

City of Mesa  
Central Mesa Reuse Pipeline – Plants  
Intermediate Pump Station  
Mesa CIP No. CP0896

B&V Project 411073  
February 12, 2024

City of Mesa Development Services  
55 N Center Street  
P.O. Box 1466  
Mesa, AZ 85211-1466

### **Central Mesa Reuse Pipeline – Plants (Intermediate Pump Station) Alternative Landscape Plan Narrative**

The proposed Central Mesa Reuse Pipeline (CMRP) Intermediate Pump Station (IPS) project is part of a multi-site improvements project that is critical to the City of Mesa (COM) fulfilling its future water supply requirements. Due to the unique geometry of the property and necessary configuration of proposed site equipment, not all landscaping standards as required by Mesa Zoning Ordinance (MZO) Section 11-33 are able to be fulfilled.

For this reason, we are requesting a modification to the standard for minimum percentage of perimeter landscaping vegetative ground coverage to be 50%. The perimeter landscaping vegetative ground coverage to be provided is 37%. This standard is listed as an allowable modification in MZO Section 11-33-7(B)(2)(a). In return, we will provide the following 7 enhanced landscape design principles:

1. Plant Variety (11-33-7(A)(3)): we will be providing a variety of plant materials, colors, forms, and textures. Two different types of trees will be provided: the chaste tree that has purple flowers and the Mexican bird of paradise that has yellow flowers. All trees will be 36-inch box size which exceeds the minimum tree size requirements. Six different types of shrubs will be provided including: triangle leaf bursage that is a small rounded shrub with triangular shaped leaves; emu bush that has deep green foliage with glabrous branches and leaves and yellow trumpet flowers; hybrid fairy duster that has gray hued leaves and bright red fanning flowers; brittlebush that is a rounded shrub with long oval silver leaves that are somewhat fuzzy and small yellow flowers that form on long stalks well above the leafy stems; gold mountain lantana has dense, compact, dark green foliage that is excellent for trailing growth and groundcover and has brilliant golden yellow flower clusters; yellow bells is irregularly shaped and has lance-shaped, olive green leaves and clusters of large trumpet shapes yellow flowers. Red hesperaloe will also be provided as an accent plant, these plants have soft yucca-like evergreen leaves and coral colored tubular flowers on pink stems.
2. Naturalistic Design (11-33-7(A)(4)): in order to provide a naturalistic landscaping design, plantings will follow a curvilinear pattern, there will be no rows of plants or squares. The

curvilinear planting patterns and grouping of plants will create a harmonious aesthetic with the native surroundings. Additionally, bio-swales are being provided near paved areas.

3. Compatibility with Surrounding Uses (11-33-7(A)(5)): in order to provide a greater degree of compatibility with the surrounding area, the IPS site wall has been designed to match the perimeter wall of the development south of E. Thomas Rd. (Estates at Pioneer Crossing). This coordination will create consistency in the area's aesthetic and allow the site to blend into the surroundings.
4. Water Efficiency (11-33-7(A)(6)): A water efficient drip irrigation system will be provided to limit and conserve the amount of water used. Compared to the 65% - 75% efficiency of sprinklers, drip irrigation is closer to 90% efficient. Drip irrigation reduces runoff and evaporation and allows the plants to use the majority of the water that is applied. Xeriscaping will also be implemented by providing native plants that have low water requirements such as: the triangle leaf bursage, hybrid fairy duster, and the brittle bush. Additionally, bio-swales will be provided as part of the landscaping design to allow cleaned rainwater to percolate into the ground more efficiently.
5. Storm Water Management (11-33-7(A)(7)): Bio-swales are being provided as part of the site perimeter landscaping as indicated on the landscaping plans. The bio-swales will have plant material and desert varnish to clean storm water before it percolates into the ground.
6. Plant Viability and Longevity (11-33-7(A)(10)): When selecting plants for the site landscaping, consideration of their effect on the surrounding area was taken into account to promote their viability and long-term maturation. The microclimate of the plant' locations were also accounted for such that all nine plant types are heat and drought tolerant, all can tolerate the heat reflected by the site wall, and all survive well on streetscapes. Additionally, as the plants, specifically the trees, mature they will provide moderate shade along Val Vista Dr. without limiting visibility from adjacent streets. All plants will be located outside of vehicle traffic sight angles as shown on the landscape plans. Since the site does not have developed hardscapes, the use of advanced installation techniques such as structured soils is not applicable.
7. Overhead Utility Line Easements (11-33-7(A)(11)): SRP overhead power lines run along the south perimeter of the site on E. Thomas Rd. as well as a 10-ft SRP easement. Per the requirements listed in SRP's Technical Provisions, trees are prohibited from being located within such easements. The plants provided along E. Thomas Rd. will eliminate the potential of mature plant limbs interfering with overhead utility lines. They are also plants approved by SRP for placement near utility lines.

Thank you,



Peter Olszewski, P.E.  
Senior Engineering Manager  
Black & Veatch

[OlszewskiP@bv.com](mailto:OlszewskiP@bv.com)

602-381-4434