

PIPE HYDRAULIC DATA
30" RCP IV Sta.62+50

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|-----------------------|----------|-----|
| DRAINAGE AREA | = 13.8 | AC |
| DESIGN FREQUENCY | = 50 | YRS |
| DESIGN DISCHARGE | = 23 | CFS |
| DESIGN HW ELEVATION | = 30.8 | FT |
| 100 YEAR DISCHARGE | = 26 | CFS |
| 100 YEAR HW ELEVATION | = 31.0 | FT |
| OVERTOPPING FREQUENCY | = 500+/- | YRS |
| OVERTOPPING DISCHARGE | = 43 | CFS |
| OVERTOPPING ELEVATION | = 32.9 | FT |

PIPE HYDRAULIC DATA
48" RCP IV Sta.64+06

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|-----------------------|--------|-----|
| DRAINAGE AREA | = 64 | AC |
| DESIGN FREQUENCY | = 50 | YRS |
| DESIGN DISCHARGE | = 80 | CFS |
| DESIGN HW ELEVATION | = 32.6 | FT |
| 100 YEAR DISCHARGE | = 96 | CFS |
| 100 YEAR HW ELEVATION | = 33.5 | FT |
| OVERTOPPING FREQUENCY | = 100 | YRS |
| OVERTOPPING DISCHARGE | = 84 | CFS |
| OVERTOPPING ELEVATION | = 32.9 | FT |

BMI2
-L- STA. 64+32.30, 105.79 RT. EL=32.04
RR SPIKE IN PP

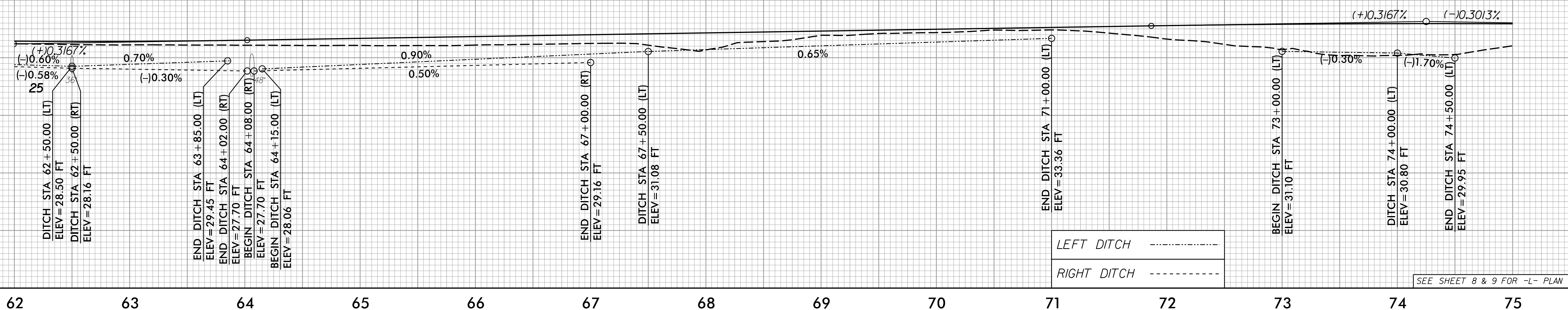
WETHERILL ENGINEERING
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Raleigh, N.C. 27606
License No. F-0377
Bus: 919 851 8077
Fax: 919 851 8107

TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN
CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION

| | | | |
|--|----------|---------------------|----------|
| PROJECT REFERENCE NO. | R-4705 | SHEET NO. | 46 |
| ROADWAY DESIGN ENGINEER | 4/7/2022 | HYDRAULICS ENGINEER | 4/7/2022 |
| | | | |
| DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED | | | |

