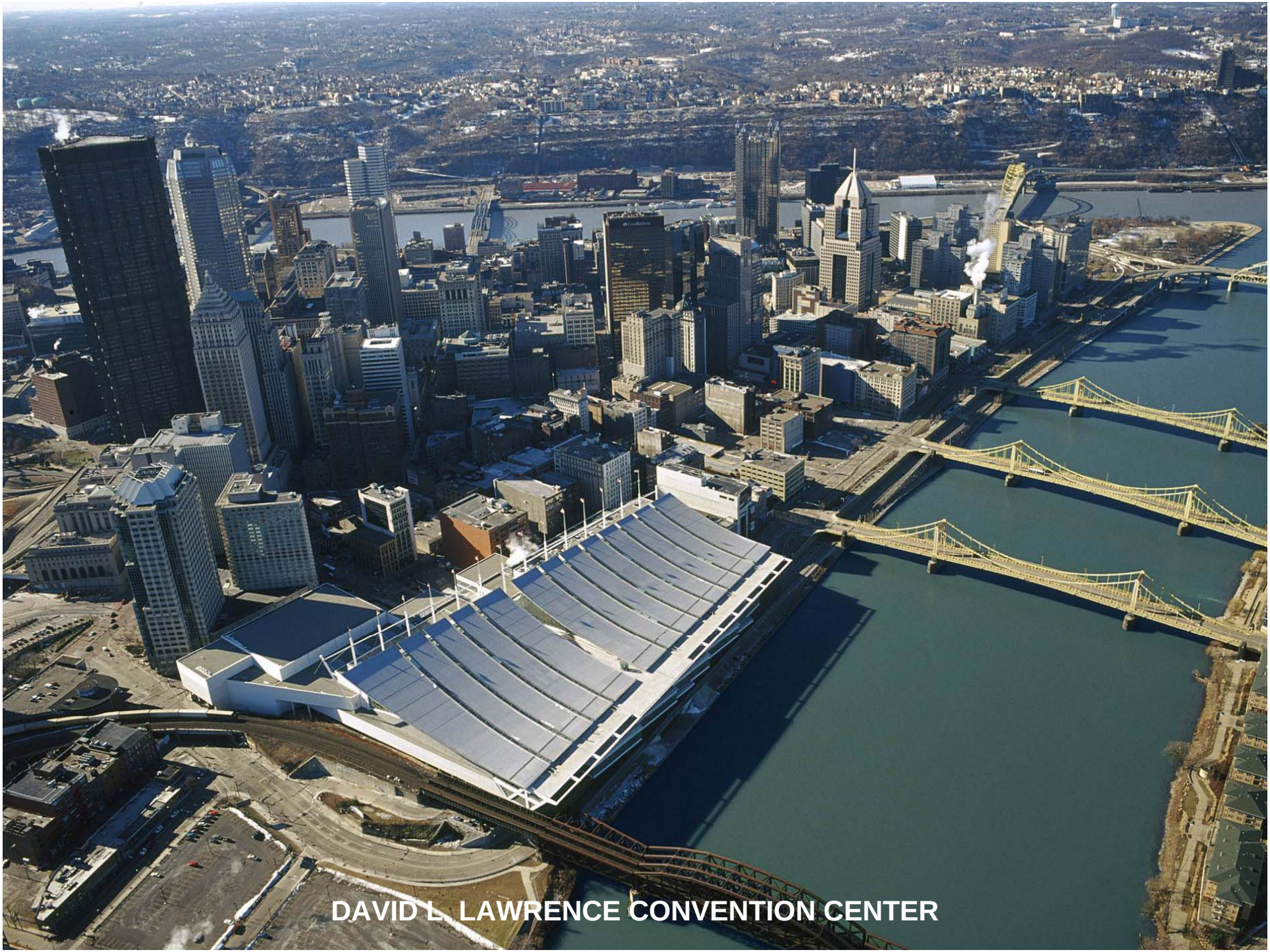
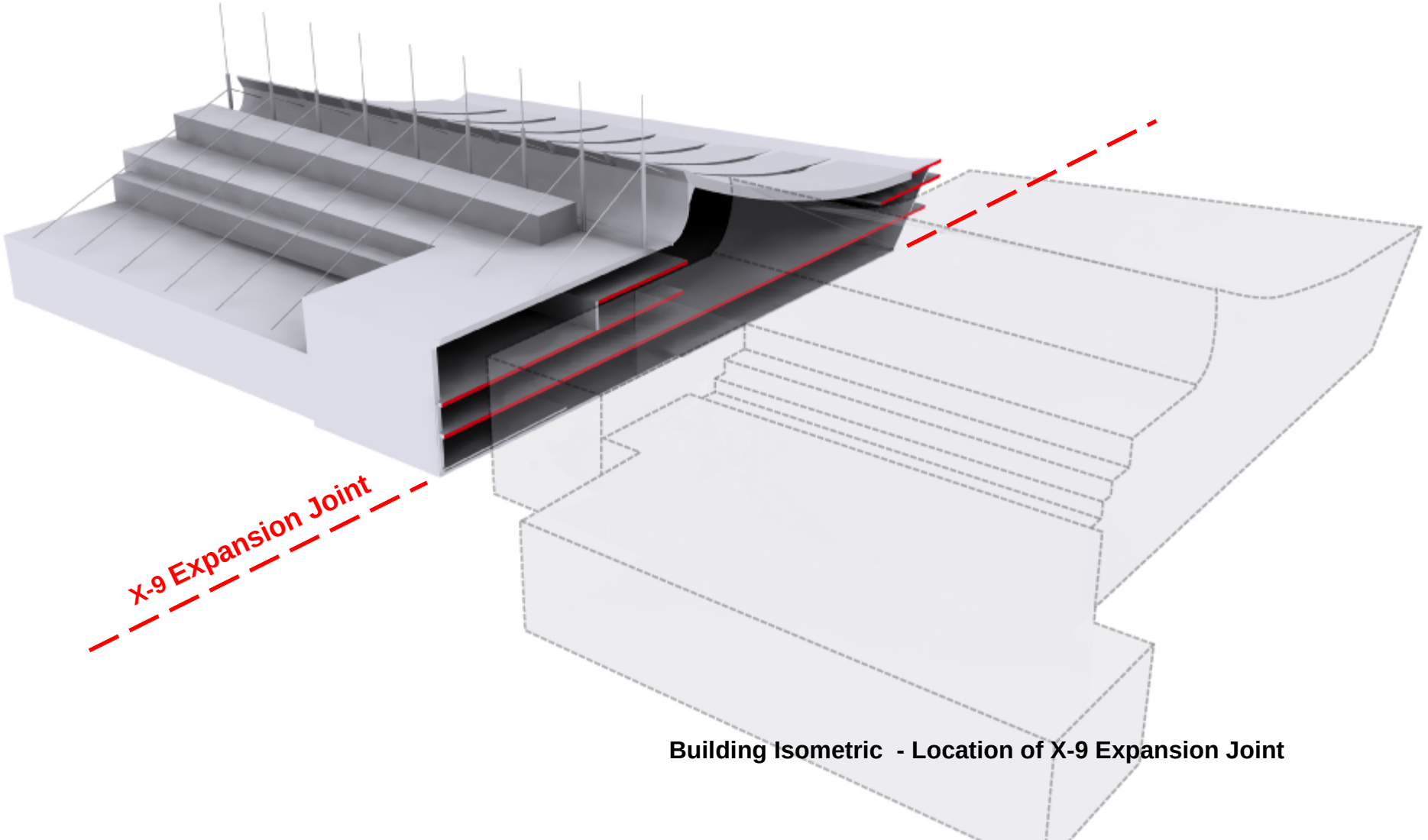
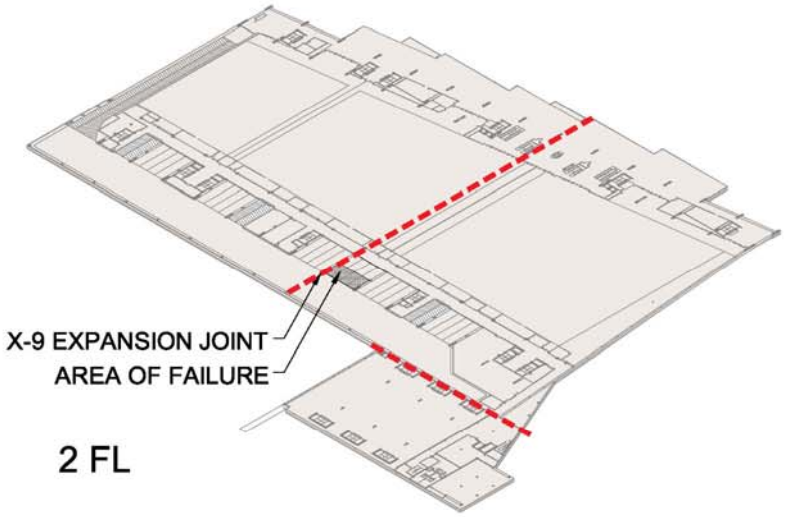
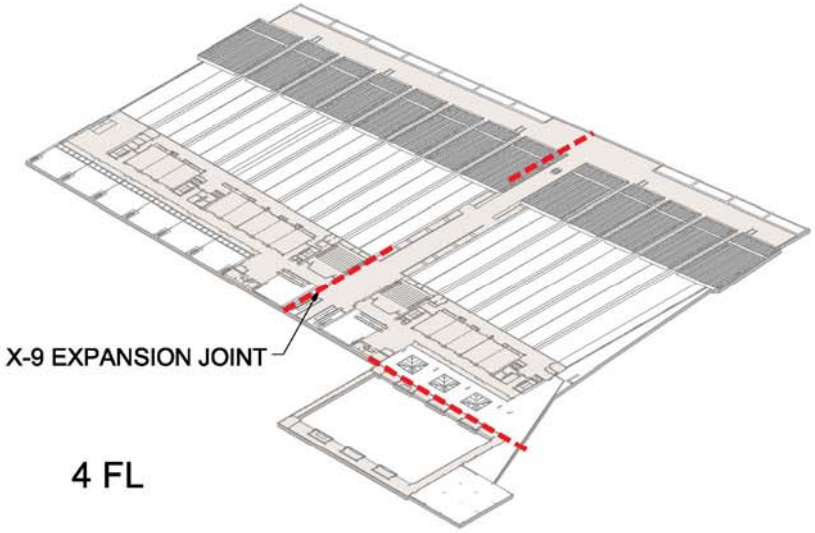

