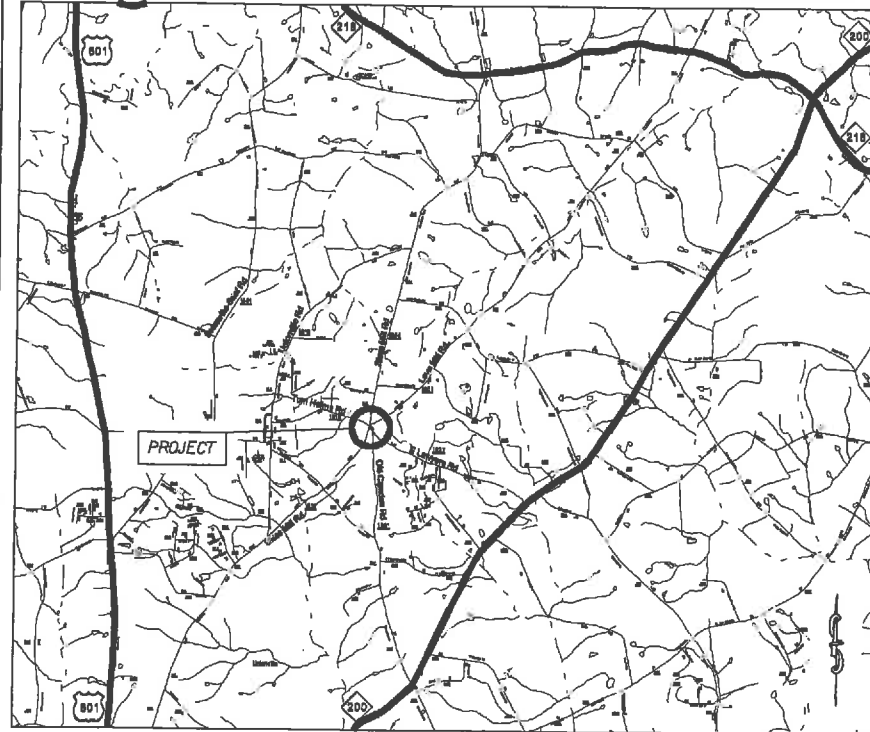


**TIP: W-5210F**  
**PROJECT: 45340.3.FD6**



VICINITY MAP NOT TO SCALE

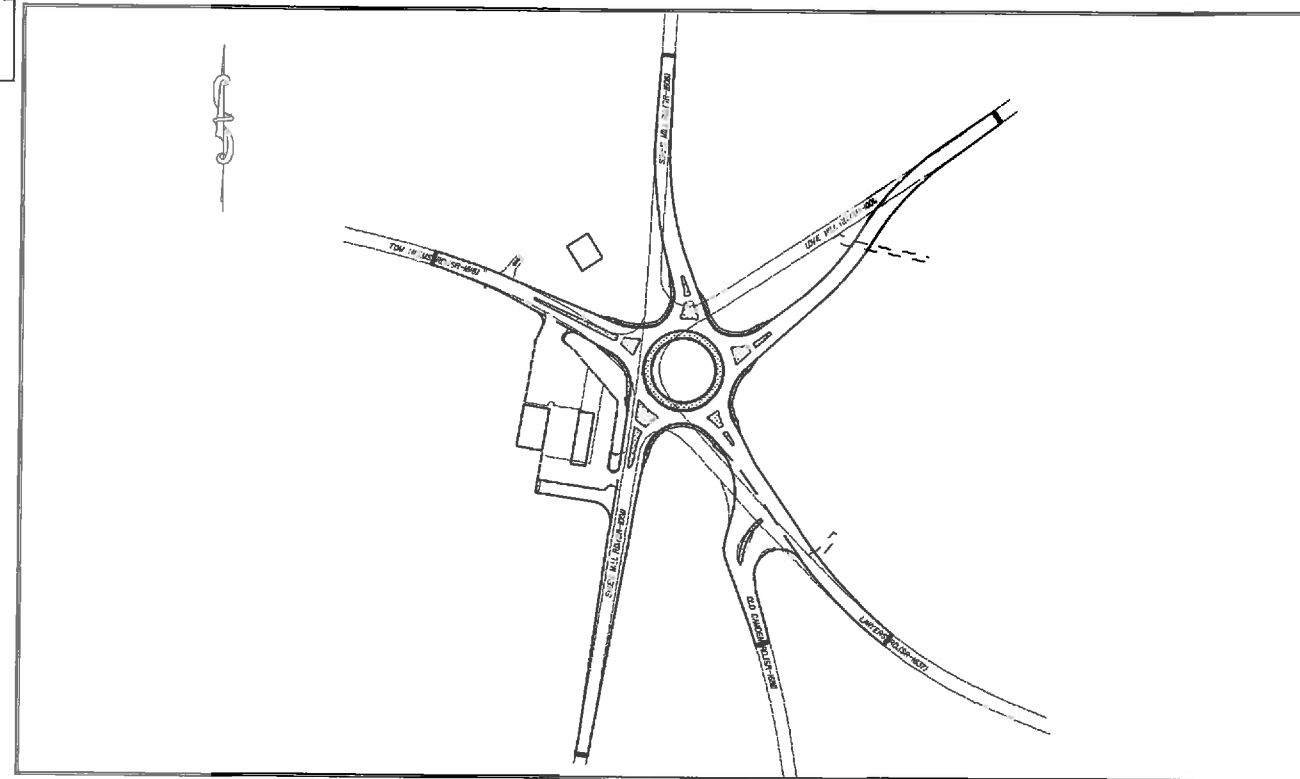
STATE OF NORTH CAROLINA  
 DIVISION OF HIGHWAYS  


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**UNION COUNTY**

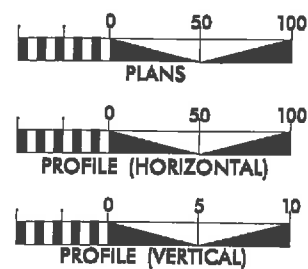
**LOCATION:** ROUNDABOUT AT SIKES MILL RD. (SR-1001), TOM HELMS RD. (SR-1618),  
 LOVE MILL RD. (SR-1001), AND LAWYERS RD. (SR-1637)

**TYPE OF WORK:** GRADING, PAVING, DRAINAGE, CONCRETE ISLANDS &  
 THERMOPLASTIC PAVEMENT MARKINGS



| STATE             | STATE PROJECT REFERENCE NO. | REPORT NO.  | TOTAL SHEETS |
|-------------------|-----------------------------|-------------|--------------|
| N.C.              | 45340.3.FD6                 | 1           |              |
| STATE PROJECT NO. | P.A. PROJECT NO.            | DESCRIPTION |              |
| 45340.1.6         |                             | P.S.        |              |
| 45340.2.FD6       |                             | R/W         |              |
| 45340.3.FD6       | HRRR-1001(58)               | CONST.      |              |
|                   |                             |             |              |
|                   |                             |             |              |

**GRAPHIC SCALES**



**DESIGN DATA**

ADT =  
 ADT =  
 DHV = %  
 D = %  
 T = %  
 V = MPH

**PROJECT LENGTH**

LENGTH OF ROADWAY PROJECT = 0.51 MILES  
 TOTAL LENGTH OF STATE PROJECT = 0.51 MILES

Prepared In the Office of:  
**DIVISION OF HIGHWAYS**  
 DIVISION TEN  
 DIVISION DESIGN / CONSTRUCT UNIT

RIGHT OF WAY DATE:

**RANDY BOWERS**  
PROJECT ENGINEER

LETTING DATE:  
 JUNE 4, 2014

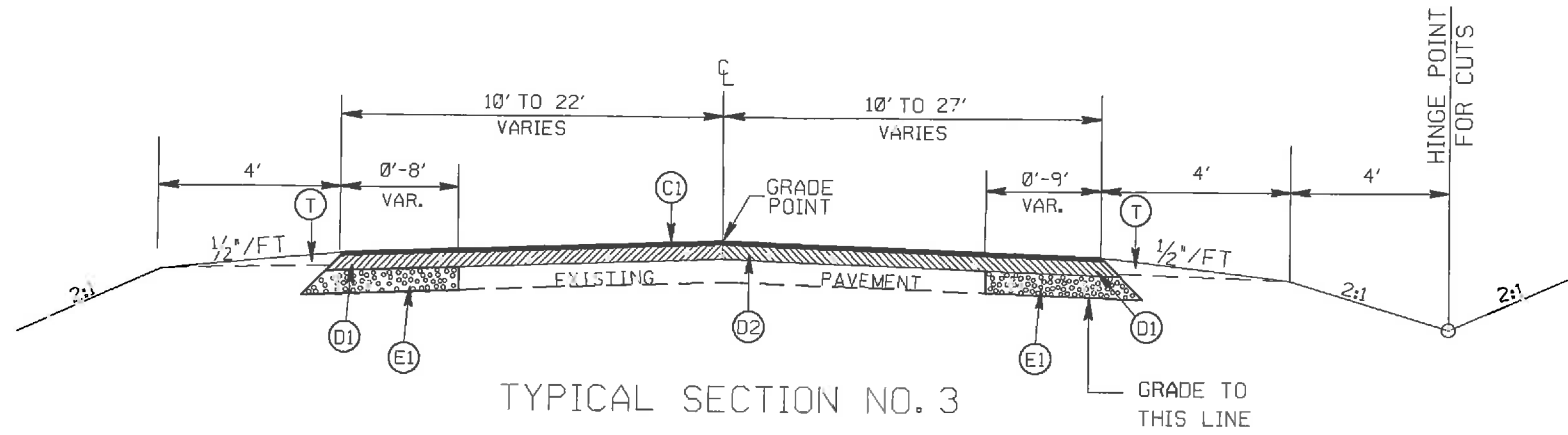
**TERRY BURLESON**  
PROJECT DESIGN ENGINEER



DIVISION OF HIGHWAYS  
 STATE OF NORTH CAROLINA

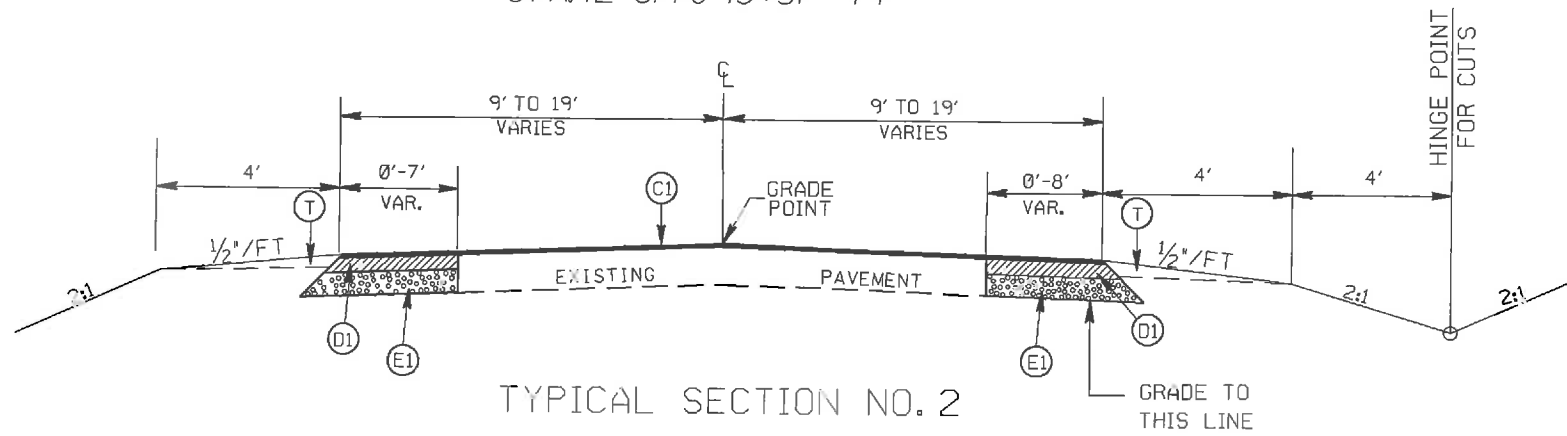
APPROVED BY \_\_\_\_\_ DATE \_\_\_\_\_

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| STATE            | PROJECT NO. | SHEET NO. | TOTAL SHEETS |
| N.C.             | 45740.3.FD6 | 2         |              |
| F.A. PROJECT NO. |             |           |              |



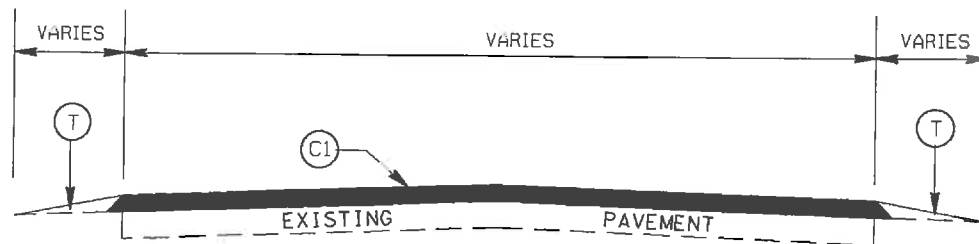
TYPICAL SECTION NO. 3

STA. 14+21 TO 14+63 -L1-  
 STA. 13+62.92 TO 13+93.47 -L2-  
 STA. 12+05 TO 13+10 -Y1-  
 STA. 14+25 TO 14+50 -Y3-  
 STA. 12+61 TO 13+57 -Y4-



TYPICAL SECTION NO. 2

STA. 10+38 TO 14+21 -L1-  
 STA. 11+65.50 TO 12+05 -Y1-  
 STA. 14+59.44 TO 15+34.44 -Y2-  
 STA. 14+50 TO 15+00 -Y3-



TYPICAL SECTION NO. 1

STA. 10+13 TO 10+38 -L1-  
 STA. 13+93.47 TO 14+18.47 -L2-  
 STA. 11+40.50 TO 11+65.50 -Y1-  
 STA. 15+34.44 TO 15+59.44 -Y2-  
 STA. 15+00 TO 15+25 -Y3-  
 STA. 12+25 TO 12+61 -Y4-

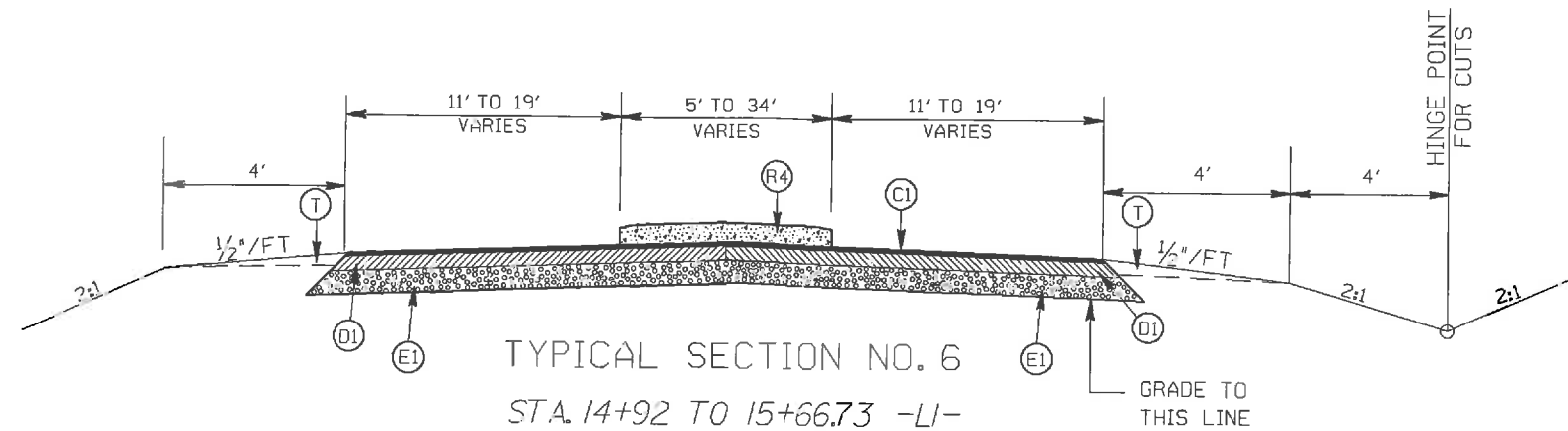
PAVEMENT SCHEDULE

|      |  |
|------|--|
| (C1) | PROP. APPROX. 1 1/2" ASPHALT CONC. SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.                    |
| (C2) | PROP. VARIABLE DEPTH ASPHALT CONC. SURFACE COURSE.   |
| (D1) | PROP. APPROX. 2.5" ASPHALT CONC. BINDER COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD.                      |
| (D2) | PROP. VARIABLE DEPTH ASPHALT CONC. BINDER COURSE.  |
| (E1) | PROP. APPROX. 3.0" ASPHALT CONC. BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 342 LBS. PER SQ. YD. IN EACH OF TWO LAYERS. |
| (E2) | PROP. APPROX. 3.0" ASPHALT CONC. BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 342 LBS. PER SQ. YD.                        |
| (E3) | PROP. VARIABLE DEPTH ASPHALT CONC. BASE COURSE.  |
| (R1) | PROP. 2'-6" CURB & GUTTER  |
| (R2) | PROP. 1'-6" CURB & GUTTER W/ BLACK TINT, CLASS AA CONCRETE   |
| (R3) | PROP. 7" TRUCK MOUNTABLE CONC ISLAND W/ BLACK TINT, CLASS AA CONCRETE  |
| (R4) | PROP. 5' MONOLITHIC CONCRETE ISLAND  |
| (J)  | PROPOSED 6" AGGREGATE BASE COURSE  |
| (T)  | EARTH MATERIAL   |

ROUNDBOUT AT SIKES MILL RD.(SR-1606)  
 AND TOM HELMS RD.(SR-1618)  
 AND LOVE MILL RD.(SR-1001)  
 AND LAWYERS RD.(SR-1637)

