# THE TEAM


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Environmental Science & GIS | Landscape Architecture

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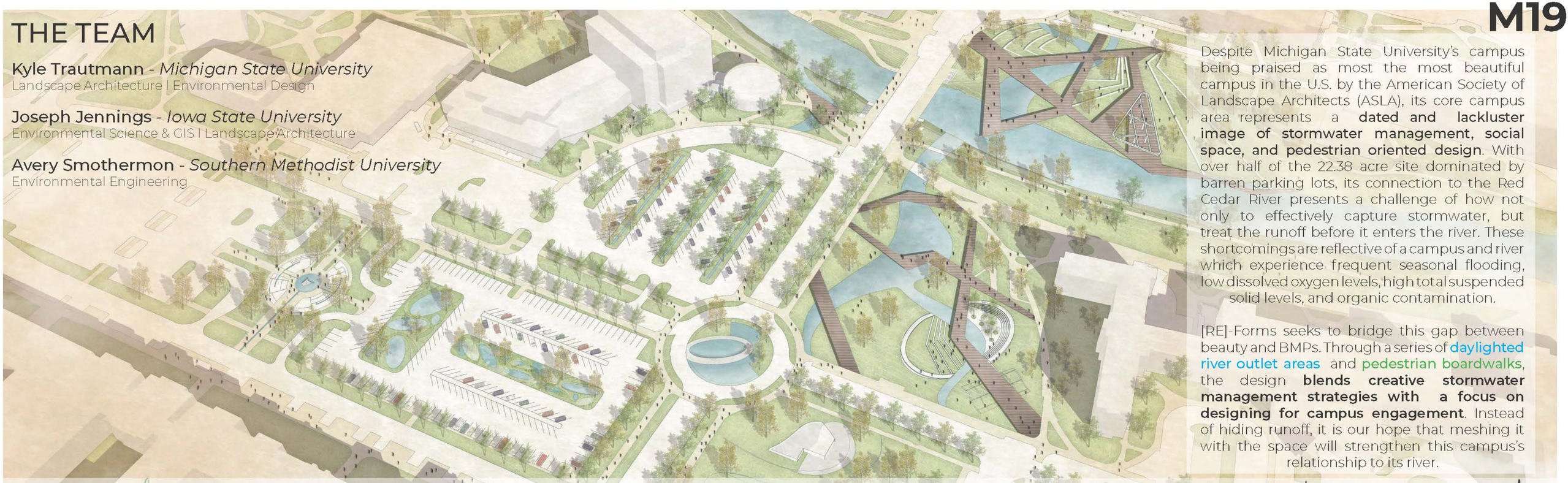
Environmental Engineering

Despite Michigan State University's campus being praised as most the most beautiful campus in the U.S. by the American Society of Landscape Architects (ASLA), its core campus area represents a **dated and lackluster image of stormwater management, social space, and pedestrian oriented design**. With over half of the 22.38 acre site dominated by barren parking lots, its connection to the Red Cedar River presents a challenge of how not only to effectively capture stormwater, but treat the runoff before it enters the river. These shortcomings are reflective of a campus and river which experience frequent seasonal flooding, low dissolved oxygen levels, high total suspended solid levels, and organic contamination.

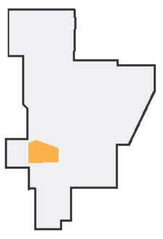
[RE]-Forms seeks to bridge this gap between beauty and BMPs. Through a series of daylighted river outlet areas and pedestrian boardwalks, the design **blends creative stormwater management strategies with a focus on designing for campus engagement**. Instead of hiding runoff, it is our hope that meshing it with the space will strengthen this campus's relationship to its river.

