

upland opening

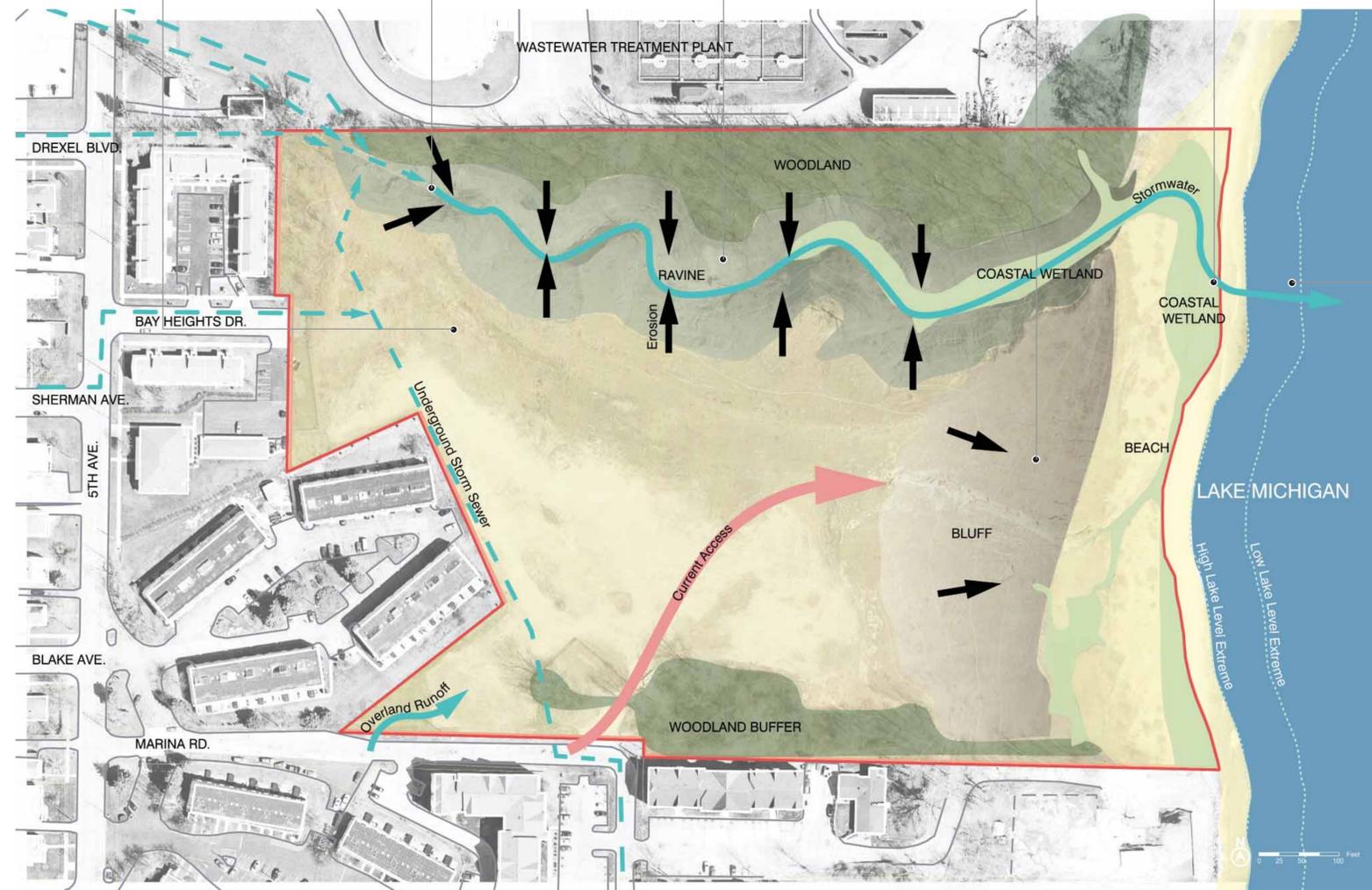
stormwater convergence of 500-acre urban watershed outfalls into ravine

