

(un)LOADING NUTRIENTS

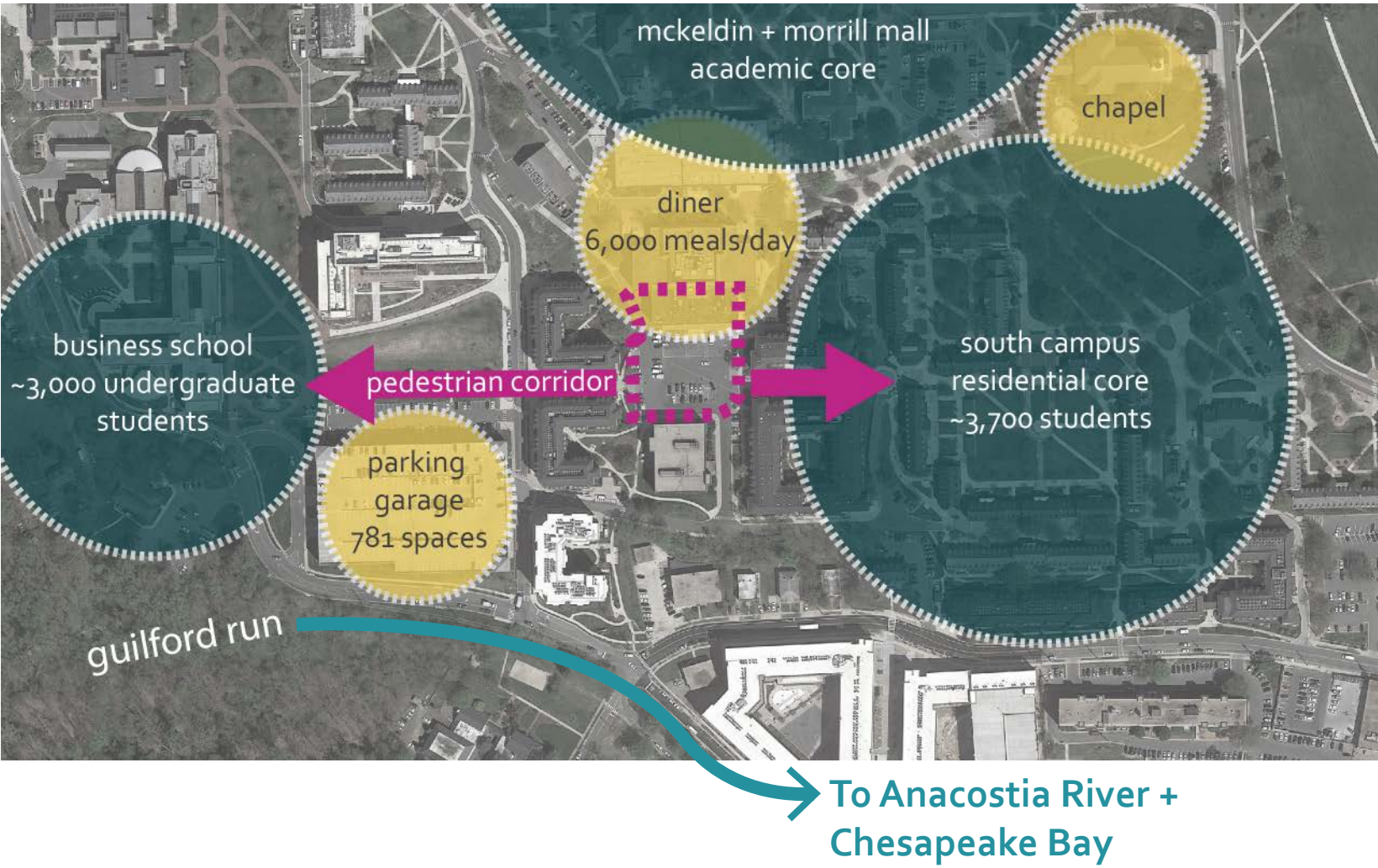


Goals

- To capture, detain, and infiltrate the 2-year, 24 hour storm event while preserving existing use as a loading dock
- To safely re-connect the pedestrian corridor
- To increase tree canopy and provide habitat and food resources for wildlife
- To provide opportunities for students, faculty, and staff to learn about stormwater best management practices

Site Context

The southern part of the campus lacks stormwater best management practices. The diner loading dock was chosen because of its impervious surface, lack of vegetation, and the high volume of student traffic.