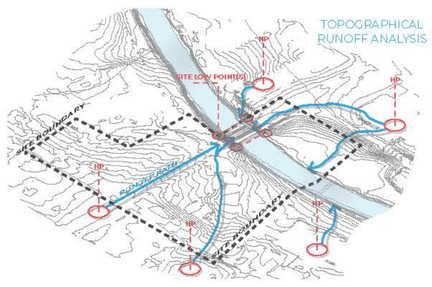
# [RE]-FORMS

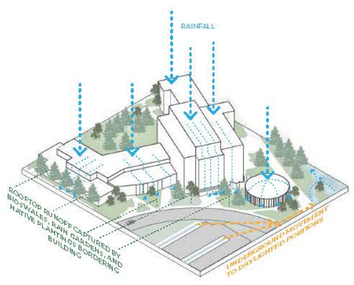
## REIMAGINING THE HEART OF MICHIGAN STATE UNIVERSITY'S CAMPUS

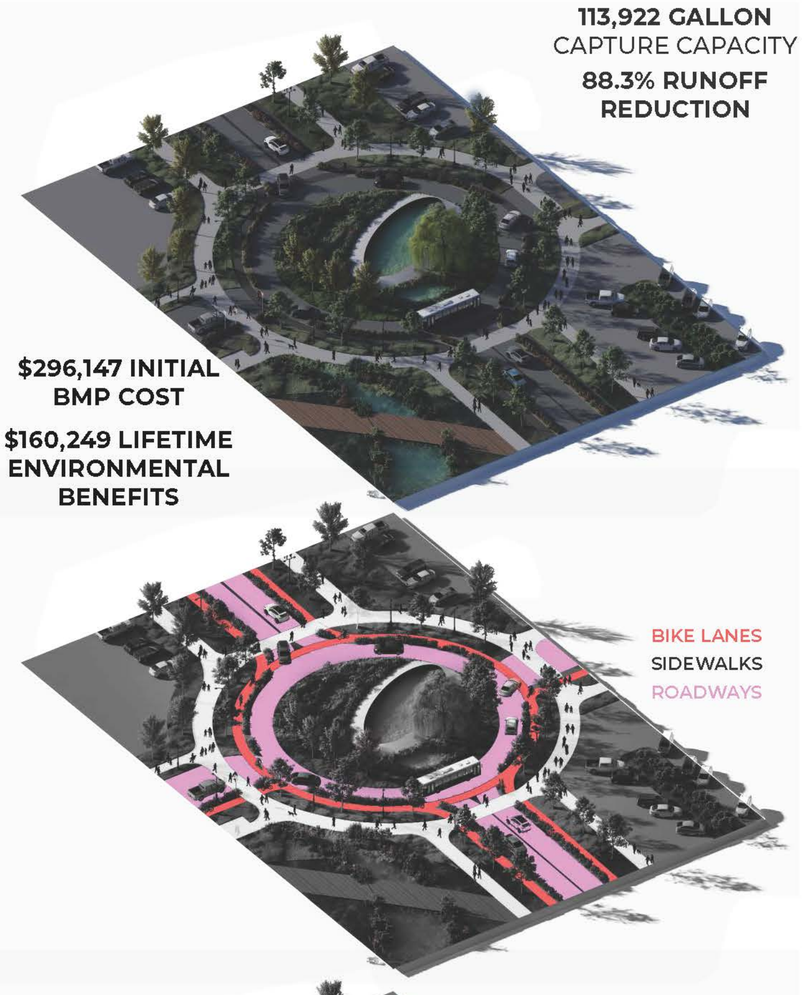
