Post Tensioning Compression Makes it Work!!
• Under Dead Load- Tension effects are addressed through compression

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5 Types of Post Tensioning

• Longitudinal Cantilever Tendons
• Bottom Span Tendons
• External Tendons
• Transverse Deck Tendons
• Bar Tendons
Longitudinal Tendons
(Negative Moment)

- Typically 12, 19, or 22 strands
- 527, 835 or 967 Kips, respectively
- Stressed 2 Tendons per Segment
Span Tendons

- 395 Kips - 835 Kips
External Tendons

- 2 Tendons in Spans 1 & 6
- 4 Tendons in Spans 2-5
- 22 strands per Tendon
- 965 Kips per strand
Transverse Deck Tendons

- Alternately Stressed
- 6 Tendons per Segment
- 4 Strands per Tendon
- 45 Kips per Strand
  \[=180 \text{ Kips Total per Tendon}\]
Bar Tendons

- 1-3/8” Bar Tendon
- 18 Bar Tendons on Rear and Forward Diaphragms
- 72 Bar Tendons Total
- Stressed, Capped and Grouted
Progress Since OTEC 2013
Pick and Blast
Demo NB Span 2
Northbound Bridge

- Substructure Complete
- Rear and Forward Abutments Complete
- Pier 1 Complete
- Pier 2 (Segment 4D)
- Pier 3 (Segment 7D)
- Pier 4 Complete
- Pier Table 5 (Bottom Slab)
Moving Forward

Demo Existing SB Bridge
• Winter 2016/2017

- NB P1 Completed
- NB P2&3 Complete Fall 2015
- NB P4 Completed
- NB P5 Complete Spring 2016
Questions