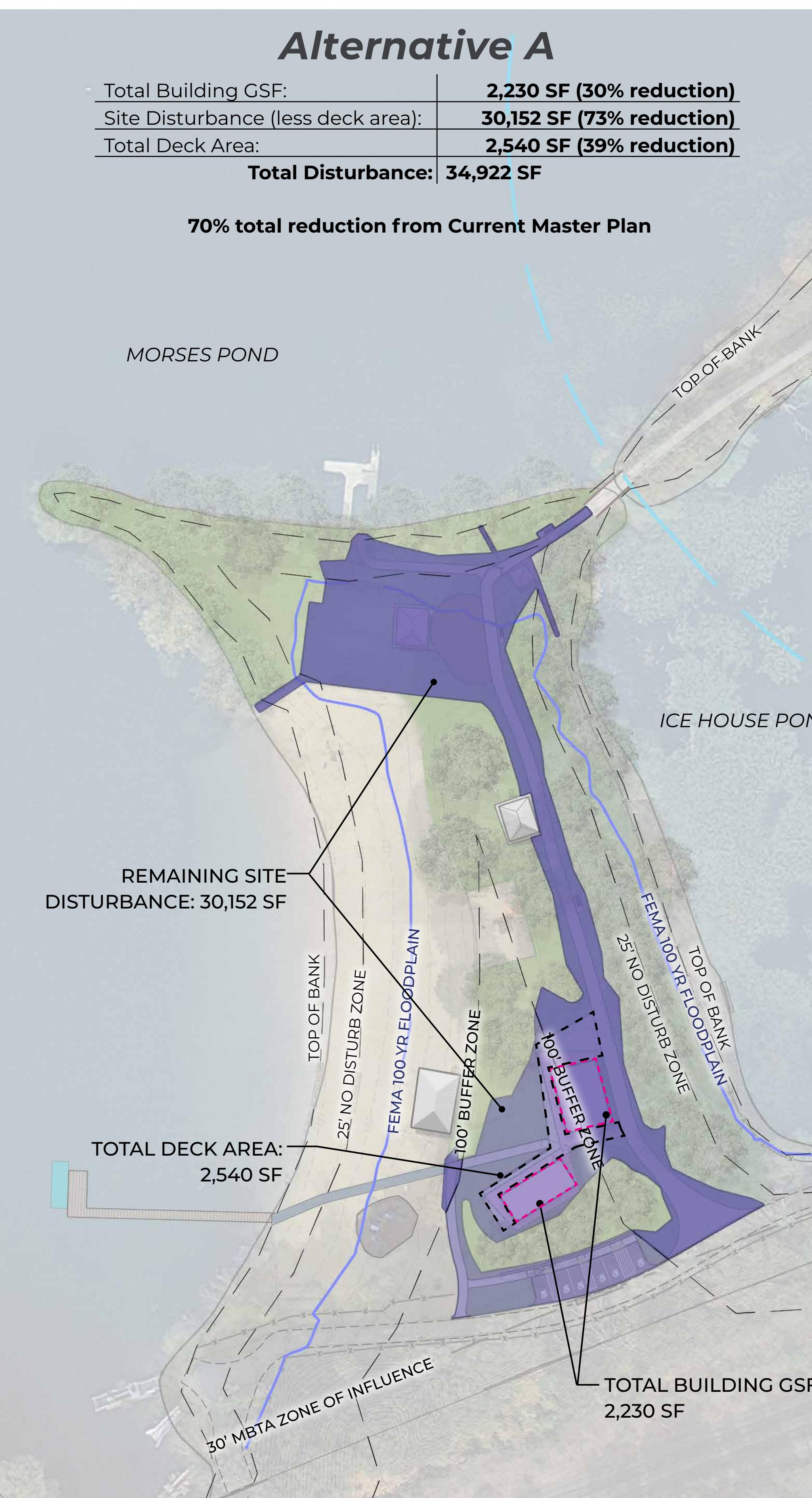
Current Master Plan

Total Building GSF:	3,170 SF
Site Disturbance (less deck area):	109,602 SF
Total Deck Area:	4,150 SF
Total Disturbance: 116,922 SF	