Site Photos



Ponding around the drain



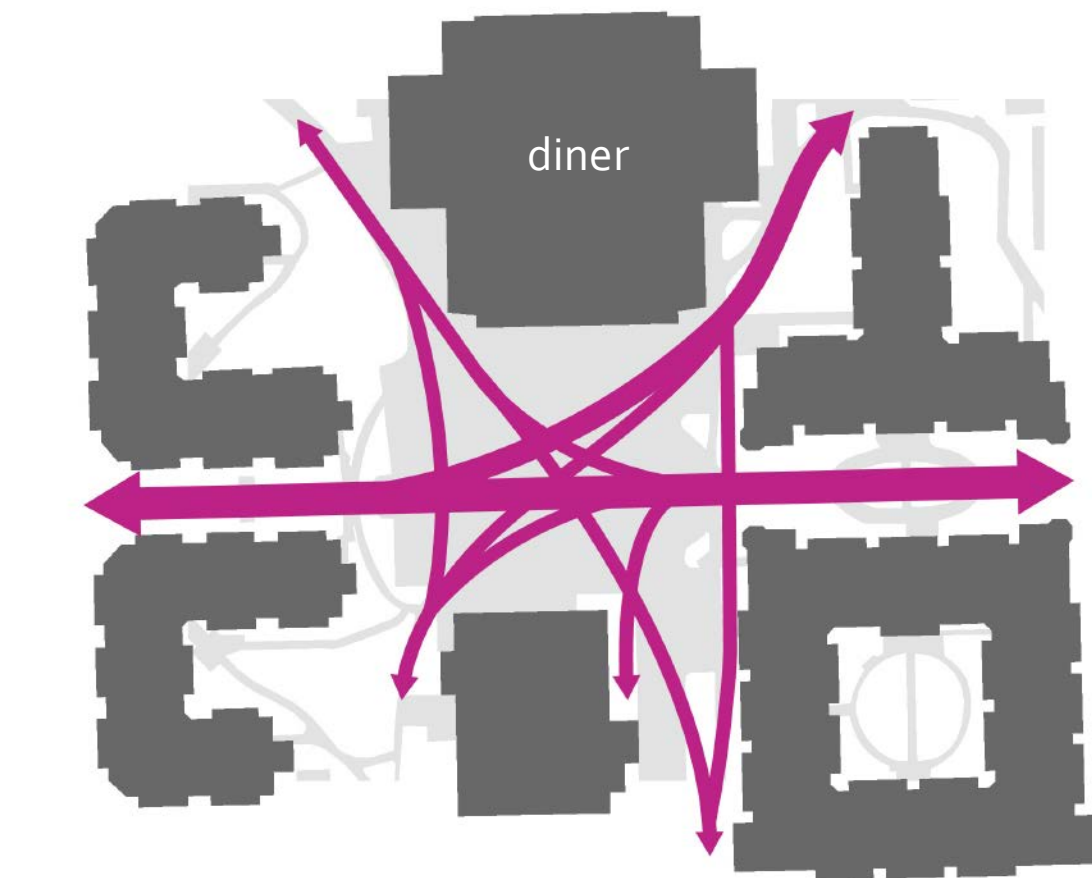
The site is 97% impervious with little tree canopy



