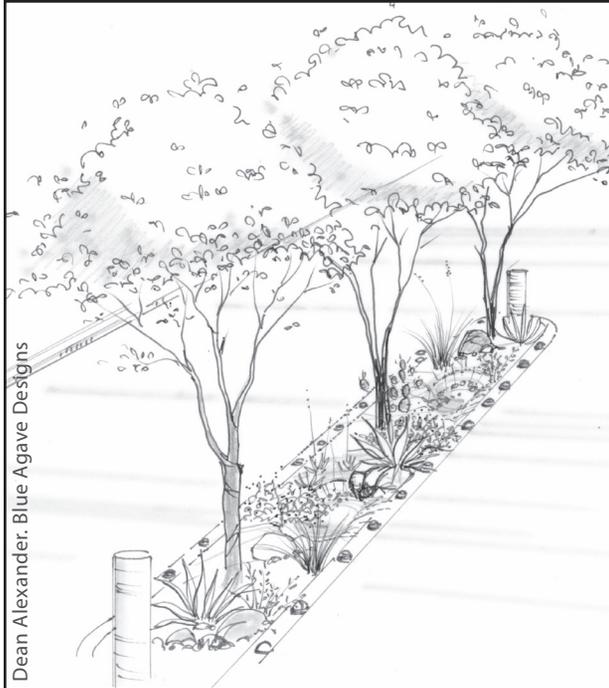


Continued from inside

- Place 6" ceramic disks along the top of header curb to discourage entry by automobiles.
- Place bollards at both ends of the median to warn oncoming traffic of obstruction.
- Consider striping pavement surface in approach to median to increase visibility of feature.

## Maintenance

- It is the neighborhood's responsibility and liability to maintain the right-of-way.
- Check slopes, edges, etc. for signs of erosion and repair/reinforce as needed (before each rainy season).
- Observe bioretention feature during rain events to evaluate function and make necessary adjustments.
- Prune vegetation to preserve visibility and prevent obstruction of travel lanes.
- Remove undesirable and invasive plants (weeds) on a regular basis.

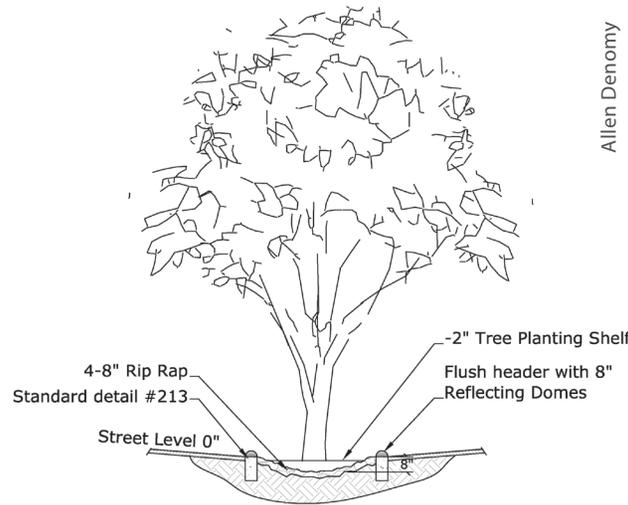


Dean Alexander. Blue Agave Designs

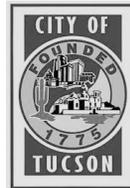
- Remove accumulated sediment from bottom of basin to retain designed depth.

## Adapting the practice to your site

- If medians are designed for crested streets (flow conveyed along the street edge), use a uniformly raised curb and a depressed planting area to capture and infiltrate stormwater that falls on the median itself.
- In areas with higher sediment flows, consider using sediment traps (see handout GI-2) to facilitate maintenance.



Allen Denomy



City of Tucson, Department of Transportation  
201 North Stone Ave, 4th Floor  
520.791.5100  
dot.tucsonaz.gov



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GI-8

## Green Infrastructure for Public Right-of-ways

### An in-street practice: Center Medians with Bioretention Basins

*Purpose: To collect and infiltrate stormwater flowing along the center of the street, slow traffic, reduce impervious area, and beautify a neighborhood.*



A green infrastructure practice developed by Watershed Management Group in coordination with City of Tucson Department of Transportation.

