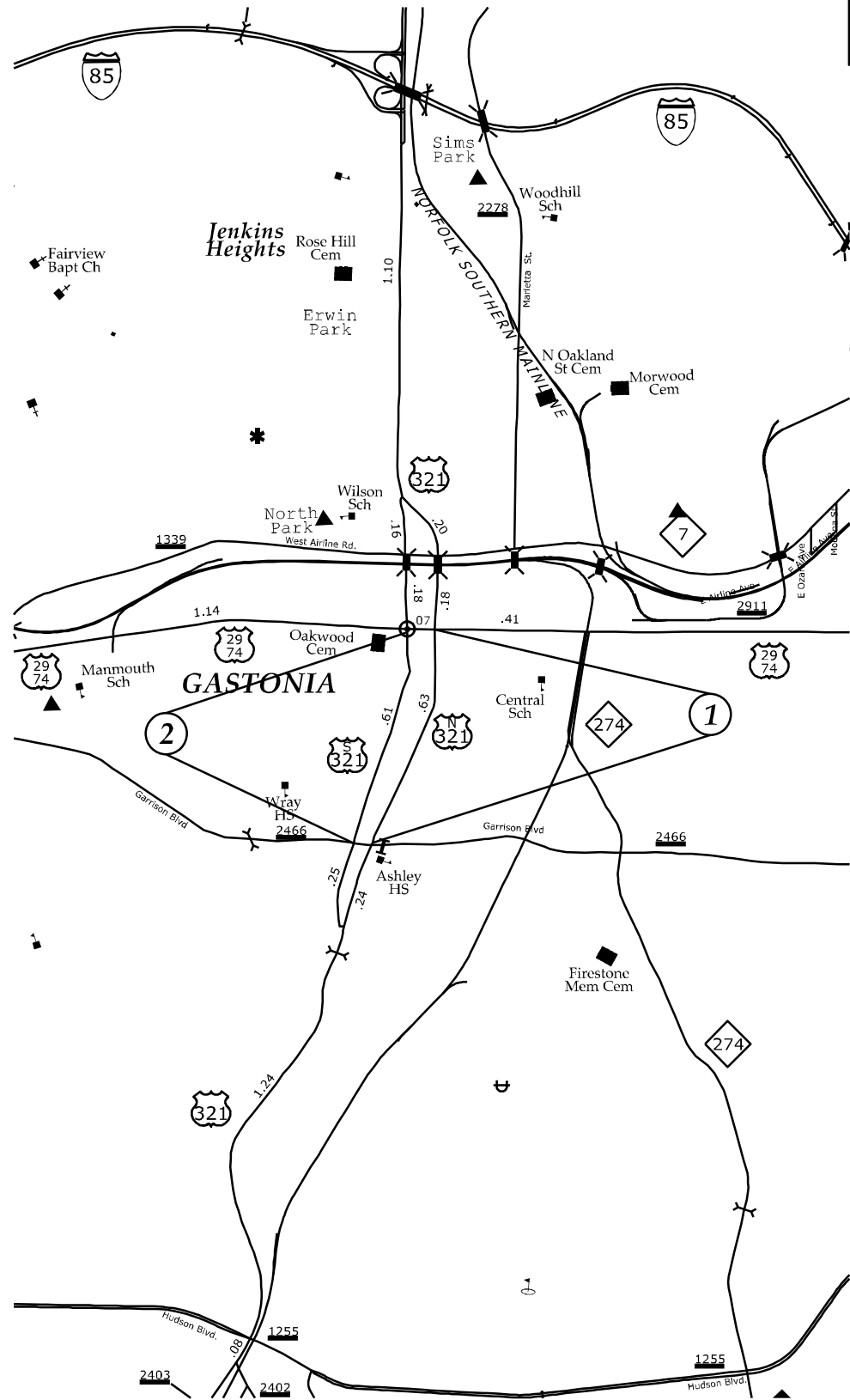


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and sealed by the individuals whose names and license
numbers appear on each page, on the dates appearing
with their signature on that page.**

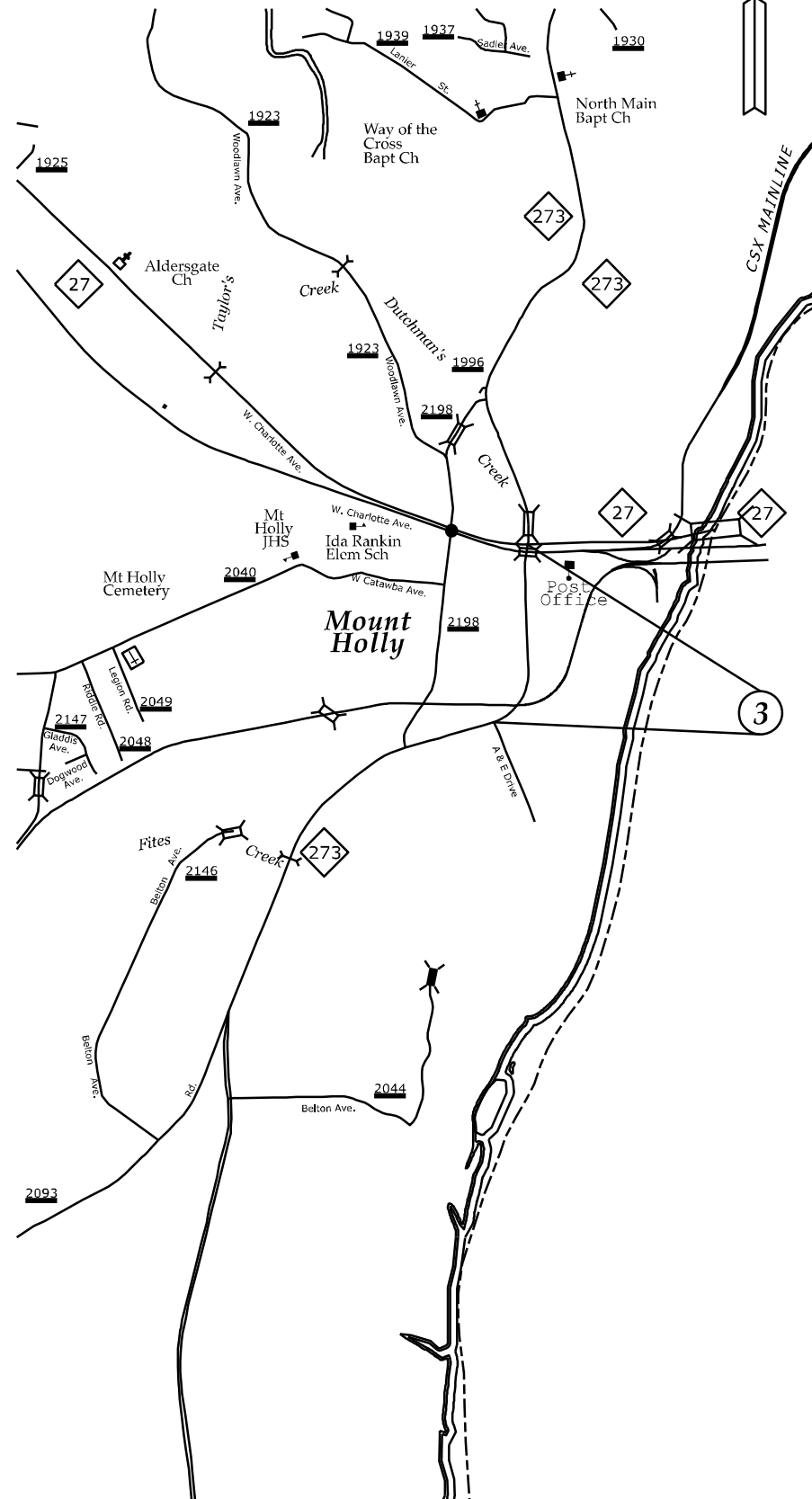
**This file or an individual page
shall not be considered a certified document.**

GASTON CO. RESURFACING MAP 1 & 2



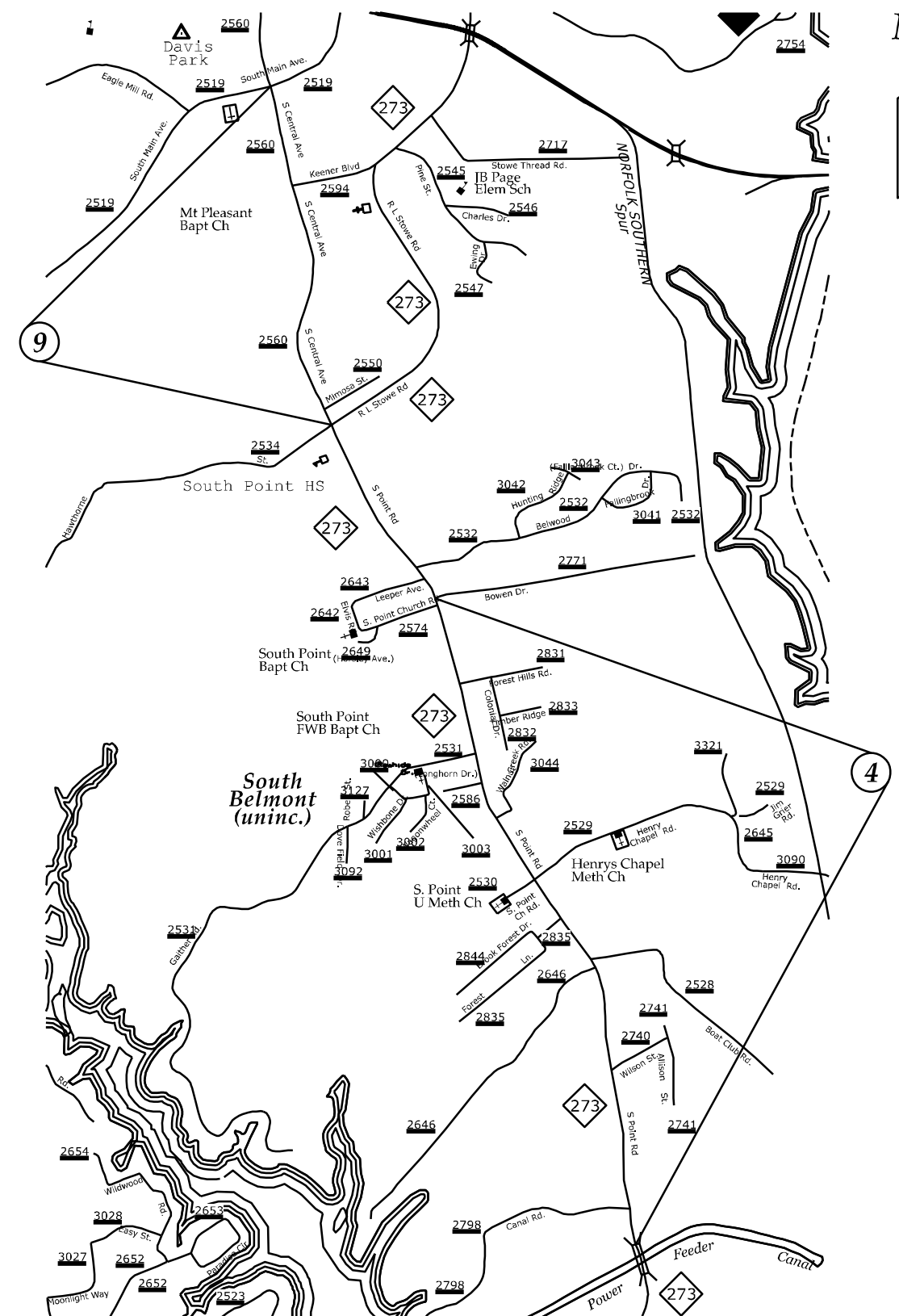
No Scale

GASTON CO. RESURFACING MAP 3



No Scale

GASTON CO. RESURFACING MAP 4 & 9



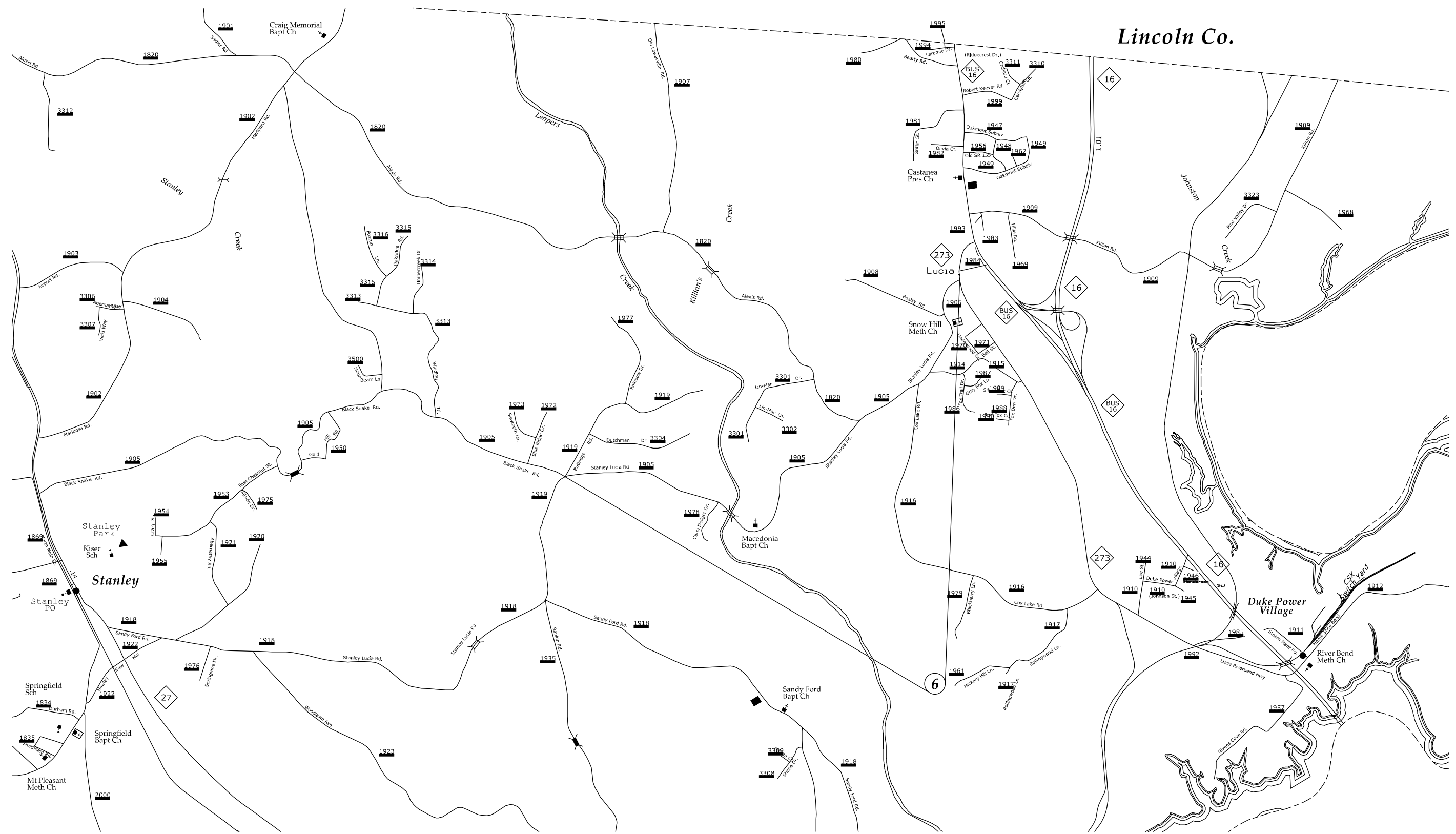
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| 2026CPT.12.16.10361 | 2 |
| 2026CPT.12.16.20361 | |

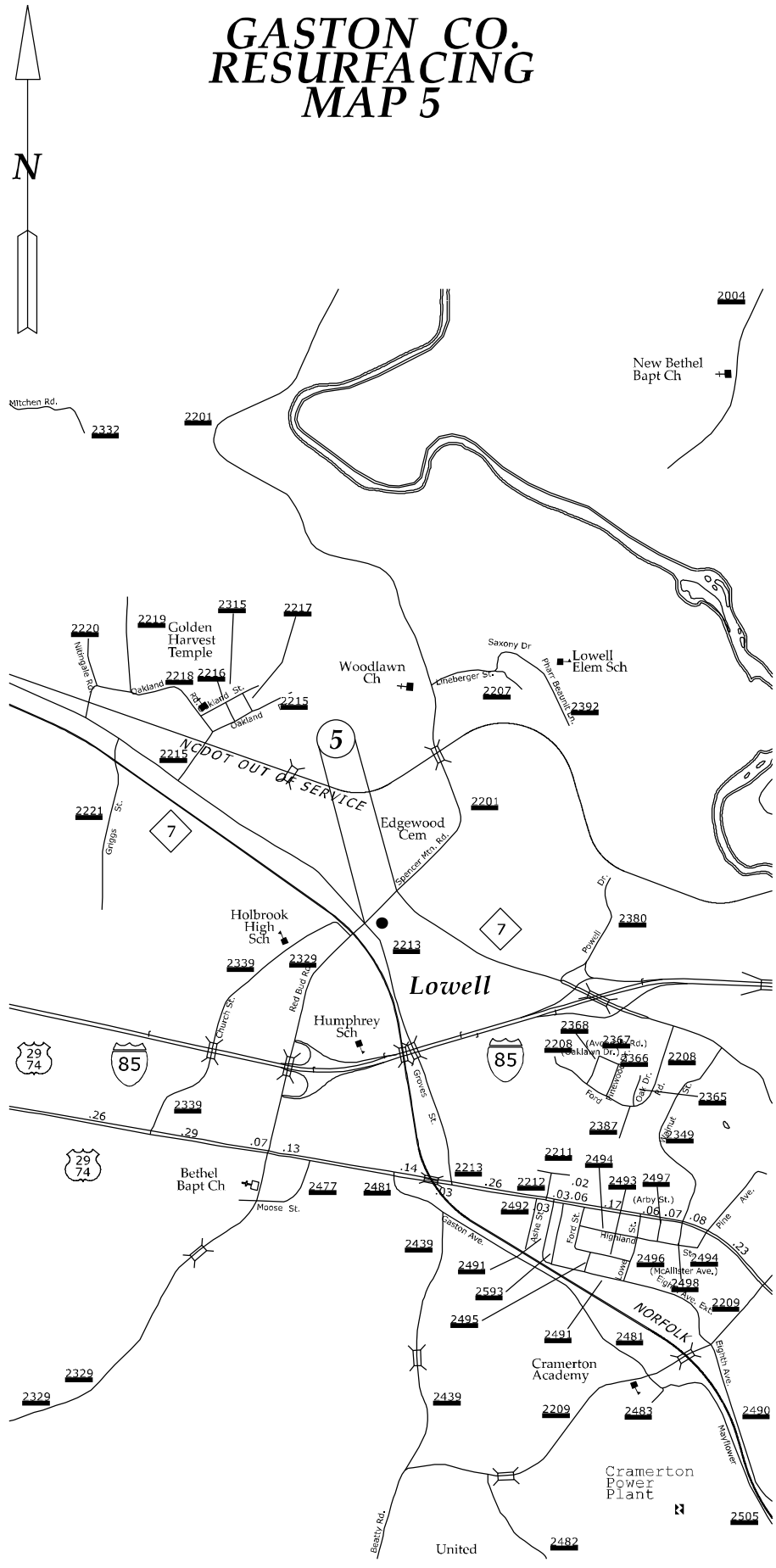
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CLEVELAND CO. RESURFACING MAP 6

| | |
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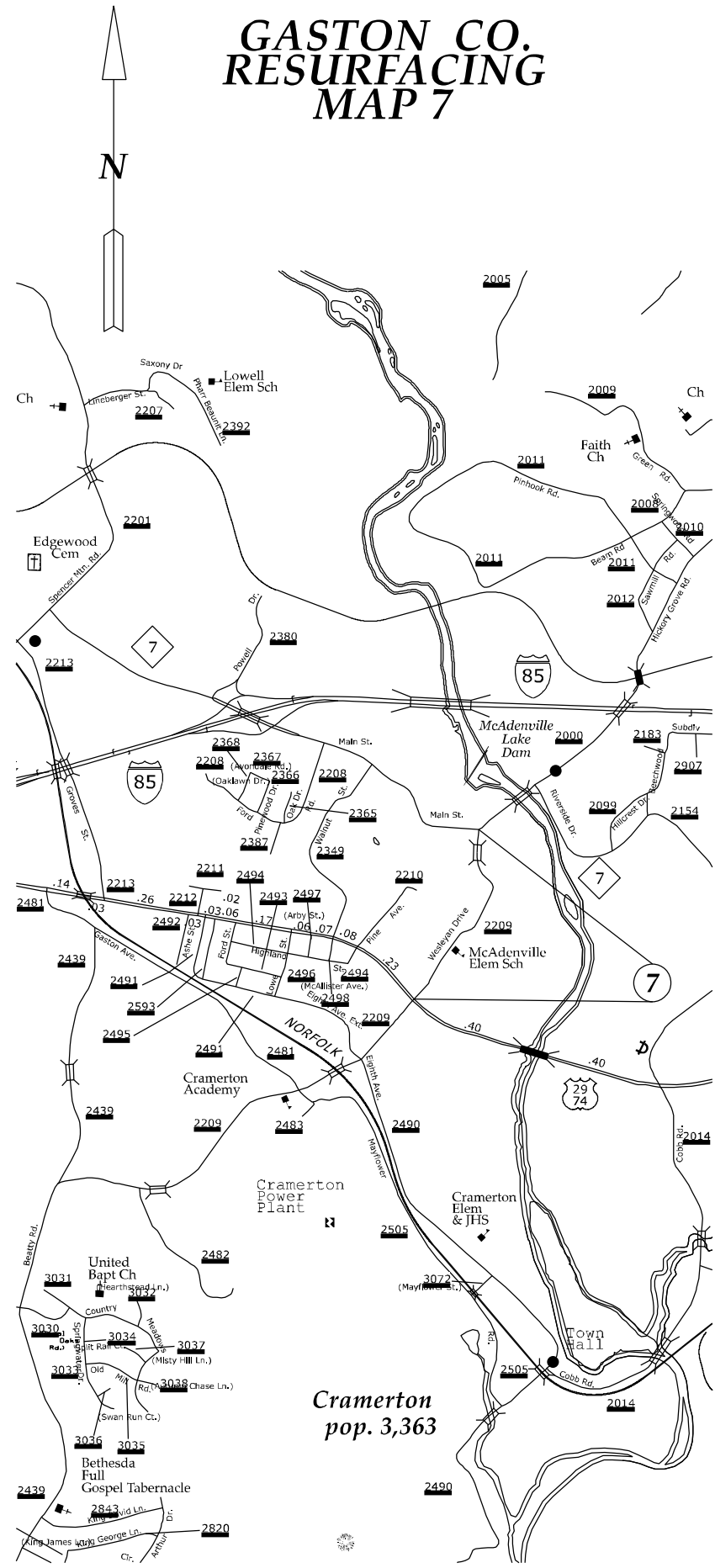


