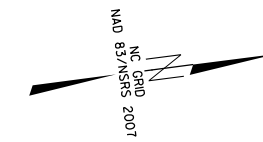


WETLAND & STREAM IMPACTS

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Raleigh, North Carolina 27609
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| 17BP.2.R.25 | 4 |
| RW SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

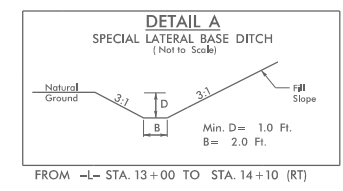
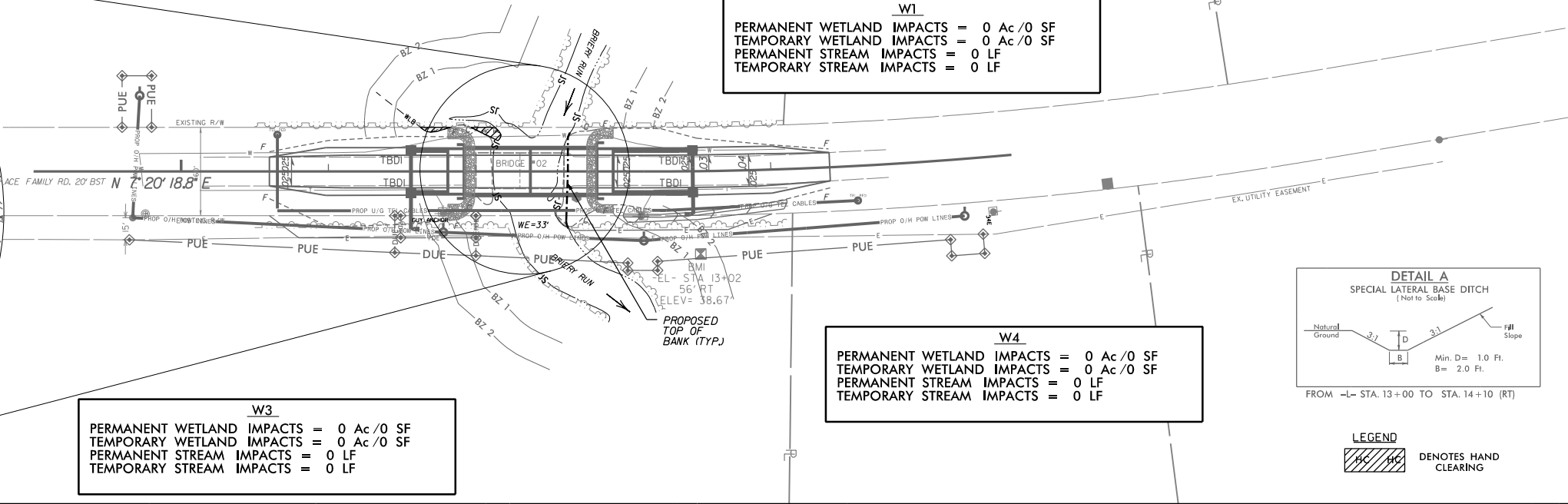
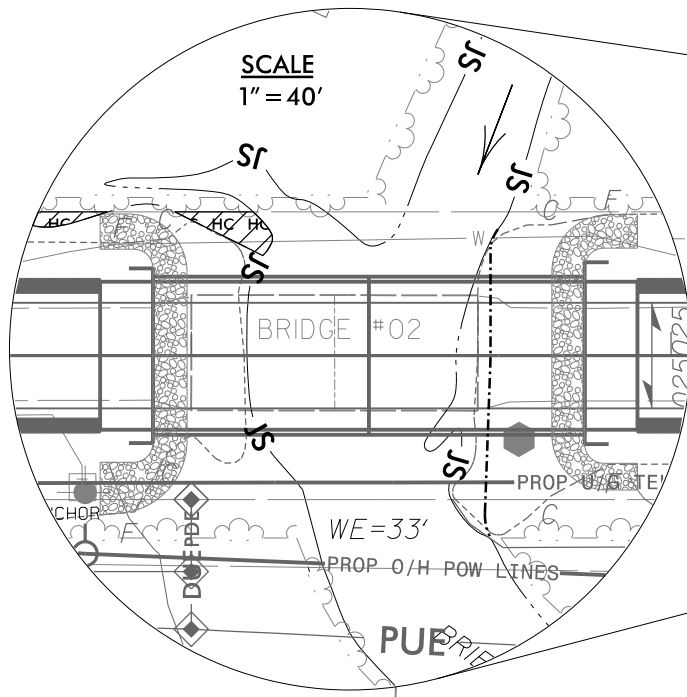