ravine erosion with compromised tree root systems

view of bluff embankment

release of stormwater

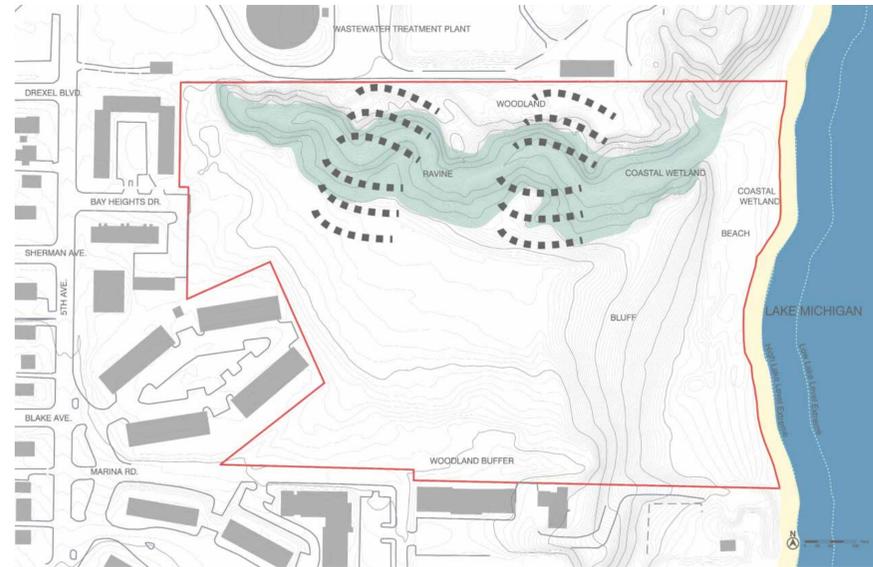
lake level fluctuation results in 50' -100' beach width at low levels and 15'-30' during high levels



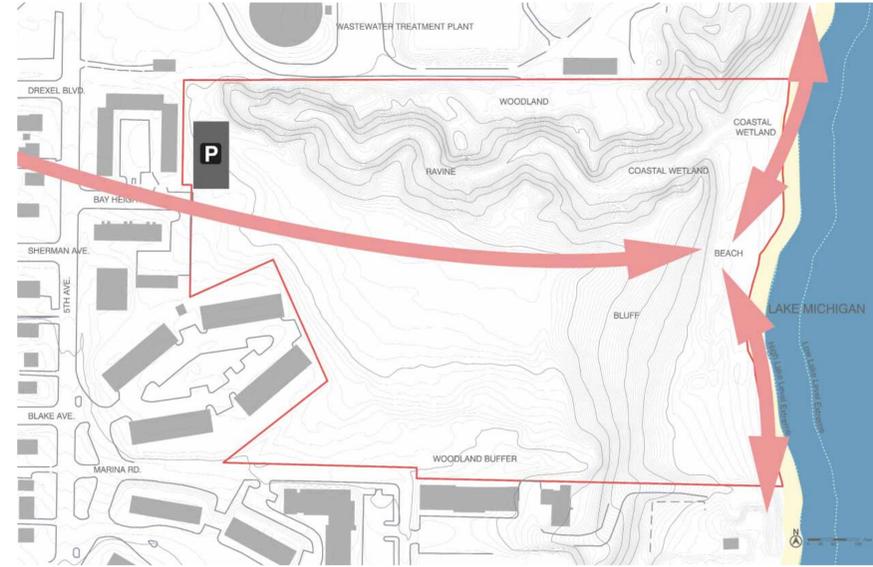
**PROJECT OBJECTIVES**

- Preserve open-space
- Provide public access to coastal open space and shoreline
- Increase opportunities for public interaction with Lake Michigan
- Enhance and maintain park and recreational areas for residents
- Protect and preserve the city's natural heritage and environmental corridors
- Reduce impacts of non-point pollution