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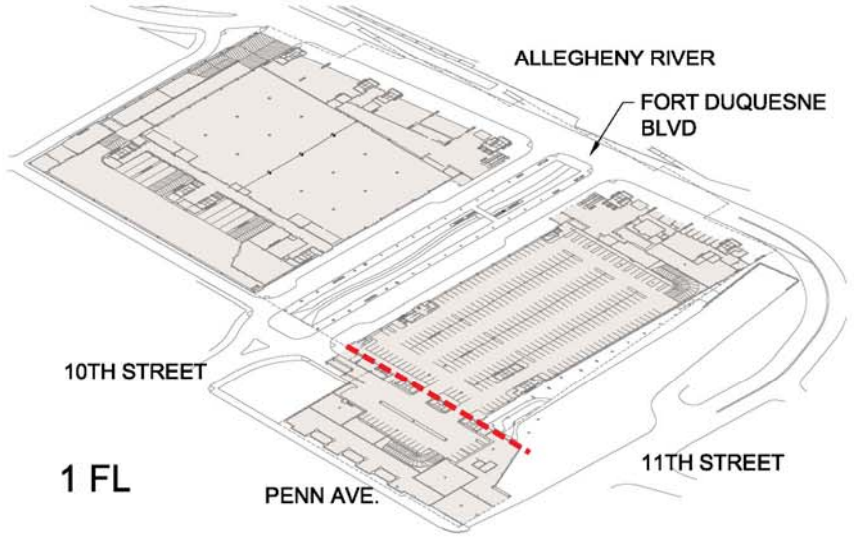