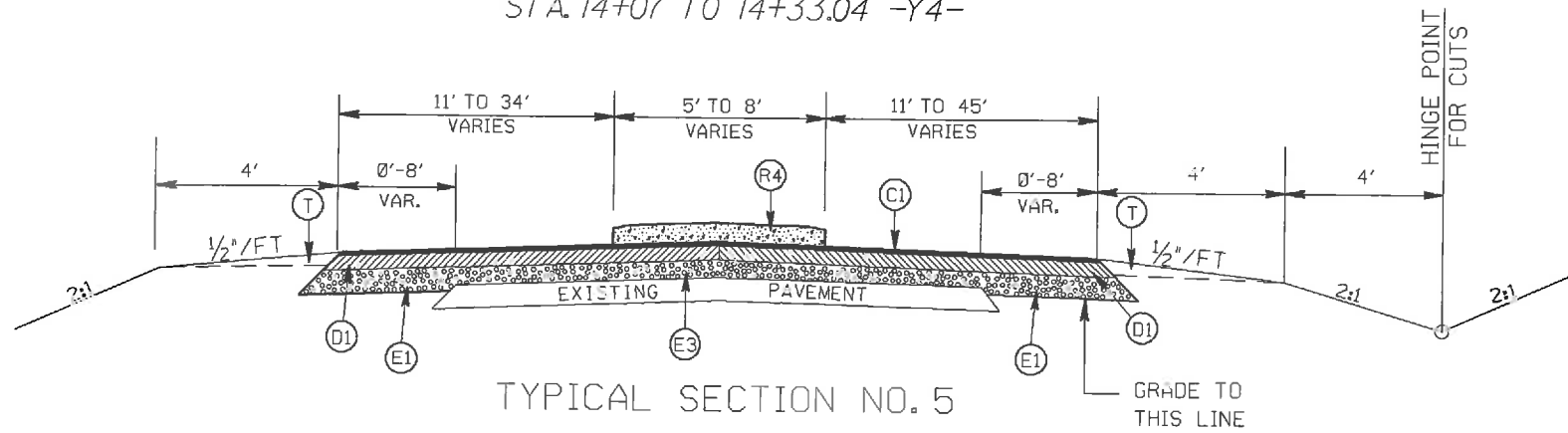
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| SCALE     | -NA- |  | REVISIONS |
| DATE      | 1-14 |   |           |
| DWG. BY   | JDH  |   |           |
| DESIGN BY | JDH  |   |           |
| APPROVED  | RWB  |   |           |

|                  |             |           |              |
|------------------|-------------|-----------|--------------|
| STATE            | PROJECT NO. | SHEET NO. | TOTAL SHEETS |
| N.C.             | 45340.3.FD6 | 2A        |              |
| F.A. PROJECT NO. |             |           |              |



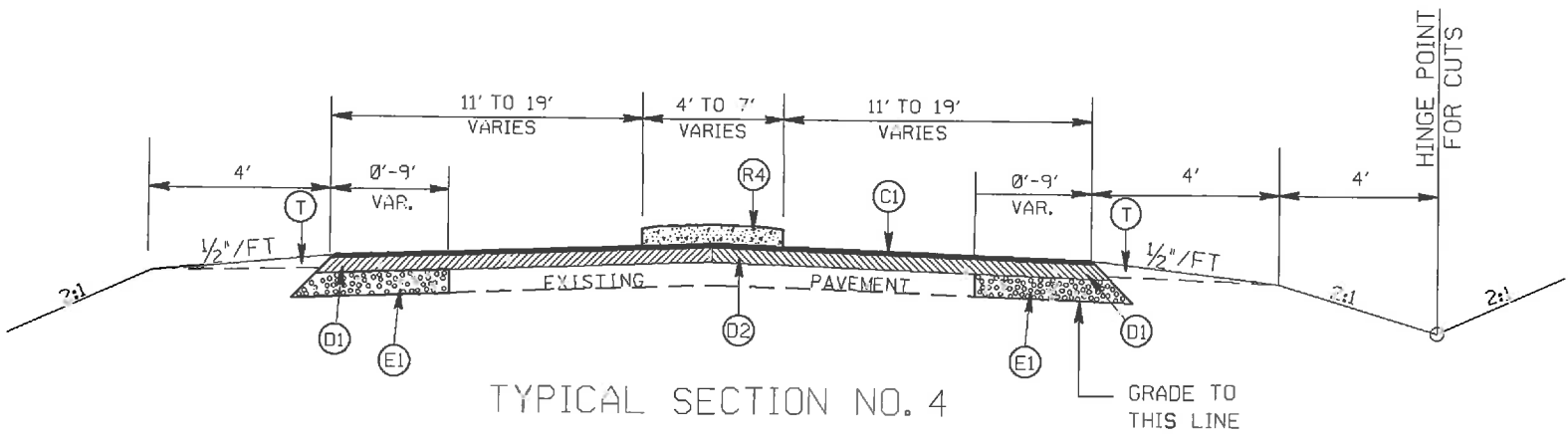
TYPICAL SECTION NO. 6

STA. 14+92 TO 15+66.73 -L1-  
 STA. 10+00 TO 10+71.46 -L2-  
 STA. 13+71 TO 14+86.82 -Y1-  
 STA. 10+00 TO 10+71.46 -Y2-  
 STA. 10+80 TO 11+38.59 -Y3-  
 STA. 14+07 TO 14+33.04 -Y4-



TYPICAL SECTION NO. 5

STA. 14+75 TO 14+92 -L1-  
 STA. 13+72 TO 14+07 -Y4-



TYPICAL SECTION NO. 4

STA. 14+63 TO 14+75 -L1-  
 STA. 13+10 TO 13+71 -Y1-  
 STA. 13+57 TO 13+72 -Y4-

PAVEMENT SCHEDULE

|      |  |
|------|--|
| (C1) | PROP. APPROX. 1 1/2" ASPHALT CONC. SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.                    |
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| (D1) | PROP. APPROX. 2.5" ASPHALT CONC. BINDER COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD.                      |
| (D2) | PROP. VARIABLE DEPTH ASPHALT CONC. BINDER COURSE.  |
| (E1) | PROP. APPROX. 3.0" ASPHALT CONC. BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 342 LBS. PER SQ. YD. IN EACH OF TWO LAYERS. |
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| (J)  | PROPOSED 6" AGGREGATE BASE COURSE  |
| (T)  | EARTH MATERIAL   |

ROUNDBOUT AT SIKES MILL RD.(SR-1606)  
 AND TOM HELMS RD.(SR-1618)  
 AND LOVE MILL RD.(SR-1001)  
 AND LAWYERS RD.(SR-1637)

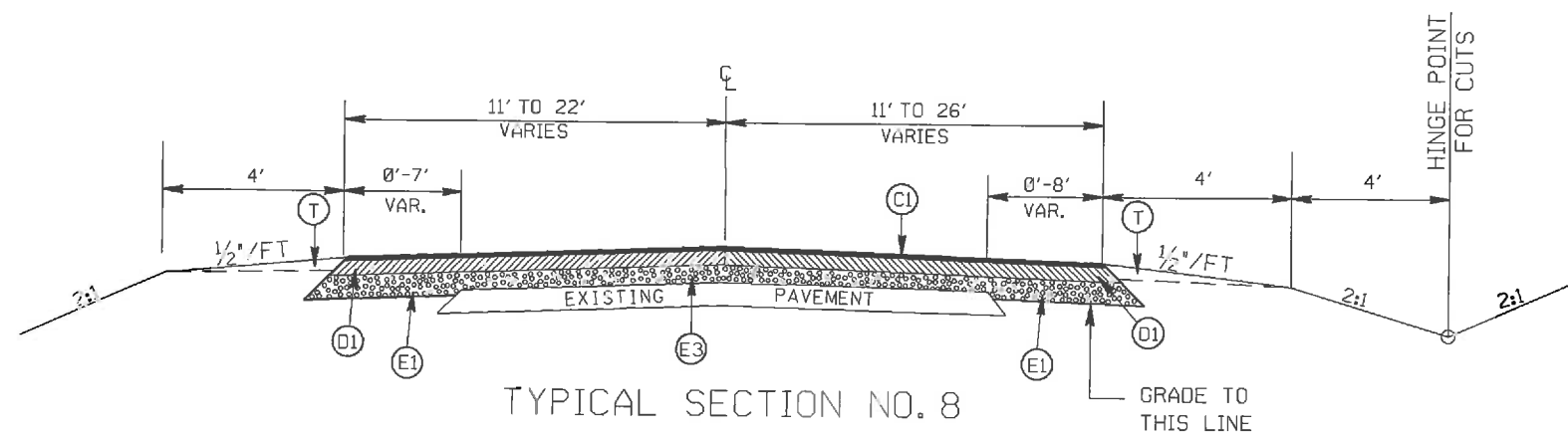
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| SCALE     | -N/A- |
| DATE      | 1-14  |
| DWG. BY   | JDH   |
| DESIGN BY | JDH   |
| APPROVED  | RWB   |



REVISIONS

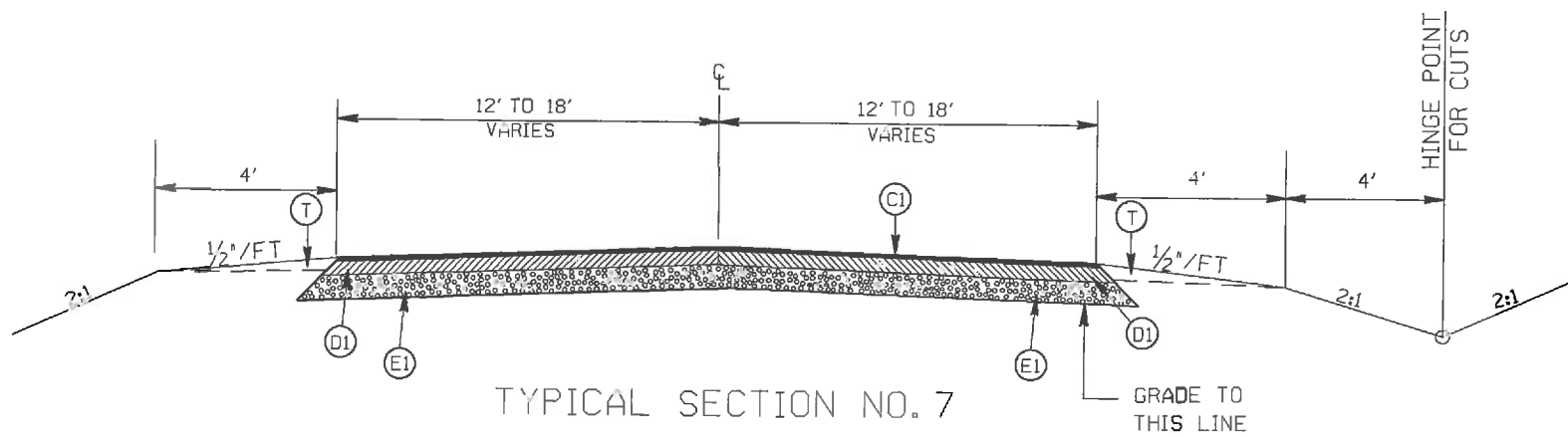
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|------------------|-------------|-----------|--------------|
| STATE            | PROJECT NO. | SHEET NO. | TOTAL SHEETS |
| N.C.             | 15340.3.F06 | 28        |              |
| F.A. PROJECT NO. |             |           |              |



TYPICAL SECTION NO. 8

STA. 12+93.47 TO 13+62.92 -L2-  
 STA. 13+72 TO 14+07.59 -Y4-



TYPICAL SECTION NO. 7

STA. 10+71.46 TO 12+93.47 -L2-  
 STA. 10+71.46 TO 14+59.44 -Y2-  
 STA. 11+38.59 TO 14+25 -Y3-  
 STA. 14+33.04 TO 14+48.05 -Y4-

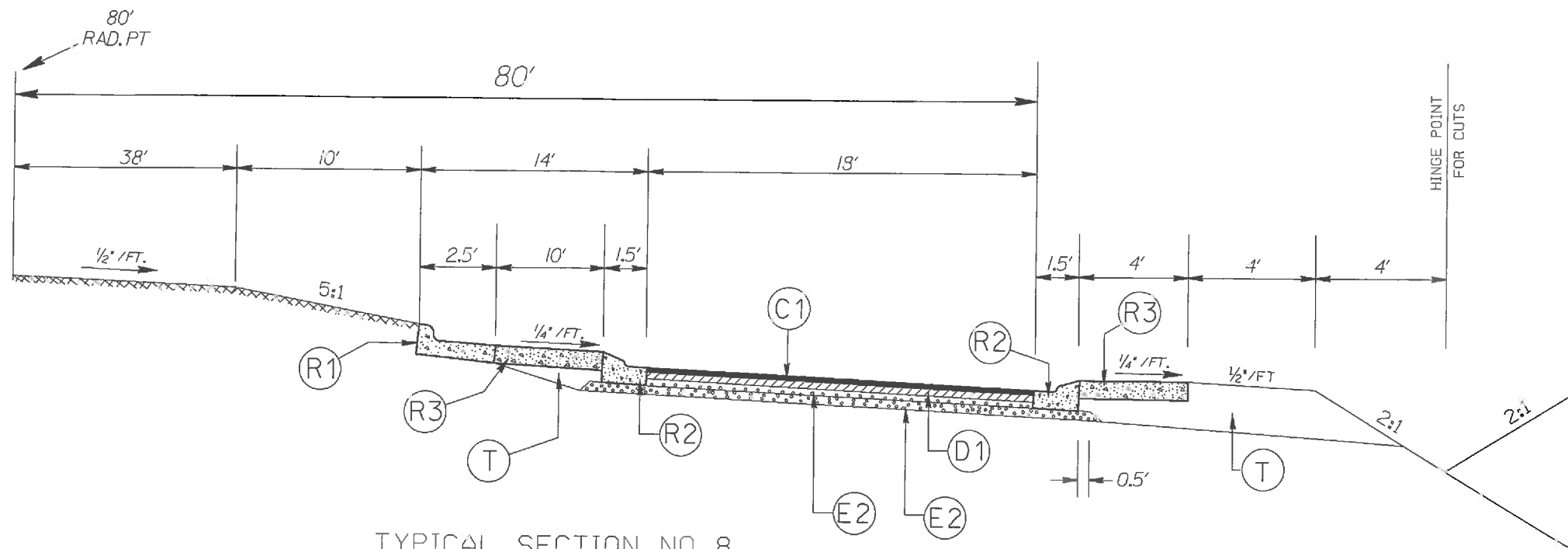
PAVEMENT SCHEDULE

|      |  |
|------|--|
| (C1) | PROP. APPROX. 1½" ASPHALT CONC. SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.                       |
| (C2) | PROP. VARIABLE DEPTH ASPHALT CONC. SURFACE COURSE.   |
| (D1) | PROP. APPROX. 2.5" ASPHALT CONC. BINDER COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD.                      |
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| (E1) | PROP. APPROX. 3.0" ASPHALT CONC. BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 342 LBS. PER SQ. YD. IN EACH OF TWO LAYERS. |
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| (J)  | PROPOSED 6" AGGREGATE BASE COURSE  |
| (T)  | EARTH MATERIAL   |

ROUNDBOUT AT SIKES MILL RD.(SR-1606)  
 AND TOM HELM'S RD.(SR-1618)  
 AND LOVE MILL RD.(SR-1001)  
 AND LAWYERS RD.(SR-1637)

|           |      |  |           |
|-----------|------|--|-----------|
| SCALE     | -NA- |  | REVISIONS |
| DATE      | 1-14 |  |           |
| DWG. BY   | JDH  |  |           |
| DESIGN BY | JDH  |  |           |
| APPROVED  | RWB  |  |           |

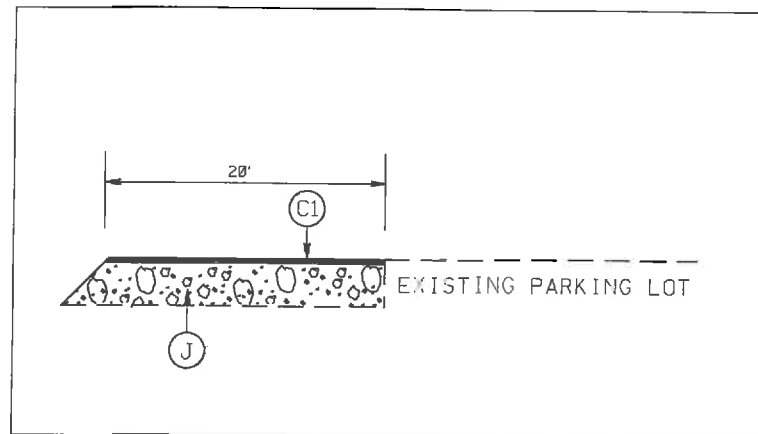
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| STATE            | PROJECT NO. | SHEET NO. | TOTAL SHEETS |
| N.C.             | 45340.3.FD6 | 2C        |              |
| F.A. PROJECT NO. |             |           |              |



