



R-5901

This program is a design aid. Final designs should be verified by the Engineer.

GENERAL INFORMATION			
Sign Number =	901	Project Number =	R-5901
Station =	15+34	County =	SURRY
Design Date =	11/13/2024	Division =	11
Field Verification Date =		Designer Initials =	EPH
Design Notes =	Relocate panel on new supports		

PROPOSED SIGN DIMENSIONS					
Panel	Width (in)	x	Height (in)	Primary	Temporary
901 / 901A	192	x	120	<input checked="" type="radio"/>	<input type="checkbox"/>
901B	0	x	0	<input type="radio"/>	<input type="checkbox"/>
901C	0	x	0	<input type="radio"/>	<input type="checkbox"/>

FUTURE SIGN DIMENSIONS				
Panel	Width (in)	x	Height (in)	Primary
		x		<input checked="" type="radio"/>
		x		<input type="radio"/>
		x		<input type="radio"/>

OFFSETS & MOUNTING HEIGHTS			
Horizontal Clearance (ft) =	18	Mounting Height (ft) =	7
Guardrail/Barrier Offset (ft) =	N/A	Guardrail =	NO
Support Spacing (ft) =	9.38	Barrier =	NO

BEAM DESIGN			
Material =	STEEL	Number of Supports =	2
Breakaway =	YES	Omni-Directional =	NO

S DIMENSIONS			
	Left	Center/Single	Right
S drop (ft) =	3.41	0.00	2.35

FINAL DESIGN CRITERIA			
Number of Panels =	1	Future Panels =	NO
Sign Area (sq ft) =	160	Temporary Panels =	NO
Number of Supports =	2	Wind Speed (mph) =	76
Support Spacing (ft) =	9.38	Mounting Height (ft) =	7.00
Standard Support Spacing =	YES	Std. Mounting Height =	YES

ATTACHMENT & MOUNTING METHODS			
Panel	Attachment Method	Mounting Method	
901 / 901A	N/A	N/A	
901B	N/A	N/A	
901C	N/A	N/A	

SUPPORT DESIGN			
Steel Beam Size =	W6x16	Weight of Steel =	874.16
Wood Beam Size =	Over Sized	Omni Coupler =	N/A
1 Support Allowable	NO	3 Supports Required	NO

CONCRETE FOUNDATION DESIGN			
Footing Diameter (ft) =	1.50	Embedment (ft) =	4.5
Footing Depth (ft) =	5	Concrete Volume (cy) =	0.65

DESIGN CHECKS			
Breakaway Weight =	PASS	Footing Overlap =	PASS
Positive Protection for Simple Supports =	N/A	Breakaway Support Spacing Clearance =	PASS
Less than 6' from Positive Protection to Edge of Sign =	N/A	6"x6" or Larger Wood 7' Apart =	N/A
Vertical Clearance =	PASS	Support Spacing Data =	OK
Primary Sign Designation =	OK	Sign Data =	OK
S Dimension Data =	OK	Guardrail Data =	OK

This program is a design aid. Final designs should be verified by the Engineer.

GENERAL INFORMATION			
Sign Number =	902	Project Number =	R-5901
Station =	18+06	County =	SURRY
Design Date =	11/13/2024	Division =	11
Field Verification Date =		Designer Initials =	EPH
Design Notes =	Relocate panel on new supports		

PROPOSED SIGN DIMENSIONS					
Panel	Width (in)	x	Height (in)	Primary	Temporary
902 / 902A	120	x	36	<input checked="" type="radio"/>	<input type="checkbox"/>
902B	0	x	0	<input type="radio"/>	<input type="checkbox"/>
902C	0	x	0	<input type="radio"/>	<input type="checkbox"/>

FUTURE SIGN DIMENSIONS				
Panel	Width (in)	x	Height (in)	Primary
		x		<input checked="" type="radio"/>
		x		<input type="radio"/>
		x		<input type="radio"/>

