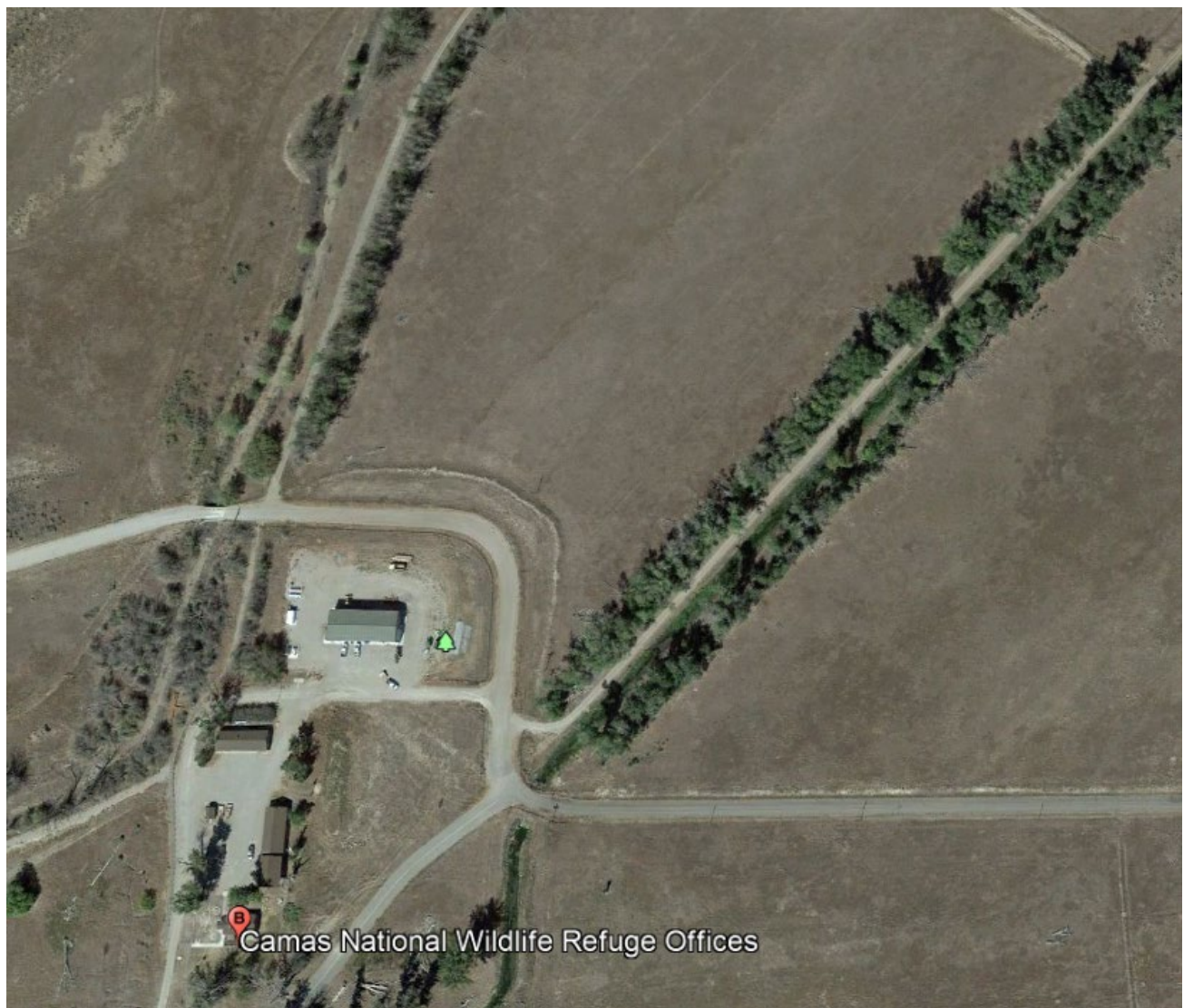


Camas National Wildlife Refuge Water Delivery System Upgrades Scope Narrative

Existing Site Description

The Camas NWR is 10,578 acres and is located in southeastern Idaho, 36 miles north of Idaho Falls, at an elevation of about 4,800 feet. The Refuge is situated within the Upper Snake River Plain and sits at the northeastern edge of the Snake River Aquifer. The Refuge is within the Great Basin Landscape Conservation Cooperative (LCC), which includes internally drained basins in Nevada, western Utah, eastern California, southeastern Oregon and Southern Idaho and is dominated by high altitude, cold deserts.

The Camas National Wildlife Refuge was established October 12, 1937. The primary purpose of Camas National Wildlife Refuge, as derived from Executive Order 7720 (from President Franklin D. Roosevelt, October 12, 1937), is in essence: "...as a refuge and breeding ground for migratory birds and other wildlife." About half of the Refuge consists of lakes, ponds, and marshlands. Camas Creek runs through the Refuge and is the source of water for the numerous aquatic habitats. The remainder of the Refuge is comprised of upland grass and sagebrush habitat, meadows, and farm fields.



Site Geotechnical Conditions

The soils in the Refuge range from excessively drained loamy sands developing in the eolian deposits to very poorly drained silty clays and clay loams in the relict lakebeds. Permeability of the soils varies greatly both across the surface of the landscape and within soil horizons below the surface. Low permeability soil horizons underlying the Refuge are partially responsible for the complex of wetlands, ponds and wet meadows that existed there naturally in the past and continue to be maintained by the Refuge today. Care must be taken when excavating or digging in stream channels or wetlands of the Refuge. Connecting highly conductive soil horizons to surface water sources can lead to inadvertent drainage of wetlands or stream channels.

Solar Generating Plant

The solar generating plant will be 300kW generating capacity and will include 720 solar panels attached to fixed mounts, three 62.5KVA inverters, 600A PV panel and connection to power utility. The solar generating plant will be constructed in a relatively flat open field immediately north of the refuge office building. Construction of the solar generating plant will include construction of fixed mounts, photovoltaic panels, conduits and conductors, concrete equipment pad, inverters, PV Panel, meter and generating plant disconnect. Generating plant shall be connected to Rocky Mountain Power electrical system at a location approximately 500 feet south of the PV Panel and meter. Contractor shall be responsible for coordinating inter-tie of solar generating plant with Rocky Mountain Power.

Access Area Improvements

The location of the access area improvements is approximately 1.0 mile north of the refuge office, behind the current maintenance facilities. The access area improvements will include excavation, fill, grading, and construction and installation of a 300kW solar plant.

Bid Items

Base Bid

Bid includes but is not limited to construction of a 300kW grid tied solar generating plant