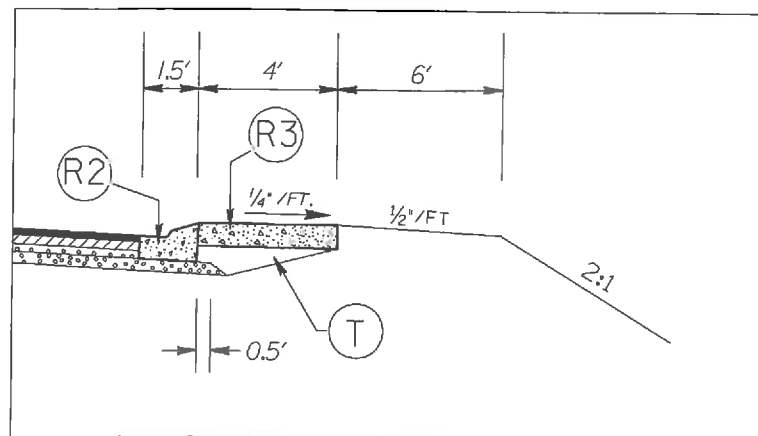
TYPICAL SECTION NO. 8  
ROUNDBOUT

PAVEMENT SCHEDULE

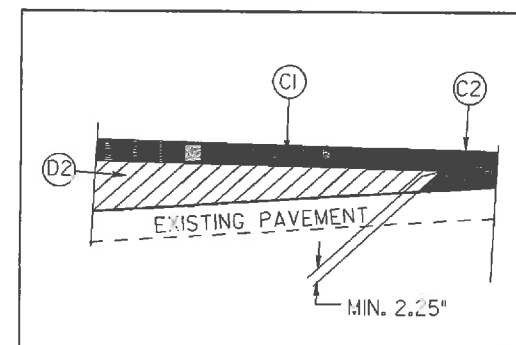
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|------|--|
| (C1) | PROP. APPROX. 1½" ASPHALT CONC. SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.                       |
| (C2) | PROP. VARIABLE DEPTH ASPHALT CONC. SURFACE COURSE.   |
| (D1) | PROP. APPROX. 2.5" ASPHALT CONC. BINDER COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD.                      |
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| (R3) | PROP. 7" TRUCK MOUNTABLE CONC ISLAND W/ BLACK TINT, CLASS AA CONCRETE  |
| (R4) | PROP. 5" MONOLITHIC CONCRETE ISLAND  |
| (J)  | PROPOSED 6" AGGREGATE BASE COURSE  |
| (T)  | EARTH MATERIAL   |



PARKING LOT DETAIL



APRON DETAIL



WEDGING DETAIL

ROUNDBOUT AT SIKES MILL RD.(SR-1606)  
AND TOM HELMS RD.(SR-1618)  
AND LOVE MILL RD.(SR-1001)  
AND LAWYERS RD.(SR-1637)

|           |      |
|-----------|------|
| SCALE     | -NA- |
| DATE      | 1-14 |
| DWG. BY   | JDH  |
| DESIGN BY | JDH  |
| APPROVED  | RWB  |



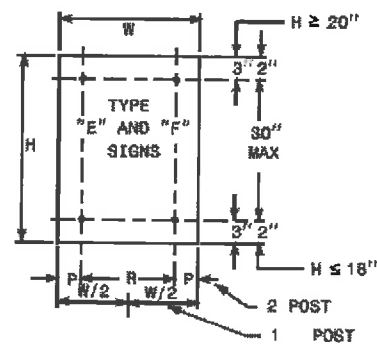
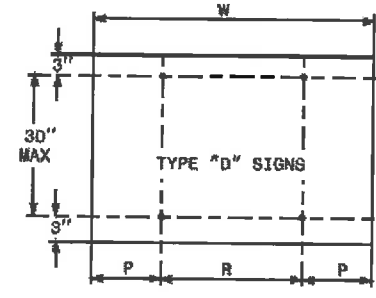
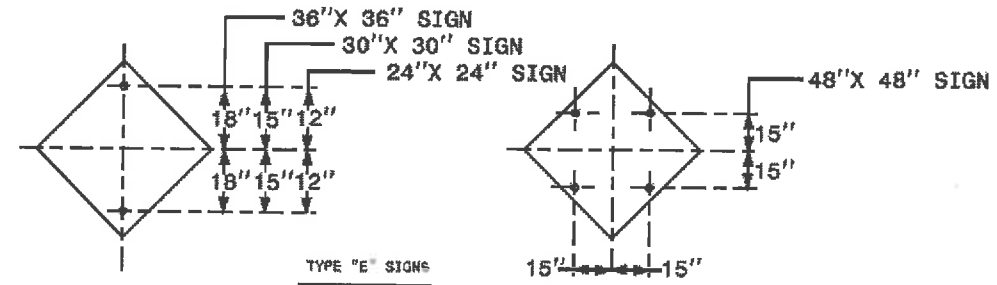
| REVISIONS |  |
|-----------|--|
|           |  |
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|                  |             |           |              |
|------------------|-------------|-----------|--------------|
| STATE            | PROJECT NO. | SHEET NO. | TOTAL SHEETS |
| N.C.             | 45340.J.FDE | 2D        |              |
| F.A. PROJECT NO. |             |           |              |

STATE OF NORTH CAROLINA  
DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
RALEIGH, N.C.

1-12

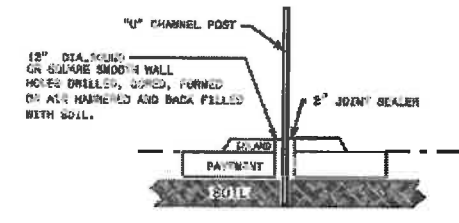
ENGLISH STANDARD DRAWING FOR  
MOUNTING OF  
TYPE 'D', 'E' AND 'F' SIGNS  
ON 'U' CHANNEL POSTS



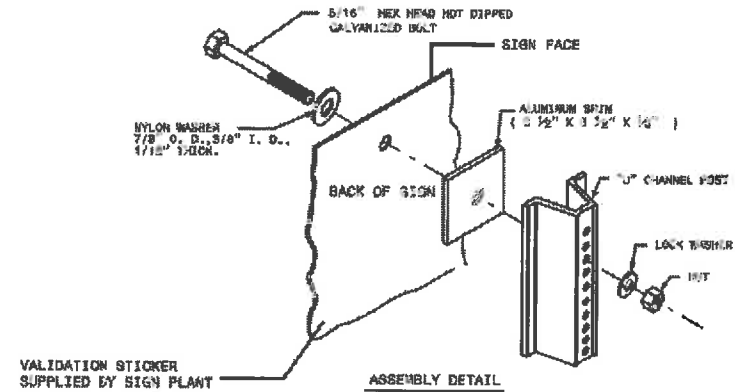
|   | NO. SUPPORTS |       |       |
|---|--------------|-------|-------|
|   | 2            | 3 *   | 4     |
| P | .207W        | .145W | .107W |
| R | .586W        | .355W | .262W |

UNITS ON ATTACHED SHEET  
\* MINIMUM 4 FT. BETWEEN CHANNEL POSTS

HOLE PUNCHING DETAIL



DETAIL FOR INSTALLATION OF CHANNEL POST IN CONCRETE



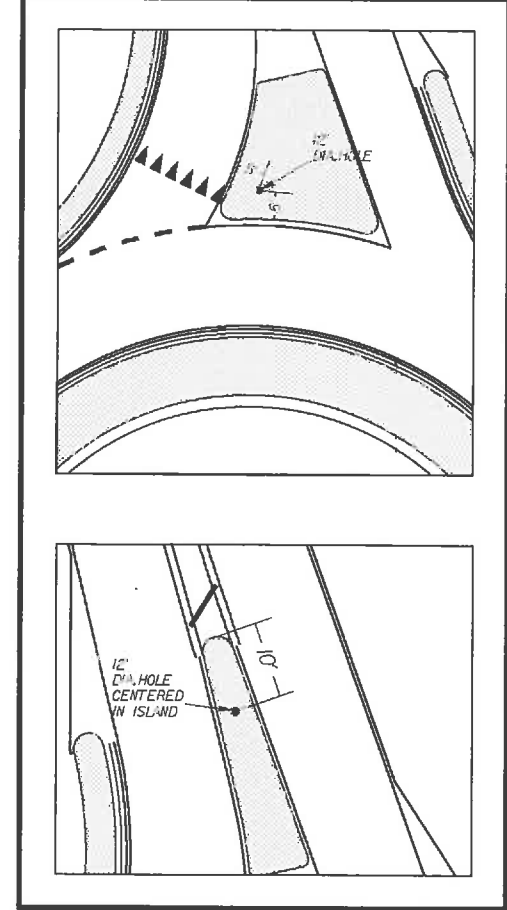
STATE OF NORTH CAROLINA  
DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
RALEIGH, N.C.

1-12

ENGLISH STANDARD DRAWING FOR  
MOUNTING OF  
TYPE 'D', 'E' AND 'F' SIGNS  
ON 'U' CHANNEL POSTS

SHEET 2 OF 2  
904.50

12" DIA. HOLE LOCATION FOR SIGN U-CHANNEL POST IN SPLITTER ISLANDS



SHEET 2 OF 2  
904.50

ROUNDBOUT AT SIKES MILL RD.(SR-1606)  
AND TOM HELMS RD.(SR-1618)  
AND LOVE MILL RD.(SR-1031)  
AND LAWYERS RD.(SR-1637)

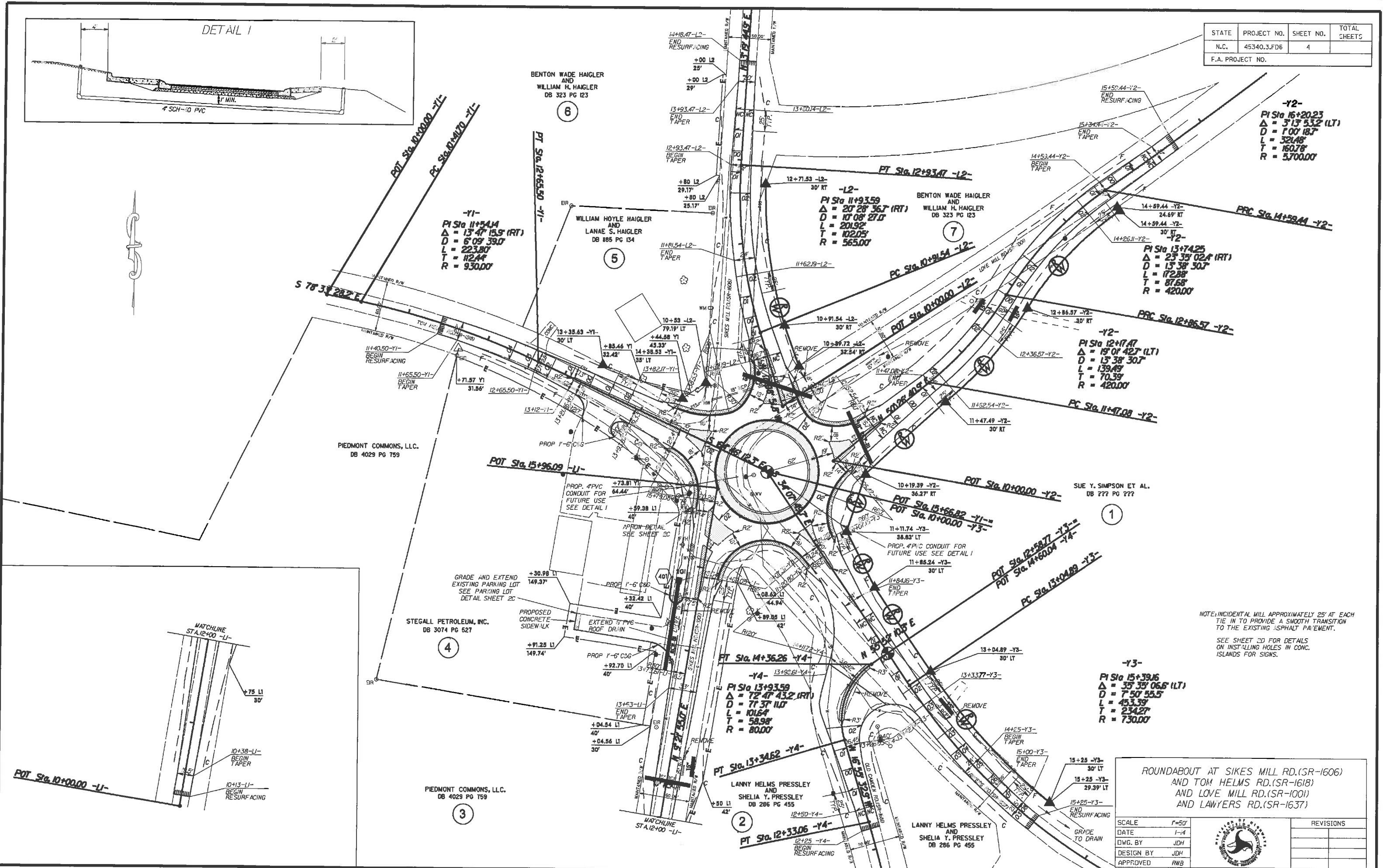
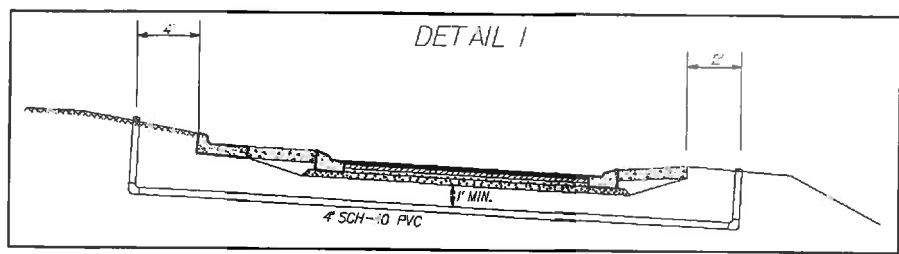
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| SCALE     | -N/- |
| DATE      | 1-14 |
| DWG. BY   | JDH  |
| DESIGN BY | JDH  |
| APPROVED  | RWE  |



| REVISIONS |  |
|-----------|--|
|           |  |
|           |  |
|           |  |



|                  |             |           |              |
|------------------|-------------|-----------|--------------|
| STATE            | PROJECT NO. | SHEET NO. | TOTAL SHEETS |
| N.C.             | 45340.3.FD6 | 4         |              |
| F.A. PROJECT NO. |             |           |              |



**-Y1-**  
 PI Sta 11+54.4  
 $\Delta = 13^{\circ} 47' 15.9''$  (RT)  
 $D = 6^{\circ} 09' 39.0''$   
 $L = 223.80'$   
 $T = 112.44'$   
 $R = 930.00'$

**-L2-**  
 PI Sta 11+93.59  
 $\Delta = 20^{\circ} 28' 36.7''$  (RT)  
 $D = 10^{\circ} 08' 27.0''$   
 $L = 201.92'$   
 $T = 102.05'$   
 $R = 565.00'$

**-Y2-**  
 PI Sta 16+20.23  
 $\Delta = 3^{\circ} 13' 53.2''$  (LT)  
 $D = 1^{\circ} 07' 18.7''$   
 $L = 321.48'$   
 $T = 160.78'$   
 $R = 3700.00'$

**-Y2-**  
 PI Sta 13+74.25  
 $\Delta = 25^{\circ} 33' 02.4''$  (RT)  
 $D = 15^{\circ} 38' 30.7''$   
 $L = 172.88'$   
 $T = 87.68'$   
 $R = 420.00'$

**-Y2-**  
 PI Sta 12+17.47  
 $\Delta = 18^{\circ} 07' 42.7''$  (LT)  
 $D = 15^{\circ} 38' 30.7''$   
 $L = 139.49'$   
 $T = 70.39'$   
 $R = 420.00'$

1

**-Y3-**  
 PI Sta 15+39.16  
 $\Delta = 35^{\circ} 35' 06.6''$  (LT)  
 $D = 7^{\circ} 50' 55.5''$   
 $L = 453.39'$   
 $T = 234.27'$   
 $R = 730.00'$

**-Y4-**  
 PI Sta 13+93.59  
 $\Delta = 72^{\circ} 47' 43.2''$  (RT)  
 $D = 7^{\circ} 37' 11.0''$   
 $L = 101.64'$   
 $T = 58.98'$   
 $R = 80.00'$

2

4

3

NOTE: INCIDENTAL MILL APPROXIMATELY 25' AT EACH TIE IN TO PROVIDE A SMOOTH TRANSITION TO THE EXISTING ASPHALT PAVEMENT.  
 SEE SHEET 3D FOR DETAILS ON INSTALLING HOLES IN CONC. ISLANDS FOR SIGNS.