EAST LANSING WITHIN INGHAM COUNTY

MSU'S CAMPUS WITHIN EAST LANSING






**113,922 GALLON** CAPTURE CAPACITY

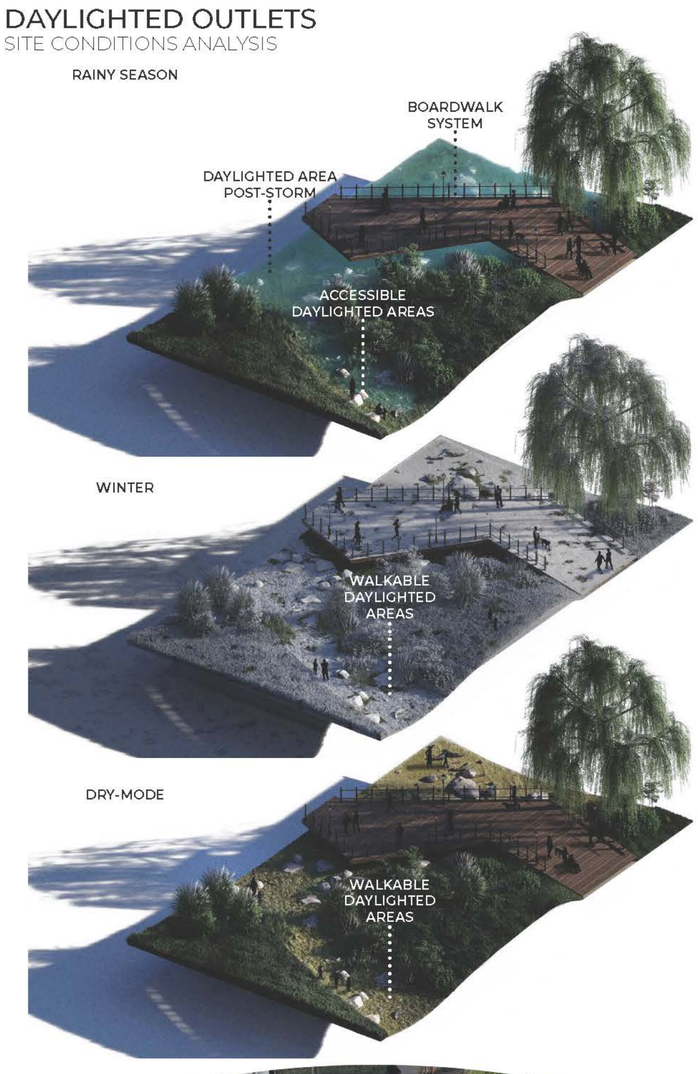
**88.3% RUNOFF REDUCTION**

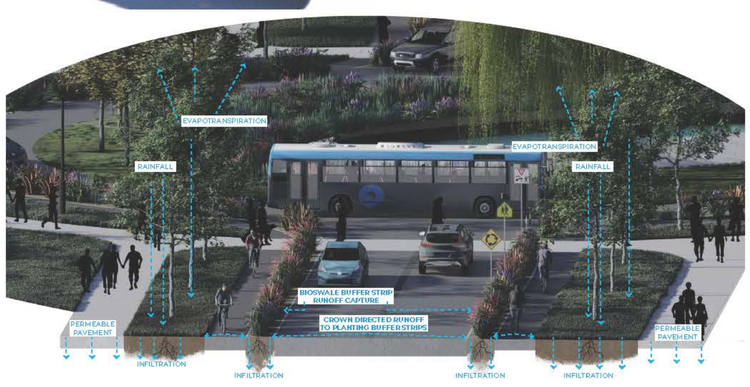
