



# Rainbow Valley Area Drainage Master Plan - Proposed Alternatives

## ALTERNATIVE 4 - STRUCTURAL STORAGE

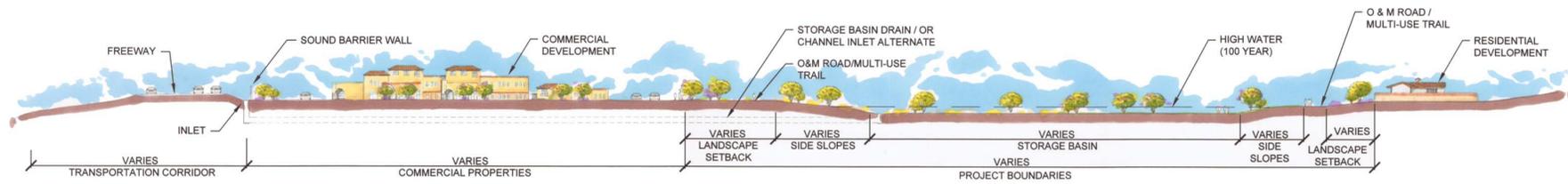
**Description:** This alternative provides flood protection through the construction of floodwater intercept and storage structures that would be shared with the large planned transportation facilities such as the Loop 303 and the proposed Hassayampa Freeway. Flood storage basins would be located upstream of these roads with the opportunity to partner with MCDOT or ADOT to share use of these basins to concentrate floodwaters in a single series of facilities rather than using two separate flood protection systems. These basins would be configured so that

they are not directly adjacent to the roadways, allowing for development of the highly desirable land immediately adjacent to the roads. Instead, these basins would be configured at a determined distance upstream of the road where they would be able to form a “greenbelt” of passive-use open spaces and active-use recreation areas. This would also allow the facilities to be flexible in their ultimate configuration if acquiring a property planned for flood control use proves difficult. Other structures proposed in this alternative include a storage basin upstream of the

Union Pacific Railroad (UPRR) within the Mobile planning unit and small apex storage basins on the alluvial fans. Apex basins will be located in the Estrella planning unit. Channels will convey flows from the apex basins to the Loop 303 Extension linear basins. Waterman Wash would be managed in accordance with the *Waterman Wash City of Goodyear Conceptual Corridor Study*, with the basin at the UPRR providing an opportunity to enhance the southern reach of Waterman Wash.

**Proposed Flood Protection Method:**  
Soft-Structural, Semi-Soft Structural

**Compatible Landscape Design Themes:**  
Natural Sonoran Desert Upland, Natural Sonoran Desert Upland Riparian, Natural Lower Sonoran Desert, Natural Lower Sonoran Desert Riparian, Semi-Natural Sonoran Desert, Enhanced Desert, Desert Park, Desert Oasis

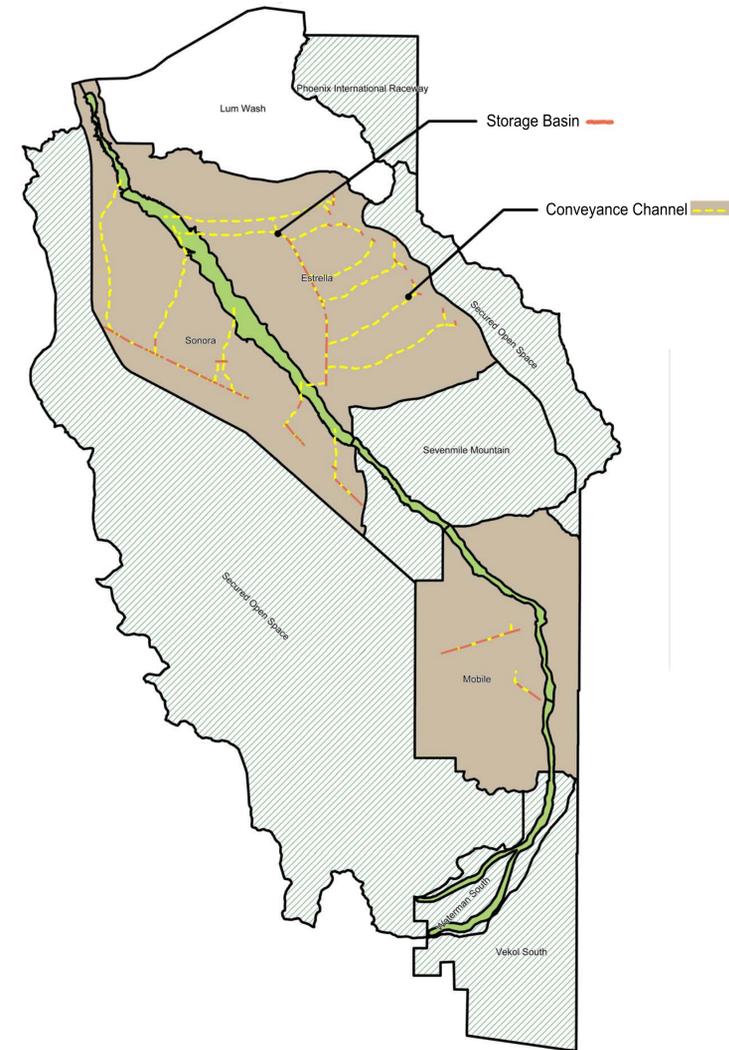


SECTION A-A



TYPICAL PLAN VIEW

KEY MAP



- Planning Unit where Structural Storage is applicable for Flood Hazard Mitigation
- Planning Unit where Flood Hazard Mitigation is achieved through Land Use Management or Existing Regulations
- No Structural Storage Flood Hazard Mitigation proposed for this Planning Unit
- Flood Hazard Mitigation achieved through implementation of updated Waterman Wash Guidelines