W2
 PERMANENT WETLAND IMPACTS = 0 Ac / 0 SF
 TEMPORARY WETLAND IMPACTS = <0.01 Ac / 132 SF
 PERMANENT STREAM IMPACTS = 0 LF
 TEMPORARY STREAM IMPACTS = 0 LF

W1
 PERMANENT WETLAND IMPACTS = 0 Ac / 0 SF
 TEMPORARY WETLAND IMPACTS = 0 Ac / 0 SF
 PERMANENT STREAM IMPACTS = 0 LF
 TEMPORARY STREAM IMPACTS = 0 LF

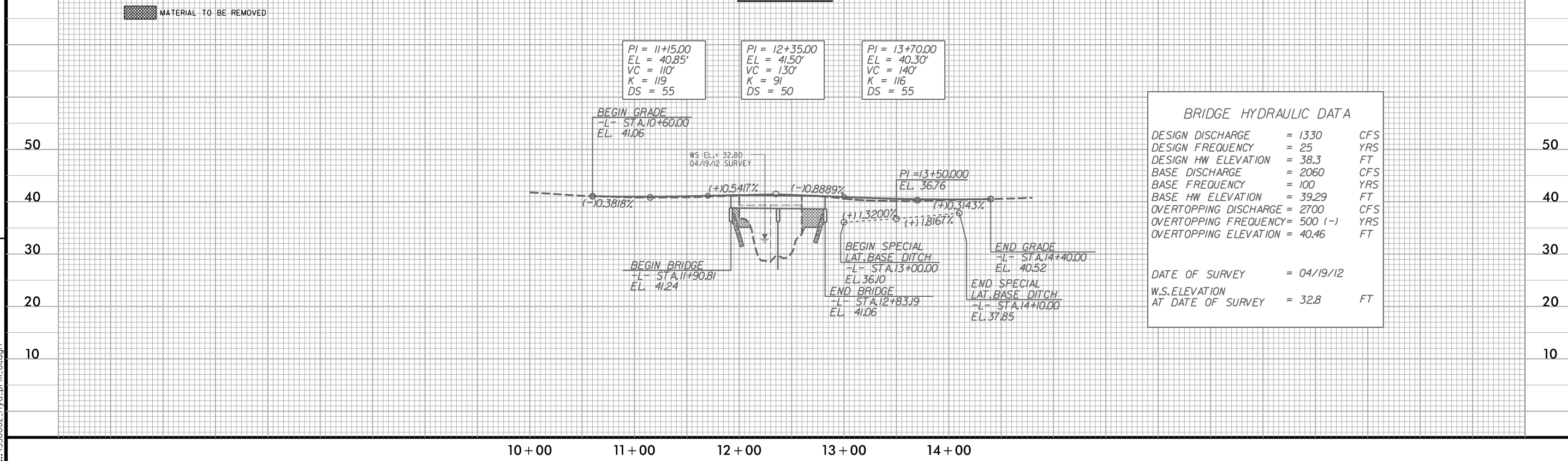
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 TEMPORARY STREAM IMPACTS = 0 LF