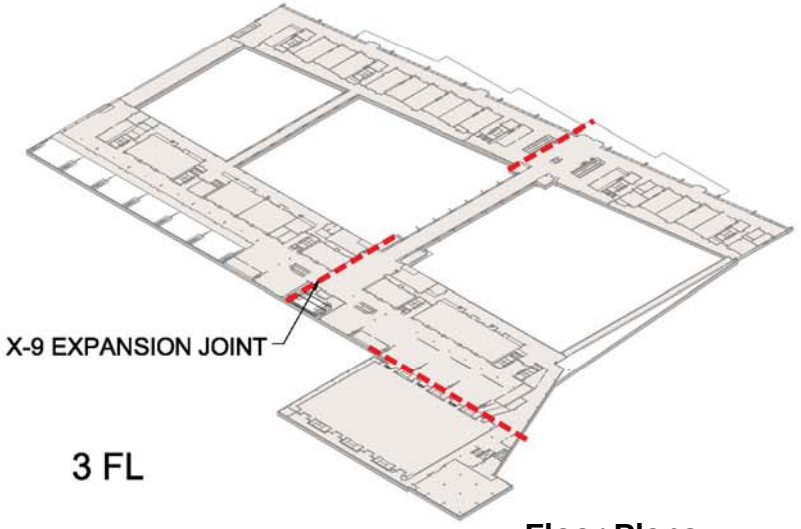
Building Isometric - Location of X-9 Expansion Joint

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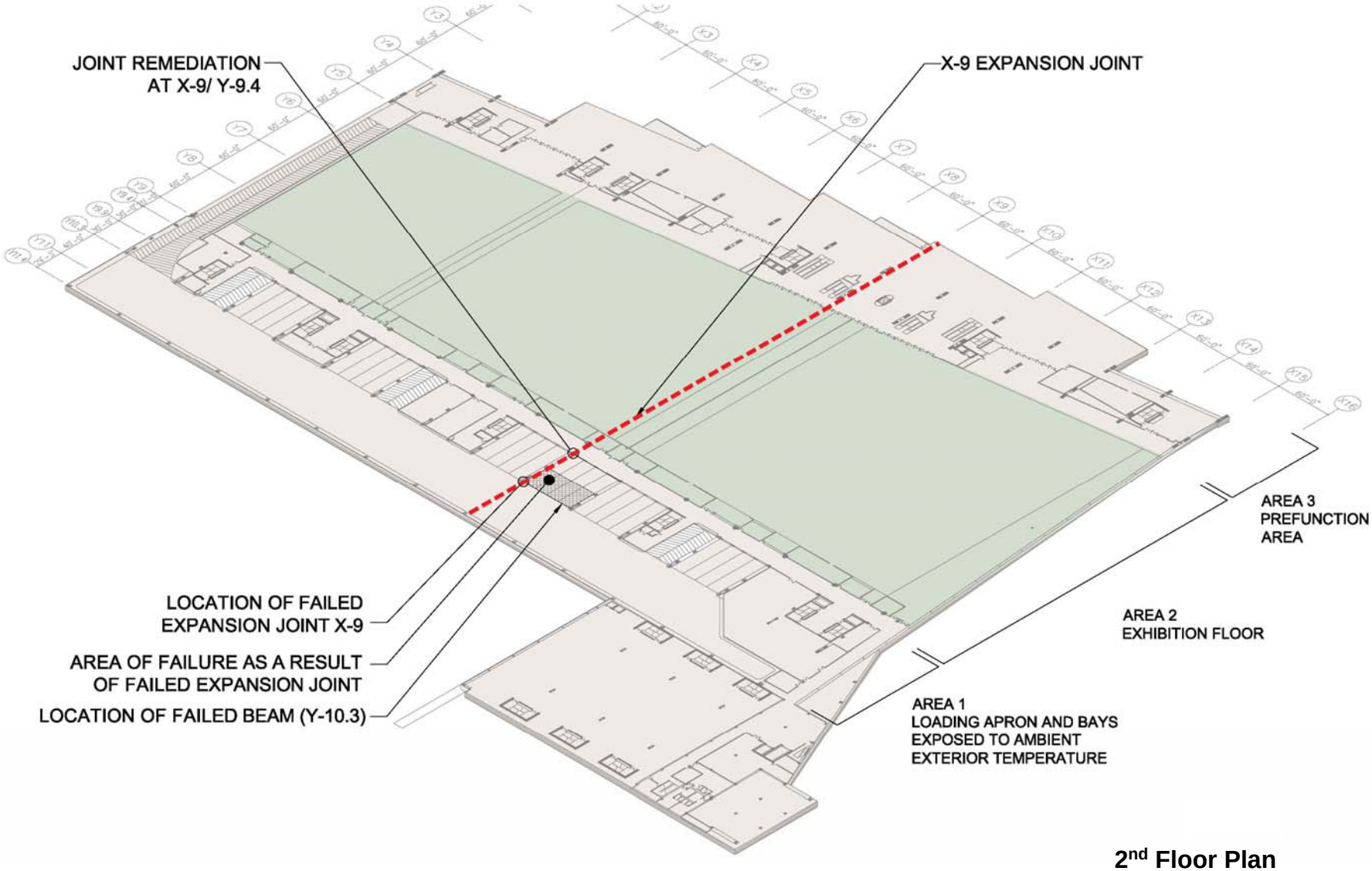