PI = 61+99.00
EL = 32.40'
VC = 406'
K = 433
DS = 60+ MPH

PI = 74+25.00
EL = 36.28'
VC = 477'
K = 772
DS = 60+ MPH



LEFT DITCH -----
RIGHT DITCH
SEE SHEET 8 & 9 FOR -L- PLAN

PIPE HYDRAULIC DATA
30" RCP III Sta.76+77

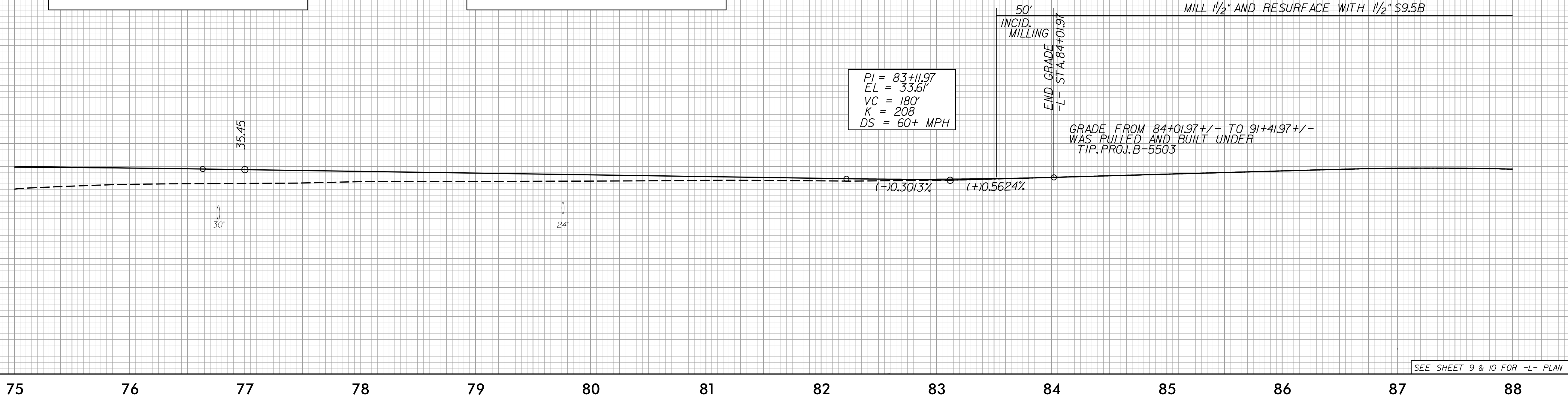
| | | |
|-----------------------|----------|-----|
| DRAINAGE AREA | = 12 | AC |
| DESIGN FREQUENCY | = 50 | YRS |
| DESIGN DISCHARGE | = 19 | CFS |
| DESIGN HW ELEVATION | = 29.3 | FT |
| 100 YEAR DISCHARGE | = 21 | CFS |
| 100 YEAR HW ELEVATION | = 29.5 | FT |
| OVERTOPPING FREQUENCY | = 500+/- | YRS |
| OVERTOPPING DISCHARGE | = 39 | CFS |
| OVERTOPPING ELEVATION | = 31.6 | FT |

PIPE HYDRAULIC DATA
24" RCP III Sta.79+76

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|-----------------------|----------|-----|
| DRAINAGE AREA | = 2 | AC |
| DESIGN FREQUENCY | = 50 | YRS |
| DESIGN DISCHARGE | = 3.1 | CFS |
| DESIGN HW ELEVATION | = 29.7 | FT |
| 100 YEAR DISCHARGE | = 3.3 | CFS |
| 100 YEAR HW ELEVATION | = 29.8 | FT |
| OVERTOPPING FREQUENCY | = 500+/- | YRS |
| OVERTOPPING DISCHARGE | = 5.3 | CFS |
| OVERTOPPING ELEVATION | = 30.0 | FT |

BMI3
-L- STA. 86+53.83, 86.85 RT. EL=32.06
RR SPIKE IN 30" PINE

PI = 83+11.97
EL = 33.61'
VC = 180'
K = 208
DS = 60+ MPH



SEE SHEET 9 & 10 FOR -L- PLAN