

Telecommunications S.O.Q.



Old Harbor Cell Tower NEPA Reports
Provided the National Environmental Policy Act (NEPA) Reports for twenty cell towers across southern Alaska. 2018 to 2019.



Cooper Landing Pile Cap Redesign
Provided the design and construction engineering services for the foundation redesign of the Cooper Landing Gun Club Tower. 1996 to 1997.



Clearwire Cell Tower Foundation Design
Provided the design and Construction Engineering Services for three separate wooden antenna poles and foundations. 2005 to 2006.

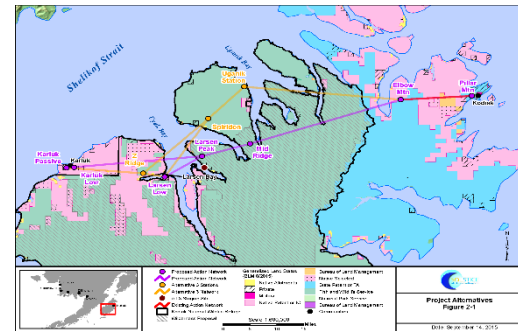
With more than 37 years of engineering and design experience in Alaska and the Pacific Northwest, Great Northern Engineering, LLC (GNE) is familiar with, and appreciates the need for, quality engineering and construction in an arctic environment. Project budgets range from \$15,000 to over \$50 million.

GNE Project Capabilities:

- Project Management, Contractor Selection
- Project Controls and Schedule Planning
- Geotech and Survey
- Civil and Site Prep
- Structural and Foundations
- Architectural and Code Analysis
- Mechanical, Tanks, Piping, and HVAC
- Pipelines and Transmission
- Truck and Rail Loading / Unloading
- Utilities and Tie-ins
- Electrical and Instrumentation
- Control Systems and SCADA
- Permitting
- Constructability Reviews
- Construction and Field Engineering Support
- Startup, Commissioning, and Turnover
- Facility As-builts
- O&M Documentation, Spare Parts
- Personnel Training
- HAZOP, SimOps, Cause & Effect, QA/QC API 520, 521, 570, 537, 650, 653, 1169, 2000, SPCC, STI SP001



Dobson Tower Foundations, NEPA, & SHPO
Provided designs and construction engineering services for over 130 cell towers located throughout the State of Alaska. 2001 to 2009.



Kodiak Cell Tower DR&R

Provided Dismantlement, Removal, and Remediation (DR&R) Reports for the Spiridon and Uganik Cell Towers. 2015 to 2016.



Waldec Cell Tower Foundation Design
Provided the design and construction engineering services for the Waldec 170-foot Lattice Tower. 2006 to 2006.



Alaska DigiTel Cell Towers

Provided design and construction engineering services for cell towers and foundations located throughout the State of Alaska. 2004 to 2010.