

U GIRDER SUMMARY		
Sl. No.	Description	GFC
1	Submission of design calculations & drawings for U-Girder (31 Mtr. Span)	GFC Approved
2	Submission of design & drawings for 22m curved superstructure (U-Girder) for radius $R \geq 328m$ & $R \leq 438m$	GFC Approved
3	Submission of design & drawings for 25m curved superstructure (U-Girder) of radius $\geq 438m$ & radius $\leq 540m$	GFC Approved
4	Submission of design & drawings for 28m curved superstructure (U-Girder) of radius $R \geq 540m$ & $R \leq 770m$	GFC Approved
5	Submission of revised design & drawings for 31m curved superstructure (U-Girder) of radius $\geq 1252.6m$ .	GFC Approved

#### I GIRDER SUMMARY

Sl. No.	Description	GFC
1	Submission of design & drawings for 20.75m curved span ( $R=1004.25m$ ) superstructure at Benniganahalli station for CR2 for BPP1- BPP2 - double track	GFC Approved
2	Submission of design & drawings for 17.75m curved span ( $R=1004.25m$ ) superstructure (I- girder) at Benniganahalli station for CR2 for BPP4-BPP5 - double track	GFC Approved
3	Submission of design & drawings for 24.449m curved span ( $R=1007m$ ) superstructure at Benniganahalli station for CR2 & CR4 for BA1-BPP1 - double track	GFC Approved
4	Submission of design & drawings for 14m curved span ( $R=1004.25m$ ) superstructure (I- girder) at Benniganahalli station for CR2 for BPP3-BPP4 - double track.	GFC Approved
5	Submission of design and drawings for 17.75m Curved span ( $R=1002m$ ) superstructure (I-girder) at Yeshwantpur station for CR2-Single track for PP196A- PP196 (Down track)	GFC Approved
6	Submission of design & drawings for 31 m curved span superstructure (I-girder) at viaduct for CR2 for UP205-U206 - Single track	GFC Approved
7	Submission of design & drawings for 20.75m straight span superstructure (I-girder) at Mathikere station for P156 to P159 & P164 to P165-2 (up & down track)- single track	GFC Approved

[illegible]

46	Design & drawing of pier, pile & pile cap at P69-1	GFC Approved
47	Design & drawing of pier, pile & pile cap at P78	GFC Approved
48	Design & drawing of pier, pile & pile cap at P79	GFC Approved
49	Design & drawing of pier, pile & pile cap at P80	GFC Approved
50	Design & drawing of pier, pile & pile cap at P81	GFC Approved
51	Design & drawing of pier, pile & pile cap at P82	GFC Approved
52	Design & drawing of pier, pile & pile cap at P86	GFC Approved
53	Design & drawing of pier, pile & pile cap at P87	GFC Approved
54	Design & drawing of pier, pile & pile cap at P88	GFC Approved
55	Design & drawing of pier, pile & pile cap at P89	GFC Approved
56	Design & drawing of pier, pile & pile cap at P90	GFC Approved
57	Design & drawing of pier, pile & pile cap at P91	GFC Approved
58	Design & drawing of pier, pile & pile cap at P92	GFC Approved
59	Design & drawing of pier, pile & pile cap at P93	GFC Approved
60	Design & drawing of pier, pile & pile cap at P94	GFC Approved
61	Design & drawing of pier, pile & pile cap at P95	GFC Approved
62	Design & drawing of pier, pile & pile cap at P96	GFC Approved
63	Design & drawing of pier, pile & pile cap at P97	GFC Approved
64	Design & drawing of pier, pile & pile cap at P100	GFC Approved
65	Design & drawing of pier, pile & pile cap at P101	GFC Approved
66	Design & drawing of pier, pile & pile cap at P104	GFC Approved
67	Design & drawing of pier, pile & pile cap at P105	GFC Approved
68	Design & drawing of pier, pile & pile cap at P106	GFC Approved
69	Design & drawing of pier, pile & pile cap at P107	GFC Approved
70	Design & drawing of pier, pile & pile cap at P190	GFC Approved
71	Design & drawing of pier, pile & pile cap at P191	GFC Approved
72	Design & drawing of pier, pile & pile cap at P192	GFC Approved
73	Submission of design & drawings of pile, pile cap & pier for P204	GFC Approved
74	Design & drawing of pier, pile & pile cap at P205	GFC Approved
75	Design & drawing of pier, pile & pile cap at P208	GFC Approved
76	Design & drawing of pier, pile & pile cap at P209	GFC Approved
77	Design & drawings of pile, pile cap & pier at P210	GFC Approved
78	Design & drawings of pile, pile cap & pier at C1CP219	GFC Approved
79	Design & drawings of pile, pile cap & pier at CP222	GFC Approved
80	Design & drawing of pier, pile & pile cap at CP230	GFC Approved
81	Design & drawing of pier, pile & pile cap at P233	GFC Approved
82	Design & drawings of pile, pile cap & pier at C1P217	GFC Approved
83	Design & drawings of pile, pile cap & pier at C1P218	GFC Approved
84	Design & drawings of pile, pile cap & pier at C1P220	GFC Approved
85	Design & drawings of pile, pile cap & pier at C1P221	GFC Approved
86	Design & drawing of pier, pile & pile cap at C4P12	GFC Approved

