



# DITCH ANALYSIS

**PID :** 116570    **Date :** 07/21/2025    **Project :** ERIE-US 6-CORRIDOR    **Location :** US 6 Right

**Description :** Ditch from Sta 1756+30 to Sta 1756+95

**Designer :** WK

**Rainfall Area :** A

**Allowable Shears**

|                      |                |      |                  |      |                       |      |
|----------------------|----------------|------|------------------|------|-----------------------|------|
|                      | <b>Seed:</b>   | 0.40 | <b>Jute Mat:</b> | 0.45 | <b>Temporary Mat:</b> | 1.00 |
| <b>Permanent Mat</b> | <b>Type 1:</b> | 2.00 | <b>Type 2:</b>   | 3.00 | <b>Type 3:</b>        | 5.00 |
| <b>RCP</b>           | <b>Type B:</b> | 6.00 |                  |      |                       |      |

(\*) Warning: Grade is steeper than allowable.

If value is parantheses, design parameters have been exceeded. - See user manual.

| STATION<br>BEGIN | STATION<br>END | SIDE | LENGTH<br>(ft.) | RADIUS<br>WIDTH<br>(ft.) | IN<br>SLOPE<br>(ft./ft.) | BACK<br>SLOPE<br>(ft./ft.) | GRADE<br>(ft./ft.) | AREA<br>(acres) | AREA<br>SUM<br>(acres) | RUNOFF<br>COEFF. | CA<br>(Sum) | PROTECT<br>TYPE | RAIN<br>INT.<br>(in./hr.) | STORM<br>FREQ.<br>(yrs.) | MANN.<br>COEFF. | TIME<br>FLOW<br>(min.) | VEL.<br>FLOW<br>(fps.) | SHEAR<br>(lbs./<br>sq.ft.) | DESIGN<br>FLOW<br>(cfs.) | DEPTH<br>FLOW<br>(ft.) | WIDTH<br>FLOW<br>(ft.) |
|------------------|----------------|------|-----------------|--------------------------|--------------------------|----------------------------|--------------------|-----------------|------------------------|------------------|-------------|-----------------|---------------------------|--------------------------|-----------------|------------------------|------------------------|----------------------------|--------------------------|------------------------|------------------------|
| 1756+30          | 1756+95        | R    | 65.00           | 4.00                     | 6.00                     | 2.00                       | 0.0020             | 0.42            | 0.42                   | 0.56             | 0.24        | Seed            | 3.48                      | 5                        | 0.030           | 16.46                  | 0.74                   | 0.03                       | 0.82                     | 0.23                   | 5.83                   |
|                  |                |      |                 |                          |                          |                            |                    |                 |                        |                  |             | Seed            | 3.92                      | 10                       | 0.040           | 16.70                  | 0.63                   | 0.04                       | 0.93                     | 0.29                   | 6.30                   |