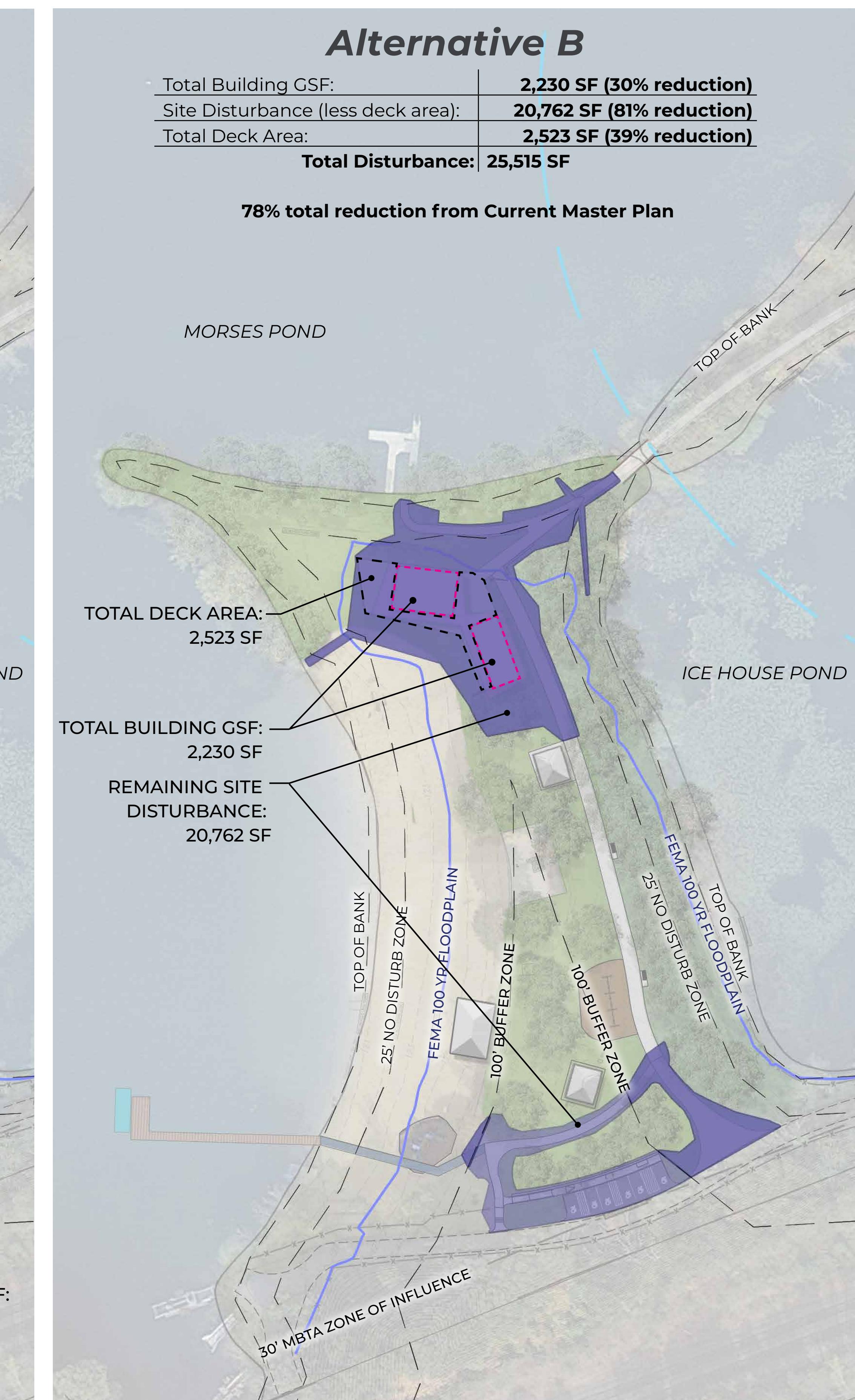
Alternative A

Total Building GSF:	2,230 SF (30% reduction)
Site Disturbance (less deck area):	30,152 SF (73% reduction)
Total Deck Area:	2,540 SF (39% reduction)
Total Disturbance: 34,922 SF	