GASTON CO. RESURFACING MAP 5



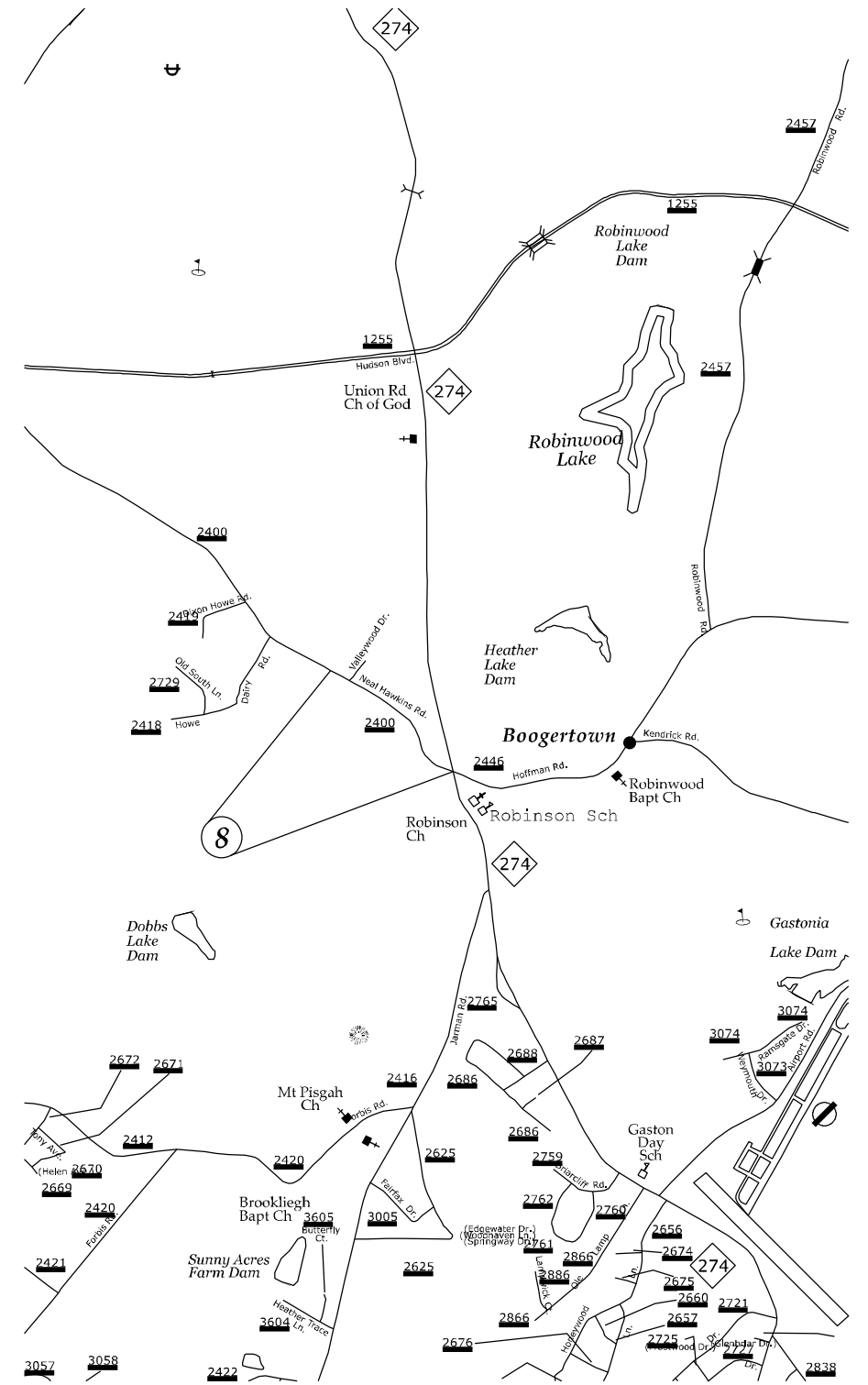
No Scale

GASTON CO. RESURFACING MAP 7



No Scale

GASTON CO. RESURFACING MAP 8



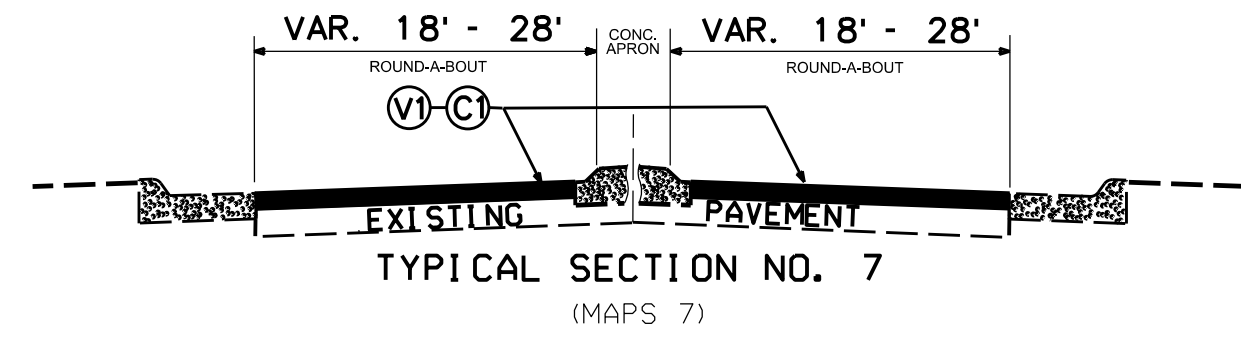
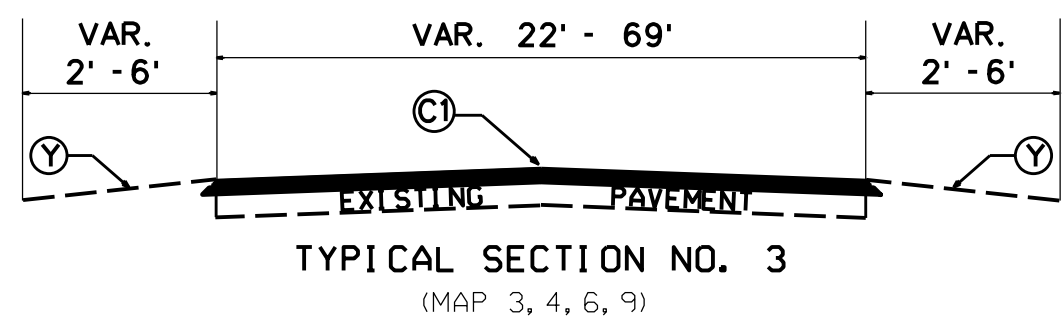
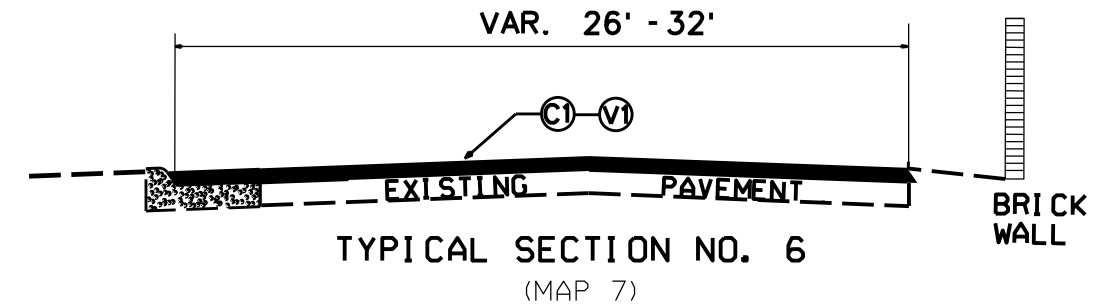
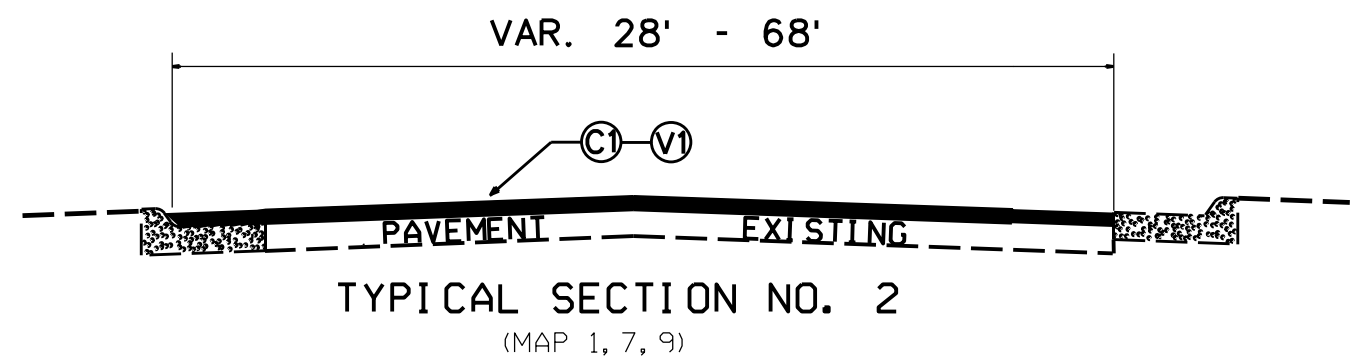
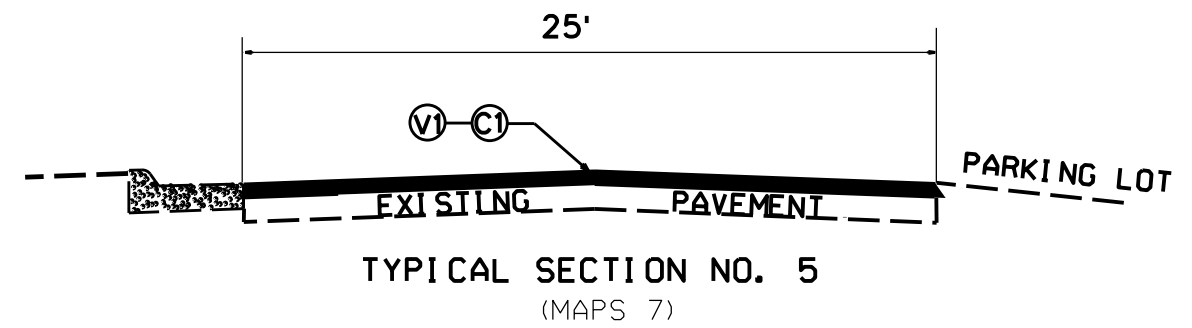
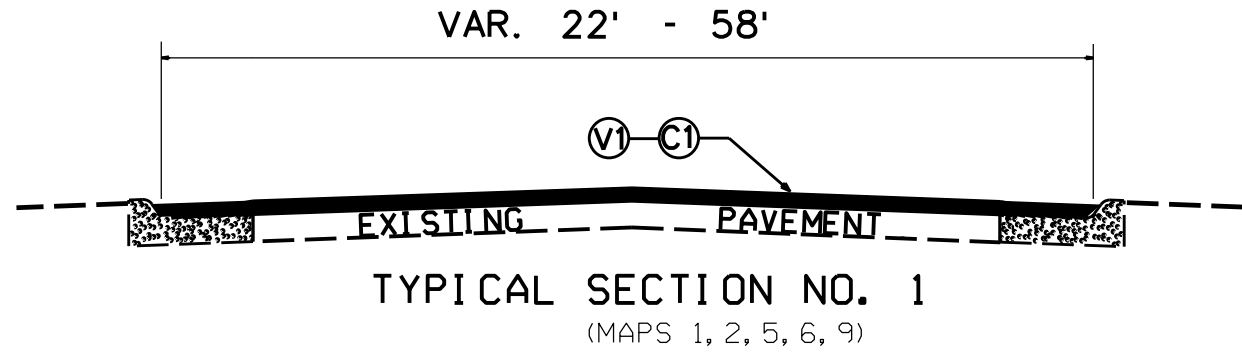
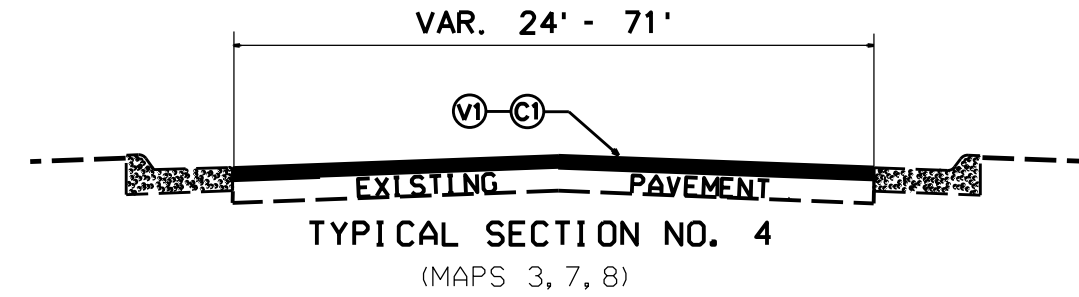
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| 2026CPT.12.16.10361 | 4 |
| 2026CPT.12.16.20361 | |

| | | |
|-------------------------|-----------------|--------------|
| PROJ. REFERENCE NO. | SHEET NO. | TOTAL SHEETS |
| GASTON COUNTY 2025-2026 | 5 | 22 |
| STATE PROJ. NO. | F. A. PROJ. NO. | DESCRIPTION |
| 2026CPT. 12. 16. 10361 | | |
| 2026CPT. 12. 16. 20361 | | |

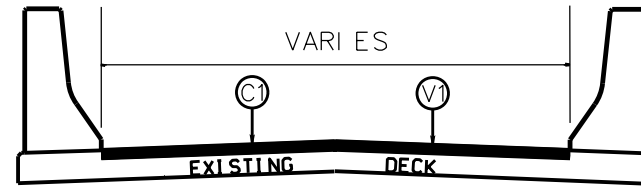
| PAVEMENT SCHEDULE | |
|-------------------|---|
| C1 | PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. |
| V1 | MILL ASPHALT PAVEMENT APPROX. 1-1/2" AS DIRECTED BY ENGINEER |
| Y | SHOULDER RECONSTRUCTION |
| Z | INCIDENTAL MILLING AS DIRECTED BY THE ENGINEER. |

- NOTES: 1. PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.
 2. MILL BRIDGE APPROACHES & RXR APPROACHES 100' TO PROVIDE A SMOOTH TRANSITION AS DIRECTED.
 3. MILL INTO GUTTER LINE WHERE SHOWN AND AS DIRECTED.
 4. MAINTAIN PROPER CROWN FOR DRAINAGE OF THE ROAD SURFACE.



| PAVEMENT SCHEDULE | |
|-------------------|---|
| C1 | PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. |
| V1 | MILL ASPHALT PAVEMENT APPROX. 1-1/2" AS DIRECTED BY ENGINEER |
| Y | SHOULDER RECONSTRUCTION |
| Z | INCIDENTAL MILLING AS DIRECTED BY THE ENGINEER. |

- NOTES: 1. PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.
 2. MILL BRIDGE APPROACHES & RXR APPROACHES 100' TO PROVIDE A SMOOTH TRANSITION AS DIRECTED.
 3. MILL INTO GUTTER LINE WHERE SHOWN AND AS DIRECTED.
 4. MAINTAIN PROPER CROWN FOR DRAINAGE OF THE ROAD SURFACE.



