

ELASTIZELL EF (Engineered Fill)

RESEARCH REPORT

Bridge & Culvert Construction & Rehabilitation



Traffic maintained, by-pass not required



Extending width of bridge

- Non-Setting Solution Eliminates Compaction
- Resists Washouts from Floods or High Water
- Provides a Load Reducing Fill Over Poor Soils
- Preserves the Existing Infrastructure
- Maintains Traffic and Widens Narrow Crossings
- Permanent Solution - Low Cost

BRIDGE REHABILITATION

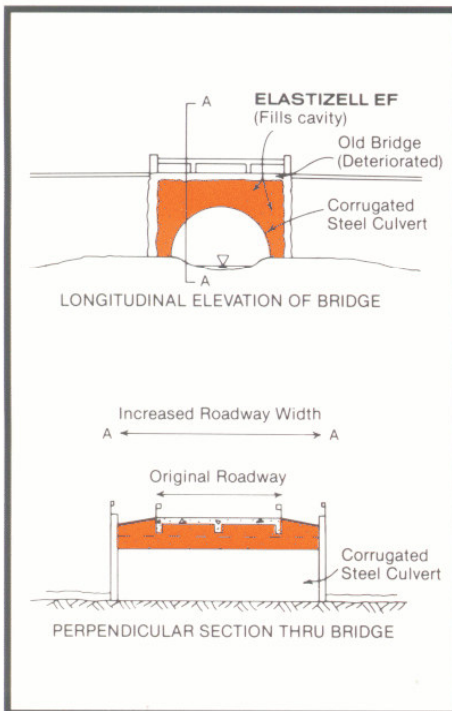


PROBLEM:

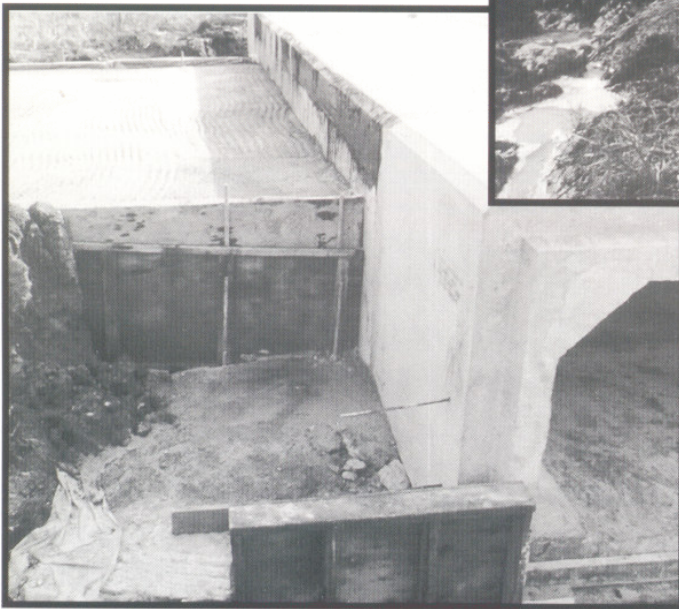
A bridge over a small creek on a federal highway has deteriorated and must be replaced.

SOLUTION:

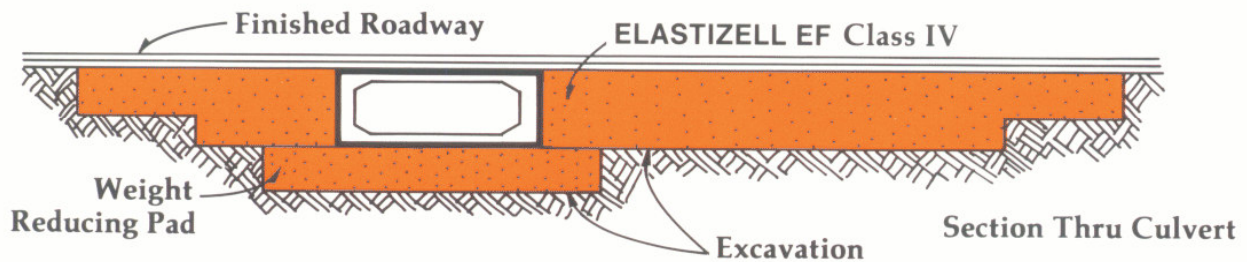
- 1 - A corrugated steel culvert is placed within the bridge opening.
- 2 - Culvert end walls are constructed to permit widening of the bridge and roadway.
- 3 - The entire void is filled with **ELASTIZELL EF** which fully supports the original bridge.



