Background

• Company:
  • Johnson, Mirmiran & Thompson (JMT)
  • Headquartered in Sparks MD w/20+ offices across the East Coast, Texas and Ohio
  • Architectural, Engineering and Construction Management
  • Staff of 1,300 employees

• Bio:
  • 15 yrs. Emergency Service and 5yrs. in OHS
  • 15 yrs. at JMT
  • AAS from CCBC in OHS, OHST - 2014
Access/Inspection of Mary’s Wall

NPS contracted JMT to do a hands on inspection of the retaining wall known as Mary’s Wall

- Needed a baseline survey of the historic retaining wall
  - LIDAR Scan
  - Physical inspection
  - Installation of tilt meters

Area wide Earthquake that registered 5.8 on August 23, 2011

Signs of Movement

Restrictions/Issues:
- Access equipment
- No trail closure
Development of JHA & Rope-Access Work Plan

- Initial site visit
  - Development of concept plans
- Review of old repair plans
  - Verifying anchor points
- Developed JHA & Rope-Access Work Plan
  - 4 Main sections
  - Key contacts/Emergency info
  - Work Plan
  - JHA
  - Post-Job Debrief
- NPS Reviewed/commented
  - NPS was highly impressed with the quality and professionalism
  - OK to proceed

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<th>Description of Work</th>
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<tr>
<td>Safety Considerations</td>
<td>Were adequate safety measures taken to ensure the safety of personnel and public? Note any additional safety measures taken or recommended.</td>
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<td>Anchorages Used / Special Techniques</td>
<td>Describe the anchorage set-up used and any special techniques used</td>
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<tr>
<td>Near Miss or Accidents</td>
<td>Describe any near misses or accidents. If none, write &quot;none&quot;. Attach additional pages if necessary.</td>
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NPS was highly impressed with the quality and professionalism.
System and Equipment

• Each person utilized a two rope system.
  • Working line
  • Fall protection/vertical lifeline

• Petzl ID and ASAP

• 34 Tri-Loc carabiners

• 10 Anchor Straps
  • 10 and 15 foot

• Anchor Strap protectors

• Rope
  • 2 - 11mm working lines 150 feet
  • 10 - 12mm vertical lifelines w/sewn eyelets various lengths

• 1” tubular webbing

• Canvas edge protectors

• Anchor plates (4 small and 2 medium)

• 200 feet of 12mm rigged in a 4:1 pulley system (rescue)

• 8-10 Sewn prusik loop (rescue)
Lessons Learned

• Safety Considerations
  • The use of a highline would have been useful and allowed for faster inspection. However this set up would require a higher degree of rigging and training.

• Anchorages Used / Special Techniques
  • Using the fence was for the working lines keep the ropes to the side of the trail and did not create a tripping hazard for the trail users.
  • For redundancy, two fence post were equalized and rigged into the anchor plates.
  • The vertical lifeline was anchored to large (2’ dia.) trees at the end of the fence then redirected with a directional attached to the fence post.

• Near Miss or Accidents
  • A rock was thrown down past employees. A park ranger/guide witnessed the act and quickly took care of the issue. A worker was then posted on the trail afterwards to keep others from attempting a similar act.

• Impact on the rest of the operation / organization?
Thank you

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