## STABILIZE RAVINE



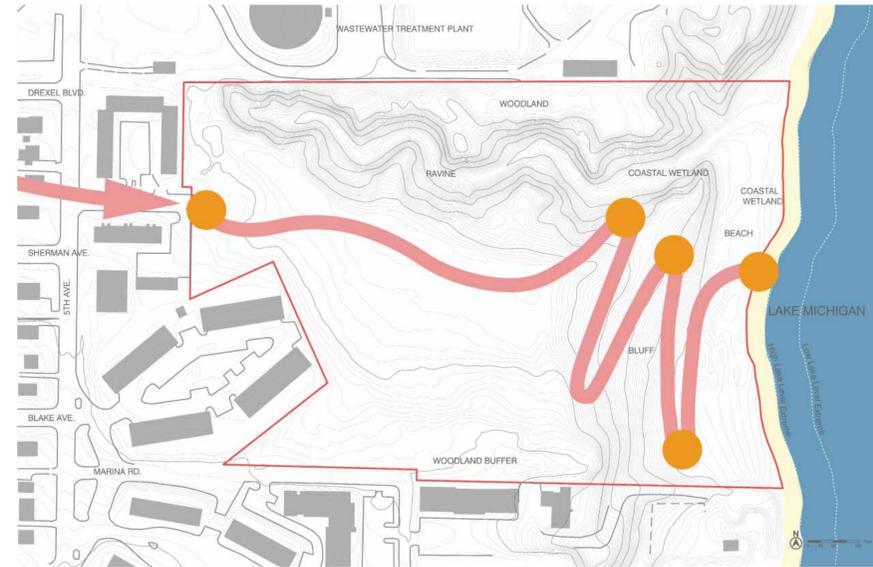
## CREATE ACCESS TO THE BEACH AND SHORELINE