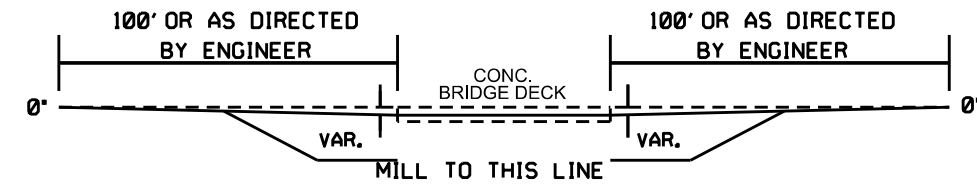
ASPHALT BRIDGE SECTION

Map 6
Map 7

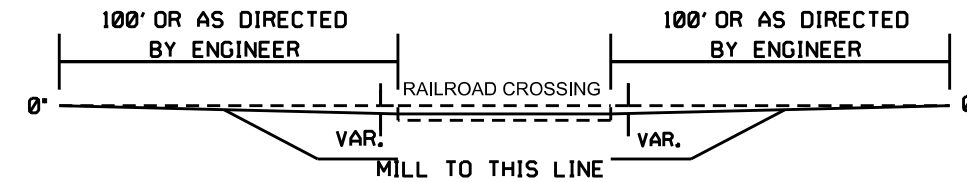
** OR AS DIRECTED

| PROJ. REFERENCE NO. | SHEET NO. | TOTAL SHEETS |
|-------------------------|-----------------|--------------|
| GASTON COUNTY 2025-2026 | 6 | 22 |
| STATE PROJ. NO. | F. A. PROJ. NO. | DESCRIPTION |
| 2026CPT. 12. 16. 10361 | | |
| 2026CPT. 12. 16. 20361 | | |

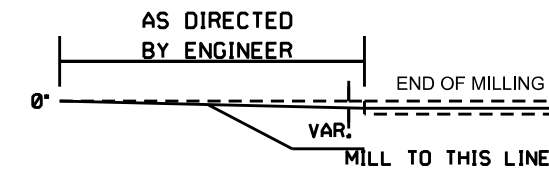
INCIDENTAL MILLING DETAILS



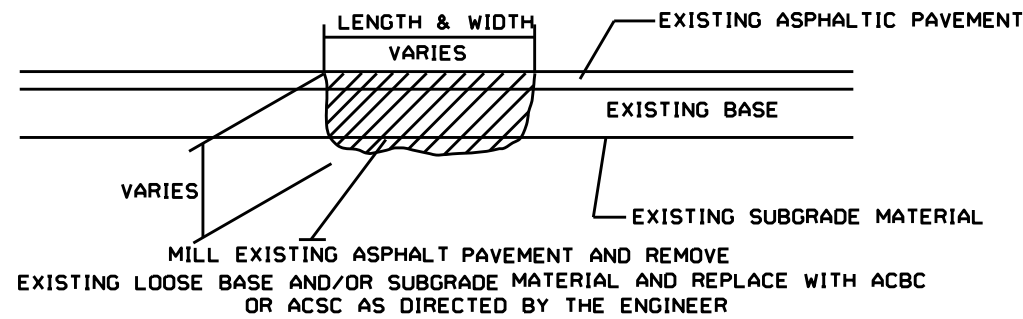
BRIDGE PROFILE



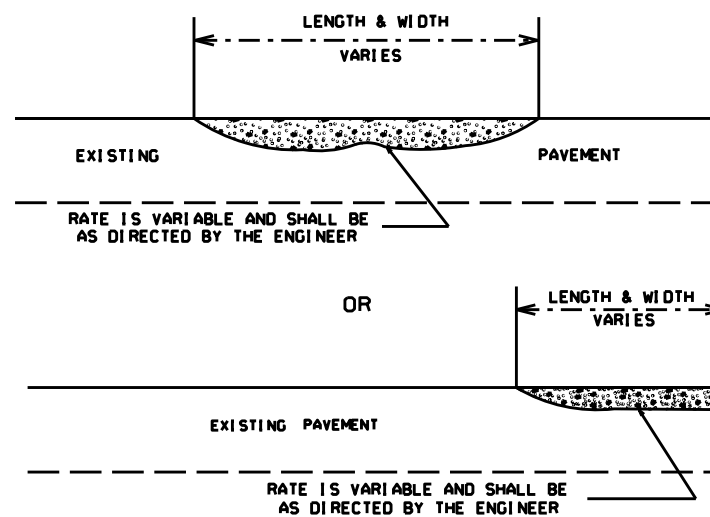
RAILROAD PROFILE



END OF MILLING PROFILE

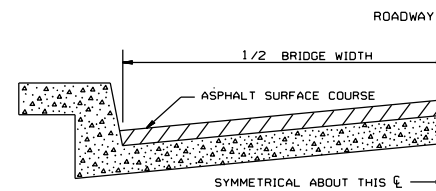


PATCHING EXISTING PAVEMENT



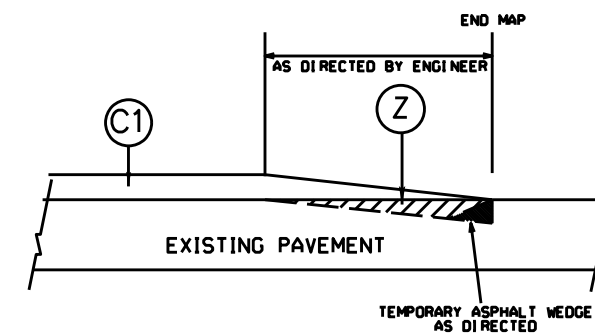
ASPHALT CONCRETE SURFACE COURSE
TYPE S9.5C (LEVELING COURSE)

BRIDGE HALF TYPICAL SECTION DETAIL

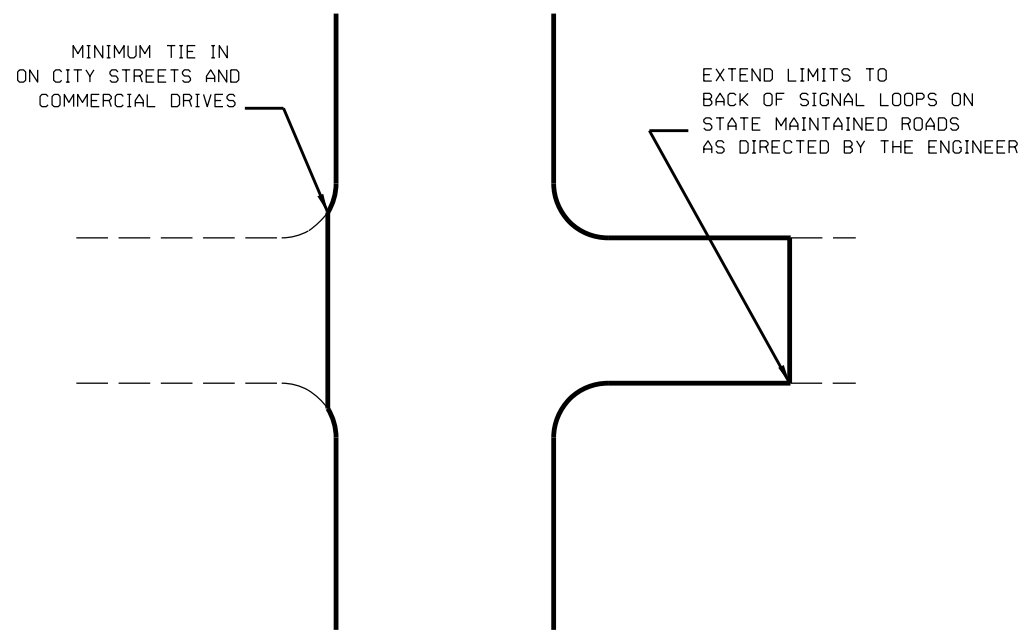


FOR BRIDGES WITH FLOOR DRAINS, CARE SHALL BE EXERCISED IN PLACING THE ASPHALT SURFACE AROUND FLOOR DRAINS SO AS NOT TO HINDER EFFECTIVE DRAINAGE. ALL DRAINS SHALL BE LEFT OPEN.

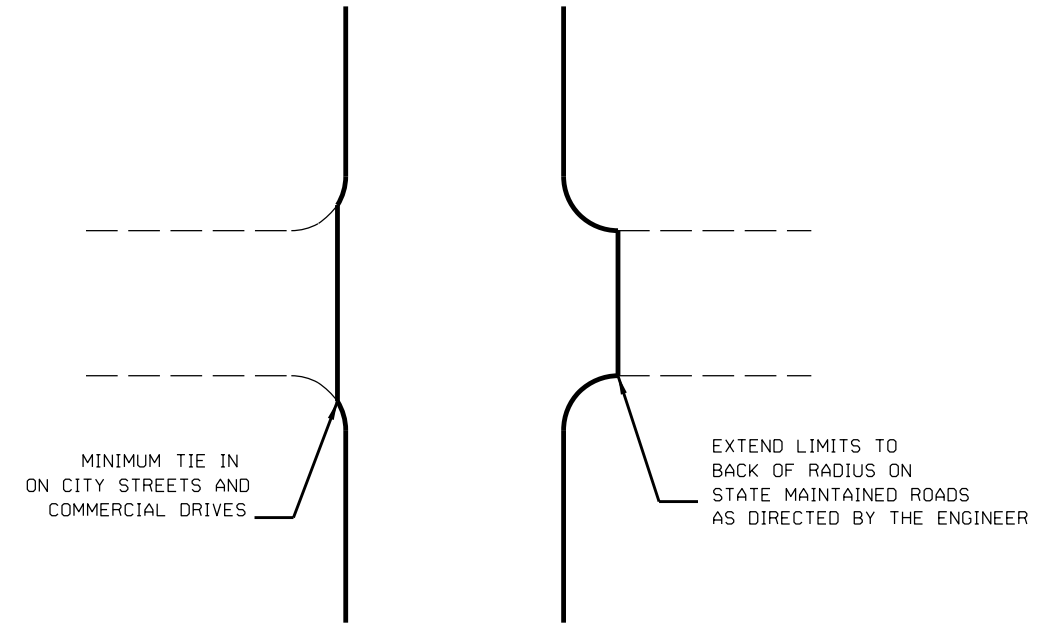
THE PROPOSED ASPHALT SURFACE SHALL VARY IN THICKNESS AS NECESSARY TO PROVIDE A SMOOTH RIDING SURFACE. A THICKNESS OF NOT LESS THAN 1" SHALL BE PROVIDED. THE MAXIMUM THICKNESS SHALL PREFERABLY BE 1-1/2" UNLESS IT IS IMPRACTICAL TO PROVIDE A SMOOTH RIDING SURFACE OTHERWISE.



TIE-IN MILLING DETAIL

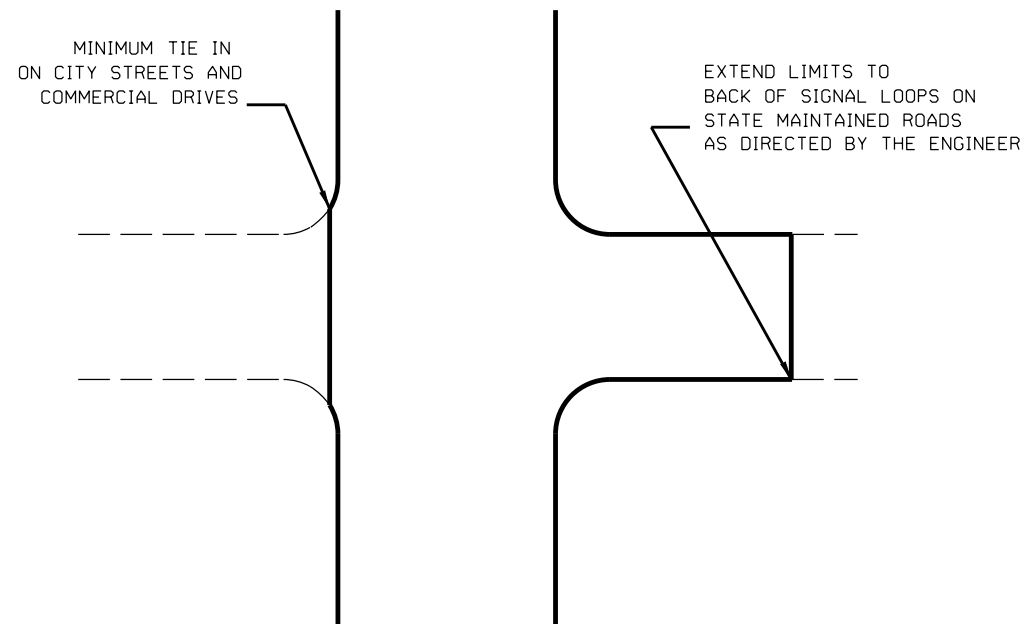


TYPICAL DETAIL OF PROJECT LIMITS AT SIGNALIZED Y LINES

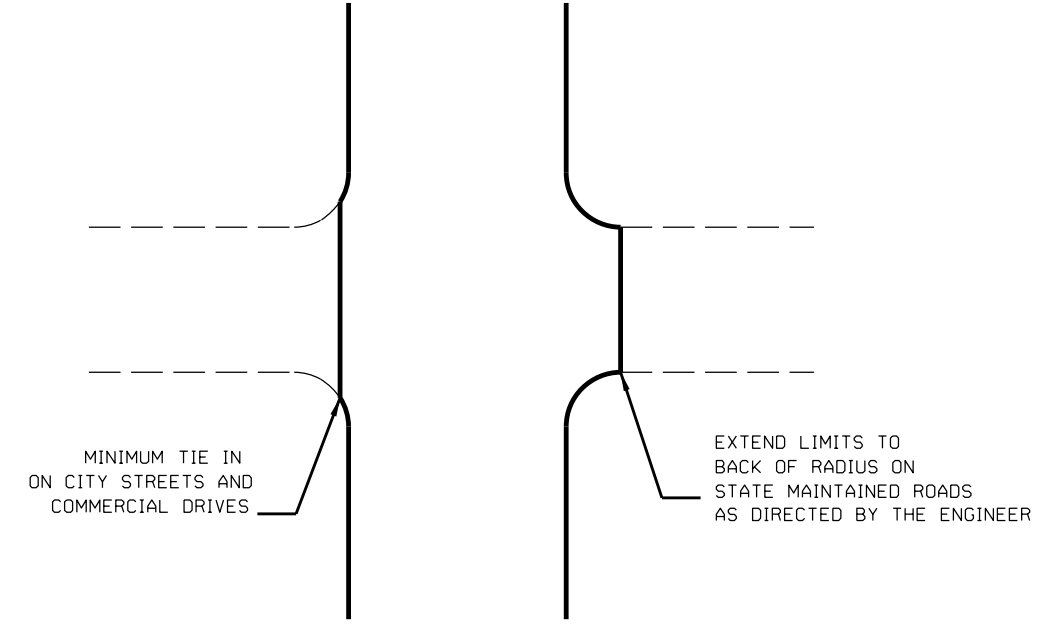


TYPICAL DETAIL OF PROJECT LIMITS AT UNSIGNALIZED Y LINES

| ADDITIONAL INTERSECTIONS (NON-TYPICAL) | | |
|--|--------------|--------------------------------|
| Extend paving limits to back of radius or loop on the following intersections: | | |
| MAP# | STREET NAME | COMMENTS |
| 1 | W SIXTH AVE | BACK OF RADIUS |
| 1 | W FIFTH AVE | BACK OF RADIUS |
| 1 | W FOURTH AVE | BACK OF SIDEWALK |
| 1 | W THIRD AVE | BACK OF RADIUS |
| 1 | W SECOND AVE | MINIMUM TIE IN ON CITY STREETS |
| 2 | W SECOND AVE | MINIMUM TIE IN ON CITY STREETS |
| 2 | W THIRD AVE | BACK OF RADIUS |
| 2 | W FOURTH AVE | BACK OF RADIUS |
| 2 | W HARVIE AVE | BACK OF RADIUS |
| 2 | W FIFTH AVE | BACK OF RADIUS |
| 2 | W SIXTH AVE | BACK OF RADIUS |
| | | |
| | | |
| | | |
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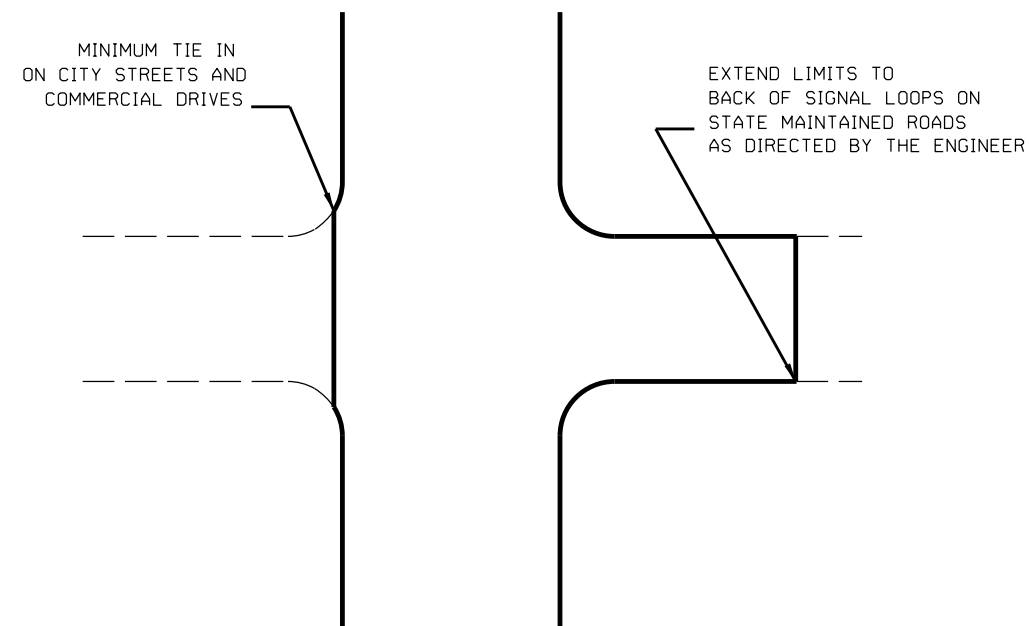


TYPICAL DETAIL OF PROJECT LIMITS AT SIGNALIZED Y LINES

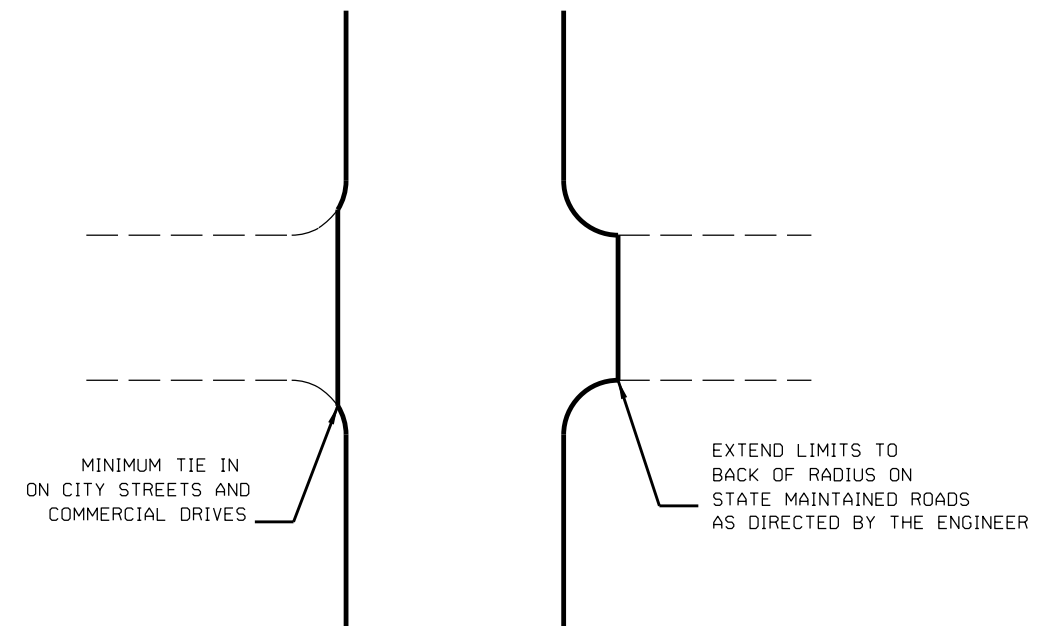


TYPICAL DETAIL OF PROJECT LIMITS AT UNSIGNALIZED Y LINES

| ADDITIONAL INTERSECTIONS (NON-TYPICAL) | | |
|--|----------------------------------|--------------------------------|
| Extend paving limits to back of radius or loop on the following intersections: | | |
| MAP# | STREET NAME | COMMENTS |
| 3 | SUMMIT AVE | BACK OF RADIUS |
| 3 | E GLENDALE AVE | BACK OF RADIUS |
| 3 | PIEDMONT AVE | BACK OF RADIUS |
| 3 | E CATAWBA AVE | BACK OF RADIUS |
| 3 | E CENTRAL AVE | BACK OF RADIUS |
| 4 | CANAL RD | BACK OF RADIUS |
| 4 | FIRST ST | MINIMUM TIE IN ON CITY STREETS |
| 4 | WILSON ST | BACK OF RADIUS |
| 4 | SUNOCO THREE DRIVE WAY ENTRANCES | BACK OF RADIUS |
| 4 | TUCKER RD | BACK OF RADIUS |
| 4 | BOAT CLUB RD | BACK OF RADIUS |
| 4 | SINGING BROOK TRL | BACK OF RADIUS |
| 4 | NEAGLE SMITH LN | MINIMUM TIE IN ON CITY STREETS |
| 4 | HENRY CHAPEL RD | BACK OF RADIUS |
| 4 | SMITH POINT CHURCH RD | BACK OF RADIUS |