Lack of circulation pattern creates conflicts for the different users

Challenges

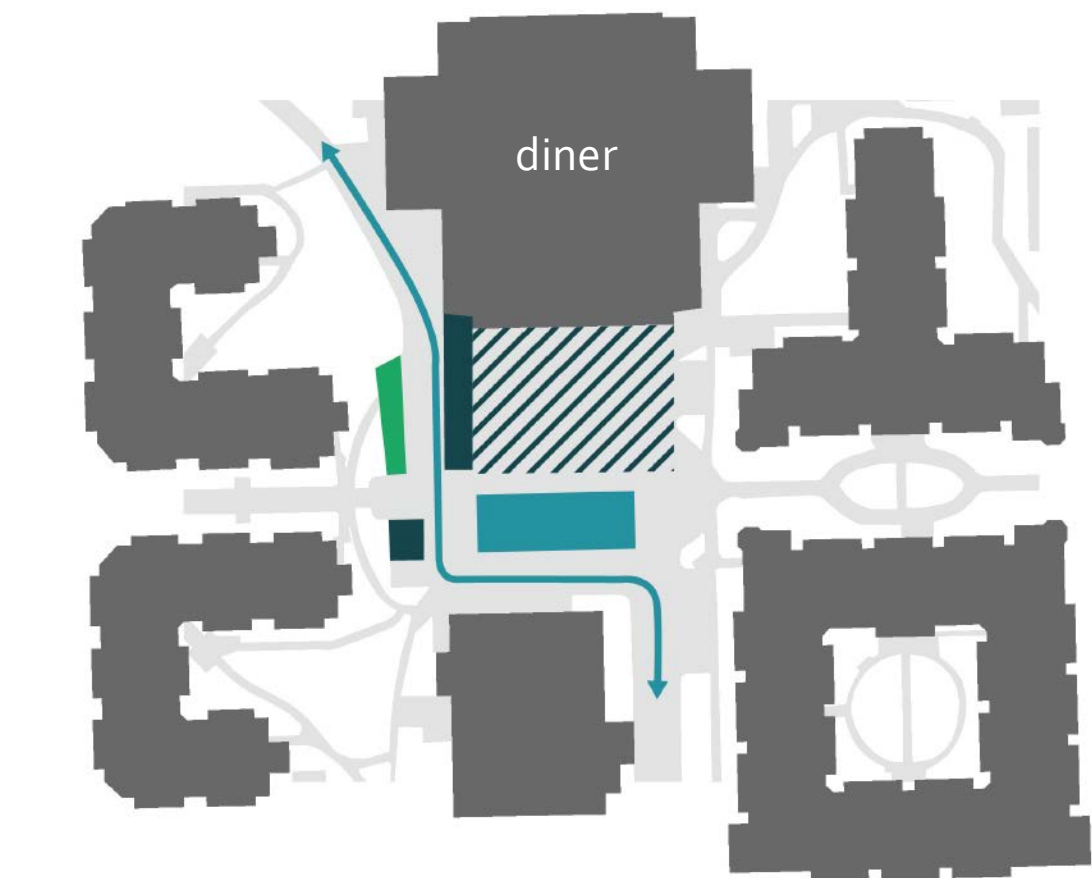
Pedestrian Circulation



A high volume of students cross the loading dock/ parking lot between classes and mealtimes