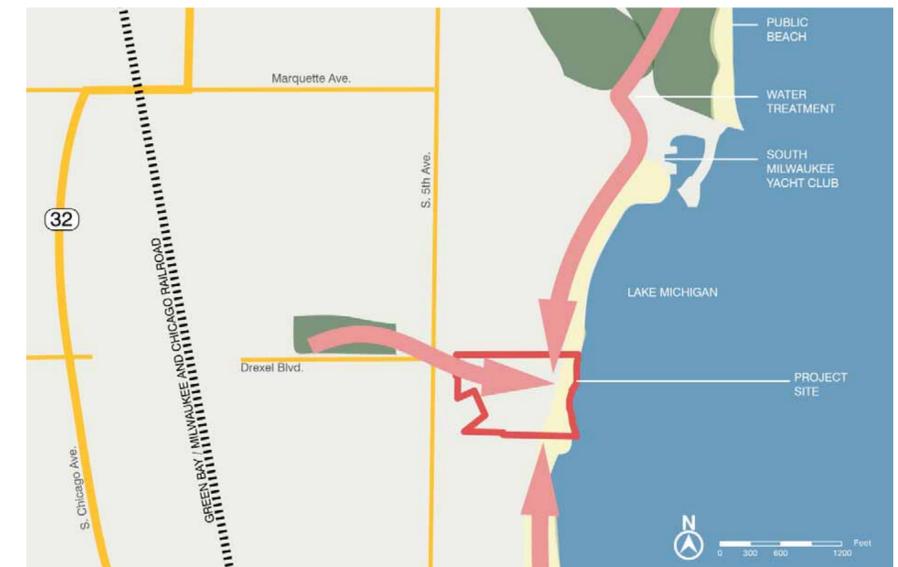
## VEGETATION AND ECOLOGY ENHANCEMENT



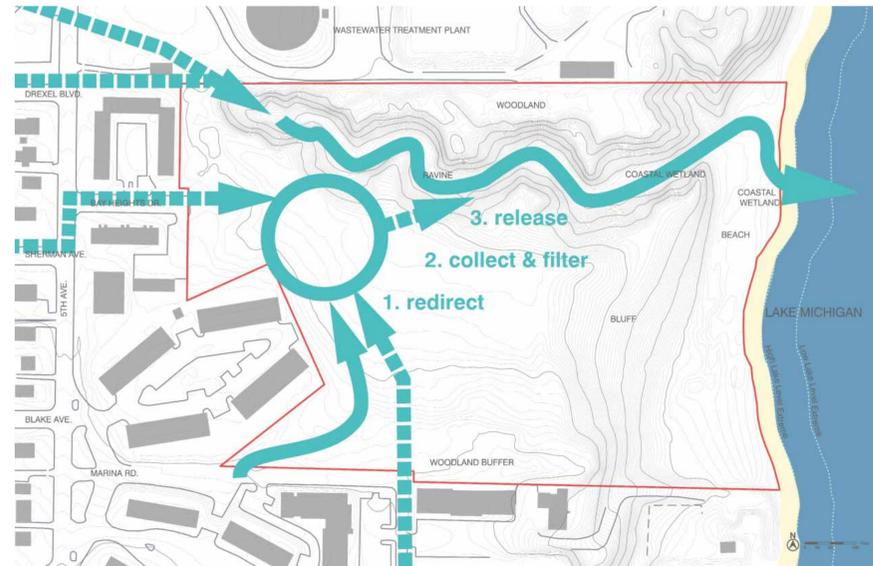
## INTEGRATE RAVINE OVERLOOKS/OPEN SPACE/SHORELINE