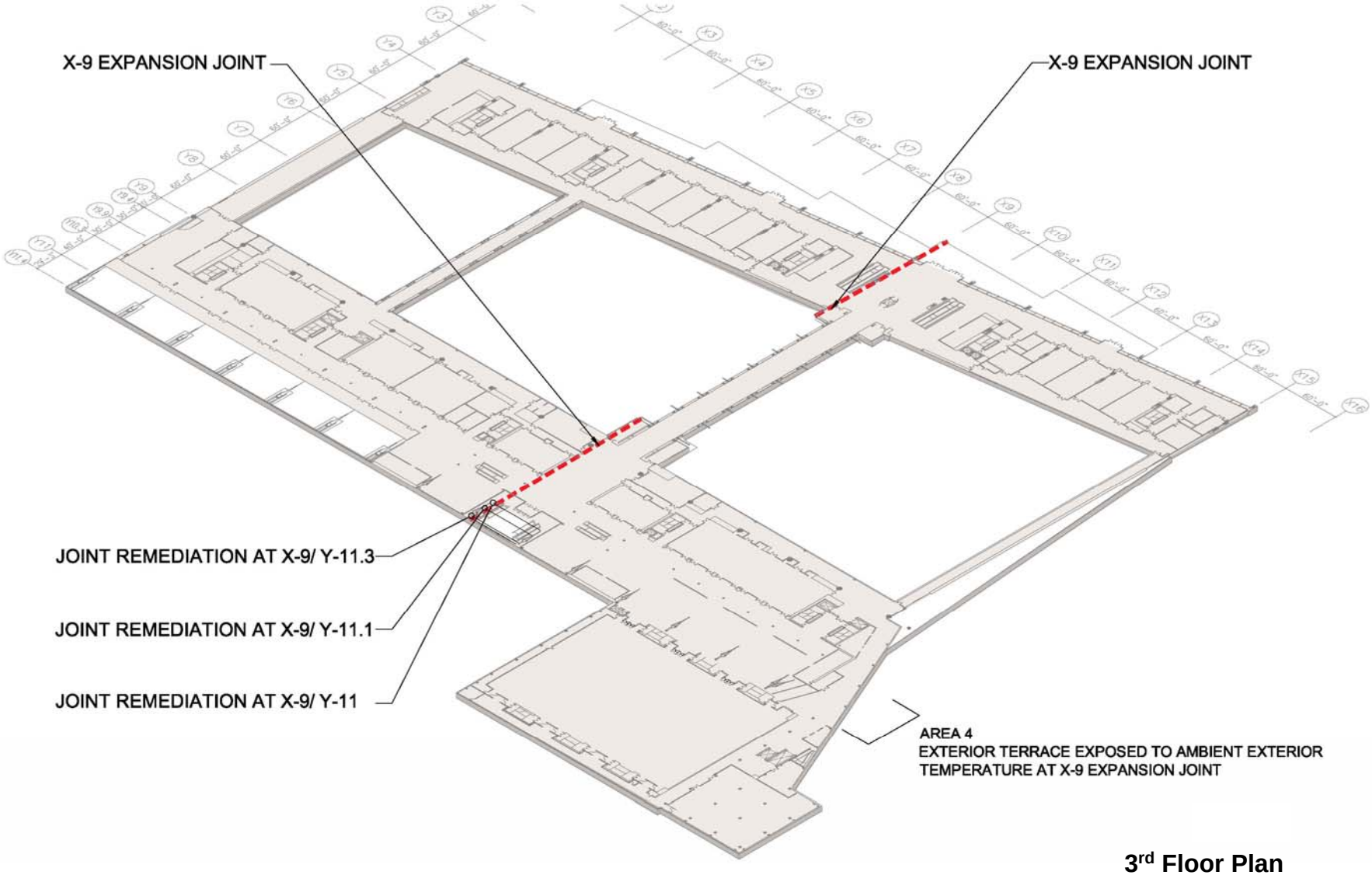
Floor Plans

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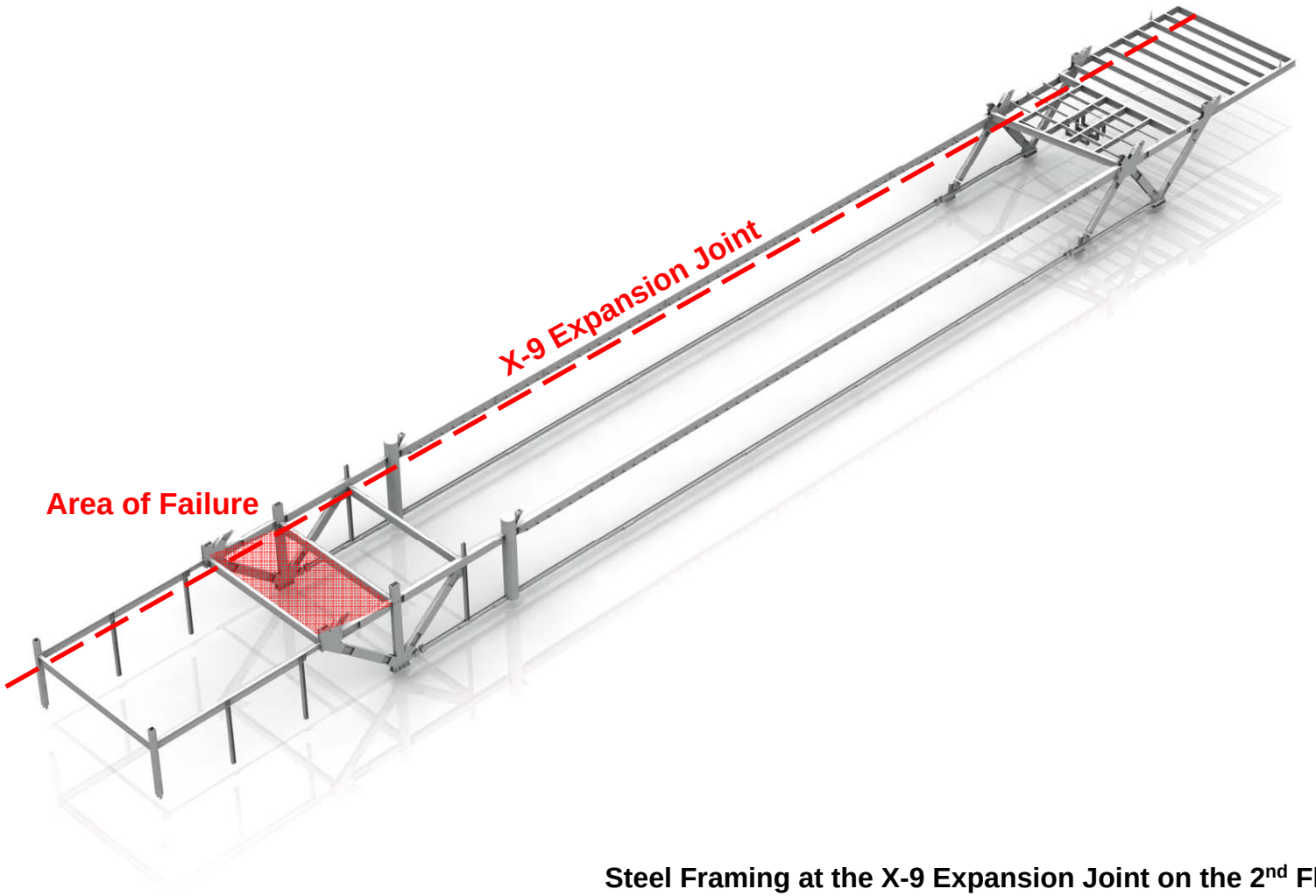
2nd Floor Plan

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3rd Floor Plan

