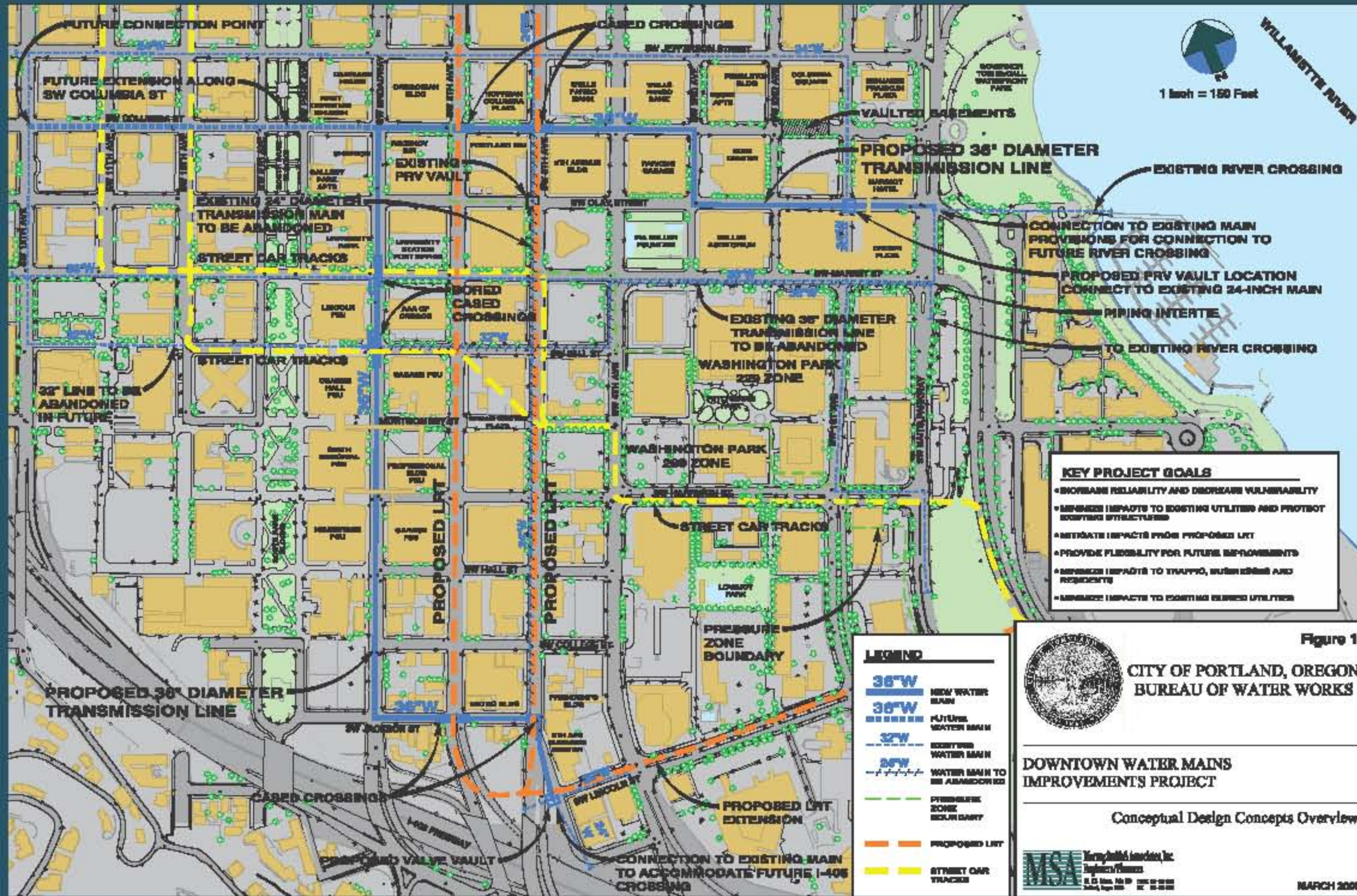


DOWNTOWN TRANSMISSION MAIN IMPROVEMENTS

CITY OF PORTLAND WATER BUREAU, OREGON



KEY PROJECT HIGHLIGHTS

- Replaced existing 60-year-old cast iron supply mains with 7,000 feet of 36-inch diameter, cement mortar-lined and coated, welded steel piping
- Minimized operational impacts from new light rail construction, improved system reliability and reduced water system vulnerability
- Extensive utility coordination (29 companies), pavement replacement and resurfacing
- Proactive public involvement program helped minimize impacts to downtown residents and businesses

PROJECT AWARDS

- Selected as one of the 2008 DJC's Top Projects
- Winner of the 2008 APWA-OR Project of the Year Award



Murray, Smith & Associates, Inc.
Engineers/Planners

WASHINGTON

OREGON

IDAHO