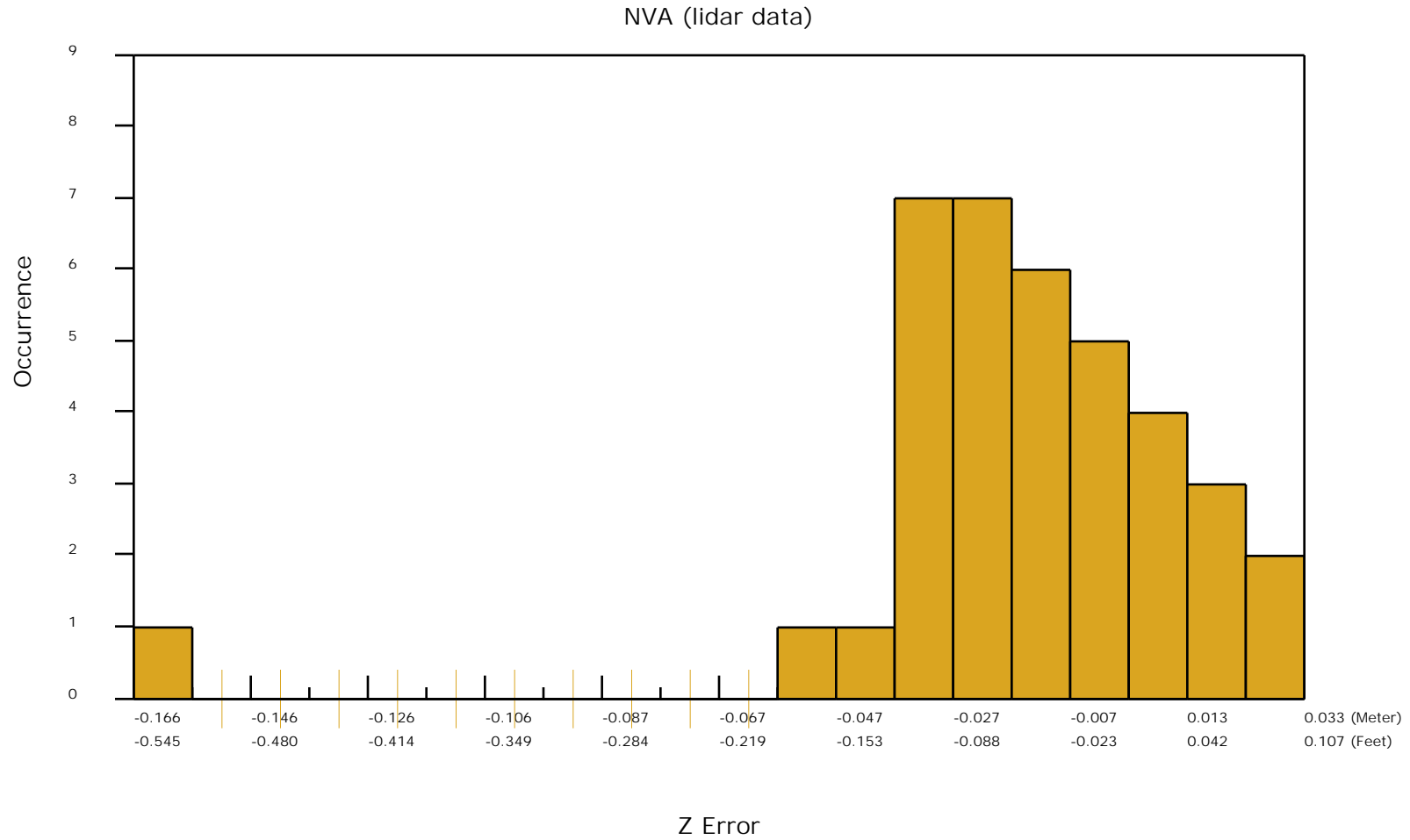


DPH-11 Report on Absolute Vertical Accuracy - continued

The purpose of this section is to show a frequency distribution chart of the non-vegetated vertical accuracy (NVA) of the lidar point cloud data measured against surveyed ground check points.