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Steel Framing at the X-9 Expansion Joint on the 2nd Floor

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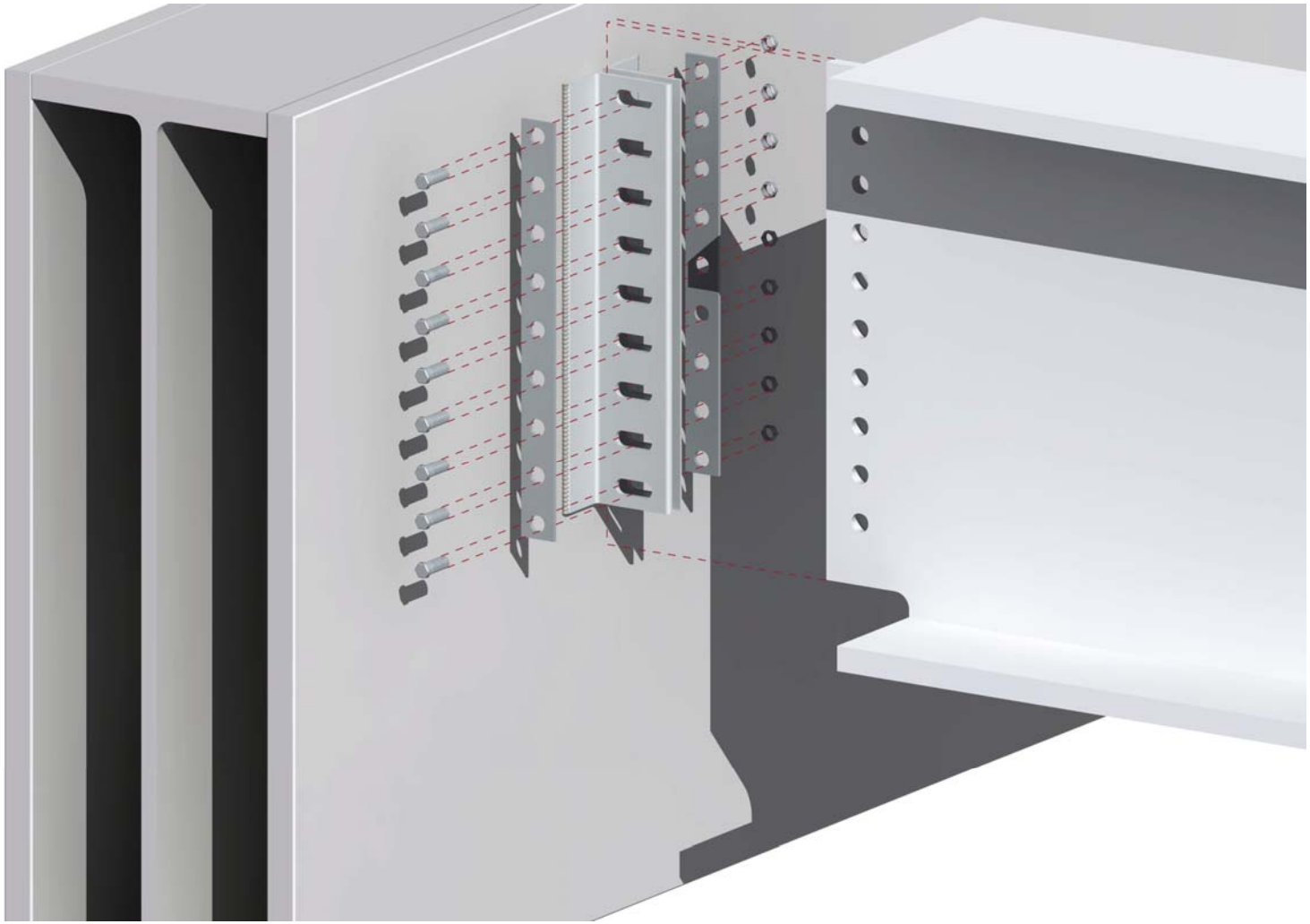
Typical Loading Bay