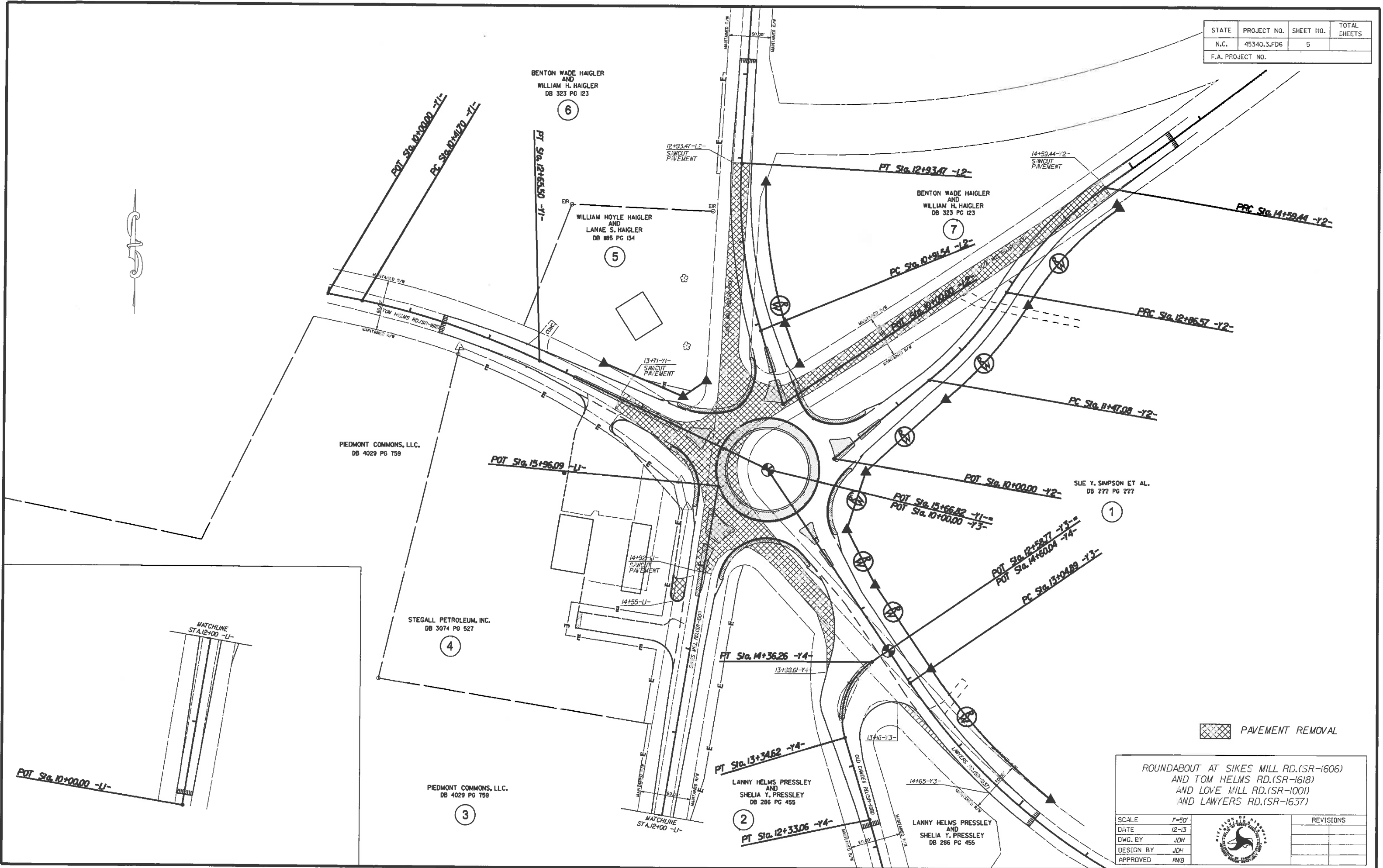
ROUNDABOUT AT SIKES MILL RD.(SR-1606) AND TOM HELMS RD.(SR-1618) AND LOVE MILL RD.(SR-1001) AND LAWYERS RD.(SR-1637)

|           |       |           |
|-----------|-------|-----------|
| SCALE     | F=50' | REVISIONS |
| DATE      | 1-14  |           |
| DWG. BY   | JDH   |           |
| DESIGN BY | JDH   |           |
| APPROVED  | RWB   |           |





|                  |             |           |              |
|------------------|-------------|-----------|--------------|
| STATE            | PROJECT NO. | SHEET NO. | TOTAL SHEETS |
| N.C.             | 45340.3.FD6 | 5         |              |
| F.A. PROJECT NO. |             |           |              |



PAVEMENT REMOVAL

ROUNDBOUT AT SIKES MILL RD.(SR-1606)  
AND TOM HELMS RD.(SR-1618)  
AND LOVE MILL RD.(SR-1001)  
AND LAWYERS RD.(SR-1637)

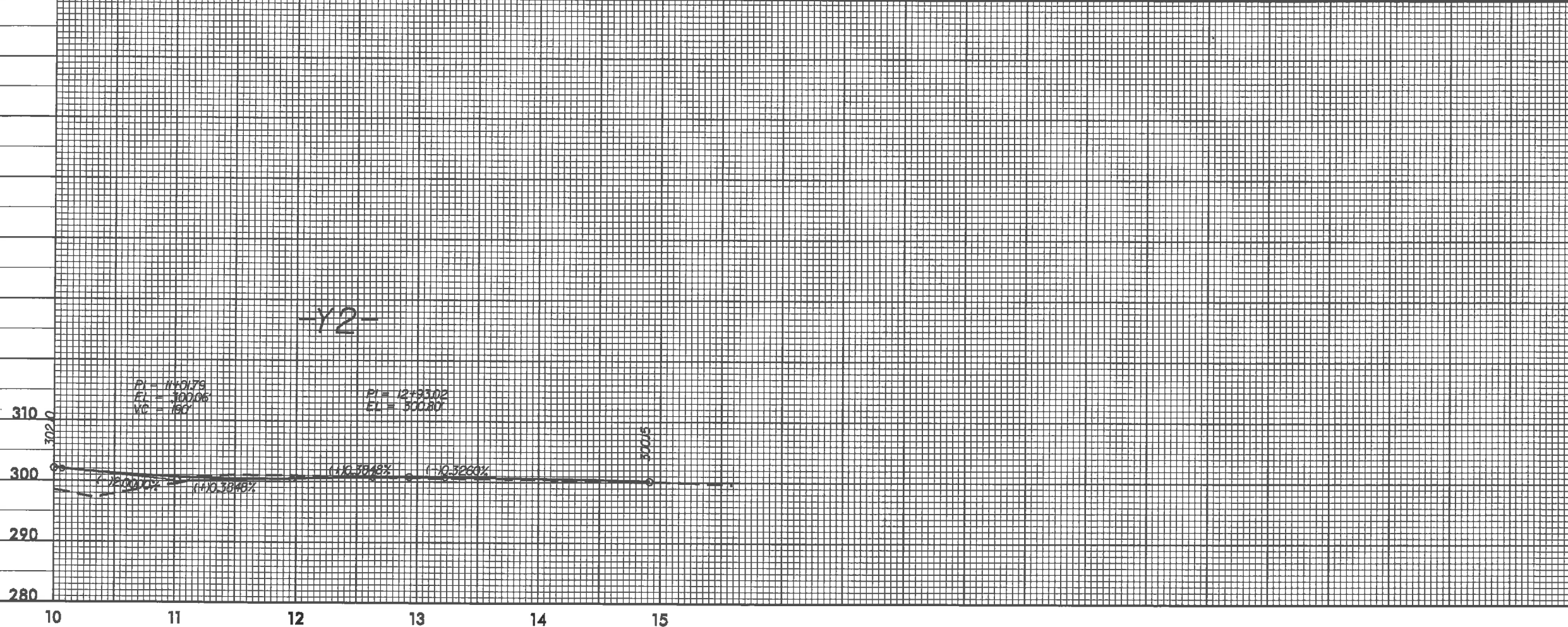
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|-----------|--------|
| SCALE     | 1"=50' |
| DATE      | 12-13  |
| DWG. BY   | JDH    |
| DESIGN BY | JDH    |
| APPROVED  | RWB    |



| NO. | REVISIONS |
|-----|-----------|
|     |           |
|     |           |
|     |           |

5/28/99

|                                     |                        |
|-------------------------------------|------------------------|
| PROJECT REFERENCE NO.<br>45340.3FD6 | SHEET NO.<br>7         |
| ROADWAY DESIGN<br>ENGINEER          | HYDRAULICS<br>ENGINEER |

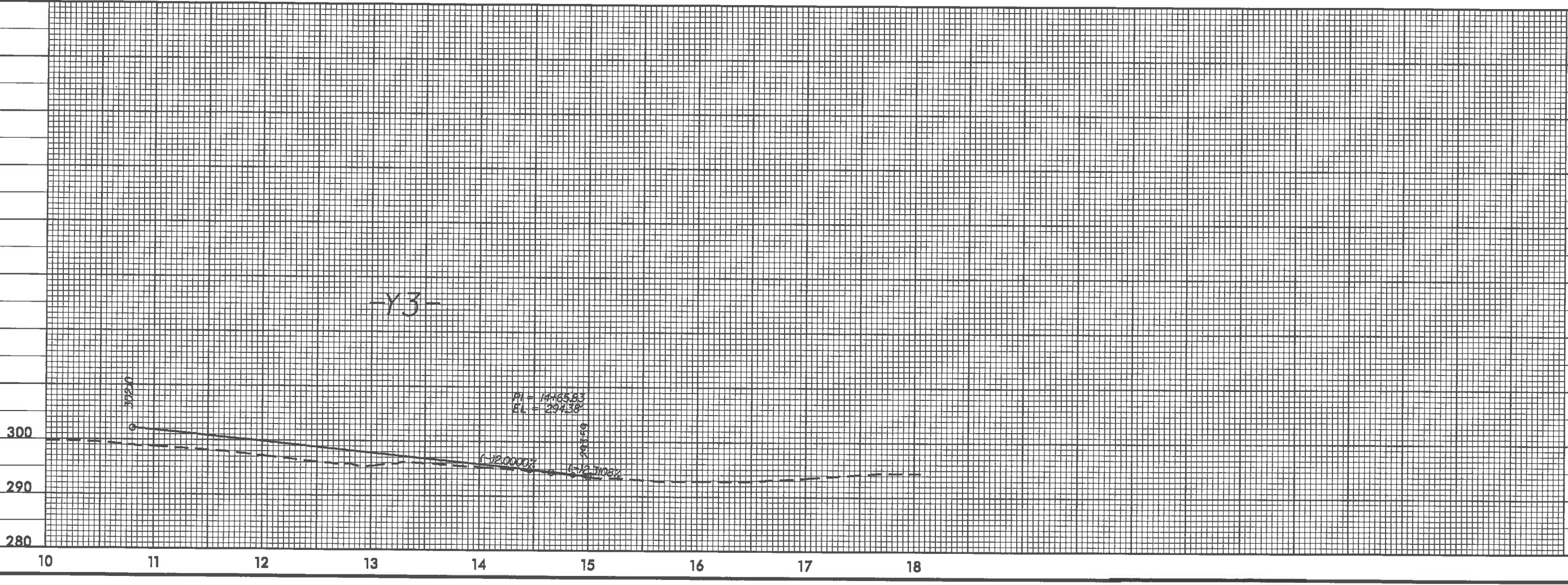
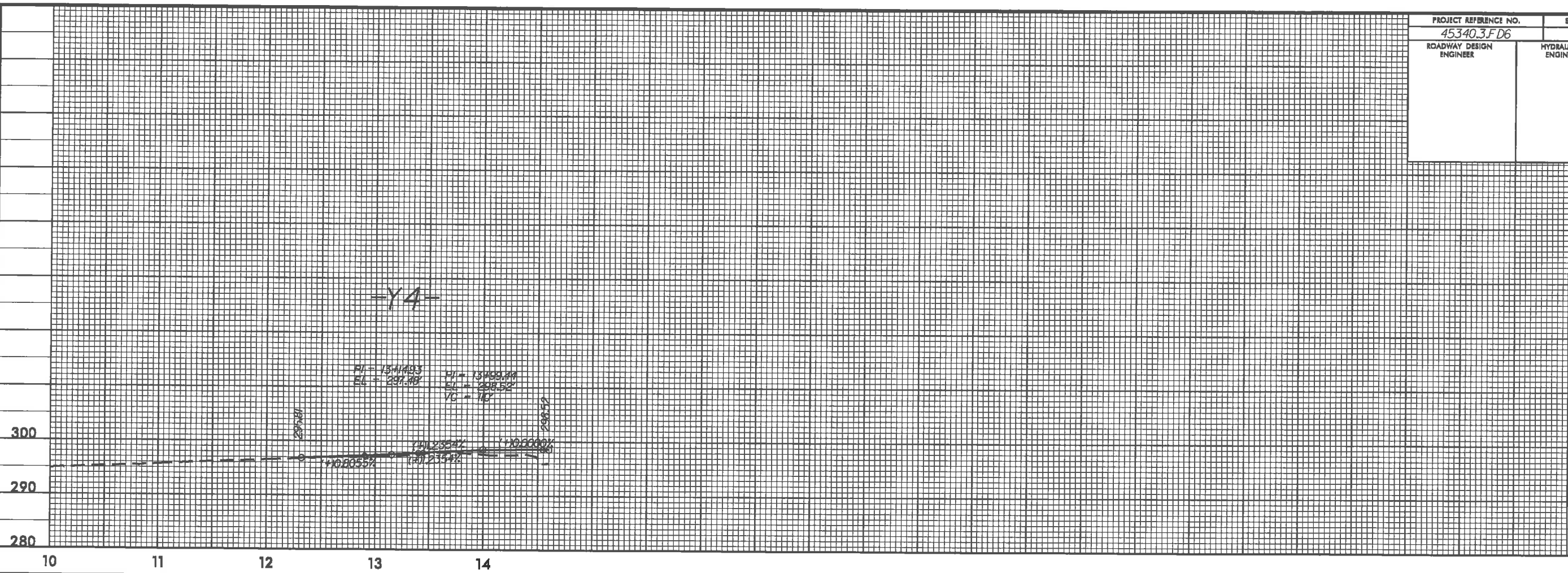


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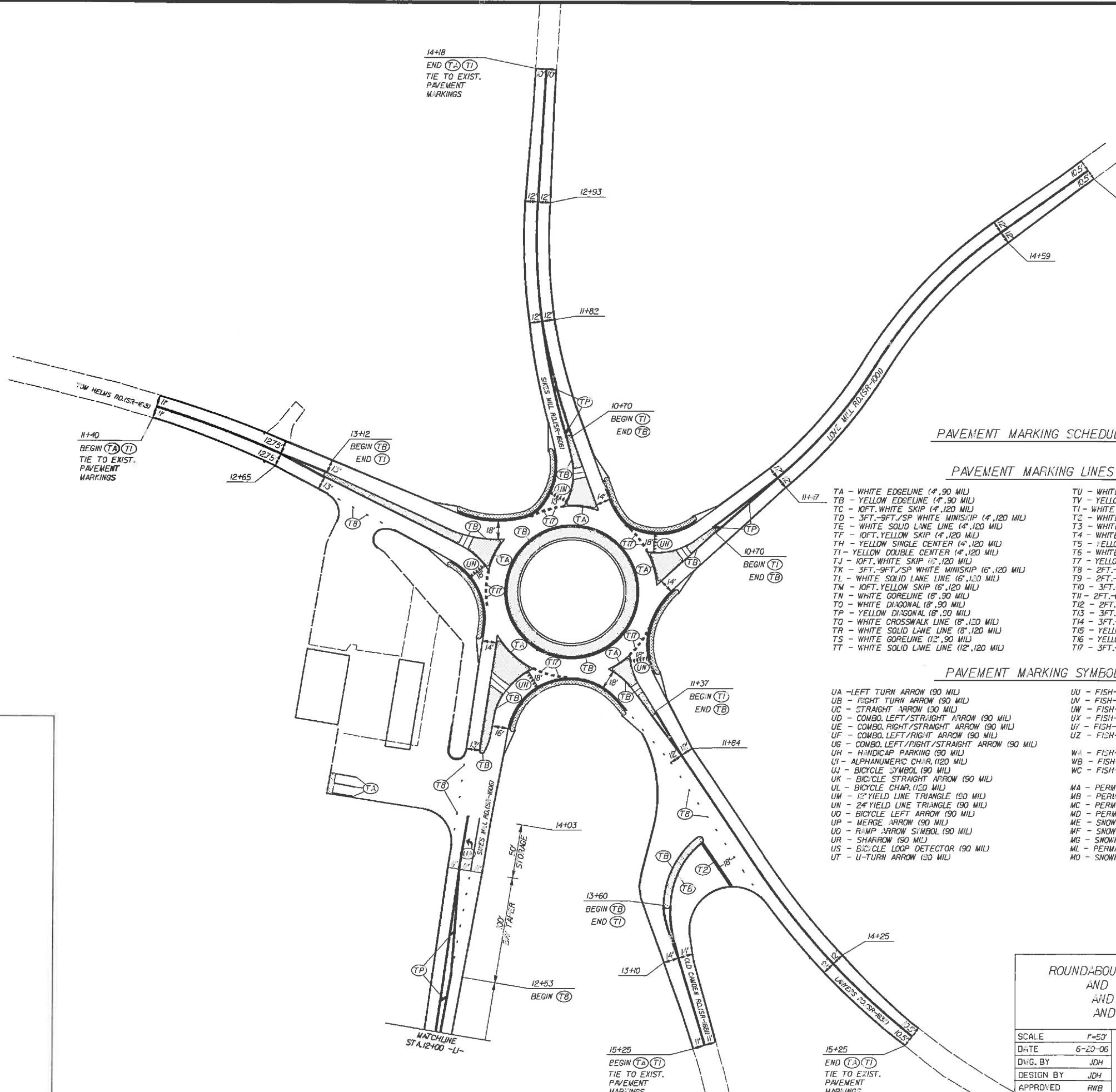
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|                                     |                     |
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| PROJECT REFERENCE NO.<br>45340.3FD6 | SHEET NO.<br>8      |
| ROADWAY DESIGN ENGINEER             | HYDRAULICS ENGINEER |



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| STATE            | PROJECT NO. | SHEET NO. | TOTAL SHEETS |
| N.C.             | 45340.3.FD6 | PMP-1     |              |
| F.A. PROJECT NO. |             |           |              |



