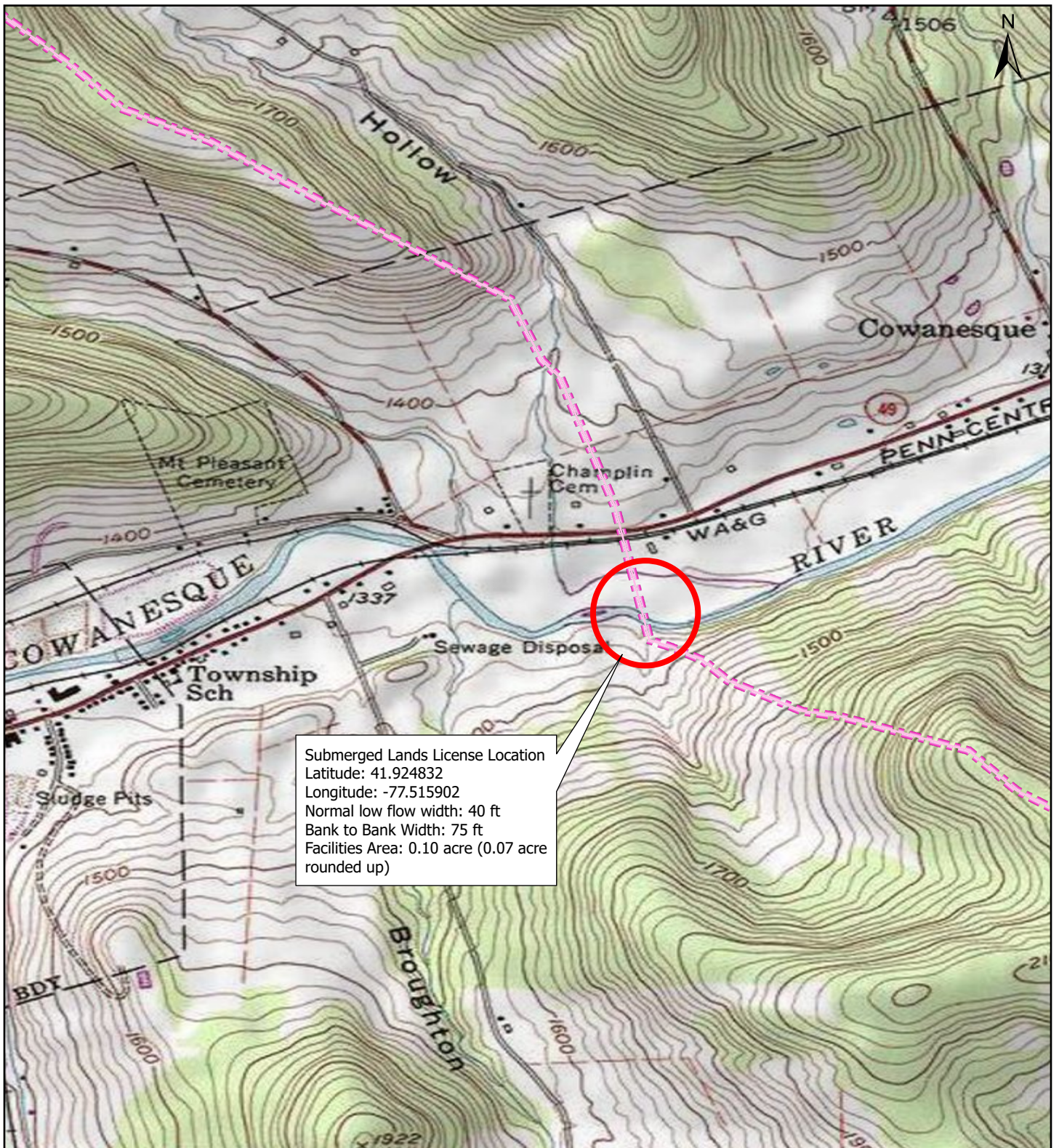


ATTACHMENT 22

SUBMERGED LAND LICENSE AGREEMENT (SLLA)
INFORMATION



Submerged Lands License Location
 Latitude: 41.924832
 Longitude: -77.515902
 Normal low flow width: 40 ft
 Bank to Bank Width: 75 ft
 Facilities Area: 0.10 acre (0.07 acre rounded up)



Legend

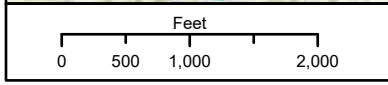
- Submerged Lands License Location
- YM59 Pipeline Centerline
- YM59 Permanent Right of Way
- State Boundary

Tioga Pathway Project

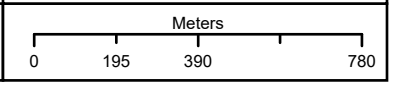
Figure 1
 USGS Location Map Cowanesque
 River Submerged Land License
 Tioga County, Pennsylvania