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Expansion Joint Connection at X-9

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X-9 Expansion Joint Connection - Assembly Detail

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X-9 Expansion Joint Connection – Sequence of Joint Failure under Thermal Change 1/5

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X-9 Expansion Joint Connection – Sequence of Joint Failure under Thermal Stress 2/5

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X-9 Expansion Joint Connection – Sequence of Joint Failure under Thermal Stress 3/5

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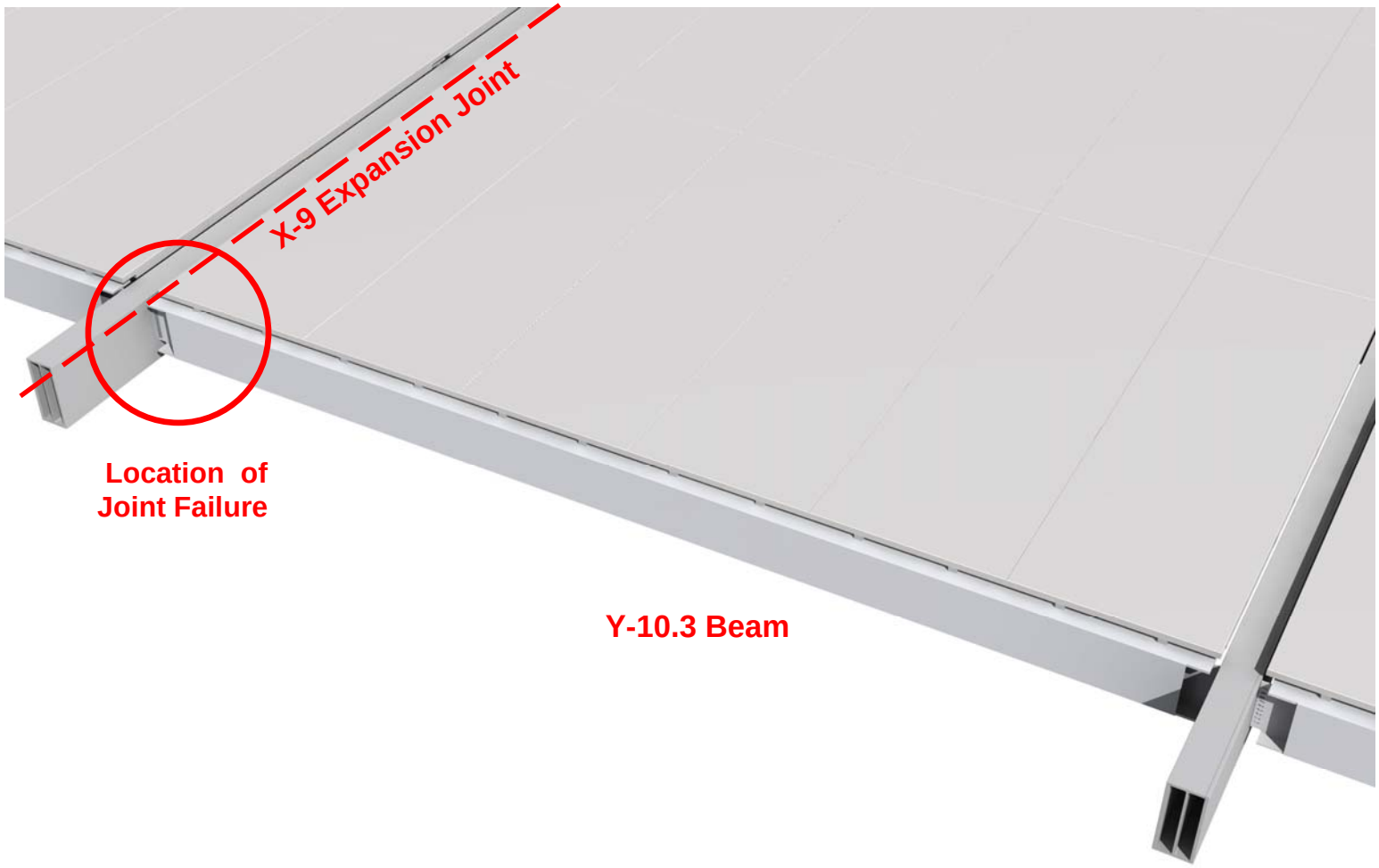
X-9 Expansion Joint Connection – Sequence of Joint Failure under Thermal Stress 4/5