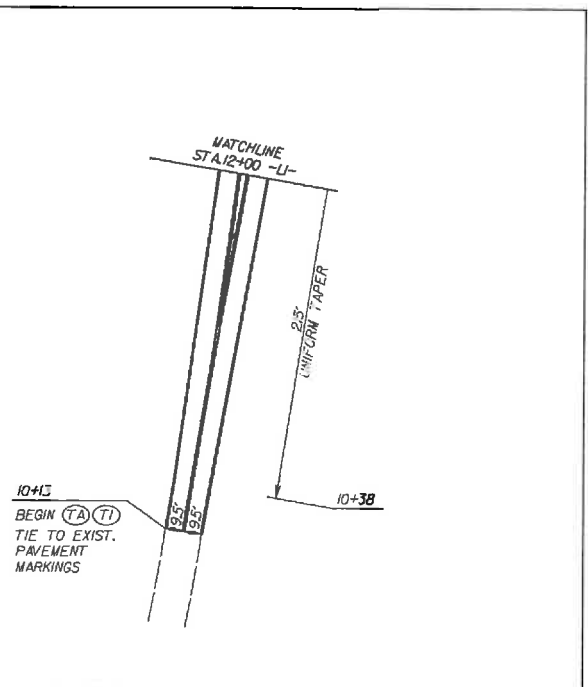
PAVEMENT MARKING SCHEDULE

PAVEMENT MARKING LINES

- TA - WHITE EDGELINE (4', 90 MIL)
- TB - YELLOW EDGELINE (4', 90 MIL)
- TC - 10FT. WHITE SKIP (4', 120 MIL)
- TD - 3FT.-9FT./SP WHITE MINISKIP (4', 120 MIL)
- TE - WHITE SOLID LANE LINE (4', 120 MIL)
- TF - 10FT. YELLOW SKIP (4', 120 MIL)
- TH - YELLOW SINGLE CENTER (4', 120 MIL)
- TI - YELLOW DOUBLE CENTER (4', 120 MIL)
- TJ - 10FT. WHITE SKIP (6', 120 MIL)
- TK - 3FT.-9FT./SP WHITE MINISKIP (6', 120 MIL)
- TL - WHITE SOLID LANE LINE (6', 120 MIL)
- TM - 10FT. YELLOW SKIP (6', 120 MIL)
- TN - WHITE GORELINE (6', 90 MIL)
- TO - WHITE DIAGONAL (8', 90 MIL)
- TP - YELLOW DIAGONAL (8', 90 MIL)
- TQ - WHITE CROSSWALK LINE (8', 120 MIL)
- TR - WHITE SOLID LANE LINE (8', 120 MIL)
- TS - WHITE GORELINE (12', 90 MIL)
- TT - WHITE SOLID LANE LINE (12', 120 MIL)
- TU - WHITE DIAGONAL (12', 90 MIL)
- TV - YELLOW DIAGONAL (12', 90 MIL)
- TI - WHITE LINE, RR X (16', 120 MIL)
- T2 - WHITE STOPBAR (24', 120 MIL)
- T3 - WHITE CROSSWALK LINE (24', 120 MIL)
- T4 - WHITE RUMBLE STRIP (4', 240 MIL)
- T5 - YELLOW RUMBLE STRIP (4', 240 MIL)
- T6 - WHITE EDGELINE (6', 90 MIL)
- T7 - YELLOW EDGELINE (6', 90 MIL)
- T8 - 2FT.-6FT./SP WHITE MINISKIP (4', 120 MIL)
- T9 - 2FT.-6FT./SP YELLOW MINISKIP (4', 120 MIL)
- T10 - 3FT.-3FT./SP WHITE MINISKIP (12', 120 MIL)
- T11 - 2FT.-6FT./SP WHITE MINISKIP (6', 120 MIL)
- T12 - 2FT.-6FT./SP YELLOW MINISKIP (6', 120 MIL)
- T13 - 3FT.-9FT./SP WHITE MINISKIP (6', 120 MIL)
- T14 - 3FT.-9FT./SP WHITE MINISKIP (12', 120 MIL)
- T15 - YELLOW SINGLE CENTER (6', 120 MIL)
- T16 - YELLOW DOUBLE CENTER (6', 120 MIL)
- T17 - 3FT.-3FT./SP WHITE MINISKIP ENTRANCE LINE (12', 120 MIL)

PAVEMENT MARKING SYMBOLS

- UA - LEFT TURN ARROW (90 MIL)
- UB - RIGHT TURN ARROW (90 MIL)
- UC - STRAIGHT ARROW (90 MIL)
- UD - COMBO. LEFT/STRAIGHT ARROW (90 MIL)
- UE - COMBO. RIGHT/STRAIGHT ARROW (90 MIL)
- UF - COMBO. LEFT/RIGHT ARROW (90 MIL)
- UG - COMBO. LEFT/RIGHT/STRAIGHT ARROW (90 MIL)
- UH - HANDICAP PARKING (90 MIL)
- UI - ALPHANUMERIC CH./R. (120 MIL)
- UJ - BICYCLE SYMBOL (90 MIL)
- UK - BICYCLE STRAIGHT ARROW (90 MIL)
- UL - BICYCLE CHAR. (120 MIL)
- UM - 12" YIELD LINE TRIANGLE (90 MIL)
- UN - 24" YIELD LINE TRIANGLE (90 MIL)
- UO - BICYCLE LEFT ARROW (90 MIL)
- UP - MERGE ARROW (90 MIL)
- UQ - RAMP ARROW SYMBOL (90 MIL)
- UR - SHARROW (90 MIL)
- US - BICYCLE LOOP DETECTOR (90 MIL)
- UT - U-TURN ARROW (90 MIL)
- UU - FISH-HOOK STRAIGHT ARROW (90 MIL)
- UV - FISH-HOOK LEFT/STRAIGHT ARROW (90 MIL)
- UN - FISH-HOOK RIGHT/STRAIGHT ARROW (90 MIL)
- UX - FISH-HOOK: LEFT/RIGHT ARROW (90 MIL)
- UY - FISH-HOOK: LEFT/RIGHT/STRAIGHT ARROW (90 MIL)
- UZ - FISH-HOOK: W/CIRCLE STRAIGHT ARROW (90 MIL)
- WA - FISH-HOOK: W/CIRCLE LEFT ARROW (90 MIL)
- WB - FISH-HOOK: W/CIRCLE LEFT/STRAIGHT ARROW (90 MIL)
- WC - FISH-HOOK: W/CIRCLE LEFT/RIGHT/STRAIGHT ARROW (90 MIL)
- MA - PERMANENT RAISED MARKER (YELLOW & YELLOW)
- MB - PERMANENT RAISED MARKER (CRYSTAL & RED)
- MC - PERMANENT RAISED MARKER (YELLOW & RED)
- MD - PERMANENT RAISED MARKER (YELLOW)
- ME - SNOWPLOWABLE MARKER (YELLOW & YELLOW)
- MF - SNOWPLOWABLE MARKER (CRYSTAL & RED)
- MG - SNOWPLOWABLE MARKER (YELLOW & RED)
- ML - PERMANENT RAISED MARKER (CRYSTAL & CRYSTAL)
- MO - SNOWPLOWABLE MARKER (CRYSTAL & CRYSTAL)



ROUNDABOUT AT SIKES MILL RD.(SR-1605)  
AND TOM HELMS RD.(SR-1618)  
AND LOVE MILL RD.(SR-1001)  
AND LAWYERS RD.(SR-1637)

|             |         |  |           |
|-------------|---------|--|-----------|
| SCALE       | 1"=50'  |  | REVISIONS |
| DATE        | 6-20-06 |  |           |
| DESIGNED BY | JDH     |  |           |
| APPROVED    | RWB     |  |           |

**TIP PROJECT: W-5210F**

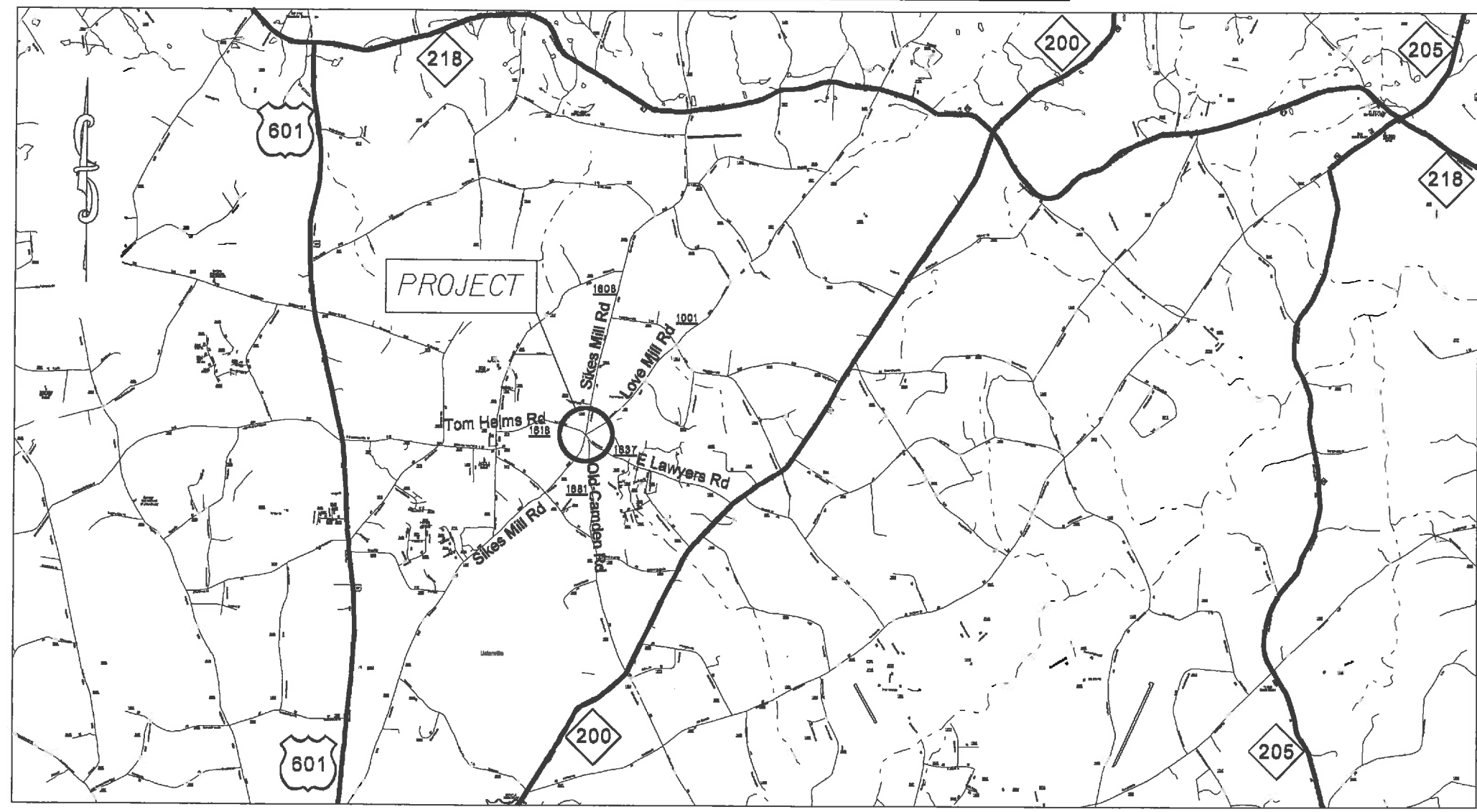
STATE OF NORTH CAROLINA  
 DIVISION OF HIGHWAYS  
 PLAN FOR PROPOSED  
 HIGHWAY EROSION CONTROL

|                 |                             |             |              |
|-----------------|-----------------------------|-------------|--------------|
| STATE           | STATE PROJECT REFERENCE NO. | SHEET NO.   | TOTAL SHEETS |
| N.C.            | W-5210F                     | EC-1        |              |
| STATE PROJ. NO. | F.A. PROJ. NO.              | DESCRIPTION |              |
| 45340.3.FD6     | HRRR-1001(58)               | CONST.      |              |
|                 |                             |             |              |
|                 |                             |             |              |

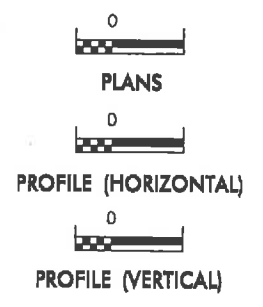
**EROSION AND SEDIMENT CONTROL MEASURES**

| Sht. #  | Description  | Symbol      |
|---------|--|-------------|
| 1630.03 | Temporary Silt Ditch   | ---         |
| 1630.05 | Temporary Diversion  | ---         |
| 1605.01 | Temporary Silt Fence   | --- --- --- |
| 1606.01 | Special Sediment Control Fence   | --- --- --- |
| 1622.01 | Temporary Berms and Slope Drains                                       | ---         |
| 1630.02 | Silt Basin Type B  | ---         |
| 1633.01 | Temporary Rock Silt Check Type-A                                       | ---         |
|         | Temporary Rock Silt Check Type-A with Matting and Polyacrylamide (PAM) | ---         |
| 1633.02 | Temporary Rock Silt Check Type-B                                       | ---         |
|         | Wattle / Coir Fiber Wattle   | ---         |
|         | Wattle / Coir Fiber Wattle with Polyacrylamide (PAM)                   | ---         |
| 1634.01 | Temporary Rock Sediment Dam Type-A                                     | ---         |
| 1634.02 | Temporary Rock Sediment Dam Type-B                                     | ---         |
| 1635.01 | Rock Pipe Inlet Sediment Trap Type-A                                   | ---         |
| 1635.02 | Rock Pipe Inlet Sediment Trap Type-B                                   | ---         |
| 1630.04 | Stilling Basin   | ---         |
| 1630.06 | Special Stilling Basin   | ---         |
|         | Rock Inlet Sediment Trap:  |             |
| 1632.01 | Type A   | ---         |
| 1632.02 | Type B   | ---         |
| 1632.03 | Type C   | ---         |
|         | Skimmer Basin  | ---         |
|         | Tiered Skimmer Basin   | ---         |
|         | Infiltration Basin   | ---         |

THIS PROJECT CONTAINS  
 EROSION CONTROL PLANS  
 FOR CLEARING AND  
 GRUBBING PHASE OF  
 CONSTRUCTION.



**GRAPHIC SCALE**



ROADSIDE ENVIRONMENTAL UNIT  
 DIVISION OF HIGHWAYS  
 STATE OF NORTH CAROLINA

THESE EROSION AND SEDIMENT CONTROL PLANS COMPLY  
 WITH THE REGULATIONS SET FORTH BY THE  
 NCG-010000 GENERAL CONSTRUCTION PERMIT EFFECTIVE AUGUST 3, 2011  
 ISSUED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND  
 NATURAL RESOURCES DIVISION OF WATER QUALITY.

Prepared In the Office of:  
**ROADSIDE ENVIRONMENTAL UNIT**  
 1 South Wilmington St.  
 Raleigh, NC 27611  
**2012 STANDARD SPECIFICATIONS**  
**DONALD HARWARD** 3028  
 EROSION CONTROL DESIGNER LEVEL III-A CERTIFICATION #

Roadway Standard Drawings

The following roadway english standards as appear in "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated January 2012 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.

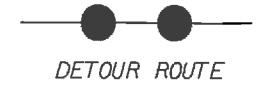
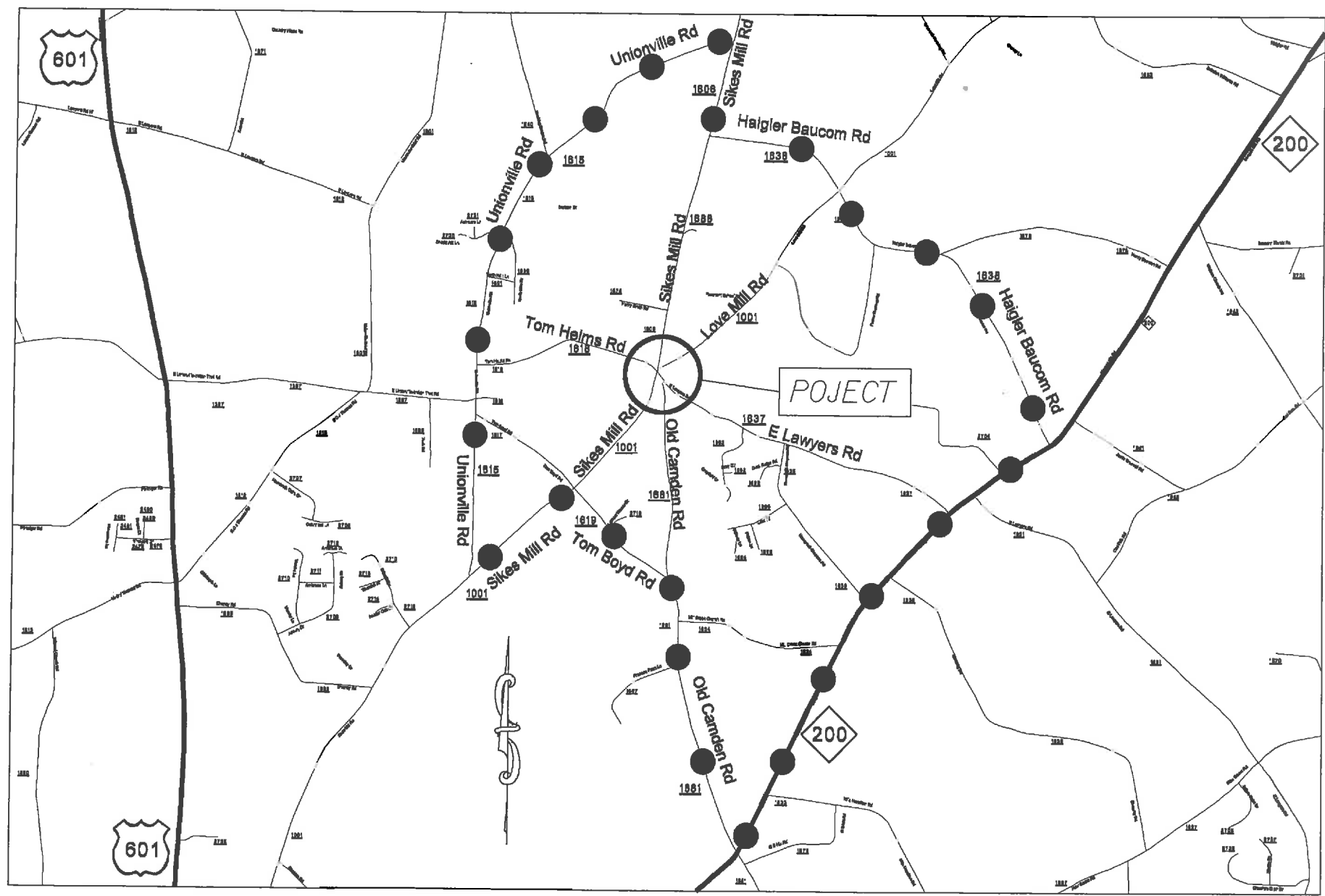
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|--|--|
| 1604.01 Railroad Erosion Control Detail  | 1632.01 Rock Inlet Sediment Trap Type A      |
| 1605.01 Temporary Silt Fence             | 1632.02 Rock Inlet Sediment Trap Type B      |
| 1606.01 Special Sediment Control Fence   | 1632.03 Rock Inlet Sediment Trap Type C      |
| 1607.01 Gravel Construction Entrance     | 1633.01 Temporary Rock Silt Check Type A     |
| 1622.01 Temporary Berms and Slope Drains | 1633.02 Temporary Rock Silt Check Type B     |
| 1630.01 Silt Basin                       | 1634.01 Temporary Rock Sediment Dam Type A   |
| 1630.02 Silt Basin Type B                | 1634.02 Temporary Rock Sediment Dam Type B   |
| 1630.03 Temporary Silt Ditch             | 1635.01 Rock Pipe Inlet Sediment Trap Type A |
| 1630.04 Stilling Basin                   | 1635.02 Rock Pipe Inlet Sediment Trap Type B |
| 1630.05 Temporary Diversion              | 1640.01 Coir Fiber Baffle                    |
| 1630.06 Special Stilling Basin           | 1645.01 Temporary Stream Crossing            |
| 1631.01 Matting Installation             |  |


