

Curb Cuts (CC)



Curb Cut; Point Clear, AL

Synonyms: There are no synonyms for this practice.

Curb cuts convey stormwater into vegetated areas such as roadside swales, parking lot islands, rain gardens, or bioretention areas. Curb cuts are an easy retrofit that can be used in residential or commercial land use areas and are effective in moving stormwater to landscaped areas. Curb cuts are often used to convey stormwater into another low impact development (LID) practice. Curb cuts do not perform any pretreatment, but can minimize erosion by creating diffuse flow into other stormwater control measures (SCMs). Curb cuts can also be installed to redirect stormwater into a grassy field. While this is not directly considered a LID practice, it does reduce stormwater quantity in the receiving water body. Roadside curb cuts usually intercept perpendicular stormwater flow and in many cases multiple curb cuts are needed to adequately collect and move stormwater.

Site Selection

Crested Streets: Roadside curb cuts are best when used on crested streets that have their highest point in the center of the street and carry stormwater to either side.

Site Visit: Prior to design, a site visit during a rainfall event is helpful to note flow patterns that may affect stormwater flows into future curb cuts.

Local Ordinances: It should be noted that city or county codes and ordinances may require a permit application before any ground can be broken for curb cut construction.

Driveways and Intersections: It is recommended that curb cuts are sited at least 5' from driveway aprons and 20' from intersections.

Right of Way: When curb cuts are used to direct flow from roadsides into the right of way (ROW), landscaped areas should be a minimum of 6' wide when street parking is utilized and 5' wide on streets absent of parking.

Slope: Streets with greater than 5% slope are not recommended for curb cuts.

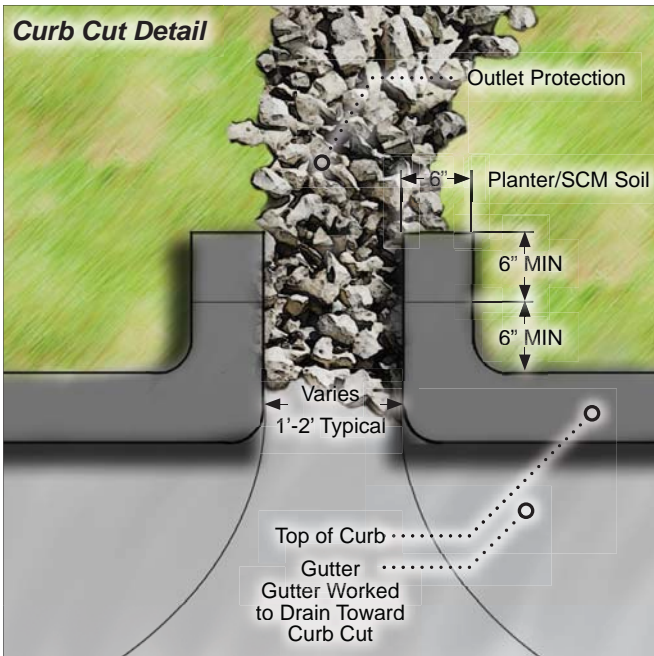
Submerged Curbs: Curbs that are submerged in water are not recommended for curb cuts.

Site Selection

Quantity Control	---
Drainage Area	small
Space Required	small
<i>Works with:</i>	
Steep Slopes	---
Shallow Water Table	---
Poorly Drained Soils	---

General Significance

Construction Cost	med
Maintenance	low
Community Acceptance	high
Habitat	---
Sun / Shade	either



Design Components

Outlet Protection: A rock apron that is as wide or wider than the curb cut is laid 1 – 2” below the curb cut to prevent soil erosion in the landscaped area that will collect stormwater.

Curb Cut: Curb cuts are generally 18 – 24” wide (a minimum of 12” wide is recommended to reduce the chance of clogging) and the cuts are usually made at 45° angles forming a trapezoidal channel shape. The bottom on the cut should be sloped down toward the area of stormwater collection.

Practice Pairing: When curb cuts are used in conjunction with SCMs, a 2 to 3” drop at the intersection of pavement and the SCM is needed to convey stormwater into the SCM.

