

# **APPENDIX B**

## Photographs



Photo 1: East approach



Photo 2: Upstream east approach guardrail end



Photo 3: Downstream east approach guardrail end



Photo 4: Structure as seen from east approach





Photo 5: West approach



Photo 6: Upstream west approach guardrail end



Photo 7: Downstream west approach guardrail end



Photo 8: Structure as seen from west approach





Photo 9: Upstream guardrail/railing



Photo 10: Downstream guardrail/railing





Photo 11: Roadway



Photo 12: Upstream channel





Photo 13: Upstream elevation



Photo 14: Corroded upstream guardrail posts embeddings in upstream headwall





Photo 15: Spall measuring 8" high x 16" wide x 1" deep occurring at the top east corner of the upstream headwall



Photo 16: View of culvert soffit



Photo 17: 12" long x 72" wide area of delamination occurring in culvert soffit at inlet



Photo 18: Spall measuring 10' long x 30" wide x 2" deep with 8 exposed reinforcing bars occurring in culvert soffit near outlet above the east culvert wall





Photo 19: Spall measuring 10' long x 24" wide x 2" deep with 8 exposed reinforcing bars occurring in culvert soffit near outlet above the west culvert wall



Photo 20: View of east culvert wall



Photo 21: View of west culvert wall



Photo 22: Scaling occurring along the top 12" of the culvert walls, typical





Photo 23: View of culvert invert



Photo 24: Downstream elevation





Photo 25: Scattered spalls occurring throughout downstream headwall



Photo 26: Concrete block built at outlet leaves only the top 16" of the culvert for water to flow through





Photo 27: Downstream channel