




BMP Section and Design

Tree Preservation

This EPIC and Construction Stormwater Best Management Practice must be installed, maintained, and removed in accordance with TxDOT plans and specifications, manufacturer specifications, and the Construction General Permit (TXR150000).

		DESCRIPTION	
		<p>Tree protection within the construction area is used to minimize erosion by protecting tree roots to allow for continued growth. Tree health and canopy density prevents splash erosion. Additionally, the tree roots provide natural soil stabilization</p>	
TYPES			
Orange Construction Fencing		Wood Barricade	
Chain-Link Fence			
APPLICATION			
<p>Tree protection is utilized for permanent soil stabilization, run-on and runoff control, and temporary sediment control. Tree protection should be scheduled for sites with:</p> <ul style="list-style-type: none"> • Healthy mature trees • Existing trees that help prevent erosion by increasing infiltration and decreasing stormwater velocity • Trees listed in the threatened and endangered plants list • Construction chemical use that will not affect existing vegetation 			
<p>Advantages</p> <ul style="list-style-type: none"> • Most inexpensive form of erosion control • Most effective BMP for soil stabilization and erosion control • Some trees may be transplanted within the construction sites 		<p>Disadvantages</p> <ul style="list-style-type: none"> • Site conditions will dictate design and need • Trees may need to be evaluated by an arborist • Onsite utilities may not allow the preservation of existing trees 	
DESIGN CRITERIA			
<ol style="list-style-type: none"> 1. This BMP must be used in conjunction with construction activity scheduling and preservation of existing vegetation. Consider creating an inventory of trees onsite and identify trees that may provide added erosion and sediment control benefits. 2. Identify trees that are to be protected and include the buffer on the SWP3 Layout Sheets. 3. If work is being conducted on an easement, confirm that the local government doesn't have a tree protection ordinance. 		<ol style="list-style-type: none"> 4. Preserve trees if they are on the threatened and endangered species plant list. 5. On the SWP3 Layout Sheets, use the construction perimeter fence symbol to indicate the trees are to be preserved and a construction perimeter fence is needed to protect. 6. The construction perimeter fence should be installed out from under the drip line of the tree to ensure adequate protection of the tree roots 7. Workers, equipment, and vehicles should be situated away from existing trees to prevent trunk or root damage. 	
REFERENCE: TPDES Construction General Permit TXR150000 Part III.F and Part III.G			