

BIM Reference Manual

List of Figures

Figure 3-1	Out of Plane Distortion #1	3-11
Figure 3-2	Out of Plane Distortion #2	3-11
Figure 3-3	Constraint Induced Fracture	3-16
Figure 6-1	Full Integral Abutment	6-2
Figure 6-2	Semi-integral Abutment	6-3
Figure 6-3	Vertical misalignment of finger joint.....	6-4
Figure 6-4	Deterioration of concrete paving lip	6-5
Figure 6-5	Fingers not properly aligned and broken finger	6-5
Figure 6-6	Drain filled with sand and starting to corrode	6-6
Figure 6-7	Torn seal	6-7
Figure 6-8	Dislodged seal	6-7
Figure 7-1	Concrete Box Culvert	7-2
Figure 7-2	Concrete Arch Culvert	7-2
Figure 7-3	Open Bottom Culvert Shapes.....	7-4
Figure 7-4	Arch Beam Culvert (ABC).....	7-5
Figure 7-5	Deformation of culvert shape	7-7
Figure 7-6	Collapsed culvert	7-7
Figure 7-7	Cracking of plate between bolt holes	7-8
Figure 7-8	Corrosion due to water	7-9
Figure 7-9	Corrosion due to soil	7-9
Figure 7-10	Culvert scour	7-10
Figure 7-11	Strutting	7-11
Figure 7-12	Shotcrete beam	7-11
Figure 7-13	Culvert liner	7-12
Figure 7-14	Concrete floor with partial concrete walls	7-13
Figure 7-15	Rock Rip Rap at culvert outlet.....	7-14
Figure 7-16	Scour repair.....	7-14
Figure 7-17	Rock Rip Rap being placed at new culvert.....	7-15
Figure 8-1	Type PG Girder – Spalling on girder leg.....	8-1
Figure 8-2	Type PE Girder – Spalling on leg of curb girder	8-2
Figure 8-3	Type HC Girder – Wide crack in anchorage zone	8-2
Figure 8-4	Type HC Girder – Deteriorated end diaphragm.....	8-3
Figure 8-5	Type PX Girder – Deck punchout.....	8-3
Figure 8-6	Type PE Girder – Crack along both webs and deck underside.....	8-4
Figure 8-7	Type PE Girder – Shear crack.....	8-4
Figure 8-8	Type PE Girder – Shear crack with corrosion staining	8-5
Figure 8-9	Type SM Girder – Corrosion stains from connector pockets.....	8-5
Figure 8-10	Type SM Girder – Typical corrosion spot with no significant effect on rating.....	8-6
Figure 8-11	Type SM Girder – Typical diagonal crack in girder bottom at pier.....	8-6
Figure 8-12	Type SM Girder – Typical vertical crack at girder end.....	8-7
Figure 8-13	Type FC Girder – Typical crack in deck underside/web chamfer at girder end.....	8-7

Figure 8-14	Type FM Girder – Typical longitudinal crack on inside web at abutment	8-8
Figure 8-15	Type FC Girder – Typical vertical crack with corrosion staining at girder end.....	8-8
Figure 8-16	Type FC Girder – Corrosion spots on underside of leg near bearing.....	8-9
Figure 8-17	Type PM Girder – Wide crack with corrosion staining at girder bottom.....	8-9
Figure 8-18	Type PM Girder – Wide crack and spall with corrosion staining at girder bottom ..	8-10
Figure 8-19	Type DBT Girder – Typical crack in girder end block at transition zone.....	8-10