— Pedestrian traffic

Existing Uses

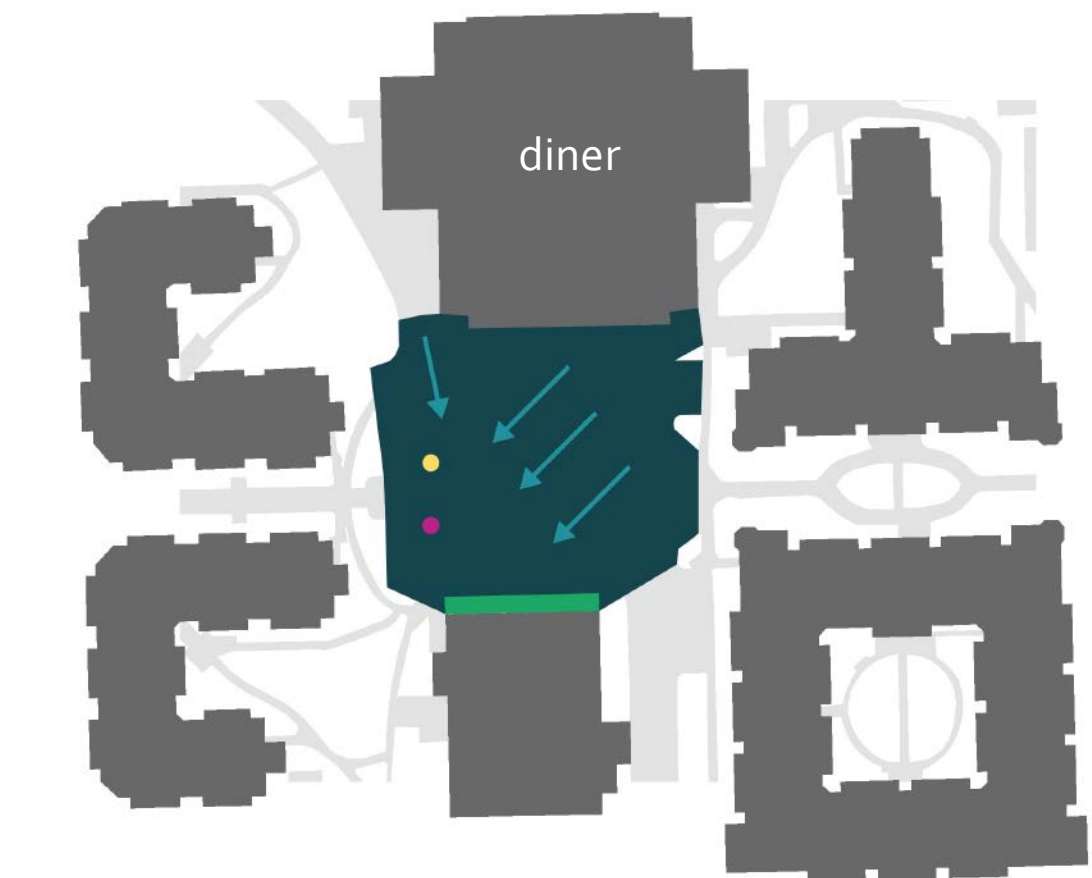


Current use of site as a loading dock and parking lot. The intersection of vehicular and pedestrian traffic creates safety concerns

- Fire Lane
- ▨ Loading Dock
- Service Parking (11)