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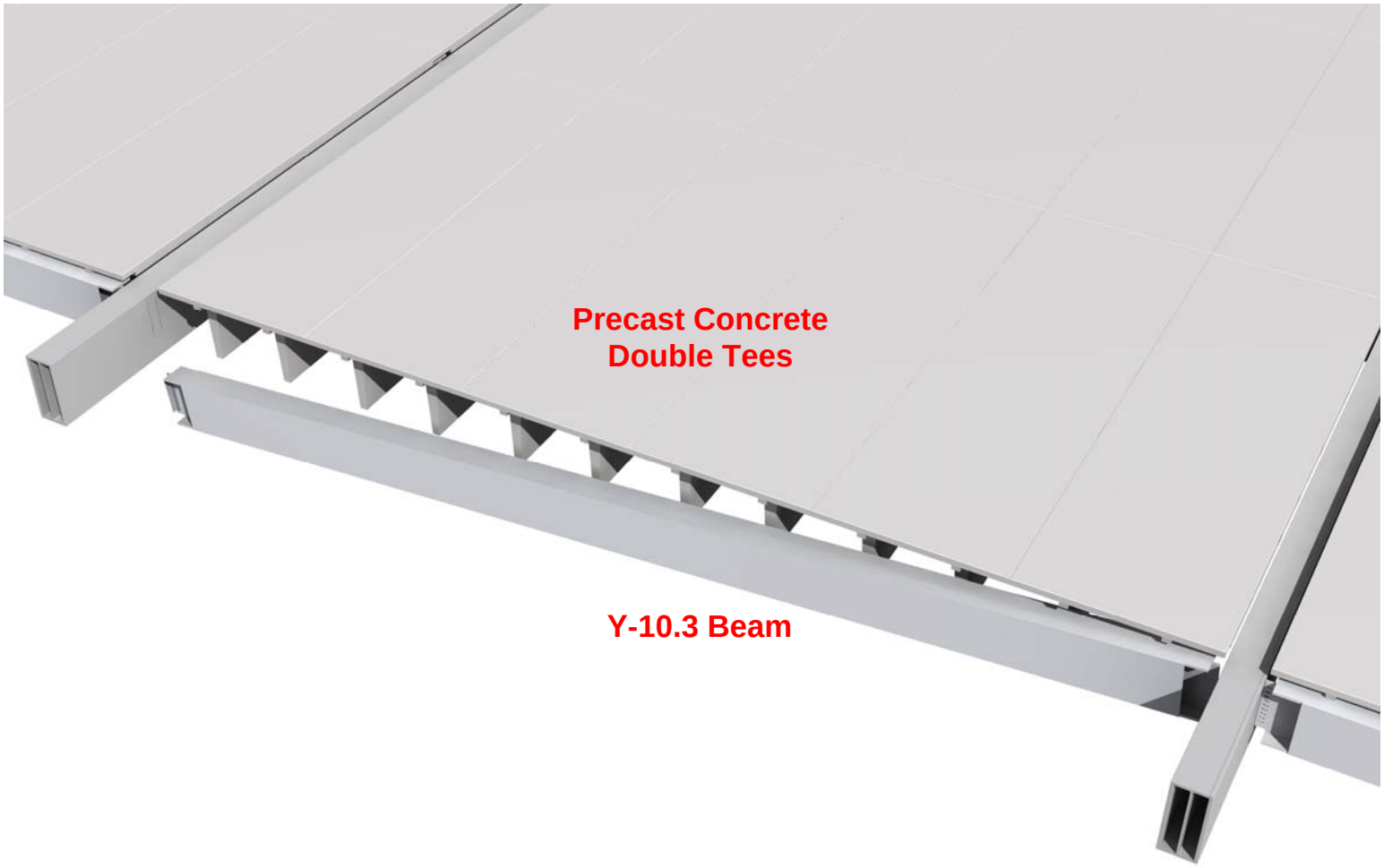
X-9 Expansion Joint Connection – Sequence of Joint Failure under Thermal Stress 5/5

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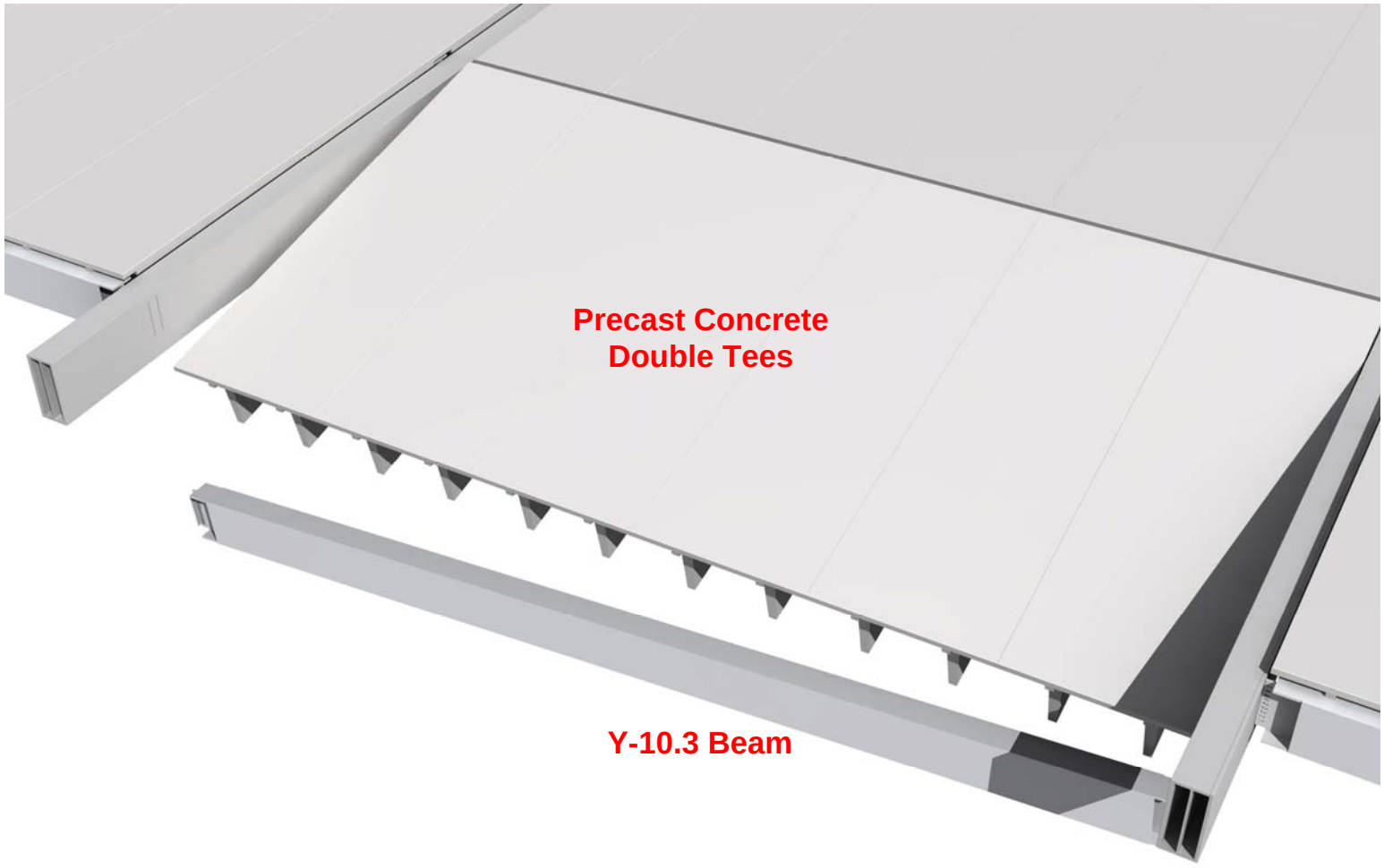
Isometric drawing of Joint Failure at X-9 / Y-10.3

