····PRE-DEVELOPMENT

HABITAT+TREE COVER

Canopy cover 88-96% (depending on fire)
26.7 acres of Blackjack and Post Oak forest or savanna
Dense understory of Greenbriar, Roughleaf Dogwood,
Poison Ivy, Redbud, and Coralberry. Many grasses in savannas.

Broad diversity of wildlife

Bison, blackfooted ferrets, prairie dogs, burrowing owls, mountain lions, black bears, coyotes, bobcats, foxes, wild turkeys, and white-tailed deer. Many songbirds, waterfowl, and birds of prey migrate through the area or stop to spend their breeding or winter season.

Stormwater

runoff 2% precipitation 522,132 gallons/year

····EXISTING

Canopy cover 14% 17 acres of parking lot

Post Oak, Live Oak, Bald Cypress, Red Oak, and Crape Myrtle. Groundcover of Asian Jasmine, St. Augustine, and Bermuda grasses.

Impervious surfaces Channelized stormwater drainage to handle impervious surfaces, some erosion in intense rainfall. Untreated water carries pollutants to Trinity waterway. Urban wildlife such as

Stormwater

feral cats. Few hosts for pollinator species.

runoff 70% precipitation 18,389,078 gallons/year

····PROPOSED

Canopy cover 20% + 8.5 acres of living roofs

Various living roof types: Foodservice, leisure, habitat, and low-maintenance. New trees sited to shade hardscape and building surfaces. Planting chosed to encourage pollinator

Pervious surfaces increased Bioswales cool, clean, and slow water runoff from rooftops and sidewalk before reaching creek.

Stormwater runoff

PRECIPITATION Average 37 inches/year 26,106,640 gallons/year

Evaporation +

Transpiration 13% precipitation 912,400 gallons/year

Aquifer recharge

Groundwater

recharge 82% precipitation 21,407,444 gallons/year

Evaporation + Transpiration 4% precipitation

1,053,621 gallons/year

Aquifer

recharge 3% precipitation 783,199 gallons/year

recharge 23% precipitation

Groundwater

Evaporation + **Transpiration** 11% precipitation 2,871,730 gallons/year

Aquifer

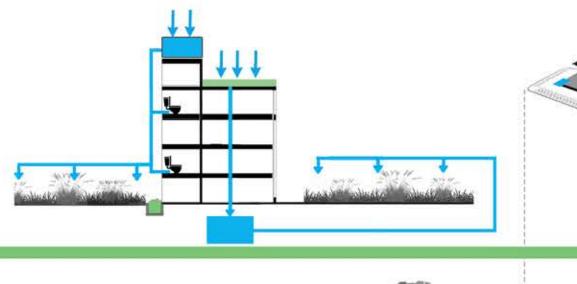
1,044,265

gallons/year

recharge 4% precipitation

Adapt surface parking by adding structural and subsurface parking

limited



FILTER + DETAIN

RETAIN + REUSE

in above- and below-ground

Capture stormwater runoff

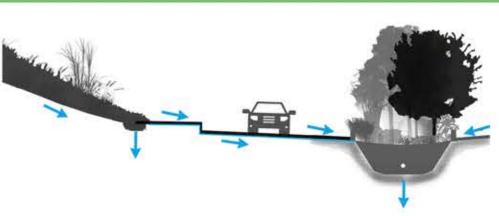
During times of drought,

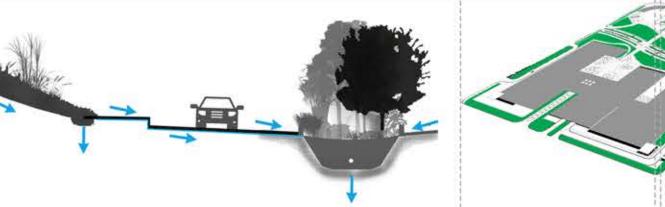
Supplement toilets at other

irrigate plantings.

Filter hydrocarbons and heavy metals from automobiles with median and roadside swales

Other swales detain water from rooftop overflow





ACTIVATE + RECREATE

Reduce steepness of slope at creek and incorporate boardwalk

Provide plantings to filter and retain soil at edge

Reinforce pedestrian corridors through campus

Mitigate habitat loss and

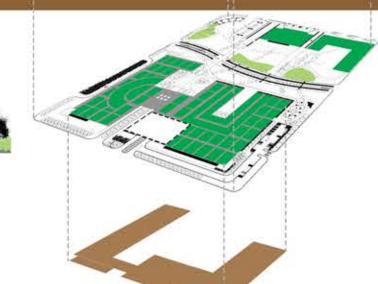
vegetating rooftops. Use

white roof where access

potential contribution to Urban Heat Island by







Provide habitat for birds

and fruiting species.

and pollinators through use

of multi-seasonal flowering

Pollinators supported by an

improved habitat include:

ants, bees, beetles, birds,

butterflies, flies, moths,

wasps, and true bugs.

The boardwalk adjacent to the creek provides a multifunctional landscape campus amenity, which allows users to connect to the larger city trail along Johnson Creek. Incorporating a boardwalk and a short loop trail encourage users to walk or jog around the vegetated area which also serves

to filter pollutants.



PERFORMANCE



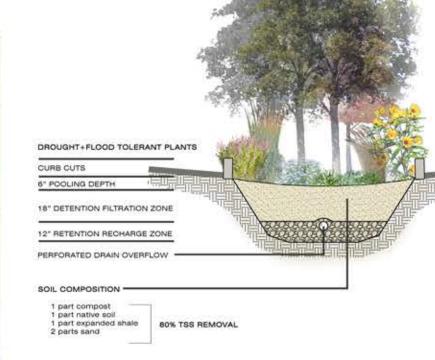
PROPOSED SITE DEVELOPMENT

26 acres TOTAL SITE AREA

10.41 acres IMPERVIOUS AREA

7.40 in./year













ht-and-flood resistant plants to slow and filter pollution from stormwater runoff