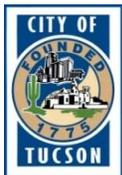


4. Water Harvesting and Green Streets

Catlow Shipek,
Watershed Management Group



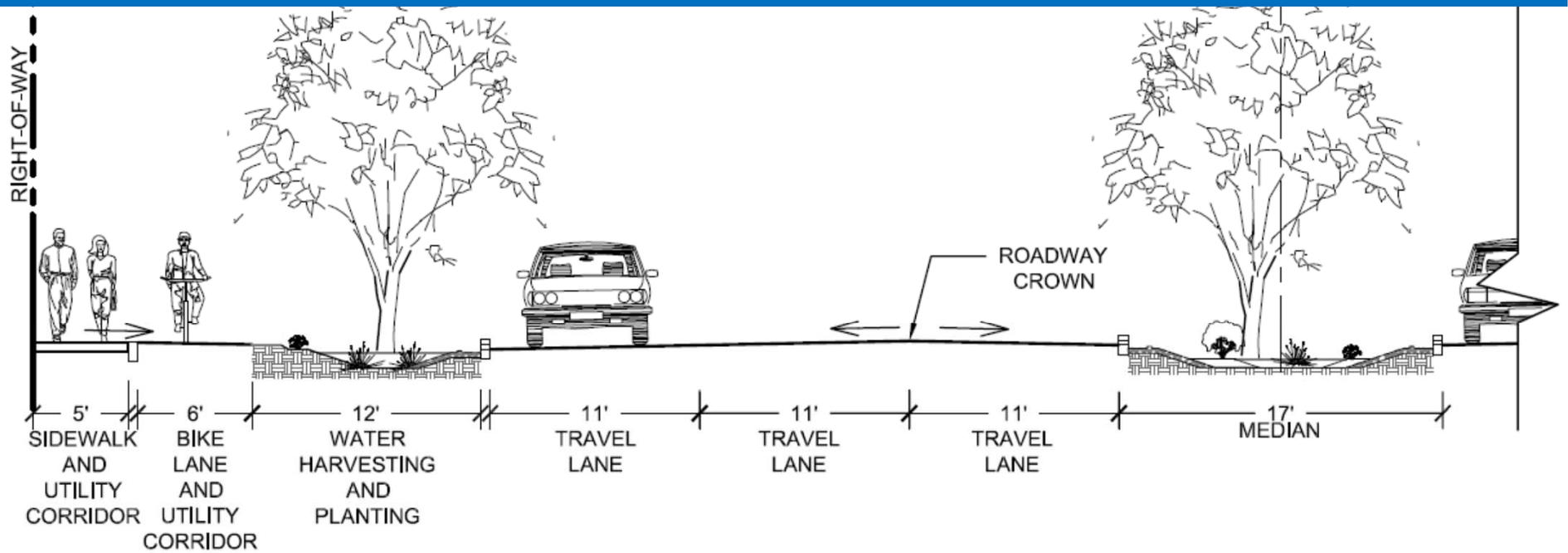
Green Streets Active Practice Guideline

Catlow Shipek
Co-founder & Sr. Program Manager
Watershed Management Group





Watershed Management Group develops and implements community-based solutions to ensure the long-term **prosperity of people** and **health of the environment**. We provide people with the knowledge, skills, and resources for sustainable livelihoods.



Green Infrastructure



Advisory Committee

- Watershed Management Group
- Mayor's Office
- Tucson Dept. of Transportation
 - Landscape Architect
 - Hydrologist
- Wheat Scharf, Landscape Architectural Firm
- Stantec, Engineering Firm
- Tucson Office of Conservation and Sustainability

Read it: watershedmg.org/policies

Green Streets Active Practice Guideline

ADOPTED BY THE
MAYOR AND COUNCIL

August 6, 2013

RESOLUTION NO. 22116

RELATING TO TRANSPORTATION; AUTHORIZING AND APPROVING THE ADOPTION AND IMPLEMENTATION OF THE GREEN STREETS POLICY FOR THE TUCSON DEPARTMENT OF TRANSPORTATION; AND DECLARING AN EMERGENCY.



Green Streets Active Practice Guideline

Applies to new city road construction and reconstruction

Performance Goals

- Stormwater to be directed through GI before entering storm drains
- Landscape areas to retain $\geq \frac{1}{2}$ " of rain on public right-of-way
- Landscape plantings must meet coverage metrics to provide canopy shade and ground cover
- Landscape within 5 years to survive on harvested rainwater
- And, planning process requires coordination and identification of potential GI features at the very start.

