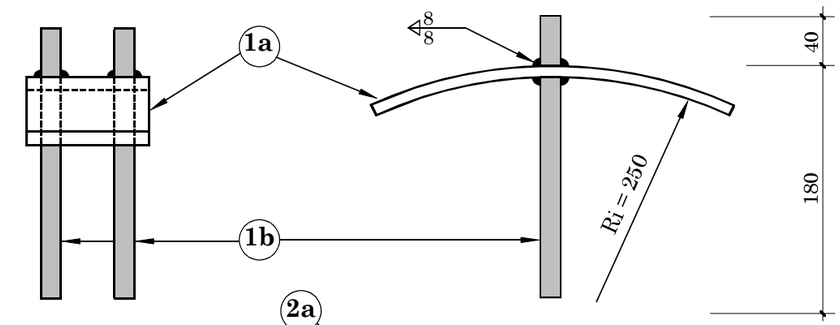
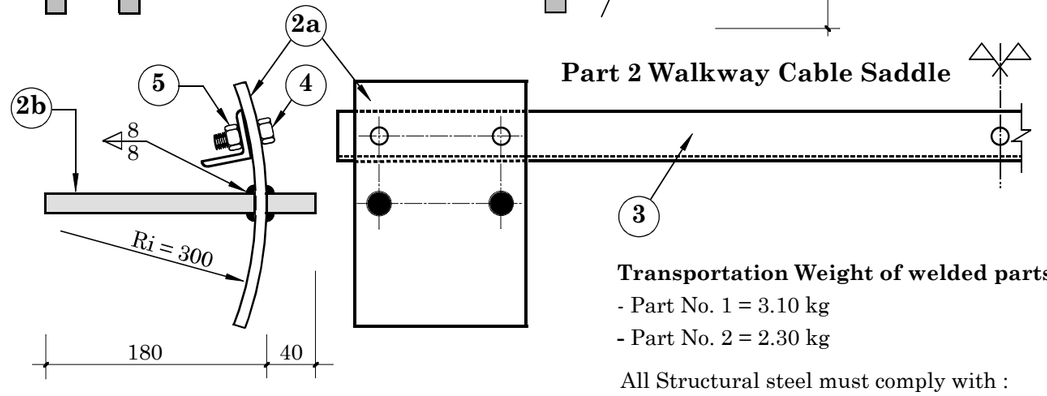
Part No.		Section [mm]	Quantity [nos]	Working Drawing	Weight Kg/pc	Weight total Kg
1	a	**Plate 100/300/10**	2	150 150; 20 60 20; 100; 2 holes ƒ 17; Ri = 250	2.35	4.70[g] galvanized
	b	**Ri-Bar ƒ 16 l = 220**	4	220	0.35	1.40[g] galvanized
2	a	**Plate 100/200/10**	2	45 55 100; 20 60 100 20; 2 holes ƒ 14; 2 holes ƒ 17; Ri = 300	1.57	3.14[g] galvanized
	b	**Ri-Bar ƒ 16 l = 220**	4	220	0.35	1.40[g] galvanized
3		**Angle (spacer) 40/40/5 l = ...**	1	L; X; 25 60 60 25; 20; 5 holes ƒ 14 Width of walkway — L — X — Weight/pc 70 cm — 910 — 740 — 2.73 kg 106 cm — 1270 — 1100 — 3.81 kg	.....	.....[U] untreated
4		**Hex bolt M12 - 40**	4	40 *galvanized*	0.065	0.26[C]
5		**Hex nut M12**	4	19; 10 *galvanized*	0.015	0.06[C]
6		**Ri - Bar ƒ 16 l = 1650**	4	350; ri = 40; 1300 — For Concrete Core of Limb Wall	2.61	10.44[R]
7		**Ri-Bar ƒ 6 l = 320**	10	200; ri = 40	0.07	0.70[R]
8		**Ri - Bar ƒ 16 l = ...**	2	L Width of walkway — L — Weight/pc 70 cm — 2100 — 3.32 kg 106 cm — 2500 — 3.95 kg — For Concrete Core of Limb Wall	.....	.....[R]
9		**Bulldog Grip ƒ ....**	2	for fixing first suspender at handrail cable ƒ 26 or 32 MS forged, according to ISI standard, **hot dip galvanized**	.....	.....[D]
10		**Plain Rod ƒ 20 l = 3100**	2*	ri =60 mm; 1300 *Erection Hooks needed at one bank only	7.66	.....[R]
11		**Ri-Bar ƒ 20 l = 2900**	4	2900 — For Deadman Beam	7.16	28.64[R]
12		**Ri - Bar ƒ 12 l = 2200**	11	500; ri =25; 80; 500 — For Deadman Beam	1.95	21.45[R]