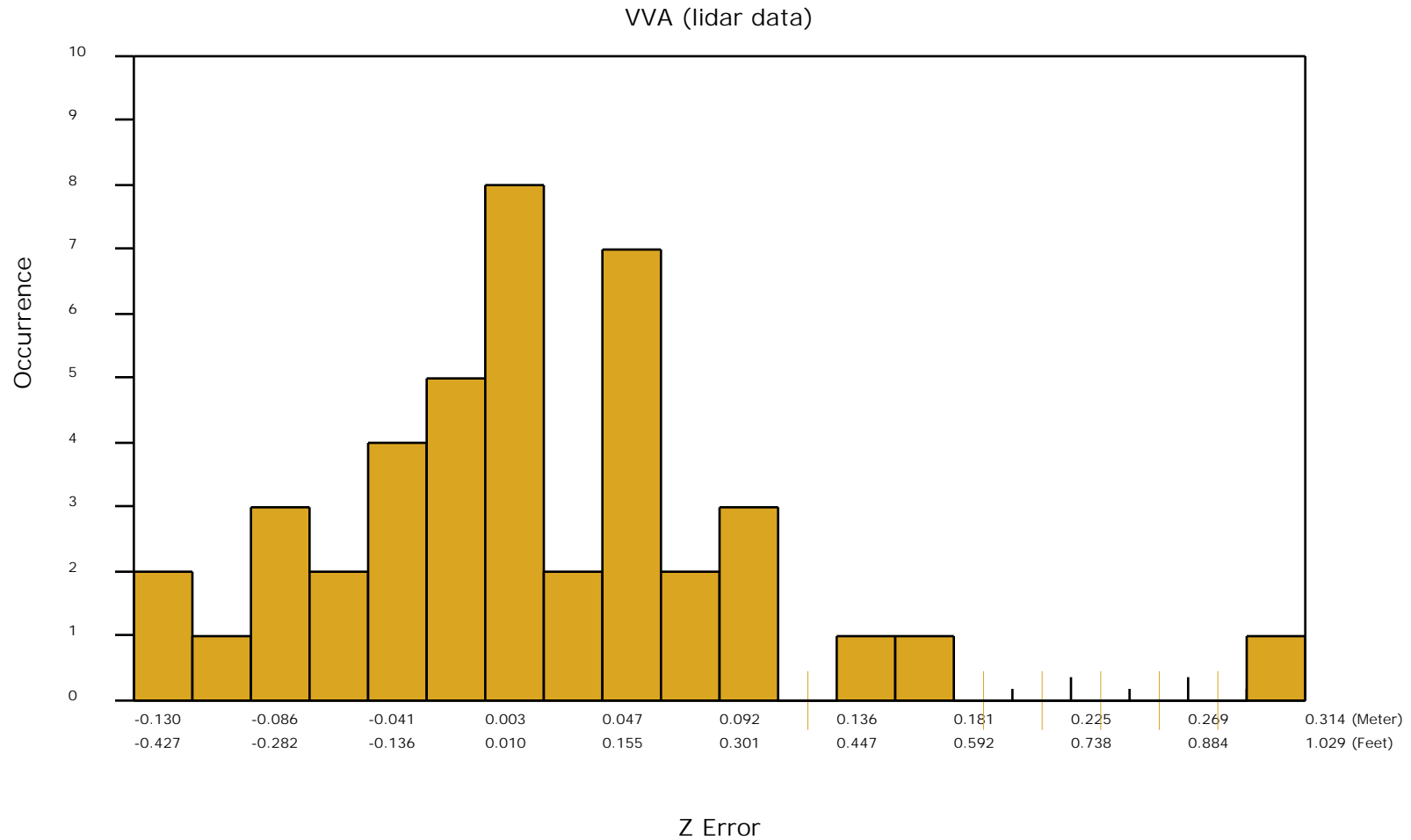
[Data Source - Y:\Mapping\Projects\100060_MN_RiverWest\Production\LIDAR\10_LiDAR_Reclass\Project_Wide\LAS\B3](#)



DPH-11 Report on Absolute Vertical Accuracy - continued

The purpose of this section is to show a frequency distribution chart of the vegetated vertical accuracy (VVA) of the lidar point cloud data measured against surveyed ground check points.