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| STATE            | PROJECT NO. | SHEET NO. | TOTAL SHEETS |
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| F.A. PROJECT NO. |             |           |              |

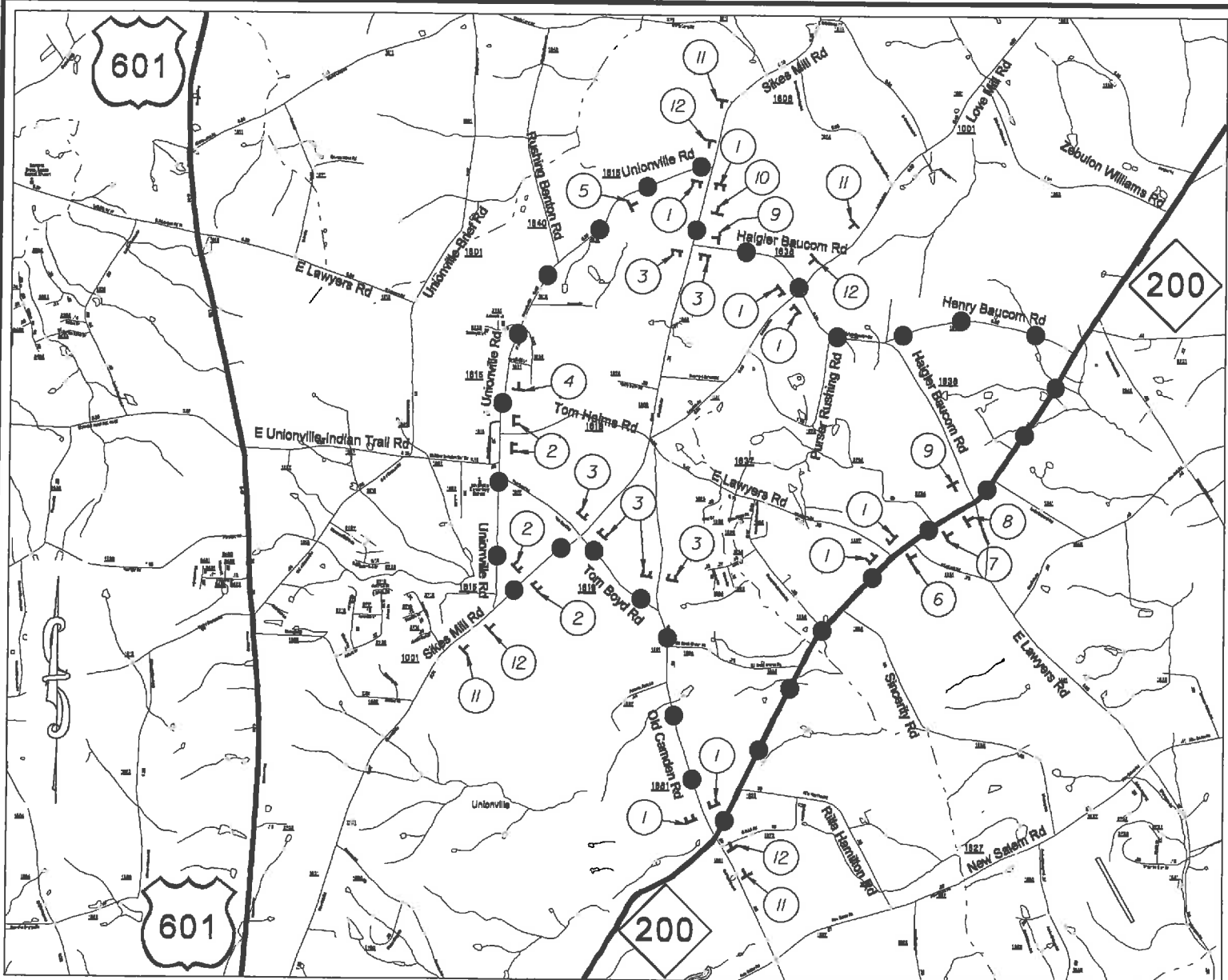
# OFFSITE DETOUR

OFFSITE DETOUR TO BE INSTALLED AND MAINTAINED BY NCDOT.  
 THE CONTRACTOR IS RESPONSIBLE FOR THE BARRACADES ON THE PROJECT. SEE SHEET TCP-2



|   |        |
|---|--------|
| ROUNDABOUT AT SIKES MILL RD.(SR-1506)<br>AND TOM HELMS RD.(SR-1618)<br>AND LOVE MILL RD.(SR-1001)<br>AND LAWYERS RD.(SR-1637) |        |
| SCALE   | 1"=50' |
| DATE  | 1/14   |
| DWG. BY   | JCH    |
| DESIGN BY   | JCH    |
| APPROVED  | RWB    |
|    |        |
| REVISIONS   |        |
|   |        |
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|------------------|-------------|-----------|--------------|
| STATE            | PROJECT NO. | SHEET NO. | TOTAL SHEETS |
| N.C.             | 453-0.3.FD6 | TCP-2     |              |
| F.A. PROJECT NO. |             |           |              |



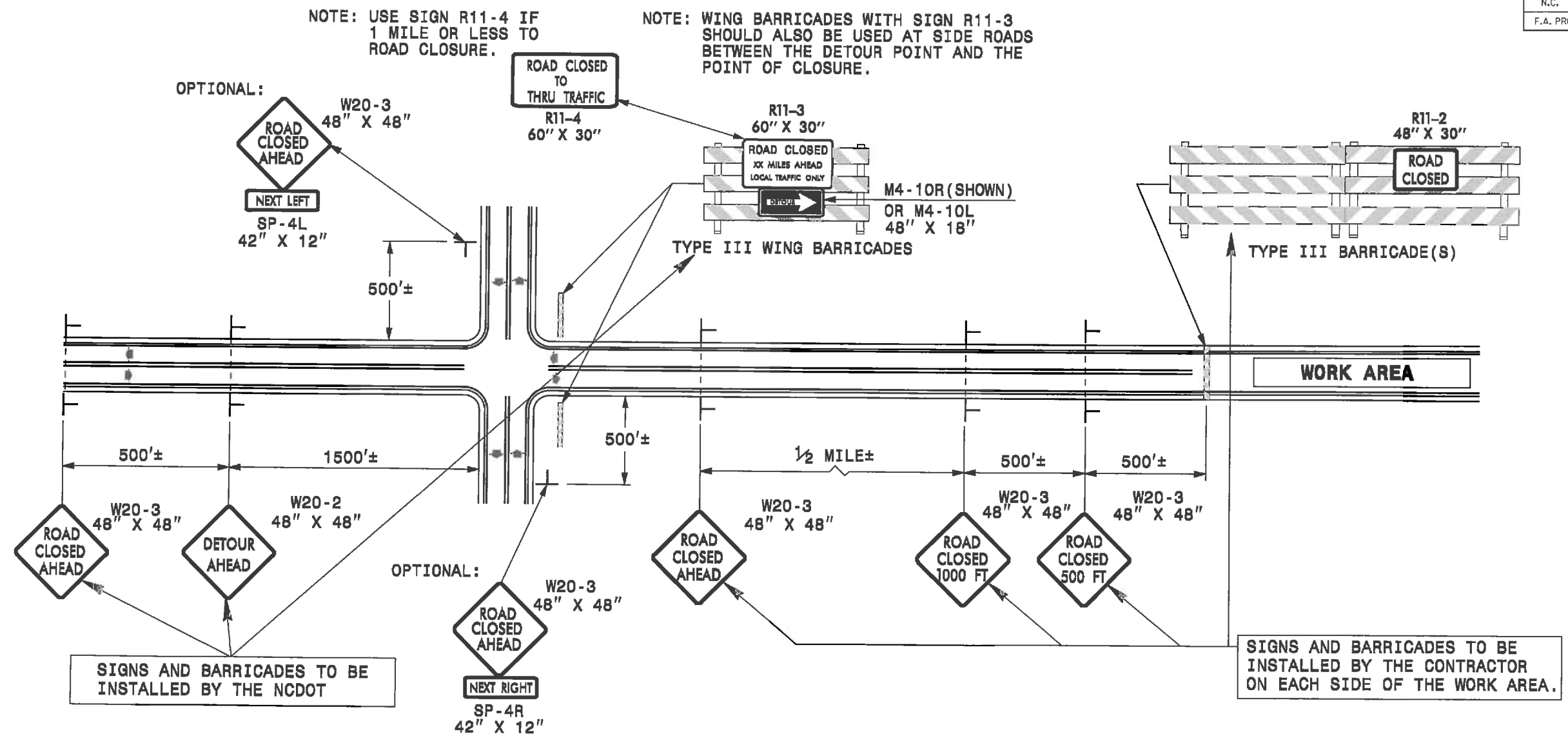
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|---------------------------|-----------|---------------------------|-----------|---------------------------|--|
| <p>TYPE III BARRICADE</p> |           | <p>TYPE III BARRICADE</p> |           | <p>TYPE III BARRICADE</p> |  |
| <p>4</p>                  | <p>5</p>  | <p>6</p>                  | <p>7</p>  | <p>8</p>                  |  |
| <p>9</p>                  | <p>10</p> | <p>11</p>                 | <p>12</p> |                           |  |



ROUNDABOUT AT SIKES MILL RD.(SR-1606)  
AND TOM HELMS RD.(SR-1618)  
AND LOVE MILL RD.(SR-1001)  
AND LAWYERS RD.(SR-1637)

|           |        |  |           |
|-----------|--------|--|-----------|
| SCALE     | 1"=50' |  | REVISIONS |
| DATE      | 1/14   |  |           |
| DWG. BY   | JDH    |  |           |
| DESIGN BY | JDH    |  |           |
| APPROVED  | RWB    |  |           |

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|------------------|-------------|-----------|--------------|
| STATE            | PROJECT NO. | SHEET NO. | TOTAL SHEETS |
| N.C.             | 45340.3.F06 | TCP-3     |              |
| F.A. PROJECT NO. |             |           |              |



**GENERAL NOTES**

- 1-IF NECESSARY USE THIS STD. FOR TWO-LANE, TWO-WAY, AND MULTILANE DIVIDED AND UNDIVIDED ROADWAYS.
- 2-INSTALLATION OF DETOUR ROUTING PANELS, TEMPORARY ROUTE MARKERS, DESTINATION SIGNS, AND ANY NECESSARY MODIFICATIONS TO EXISTING OR PROPOSED REGULATORY OR WARNING SIGNS WILL BE MADE BY NCDOT FORCES UNLESS OTHERWISE DESIGNATED IN THE PLANS. PROVIDE A MINIMUM 21 CALENDAR DAY NOTICE TO STATE FORCES BEFORE A ROADWAY IS CLOSED TO TRAFFIC SUCH THAT THE NECESSARY PROVISIONS CAN BE MADE TO INSTALL DETOUR ROUTE SIGNS, INFORM LOCAL EMERGENCY AND LAW ENFORCEMENT PERSONNEL, SCHOOLS, OR ANY OTHER PARTIES AFFECTED BY THE ROAD CLOSURE.
- 3-INSTALL SIGNS BEFORE THE BARRICADES WHEN CLOSING THE ROADWAY TO TRAFFIC. REMOVE BARRICADES BEFORE SIGNS WHEN OPENING THE ROADWAY TO TRAFFIC. INSTALL/REMOVE SIGNS AND BARRICADES WITHIN THE SAME CALENDAR DAY.
- 4-USE ADDITIONAL TYPE III BARRICADES IN STAGGERED LOCATIONS SUPPLEMENTED WITH SIGN R11-4 "ROAD CLOSED TO THRU TRAFFIC" IN THE EVENT THAT TRAFFIC MUST BE MAINTAINED BEYOND THE DETOUR POINT.
- 5-DO NOT DISPLAY FRACTIONS OR DECIMALS ON SIGN R11-3 "ROAD CLOSED XX MILES AHEAD".
- 6-POSITION WING BARRICADES ON THE SHOULDERS AND SLOPE THE STRIPES DOWNWARD IN THE DIRECTION TOWARD WHICH TRAFFIC MUST TURN IN DETOURING.
- 7-USE PORTABLE SIGNS IF ROAD CLOSURE IS TO BE IMPLEMENTED FOR LESS THAN ONE DAY OR FOR EMERGENCIES.

**LEGEND**

— STATIONARY SIGN

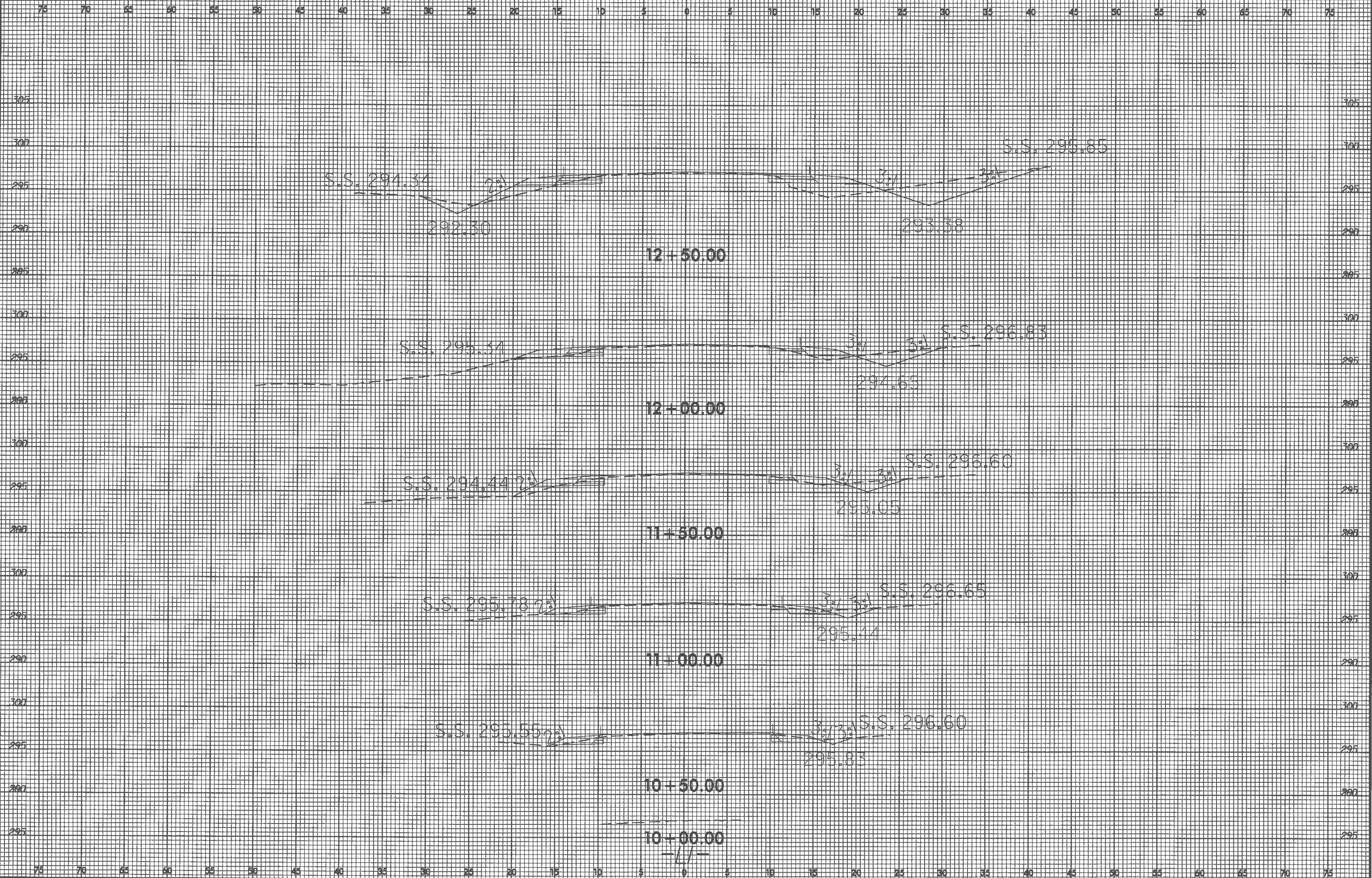
➔ DIRECTION OF TRAFFIC FLOW

TEMPORARY ROAD CLOSURE  
CLOSURE BEYOND DETOUR POINT

|          |         |  |           |
|----------|---------|--|-----------|
| SCALE    | -NA-    |  | REVISIONS |
| DATE     | 1-19-10 |  |           |
| DWG. BY  | JDH     |  |           |
| APPROVED | RWB     |  |           |