Issue: Urban Heat Island



Issue: Sustaining Urban Forests

According to
American Trees, a
25% Canopy Cover

Where is Tucson?

2% - 10%



Issue: Increased Runoff and Flooding



Issue: Non-Point Source Pollution



Issue: Water Conservation



Issue: Bike and Pedestrian Enhancements

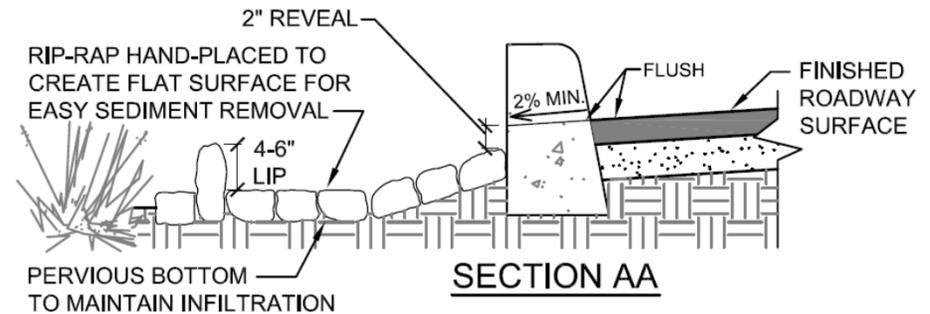


City of Tucson Green Streets Suggested Technical Best Practices

DRAFT

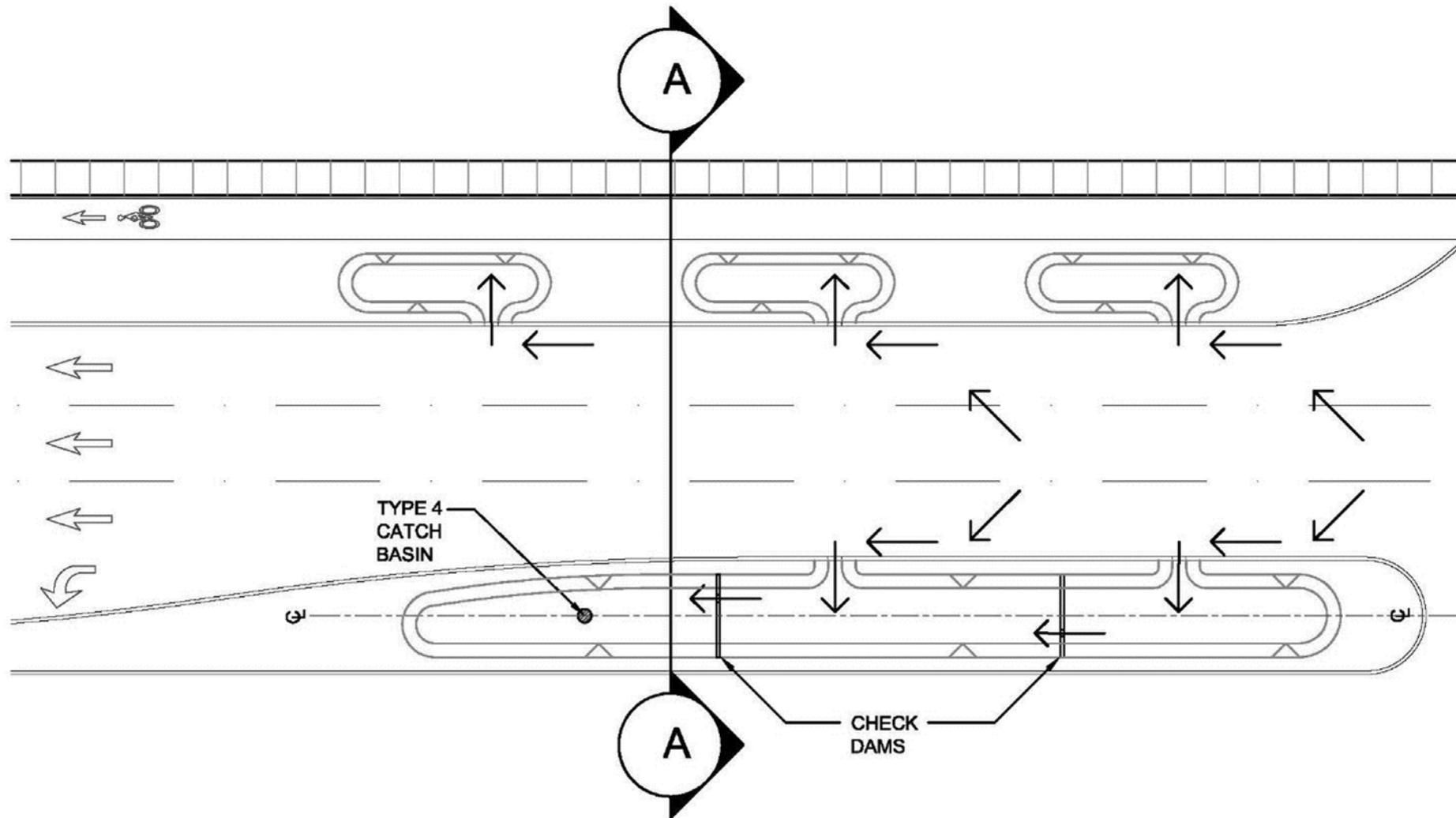
2.4. **Sediment traps.** A sediment trap will be constructed at the initial flow inlet of any landscape retention- feature accepting flow off the street. The sediment trap will be designed to slow the concentrated inflow of water sufficiently to allow particles (fine sand or larger) to settle in the constructed sediment trap.