TYPICAL DETAIL OF PROJECT LIMITS AT SIGNALIZED Y LINES

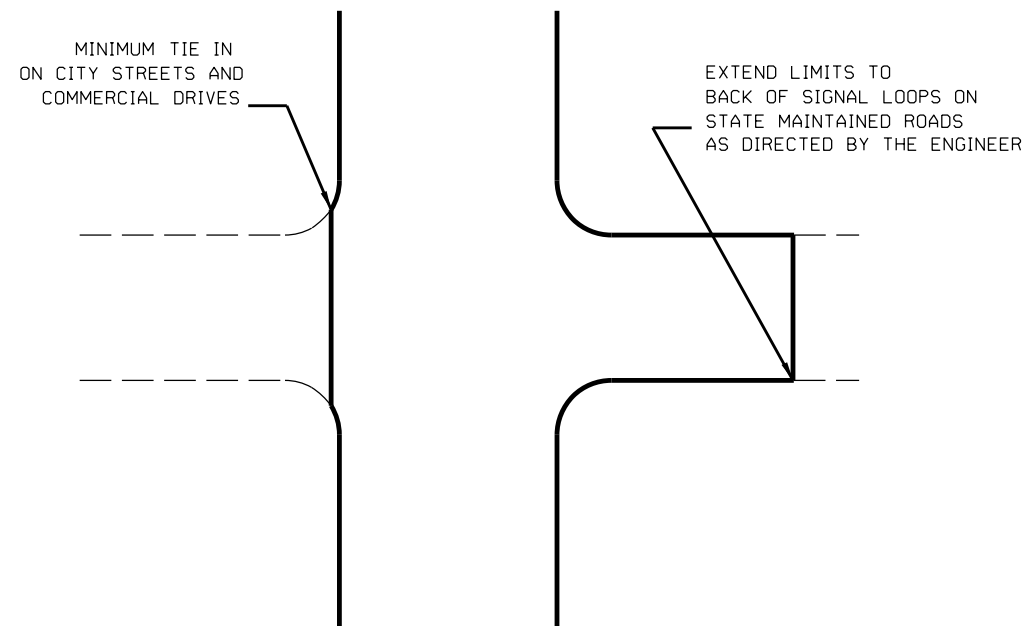


TYPICAL DETAIL OF PROJECT LIMITS AT UNSIGNALIZED Y LINES

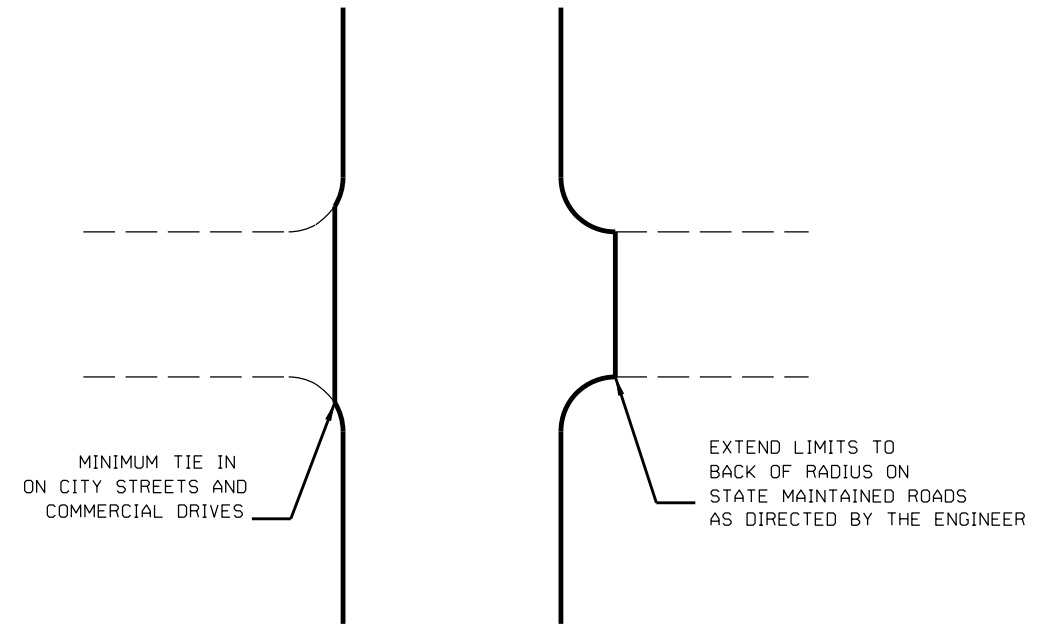
ADDITIONAL INTERSECTIONS (NON-TYPICAL)

Extend paving limits to back of radius or loop on the following intersections:

| MAP# | STREET NAME | COMMENTS |
|------|------------------------------|--------------------------------|
| 4 | GRAYSTONE ESTATES DR | MINIMUM TIE IN ON CITY STREETS |
| 4 | BELLE MEADE CIR | MINIMUM TIE IN ON CITY STREETS |
| 4 | WALNUT CREEK RD | BACK OF RADIUS |
| 4 | POINT WYLIE TWO ENTRANCES | BACK OF RADIUS |
| 4 | SECOND AVE | BACK OF RADIUS |
| 4 | GAITHER RD | BACK OF RADIUS |
| 4 | MCLEAN SELF STORAGE ENTRANCE | MINIMUM TIE IN ON CITY STREETS |
| 4 | FOREST HILLS RD | BACK OF RADIUS |
| 4 | BB DRIVE | MINIMUM TIE IN ON CITY STREETS |
| 4 | DOVE BRANCH DR | MINIMUM TIE IN ON CITY STREETS |
| 4 | HORSLEY AVE | BACK OF RADIUS |
| 4 | BOWEN DR | BACK OF RADIUS |
| | | |
| | | |
| | | |



TYPICAL DETAIL OF PROJECT LIMITS AT SIGNALIZED Y LINES

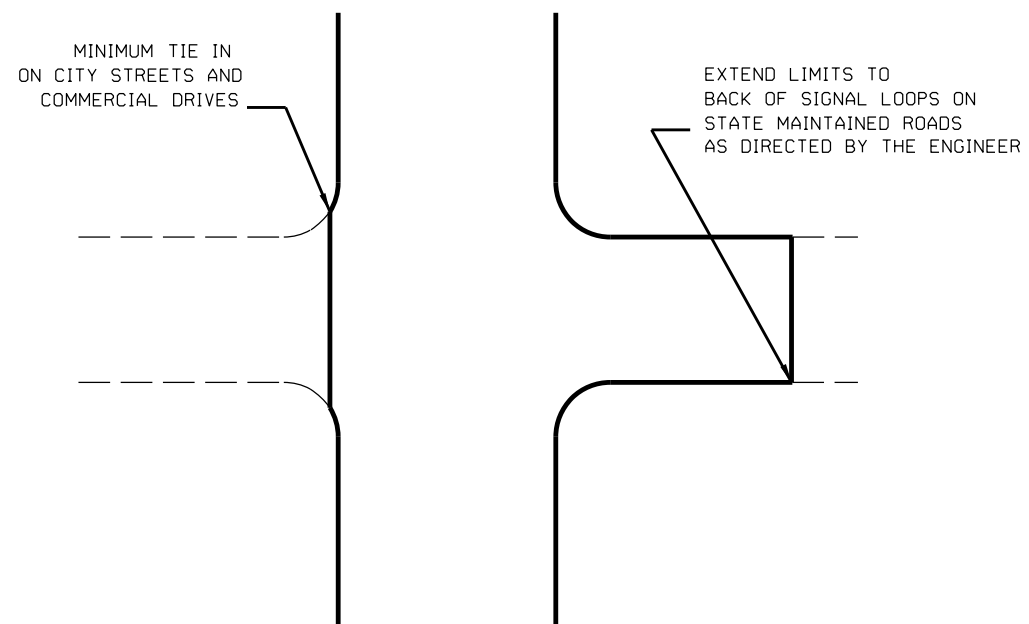


TYPICAL DETAIL OF PROJECT LIMITS AT UNSIGNALIZED Y LINES

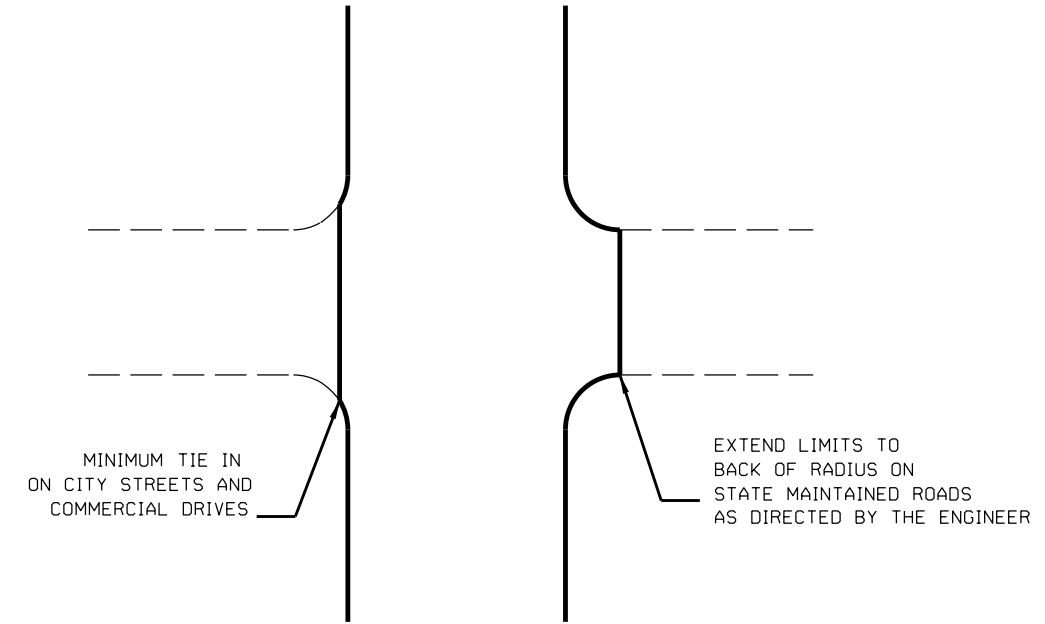
ADDITIONAL INTERSECTIONS (NON-TYPICAL)

Extend paving limits to back of radius
or loop on the following intersections:

| MAP# | STREET NAME | COMMENTS |
|------|---|--------------------------------|
| 6 | BLACKSNAKE RD | BACK OF RADIUS |
| 6 | RUTLEDGE RD | BACK OF RADIUS |
| 6 | CARROLL DELLINGER RD | BACK OF RADIUS |
| 6 | ALEXIS LUCIA RD | BACK OF RADIUS |
| 6 | COX LAKE RD | BACK OF RADIUS |
| 6 | JOHN FRAUSER RD | BACK OF RADIUS |
| 6 | WHIPPOORWILL LN | BACK OF RADIUS |
| 7 | MCADENVILLE FIRE STATION | MINIMUM TIE IN ON CITY STREETS |
| 7 | BELVIE LN | MINIMUM TIE IN ON CITY STREETS |
| 7 | ACADEMY ST | MINIMUM TIE IN ON CITY STREETS |
| 7 | CHURCH ST | BACK OF RADIUS |
| 7 | McADENVILLE ELEMENTARY DRIVEWAY ENTRANCES | MINIMUM TIE IN ON CITY STREETS |
| 7 | CHRISTMAS TOWN DENTISTRY ENTRANCE | MINIMUM TIE IN ON CITY STREETS |
| 7 | FOREST HEIGHTS DR | BACK OF RADIUS |
| | | |
| | | |



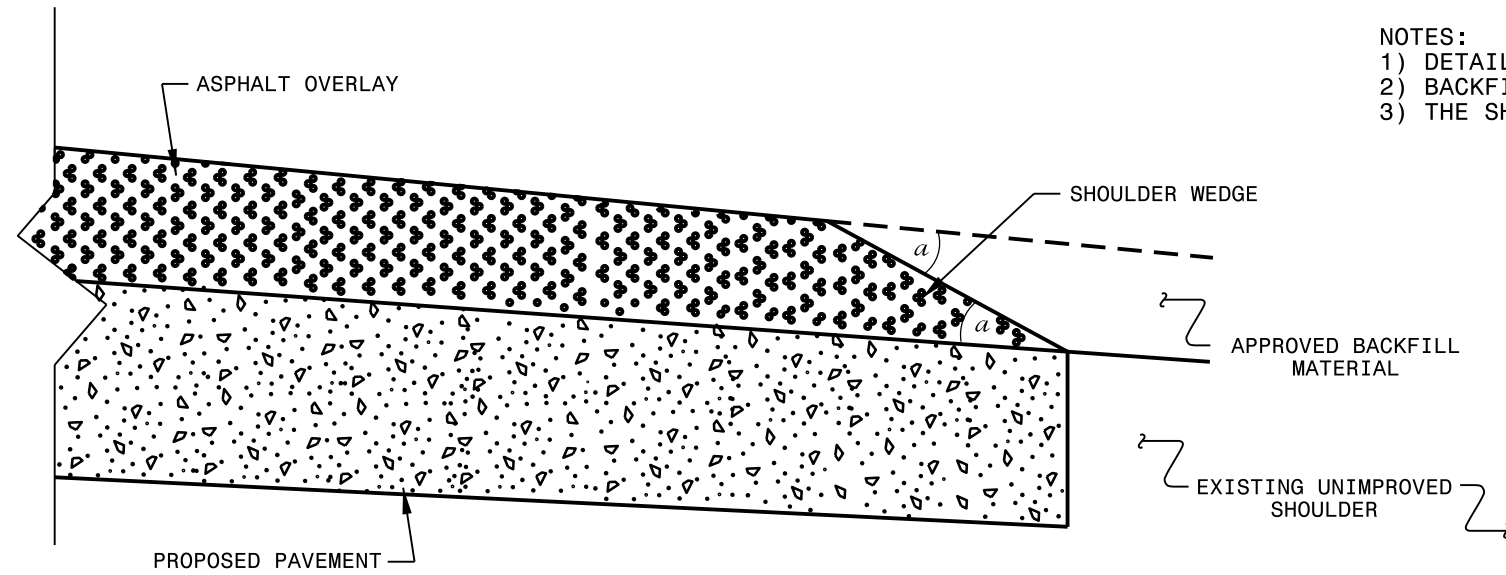
TYPICAL DETAIL OF PROJECT LIMITS AT SIGNALIZED Y LINES



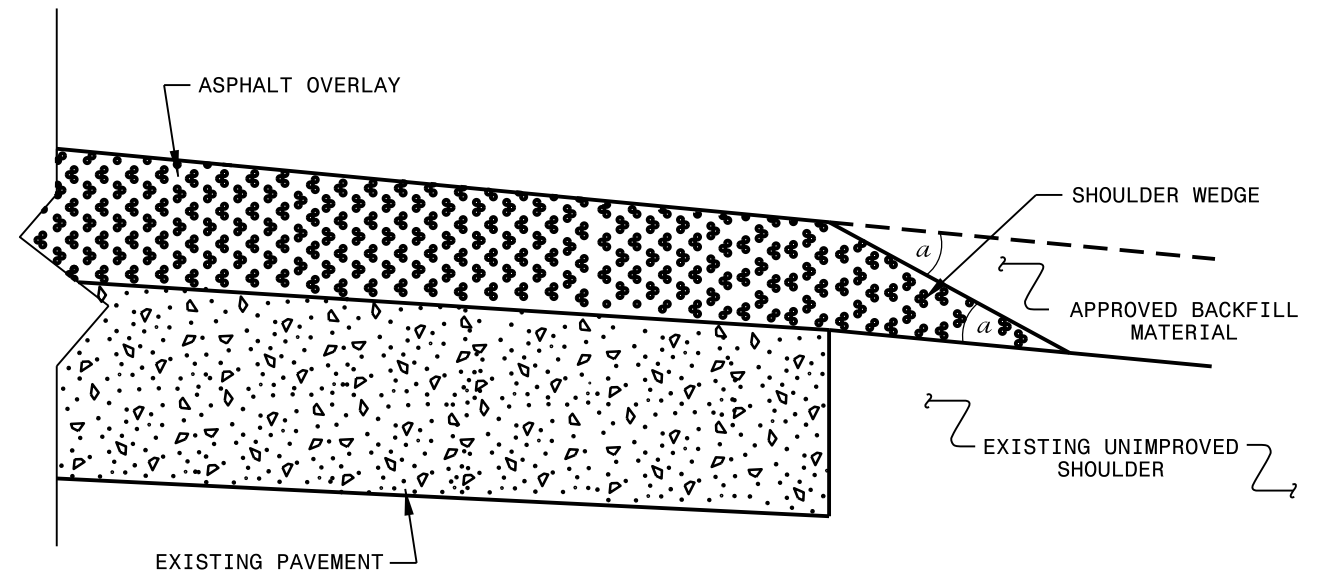
TYPICAL DETAIL OF PROJECT LIMITS AT UNSIGNALIZED Y LINES

| ADDITIONAL INTERSECTIONS (NON-TYPICAL) | | |
|--|-----------------------------|--------------------------------|
| Extend paving limits to back of radius or loop on the following intersections: | | |
| MAP# | STREET NAME | COMMENTS |
| 8 | VALLEYWOOD DR | BACK OF RADIUS |
| 8 | MARTHA RIVERS PARK ENTRANCE | MINIMUM TIE IN ON CITY STREETS |
| 8 | RIVERWOOD PKWY | BACK OF RADIUS |
| 8 | OLD NEAL HAWKINS RD | BACK OF RADIUS |
| 8 | SHOPPING CENTER ENTRANCE | BACK OF CONSTRUCTION JOINT |
| 9 | HALL ST | BACK OF SIDEWALK |
| 9 | JOHNSON ST | BACK OF RADIUS |
| 9 | CENTRAL PARK SOUTH ENTRANCE | MINIMUM TIE IN ON CITY STREETS |
| 9 | KEENER BLVD | MINIMUM TIE IN ON CITY STREETS |
| 9 | GASTON AVE | BACK OF RADIUS |
| 9 | ETHAN LN | BACK OF RADIUS |
| 9 | NORTH ST | BACK OF CONSTRUCTION JOINT |
| 9 | DEVINE AVE | BACK OF RADIUS |
| 9 | SOUTH ST | BACK OF SIDEWALK |
| 9 | JULIA AVE | BACK OF RADIUS |
| 9 | MIMOSA ST | BACK OF RADIUS |

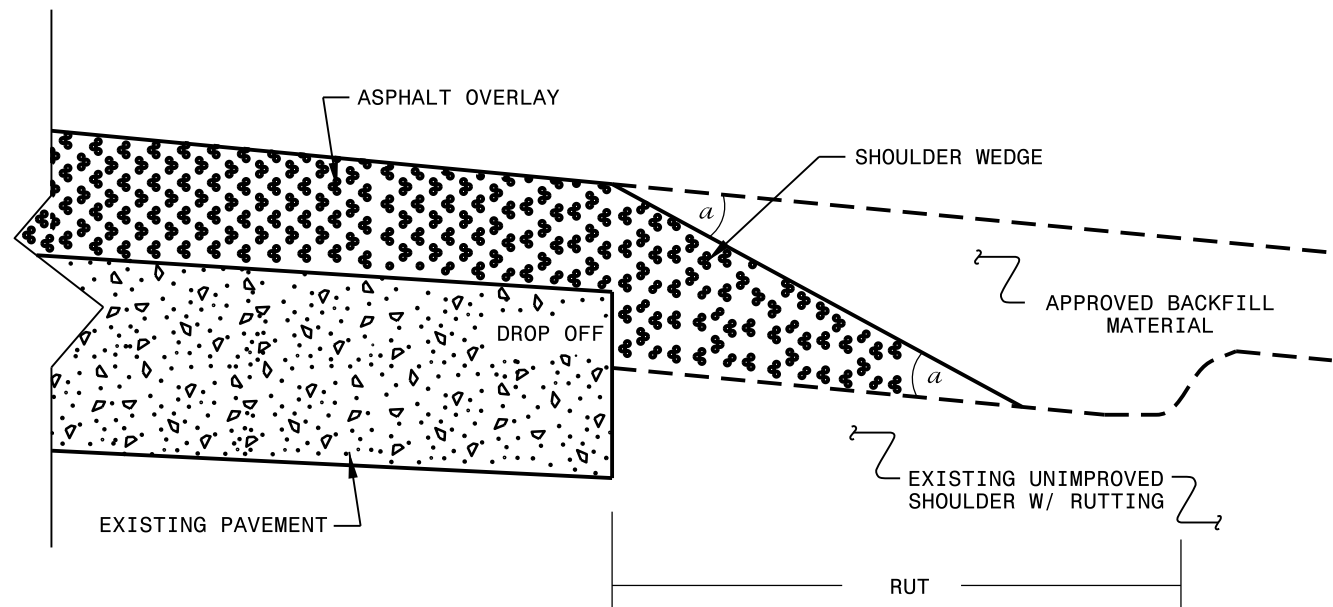
- NOTES:
- 1) DETAIL DOES NOT APPLY TO OGAFc AND ULTRA-THIN BONDED WEARING COURSE.
 - 2) BACKFILL SHOULDER WITH APPROVED MATERIAL.
 - 3) THE SHOULDER WEDGE DEVICE MAY BE DISENGAGED AT PAVED DRIVEWAYS AND SIDE STREETS.