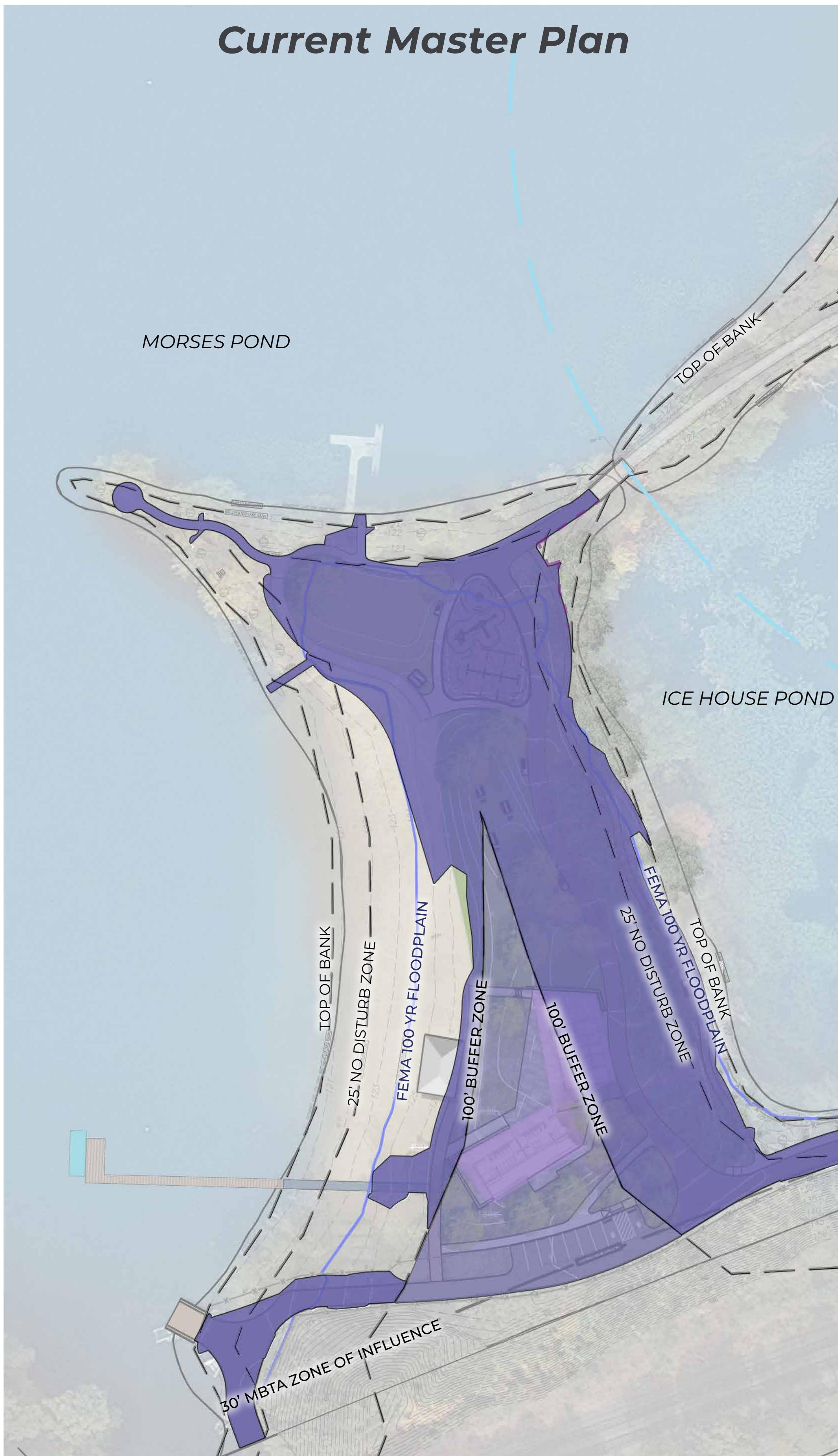
Alternative B

Total Building GSF:	2,230 SF (30% reduction)
Site Disturbance (less deck area):	20,762 SF (81% reduction)
Total Deck Area:	2,523 SF (39% reduction)
Total Disturbance: 25,515 SF	