# Center Median, an in-street practice

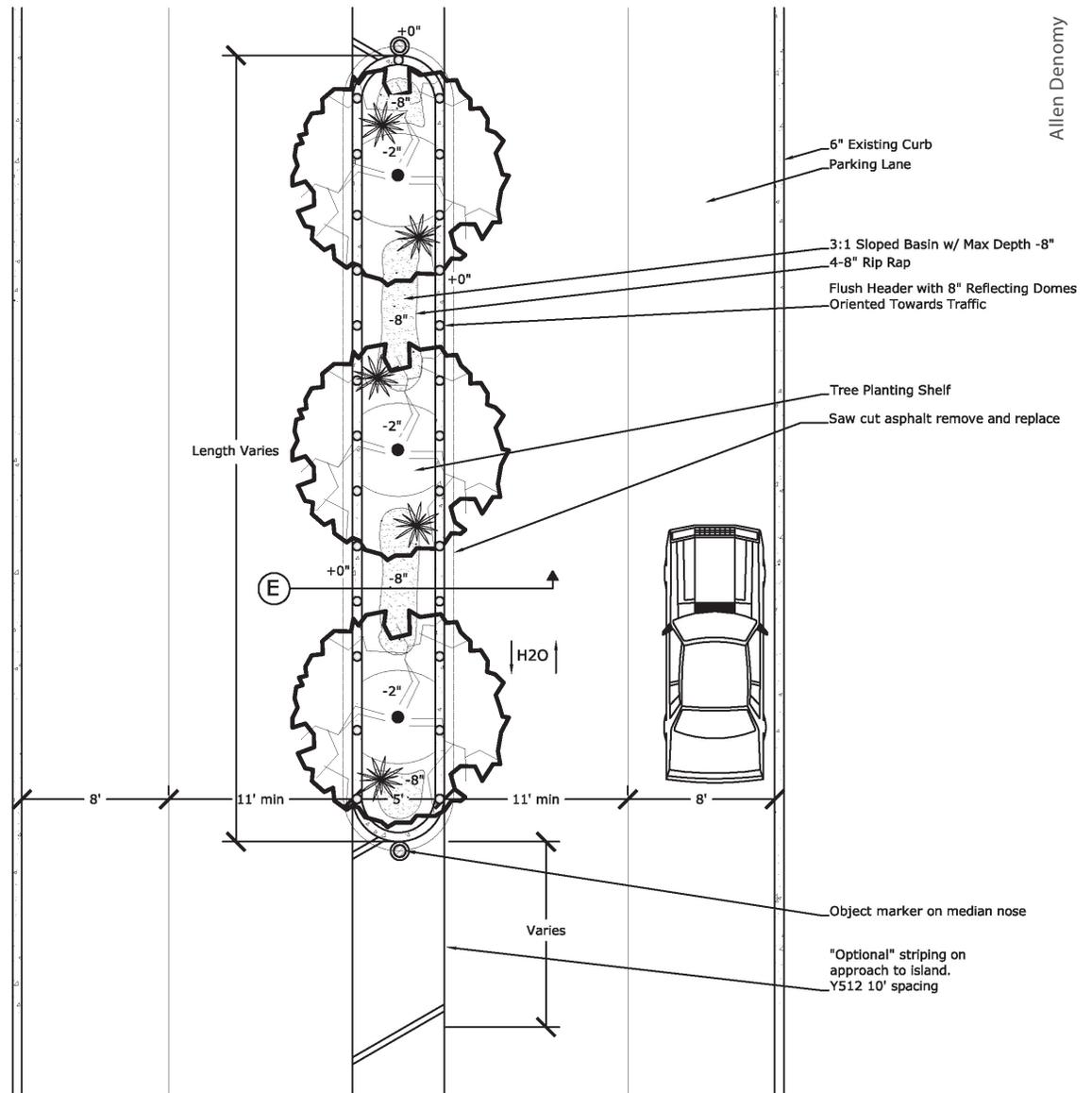
All in-street practices need to have designs approved by a Dept. of Transportation Engineer.

## Site selection

- Medians function best to collect stormwater on streets that are concave, or lowest at the middle of the street, and that carry stormwater along the middle of the street. The design shown is for a median on a concave street.
- Medians can be an excellent way to slow traffic entering a neighborhood from faster regional streets, and/or to prevent cars from making unsafe or unwanted turns mid-street.
- Medians require a minimum 5' of available (surplus) street width.
- Consider reducing on-street parking to make installing medians possible.
- Bioretention (vegetated basins) on steeply sloped streets should incorporate practices to slow the flow of stormwater runoff to minimize erosion.
- Ensure the boundaries of the in-street bioretention area are well marked and visible to traffic and bicyclists.

## Design and Construction

- In-street bioretention areas should be sized as large as possible to increase stormwater mitigation and traffic calming effects. The median shown is a minimum of 5' wide and will vary in length depending on site conditions.
- Excavate the inside of the median to a final depth of 8" (e.g. if covering soil with 4"-8" rock, excavate 4"-8" deeper to allow a final depth of 8").
- Maximize the area of level bottom of the median by using steep (up to 50%) side slopes armored with rock.
- Use flush header curbs 18" deep to protect the adjacent asphalt surface.
- Create planting areas elevated above the bottom for trees and shrubs that do not tolerate inundation. The raised planting areas can additionally function to slow stormwater flow through the bioretention area.
- To preserve visibility, do not plant trees or shrubs that will encroach into travel lanes. A tree canopy may extend over a travel lane at a minimum height of 14'.



