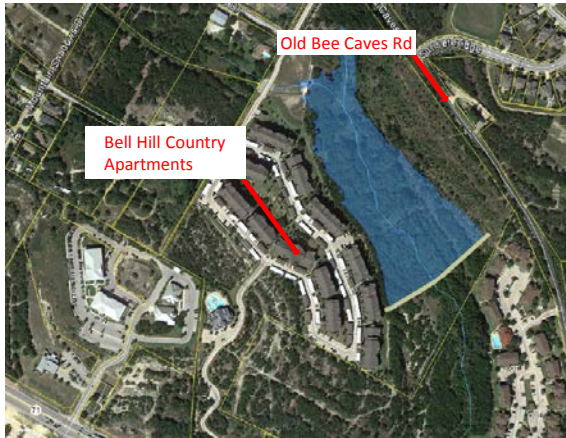


WATER QUANTITY OPPORTUNITIES

OFF-SITE DETENTION: Potential Upstream Pond Locations



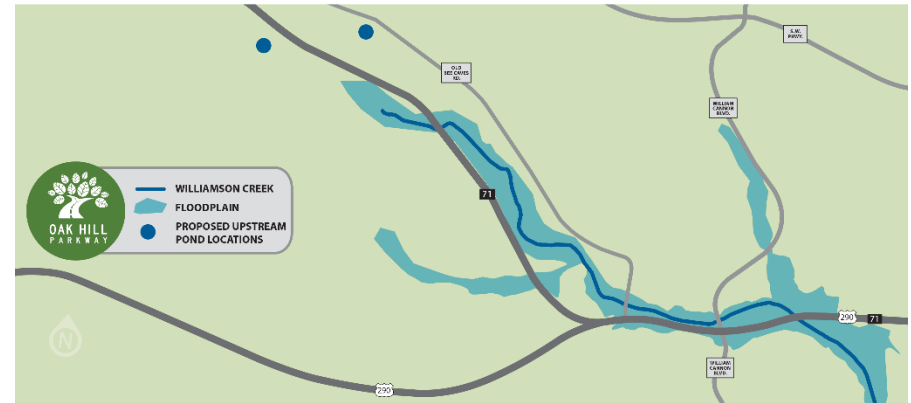
Old Bee Caves Road
near Sunset Ridge
location

*Maximum available
storage is approximately
100 acre-feet or 32
million gallons. The
surface area of the pond
is approximately
13 acres.*



SH 71 near Covered
Bridge Drive location

*Maximum available
storage is approximately
45 acre-feet or 15
million gallons. The
surface area of the pond
is approximately
12 acres.*



WHY: Ensure this project does not result in flooding impacts

WHAT: Provide flood storage at two off-site and upstream detention ponds

HOW: Build a dam across these natural creek valleys to capture flood waters during intense rain events. The water will then slowly recede over the next hours/days.



OAK HILL
PARKWAY

WILLIAMSON CREEK CONCRETE REMOVAL

EXISTING BRIDGE REMOVAL



We propose to:

- Remove a net volume of about 2,900 cubic yards of concrete from floodplain
- Add six new columns in 25-year floodplain, which would be about 220 cubic yards



OLD BEE CAVES ROAD



WILLIAM CANNON DRIVE



US 290



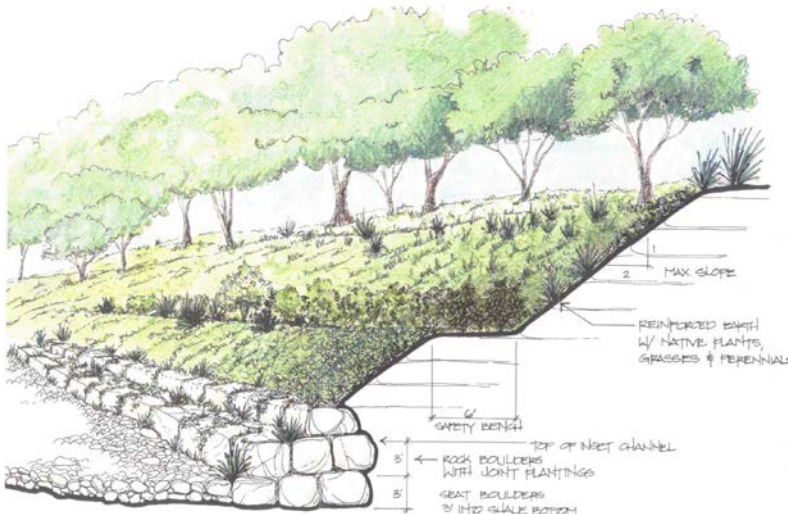
OAK HILL
PARKWAY

POTENTIAL WILLIAMSON CREEK TREATMENTS



Vegetative Treatment

Scale: Horizontal: 1/4" = 1'-0"
Vertical: 3/8" = 1'-0"



Reinforced Earth Treatment

Scale: Horizontal: 1/4" = 1'-0"
Vertical: 3/8" = 1'-0"



Rock Boulder Treatment with Joint Plantings

Scale: Horizontal: 1/4" = 1'-0"
Vertical: 3/8" = 1'-0"

Artistic Renderings from City of Austin – Watershed Protection Department



OAK HILL
PARKWAY

GREEN MOBILITY CHALLENGE

- In July 2011, the Mobility Authority, in partnership with TxDOT, launched the Green Mobility Challenge
- This sustainable design competition challenged Texas' most creative landscape architects, planners and engineers to propose better ways of constructing, operating and maintaining future transportation projects
- One of the projects selected for teams to submit sustainable concepts was the Oak Hill Parkway

IDEAS FOR OAK HILL PARKWAY

- Multi-use trails or paths/trailheads
- Enhancing Williamson Creek (while maintaining natural setting)
- Community gateway
- Native, low-maintenance vegetation/trees
- Porous friction pavement
- Grass filter strips
- Vegetated swales
- Regional detention/biofiltration
- Riparian plantings
- Solar pedestrian lighting
- Use of recycled materials



OAK HILL
PARKWAY

WATER QUALITY 101

WHAT: Provide treatment of stormwater runoff from the project before discharging into Williamson Creek and its tributaries

WHY: Protect Williamson Creek and the Edwards Aquifer from pollution associated with development

STRATEGIES - “Best Management Practices (BMPs)”

- Vegetative filter strips, grassy swales
- Sedimentation/sand filtration basins
- Bioretention ponds
- Extended detention basins
- Regional water quality



< Grassy swales



Filtration basin ^



Sedimentation basin >