CONCRETE BOX CULVERTS



- ELASTIZELL EF Distributes Loads Over Poor Soil
- Fast Installation
- Permanent Solution Which Resists Washouts
- No Compaction Required
- Reduce Loads Around the Culvert

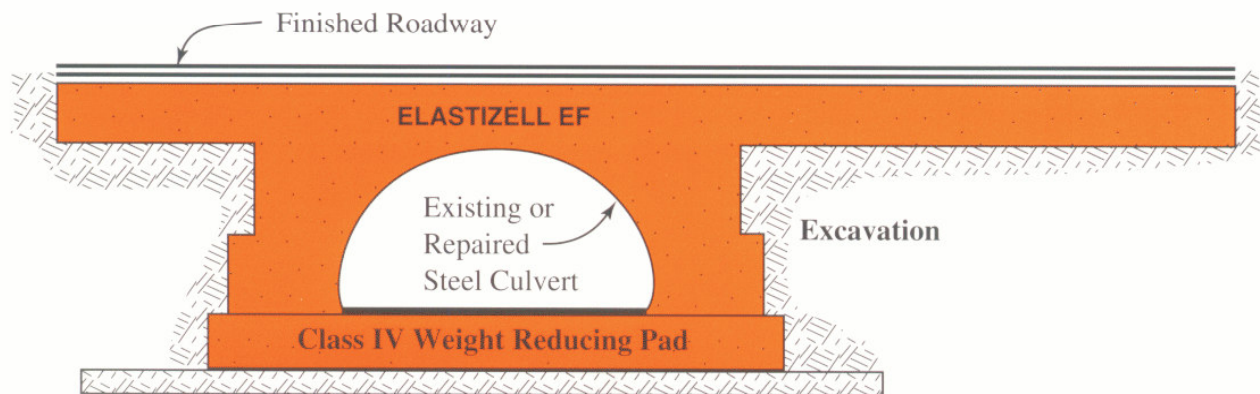


PROCEDURE:

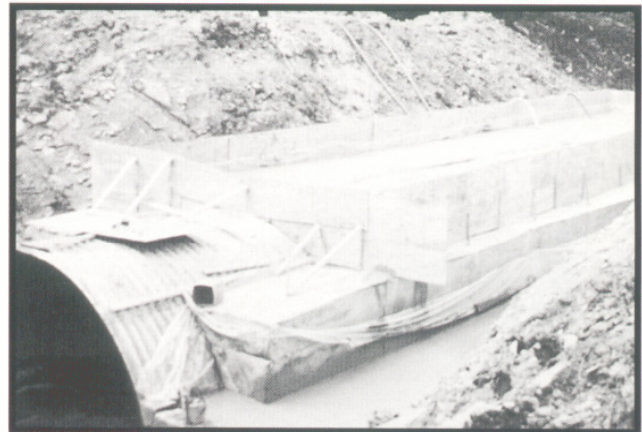
1. Divert the stream, excavate, and place the **ELASTIZELL EF** base for the box culvert. The base thickness depends on the existing soil conditions.
 2. Install the box culvert on the pad and place **ELASTIZELL EF** as the approach roadway base.
 3. Place a flexible or rigid pavement over the **ELASTIZELL EF** approach and the box culvert.
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STEEL ARCH CULVERTS

- Rehabilitate Overloaded and Damaged Culverts
- Reduce Maintenance Costs
- Fast Installation Reduces Traffic Delays
- No Compaction Required
- Permanent & Lightweight Solution Reduces Settlements



ELASTIZELL EF CLASS	MAXIMUM CAST DENSITY pcf	MINIMUM COMPRESSIVE STRENGTH psi	ULTIMATE BEARING CAPACITY Tons/sf
I	24	10	0.7
II	30	40	2.9
III	36	80	5.8
IV	42	120	8.6
V	50	160	11.5
VI	80	300	21.6



Please contact the ELASTIZELL CORPORATION OF AMERICA for additional specific design values and more detailed specifications.

Elastizell Corporation of America

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