Part No.	Section [mm]	Quantity [nos]	Working Drawing	Weight Kg/pc	Weight total Kg
13	**Bulldog Grips** MS forged ISI standard ƒ 13	12	for fixing & joining **Fixation Cable** ƒ 13mm — **hot dip galvanized**	0.28	3.36[D]
14	ƒ	.....	for **Handrail Cable** ƒ 26 or 32mm	.....	.....[D]
15	ƒ	.....	for **Walkway Cable** ƒ 26 or 32mm	.....	.....[D]
16		1	Binding Wire	1.00	1.00

A = ... kg. **Total transportation Weight B+C+D+R+ 1.16 kg.**	**B = ... kg.** **Total Structural Steel = (u+g)**	**g = 10.64 kg.** **Steel to be galvanized**	.....
C = 0.32 kg **Nuts, Bolts, Washers**	**D = ... kg** **Bulldog Grips**	**R = ... kg** **Reinforcement Steel**	



Part 1: Handrail Cable Saddle



Part 2 Walkway Cable Saddle

Transportation Weight of welded parts :
- Part No. 1 = 3.10 kg
- Part No. 2 = 2.30 kg

All Structural steel must comply with :
IS 226 - 1975 for structural steel.
IS 800-1984 for general construction in steel.

Related Construction Drawings are :
- **20Dcon70 or 20Dcon106**
- **21Dcon**
- **22Dcon**
- **23 Dcon**
- **24 Dcon**
- **25 Dcon**
- **26 Dcon**
- **41Dcon**
- **42Dcon**

The following steelparts must be hot dip galvanized acc. to IS 2629 & 2633, min thickness = 80 µ m
Part No. 1 & 2
All Nuts & Bolts must conform to IS 1363 and are galvanized acc. to IS 1367, Part XIII

Cable ƒ mm	Bulldog Grips for two cables	Weight. (kg/pc)	Weight. Total kg
26	10	1.10	11.00
32	12	1.30	15.60

HMG / Ministry of Local Development
DoLIDAR / Short SpanTrail Bridge Standard

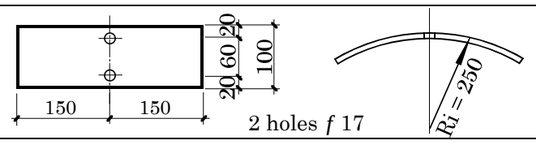
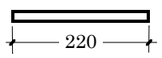
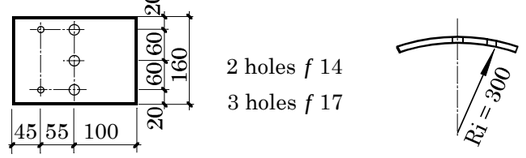
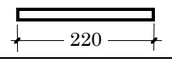
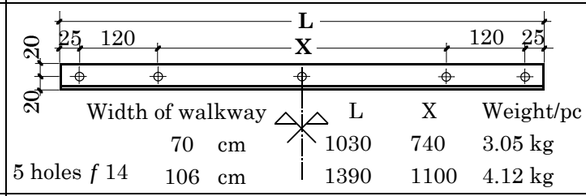
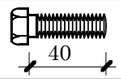
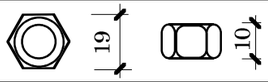
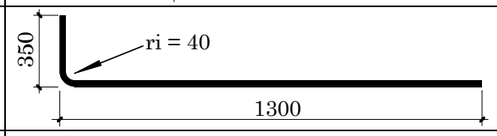
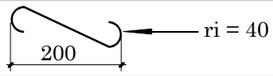
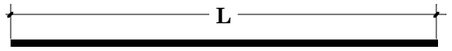
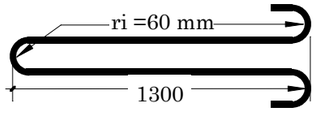
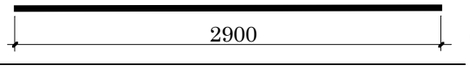
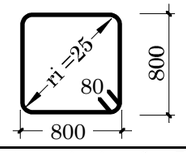
Bridge Name:
No: Bank: Span:

Steel Drawing:

Saddles & Reinforcement for RCC Deadman & Gravity Soil Anchor for 2 Walkway Cables

Walkway Width : cm
Set for one Foundation
Nos of Foundation required, 1 or 2 :