**$296,147 INITIAL BMP COST**

**$160,249 LIFETIME ENVIRONMENTAL BENEFITS**

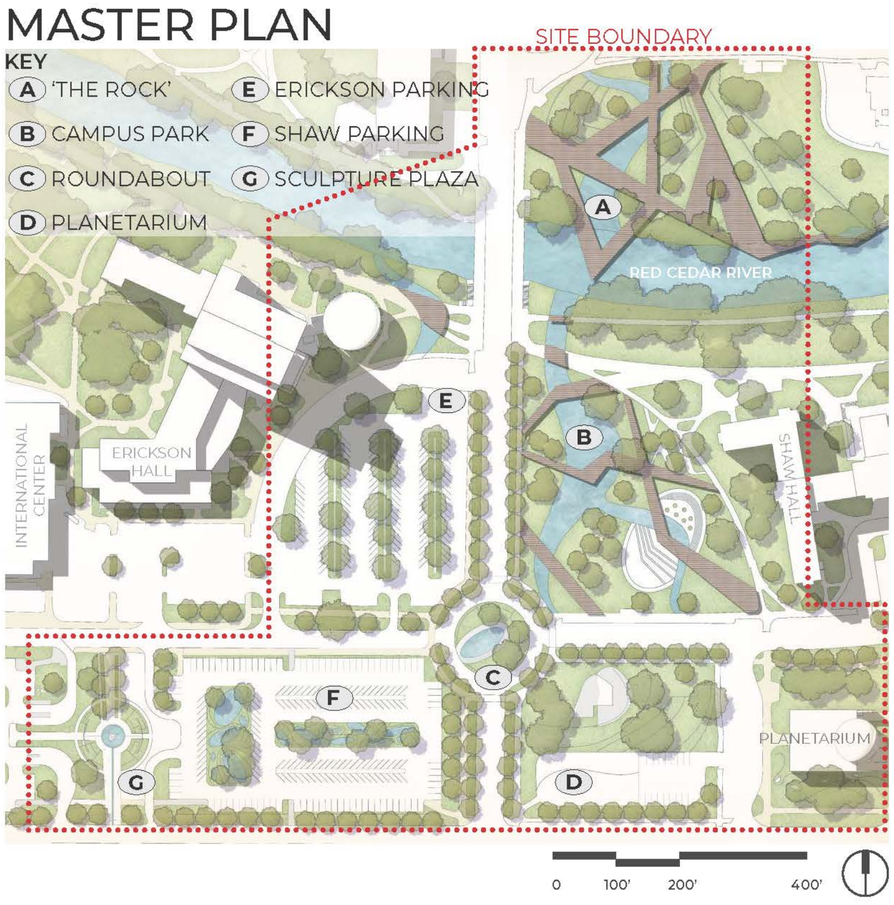
## DAYLIGHTED OUTLETS

SITE CONDITIONS ANALYSIS




## MASTER PLAN




# 1,154,051 GALLONS

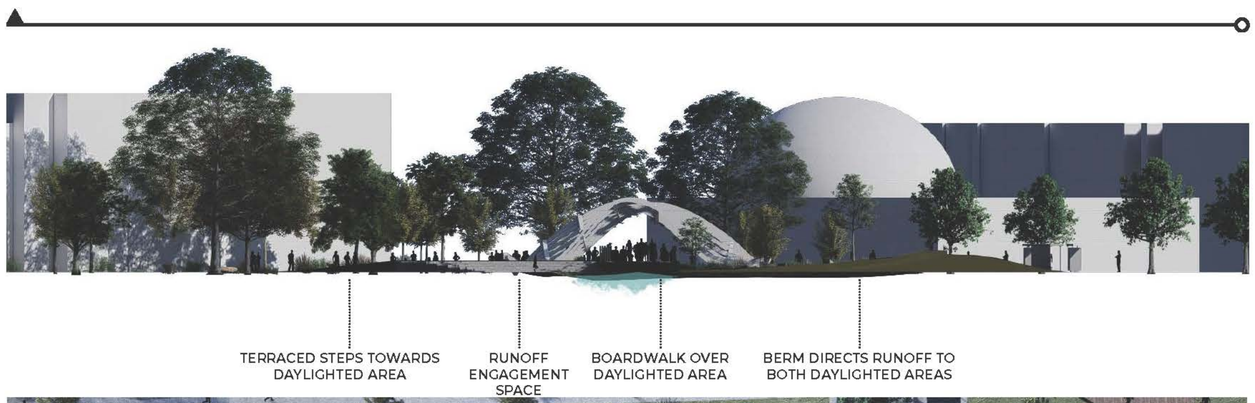