ALTERNATES COMPARISON: OVERALL SITE DISTURBANCE

Current Master Plan



87,764 sf

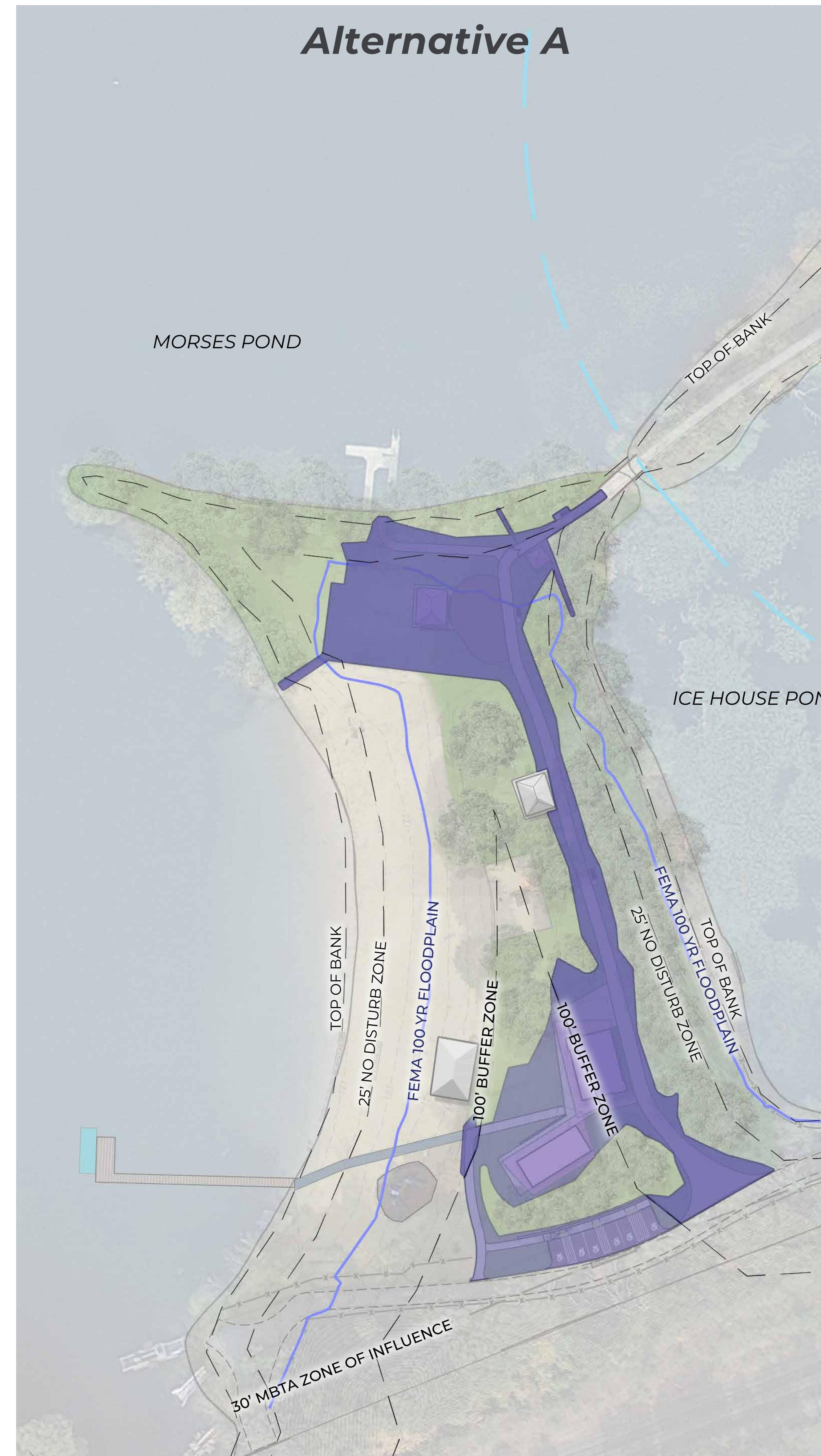
DISTURBED AREA
- INSIDE 100'
WETLAND BUFFER*