87	Design & drawing of pier, pile & pile cap at C4P13	GFC Approved
88	Design & drawing of pier, pile & pile cap at C4P14	GFC Approved
89	Design & drawing of pier, pile & pile cap at C4P15	GFC Approved
90	Design & drawing of pier, pile & pile cap at C4P16	GFC Approved
91	Design & drawing of pier, pile & pile cap at DP 190	GFC Approved
92	Design & drawing of pier, pile & pile cap at DP 191	GFC Approved
93	Design & drawing of pier, pile & pile cap at DP 192	GFC Approved
94	Design & drawing of pier, pile & pile cap at DP201	GFC Approved
95	Design & drawing of pier, pile & pile cap at DP204	GFC Approved
96	Design & drawing of pier, pile & pile cap at DP205	GFC Approved
97	Design & drawing of pier, pile & pile cap at CDP208	GFC Approved
98	Design & drawing of pier, pile & pile cap at CDP209	GFC Approved
99	Design & drawing of pier, pile & pile cap at CDP210	GFC Approved
100	Design & drawing of pier, pile & pile cap at CDP217	GFC Approved
101	Design & drawing of pier, pile & pile cap at UP 191	GFC Approved
102	Design & drawing of pier, pile & pile cap at UP 192	GFC Approved
103	Design & drawing of pier, pile & pile cap at UP201	GFC Approved
104	Design & drawings for pile, pile cap & pier for piers UP203	GFC Approved
105	Design & drawing of pile, pile cap & pier @UP205	GFC Approved
106	Design & drawing of pile, pile cap & pier @UP208	GFC Approved
107	Design & drawing of pile, pile cap & pier @UP209	GFC Approved
108	Design & drawing of pile, pile cap & pier @UP211	GFC Approved
109	Design & drawing of pile, pile cap & pier @UP212	GFC Approved
110	Design & drawing of pile, pile cap & pier @UP213	GFC Approved
111	Design & drawing of pile, pile cap & pier @UP214	GFC Approved
112	Design & drawing of pile, pile cap & pier @ UP216	GFC Approved
113	Design & drawing of pile, pile cap & pier @UP217	GFC Approved
114	Design & drawing of pile, pile cap & pier @UP218	GFC Approved
115	Design & drawing of pile, pile cap & pier @ UP219	GFC Approved
116	Design & drawing of pile, pile cap & pier @ UP220	GFC Approved
117	Design & drawing of pile, pile cap & pier @ UP221	GFC Approved
118	Design & drawing of pile, pile cap & pier @ UP222	GFC Approved

Pier Cap		
Sl. No.	Description	GFC
1	31m-31m_Straight span (double track) - PSC	GFC Approved
2	31m-31m_Straight span (single track)- RCC	GFC Approved
3	Submission of design & drawings for PSC pier cap for double track for P8 to P20	GFC Approved

Portal Pier		
Sl. No.	Description	GFC
1	Design of pile, pier cap and pier for portal pier DPP 212	GFC Approved
2	Design of pile, pier cap and pier for portal pier DPP 213	GFC Approved
3	Design of pile, pier cap and pier for portal pier DPP 214	GFC Approved
4	Submission of design & drawings for pile, pile cap & pier for pier DPP206.	GFC Approved
5	Submission of design & drawings for pile, pile cap & pier for pier DPP207.	GFC Approved