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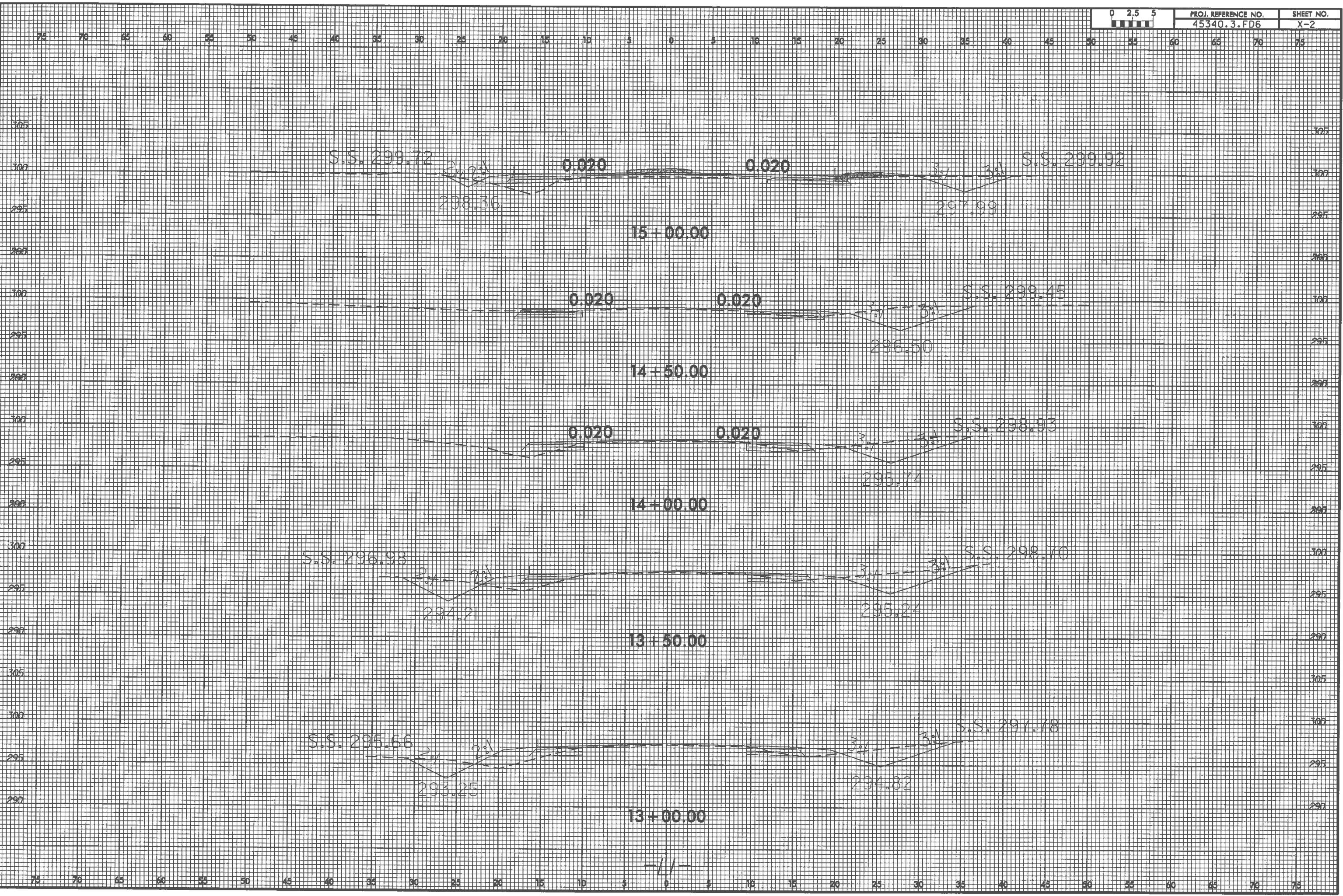


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PROJ. REFERENCE NO.  
45340.3.FD6

