

Major and Minor Steel Approach Calculator

Contract: 210R20 AD3
Job: J113271
Bridge: A19076
Line No.: 0600
Skew: 38 degree

Length of Approach: 20 feet
Width of Bridge: 39.5 feet, transverse width becomes 50.13 feet, Transverse
Likely Width of Approach: 38.167 USED IN LONGITUDINAL BAR CALCULATION BELOW...

Top transverse are # 5 bars, with Centers at 12 inches
Bottom transverse are # 5 bars, with Centers at 12 inches
Top longitudinal bars are # 5 bars, with Centers at 12 inches
Bottom longitudinal bars are # 6 bars, with Centers at 5 inches

Transverse BARS					
	Size	Number	Length	Weight per bar	Weight of Transverse
Top Bars	5	18	49.8	51.93	934.81164
Bottom Bars	5	18	49.8	51.93	934.81164

Longitudinal					
	Size	Number	Length	Weight per bar	Weight of Longitudinal
Top Bars	5	37	19.7	20.51	758.95633
Bottom Bars	6	86	19.7	29.54	2540.3827

Conversion Factors
#5 steel in approach: 2628.58
#6 steel in approach: 2540.38
#5 in both approaches: 5257.1592
#6 in both approaches: 5080.7653
27.96361
27.02535

Description and Benefit

Major and Minor bridge approaches do not come with a bar bill in the plans, nor are they prepopulated in AWP with the appropriate quantities. This requires the reinforcing steel to be calculated so that the conversion factor can be set for the contract. This form allows for a quick calculation of pounds of steel for each required bar size and a conversion factor that is calculated for you to be entered in AWP. This eliminates hand calculations for each project and the information can be shared with the construction inspector so that they are aware of the steel requirements as well.

The excel forms save time by eliminating the need to calculate out the required pounds by hand for each project. The excel form is also user-friendly so that anyone could use. The calculated results can be shared with the construction inspector so that they are aware of the steel requirements as well.

For More Information Contact

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