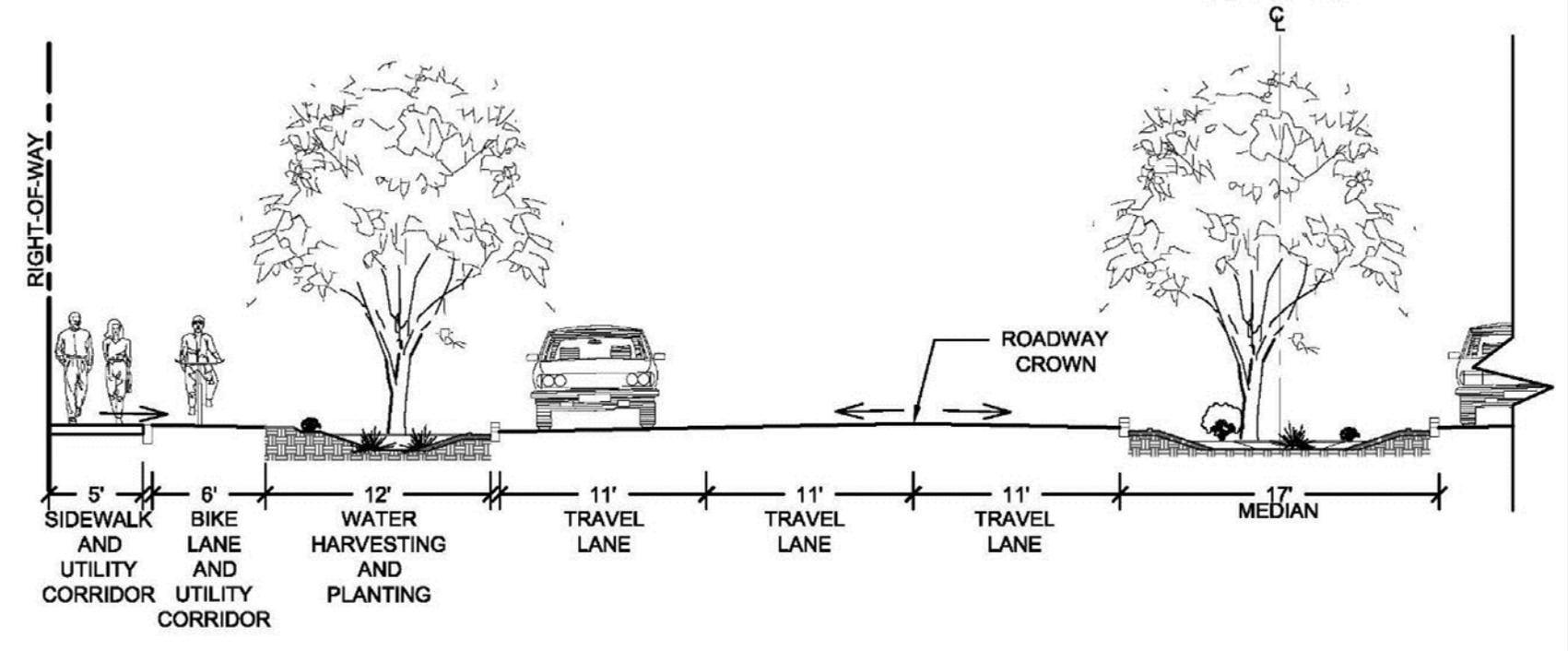
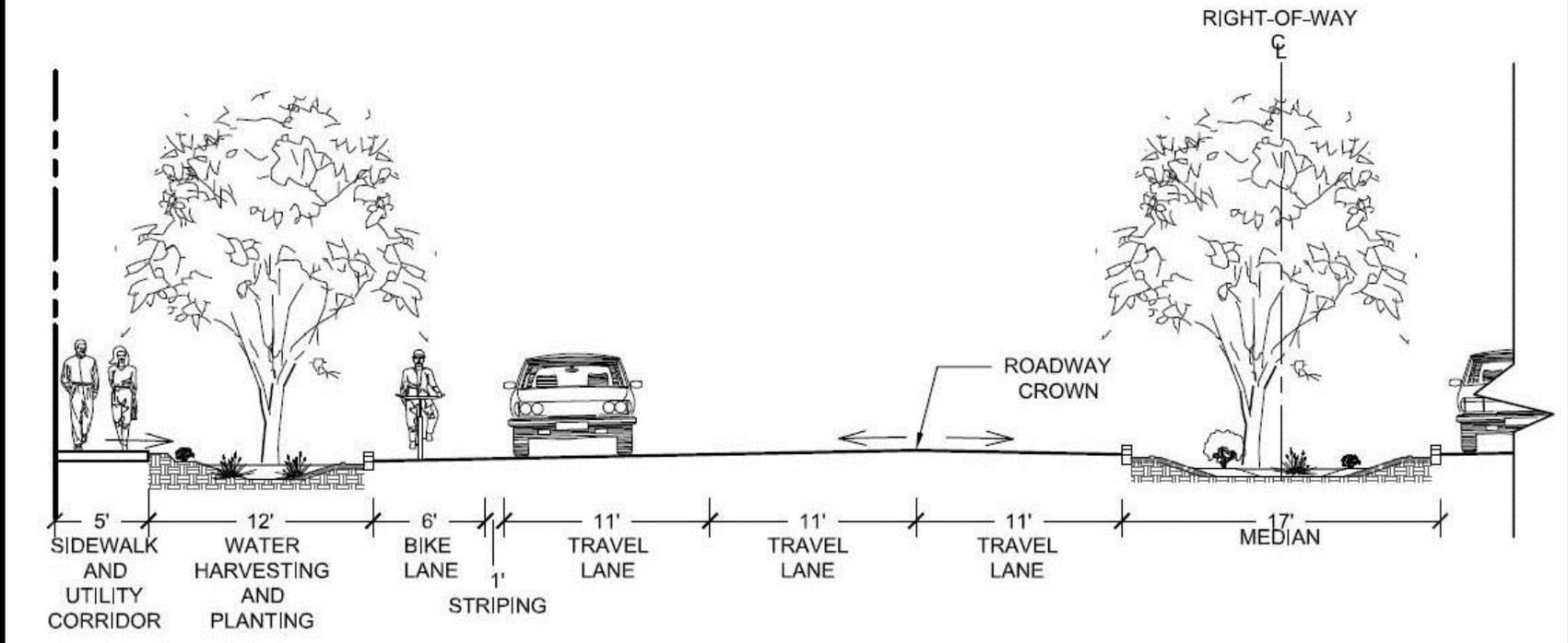
Sediment trap design considerations include: a) ability to easily remove sediment (e.g. scoop with shovel), b) a pervious bottom to allow water to infiltrate within feature, c) addition of native bunch grasses within or immediately downstream of the sediment trap to further slow and filter runoff. *See figure 2.4.*



Published December 2013 by:







Would you rather have this?



Van Buren Street, Phoenix, today. Image courtesy of Duany Plater-Zyberk.

Source: <http://bettercities.net/news-opinion/blogs/robert-steuteville/21041/top-10-reasons-new-american-dream>



Or this?



Van Buren transformed, by Steve Price of Urban Advantage, for Reinvent Phoenix. Concepts for the street retrofit were via Duany Plater-Zyberk and Crabtree Group. Source: <http://bettercities.net/news-opinion/blogs/robert-steuteville/21041/top-10-reasons-new-american-dream>



Download your free copy at watershedmg.org/green-streets

Green Infrastructure for Southwestern Neighborhoods



Version 1.2
Revised October 2012