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Joint Failure causes Y-10.3 beam to fall

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Precast concrete double tees fall as a result of falling Y-10.3 beam

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X-9 Expansion Joint Connection – Video of Joint Failure 1/3

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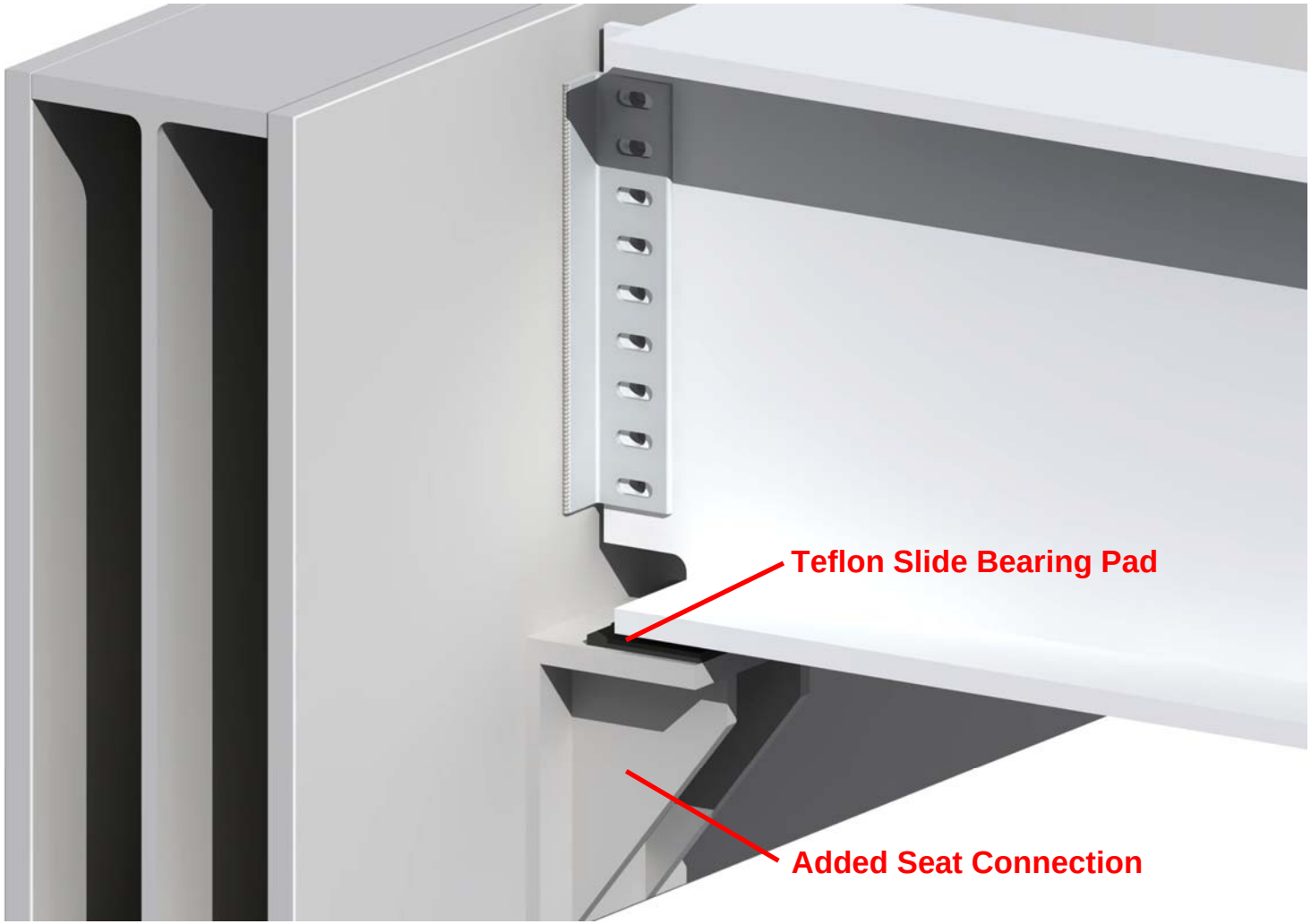
X-9 Expansion Joint Connection – Video of Joint Failure 2/3

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X-9 Expansion Joint Connection – Video of Joint Failure 3/3

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X-9 Expansion Joint Connection - Typical Remediated Joint

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