SHOULDER WEDGE DETAIL
(Resurfacing Projects w/ Widening or
with Existing Paved Shoulder having no dropoffs)



SHOULDER WEDGE DETAIL
(Resurfacing Projects w/ NO Widening)



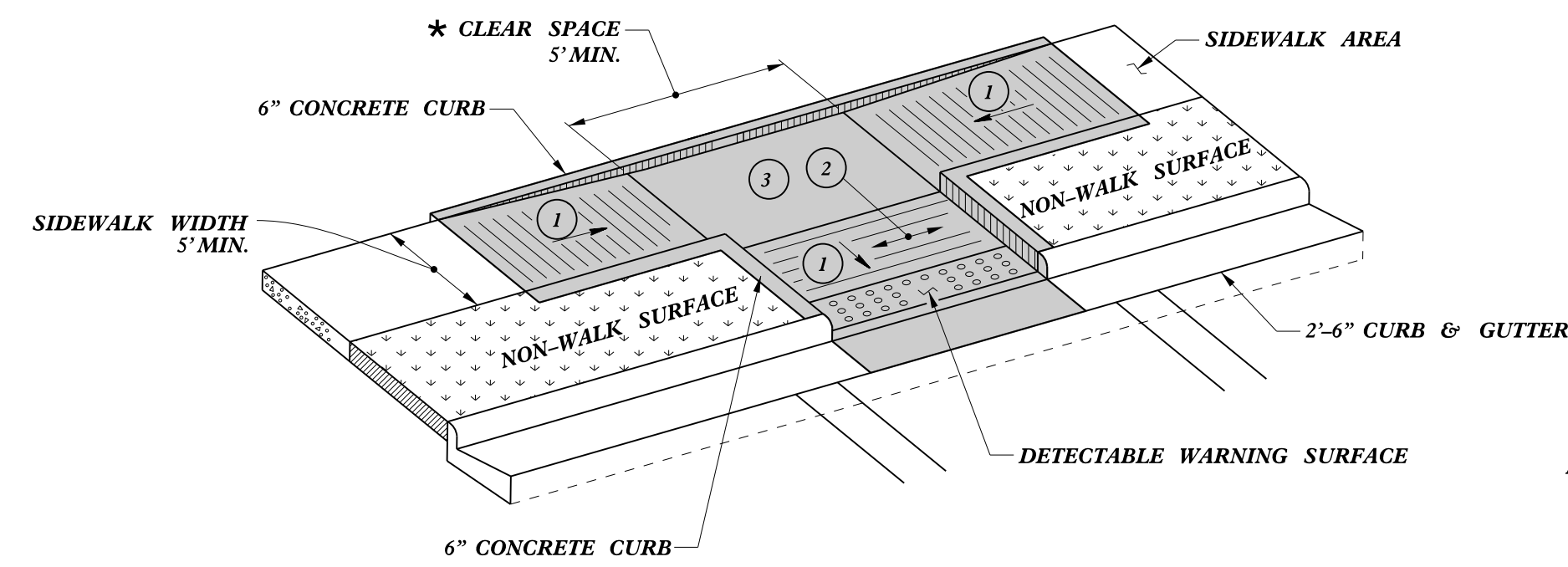
SHOULDER WEDGE DETAIL
(Resurfacing Adjacent to
Rutted Shoulder)

- SHOULDER WEDGE ANGLE = 30°

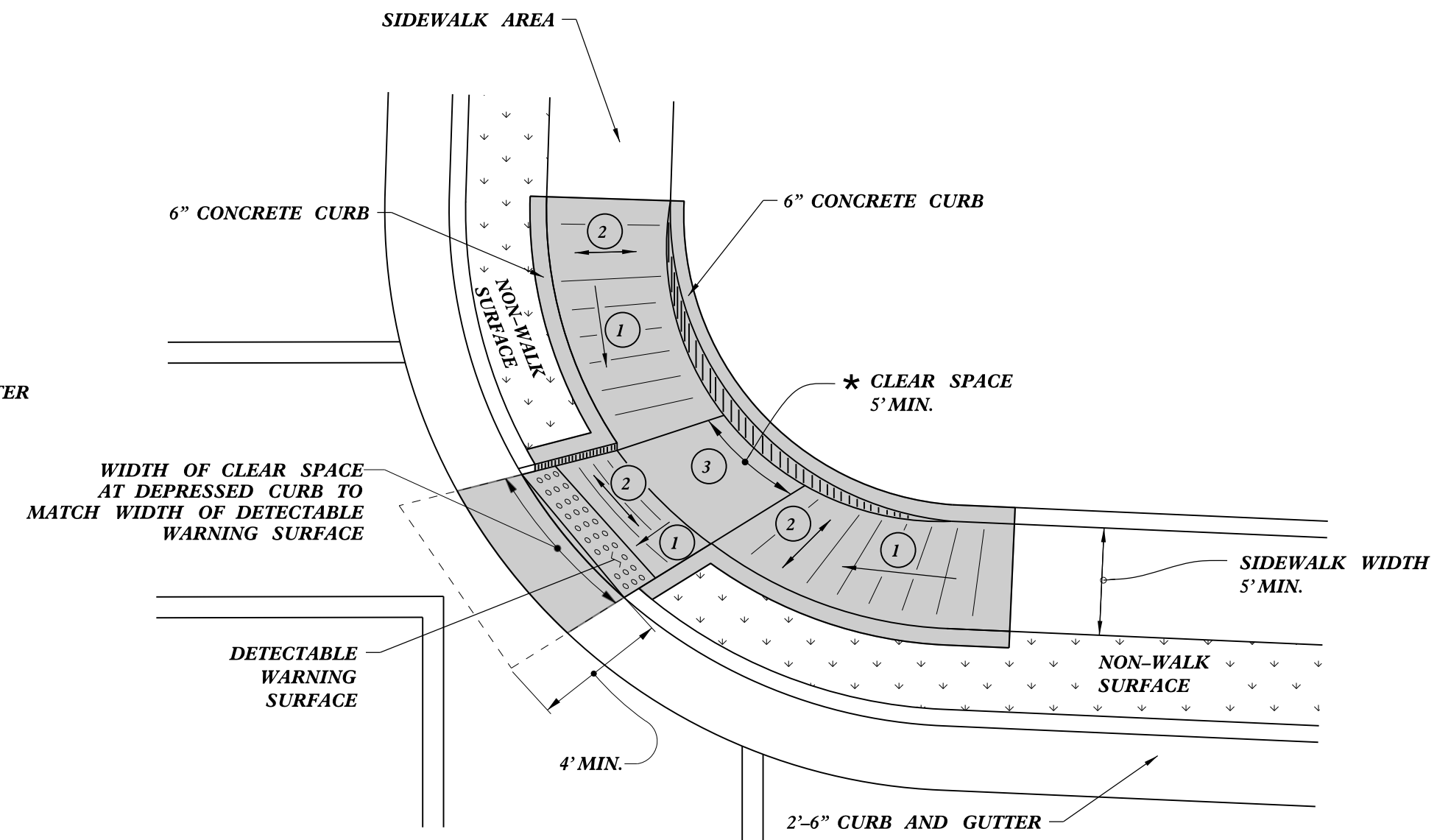
| | |
|--|------------------|
| CONTRACT STANDARDS AND DEVELOPMENT UNIT | |
| Office 919-707-6950 | FAX 919-250-4119 |
| SHOULDER WEDGE DETAILS | |
| ORIGINAL BY: T.SPELL | DATE: 7-19-11 |
| MODIFIED BY: | DATE: 10/16/12 |
| CHECKED BY: | DATE: |
| FILE SPEC.: susr/details/stand/shoulderwedgedetail.dgn | |

SYSTEMS DESIGN
USER NAME

* - WHERE CLEAR SPACE IS CONSTRAINED ON TWO OR MORE SIDES, THE CLEAR SPACE SHALL BE 4' MINIMUM X 5' MINIMUM, WITH 5' PROVIDED IN THE DIRECTION OF THE PEDESTRIAN STREET CROSSING.

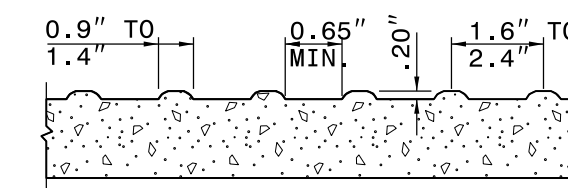
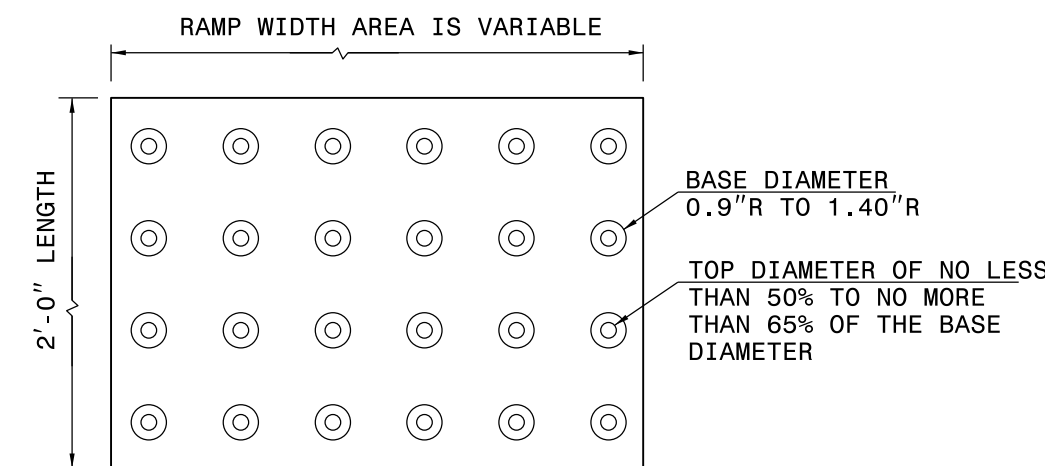


TYPE 3



**TYPE 3 MODIFIED
INSTALLATION IN A RADIUS**

NOTES:
 DETECTABLE WARNING SURFACE SHALL COVER 2'-0" LENGTH AND FULL WIDTH OF THE RAMP FLOOR AS SHOWN ON THE DETAILS.
 DETECTABLE WARNING SURFACE SHALL CONTRAST VISIBLY WITH ADJOINING SURFACE, EITHER LIGHT-ON-DARK, OR DARK-ON-LIGHT SEQUENCE COVERING THE ENTIRE RAMP.



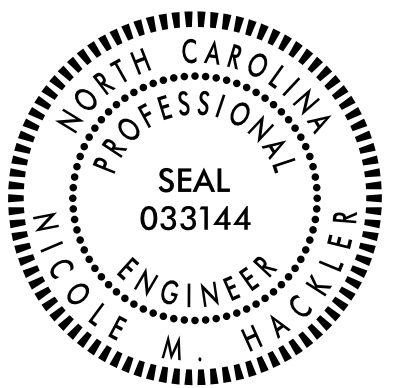
DETECTABLE WARNING SURFACE

- 1 8.33% (12:1) MAX RAMP SLOPE
- 2 CROSS SLOPE: 2.00%
- 3 MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.00%

PAY LIMITS FOR 1 CURB RAMP

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

ROADWAY DETAIL DRAWING FOR
CURB RAMP
PARALLEL RAMP



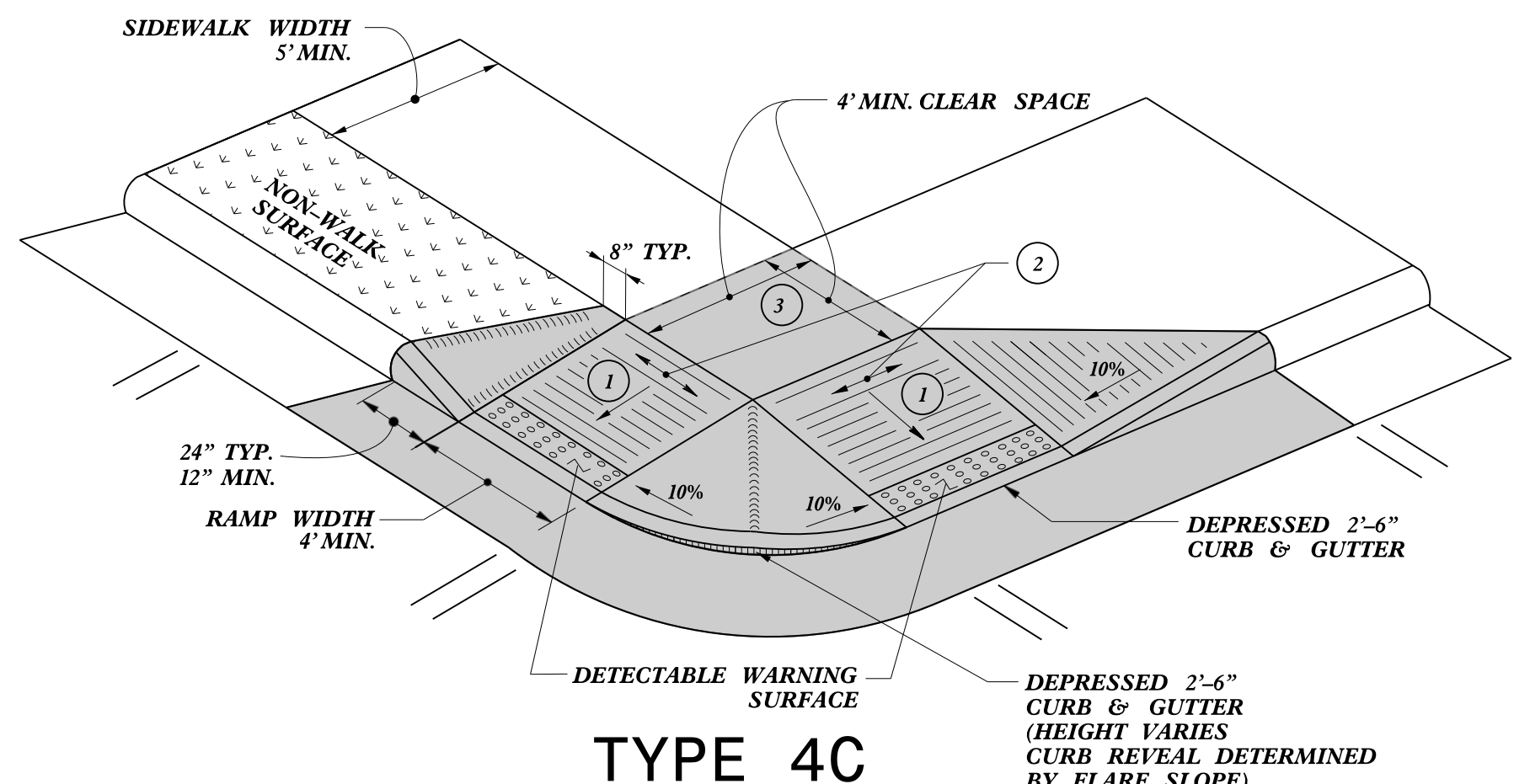
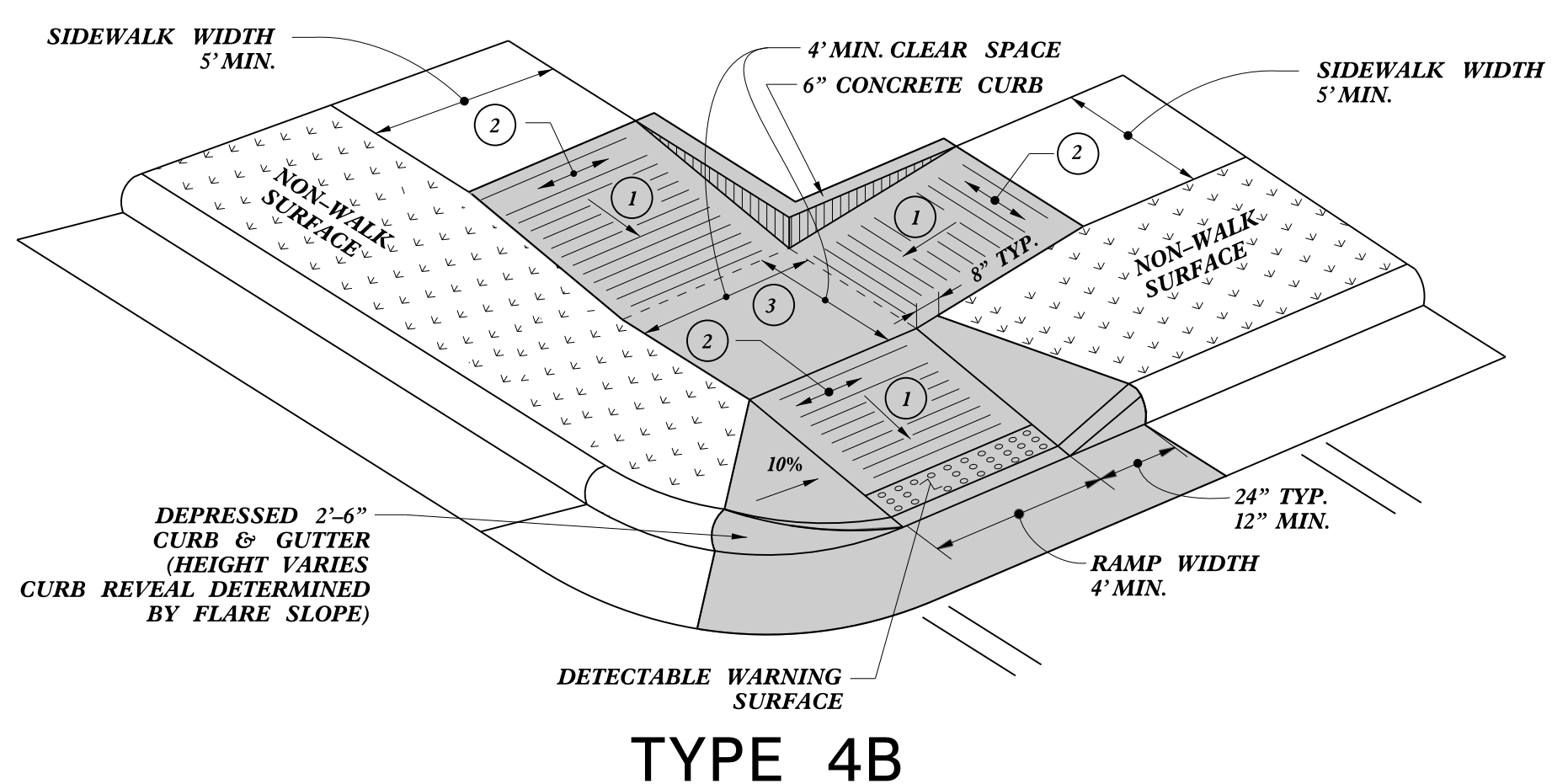
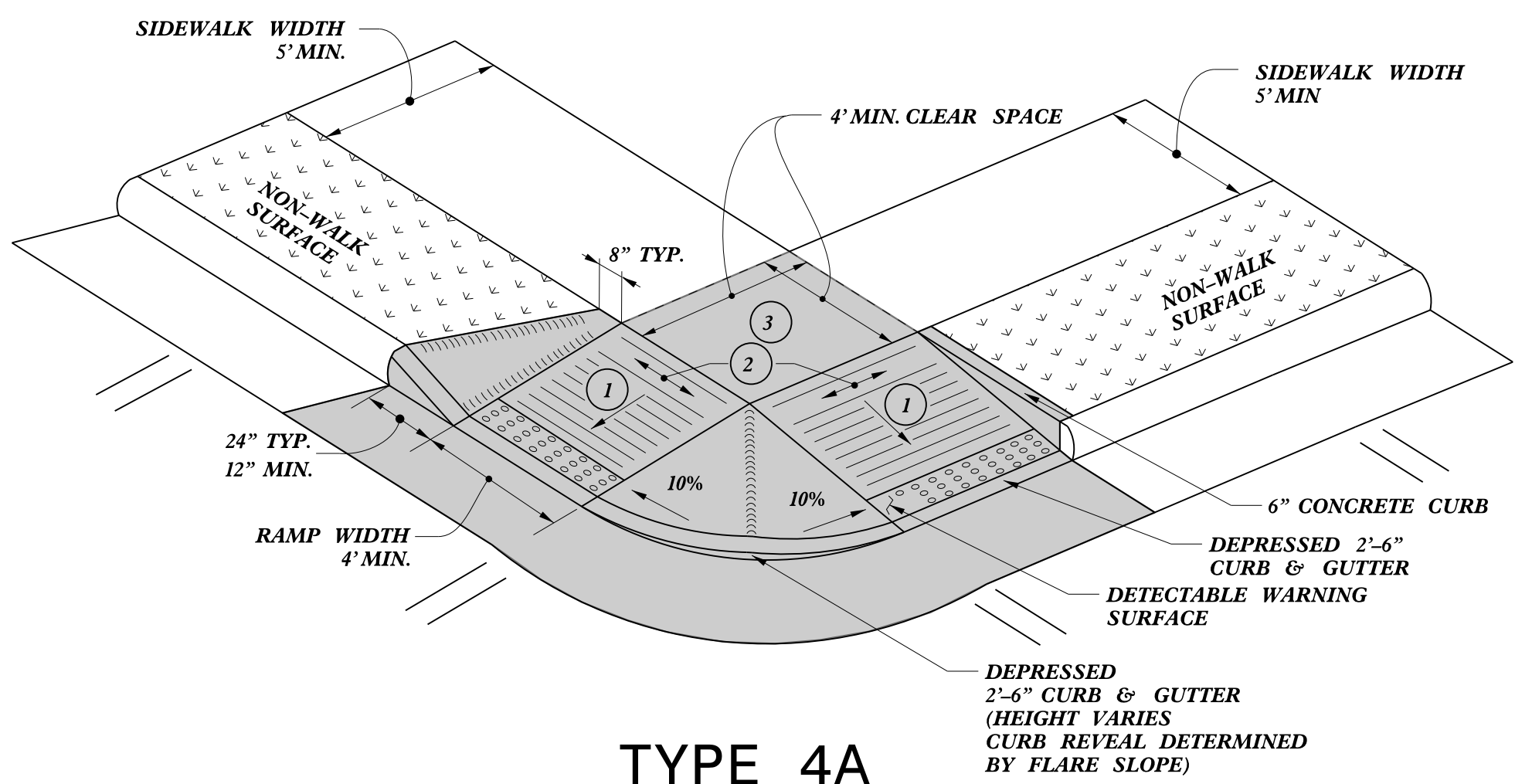
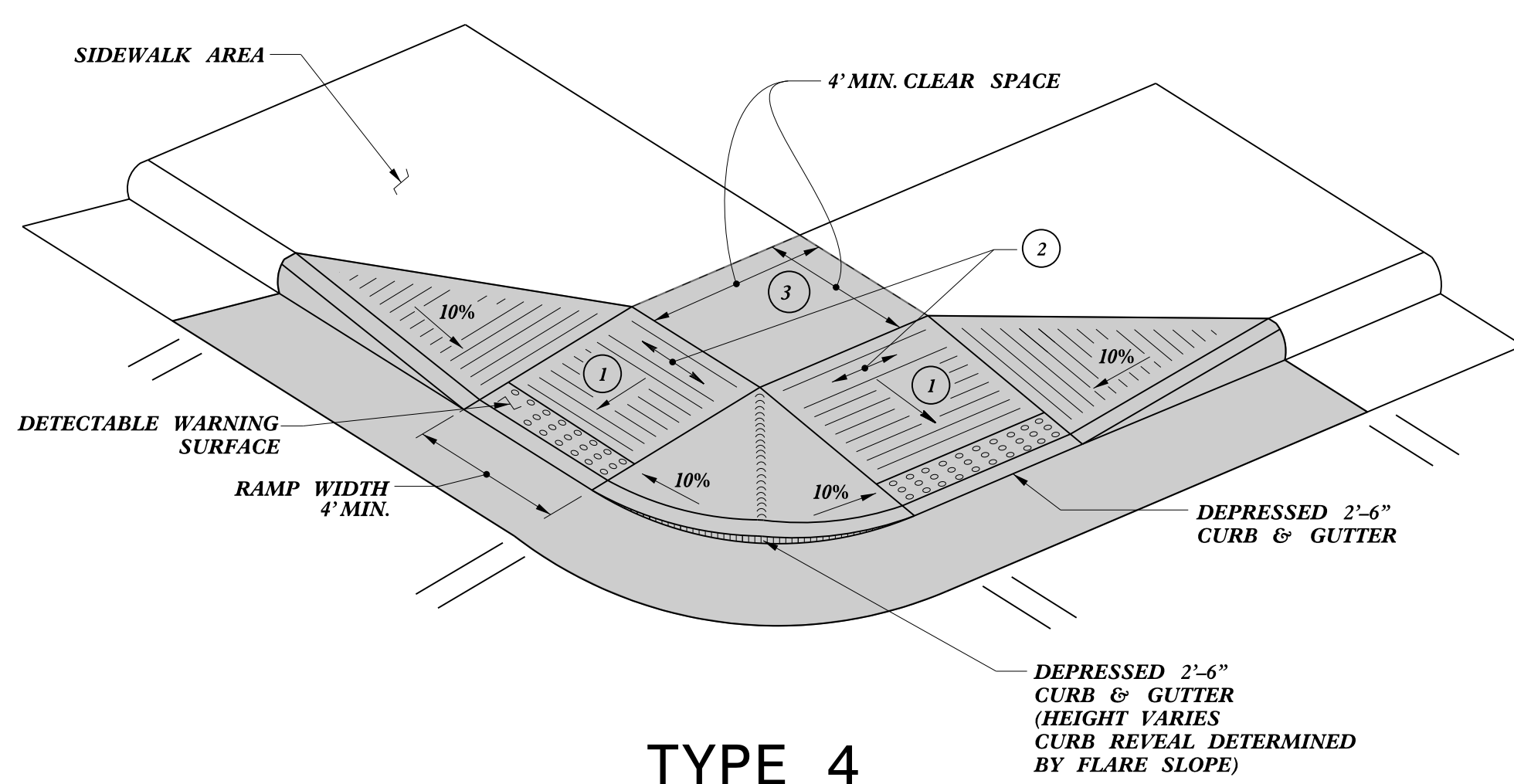
SHEET 9 OF 13
848D06

