TERRA-Aleutian

GCI TERRA Network

- Microwave - Existing
- Microwave - Pending
- Fiber
- TERRA-Aleutian Proposed Route

Miles
Distance Table – 670 miles
Unalaska to Akutan .............. 55 mi
Akutan to False Pass ............ 177 mi
False Pass to Port Heiden ..... 260 mi
Port Heiden to Levelock ....... 178 mi
• Scope
  – Undersea fiber from Levelock to Unalaska.
    • On shore stops in Port Heiden, False Pass, Akutan
    • Branching units included for potential future fiber links
    • Cable plant overbuild in Unalaska
    • Fiber to Trident seafood plant in Akutan
    • Fixed wireless in Port Heiden, False Pass and Akutan
  – Schedule
    • Completion Q3 2020
  – Budget
    • Current estimate $39.7M
  – Work underway
    • Undersea survey
    • Permitting
    • Unalaska Walk Out and cable plant design
# TERRA – Aleutian Timeline

<table>
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<tr>
<th>Q4’17</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
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</thead>
<tbody>
<tr>
<td>Business Case Approval (5 year Commitments)</td>
<td>On Shore Deployment Levelock, Port Heiden, False Pass, Akutan and Unalaska</td>
<td>Undersea Fiber System Manufacturing &amp; Purchase</td>
<td>Undersea Fiber Deployment Q2 – Q3</td>
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<tr>
<td>Permitting Completion June ’18 On Shore and Offshore</td>
<td>Test Turn Up Q3 - Q4</td>
<td>In Service NLT Year End 2020</td>
<td></td>
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</table>
• Undersea Survey - ~$2M
  – Survey work has been completed
  – Preliminary report has been completed and received
  – Final report received. Route identified

• Unalaska Local Build
  – Local walkout underway. Final design done by year end 2017.
  – Permitting discussions underway with City of Unalaska

• Other On-Shore Work
  – Engineering underway for shelters and facilities in Levelock, Port Heiden, False Pass, Akutan and Unalaska.
  – Land acquisition
  – Permitting
TERRA-Aleutian

• Permitting - ~$500K
  – DOWL scope completed
  – On shore landing (cable landing) application has been submitted to FCC IB. Working towards grant of permit by May 2018.
  – Corps of Engineers Permit application finalized and submitted on December 8, 2017. Working towards grant of permit by July 1, 2018
  – Permits are good for 5 years.

• Other Regulatory
  – Certification by RCA required for video services. 180 day process.
  – No certification required for Internet or VoIP service.

• Unalaska Local Build
  – Work with City of Unalaska on permitting process underway
• Local Issues
  – Local support needed and currently appears strong
  – Stable permitting environment
    • Local response regarding permitting has been very cooperative so far.
    • Cable plant design to be reviewed with Directors of PW, Utilities, and City Engineer on January 8, 2018.
TERRA-Aleutian

• Business Commitment
  – 5 Year commitments being asked of business community
    • 4 commitments received to date
  – Contract commitment dates begin as of Q2 2020 and expire on December 31, 2020.
  – Contact of businesses continues with universal positive response
  – 5 Year commitments signed and received by:
    • Alyeska Seafood’s
    • Westward Seafood’s
    • Unisea Seafood
    • Lynden Transport
    • American Presidents Lines
• **Product offerings - Unalaska**
  
  – Mirrors western Alaska regional centers
  
  – GCI Business
    – Enterprise data offerings
    – Wholesale
    – Telehealth and SchoolAccess
    – Bulk Video (ala North Slope)
  
  – GCI Consumer
    – Video Services (Cable TV)
    – Internet (same as other rural regional centers)
    – Cellular – Terrestrial LTE / Cell Service
    – LD
Product Offerings – Akutan, False Pass & Port Heiden

- Mirrors western Alaska terrestrial village service offerings
- GCI Business
  - Enterprise data offerings
  - Wholesale Circuits
  - Telehealth and School Access Connections
- GCI Consumer
  - Rural BroadBand – change from rural internet
  - Cellular – Upgrades from 2G to 3G w/ TERRA-Aleutian
  - LD