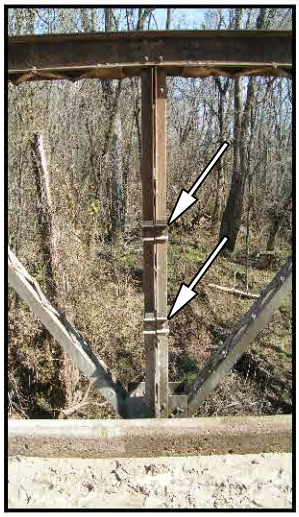
OFF-SYSTEM TRUSS BRIDGES

REPAIR SUGGESTIONS FOR LONG-TERM PRESERVATION

Texas Department of Transportation

AFTER IMPACT DAMAGE

PROBLEM	SUGGESTIONS		EXAMPLE IMAGES
	DO:	DO NOT:	
Dented or bent truss members.	• Notify TxDOT Area Engineer, TxDOT District Bridge Engineer, or structural engineer consultant.	• Heat-straighten members because it can result in subsequent fracturing of members, particularly when members were previously heat-straightened. • Weld steel members to the truss members in an attempt to fix damage or strengthen members, which can add undue stress to other members and worsen damage.	 DENTED TRUSS MEMBER
Cracked truss members.	• Notify TxDOT Area Engineer, TxDOT District Bridge Engineer, or structural engineer consultant.	• Weld steel members to the truss members in an attempt to strengthen members, as this can add undue stress to other members and worsen damage.	 CRACKED TOP CHORD
Missing or severely damaged steel railing.	• Notify TxDOT Area Engineer, TxDOT District Bridge Engineer, or structural engineer consultant when replacement cannot be conducted with compatible members. • Replace steel members with compatible members (when possible), and connect to the truss using the same bolt holes as previous railing.	• Weld new steel members to the truss, as this can add undue stress to other members and worsen damage. • Drill new bolt holes or enlarge existing holes, as this can compromise the structural integrity of the bridge and worsen damage.	 MISSING STEEL RAILING, ONLY THE BRACKETS REMAIN

AFTER IMPACT DAMAGE

PROBLEM	SUGGESTIONS		EXAMPLE IMAGES
	DO:	DO NOT:	
Scraped or damaged paint.	• Create an adhesive surface by lightly scoring and sanding the area by hand; spot treat paint corroded area.	• Delay repairs as this can lead to corrosion at areas of impact.	 SCRAPED PAINT ON VERTICAL AND RAILING