

*Guidelines for Designing Bridge Piers and Abutments for Vehicle Collisions*

**State Pooled Fund Study: TPF-5(106)  
Panel Meeting  
Phase 2**

April 14, 2009  
Texas Transportation Institute




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*Phase 2 – Full Scale Crash Testing*

- Four Different Crash Testing Concepts
- Two Full Scale Crash Tests Possible for Phase 2




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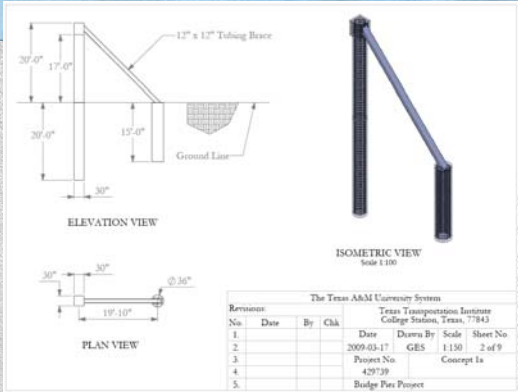
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*Concept 1 – Single 30-Inch Diameter Pier*




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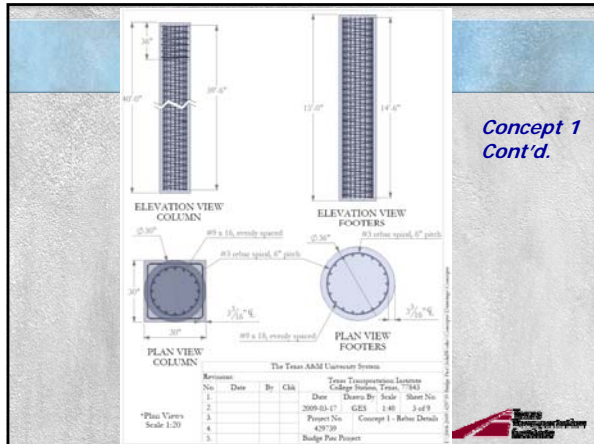
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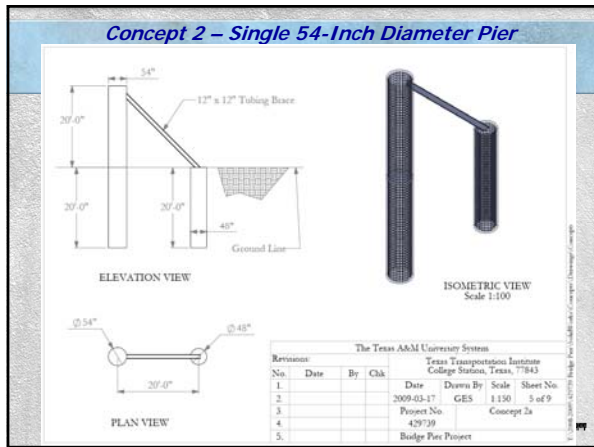
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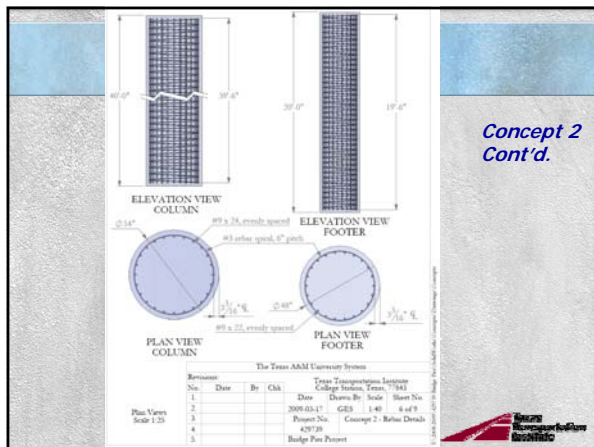
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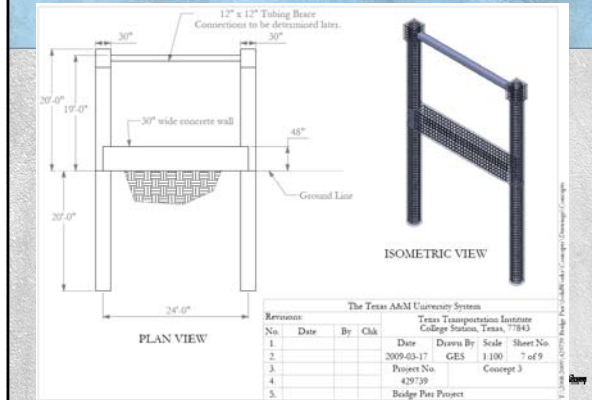
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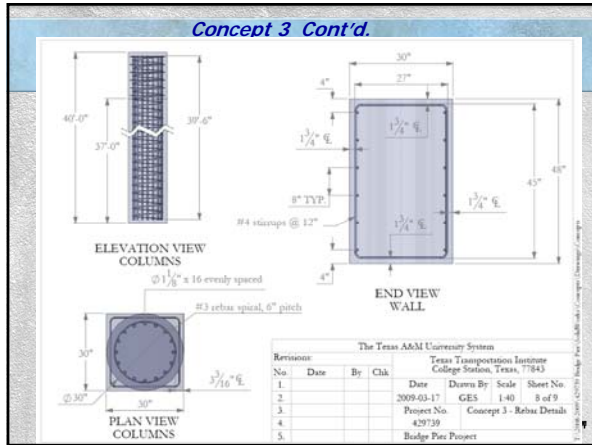
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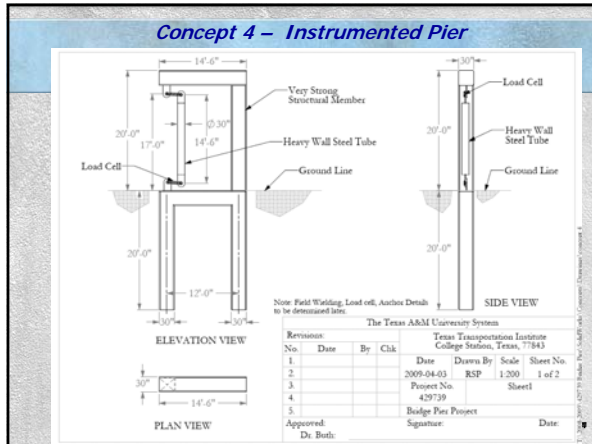
**Concept 3 – Two 30-Inch Dia. Piers with Retrofit**

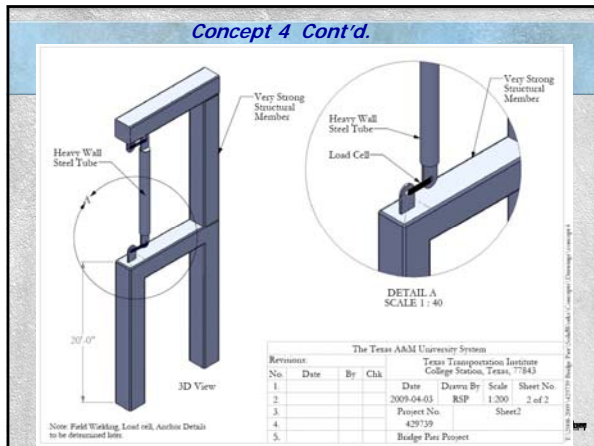


**Concept 3 Cont'd.**



**Concept 4 – Instrumented Pier**






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Phase 2 – Full-Scale Crash  
Testing Concepts ... Questions?




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