W3
 PERMANENT WETLAND IMPACTS = 0 Ac / 0 SF
 TEMPORARY WETLAND IMPACTS = 0 Ac / 0 SF
 PERMANENT STREAM IMPACTS = 0 LF
 TEMPORARY STREAM IMPACTS = 0 LF



LEGEND
 DENOTES HAND CLEARING

PROFILE



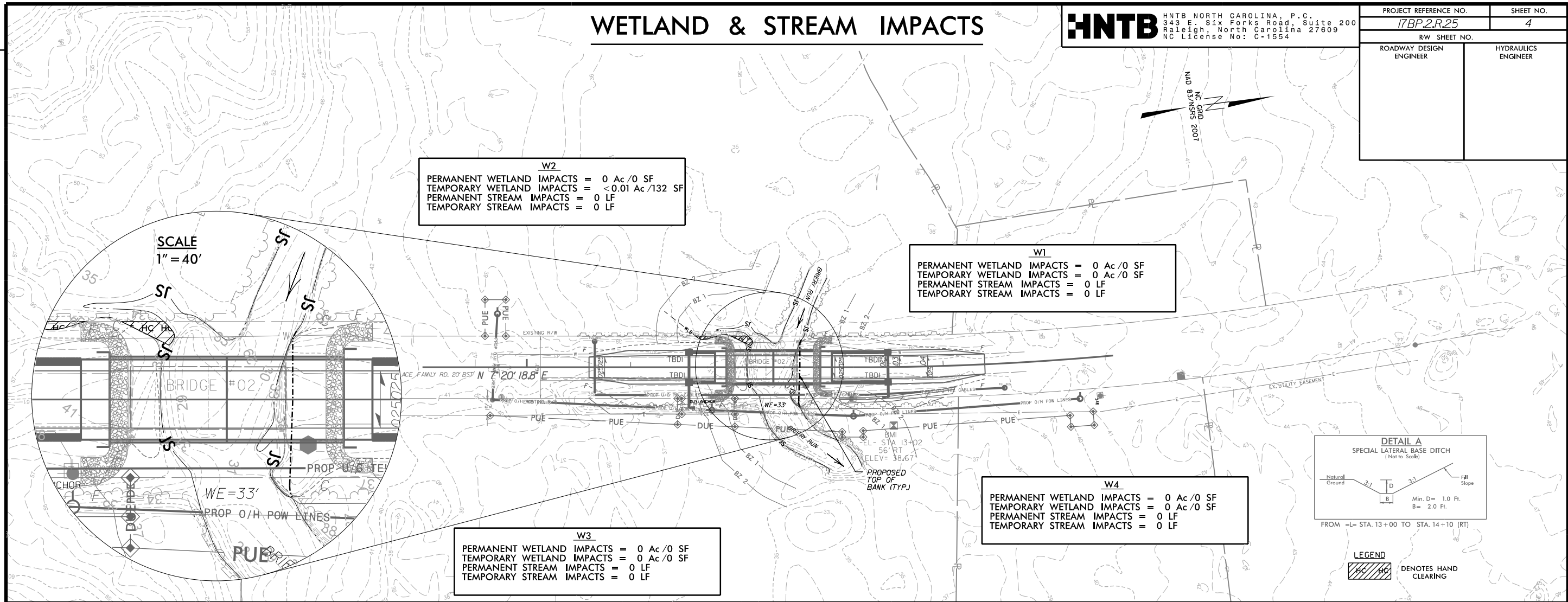
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WETLAND & STREAM IMPACTS

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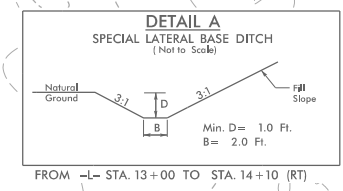


W2
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 PERMANENT STREAM IMPACTS = 0 LF
 TEMPORARY STREAM IMPACTS = 0 LF

