

Bonneville Power Administration  
Geodetic Control Data Sheet

Station: WM018 (218)  
 Project: Wallula-Smiths Harbor-McNary  
 Section: NW 1/4 24      Township: 7 North      Range: 31 East      Meridian: Willamette  
 County: Walla Walla      State: WA      USGS Quad: Wallula, Washington  
 Surveyor: M R Heidecke      Date Surveyed: July, 2001

Instrument:

The horizontal coordinates and orthometric elevation were established by GPS observations using six Trimble 4000 SSI dual frequency receivers with Compact L1/L2 antennae with ground plane.

Adjustment:

The Basis of Coordinates for this survey is the Washington State Coordinate System, South Zone, NAD 83 (1998). The horizontal component of the least squares adjustment was constrained by holding NGS Stations B 340 (A), B 502 (B), PENDLETON (B), STANFIELD EAST BASE RESET (B), and BURDEN (B). The vertical component of the least squares adjustment was constrained by holding NGS Benchmarks B 340 (First Order Class II), B 502 (First Order Class II), BURDEN (Second Order Class II), V 203 (Second Order Class 0), G 640 (First Order Class I). The elevation for point 106, 201, 249, and 255 were determined by differential leveling from G 640, D 502, E 525 and F 431 respectively and held.

Horizontal Datum: NAD83 (1998)      Linear Unit: U.S. Survey Feet  
 Vertical Datum: NAVD88      Linear Unit: U.S. Survey Feet

Latitude: <u>N 46-04-49.43782</u>	Longitude: <u>W 118-52-53.70838</u>
US State Plane Coordinate System: <u>Washington South Zone - 4602</u>	
Northing: <u>276,641.340</u>	Easting: <u>2,051,083.040</u>
Orthometric Elevation: <u>448.41</u>	Ellipsoid Height: <u>377.66</u>
Combined Factor: <u>0.99993513</u>	Convergence: <u>- 1-10-32</u>
Confidence: 95% Confidence ("1.96 Sigma") Values	
<u>Northing-0.009</u>	<u>Easting-0.007</u> <u>Elevation-0.097</u>

Monumentation: BPA 3/4-inch Aluminum Cap on 5/8-inch aluminum rod, flush with ground.

Stamping: U.S.D.O.E. Bonneville Pwr. Adm., WM018 - FEC-01 - ATB - GPS

To-Reach Description:

Begin at Wallula Post Office at Wallula, Wa. 99363. Drive south on Columbia Way (County Road #1870) 0.1 miles to intersection of First Street. Drive east on First Street 0.1 miles to intersection of Ross Way. Drive south on a dirt farm road 0.1 miles where the dirt field road turns east. Continue east on the dirt field road along the North line of Section 23, Township 7 North, Range 31 East, 1.1 miles to the station. The station is 35.1 feet south of the dirt road centerline, and is 27 feet east of a PP&L power pole #243900.

Witness post is a yellow carsonite marker inscribed with BPA logo, bearing and distance to station.

RECEIVED BY  
 Walla Walla County Surveyor  
 Date: \_\_\_\_\_  
 Rec'd By: \_\_\_\_\_  
 No. 02-19-9