29,158 sf

DISTURBED AREA
- OUTSIDE 100'
WETLAND BUFFER

* INCLUDES DISTURBANCE AREAS OF VEHICULAR DROP OFF AND ACCESS ROAD

Alternative A



22,254 sf

DISTURBED AREA
- INSIDE 100'
WETLAND BUFFER

10,668 sf

DISTURBED AREA
- OUTSIDE 100'
WETLAND BUFFER

Alternative B



19,638 sf

DISTURBED AREA
- INSIDE 100'
WETLAND BUFFER

5,877 sf

DISTURBED AREA
- OUTSIDE 100'
WETLAND BUFFER



SUMMARY COMPARISON: ALL CONCEPTS VS. EXISTING SITE CONDITIONS

	EXISTING CONDITIONS PLAN	CURRENT MASTER PLAN	ALTERNATIVE A: MODIFIED SOUTH SIDE BUILDING	ALTERNATIVE B: NEW NORTH SIDE BUILDING
BUILDING LOCATION	North side	South side	South side	North side
BUILDING SQUARE FOOTAGE	2,572 sf	3,191 sf (+619 sf)	2,230 sf (-342 sf)	2,230 sf (-342 sf)
IMPERVIOUS AREA - INSIDE 100' WETLAND BUFFER	24,074 sf	28,560 sf (+4,486 sf)	20,034 sf (-4,040 sf)	22,881 sf (-1,193 sf)
PERVIOUS AREA - INSIDE 100' WETLAND BUFFER	134,501 sf	130,015 sf (-4,486 sf)	138,541 sf (+4,040 sf)	135,694 sf (+1,193 sf)
TOTAL IMPERVIOUS AREA	28,715 sf	39,840 sf (+11,125 sf)	28,418 sf (-297sf)	29,399 sf (+684 sf)
TOTAL PERVIOUS AREA	158,645 sf	147,520 sf (-11,125 sf)	158,942 sf (+297 sf)	157,961 sf (-684 sf)
OVERALL CUT / FILL	N/A	5,849.6 cy net cut	805.7 cy net cut	356 cy net cut
CUT / FILL WITHIN THE 100 YR. FEMA FLOODPLAIN	N/A	458.8 cy cut, 68 cy fill = 390.9 cy net cut	27.8 cy cut, 71.9 cy fill, 44.1 cy net fill	55.4 cy cut, 14.2 cy fill, 41.2 cy net cut
DEDICATED LAWN AREA	Peninsula Lawn: 13,274 sf, Beach Lawn: 28, 598 sf, Total: 41,872 sf	36,764 sf (-5,108 sf)	41,916 sf (+44 sf)	40,927 sf (-945 sf)
RELOCATED AMENITIES	N/A	N/A	<ul style="list-style-type: none"> • Swing set • Southern permanent pavilion 	N/A
PARKING	<ul style="list-style-type: none"> • Gravel pull off area • No ADA parking 	+9 spaces (7 parking spaces, 2 ADA spaces)	+6 ADA spaces	+6 ADA spaces
DECIDUOUS TREES - INSIDE THE 100' WETLAND BUFFER	149	123 (-26 from existing)	145 (-4 from existing)	147 (-2 from existing)
DECIDUOUS TREES - OUTSIDE THE 100' WETLAND BUFFER	8	2 (-6 from existing)	5 (-3 from existing)	8 (0 change from existing)
TOTAL DECIDUOUS TREES	157(existing)	125 (-32 from existing)	150 (-7 from existing)	155 (-2 from existing)
EVERGREEN TREES - INSIDE THE 100' WETLAND BUFFER	66	45 (-21 from existing)	64 (-2 from existing)	66 (0 change from existing)
EVERGREEN TREES - OUTSIDE THE 100' WETLAND BUFFER	7	0 (-7 from existing)	6 (-1 from existing)	6 (-1 from existing)
TOTAL EVERGREEN TREES	73 (existing)	45 (-28 from existing)	70 (-3 from existing)	72 (-1 from existing)
UTILITY IMPACTS	N/A	+/- 300 linear feet (Electrical) +/- 300 linear feet (Water)	+/- 300 linear feet (Electrical) +/- 300 linear feet (Water)	Minimal
VEHICULAR CIRCULATION	Southern path	Southern path	Southern path	Southern path
PEDESTRIAN CIRCULATION	<ul style="list-style-type: none"> • Main pedestrian access at the northern end • Restricted access to Ice House Pond loop path during beach season • Main beach path is not accessible at southern end 	<ul style="list-style-type: none"> • 1 access point at the south end • Full access to Ice House Pond loop path only during off season • All paths are accessible 	<ul style="list-style-type: none"> • Main pedestrian access at the northern end • Restricted access to Ice House Pond loop path during beach season • Accessible paths to all site amenities 	<ul style="list-style-type: none"> • Main pedestrian access at the northern end • Restricted access to Ice House Pond loop path during beach season • Accessible paths to all site amenities
AREA OF DISTURBANCE	N/A	116,922 sf (87,764 sf inside 100' wetland buffer)	34,922 sf (24,254sf inside 100' wetland buffer)	25,515 sf (19,638 inside 100' wetland buffer)
PERMITTING IMPACTS	N/A	<ul style="list-style-type: none"> • Wildlife assessment is required (greater than 5,000 sf of alteration within the 100' wetland buffer) • A stormwater report is required (net increase in impervious within the 100' wetland buffer) • Minor compensatory storage is necessary within the 100 Yr. FEMA Floodplain (greater than 5,000 sf of alteration) • Planting one native replacement tree for each tree removed - 47 Native Trees Total • Zone of Influence permit required (project schedule to accommodate review periods) 	<ul style="list-style-type: none"> • Wildlife assessment is required (greater than 5,000 sf of alteration within the 100' wetland buffer) • A stormwater report may not be needed (net decrease in impervious within the 100' wetland buffer) • Minor compensatory storage is necessary within the 100 Yr. FEMA Floodplain (greater than 5,000 sf of alteration) • Planting one native replacement tree for each tree removed - 6 native trees total 	<ul style="list-style-type: none"> • Wildlife assessment is required (greater than 5,000 sf of alteration within the 100' wetland buffer) • A stormwater report may not be needed (net decrease in impervious within the 100' wetland buffer) • Minor compensatory storage is necessary within the 100 Yr. FEMA Floodplain (greater than 5,000 sf of alteration) • Planting one native replacement tree for each tree removed - 2 Native Trees Total