W1
 PERMANENT WETLAND IMPACTS = 0 Ac / 0 SF
 TEMPORARY WETLAND IMPACTS = 0 Ac / 0 SF
 PERMANENT STREAM IMPACTS = 0 LF
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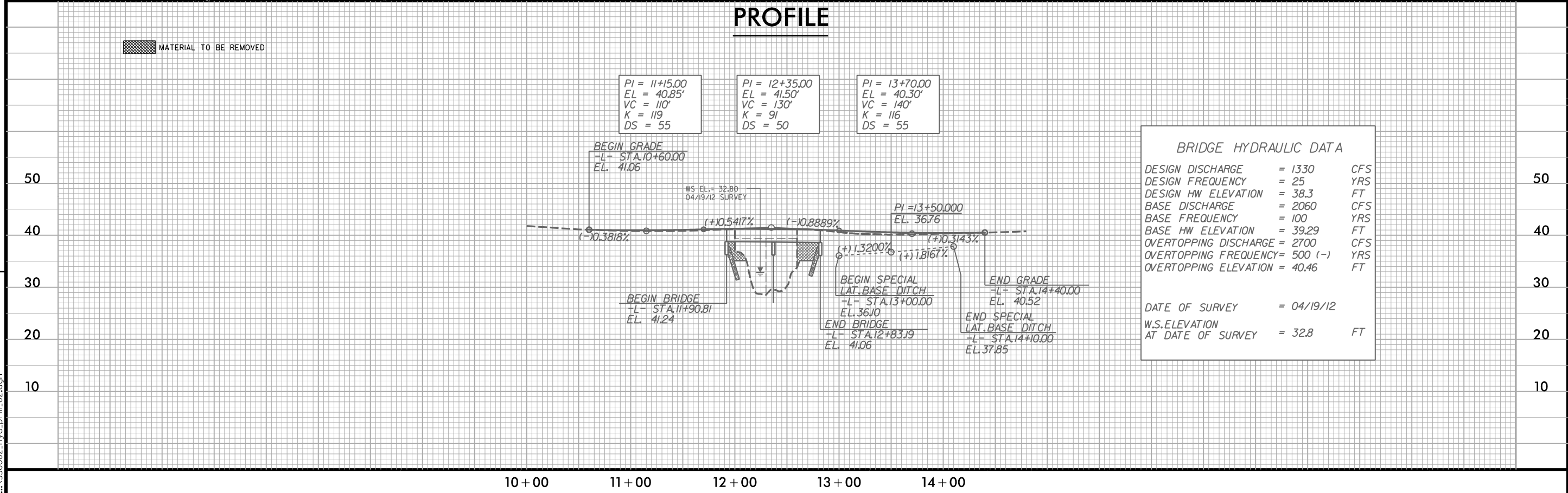
W3
 PERMANENT WETLAND IMPACTS = 0 Ac / 0 SF
 TEMPORARY WETLAND IMPACTS = 0 Ac / 0 SF
 PERMANENT STREAM IMPACTS = 0 LF
 TEMPORARY STREAM IMPACTS = 0 LF

W4
 PERMANENT WETLAND IMPACTS = 0 Ac / 0 SF
 TEMPORARY WETLAND IMPACTS = 0 Ac / 0 SF
 PERMANENT STREAM IMPACTS = 0 LF
 TEMPORARY STREAM IMPACTS = 0 LF



LEGEND
 DENOTES HAND CLEARING

PROFILE



| | | |
|---|--|---|
| PI = 11+15.00 EL = 40.85' VC = 110' K = 119 DS = 55 | PI = 12+35.00 EL = 41.50' VC = 130' K = 91 DS = 50 | PI = 13+70.00 EL = 40.30' VC = 140' K = 116 DS = 55 |
|---|--|---|

