

5/10/96

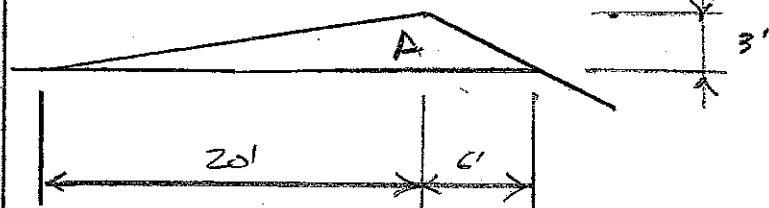
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Find area of wetland displaced by fish passage culvert.

Wetland A
SE corner

$$\text{Area} = \frac{3}{2} \times 26 = 39 \text{ sq'}$$

SAY 40 sq'



Wetland B
NE corner

$$\text{Area} = 3' \times 0.83 = 2.49 \text{ sq'}$$

SAY 3 sq'

Find area of creek increased by fish passage culvert

Existing Closed Conveyance = 0 sq'

Proposed Box Culvert = 36' x 13' Span = 468 sq'

Approx net increase in wet areas

$$468 - 40 - 3 = 425$$

$$468/43 = 10.6 \text{ times or } 1066\% \text{ increase}$$

Proposed fish passage culvert is self mitigating.

Find area of bioswale w/in 100' wetland
buffer (East of type A wetland)

$$\text{Length of bioswale} = 78'$$

$$\text{Width of bioswale} = 6'$$

$$\text{Area of bioswale} = 4680'$$

Find offsetting area of bioswales outside
of wetland buffers

$$\text{Area of bio-retention cell} = 10 \times 30 = 3000'$$

Area of bioswale outside of wetland
buffers

$$= 190' \times 6' = 11400'$$

Net Area of new bio areas

$$= 11400' - 4680' = 6720'$$