Date : Nov. 05, 2001 **Drawing No. 20D2**

Part No.		Section [mm]	Quantity [nos]	Working Drawing	Weight Kg/pc	Weight total Kg
1	a	**Plate 100/300/10**	2		2.35 *galvanized*	4.70g
	b	**Ri-Bar ƒ 16 l = 220**	4		0.35 *galvanized*	1.40g
2	a	**Plate 160/200/10**	2		2.50 *galvanized*	5.00g
	b	**Ri-Bar ƒ 16 l = 220**	6		0.35 *galvanized*	2.10g
3		**Angle (spacer) 40/40/5 l = ...**	1	 Width of walkway / L / X / Weight/pc: 70 cm — 1030 — 740 — 3.05 kg; 106 cm — 1390 — 1100 — 4.12 kg	..... *untreated*	.....U
4		**Hex bolt M12 - 40**	4	 *galvanized*	0.065	0.26c
5		**Hex nut M12**	4	 *galvanized*	0.015	0.06c
6		**Ri - Bar ƒ 16 l = 1650**	4	 For Concrete Core of Limb Wall	2.61	10.44R
7		**Ri-Bar ƒ 6 l = 320**	10		0.07	0.70R
8		**Ri - Bar ƒ 16 l = ...**	2	 Width of walkway / L / Weight/pc: 70 cm — 2100 — 3.32 kg; 106 cm — 2500 — 3.95 kg	.....	.....R
9		**Bulldog Grip ƒ ....**	2	for fixing first suspender at handrail cable ƒ 26 or 32 MS forged, according to ISI standard, **hot dip galvanized**	.....	.....D
10		**Plain Rod ƒ 20 l = 3100**	4*	 *Erection Hooks needed at one bank only	7.66	.....R
11		**Ri-Bar ƒ 20 l = 2900**	8	 For Deadman Beam	7.16	57.28R
12		**Ri - Bar ƒ 12 l = 3350**	11		2.98	32.78R

Part No.	Section [mm]	Quantity [nos]	Working Drawing	Weight Kg/pc	Weight total Kg
13	**Bulldog Grips** MS forged ISI standard ƒ 13	12	for fixing & joining **Fixation Cable** ƒ 13mm **hot dip galvanized**	0.28	3.36D
14	ƒ	.....	for **Handrail Cable** ƒ 26 or 32mm	.....	.....D
15	ƒ	.....	for **Walkway Cable** ƒ 26 or 32mm	.....	.....D
16		1	Binding wire	1.00	1.00

A = ... kg.
Total transportation Weight B+C+D+R+ 1.22 kg.

B = ... kg.
Total Structural Steel = (u+g)

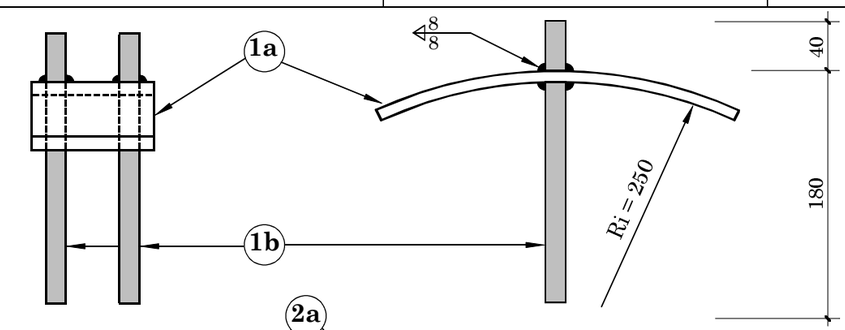
g = 13.20 kg.
Steel to be galvanized

.....

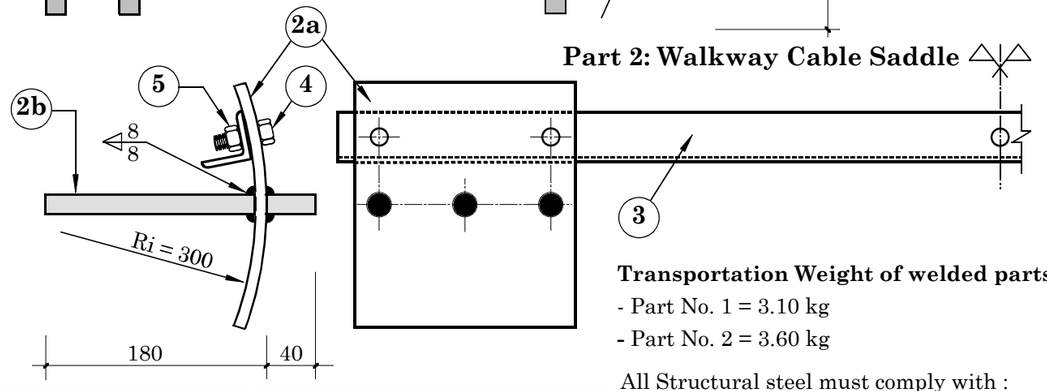
C = 0.32 kg
Nuts, Bolts, Washers

D = ... kg
Bulldog Grips

R = ... kg
Reinforcement Steel



Part 1: Handrail Cable Saddle



Part 2: Walkway Cable Saddle

Transportation Weight of welded parts :
- Part No. 1 = 3.10 kg
- Part No. 2 = 3.60 kg

All Structural steel must comply with :
IS 226 - 1975 for structural steel.
IS 800-1984 for general construction in steel.