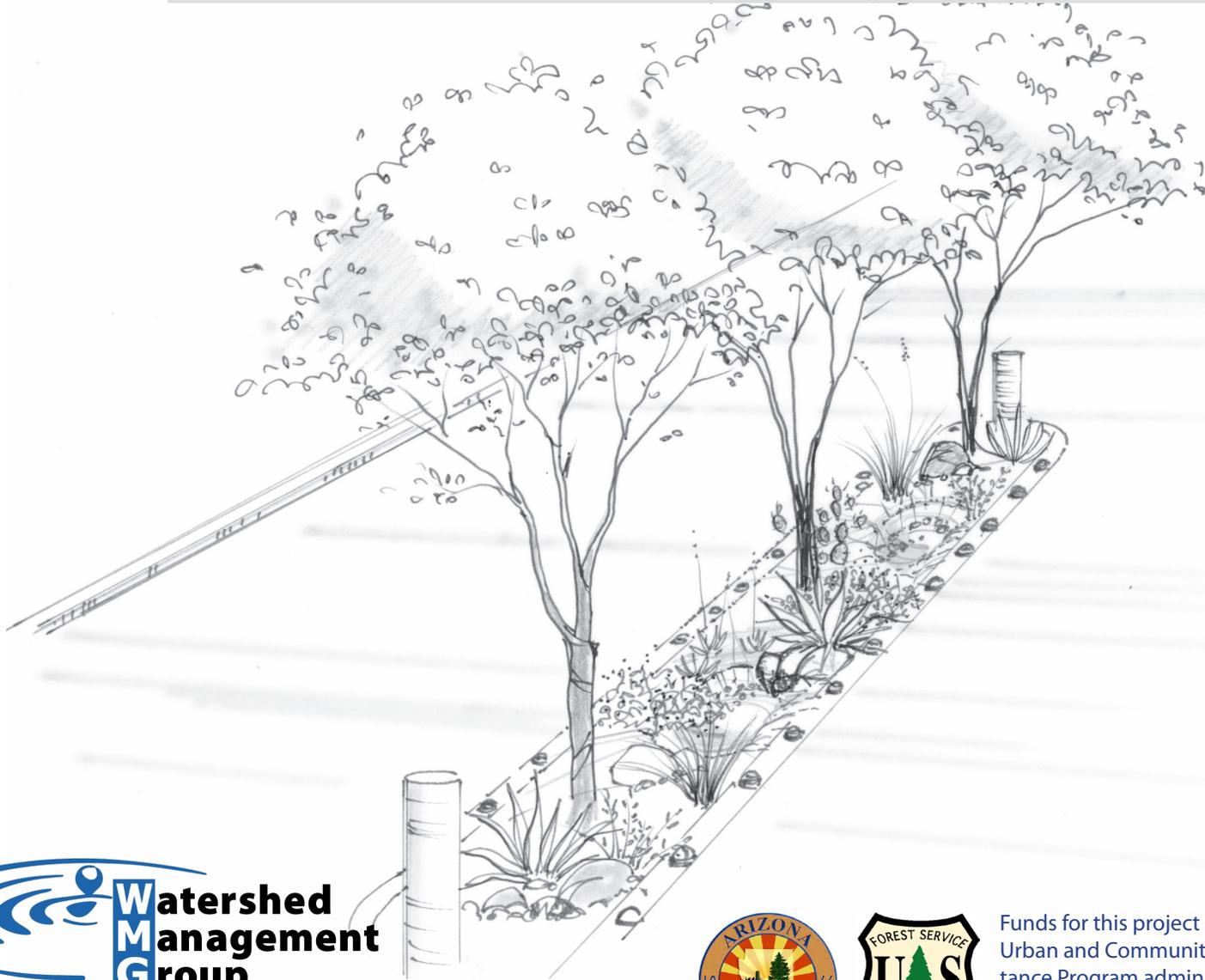
## Materials

- In areas of higher flow (concentrated flow with depths >1"-2"), lay 4"-8" rock over soil surface to prevent scouring.
- Areas that experience lesser flows can use 1"-3" rock.

*Continued on back*

## Center Median with Water Harvesting - A Conceptual Drawing

Standard design details developed by Watershed Management Group in coordination with the City of Tucson to incorporate stormwater harvesting and native plantings in streetscape improvements.



Watershed Management Group | [www.watershedmg.org](http://www.watershedmg.org)



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