



# 20,000-CBM Full-Containment-LNG Storage Tank FAIRBANKS, ALASKA

## PROJECT HIGHLIGHTS

- Cashman | Preload Cryogenics (CPC) completed the design and construction of a 20,000-cubic-meter (5.25 million gallons) full containment LNG storage tank consisting of a precast, prestressed concrete secondary containment wall (35.2 meters in diameter by 27.1 meters tall), a 9% nickel primary containment wall (33.3 meters in diameter by 23.5 meters tall), 9% Ni primary and secondary floor plates and a ASTM A516 carbon steel dome with an aluminum suspended ceiling.
- On-site work included excavation and replacement of approximately 30,000 yd<sup>3</sup> of unsuitable subgrade in order to reach stable till, the installation of an active (and passive) subgrade cooling systems to maintain the in-situ permafrost conditions and construction of an at-grade concrete base slab (with foundation heating elements).
- Precasting of the secondary wall panels was performed off-site concurrently with subgrade improvement operations and foundation construction work. The wall panels were transported to the site, erected and braced over a period of nine (9) days.
- Fabrication of the carbon steel dome and suspended ceiling was accomplished simultaneously with outer wall construction and erected prior to winter conditions (in October) in order to "dry-in" the inner tank work.



Location:	Fairbanks, AK
Tank EPC Contractor:	CPC with Global Engineering Services, LLC
Construction:	2018-2019
Application:	Base Load for Local Distribution
Capacity:	5.25 Million Gallons
Owner:	Fairbanks Natural Gas, LLC Interior Gas Utility (IGU)