BRIDGE HYDRAULIC DATA

| | | |
|-----------------------|-----------|-----|
| DESIGN DISCHARGE | = 1330 | CFS |
| DESIGN FREQUENCY | = 25 | YRS |
| DESIGN HW ELEVATION | = 38.3 | FT |
| BASE DISCHARGE | = 2060 | CFS |
| BASE FREQUENCY | = 100 | YRS |
| BASE HW ELEVATION | = 39.29 | FT |
| OVERTOPPING DISCHARGE | = 2700 | CFS |
| OVERTOPPING FREQUENCY | = 500 (-) | YRS |
| OVERTOPPING ELEVATION | = 40.46 | FT |

DATE OF SURVEY = 04/19/12
 W.S. ELEVATION AT DATE OF SURVEY = 32.8 FT

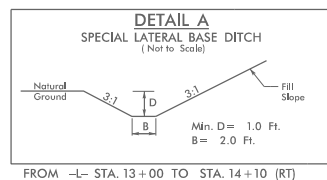
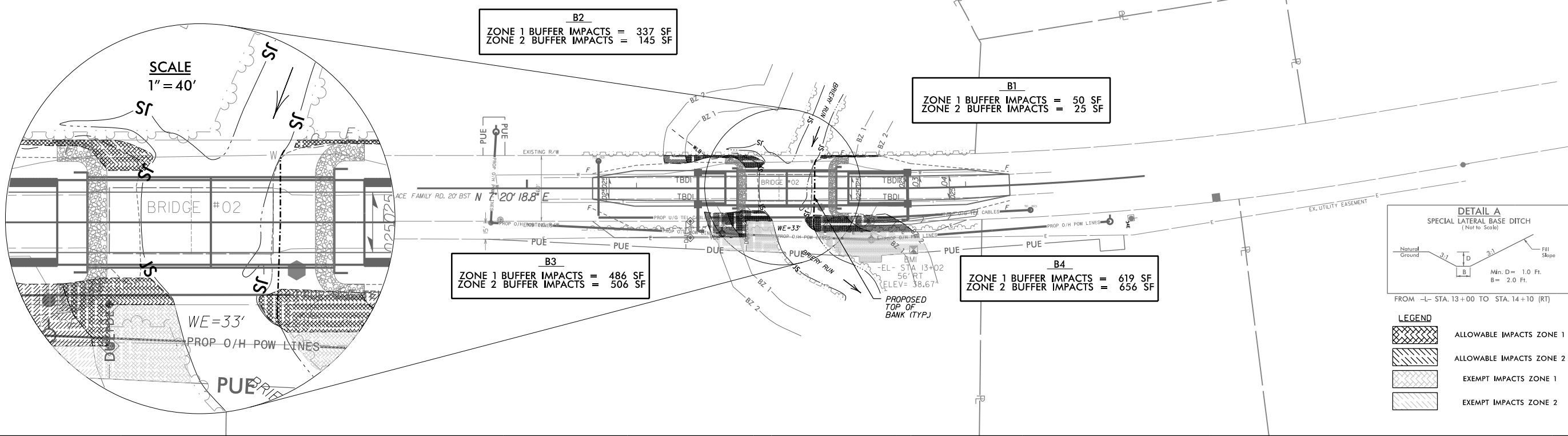
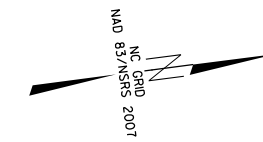
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BUFFER IMPACTS