Related Construction Drawings are :

- 20Dcon70	or 20Dcon106
- 27Dcon	- 35Dcon
- 28Dcon	- 43Dcon
- 29Dcon	- 44Dcon
- 30Dcon	- 45Dcon
- 31Dcon	- 46Dcon
- 32Dcon	- 47Dcon
- 33Dcon	- 48Dcon
- 34Dcon	- 49Dcon

The following steelparts must be hot dip galvanized acc. to IS 2629 & 2633, min thickness = 80 µ m
Part No. 1 & 2
All Nuts & Bolts must conform to IS 1363 and are galvanized acc. to IS 1367, Part XIII

Cable ƒ mm	Bulldog Grips for four cables	Weight. (kg/pc)	Weight. Total kg
26	20	1.10	22.00
32	24	1.30	31.20

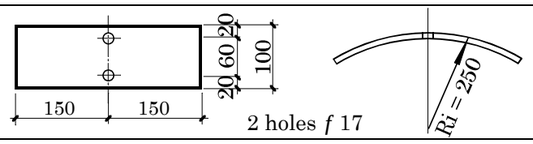
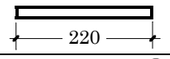
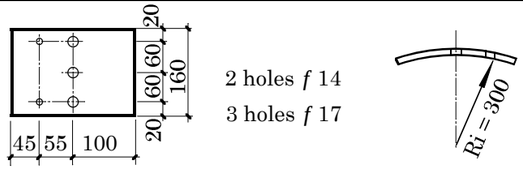
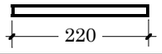
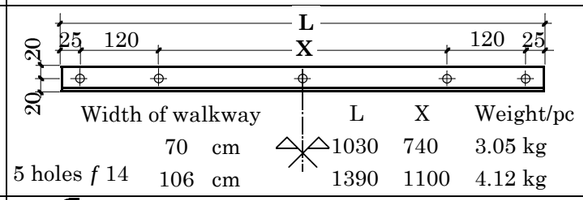
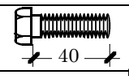
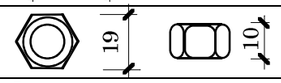
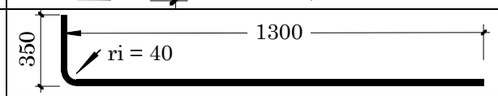
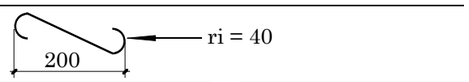
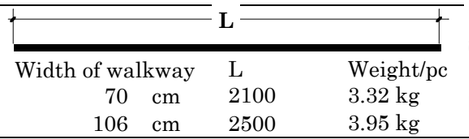
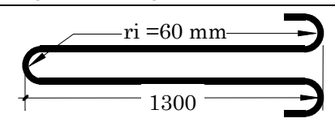
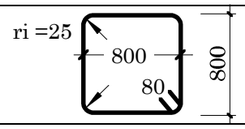
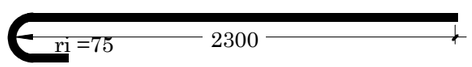
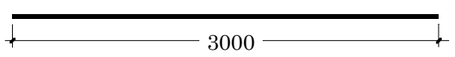
HMG / Ministry of Local Development
DoLIDAR / Short SpanTrail Bridge Standard

Bridge Name:
No: Bank: Span:

Steel Drawing:
Saddles & Reinforcement for RCC Deadman & Gravity Soil Anchor for 4 Walkway Cables

Walkway Width : ..... cm
Set for one Foundation
Nos of Foundation required, 1 or 2 : .....