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

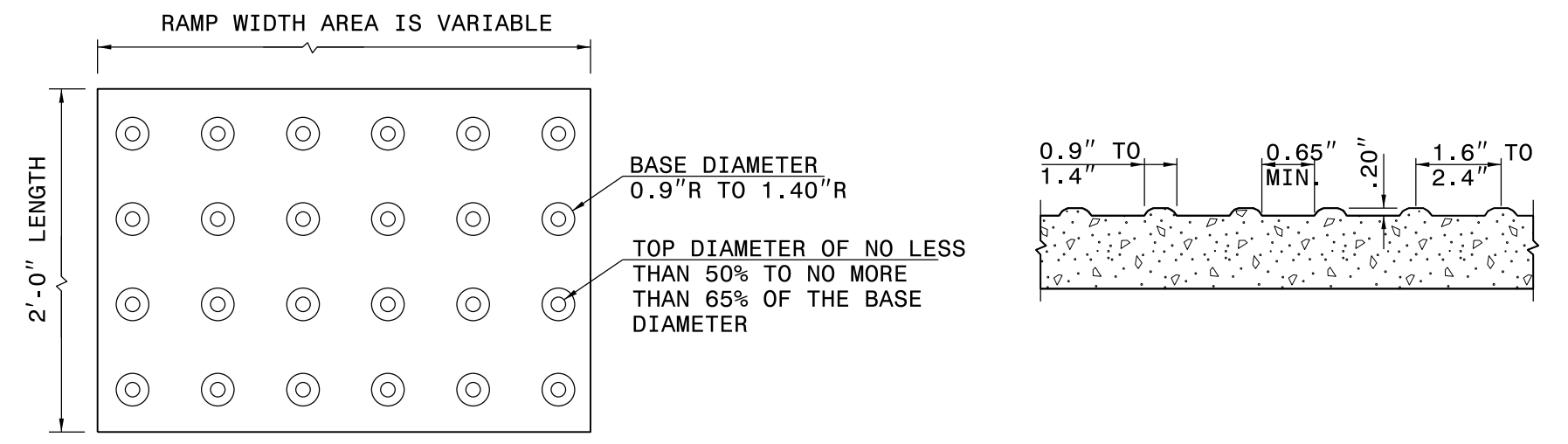
**CONTRACTS STANDARDS
AND DEVELOPMENT UNIT**
Office 919-707-6950 FAX 919-250-4119

SEE TITLE BLOCK

ORIGINAL BY: S.CALHOUN DATE: 12-22-2023
 MODIFIED BY: DATE: _____
 CHECKED BY: DATE: _____
 FILE SPEC.: special_details\nmhackler\0609.dgn



NOTES:
 DETECTABLE WARNING SURFACE SHALL COVER 2'-0" LENGTH AND FULL WIDTH OF THE RAMP FLOOR AS SHOWN ON THE DETAILS.
 DETECTABLE WARNING SURFACE SHALL CONTRAST VISIBLY WITH ADJOINING SURFACE, EITHER LIGHT-ON-DARK, OR DARK-ON-LIGHT SEQUENCE COVERING THE ENTIRE RAMP.



DETECTABLE WARNING SURFACE

- 1 8.33% (12:1) MAX RAMP SLOPE
- 2 CROSS SLOPE: 2.00%
- 3 MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.00%

PAY LIMITS FOR 1 OR 2 CURB RAMPS (CALCULATE BASED ON NUMBER OF SETS OF DETECTABLE WARNING SURFACES)

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

ROADWAY DETAIL DRAWING FOR
CURB RAMP
 SHARED LANDING



SHEET 10 OF 13
848D06

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

CONTRACTS STANDARDS AND DEVELOPMENT UNIT
 Office 919-707-6950 FAX 919-250-4119

SEE TITLE BLOCK

ORIGINAL BY: S.CALHOUN DATE: 12-22-2023
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| | | |
|---------------------|-----------|-----------|
| PROJECT NO. | SHEET NO. | TOTAL NO. |
| 2026CPT.12.16.10361 | 16 | 22 |
| 2026CPT.12.16.20361 | | |

SUMMARY OF QUANTITIES

| PROJECT NO | COUNTY | MAP NO | ROUTE | DESCRIPTION | TYP NO | LANES | LANE TYPE | FINAL SURFACE TESTING REQUIRED | WARM MIX ASPHALT REQUIRED | LENGTH | WIDTH | BEGIN MP | END MP | 0255000000-E | 1220000000-E | 1245000000-E | 1297000000-E | 1330000000-E | 1523000000-E | 1524000000-E | 1575000000-E | 1704000000-E | 2605000000-N | 2759000000-N | 2800000000-N | 2815000000-N | 2830000000-N | 2845000000-N | 5255000000-N | 7324000000-N | 7444000000-E | 7456000000-E | | | | | | |
|---|--------|--------|----------------------------|--|----------------------------|-------|-----------|--------------------------------|---------------------------|--|--|----------|--------|---------------------------|-----------------------|-------------------------|---------------|--------------------|-----------------------|------------------------|------------------------------|----------------------------|--------------------------------------|--|---------------------|--------------------|------------------|----------------------------|-------------------|------------------------------|-----------------------|----------------------|------------|--------------|--------------|--------------|--|--|
| | | | | | | | | | | | | | | AGGREGATE SHOULDER BORROW | INCIDENTAL STONE BASE | SHOULDER RECONSTRUCTION | 1.5" MILLING | INCIDENTAL MILLING | SURFACE COURSE, S9.5C | LEVELING COURSE, S9.5C | ASPHALT BINDER FOR PLANT MIX | PATCHING EXISTING PAVEMENT | REMOVE & REPLACE CONCRETE CURB RAMPS | RETROFIT CURB RAMP DETECTABLE WARNINGS | ADJ. OF CATCH BASIN | ADJ. OF DROP INLET | ADJ. OF MANHOLES | ADJ. OF METER OR VALVE BOX | PORTABLE LIGHTING | JUNCTION BOX (STANDARD SIZE) | INDUCTIVE LOOP SAWCUT | LEAD-IN CABLE (14-2) | | | | | | |
| | | | | | | | | | | MI | FT | | | TON | TONS | SMI | SY | SY | TONS | TONS | TONS | TONS | EA | EA | EA | EA | EA | EA | EA | EA | EA | EA | | | | | | |
| 2026CPT.12.16.10361 | Gaston | 1 | US-321 N / S. YORK RD. | FROM SR-2466 / GARRISON BLVD TO US 29/74 / FRANKLIN BLVD | 1 2 | 2 | MU | NO | NO | 0.53 0.10 | VAR. 34-48 34 | 7.25 | 7.88 | | | | 14,368 | | 1,214 | 202 | 100 | 351 | 6 | 5 | 2 | 1 | 17 | 18 | * | 1 | 1,000 | 400 | | | | | | |
| TOTAL FOR MAP NO. 1 | | | | | | | | | | 0.63 | | | | | | | 14,368 | | 1,214 | 202 | 100 | 351 | 6 | 5 | 2 | 1 | 17 | 18 | * | 1 | 1,000 | 400 | | | | | | |
| 2026CPT.12.16.10361 | Gaston | 2 | US-321 S / S. CHESTER ST. | FROM US 29/74 / FRANKLIN BLVD TO SR-2466 / GARRISON BLVD | 1 | 2 | MU | NO | NO | 0.61 | VAR. 24-48 | 10.48 | 11.09 | | | | 11,241 | | 950 | 125 | 74 | 228 | 5 | 12 | 1 | 1 | 19 | 13 | * | 1 | 1,000 | 400 | | | | | | |
| TOTAL FOR MAP NO. 2 | | | | | | | | | | 0.61 | | | | | | | 11,241 | | 950 | 125 | 74 | 228 | 5 | 12 | 1 | 1 | 19 | 13 | * | 1 | 1,000 | 400 | | | | | | |
| 2026CPT.12.16.10361 | Gaston | 3 | NC-273 / HIGHLAND ST. | FROM A&E DRIVE TO NC-27 / E. CHARLOTTE AVE. | 3 4 | 2 | MU | NO | NO | 0.11 0.39 | VAR. 26-44 VAR. 25-71 | 10.99 | 11.49 | 80 | | 0.22 | 9,000 | 700 | 976 | 98 | 75 | 235 | 14 | | | | 4 | 7 | | 1 | 1,850 | 750 | | | | | | |
| TOTAL FOR MAP NO. 3 | | | | | | | | | | 0.5 | | | | | | 80 | | 9,000 | 700 | 976 | 98 | 75 | 235 | 14 | | | | 4 | 7 | | 1 | 1,850 | 750 | | | | | |
| 2026CPT.12.16.10361 | Gaston | 4 | NC-273 / S POINT RD | FROM STEAM PLANT CHANNEL BRIDGE TO SR-2771 / BOWEN DR | 3 | 2 | 2WU | NO | NO | 2.03 | VAR. 24-30 | 3.13 | 5.16 | 710 | 105 | 4.05 | 3,030 | 3,232 | 150 | 258 | 1,226 | | 1 | | | | | 3 | | | | | | | | | | |
| TOTAL FOR MAP NO. 4 | | | | | | | | | | 2.03 | | | | | | 710 | 105 | 4.05 | 3,030 | 3,232 | 150 | 258 | 1,226 | | 1 | | | | | 3 | | | | | | | | |
| 2026CPT.12.16.10361 | Gaston | 5 | NC-7 / MAIN ST. | FROM SR-2329 / S. MAIN ST. TO SR-2201 / N. MAIN ST. | 1 | 2 | 2WU | NO | NO | 0.15 | 58 | 5.53 | 5.68 | | | | 6,059 | | 510 | 26 | 38 | 125 | | | | 1 | 4 | 2 | * | 1 | 1,000 | 400 | | | | | | |
| TOTAL FOR MAP NO. 5 | | | | | | | | | | 0.15 | | | | | | | 6,059 | | 510 | 26 | 38 | 125 | | | | 1 | 4 | 2 | * | 1 | 1,000 | 400 | | | | | | |
| TOTAL FOR PROJ NO. 2026CPT.12.16.10361 | | | | | | | | | | 3.92 | | | | | | | 790 | 105 | 4.27 | 40,668 | 3,730 | 6,882 | 601 | 545 | 2,165 | | 25 | 18 | 3 | 3 | 44 | 43 | * | 4 | 4,850 | 1,950 | | |
| 2026CPT.12.16.20361 | Gaston | 6 | SR-1905 / STANLEY LUCIA RD | FROM SR-1919 TO NC-273 / LUCIA RIVERBEND HWY | 3 | 2 | 2WU | NO | NO | 3.12 | 22 | 3.57 | 6.69 | 1,100 | 200 | 6.24 | 1,100 | 3,794 | 190 | 273 | 797 | | | | | | | | | | | | | | | | | |
| TOTAL FOR MAP NO. 6 | | | | | | | | | | 3.12 | | | | | | 1,100 | 200 | 6.24 | 1,100 | 3,794 | 190 | 273 | 797 | | | | | | | | | | | | | | | |
| 2026CPT.12.16.20361 | Gaston | 7 | SR-2209 / WESLEYAN DR | FROM NC-7 / MAIN ST TO US 29/74 / WILKINSON BLVD | 1 2 4 5 6 7 | 2 | 2WU | NO | NO | 0.25 0.03 0.19 0.02 0.08 0.04 | VAR. 27-53 VAR. 28-68 VAR. 24-35 25 VAR. 26-32 VAR. 36-49 | 0 | 0.61 | | | | 10,500 | | 1,025 | 110 | 87 | 319 | | | 1 | 1 | 2 | 1 | | 1 | 600 | 250 | | | | | | |
| TOTAL FOR MAP NO. 7 | | | | | | | | | | 0.61 | | | | | | | 10,500 | | 1,025 | 110 | 87 | 319 | | | 1 | 1 | 2 | 1 | | 1 | 600 | 250 | | | | | | |
| 2026CPT.12.16.20361 | Gaston | 8 | SR-2400 / NEAL HAWKINS RD | FROM BEGIN C&G W OF VALLEYWOOD DR TO NC-274 | 4 | 3 | MU | NO | NO | 0.46 | 36 | 1.36 | 1.82 | | | | 11,371 | | 957 | 47 | 72 | 268 | | 1 | | | | 4 | | 1 | 450 | 175 | | | | | | |
| TOTAL FOR MAP NO. 8 | | | | | | | | | | 0.46 | | | | | | | 11,371 | | 957 | 47 | 72 | 268 | | 1 | | | | 4 | | 1 | 450 | 175 | | | | | | |
| 2026CPT.12.16.20361 | Gaston | 9 | SR-2560 / S CENTRAL AVE | FROM SR-2519 / S MAIN ST TO NC-273 / RL STOWE RD | 2 1 3 | 2 | 2WU | NO | NO | 0.14 0.35 0.54 | VAR. 34-48 30 24 | 0.835 | 1.865 | 189 | 40 | 1.08 | 9,800 | 267 | 1,598 | 160 | 126 | 469 | 1 | 7 | 1 | | 8 | 8 | | 1 | 600 | 250 | | | | | | |
| TOTAL FOR MAP NO. 9 | | | | | | | | | | 1.03 | | | | | | | 189 | 40 | 1.08 | 9,800 | 267 | 1,598 | 160 | 126 | 469 | 1 | 7 | 1 | | 8 | 8 | | 1 | 600 | 250 | | | |
| TOTAL FOR PROJ NO. 2026CPT.12.16.20361 | | | | | | | | | | 5.22 | | | | | | | 1,289 | 240 | 7.32 | 31,671 | 1,367 | 7,374 | 507 | 1,853 | 1 | 8 | 2 | 1 | | 10 | 13 | | 3 | 1,650 | 675 | | | |
| GRAND TOTAL | | | | | | | | | | 9.14 | | | | | | | 2,079 | 345 | 11.59 | 72,339 | 5,097 | 14,256 | 1,108 | 1,103 | 4,018 | 26 | 26 | 5 | 4 | 54 | 56 | 1 | 7 | 6,500 | 2,625 | | | |