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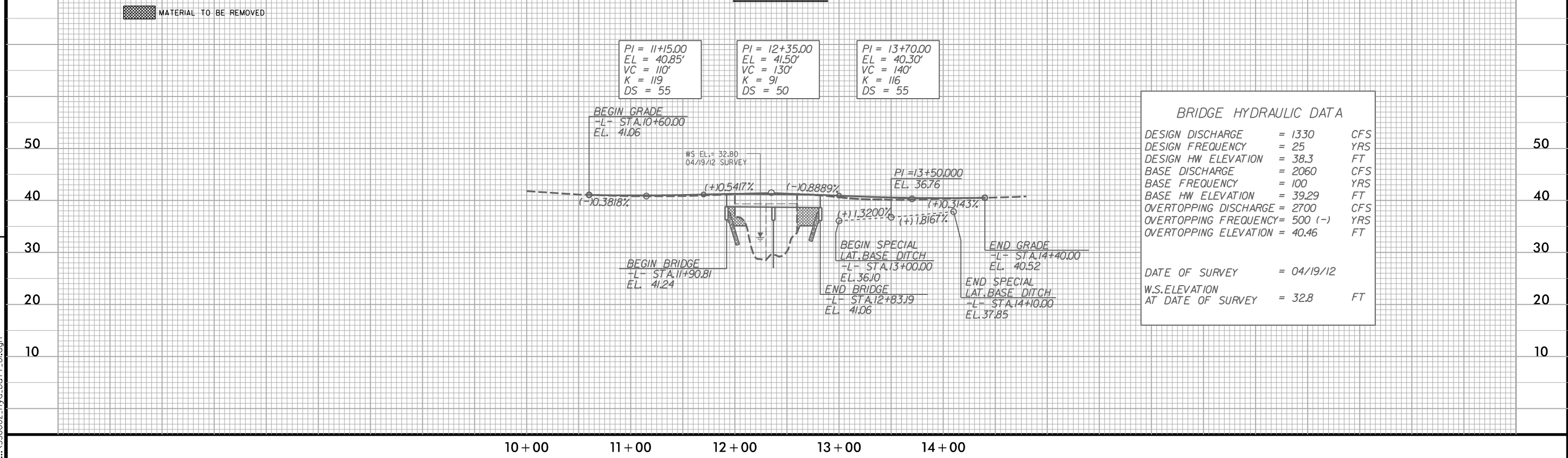
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| RW SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |



LEGEND

| | |
|--|--------------------------|
| | ALLOWABLE IMPACTS ZONE 1 |
| | ALLOWABLE IMPACTS ZONE 2 |
| | EXEMPT IMPACTS ZONE 1 |
| | EXEMPT IMPACTS ZONE 2 |