OFFSETS & MOUNTING HEIGHTS			
Horizontal Clearance (ft) =	18	Mounting Height (ft) =	7
Guardrail/Barrier Offset (ft) =	N/A	Guardrail =	NO
Support Spacing (ft) =	5.86	Barrier =	NO

BEAM DESIGN			
Material =	STEEL	Number of Supports =	2
Breakaway =	YES	Omni-Directional =	NO

S DIMENSIONS			
	Left	Center/Single	Right
S drop (ft) =	2.18	0.00	3.15

FINAL DESIGN CRITERIA			
Number of Panels =	1	Future Panels =	NO
Sign Area (sq ft) =	30	Temporary Panels =	NO
Number of Supports =	2	Wind Speed (mph) =	76
Support Spacing (ft) =	5.86	Mounting Height (ft) =	7.00
Standard Support Spacing =	YES	Std. Mounting Height =	YES

ATTACHMENT & MOUNTING METHODS		
Panel	Attachment Method	Mounting Method
902 / 902A	N/A	N/A
902B	N/A	N/A
902C	N/A	N/A

SUPPORT DESIGN			
Steel Beam Size =	S3x5.7	Weight of Steel =	208.90
Wood Beam Size =	4in x 6in	Omni Coupler =	N/A
1 Support Allowable	NO	3 Supports Required	NO

CONCRETE FOUNDATION DESIGN			
Footing Diameter (ft) =	1.00	Embedment (ft) =	2.5
Footing Depth (ft) =	3	Concrete Volume (cy) =	0.17

DESIGN CHECKS			
Breakaway Weight =	PASS	Footing Overlap =	PASS
Positive Protection for Simple Supports =	N/A	Breakaway Support Spacing Clearance =	PASS
Less than 6' from Positive Protection to Edge of Sign =	N/A	6"x6" or Larger Wood 7' Apart =	N/A
Vertical Clearance =	PASS	Support Spacing Data =	OK
Primary Sign Designation =	OK	Sign Data =	OK
S Dimension Data =	OK	Guardrail Data =	OK

**SIGN NUMBER:** 301  
**TYPE:** D  
**QUANTITY:** 1  
**SIGN WIDTH:** 4'-6"  
**HEIGHT:** 1'-6"  
**TOTAL AREA:** 6.75 Sq.Ft.  
**BORDER TYPE:** FLUSH  
**RECESS:** 0"  
**WIDTH:** 0.75"  
**RADII:** 1.75"  
**NO. Z BARS:**  
**LENGTH:**

**BACKG COLOR:** Green  
**COPY COLOR:** White

SYMBOL	X	Y	WID	HT
AR_Type D	6.93	4.5	6	9

**MAT'L:** 0.125" (3.2 mm) ALUMINUM

DESIGN BY: C. FORD	CHECKED BY: N. RUSSIN	May 28, 2025
PROJECT ID: R-5901	LOCATION: -L1- STA. 14+25±	DIV: 11

---

Technical drawing of a rectangular sign for "Mt Airy". The sign is 4' - 6" wide and 1' - 6" high. It features a black border and a black background with white text and arrow. Dimensions are provided for the sign and its mounting hardware.

Spacing Factor is 1 unless specified otherwise

[illegible]

FILENAME: R5901_SGN_GS	NORTH CAROLINA D.O.T. SIGN DETAIL
------------------------	-----------------------------------

SIGN NUMBER: 303      BACKG COLOR: Green  
 TYPE: D      COPY COLOR: White  
 QUANTITY: 1

SYMBOL	X	Y	WID	HT
AR_Type D	3.84	4.5	6	9

SIGN WIDTH: 4'-0"  
 HEIGHT: 1'-6"  
 TOTAL AREA: 6 Sq.Ft.