- Handicap Parking (7)
- Bikeshare

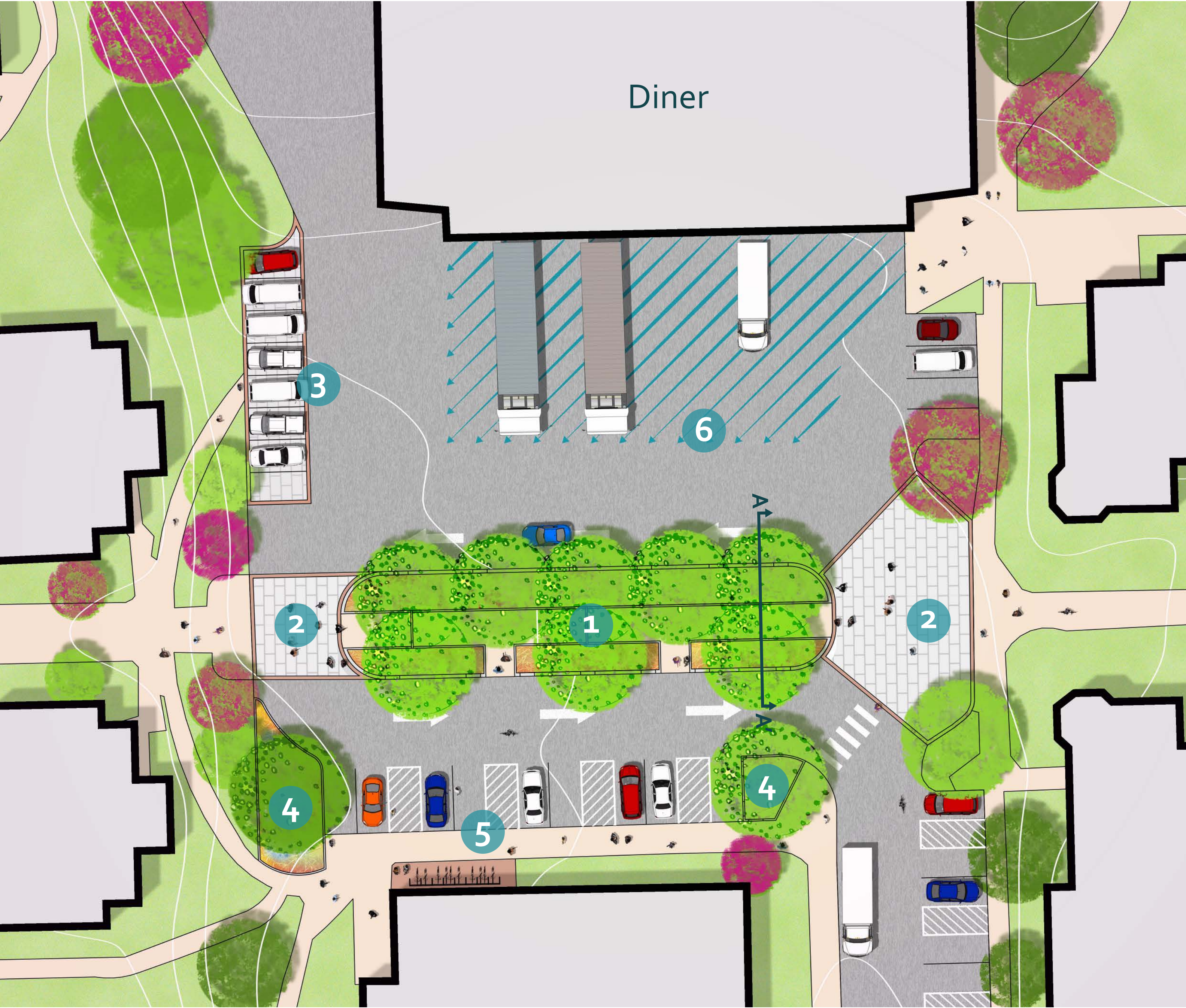
Drainage



The project site is 0.97 acre and 97% impervious. Runoff generally flows from the north and northeast to the drains on the southeast corner of the parking lot

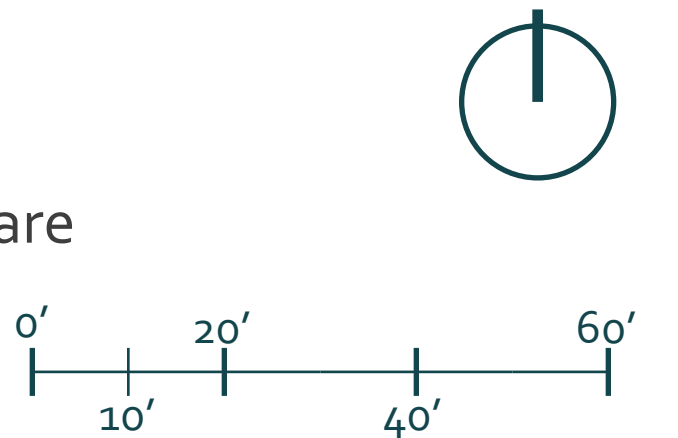
- Water Flow
- Impervious Surface
- Pervious Surface
- Covered Drain (not working)
- Working Drain

Site Plan



Key

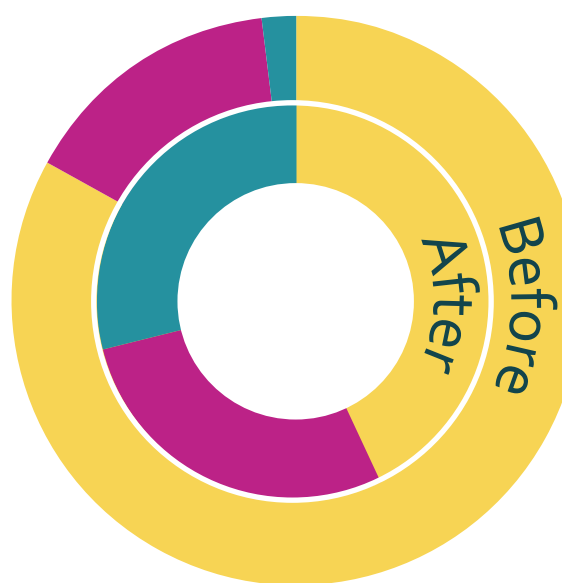
- 1 Bioretention Walk
- 2 Permeable Paver Crosswalk
- 3 Permeable Paver Parking
- 4 Bioretention Basin
- 5 Relocated Handicap Parking + Zagster Bikeshare
- 6 Artful Loading Dock Striping



Landscape Performance



Impervious Surface



Treatment of Stormwater

EPA Stormwater Calculator

	Before	After
Runoff	83% (Untreated)	43% (Treated)
Evapo	15%	29%
Infil	2%	28%

10 canopy trees planted

3,030 sqft of native planting

21 out of 28 parking spaces saved