[Data Source - Y:\Mapping\Projects\100060_MN_RiverWest\Production\LiDAR\10_LiDAR_Reclass\Project_Wide\LAS\B3](#)



DPH-11 Report on Absolute Vertical Accuracy - continued

The purpose of this section is to report the results of measuring the DEM data against surveyed ground NVA (nonvegetated vertical accuracy) check points. All XY coordinates and Z values reported are in the selected data units.

NVA (DEM)								
ID	X	Y	Coverage	Z	Z From Lidar	Z Error	Description	Comments
NVA4006	221886.631	5035041.806	Yes	338.6	338.566	-0.034		
NVA4012	327919.115	5047154.228	Yes	401.918	401.923	0.005		
NVA4022	248288.869	5067629.215	Yes	325.083	325.093	0.010		
NVA4027	302736.697	5057662.517	Yes	387.844	387.840	-0.004		
NVA4036	279057.658	5071283.264	Yes	376.615	376.559	-0.056		
NVA4043	277228.516	5035902.037	Yes	343.696	343.705	0.009		
NVA4047	262316.374	5052515.693	Yes	339.225	339.221	-0.004		
NVA4048	261440.927	5070275.404	Yes	337.112	337.082	-0.030		
NVA4058	221309.807	5054309.333	Yes	341.476	341.455	-0.021		
NVA4064	319455.9	5052499.7	Yes	407.864	407.873	0.009		
NVA4067	253252.201	5043194.978	Yes	355.026	355.011	-0.015		
NVA4070BS2	222632.538	5043088.378	Yes	350.889	350.906	0.017		
NVA4077	299998.358	5046564.238	Yes	340.426	340.259	-0.167		
NVA4084	317049.429	5069970.243	Yes	440.287	440.251	-0.036		
NVA4085	286802.037	5062465.82	Yes	352.876	352.832	-0.044		
NVA4085A	286794.002	5062471.16	Yes	353.113	353.076	-0.037		
NVA4088	332774.624	5053394.547	Yes	412.726	412.740	0.014		
NVA4090	283999.313	5038891.708	Yes	330.519	330.502	-0.017		
NVA4091	200946.19	5055700.474	Yes	298.922	298.875	-0.047		
NVA4092	232671.368	5053702.644	Yes	337.495	337.480	-0.015		
NVA4099ABS2	276500.821	5047386.063	Yes	339.899	339.882	-0.017		
NVA4110	212292.035	5036011.423	Yes	326.178	326.162	-0.016		
NVA4115	252542.402	5052896.463	Yes	344.458	344.423	-0.035		
NVA4116	332000.993	5069532.667	Yes	419.998	420.022	0.024		
NVA4123TS	322534.228	5065062.391	Yes	412.225	412.212	-0.013		
NVA4129	319948.265	5041791.547	Yes	395.188	395.203	0.015		
NVA4139	260956.944	5034883.094	Yes	335.351	335.322	-0.029		
NVA4145	331848.521	5040640.574	Yes	403.701	403.701	0.000		
NVA4147	269275.666	5042663.442	Yes	346.138	346.138	0.000		
NVA4152	290298.712	5070888.688	Yes	387.811	387.784	-0.027		