SUMMARY OF CURB RAMP QUANTITIES

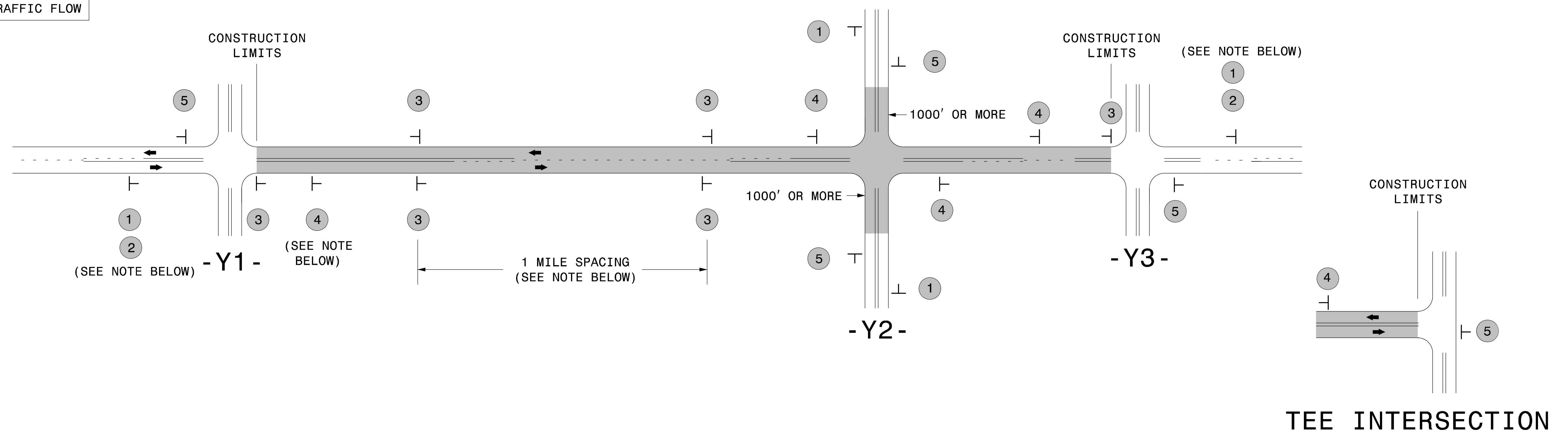
| SUMMARY OF CURB RAMP QUANTITIES | | | | | | | | Proj. # | 2026CPT.12.16.10361 |
|---------------------------------|----------|--------|---------------------------|--------------------|----------------------------------|-------------------------|--|-------------------------|----------------------------|
| | | | | | | | | Sheet # | 18 |
| WBS No. | Division | County | Major Route | Minor Route | Retrofit Existing Curb Ramp (EA) | Concrete Curb Ramp (EA) | Remove and Replace Concrete Curb Ramp (EA) | Quadrant (NE,SE,NW, SW) | Alternate Replacement Type |
| 2026CPT.12.16.10361 | 12 | Gaston | US 321 N (S. York Rd) | Sixth Ave. | 2 | | | SE, NE | Retrofit Dome |
| 2026CPT.12.16.10361 | 12 | Gaston | US 321 N (S. York Rd) | Fifth Ave. | 2 | | | SE, NE | Retrofit Dome |
| 2026CPT.12.16.10361 | 12 | Gaston | US 321 N (S. York Rd) | Fourth Ave. | 1 | | | NE | Retrofit Dome |
| 2026CPT.12.16.10361 | 12 | Gaston | US 321 N (S. York Rd) | Third Ave. | | | 4 | SE NE SW NW | Type 4A |
| 2026CPT.12.16.10361 | 12 | Gaston | US 321 N (S. York Rd) | Franklin Blvd | | | 1 | SE | Type 4A |
| 2026CPT.12.16.10361 | 12 | Gaston | US 321 N (S. York Rd) | Franklin Blvd | | | 1 | SW | Type 4 |
| 2026CPT.12.16.10361 | 12 | Gaston | US 321 N (S. Chester St.) | Franklin Blvd | | | 1 | SW | Type 4 |
| 2026CPT.12.16.10361 | 12 | Gaston | US 321 N (S. Chester St.) | Third Ave. | | | 4 | SE NE SW NW | Type 4A |
| 2026CPT.12.16.10361 | 12 | Gaston | US 321 N (S. Chester St.) | Fourth Ave. | 2 | | | SE, NE | Retrofit Dome |
| 2026CPT.12.16.10361 | 12 | Gaston | US 321 N (S. Chester St.) | Harvie Ave. | 2 | | | SW, NW | Retrofit Dome |
| 2026CPT.12.16.10361 | 12 | Gaston | US 321 N (S. Chester St.) | Fifth Ave. | 4 | | | SE NE SW NW | Retrofit Dome |
| 2026CPT.12.16.10361 | 12 | Gaston | US 321 N (S. Chester St.) | Sixth Ave. | 4 | | | SE NE SW NW | Retrofit Dome |
| 2026CPT.12.16.10361 | 12 | Gaston | US 273 (Highland St.) | Glendale Ave. | | | 3 | NW NE SE | Type 2A Modified |
| 2026CPT.12.16.10361 | 12 | Gaston | US 273 (Highland St.) | Glendale Ave. | | | 1 | SW | Type 4A |
| 2026CPT.12.16.10361 | 12 | Gaston | US 273 (Highland St.) | Piedmont Ave. | | | 4 | SE NE SW NW | Type 2A Modified |
| 2026CPT.12.16.10361 | 12 | Gaston | US 273 (Highland St.) | E. Catawba Ave. | | | 4 | SE NE SW NW | Type 4 |
| 2026CPT.12.16.10361 | 12 | Gaston | US 273 (Highland St.) | E. Central Ave. | | | 2 | SE SW | Type 2B Dual |
| 2026CPT.12.16.10361 | 12 | Gaston | US 273 (S. Point Rd) | Belle Meade Circle | 1 | | | SW | Retrofit Dome |
| | | | | | 18 | 0 | 25 | | |

SIGNING FOR RESURFACING PROJECTS

LEGEND

┆ STATIONARY SIGN

← DIRECTION OF TRAFFIC FLOW



MAINLINE (-L-) SIGNING

-Y- LINE SIGNING

| | | | | |
|--|---|---|---|--|
| SIGNING NOTES AND PLACEMENT PER DIRECTION | 1 | <small>W20-1 48" X 48"</small> | PLACE 1000' PRIOR TO BEGINNING OF CONSTRUCTION LIMITS. ONLY USED ON -Y- LINES IF RESURFACING LIMITS EXTEND 1000' ALONG -Y- LINE. | |
| | 2 | <small>W7-3aP 24" X 18"</small> | #2 SIGN ONLY USED WHEN CONSTRUCTION LIMITS ARE 2 OR MORE MILES IN LENGTH. ROUND UP TO NEXT WHOLE NUMBER. (NO FRACTIONAL OR DECIMAL NUMBERS) | |
| | 3 | <small>SP 13107 48" X 48"</small> | - PLACE INITIALLY AT THE CONSTRUCTION LIMITS AND SPACE 1 MILE APART THEREAFTER. - AT TEE INTERSECTIONS INSTALL INITIALLY 1/2 MILE FROM INTERSECTION AND SPACE 1 MILE APART THEREAFTER. | |
| | 4 | <small>SP 13106 48" X 48"</small> | - THESE ARE FOR -Y- LINES THAT ARE "THROUGH" ROADWAYS. - DEAD END AND SUBDIVISION ROADS ARE NOT "THROUGH" ROADWAYS. - INSTALL 500' +/- FROM EACH -Y- LINE APPROACH AS SHOWN ABOVE. - FOR MULTIPLE -Y- LINES THAT ARE SEPARATED BY 0.25 MILES OR LESS, TREAT AS A SINGLE UNIT AND INSTALL WITHIN 500' OF EACH APPROACH. - A MAXIMUM OF 2 SIGN SETS PER MILE. DO NOT INSTALL WHEN -Y- LINES ARE WITHIN 0.5 MILES FROM "END ROAD WORK" SIGN. - FOR TEE INTERSECTIONS, INSTALL WITHIN 500' +/- OF THE INTERSECTION ALONG -L- LINE. | |
| | 5 | <small>G20-2 A 48" X 24"</small> | PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS OR AS SHOWN WHEN WORK ENDS AT A 3-WAY TEE INTERSECTION. | |

NO REQUIRED STATIONARY SIGNING FOR THE FOLLOWING -Y- LINE CONDITIONS:

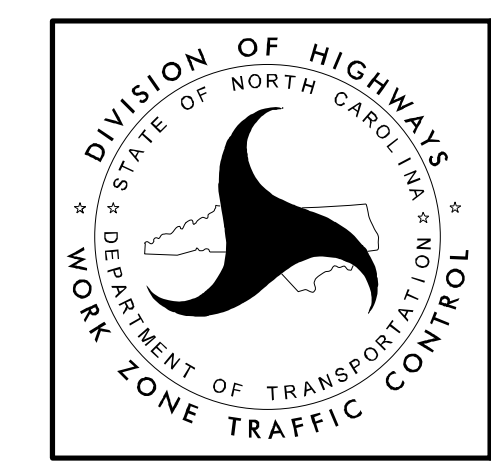
- 1) LESS THAN 1000' OF RESURFACING ALONG -Y- LINE
- 2) SUBDIVISION ROADS
- 3) DEAD END ROADS

WHEN PAVING/CONSTRUCTION ACTIVITIES PROCEED ACROSS AN UNSIGNED -Y- LINE, PORTABLE ADVANCE WARNING SIGNS SHALL BE USED ALONG THE -Y- LINE AS SHOWN BELOW. REMOVE UPON COMPLETION OF WORK.

| | |
|--|--|
| <small>W20-1 48" X 48"</small> PLACED 500' IN ADVANCE OF FLAGGER. | <small>W20-7 A 48" X 48"</small> PLACED 250' IN ADVANCE OF FLAGGER. |
|--|--|

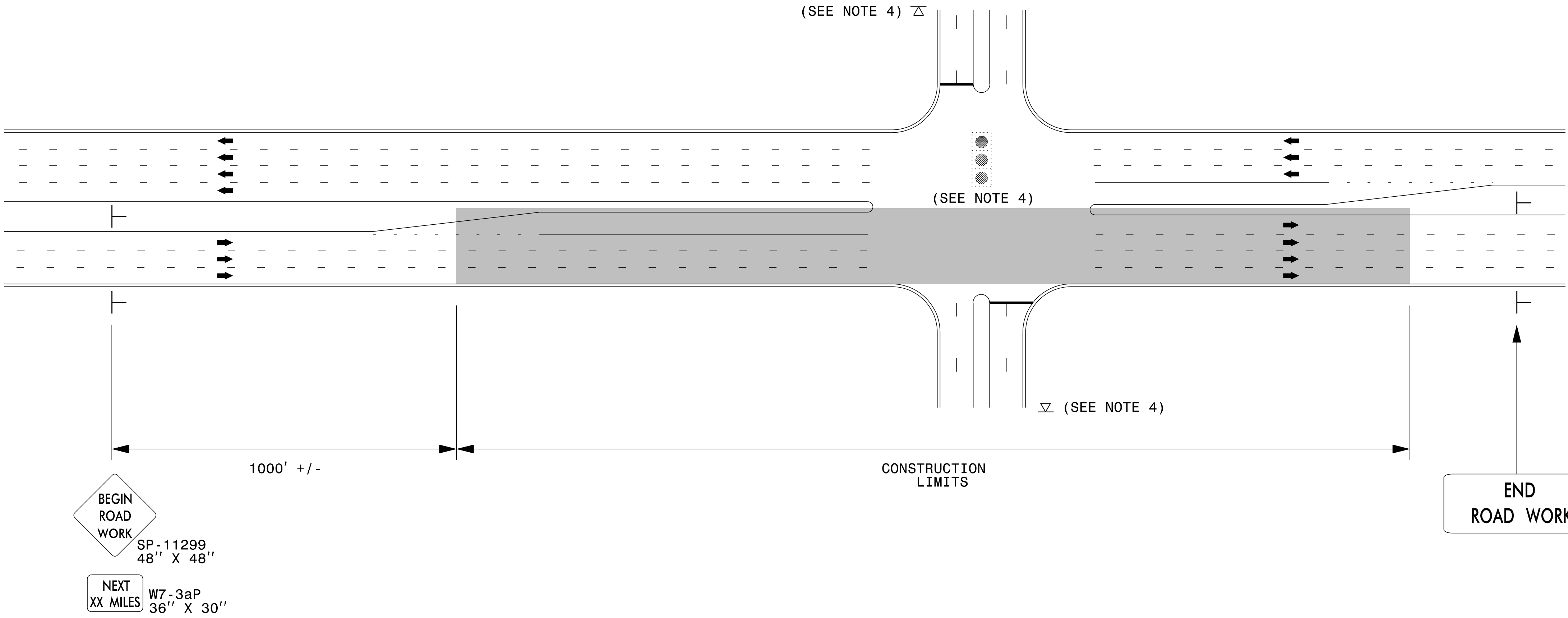
MAPS LESS THAN 2 MILES

FOR RESURFACING MAPS WITH CONSTRUCTION LIMITS LESS THAN 2 MILES IN LENGTH, NO STATIONARY SIGNS ARE REQUIRED. USE PORTABLE "ROAD UNDER CONSTRUCTION" OR "ROAD WORK AHEAD" SIGNS IN LIEU OF STATIONARY ADVANCE WARNINGS SIGNS.



ADVANCE WARNING SIGNS FOR RURAL AND SUBURBAN 2-LANE ROADWAY RESURFACING

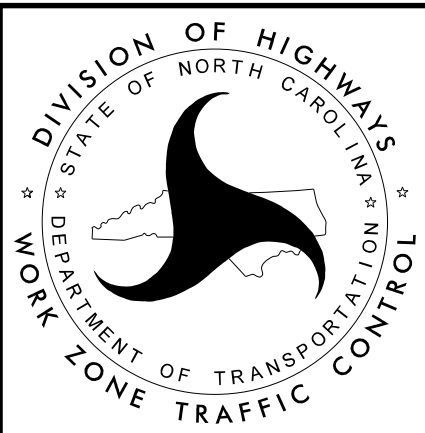
URBAN / SUBURBAN WORKZONES



NOTES:

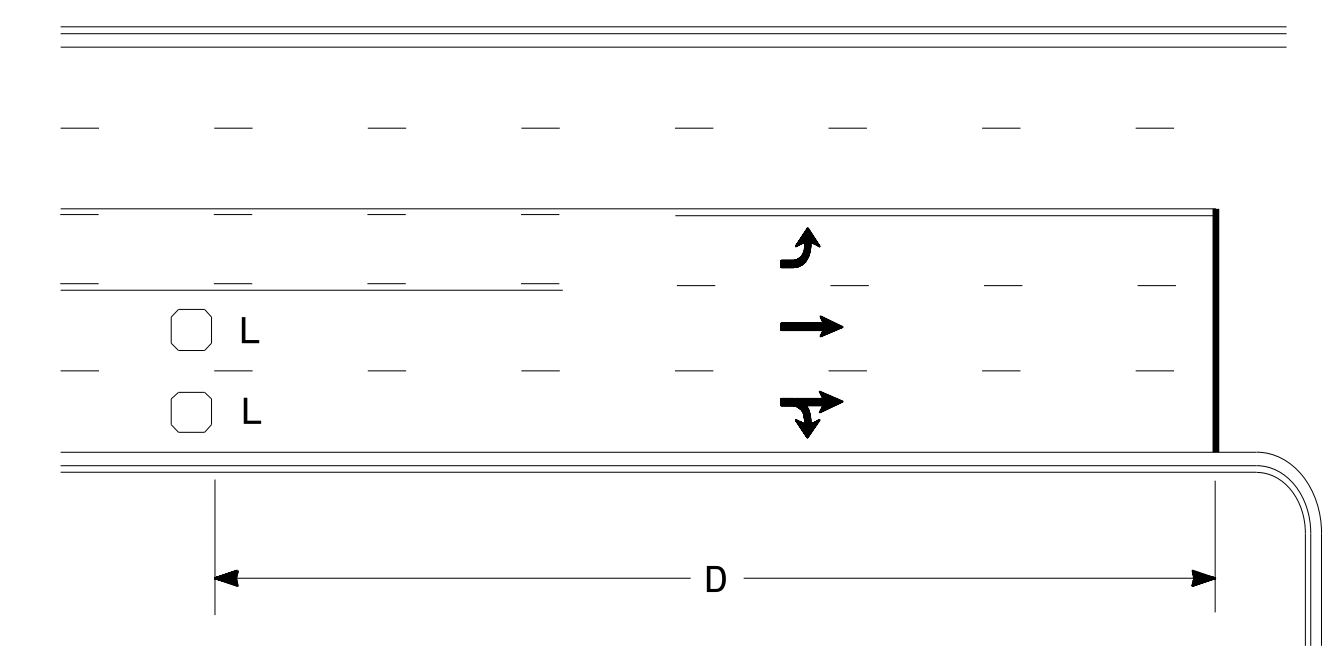
- 1) 48" x 48" SIZED SIGNS (SP- 11299) MAY BE REDUCED TO 36" X 36" ON ROADWAYS WITH SPEED LIMITS OF 40 MPH OR LESS.
- 2) MOUNT SIGNS THAT ARE LARGER THAN 10 SQUARE FEET IN AREA ON TWO OR MORE WOOD OR U-CHANNEL SUPPORTS. PERFORATED SQUARE TUBING SUPPORT SYSTEMS MAY SUPPORT LARGER AREAS ON A SINGLE SUPPORT. FOLLOW MANUFACTURER'S RECOMMENDATIONS. THESE SYSTEMS SHALL BE NCHRP 350 COMPLIANT AND NCDOT APPROVED.
- 3) ADVANCE WARNING SIGNS NOT REQUIRED ON NON-SIGNALIZED SIDE STREETS.
- 4) MAY USE LAW ENFORCEMENT TO CONTROL TRAFFIC AT SIGNALIZED INTERSECTIONS AS DIRECTED BY THE ENGINEER. PROVIDE PORTABLE "ROAD WORK AHEAD" (W20-1) SIGNS 500' IN ADVANCE ALONG BOTH APPROACHES FROM THE SIDE STREETS WHEN PAVING PROCEEDS THROUGH THE INTERSECTION.
- 5) LATERAL CLEARANCE AT ALL SIGN LOCATIONS SHALL BE 2' AS MEASURED FROM THE EDGE OF PAVEMENT OR THE FACE OF THE CURB. WHEN UNABLE TO OBTAIN THE LATERAL CLEARANCE WITHIN THE MEDIAN AREA USE SHOULDER MOUNTS ONLY.
- 6) SIGN MOUNT LOCATIONS SHALL NOT BLOCK SIDEWALKS OR DRIVEWAYS.
- 7) IF STATIONARY GENERAL WARNING SIGNS ARE USED, THEY WILL BE PAID FOR PER SECTION 104 OF THE NCDOT STANDARD SPECIFICATIONS AS EXTRA WORK.
- 8) IF MILLED AREAS ARE NOT PAVED BACK BY THE END OF THE WORK DAY, PORTABLE SIGNS SHALL BE USED TO WARN DRIVERS OF THE PRESENT CONDITIONS. THESE ARE TO INCLUDE, BUT NOT LIMITED TO "ROUGH ROAD" W8-8, "UNEVEN LANES" W8-11, "GROOVED PAVEMENT" W8-15 w/MOTORCYCLE PLAQUE MOUNTED BELOW. THESE ARE TO BE DOUBLE INDICATED ON MULTI-LANE ROADWAYS WITH SPEED LIMITS 45 MPH AND GREATER WHERE LATERAL CLEARANCE CAN BE OBTAINED WITHIN THE MEDIAN AREAS. THESE PORTABLE SIGNS ARE INCIDENTAL TO THE OTHER ITEMS OF WORK INCLUDED IN THE TEMPORARY TRAFFIC CONTROL (LUMP SUM) PAY ITEM.

| LEGEND | |
|--------|---------------------------|
| ├ | STATIONARY SIGN |
| ➔ | DIRECTION OF TRAFFIC FLOW |



**RESURFACING ADVANCE
WARNING SIGNS FOR
URBAN / SUBURBAN
FACILITIES**

High Speed Detection (≥40 mph)

