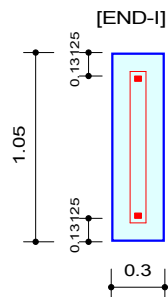
	Company		Project Title	
	Author	ACER	File Name	C:\...\midas\lrtsu project.mcb

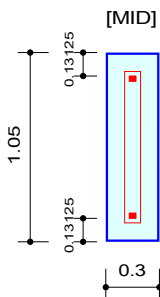
## 1. Design Information

Design Code : IRC:112-2011  
 Unit System : kN, m  
 Material Data :  $f_{ck} = 25000$ ,  $f_y = 240000$ ,  $f_{yw} = 240000$  KPa  
 Beam Span : 2.8 m  
 Section Property: CROSS-GIRDER (No : 3)

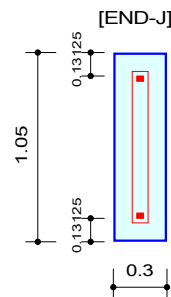
## 2. Section Diagram



TOP : 0.0012859 m<sup>2</sup>  
 BOT : 0.0024301 m<sup>2</sup>  
 STIRRUPS : 2.0-P10 @120



TOP : 0.00076588 m<sup>2</sup>  
 BOT : 0.0015055 m<sup>2</sup>  
 STIRRUPS : 2.0-P10 @120



TOP : 0.0011357 m<sup>2</sup>  
 BOT : 0.0016789 m<sup>2</sup>  
 STIRRUPS : 2.0-P10 @110

## 3. Bending Moment Capacity

	END-I	MID	END-J
Negative Moment (M <sub>Ed</sub> )	229.42	109.98	204.13
(-) Load Combination No.	9-	19-	10-
Factored Strength (M <sub>Rd</sub> )	235.42	142.82	209.06
Check Ratio (M <sub>Ed</sub> /M <sub>Rd</sub> )	0.9745	0.7701	0.9764
Positive Moment (M <sub>Ed</sub> )	414.42	265.57	296.07
(+) Load Combination No.	12+	12+	11+
Factored Strength (M <sub>Rd</sub> )	426.99	272.75	302.62
Check Ratio (M <sub>Ed</sub> /M <sub>Rd</sub> )	0.9706	0.9737	0.9784
Required Top A <sub>s</sub>	0.0013	0.0008	0.0011
Required Bot A <sub>s</sub>	0.0024	0.0015	0.0017

## 4. Shear Capacity

	END-I	MID	END-J
Load Combination No.	12+	12+	12+
Factored Shear Force (V <sub>Ed</sub> )	215.25	225.66	230.86
Shear Strength by Conc.(V <sub>Rdc</sub> )	126.25	107.63	85.92
Shear Strength by Rebar.(V <sub>Rds</sub> )	225.77	225.77	246.30
Required Shear Reinf. (A <sub>sw</sub> )	0.0000	0.0000	0.0000
Required Stirrups Spacing	2.0-P10 @120	2.0-P10 @120	2.0-P10 @110
Check Ratio	0.6115	0.6768	0.6949