## CAPTURED ON SITE

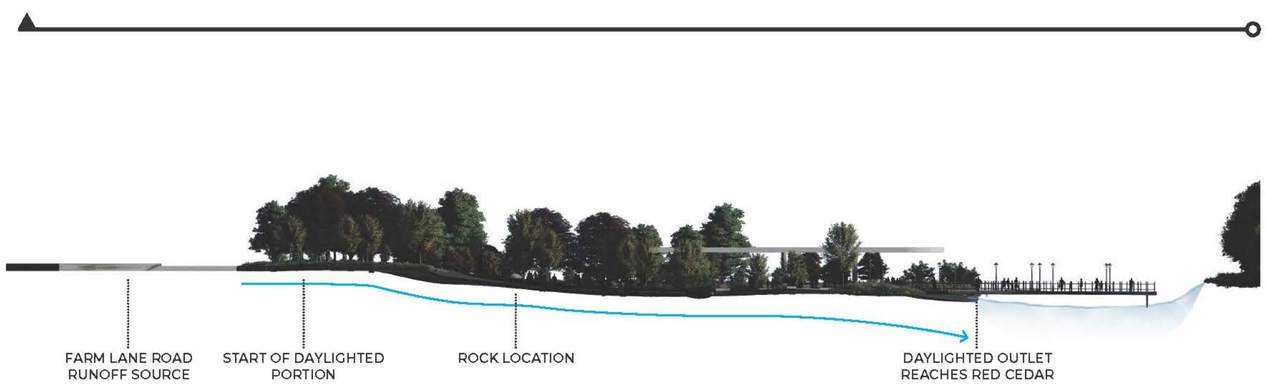
**76% LESS ANNUAL RUNOFF**

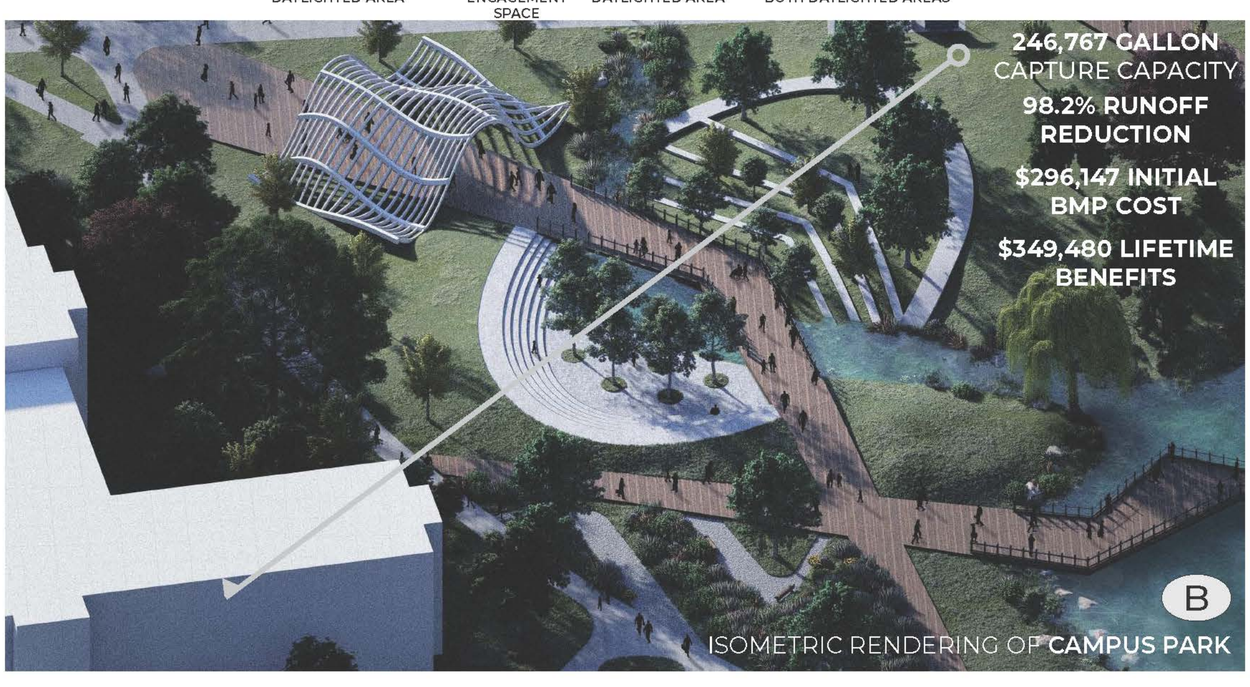
**56% OF 100-YEAR STORM RUNOFF CAPTURED ON SITE**