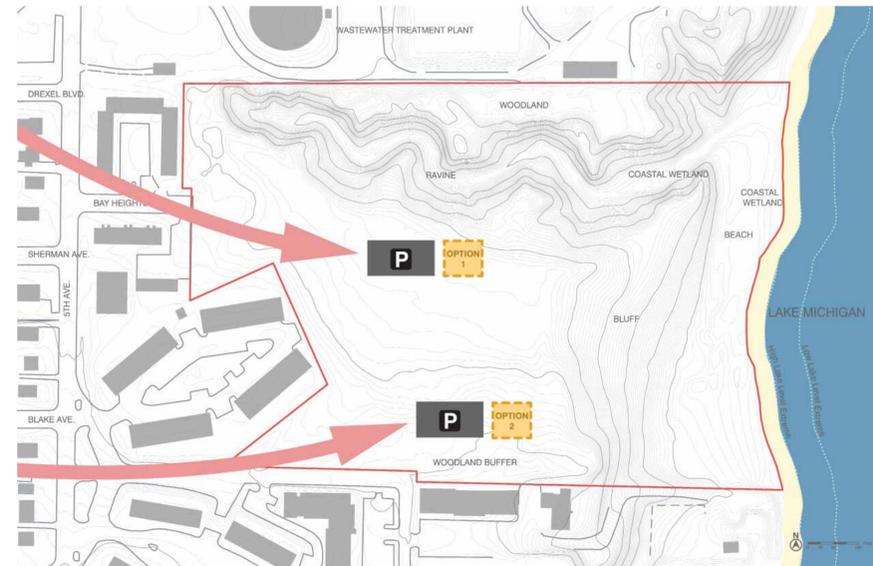
## OPEN SPACE CONNECTIONS



## STORMWATER TREATMENT OPPORTUNITIES



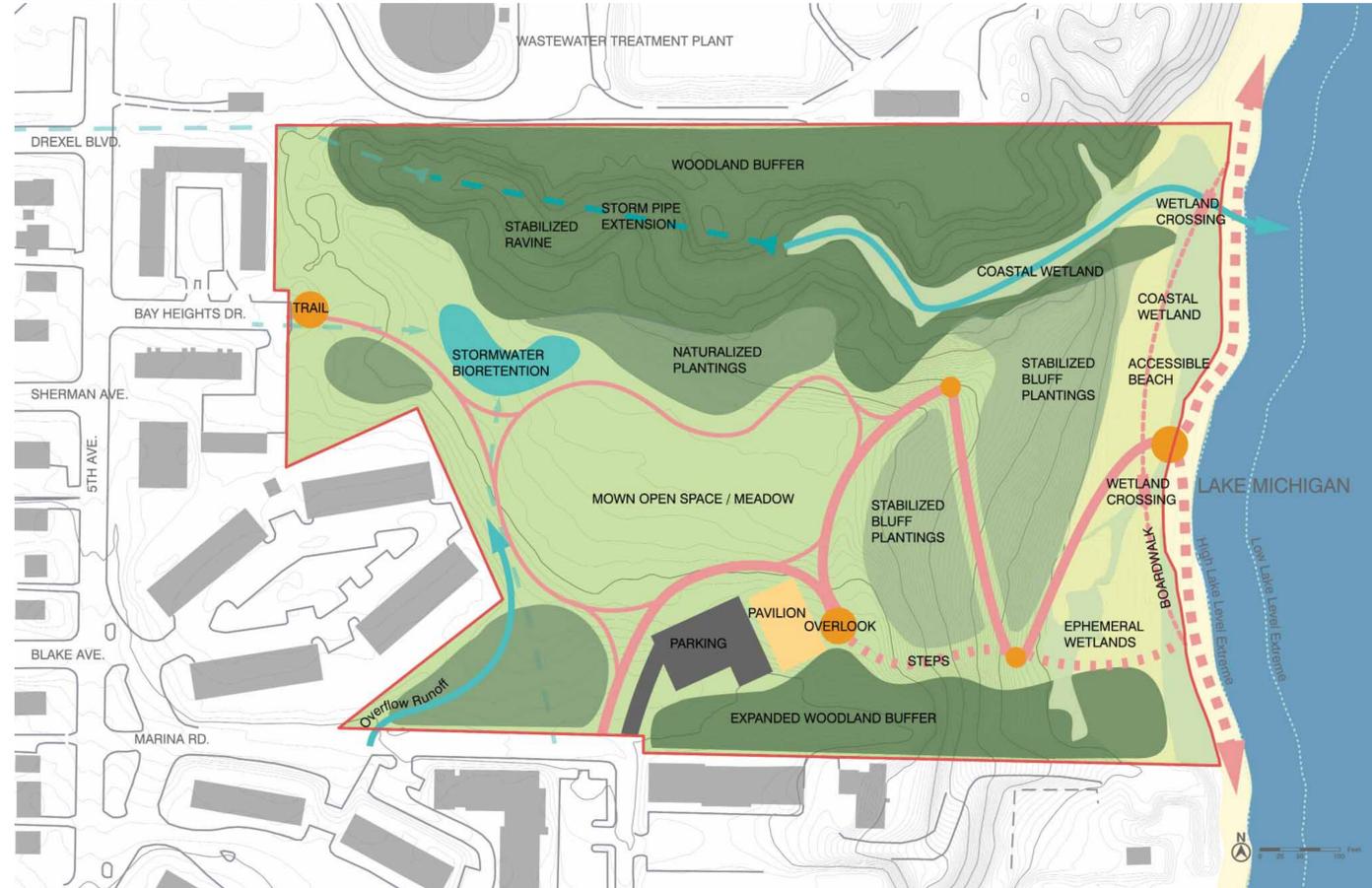
## PHASE II PAVILIONS AND PARKING OPTIONS