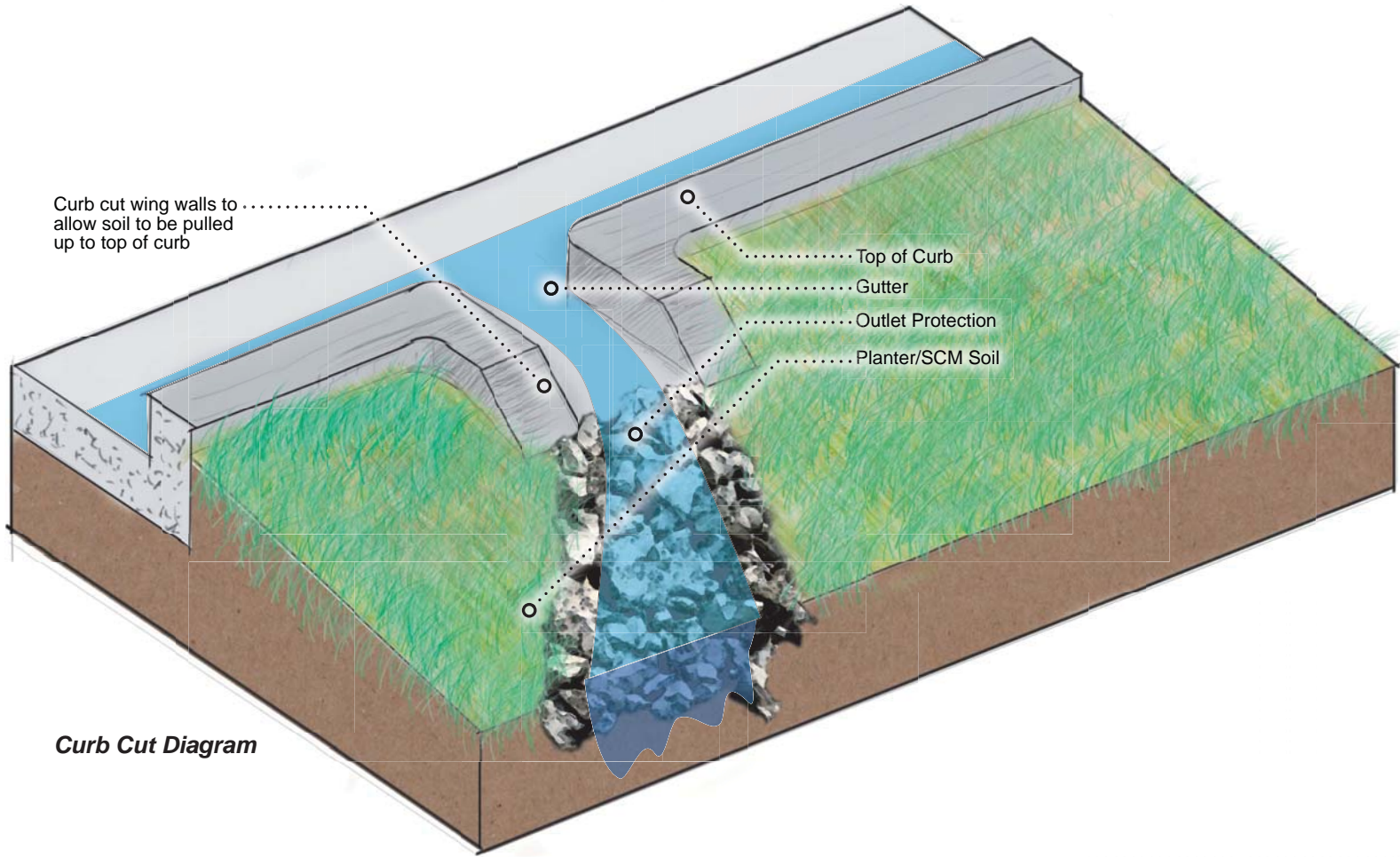


Table 5.2.2

Maintenance Schedule

Task	How Often	Comments
Remove Debris from Curb Cut	Three to four times per year	Remove trash or debris that may inhibit stormwater flow.
Check Rock Apron	Annually	Repair any erosion to rock apron.
Inspection	After 0.5" or greater rainfall event	Visually inspect all components of the curb cut.

Pollutant Removal

Curb cuts are used to convey stormwater into another SCM or vegetated area. Any associated pollutant removal occurs in the LID practice receiving the redirected stormwater.



Curb Cut at Hank Aaron Stadium; Mobile, AL

References

City of Tucson. 2010. Green Infrastructure for Public Right of Ways: Curb Cuts and Sediment Traps. Watershed Management Group, Tucson, AZ.

Pennsylvania Department of Environmental Protection. Pennsylvania Stormwater Best Management Practices Manual. 2006. Bureau of Watershed Management, Harrisburg, PA.