SHEET NO.  
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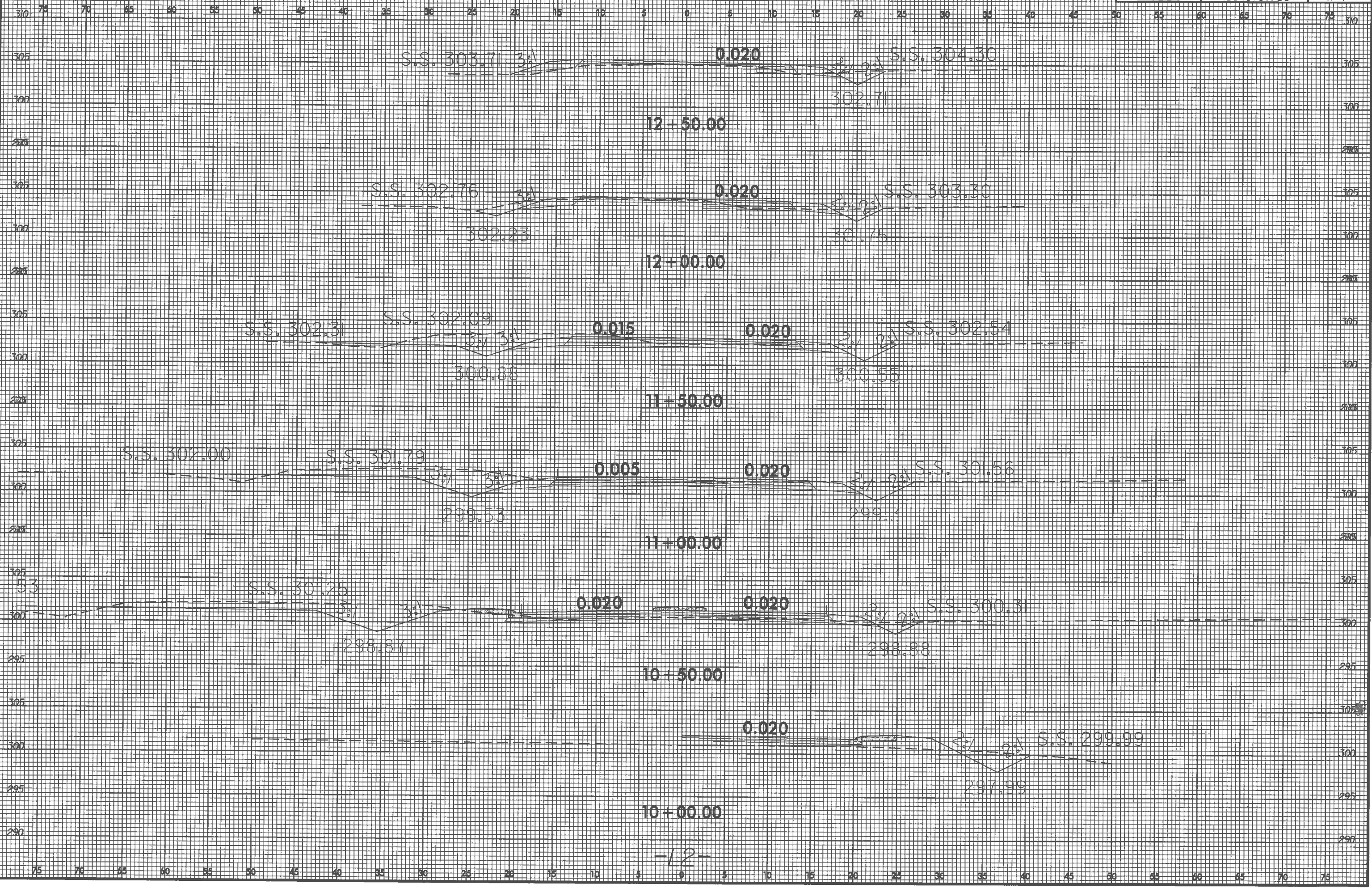
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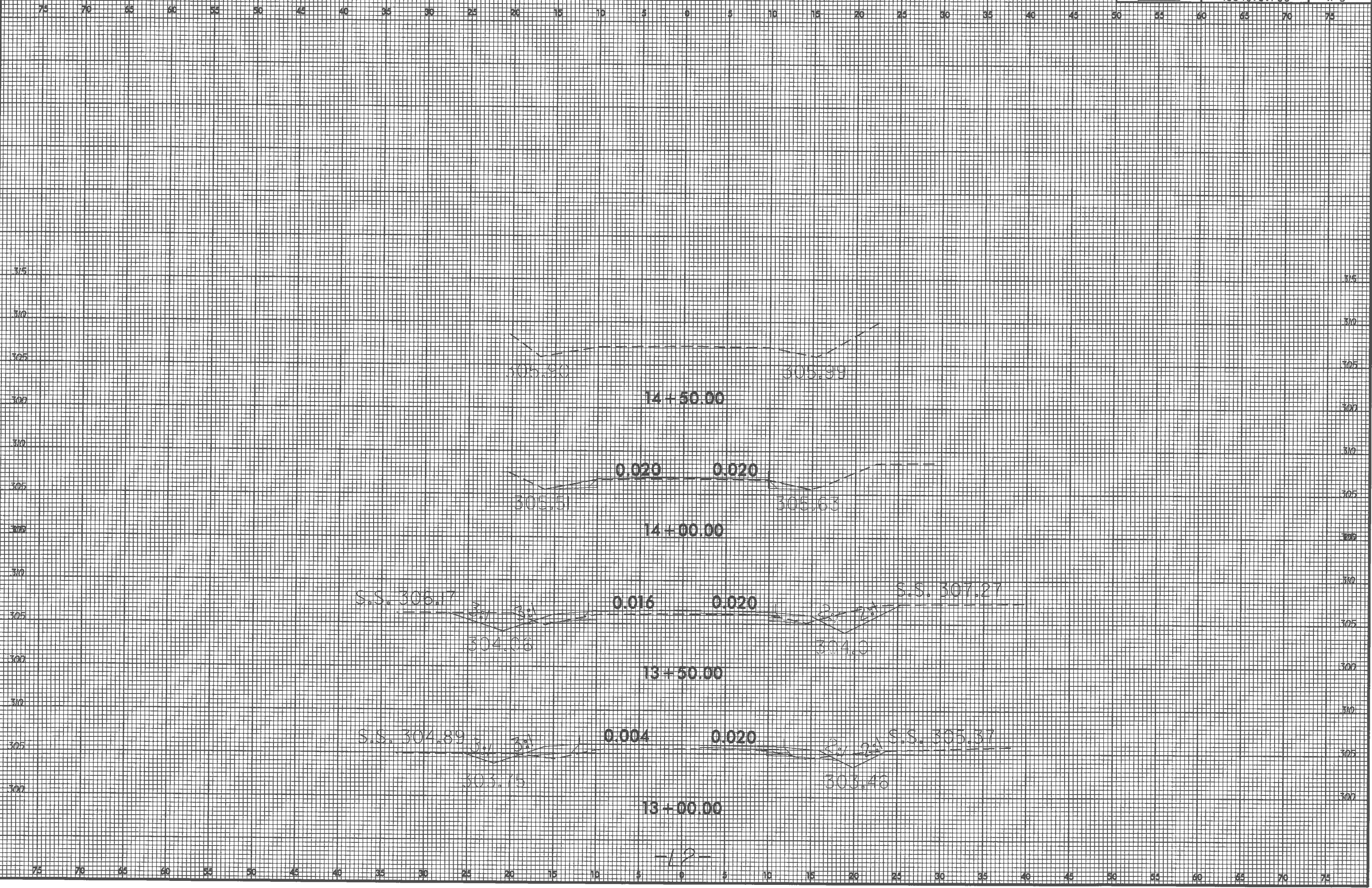
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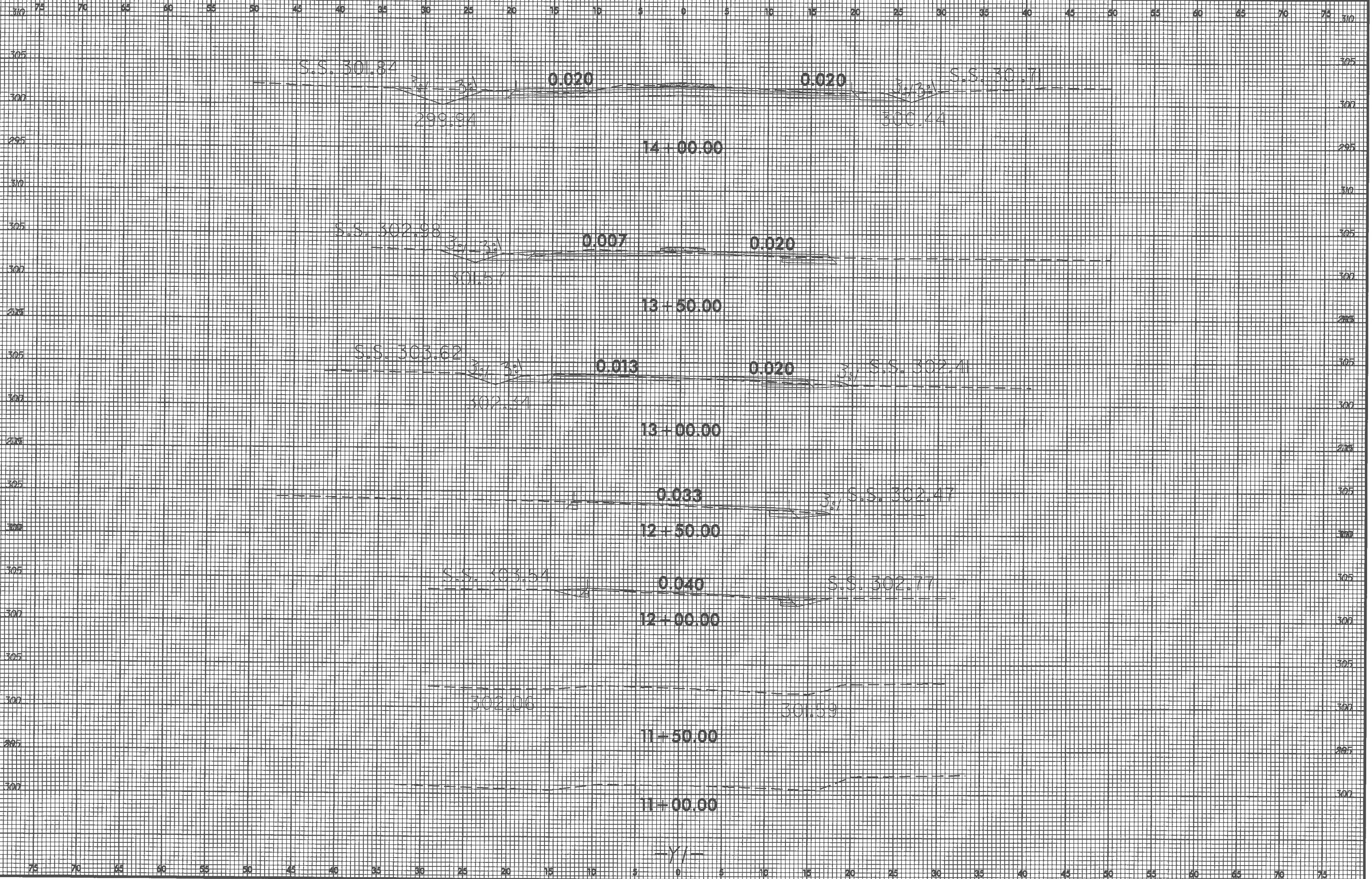
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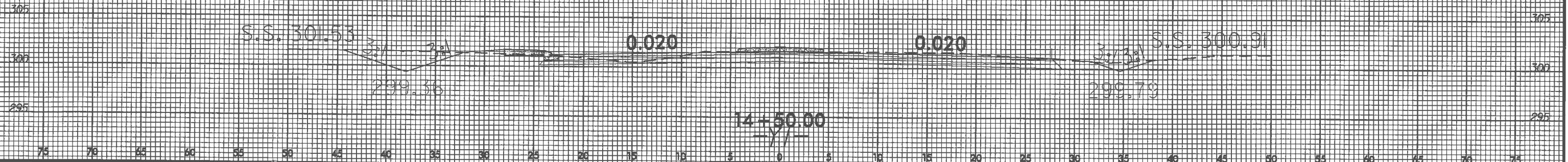
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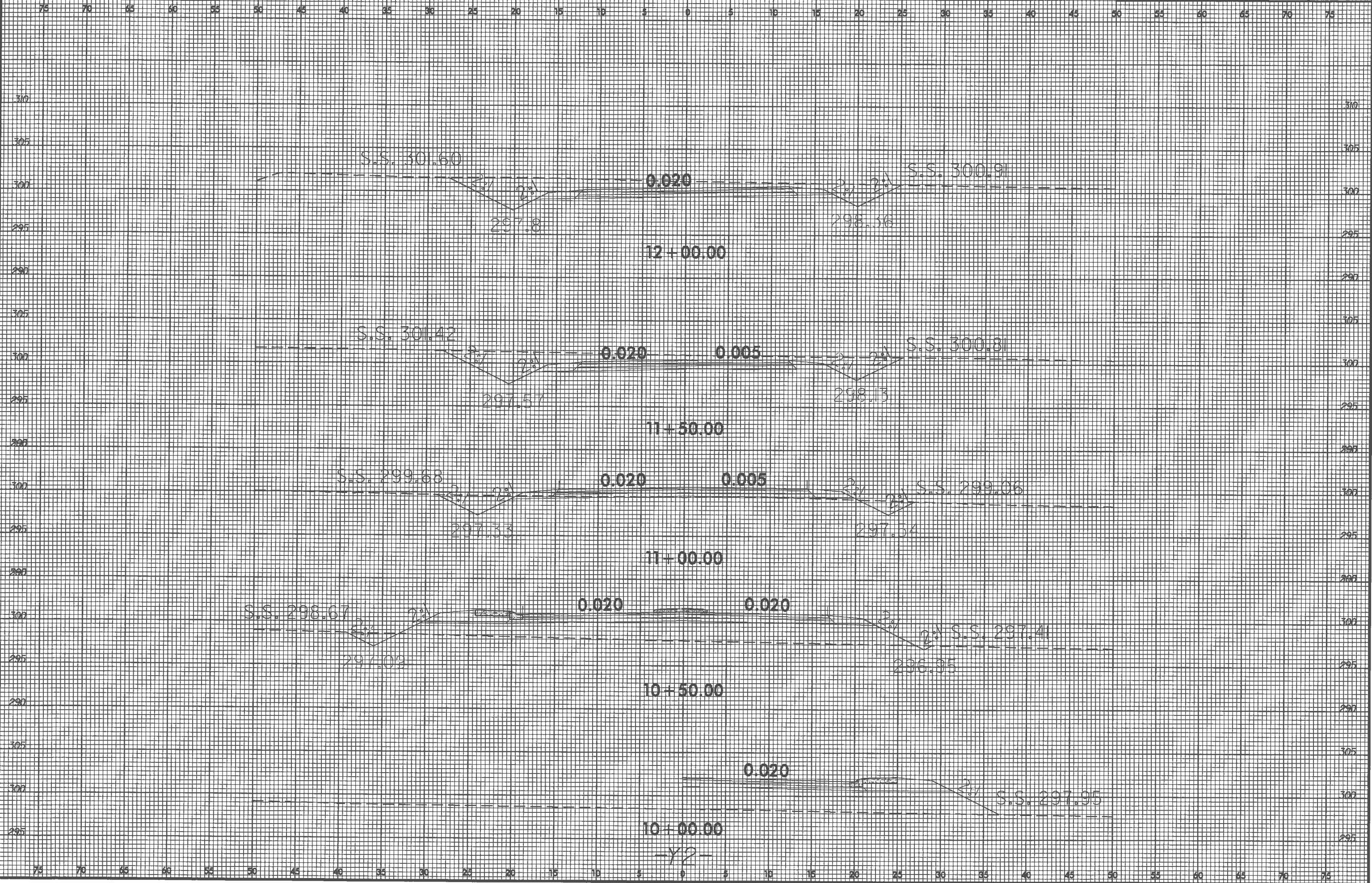
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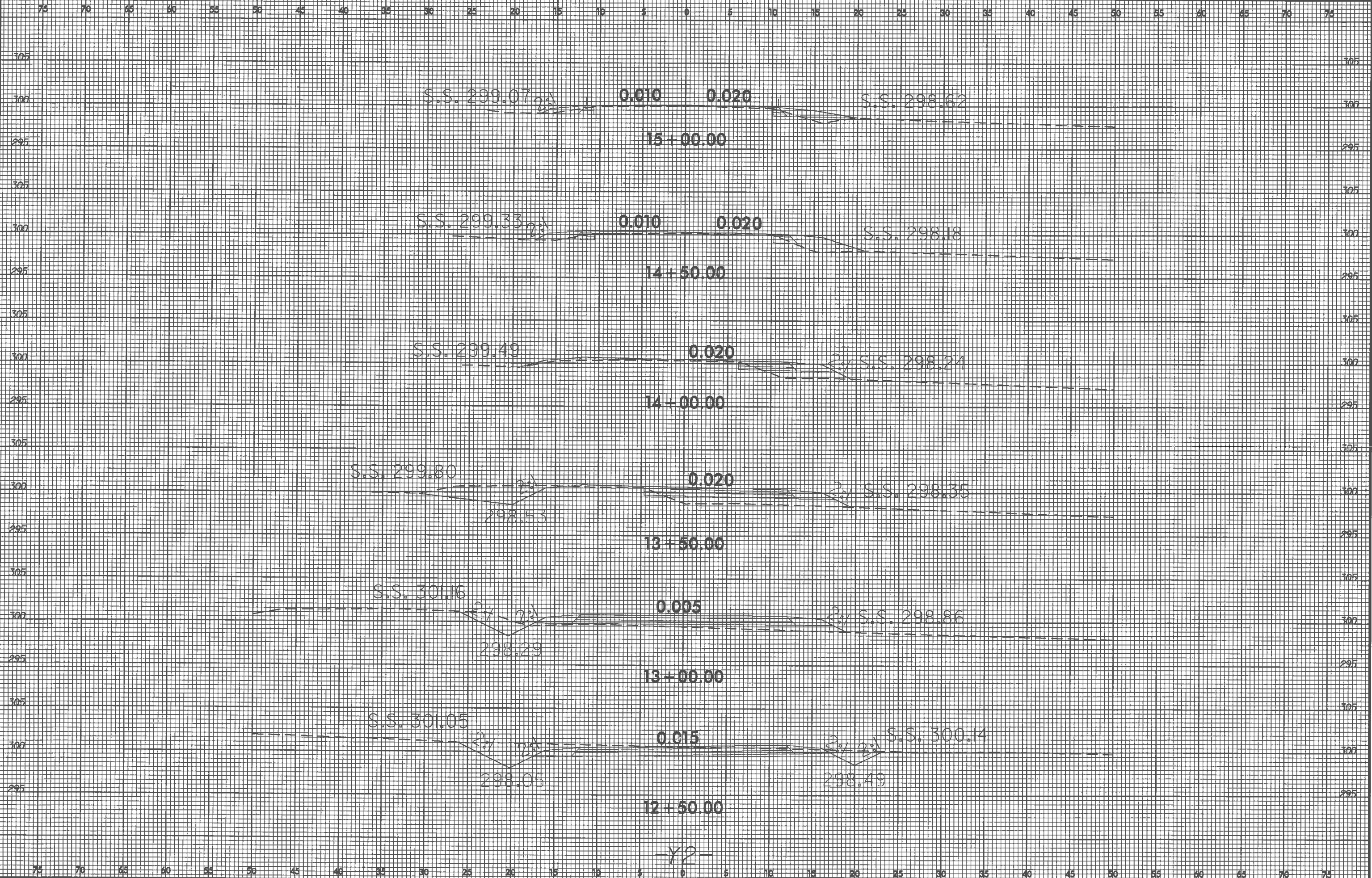
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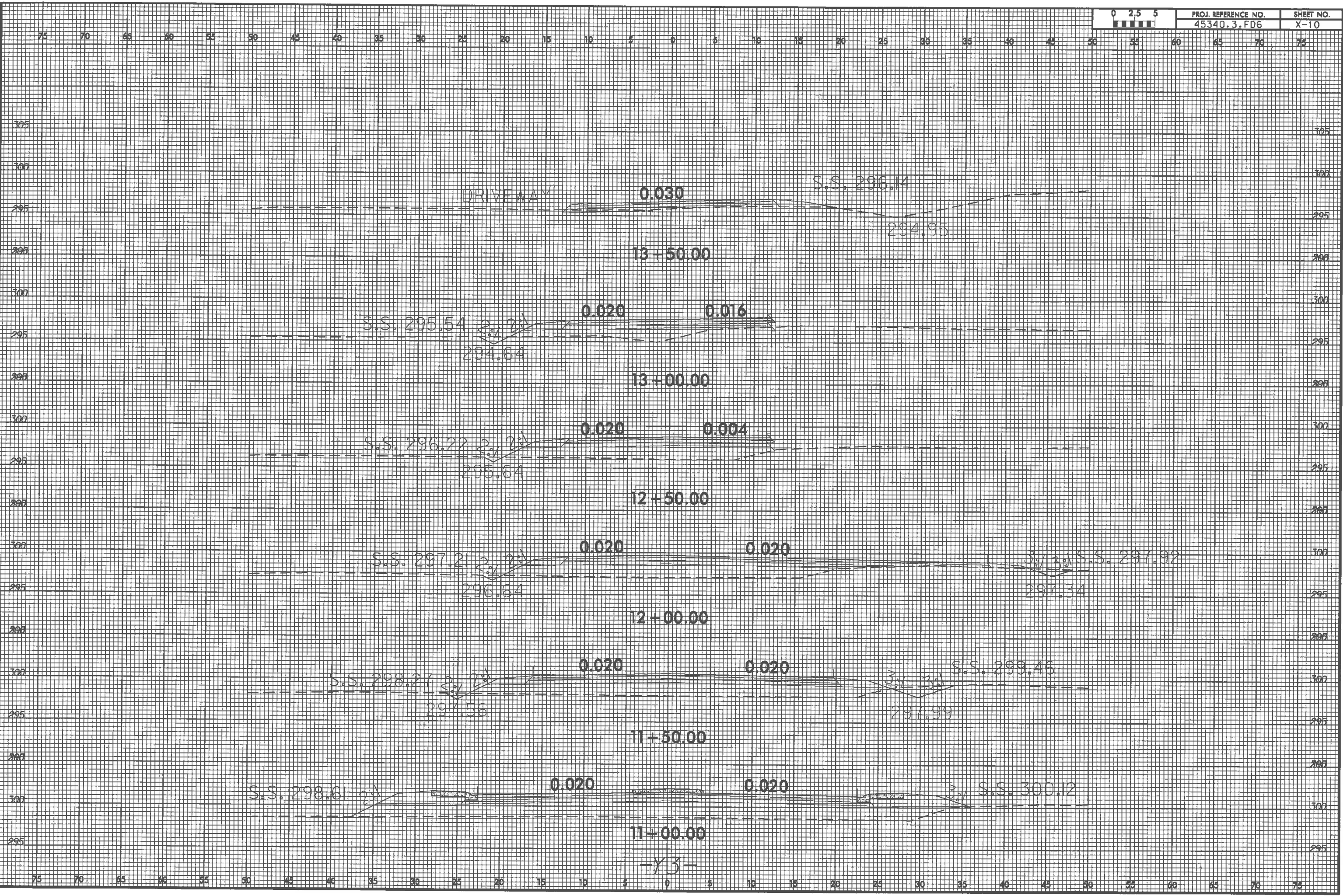
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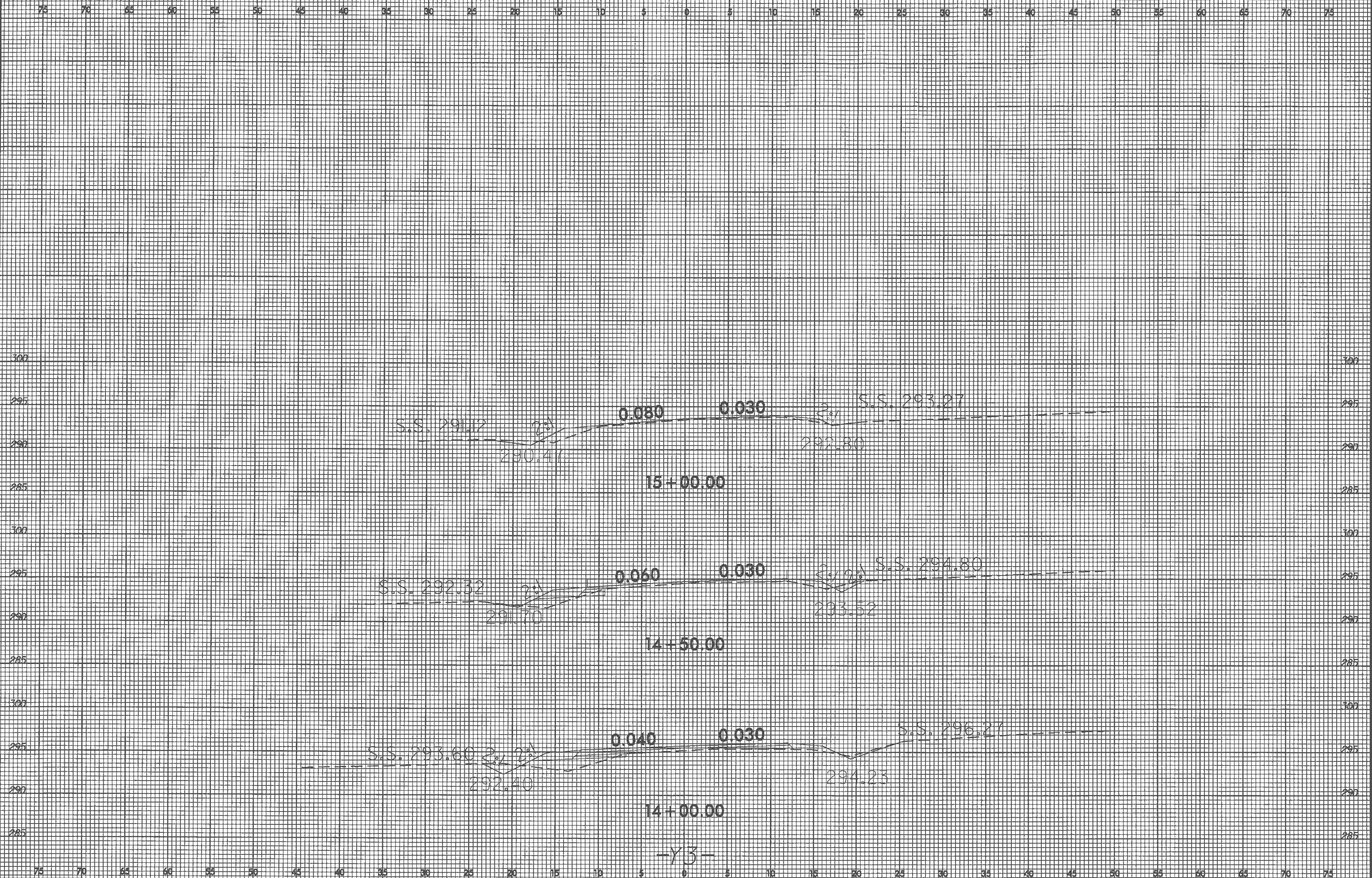
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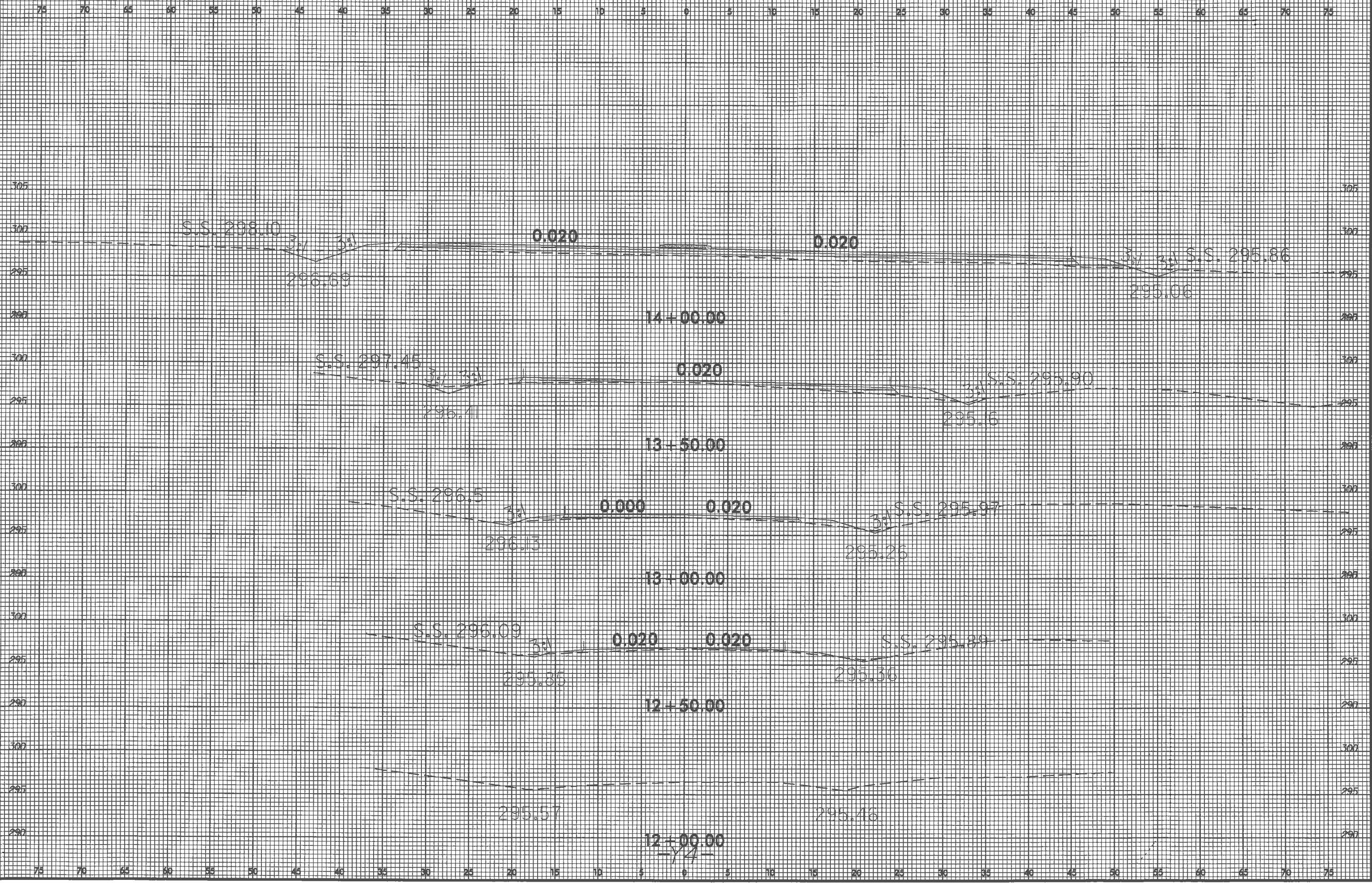
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