BORDER TYPE: FLUSH  
 RECESS: 0"  
 WIDTH: 0.75"  
 RADII: 1.75"

NO. Z BARS:  
 LENGTH:

MAT'L: 0.125" (3.2 mm) ALUMINUM

DESIGN BY: C. FORD      CHECKED BY: N. RUSSIN      May 28, 2025

PROJECT ID: R-5901      LOCATION: -L2- STA. 14+46±      DIV: 11

Diagram illustrating the dimensions of a Lowgap traffic sign. The sign is rectangular with a black border and a white background. The overall width is 4'-0" and the overall height is 1'-6". The sign face dimensions are 40.3" wide and 38.6" high. The sign face is centered within the overall dimensions, with 4.5" spacing from the top and bottom edges and 3.8" spacing from the left and right edges. The sign face contains a black upward-pointing arrow and the text "Lowgap".

LETTER POSITIONS																												Series/Size Text Length	
Letter spacings are to start of next letter																													
15.85	L	4.26	o	4.14	w	7.26	g	4.5	a	4.56	p	3.6	3.84																D 2000
																													28.32

FILENAME: R5901_SGN_GS	NORTH CAROLINA D.O.T. SIGN DETAIL
------------------------	-----------------------------------

SIGN NUMBER: 302      BACKG COLOR: Green  
 TYPE: D      COPY COLOR: White  
 QUANTITY: 1

SYMBOL	X	Y	WID	HT
AR_FISHOOK	4.89	16.98	9.9	10.8
AR_Type D	40.08	4.62	6	9

SIGN WIDTH: 4'-6"  
 HEIGHT: 2'-6"  
 TOTAL AREA: 11.25 Sq.Ft.

BORDER TYPE: FLUSH  
 RECESS: 0"  
 WIDTH: 0.75"  
 RADII: 2.25"

NO. Z BARS: MAT'L: 0.125" (3.2 mm) ALUMINUM  
 LENGTH:

Diagram of a Lowgap Mt Airy traffic sign. The sign is rectangular with a black border and a white background. It features a black arrow pointing left and the text "Lowgap" in black. Below this, it features the text "Mt Airy" in black and a black arrow pointing right. The dimensions of the sign are as follows:

- Overall width: 4'-6"
- Overall height: 2'-6"
- Top section height: 2'-2"
- Section between top and bottom: 10.8"
- Section between bottom and bottom: 6.4"
- Bottom section height: 6'-0"
- Bottom section height: 4'-6"
- Left section width: 4'-9"
- Section between left and right: 44.2"
- Right section width: 4'-9"
- Top section width: 4'-6.3"
- Section between top and bottom: 4'-7.5"
- Section between bottom and bottom: 4'-6"
- Bottom section width: 4'-6.2"

[illegible]

FILENAME: GSWKSP01 NORTH CAROLINA D.O.T. SIGN DETAIL

SIGN NUMBER: 304      BACKG COLOR: Green  
 TYPE: D      COPY COLOR: White

SYMBOL	X	Y	WID	HT
AR_FISHOOK	4.48	16.98	9.9	10.8
AR_Type D	39.66	4.62	6	9

QUANTITY: 1

SIGN WIDTH: 4'-6"

HEIGHT: 2'-6"

TOTAL AREA: 11.25 Sq.Ft.

BORDER TYPE: FLUSH

RECESS: 0"

WIDTH: 0.75"

RADII: 2.25"

NO. Z BARS:

MAT'L: 0.125" (3.2 mm) ALUMINUM

LENGTH:

Diagram of a rectangular sign with the following dimensions and text:

- Overall width: 4'-6"
- Overall height: 2'-6"
- Top section height: 2.2'
- Text in top section: "Mt Airy" (with a left-pointing arrow)
- Text in bottom section: "Lowgap" (with a right-pointing arrow)
- Bottom section height: 6.4'
- Sign face width: 4.63'
- Sign face height: 4.62'
- Mounting bracket width: 4.45'
- Mounting bracket height: 4.51'
- Mounting bracket depth: 4.62'

[illegible]

FILENAME: GSWKSP01 NORTH CAROLINA D.O.T. SIGN DETAIL

[illegible][illegible]