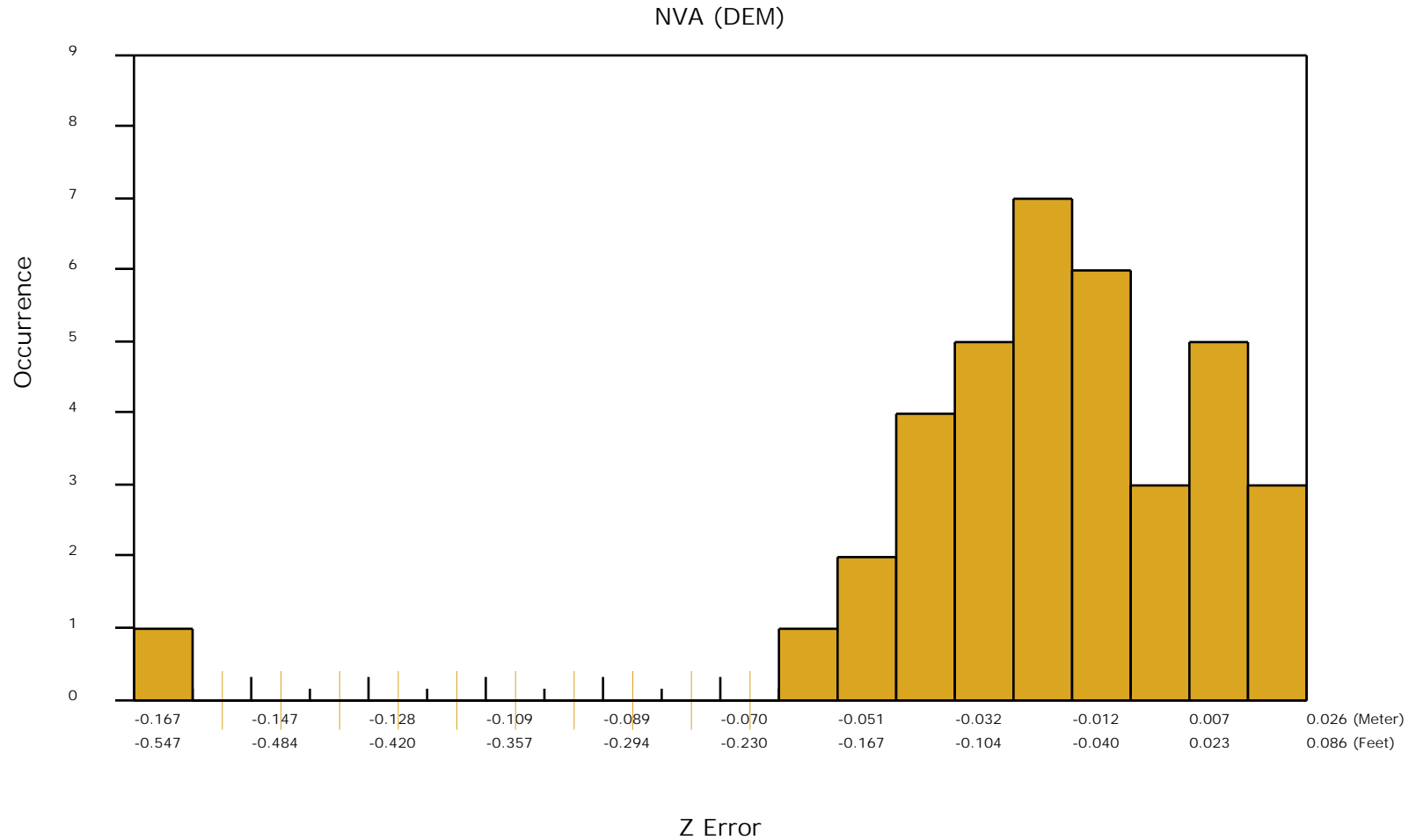
Check Points Vertical Accuracy - continued

ID	X	Y	Coverage	Z	Z From Lidar	Z Error	Description	Comments
NVA4153	266854.997	5061229.086	Yes	341.107	341.080	-0.027		
NVA4157	310960.803	5062654.889	Yes	427.849	427.839	-0.010		
NVA4161	299734.785	5038362.857	Yes	381.021	381.012	-0.009		
NVA4162	313667.851	5048385.873	Yes	396.384	396.359	-0.025		
NVA4171	244980.435	5038770.288	Yes	351.991	351.987	-0.004		
NVA4172	303197.527	5070788.992	Yes	428.625	428.651	0.026		
NVA4177	288787.799	5050041.222	Yes	343.305	343.301	-0.004		

DPH-11 Report on Absolute Vertical Accuracy - continued

The purpose of this section is to show a frequency distribution chart of the non-vegetated vertical accuracy (NVA) of the DEM data measured against surveyed ground check points.

[Data Source - Y:\Mapping\Projects\100060_MN_RiverWest\Production\LiDAR\10_LiDAR_Reclass\Project_Wide\LAS\B3](#)



DPH-11 Report on Absolute Vertical Accuracy - continued

The purpose of this section is to report the results of measuring the DEM data against surveyed ground VVA (vegetated vertical accuracy) check points. All XY coordinates and Z values reported are in the selected data units.