Date : Nov. 05, 2001 **Drawing No. 20D4**

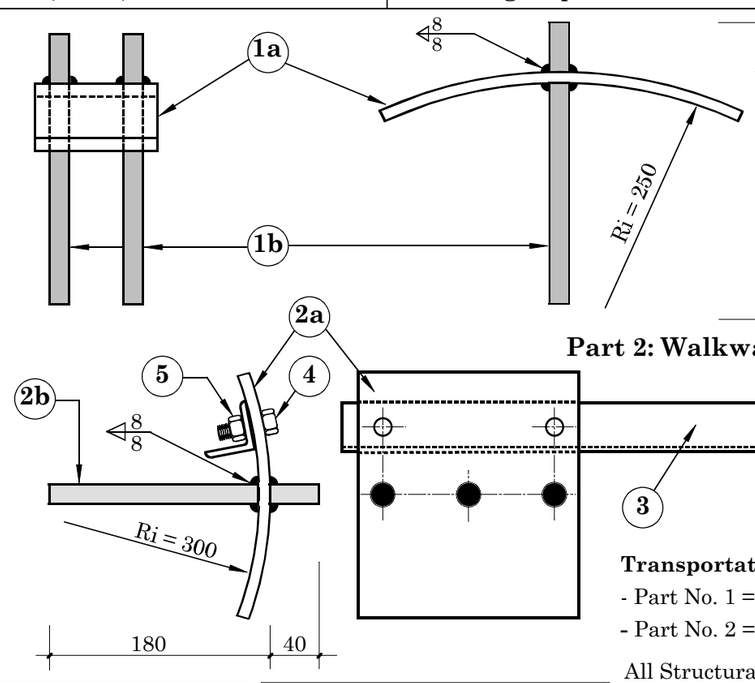
Part No.		Section [mm]	Quantity [nos]	Working Drawing	Weight Kg/pc	Weight total Kg
1	a	**Plate 100/300/10**	2		2.35	4.70[g] galvanized
	b	**Ri-Bar ƒ 16 l = 220**	4		0.35	1.40[g] galvanized
2	a	**Plate 160/200/10**	2		2.50	5.00[g] galvanized
	b	**Ri-Bar ƒ 16 l = 220**	6		0.35	2.10[g] galvanized
3		**Angle (spacer) 40/40/5 l = ...**	1		.....	.....[U] untreated
4		**Hex bolt M12 - 40**	4	 galvanized	0.065	0.26[C]
5		**Hex nut M12**	4	 galvanized	0.015	0.06[C]
6		**Ri-Bar ƒ16 l = 1650**	4		2.61	10.44[R]
7		**Ri-Bar ƒ 6 l = 320**	10		0.07	0.70[R]
8		**Ri - Bar ƒ 16 l = ...**	2		.....	.....[R]
9		**Bulldog Grip ƒ ....**	2	for fixing first suspender at handrail cable ƒ 26 or 32 MS forged, according to ISI standard, **hot dip galvanized**	.....	.....[D]
10		**Plain Rod ƒ 20 l = 3100**	4*	 *Erection Hooks needed at one bank only	7.66	.....[R]
11		**Ri-Bar ƒ 20 l = 2900**	8		7.16	57.28[R]
12		**Ri - Bar ƒ 12 l = 3350**	11		2.98	32.78[R]
13		**Ri-Bar ƒ 25 l = 2550**	36		9.83	353.88[R]
14		**Ri-Bar ƒ 10 l = 3000**	15		1.85	27.75[R]

For Concrete Core of Limb Wall

For Deadman Beam

Part No.	Section [mm]	Quantity [nos]	Working Drawing	Weight Kg/pc	Weight total Kg
15	**Bulldog Grips** MS forged ISI standard ƒ 13	12	for fixing & joining **Fixation Cable** ƒ 13mm **hot dip galvanized**	0.28	3.36[D]
16	ƒ	.....	for **Handrail Cable** ƒ 26 or 32mm	.....	.....[D]
17	ƒ	.....	for **Walkway Cable** ƒ 26 or 32mm	.....	.....[D]
18			Binding wire	1.00	1.00

A = ... kg. **Total transportation Weight B+C+D+R+ 1.22 kg.**	**B = ... kg.** **Total Structural Steel = (u+g)**	**g = 13.20 kg.** **Steel to be galvanized**		.....
C = 0.32 kg **Nuts, Bolts, Washers**	**D = ... kg** **Bulldog Grips**	**R = ... kg** **Reinforcement Steel**		



Part 1: Handrail Cable Saddle

Part 2: Walkway Cable Saddle

Transportation Weight of welded parts :
- Part No. 1 = 3.10 kg
- Part No. 2 = 3.60 kg

All Structural steel must comply with :
IS 226 - 1975 for structural steel.
IS 800-1984 for general construction in steel.

