



Subject: CORS Station

To Whom It May Concern:

I am writing this letter on the behalf of not only the benefit this will bring to our company, but also about how many other people will benefit if the City of Miles City is able to put a Continuously Operating Reference Station (CORS) in the Miles City Area.

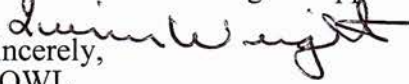
Currently there is a large bubble of an area where there is no CORS station around the Miles City area. There are currently one in Glendive, Ekalaka, Jordan, and Pompey's Pillar area. This means the closest station is roughly 80 miles away from Miles City. What this leads to is poorer GPS accuracy within the Miles City area. Anything that involves GPS data in the Miles City area causes maps to be inaccurate. Some of the many users that will benefit are any companies using GIS data for mapping, Montana Cadastral website, local surveyors, surveyors coming from other cities, emergency services, etc. Right now if you went to the Montana Cadastral website you will see things looking very out of proportion where they are supposed to be on the ground. By supplying the data from the CORS station in Miles City this would help bring those locations to a more accurate position.

A lot of surveyors use the Online Positioning User Service to get a high accurate position on a control point when setting up a new job. The OPUS software uses CORS stations in the area to triangulate a high accuracy position on a point the GPS is set up on. When surveying around the Miles City area, OPUS has to use these CORS stations that are more than 80 miles away from the project. By having a CORS station in Miles City, the OPUS software would have another CORS station to use for the triangulation and would supply better accuracy because of the location being closer than the existing CORS stations.

The City of Miles City uses GIS software for inventory on their public services. The files that they download for inserting in Arc GIS currently don't match up well where they are supposed to be. This causes for confusion when looking at maps that show a sewer line in a private owners property instead of in the street right-of-way. By supplying a CORS station and providing GIS users a high accuracy GPS position for the Miles City area, the City's maps would be more accurate and help inventory their services better.

The City of Miles City is also planning on making the CORS station a permanent base station as well. Currently the only control that is set up in Miles City is from the MDOT and DOWL. When the city tries to share files with DOWL we need to make a transformation because nobody uses the same control. With creating a base station all surveyors could use this for the surveying around Miles City, and be able to share data with the City that will be able to be used without hours of transformation of GPS files.

The CORS station will provide better accuracy for anyone using GPS systems, including surveyors or just the average person using a handheld GPS for navigating around town. Emergency companies like the fire department and the ambulance can have better accuracy for when they type in an address to find the location of the emergency. This would benefit everyone in the Miles City area, and would be a great opportunity to help out in the GPS world we live in.


Sincerely,
DOWL
Quinn W. Wright
Professional Land Surveyor