SUMMARY COMPARISON: ALTERNATIVE A AND B FOR RECOMMENDATION / SELECTION

TASK 5

MoPoBAC Preliminary Review of Building Location Analysis /Data and Feedback

CRITERIA	ALTERNATIVE A: South Side Building Location	ALTERNATIVE B: North Side Building Location
Patrons		
Beach Character	Transformational. New beach front area opens up panoramic views/site to the North for patrons.	Existing patron beach experience to remain largely unchanged. Slightly more view to the North past building.
Shade Trees and Lawn	Adds an open lawn area at existing demolished building (beach level). Reduces current tree/shade lawn area at the South.	No significant shade tree and lawn impact for patrons.
Main Public Entry (North)	Building located on opposite side of site from main public entrance (gatekeeper control required at remote entry). Requires patrons to traverse site to purchase passes/rentals and to use bathhouse.	Building with integral gatehouse located at main entry on the North.
ADA / MAAB Access (South)	Building adjacent to accessible entrance/parking. Requires sloped walkways to access elevated building.	Building located on opposite side from accessible entrance/parking. Requires traversing site to access building. Requires separate monitoring of South entrance by staff/guard.
View from Bathhouse Deck	Deck has elevated view of beach and view to the North, with sun at patron's back.	Low (beach elevation) panoramic view from deck located at bend in site.
View from Beach	Paternal view to Bathhouse from beach (towards sun).	Paternal view to Bathhouse from beach (away from sun).
Amenities	Requires relocating/eliminating/replacing a shade structure and the swing set.	All current amenities can remain.
Staff		
Programming	Meets all program requirements for staff.	Meets all program requirements for staff.
Gatekeeper	Requires remote staffing at North entry.	Requires monitoring of South accessible entry by staff/guards.
View from Building	Building is on South end of beach with full view to the North.	Building is at bend in site, with views in two directions.
Potential Food Trucks	Food trucks can be accommodated near building (or adjacent to accessible parking area).	Food trucks can be accommodated near building.
Building		
Buildings (Quantity)	Requires separate minimal gatehouse structure at North entry.	Gatehouse located as part of main Bathhouse.
Flood Zone	Building floor elevations are approximately 7 feet above the 100-year FEMA floodplain. Also above FEMA 500-year floodplain.	Building floor elevations are approximately 12" above the 100-year FEMA floodplain (EL 125.2) and also 9.6" above current floor elevation of the existing building (EL 124.4).
Building Foundations & Soil-Loading / Geotechnical Considerations	Requires deeper excavation of unstable soil on man-made hill for foundations. Dewatering is unlikely. Geotechnically, undocumented fill (1-4 ft deep) and some buried topsoil layers were found in the vicinity.	Requires some excavation and dewatering for foundations at its lower elevation. Geotechnically, low quantities of unsuitable soil were found at foundation depths. Groundwater was found closer to foundation depth.



