

Garage

- After Fire





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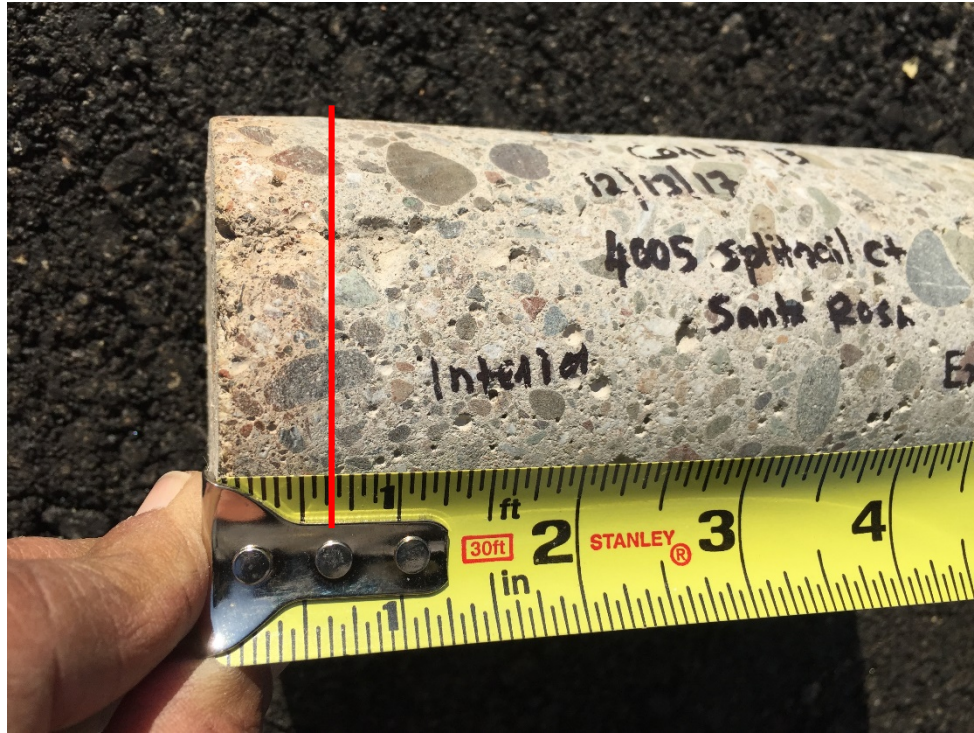
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Anchor bolts and Holdown Testing

Proof Load

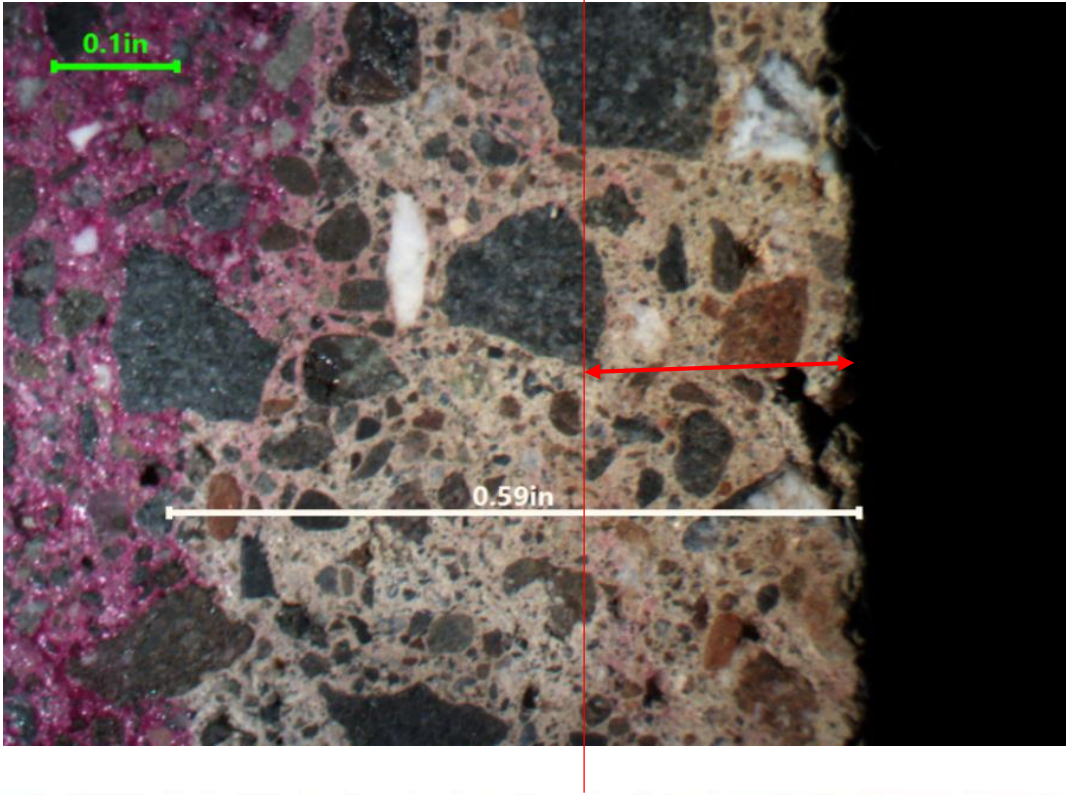
$\frac{3}{4}$ -inch (19 mm) diameter bolt: 9,600lb (272 kg)



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Petrographic Analysis



Test Results

1. **Rebound Hammer (Estimated Compressive Strength)**
 - Relatively uniform, within 15% of actual core strength.
2. **Core Compressive Strength:** 4,030 psi (28 MPa)
3. **Pulse Velocity:** No major internal void/cracking
4. **Pull strength on bolts:** Exceeded criteria
5. **Fire Damage:** About 2-inches from the top and $\frac{3}{4}$ -inch from the side
6. **Microscopy:** No excessive Internal micro cracking and the aggregate to paste bond was good.



Repair Recommendations

1. Remove top 10-inches of concrete foundation stem wall and replace.
2. Replace damaged foundations & individual isolated footings.



Savings

Over \$150,000



Fire Damage Evaluation

Concrete Box Culvert Bridge



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Testing





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