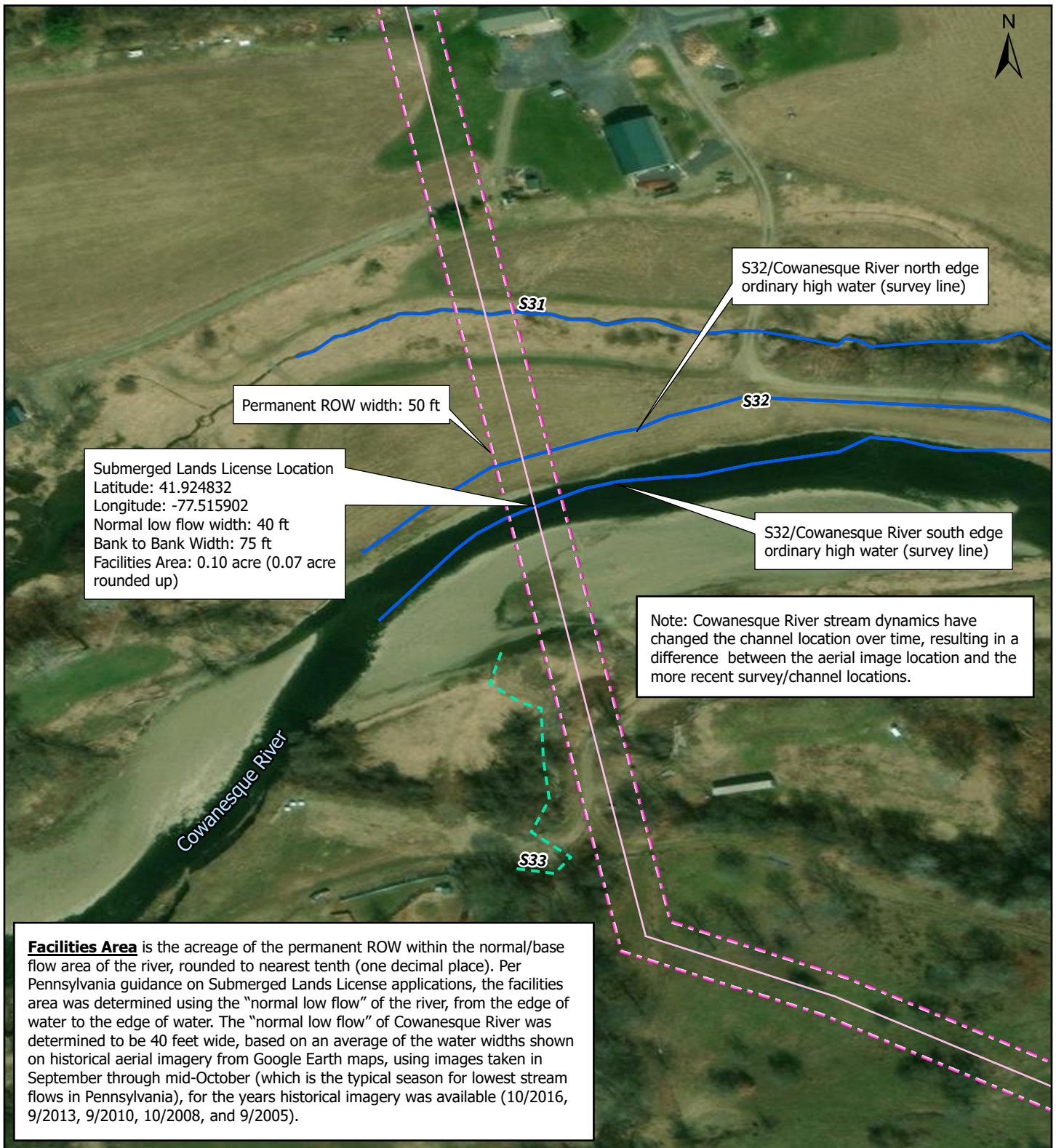
Prepared For: **National Fuel**
 Supply Corporation

Prepared By: **TETRA TECH**



Basemap: ESRI, USGS Topographic (2023)





Facilities Area is the acreage of the permanent ROW within the normal/base flow area of the river, rounded to nearest tenth (one decimal place). Per Pennsylvania guidance on Submerged Lands License applications, the facilities area was determined using the "normal low flow" of the river, from the edge of water to the edge of water. The "normal low flow" of Cowanesque River was determined to be 40 feet wide, based on an average of the water widths shown on historical aerial imagery from Google Earth maps, using images taken in September through mid-October (which is the typical season for lowest stream flows in Pennsylvania), for the years historical imagery was available (10/2016, 9/2013, 9/2010, 10/2008, and 9/2005).

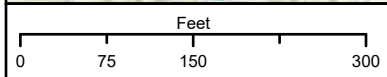


Legend	
	YM59 Pipeline Centerline
	YM59 Permanent Right of Way
	State Boundary
	Ephemeral Stream
	Perennial Stream

Tioga Pathway Project
 Figure 2
 Aerial Location Map Cowanesque River Submerged Land License
 Tioga County, Pennsylvania

Prepared For: **National Fuel**
 Supply Corporation

Prepared By: **TETRA TECH**



Basemap: ESRI World Imagery (4/6/2021)