Related Construction Drawings are :
- 20Dcon70 or 20Dcon106 & 67D con

The following steelparts must be hot dip galvanized acc. to IS 2629 & 2633, min thickness = 80 µ m
Part No. 1 & 2
All Nuts & Bolts must conform to IS 1363 and are galvanized acc. to IS 1367, Part XIII

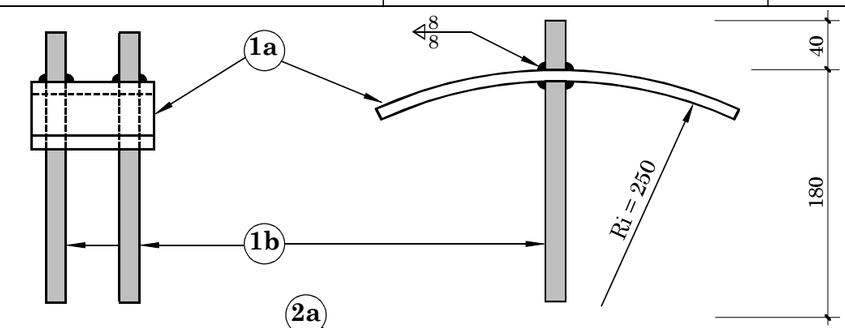
Cable ƒ mm	Bulldog Grips for four cables	Weight. (kg/pc)	Weight. Total kg
26	20	1.10	22.00
32	24	1.30	31.20

HMG / Ministry of Local Development
DoLIDAR / Short SpanTrail Bridge Standard
Bridge Name:
No: Bank: Span:
Steel Drawing:
Saddles & Reinforcement for RCC Deadman Anchor in Fractured Rock for 4 Walkway Cables
Walkway Width : ---------- cm
Set for one Foundation
Nos of Foundation required, 1 or 2 : ----------
Date : Nov. 05, 2001 **Drawing No. 20D4S**

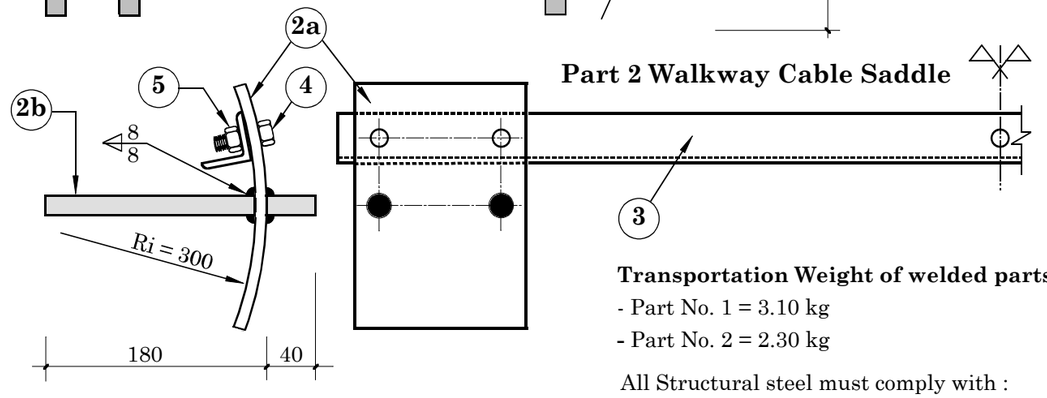
Part No.		Section [mm]	Quantity [nos]	Working Drawing	Weight Kg/pc	Weight total Kg
1	a	**Plate 100/300/10**	2	150 150; 20 60 20; 100; 2 holes *f* 17; Ri = 250	2.35 *galvanized*	4.70[g]
	b	**Ri-Bar *f* 16 l = 220**	4	220	0.35 *galvanized*	1.40[g]
2	a	**Plate 100/200/10**	2	20 60 20; 100; 2 holes *f* 14; 2 holes *f* 17; 45 55 100; Ri = 300	1.57 *galvanized*	3.17[g]
	b	**Ri-Bar *f* 16 l = 220**	4	220	0.35 *galvanized*	1.40[g]
3		**Angle (spacer) 40/40/5 l = ...**	1	20 25 60 L X 60 25 20; Width of walkway / L / X / Weight/pc: 70 cm 910 740 2.73 kg; 106 cm 1270 1100 3.81 kg; 5 holes *f* 14	..... *untreated*	.....[U]
4		**Hex bolt M12 - 40**	4	40	*galvanized* 0.065	0.26[c]
5		**Hex nut M12**	4	19; 10	*galvanized* 0.015	0.06[c]
6		**Ri - Bar *f* 16 l = 1650**	4	350; ri = 40; 1300	**For Concrete Core of Limb Wall** 2.61	10.44[R]
7		**Ri-Bar *f* 6 l = 320**	10	200; ri = 40	0.07	0.70[R]
8		**Ri - Bar *f* 16 l = ...**	2	L; Width of walkway / L / Weight/pc: 70 cm 2100 3.32 kg; 106 cm 2500 3.95 kg	.....	.....[R]
9		**Bulldog Grip *f* ....**	2	for fixing first suspender at handrail cable *f* 26 or 32 MS forged, according to ISI standard, **hot dip galvanized**	.....	.....[D]
10		**Plain Rod *f* 20 l = 3200**	.....	ri =60 mm; 1490; Erection Hook	**For Drum** 7.90	.....[R]
11		**Ri-Bar *f* 25 l = 1500**	.....	1500; Anchor Rod	5.78	.....[R]
12		**Ri - Bar *f* 10 l = ...**	.....	350; ri =30; dia =..... Stirrup for Handrail Cable Drum	.....	.....[R]
13		**Ri - Bar *f* 10 l = ...**	.....	350; ri =30; dia =..... Stirrup for Walkway Cable Drum	.....	.....[R]