VVA (DEM)								
ID	X	Y	Coverage	Z	Z From Lidar	Z Error	Description	Comments
VVA5006	221906.966	5035023.001	Yes	337.485	337.518	0.033		
VVA5006A	221893.834	5035031.599	Yes	337.712	337.799	0.087		
VVA5012	328795.888	5044980.244	Yes	403.491	403.593	0.102		
VVA5021	248239.897	5067672.31	Yes	323.694	323.702	0.008		
VVA5026	300982.6	5059265.833	Yes	390.728	390.882	0.154		
VVA5026B	300972.822	5059300.472	Yes	390.331	390.247	-0.084		
VVA5045	261518.646	5050925.046	Yes	336.618	336.695	0.077		
VVA5046	265533.269	5063791.94	Yes	343.433	343.463	0.030		
VVA5046A	261491.622	5070325.998	Yes	335.48	335.572	0.092		
VVA5056	222088.385	5051235.524	Yes	336.65	336.580	-0.070		
VVA5056A	222192.943	5051497.11	Yes	337.961	337.965	0.004		
VVA5061	315311.204	5057612.252	Yes	411.455	411.455	0.000		
VVA5064A	254800.305	5040900.498	Yes	356.011	356.047	0.036		
VVA5064C	254835.745	5040895.485	Yes	356.205	356.222	0.017		
VVA5067	222685.08	5043129.286	Yes	350.498	350.633	0.135		
VVA5067B	222680.512	5043145.989	Yes	350.576	350.610	0.034		
VVA5067C	222700.897	5043125.6	Yes	350.462	350.425	-0.037		
VVA5074	302420.669	5050639.372	Yes	370.162	370.141	-0.021		
VVA5074A	302404.321	5050643.472	Yes	370.274	370.246	-0.028		
VVA5080	318464.419	5070901.251	Yes	435.64	435.646	0.006		
VVA5080A	318432.38	5070913.136	Yes	435.001	435.053	0.052		
VVA5080B	318515.343	5070917.799	Yes	435.63	435.629	-0.001		
VVA5080C	318512.508	5070896.999	Yes	435.124	435.171	0.047		
VVA5081	286728.911	5061807.12	Yes	348.683	348.791	0.108		
VVA5081A	290281.01	5070873.532	Yes	387.36	387.446	0.086		
VVA5084	327450.638	5052404.023	Yes	409.897	409.982	0.085		
VVA5086	282670.873	5042129.46	Yes	341.648	341.704	0.056		
VVA5087	201335.149	5055915.263	Yes	307.844	307.759	-0.085		
VVA5088	230796.127	5051801.66	Yes	336.521	336.537	0.016		
VVA5088A	200941.5	5055709.985	Yes	298.69	298.713	0.023		

Check Points Vertical Accuracy - continued

ID	X	Y	Coverage	Z	Z From Lidar	Z Error	Description	Comments
VVA5095	276419.627	5047301.655	Yes	340.773	340.709	-0.064		
VVA5095A	276421.778	5047282.266	Yes	341.277	341.250	-0.027		
VVA5095B	276405.007	5047289.254	Yes	341.533	341.369	-0.164		
VVA5095C	276367.092	5047334.855	Yes	341.824	341.670	-0.154		
VVA5095D	276336.557	5047363.242	Yes	341.869	341.813	-0.056		
VVA5106	212445.733	5035722.71	Yes	299.048	299.045	-0.003		
VVA5110	252637.076	5052925.325	Yes	342.733	342.731	-0.002		
VVA5111	329792.115	5070427.198	Yes	416.858	416.883	0.025		
VVA5118	322545.257	5065102.539	Yes	412.022	411.978	-0.044		
VVA5118B	322522.421	5065091.053	Yes	412.664	412.603	-0.061		
VVA5127A	296309.108	5069729.793	Yes	407.035	407.098	0.063		
VVA8000	332697.206	5050204.679	Yes	410.058	410.374	0.316		

DPH-11 Report on Absolute Vertical Accuracy - continued

The purpose of this section is to show a frequency distribution chart of the vegetated vertical accuracy (VVA) of the DEM data measured against surveyed ground check points.

[Data Source - Y:\Mapping\Projects\100060_MN_RiverWest\Production\LIDAR\10_LiDAR_Reclass\Project_Wide\LAS\B3](Y:\Mapping\Projects\100060_MN_RiverWest\Production\LIDAR\10_LiDAR_Reclass\Project_Wide\LAS\B3)