PROFILE



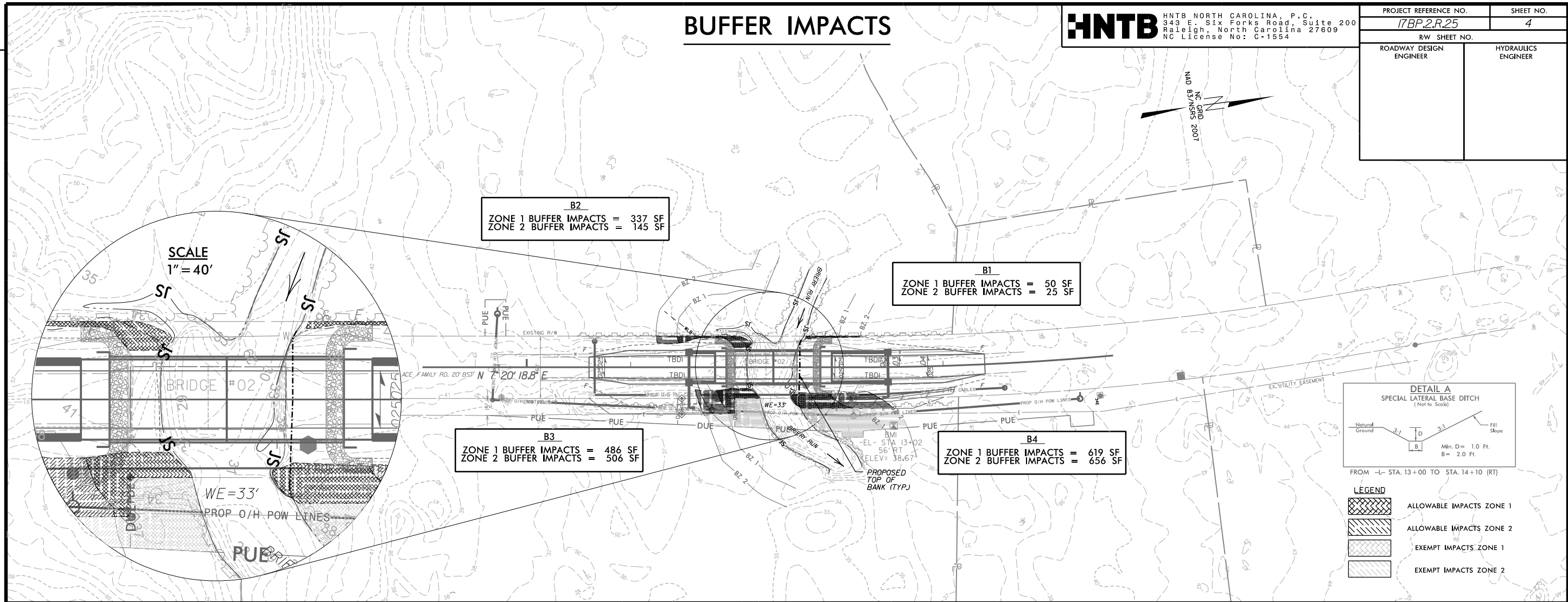
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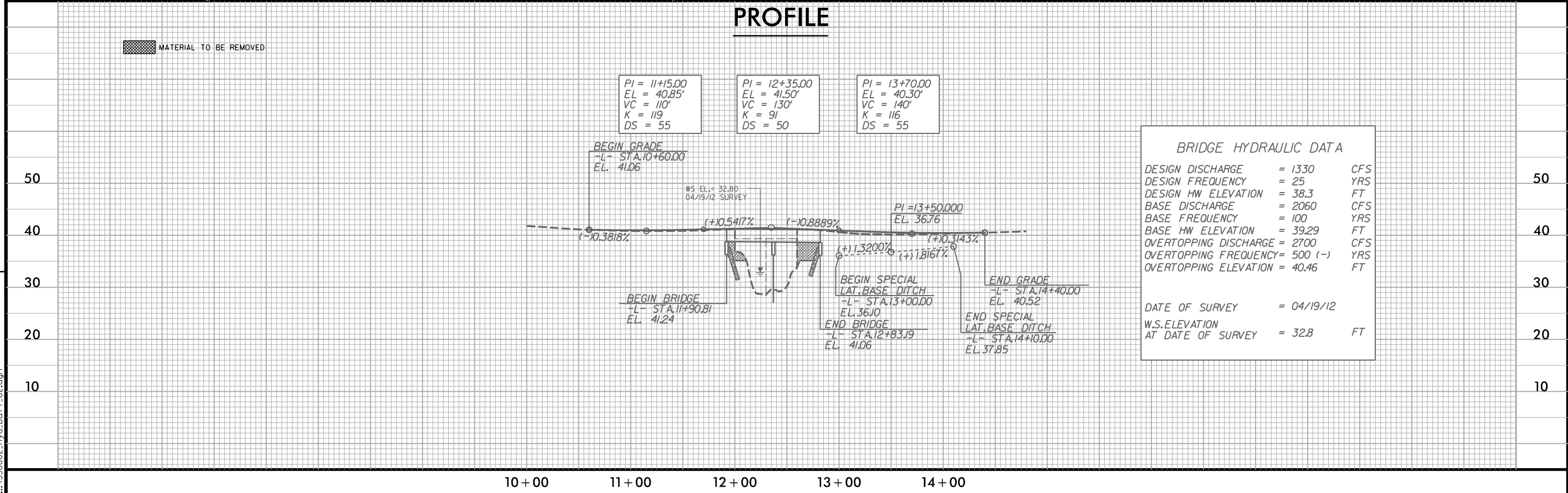
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