Part No.	Section [mm]	Quantity [nos]	Working Drawing	Weight Kg/pc	Weight total Kg
14	**Bulldog Grips** MS forged ISI standard *f* 13	12	for fixing & joining **Fixation Cable** *f* 13mm	0.28	1.40[D]
15	*f*	.....	for **Handrail Cable** *f* 26 or 32mm **hot dip galvanized**	.....	.....[D]
16	*f*	.....	for **Walkway Cable** *f* 26 or 32mm	.....	.....[D]
17			Binding wire	1.00	1.00

A = ... kg **Total transportation Weight B+C+D+R+ 1.16 kg.**	**B = ... kg** **Total Structural Steel = (u+g)**	**g = 10.64 kg** **Steel to be galvanized**
C = 0.32 kg **Nuts, Bolts, Washers**	**D = ... kg** **Bulldog Grips**	**R = ... kg** **Reinforcement Steel**



Part 1: Handrail Cable Saddle



Part 2 Walkway Cable Saddle

Transportation Weight of welded parts :
- Part No. 1 = 3.10 kg
- Part No. 2 = 2.30 kg

All Structural steel must comply with :
IS 226 - 1975 for structural steel.
IS 800-1984 for general construction in steel.

Related Construction Drawings are :
- **20Dcon70 or 20Dcon106**
- **61Dcon**
- **63Dcon**
- **65Dcon**
- **66Dcon**

The following steelparts must be hot dip galvanized acc. to IS 2629 & 2633, min thickness = 80 µ m
Part No. 1 & 2
All Nuts & Bolts must conform to IS 1363 and are galvanized acc. to IS 1367, Part XIII

Cable *f* mm	Bulldog Grips for two cables	Weight. (kg/pc)	Weight. Total kg
26	10	1.10	11.00
32	12	1.30	15.60

HMG / Ministry of Local Development
DoLIDAR / Short SpanTrail Bridge Standard

Bridge Name:
No: Bank: Span:

Steel Drawing:
Saddles & Reinforcement for Drum Rock Anchor for 2 Walkway Cables
Walkway Width : cm
Set for one Foundation
Nos of Foundation required, 1 or 2 :

Date : Nov. 05, 2001 **Drawing No. 60D2**

Part No.		Section [mm]	Quantity [nos]	Working Drawing	Weight Kg/pc	Weight total Kg
1	a	**Plate 100/300/10**	2	150 150; 20 60 20; 100; 2 holes *f* 17; *Ri* = 250	2.35	4.70g
					galvanized	
	b	**Ri-Bar *f* 16 l = 220**	4	220	0.35	1.40g
					galvanized	
2	a	**Plate 160/200/10**	2	45 55 100; 20 60 60 160 20; 2 holes *f* 14; 3 holes *f* 17; *Ri* = 300	2.50	5.00g
					galvanized	
	b	**Ri-Bar *f* 16 l = 220**	6	220	0.35	2.10g
					galvanized	
3		**Angle (spacer) 40/40/5 l =.....**	1	L; X; 25 120 120 25; 20 20; 5 holes *f* 14; Width of walkway / L / X / Weight/pc: 70 cm — 1030 — 740 — 3.05 kg; 106 cm — 1390 — 1100 — 4.12 kg	.....	.....u
					untreated	
4		**Hex bolt M12 - 40**	4	40	0.065	0.26c
					galvanized	
5		**Hex nut M12**	4	19; 10	0.015	0.06c
					galvanized	
6		**Ri-Bar *f*16 l = 1650**	4	350; 1300; ri = 40	2.61	10.44R
7		**Ri-Bar *f* 6 l = 320**	10	200; ri = 40	0.07	0.70R
8		**Ri - Bar *f* 16 l = ...**	2	L; Width of walkway / L / Weight/pc: 70 cm — 2100 — 3.32 kg; 106 cm — 2500 — 3.95 kg	.....	.....R
9		**Bulldog Grip *f* ....**	2	for fixing first suspender at handrail cable *f* 26 or 32 MS forged, according to ISI standard, **hot dip galvanized**	.....	.....D
10		**Plain Rod *f* 20 l = 3200**	.....	ri =60 mm; 1490	7.90	.....R
11		**Ri-Bar *f* 25 l = 1500**	.....	1500; Anchor Rod	5.78	.....R
12		**Ri - Bar *f* 10 l = ...**	.....	350; ri =30; dia =.....	.....	.....R
13		**Ri - Bar *f* 10 l = ...**	.....	350; ri =30; dia =.....	.....	.....R