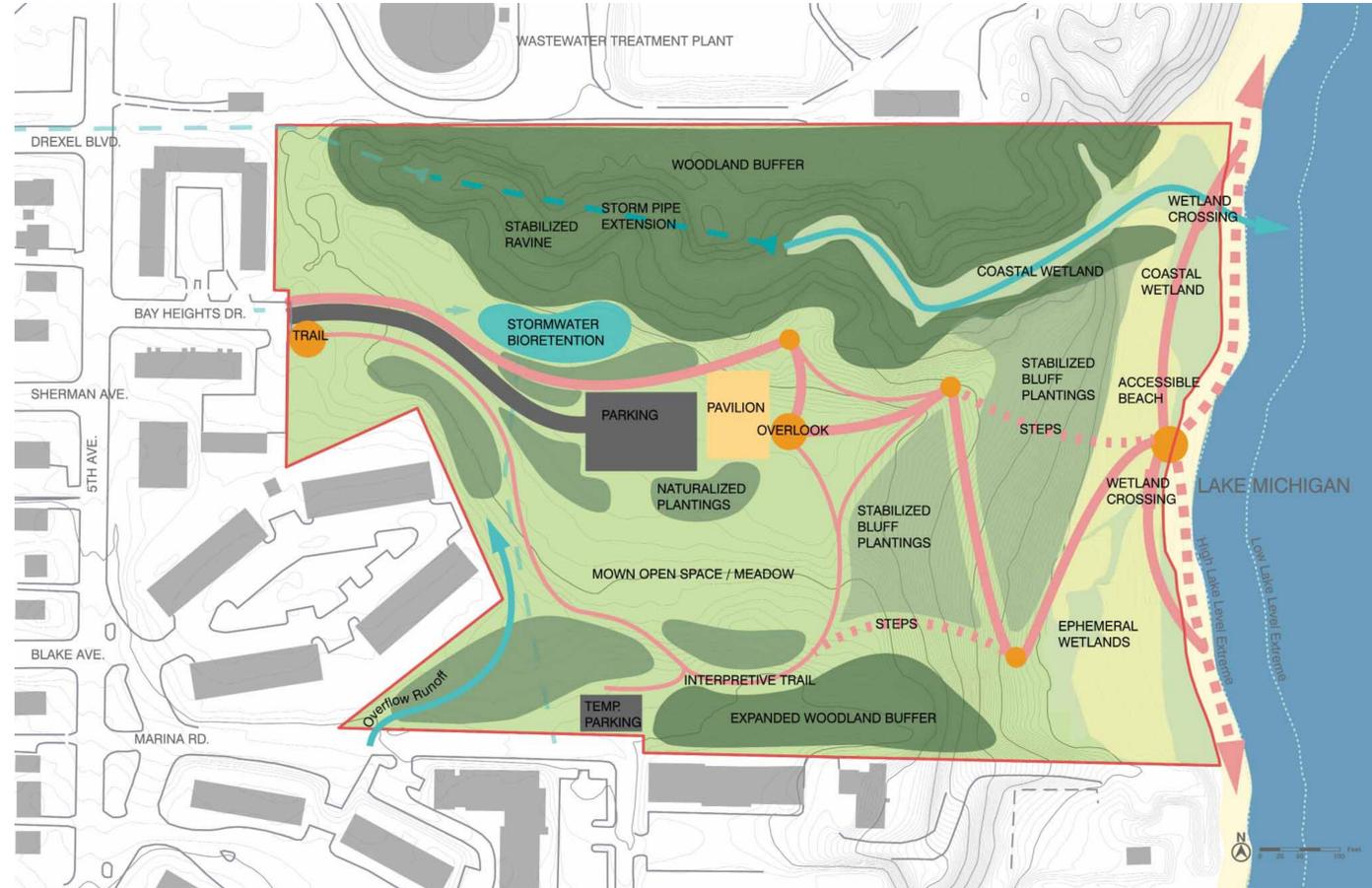
## OPPORTUNITIES / DESIGN PRINCIPLES

- Provide ravine stabilization strategies that integrate with park design
- Treat urban stormwater runoff
- Improve coastal wetland habitat through erosion control
- Create an interpretive path through diverse project ecologies such as the tributary ravine, coastal wetlands and uplands
- Provide universal access to the beach
- Consider safety and maintenance in overall development
- Provide phasing of potential pavilion and satellite parking

CONCEPT DEVELOPMENT - SCHEME A



CONCEPT DEVELOPMENT - SCHEME B



PRECEDENTS



miscellaneous features



plant ecologies



paths and edges



seating systems



pavilion styles