**$670,493 LIFE CYCLE BENEFITS**

**OVER 60,000 FT$^3$ OF DAYLIGHTED OUTLET AREA**



**246,767 GALLON** CAPTURE CAPACITY

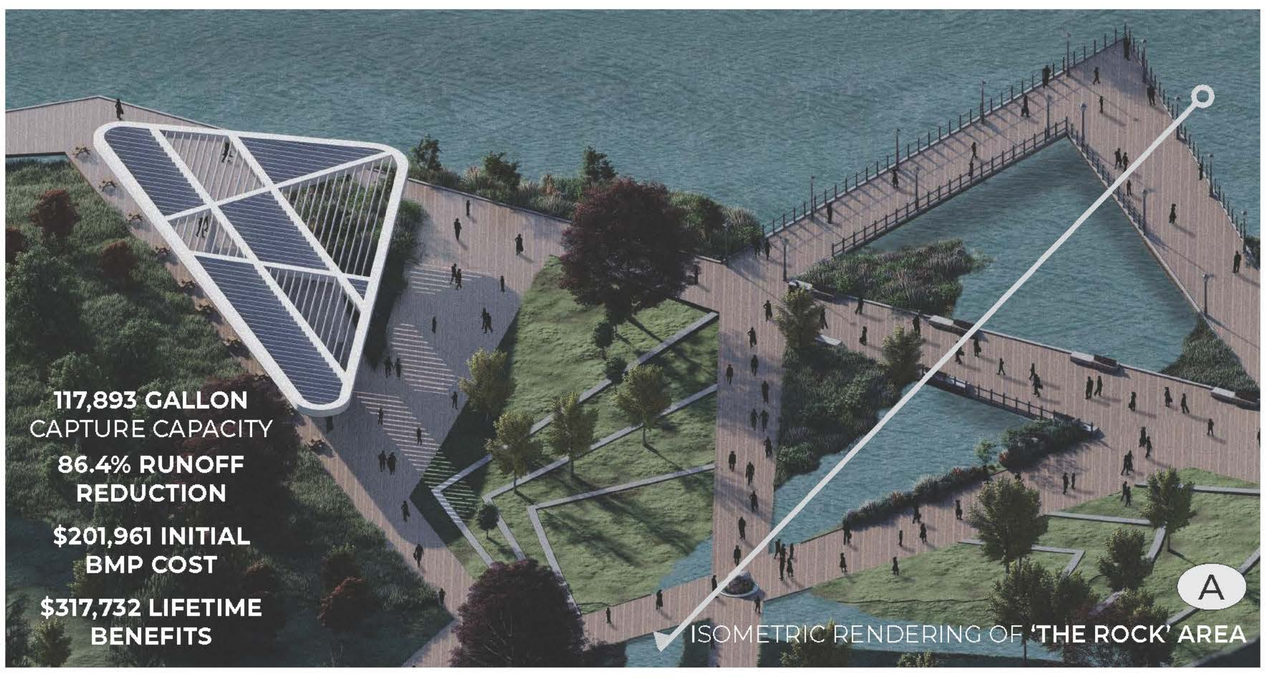
**98.2% RUNOFF REDUCTION**

**$296,147 INITIAL BMP COST**

**$349,480 LIFETIME BENEFITS**

B

ISOMETRIC RENDERING OF **CAMPUS PARK**



**117,893 GALLON** CAPTURE CAPACITY

**86.4% RUNOFF REDUCTION**

**$201,961 INITIAL BMP COST**

**$317,732 LIFETIME BENEFITS**

A

ISOMETRIC RENDERING OF **'THE ROCK' AREA**