



Figure 8-37 – Demolition likely prior to earthquake



Figure 8-38 - Failed landside behind demolished wharf area



Figure 8-39 – Ramps popped out of place due to tsunami uplift loads



Figure 8-40 – Differential transverse movement of Location 5 wharf at construction joints



Figure 8-41 - Landside settlement along the wharf at Location 5 wharf



Figure 8-42 - Landside settlement at corner of Location 5 wharf



Figure 8-43 – Expansion joint separated 50 mm to 100 mm



Figure 8-44 - Large vessel washed onto landside at northern end of Location 5 wharf



Figure 8-45 – Part of a ruptured bollard at northern end of Location 5 wharf



Figure 8-46 - Bollard with bent base plate at northern end of Location 5 wharf



Figure 8-47 – Ruptured concrete anchorage for bollard at northern end of Location 5 wharf



Figure 8-48 - Failed gangway and undamaged piles at Location 6 floating dock



Figure 8-49 - Small area of Location 6 pedestrian wharf likely scoured away



Figure 8-50 – Sheetpile wall wharf at Location 7 with limited settlement and no obvious movement



Figure 8-51 - Sheets of asphalt scoured from the deck surface at the Location 7 wharf



Figure 8-52 - Significant settlement behind gravity caisson wharf at Location 7



Figure 8-53 - Undamaged drainage grating and planters at backland settlement behind gravity caisson at Location 7



Figure 8-54 – Small shipyard with several cranes at Location 8



Figure 8-55 - Small bunkering facility South of Location 8