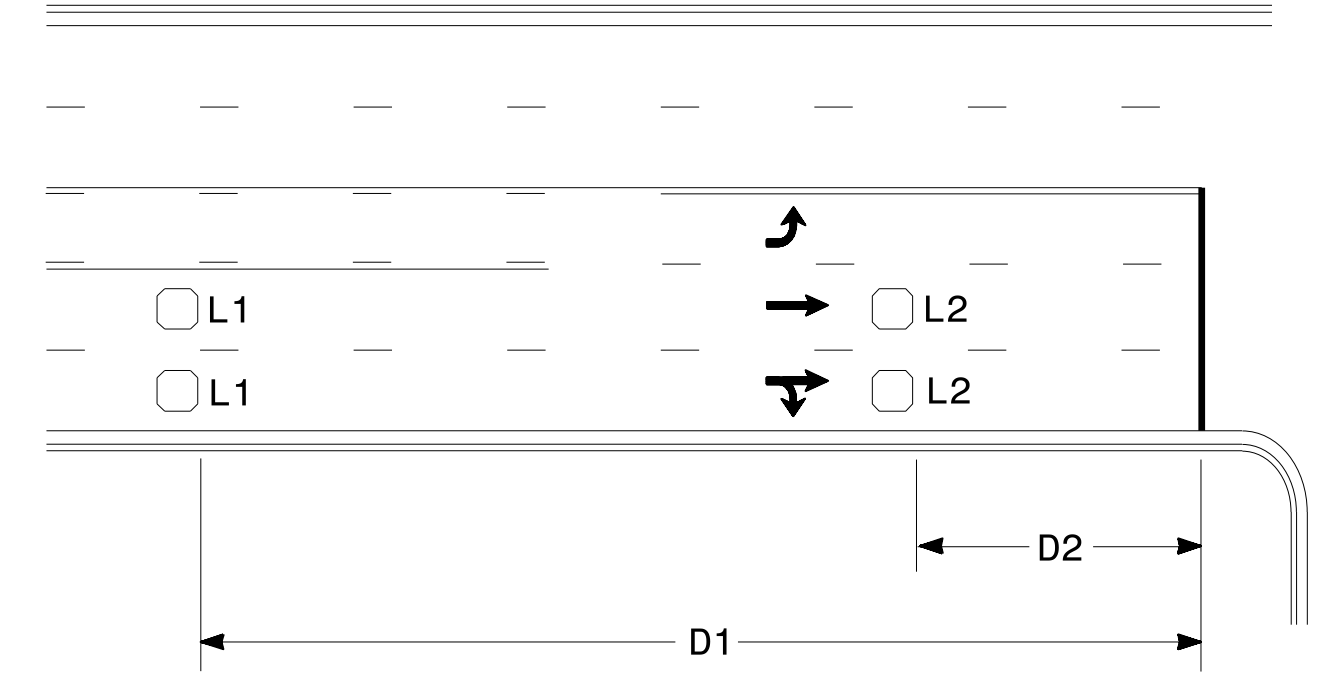


| Speed Limit mph | D ft |
|-----------------|------|
| 40 | 250 |
| 45 | 300 |
| 50 | 355 |
| 55 | 420 |

L = 6ft X 6ft
Wired in series for TS1
Controllers
Wired separately for TS2,
170, and 2070L Controllers

Volume Density Operation

OR

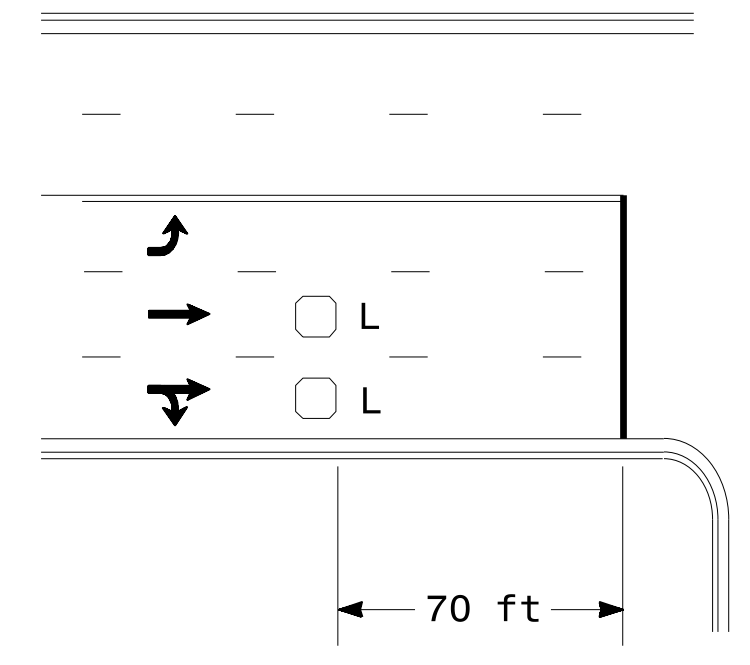


| Speed Limit mph | D1 ft | D2 ft |
|-----------------|-------|-------|
| 40 | 250 | 80 |
| 45 | 300 | 90 |
| 50 | 355 | 100 |
| 55 | 420 | 110 |

L1 = 6ft X 6ft
Wired in series
L2 = 6ft X 6ft
Wired in series

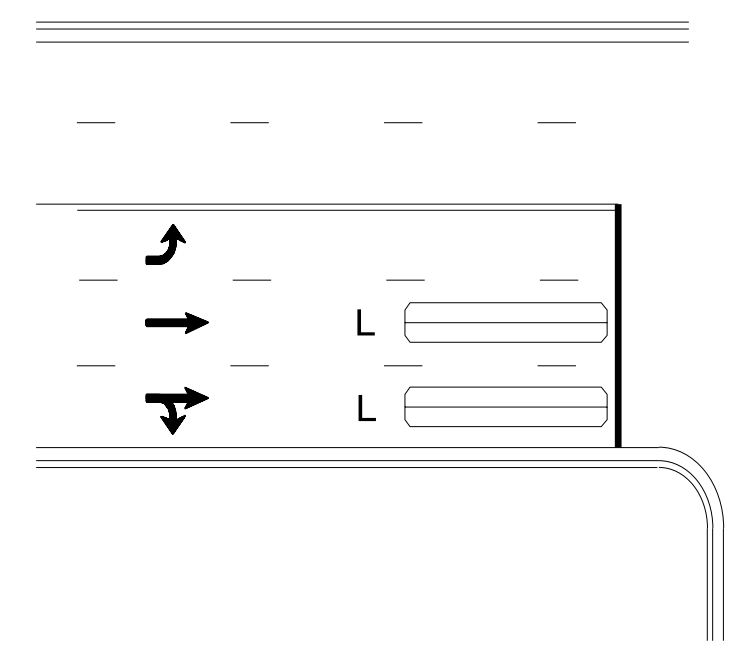
"Stretch" Operation

Low Speed Detection (≤35 mph)



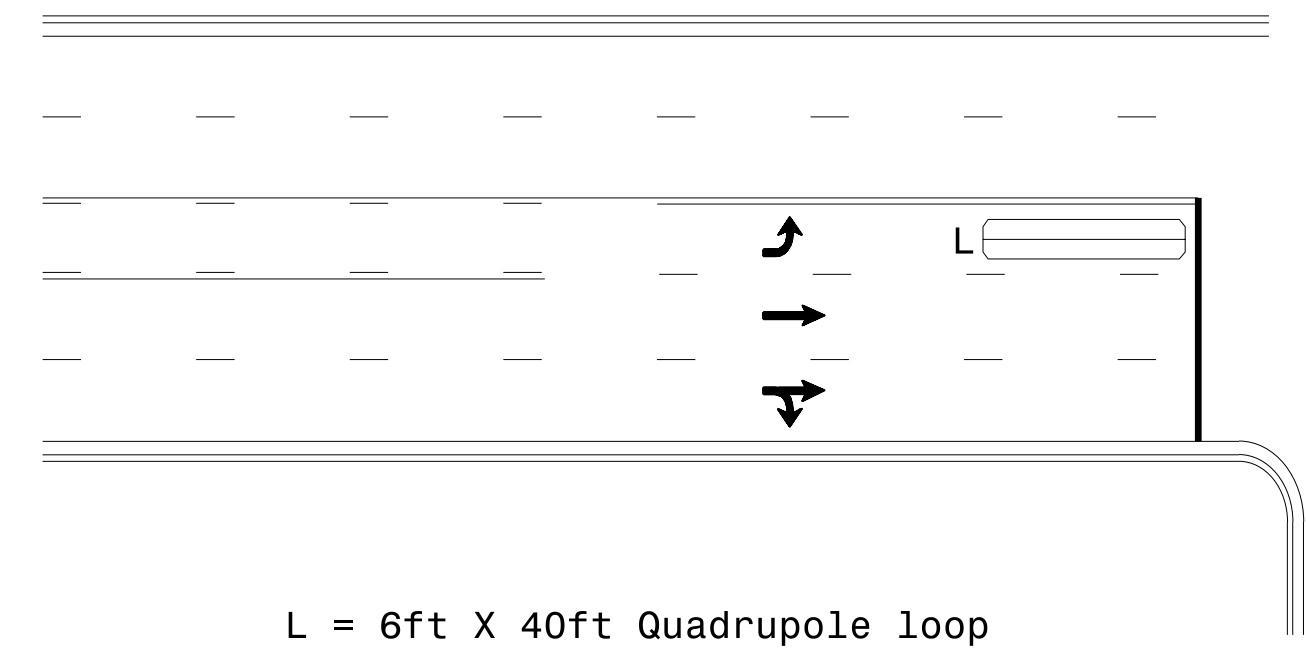
L = 6ft X 6ft
Wired in series

OR



L = 6ft X 40ft
Quadrupole loop, wired separately

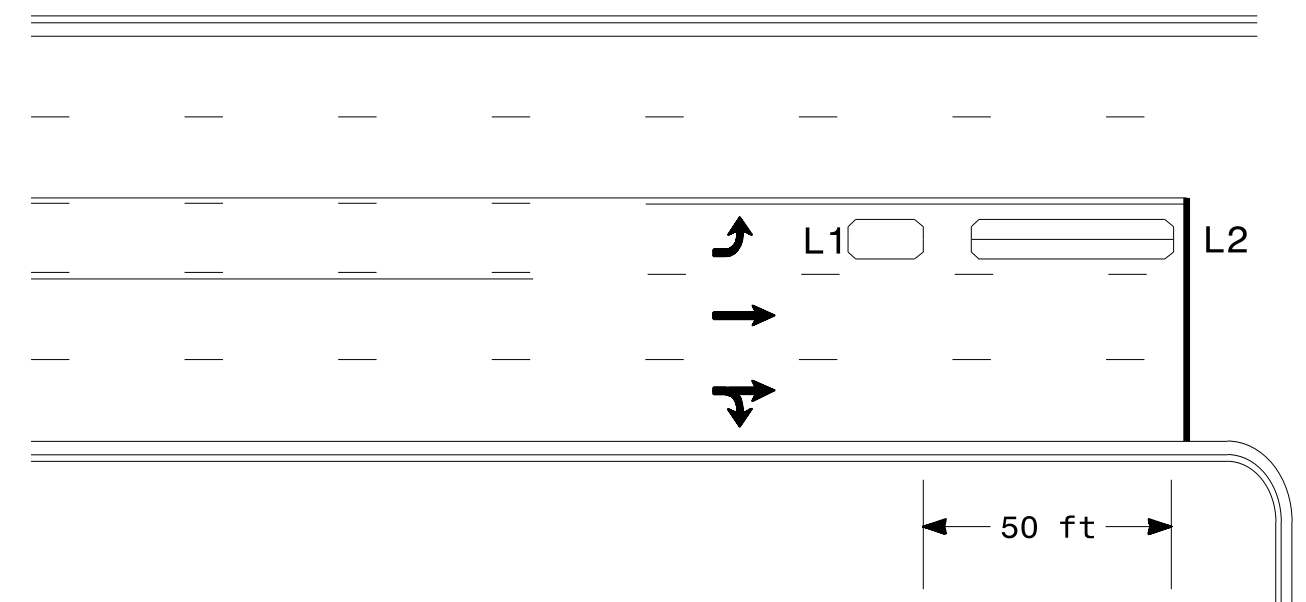
Left Turn Lane Detection



L = 6ft X 40ft Quadrupole loop

Presence Loop Detection

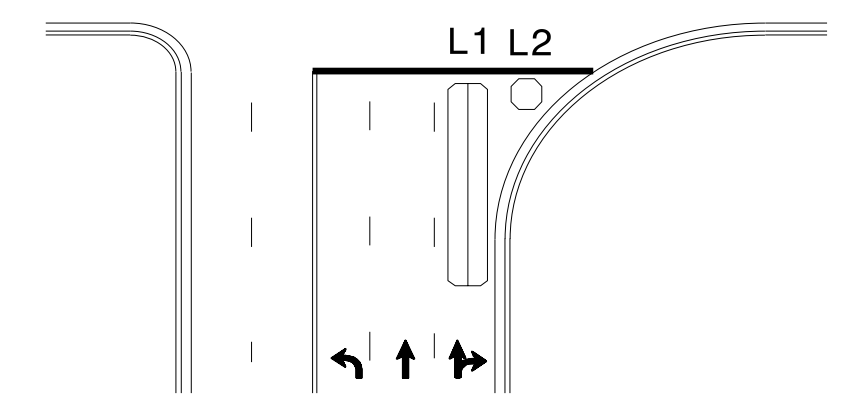
OR



L1 = 6ft X 15ft Queue detector
L2 = 6ft X 40ft Quadrupole loop

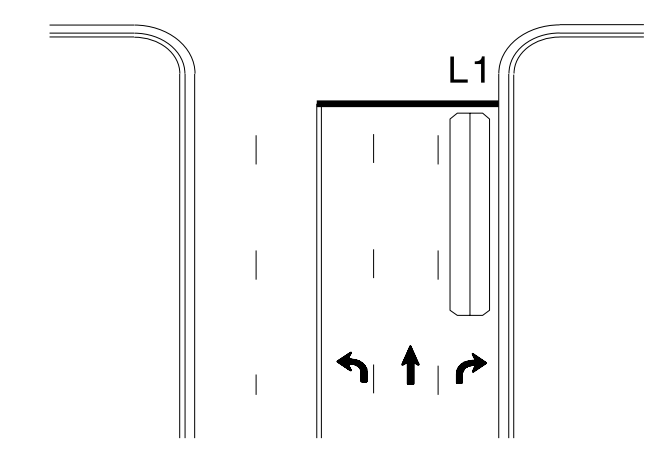
Queue Loop Detection

Right Turn Lane Detection

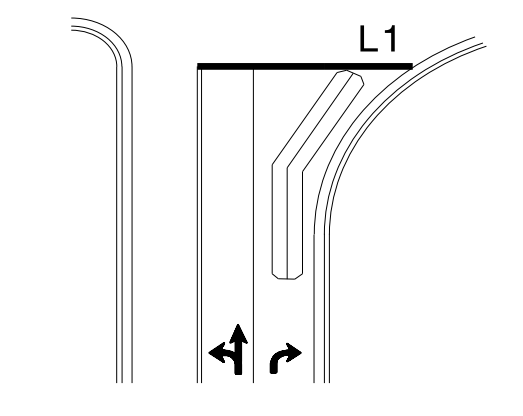


Shared Lane/
Wide Radius Turn

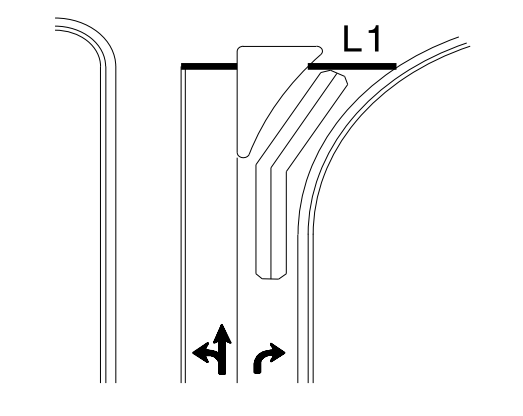
L1 = 6ft X 40ft Quadrupole loop
L2 = 6ft X 6ft [Minimum] Presence loop
Wired separately



Standard Turn

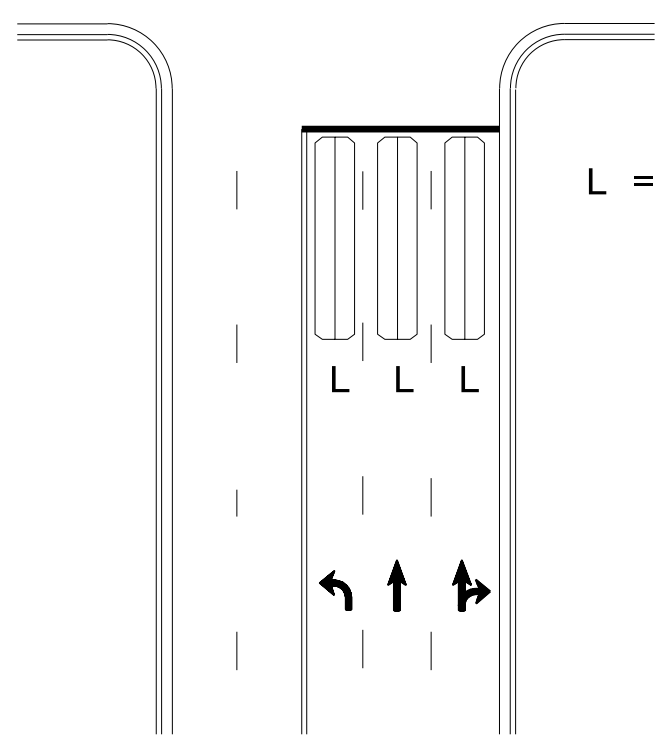


Wide Radius Turn



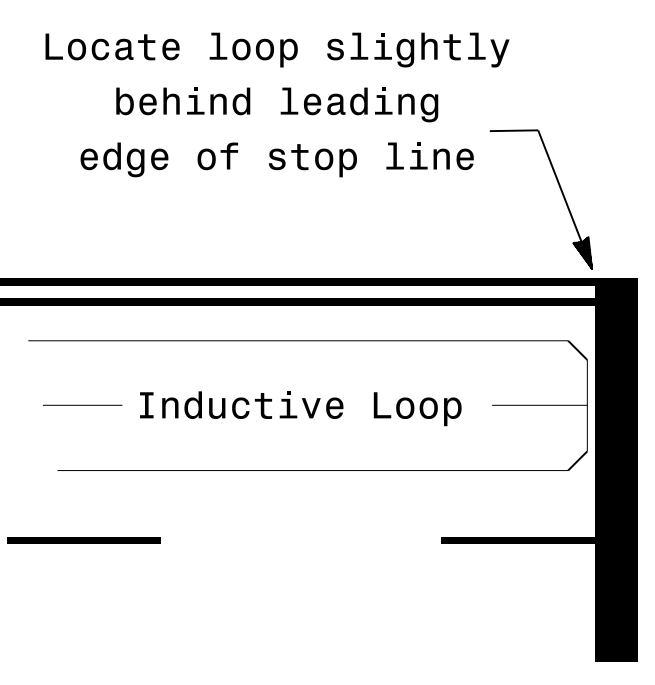
Channelized Turn

Side Street Detection



L = 6ft X 40ft
Quadrupole loop
Wired to separate
detectors/channels

Presence Loop Placement at Stop Lines



Locate loop slightly
behind leading
edge of stop line

Note:
Loop may be located in advance
of stop line under any of the
following conditions:
1) stop line is greater than 15'
from edge of intersecting
roadway
2) loop detects a permissive or
protected/permissive left turn
3) for an exclusive right turn
lane

Recommended Number of Turns

Single 6' X 6' loop
(when wired separately):

| Length of Lead-in ft | Number of Turns |
|----------------------|-----------------|
| < 250 | 3 |
| 250-375 | 4 |
| 375-525 | 5 |
| > 525 | 6 |

Quadrupole loops: Use 2-4-2 turns
6' X 15' Loops:
Lead-in < 150', use 2 turns
Lead-in > 150', use 3 turns

750 N. Greenfield Pkwy, Garner, NC 27529

Typical Signal Loop Locations

| | |
|-------------------------|------------------|
| PLAN DATE: January 2015 | REVIEWED BY: JPG |
| PREPARED BY: PLA | REVIEWED BY: |
| REVISIONS | INIT. DATE |

SEAL
NORTH CAROLINA
PROFESSIONAL ENGINEER
PAMELA L. ALEXANDER
23489

1/30/2015

3D:\4146-2015_12\319
 S:\4146\41461215\SIGNAL Design Section\Eastern Region\loop\loop\ypl\ca\2015.dgn
 pal alexander