

Business Item 2012-16:

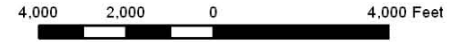
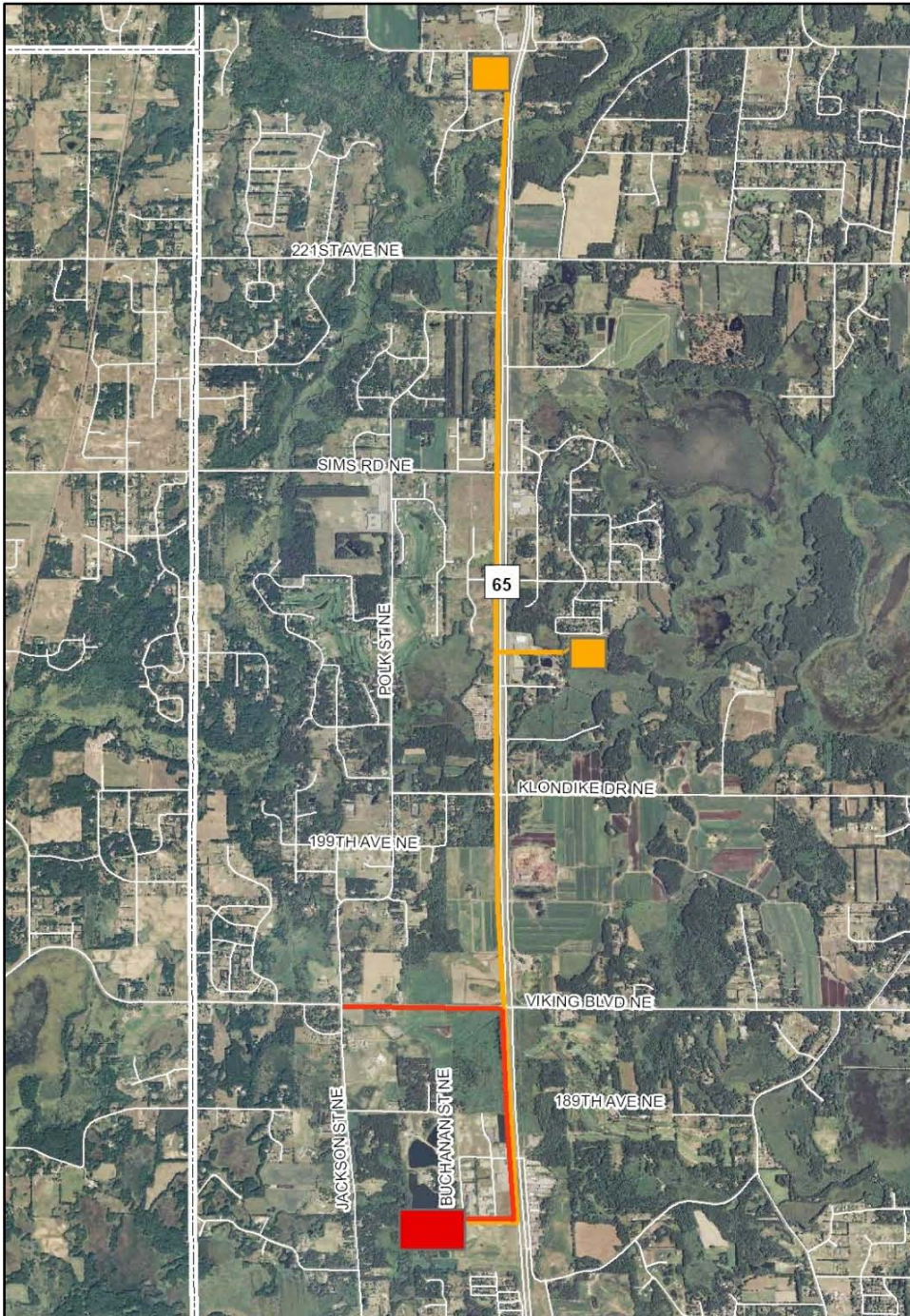
Authorization to Award and Execute Construction Contract 11P060 for East Bethel Water Reclamation Plant and Land Application Basins

Presented to the Environment Committee

January 10, 2012

Bryce Pickart, Assistant General Manager Technical Services

East Bethel Facilities



- Interceptor Alignment
- Reclaimed Water Alignment
- Water Reclamation Plant Site
- Land Application Site



East Bethel Water Reclamation Plant

- Initial capacity - 0.41 MGD
- Raw sewage pumping
- Grit removal and fine screening
- Activated sludge with biological nutrient removal
- Membrane filtration



East Bethel Water Reclamation Plant (cont.)

- Ultraviolet disinfection
- Effluent pumping to land application basins
- Sludge hauling to Fridley Liquid Waste Receiving Station

East Bethel Water Reclamation Plant

Pretreatment
Building

Secondary Treatment
Building

Activated Sludge
Tanks

Raw sewage
Pumping Station





East Bethel Water Reclamation Plant

- Two remote land application basins
 - Subsurface effluent distribution
 - Capacity of each basin – 0.41mgd



Effluent Requirements

Parameter	Effluent Requirement
CBOD5	25 mg/l
TSS	25 mg/l
Total Nitrogen	10 mg/l
Total Phosphorus	1.0 mg/l
Disinfection	≤ 2.2 total coliform/100ml



Bid Results

- Four bids received ranging in costs from \$13,056,600 to \$14,136,000
- Low bid offered by Rice Lake Construction Group
- Engineer's estimate - \$14,204,500



Project Schedule

- Notice to proceed – February 2012
- Substantial Completion and ready for service – August 2013
- Contractor process performance verification – August 2013 – August 2015
- Final Completion – August 2015