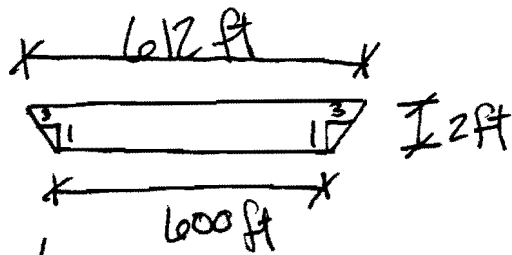
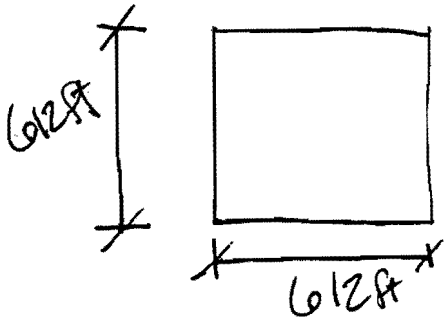


ARG 160045 C

662,247 ft³ is needed for a 25yr, 24hr storm.

* 8.6 acre pond represented as a square:

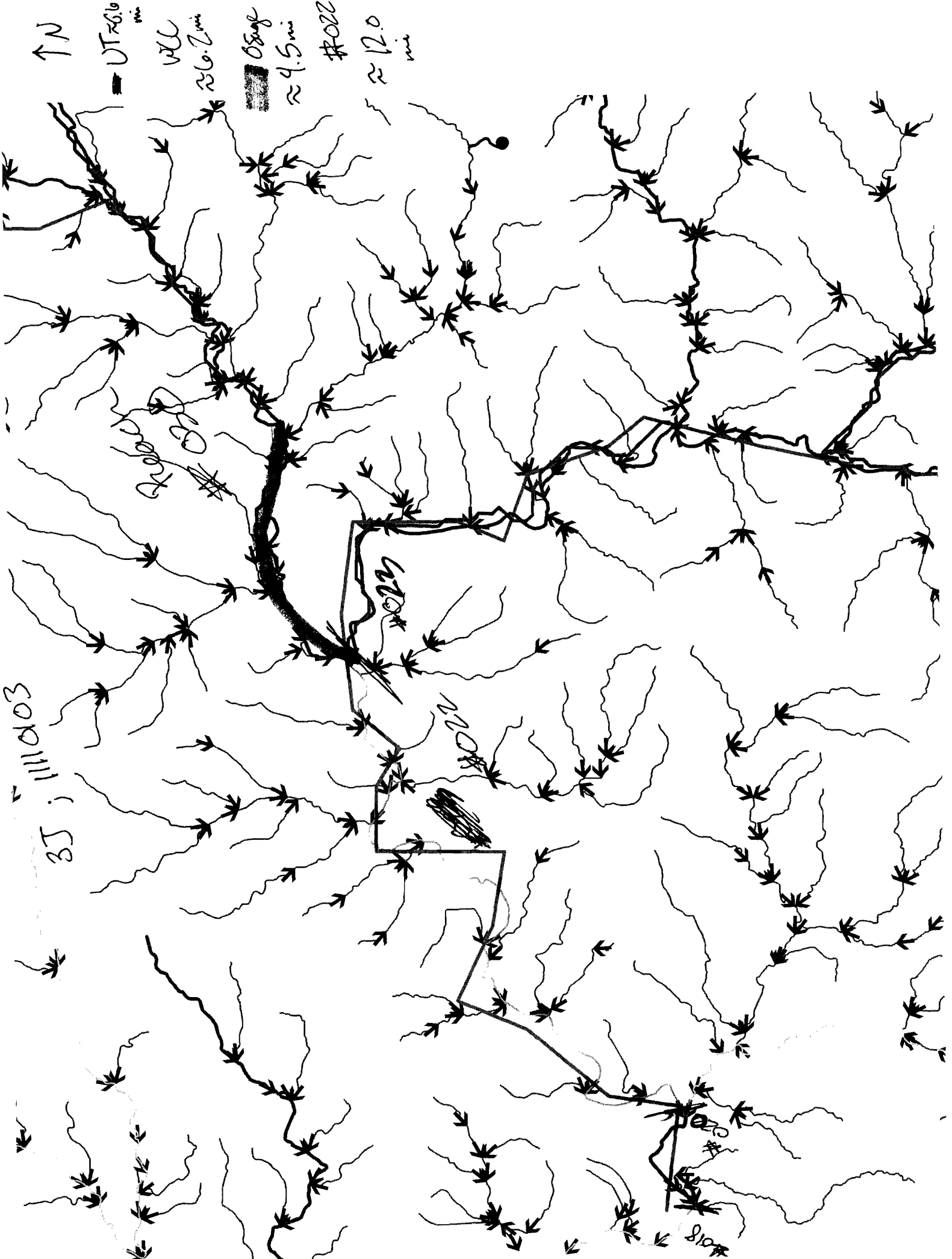
$$8.6 \text{ acres} \cdot \frac{43560 \text{ ft}^2}{1 \text{ acre}} = 374616 \text{ ft}^2 \quad \sqrt{374616 \text{ ft}^2} = 612.06 \text{ ft}$$



$$\begin{aligned} V &= (600 \text{ ft})^2 \cdot (2 \text{ ft}) + \frac{1}{2} (6) (2) (600 \text{ ft}) (4) \\ &\quad + \frac{1}{2} (12 \text{ ft})^2 \cdot (2 \text{ ft}) \\ &= 734,496 \text{ ft}^3 \end{aligned}$$

As $734,496 \text{ ft}^3 > 662,247 \text{ ft}^3$, it seems having 2 ft of freeboard will be adequate soon to handle a 25 year, 24 hr storm event.

~~2-26-14~~ 2-26-14



Osage Creek @ Reach #030

→ Pathogens + Total Phosphorus

- Category 5g
- Unknown Sources
- Low priority

Illinois River @ Reaches #018, #020, + #022

Illinois River @ Reach 020

→ Siltation

- Category 5d
- Surface Erosion is source
- Low priority