For Concrete Core of Limb Wall

For Drum

Part No.	Section [mm]	Quantity [nos]	Working Drawing	Weight Kg/pc	Weight total Kg
14	**Bulldog Grips** MS forged ISI standard *f* 13	12	for fixing & joining **Fixation Cable** *f* 13mm	0.28	1.40D
15	*f*	.....	for **Handrail Cable** *f* 26 or 32mm	.....	.....D
16	*f*	.....	for **Walkway Cable** *f* 26 or 32mm	.....	.....D

hot dip galvanized

A = ... kg.
Total transportation Weight B+C+D+R+ 0.22 kg.

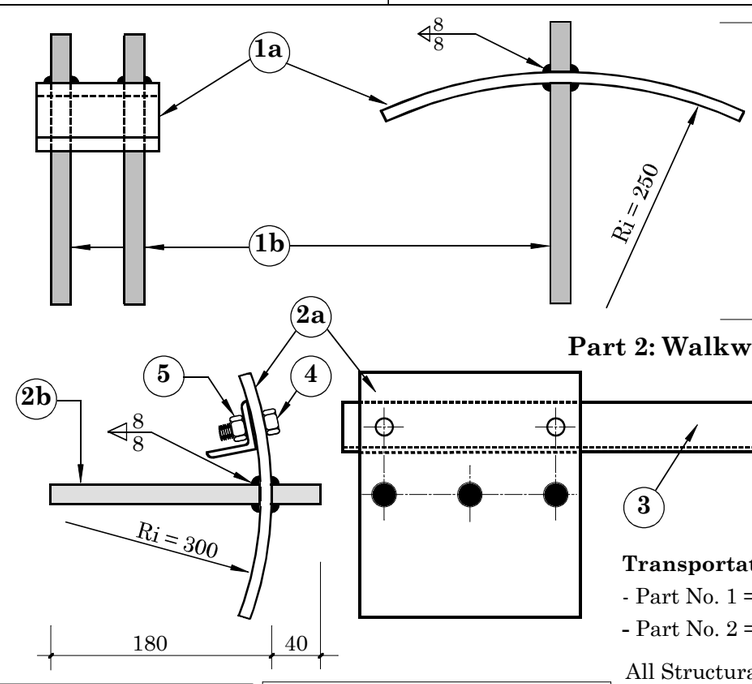
B = ... kg.
Total Structural Steel = (u+g)

g = 13.20 kg.
Steel to be galvanized

C = 0.32 kg
Nuts, Bolts, Washers

D = ... kg
Bulldog Grips

R = ... kg
Reinforcement Steel



Part 1: Handrail Cable Saddle

Part 2: Walkway Cable Saddle

Transportation Weight of welded parts :
- Part No. 1 = 3.10 kg
- Part No. 2 = 3.60 kg

All Structural steel must comply with :
IS 226 - 1975 for structural steel.
IS 800-1984 for general construction in steel.

Related Construction Drawings are :
- **20Dcon70 or 20Dcon106**
- **62Dcon**
- **64Dcon**

The following steelparts must be hot dip galvanized acc. to IS 2629 & 2633, min thickness = 80 µ m
Part No. 1 & 2
All Nuts & Bolts must conform to IS 1363 and are galvanized acc. to IS 1367, Part XIII

Cable *f* mm	Bulldog Grips for four cables	Weight. (kg/pc)	Weight. Total kg
26	20	1.10	22.00
32	24	1.30	31.20

HMG / Ministry of Local Development
DoLIDAR / Short SpanTrail Bridge Standard

Bridge Name:
No: Bank: Span:

Steel Drawing:
Saddles & Reinforcement for Drum Rock Anchor for 4 Walkway Cables

Walkway Width : cm

Set for one Foundation
Nos of Foundation required, 1 or 2 :

Date : Nov. 05, 2001 **Drawing No. 60D4**