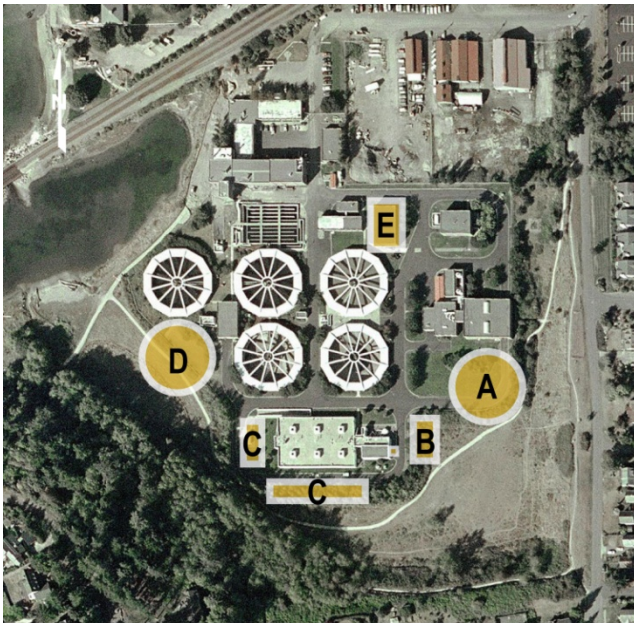


# Alternative 1B – Alternate Layout

## Expand “Core” Process to the South

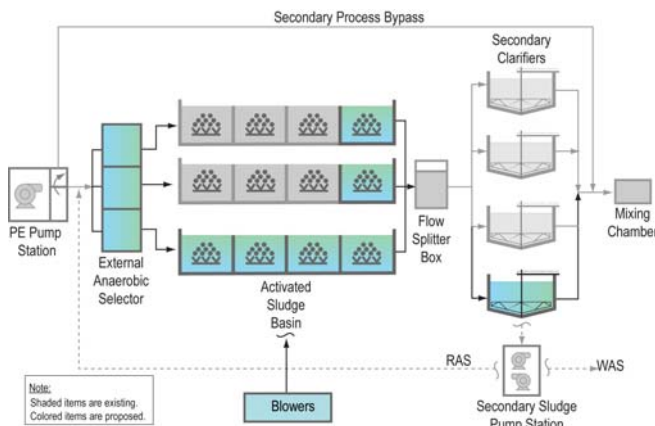
### Preliminary Site Layout



### Alternative Components

- A. Primary clarifier may be deferred with chemically enhanced primary treatment
- B. Anaerobic selector
- C. Two activated sludge basins
- D. Fourth secondary clarifier
- E. Replacement and addition of oxygen system

### Flow Schematic



### Cost Summary

**Capital Estimate: \$47 million**  
**Life-Cycle Estimate: \$54 million**

2009 dollars

### Advantages

1. Most efficient use of existing infrastructure.
2. Lowest energy use, lowest greenhouse gas emissions.
3. Proven technology, familiar to staff .
4. Minimizes chemical usage (traffic, health, safety).
5. Maintains City property to the north for future use (nutrient removal, solids facility, maintenance needs, etc . . . .).
6. Lowest capital and 20-year total life-cycle costs.

### Disadvantages

1. Impacts undeveloped area used by the public.
2. Impacts environmentally sensitive areas (Blue Heron colony, Class IV wetlands).

### Triple Bottom Line + Evaluation