# STATIONS

Sl. No.	Description	GFC
1	Submission of revised design & drawings for piles only for portal pier BPP2, BPP9 & BPP10 at Benniganahalli station.	GFC Approved
2	Submission of design & drawings for pile cap & pier for portal piers at Benniganahalli station (BPP2, BPP9 & BPP10).	GFC Approved
3	Submission of revised design & drawings for piles only for portal pier (BA1, BPP1, BPP3, BPP4, BPP5, BPP6, BPP7, BPP8 & BPP11) at Benniganahalli station.	GFC Approved
4	Submission of design & drawings for pile cap & pier for portal piers at Benniganahalli station (BA1, BPP1, BPP3, BPP4, BPP5, BPP6, BPP7, BPP8 & BPP11)	GFC Approved
5	Submission of typical drawings for pier protection	GFC Approved
6	Submission of Good for Construction drawing for typical reinforcement details at lifting hole location for U-girder	GFC Approved
7	General arrangement for 20.75m straight superstructure at Benniganahalli station for CR2 for BPP9 to BPP10 & BPP10 to BPP11 Double track	GFC Approved
8	General arrangement for 20.388m curved span (R=1010.25m) superstructure at Benniganahalli station for CR4 for BPP2 to BPP3 - Double track	GFC Approved
9	General arrangement for 20.744m straight span superstructure at Benniganahalli station for CR4 for BPP8 to BPP9 - Double track	GFC Approved
10	General arrangement for 13.752m curved span (R=1010.25m) superstructure at Benniganahalli station for CR4 for BPP3 to BPP4 - Double track	GFC Approved
11	Master sheet for Benniganahalli station pretension I girder - double track (CR2 & CR4)	GFC Approved
12	General arrangement for 24.038m curved span (R=1010.25m) superstructure at Benniganahalli station for CR4 for BA1 to BPP1 - Double track	GFC Approved
13	General arrangement for 13.746m curved transition span (R=1004.25m) superstructure at Benniganahalli station for CR4 for BPP5 to BPP6 - Double track	GFC Approved
14	General arrangement for 13.904m transition span super structure at Benniganahalli station for CR4 for BPP7 to BPP8 - Double track	GFC Approved
15	General Arrangement for 17.432m curved span (R=1010.25m) Superstructure Benniganahalli slab CR4 for BPP4 to BPP5 - Double track	GFC Approved
16	General arrangement for 17.466m transition span superstructure at Benniganahalli station for CR4 for BPP6 to BPP7 - Double track	GFC Approved
14	DESIGN CALCULATION FOR 14M CURVED (R=1004.25M) SPAN SUPERSTRUCTURE AT BENNIGANAHALLI STATION BETWEEN BPP3-BPP4, BPP5-BPP6, BPP7- BPP8 FOR CR2 & CR4 - DOUBLE TRACK	GFC Approved
15	GENERAL ARRANGEMENT DETAILS FOR 14M CURVED (R=1004.25M) SPAN SUPERSTRUCTURE AT BENNIGANAHALLI STATION BETWEEN BPP3-BPP4, BPP5- BPP6 FOR CR2 - DOUBLE TRACK	GFC Approved
16	REINFORCEMENT DETAILS FOR 14M CURVED (R=1004.25M) SPAN SUPERSTRUCTURE AT BENNIGANAHALLI STATION BETWEEN BPP3-BPP4 FOR CR2 - DOUBLE TRACK	GFC Approved
17	PRETENSIONED STRAND DETAILS FOR 14M CURVED (R=1004.25M) SPAN SUPERSTRUCTURE AT BENNIGANAHALLI STATION BETWEEN BPP3-BPP4 FOR CR2 - DOUBLE TRACK	GFC Approved
18	REINFORCEMENT DETAILS FOR 14M CURVED (R=1004.25M) SPAN SUPERSTRUCTURE AT BENNIGANAHALLI STATION BETWEEN BPP3-BPP4 FOR CR2 - DOUBLE TRACK (DECK SLAB & DIAPHRAGM)	GFC Approved

STATIONS		
Sl. No.	Description	GFC
1	Submission of revised design & drawings for piles only for portal pier BPP2, BPP9 & BPP10 at Benniganahalli station.	GFC Approved
2	Submission of design & drawings for pile cap & pier for portal piers at Benniganahalli station (BPP2, BPP9 & BPP10).	GFC Approved
3	Submission of revised design & drawings for piles only for portal pier (BA1, BPP1, BPP3, BPP4, BPP5, BPP6, BPP7, BPP8 & BPP11) at Benniganahalli station.	GFC Approved
4	Submission of design & drawings for pile cap & pier for portal piers at Benniganahalli station (BA1, BPP1, BPP3, BPP4, BPP5, BPP6, BPP7, BPP8 & BPP11)	GFC Approved
<b>Superstructures</b>		
5	Submission of design & drawings for 20.75m curved span (R=1004.25m) superstructure at Benniganahalli station for CR2 for BPP1-BPP2 - double track	GFC Approved
6	Submission of design & drawings for 17.75m curved span (R=1004.25m) superstructure (I-girder) at Benniganahalli station for CR2 for BPP4- BPP5 - double track	GFC Approved
7	Submission of design & drawings for 24.449m curved span (R=1007m) superstructure at Benniganahalli station for CR2 & CR4 for BA1-BPP1 - double track	GFC Approved