SUMMARY COMPARISON: ALTERNATIVE A AND B FOR RECOMMENDATION / SELECTION

TASK 6

Evaluate Soil Conditions

CRITERIA	ALTERNATIVE A: South Side Building Location	ALTERNATIVE B: North Side Building Location
Environmental Impact		
Site Disturbance	Excavates South end of site for new parking/building, demolishes building on North side, and trenches utilities between. Total disturbance 34,922 SF	Excavates South end of site for new parking/paths and excavates North side for building (at demolished building site). Total disturbance 25,515 SF
Wetlands	Approximately half the building is located outside the 100-foot wetlands buffer zone.	Entire building located within the 100-foot wetlands buffer zone (current building site)
Stormwater	Soils generally transmit water well (sandy/gravelly with high infiltration). Seasonal high groundwater is of low concern.	Soils generally transmit water well (sandy/gravelly with high infiltration). Seasonal high groundwater appears relatively shallow in some locations (as close as 46–60 in), which will need to be managed in the design.
Impervious	Similar total impervious area proposed for both Alternates. Within Wetlands, there is a net reduction of 4,040 SF of impervious area compared to current existing conditions.	Similar total impervious area proposed for both Alternates. Within Wetlands, there is a net reduction of 1,193 SF of impervious area compared to current existing conditions.
Mitigation	Wildlife assessment and minor compensatory storage required (requires 6 native tree replacements)	Wildlife assessment and minor compensatory storage required (requires 2 native tree replacement)
Cost Deltas		
Utilities	Utilities need to be extended to South side of site (+\$235,000)	Current utilities exist to building location.
Bathhouse Building	Requires a minimal Gatekeeper structure at North entry (+\$30,000), replace existing building footprint with lawn (+\$75,000)	May require more durable materials and additional design elements because of lower elevation and proximity to water (+\$105,000).
Amenities	Building location requires swing set relocation (+\$50,000), relocating the shade shelter (+\$130,000)	All amenities can remain.
Site Disruption / Excavation	Less disruption / excavation than Current Master Plan but more than Alternate B (+\$30,000)	Less disruption/excavation than Current Master Plan and Alternate A. Assume some road repair will be needed on the north / south pathway due to construction activities (+15,000)
Tree Mitigation	Replace 6 trees (+\$2,400 per tree = \$14,400)	Replace 2 trees (+\$2,400 per tree = \$4,800)
Soil Loading Capacity / Geotechnical Considerations	Overexcavation and lightweight fill would be required for +/- 6 ft depth (+125,000), no dewatering required	Overexcavation and lightweight fill of +/- 2 feet may be needed for half of the building footprint (+25,000), dewatering would be needed due to high groundwater (+15,000)

Cost deltas included in this chart are high-level order-of-magnitude numbers and are intended to be used for cost comparative purposes only.



MOPOBAC COMMENTS ON ALTERNATES AND RESPONSES

August 2025 Site Visit



MOPOBAC COMMENTS ON ALTERNATES



ALTERNATIVE A: SOUTH SIDE BUILDING DESIGN



ALTERNATIVE B: NORTH SIDE BUILDING DESIGN



RESPONSE TO MOPOBAC COMMENTS ON ALTERNATES

ALTERNATE AB

- Locates a gateway building at main public entrance/exit, with framed view of pond, for sense of arrival and control.
- Building provides patron amenities (ticket/pass sales, rentals, lifejackets, toilets, etc.) at entrance to beach.
- Sets the building into the North-East corner of the site (approx. 20' further than Alt B) to open up view/ site-lines to North and dock (for parental and staff control)
- Provides desired open lawn space for flexible use at North end of site, adjacent to building.
- Reduces overall cost of project (less required infrastructure costs and less displacement of current amenities)
- Minimizes overall disturbance.
- Maximizes current highly desirable (and unique) lawn/tree space
- Relocates new ADA parking that is required in existing parking lot closer and adjacent to site.
- Addresses strong Public input to have covered ADA seating area on the South hill, near the accessible parking, with elevated sweeping views of pond.



VIEW FROM PROPOSED PUBLIC OVERLOOK
(NEW BUILDING LOCATION DASHED)

