

Sea Level Rise Response Plan

BUDD INLET TREATMENT PLANT (BITP)



Vulnerabilities

BITP STRUCTURES AT RISK

Utilidor

- ❖ Electrical equipment and piping

Headworks

- ❖ Influent pumps, back-up generator, and motor control centers

Effluent Pumping

- ❖ Pumps and electrical

Substations

- ❖ LOTT substations and PSE substation

COMBINED STORM/SEWER SYSTEM

- ❖ 351 acres and 200 catch basins
- ❖ Increased peak flows to BITP from combined system

Actions to Date

COMPLETED 2014 VULNERABILITY ASSESSMENT FOR BITP

ADDRESSED SEA LEVEL RISE RISK PROJECT BY PROJECT

LOTT Regional Services Center (2010)

- ❖ Raised elevation by 1 foot

Primary Sedimentation Basins (2014)

- ❖ New electrical substation constructed 1.5 feet higher than usual

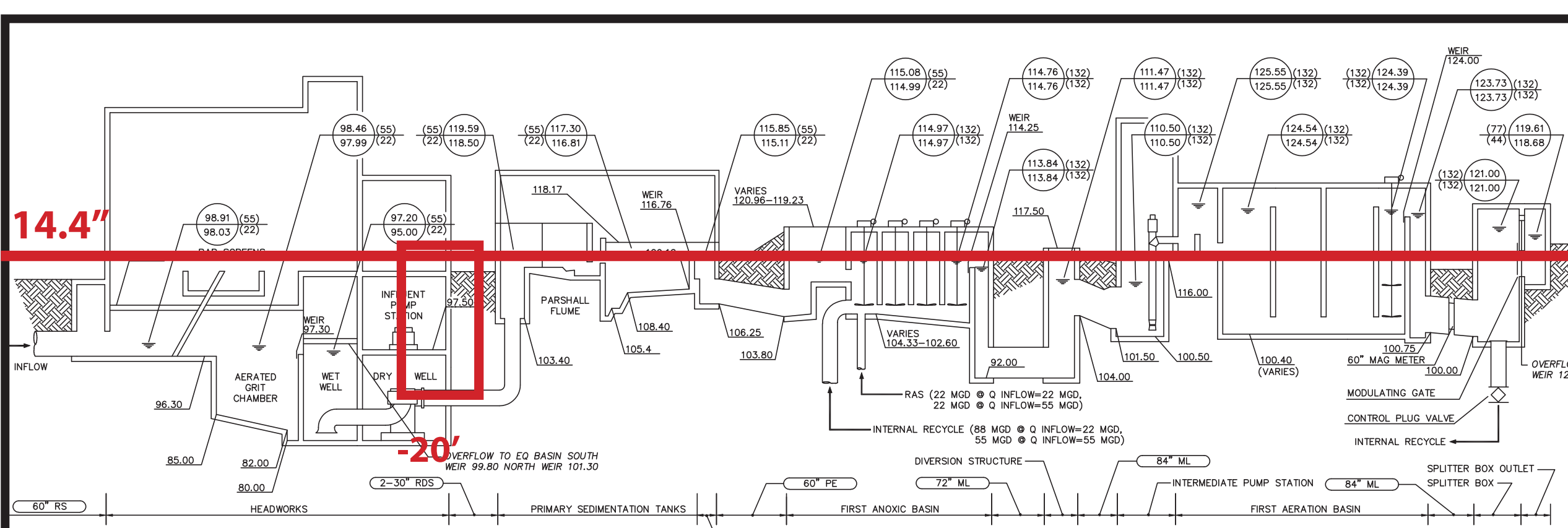
Service Entry Switchgear (2016)

- ❖ Watertight conduit
- ❖ Watertight enclosures
- ❖ Raised base elevation by 1.5 feet

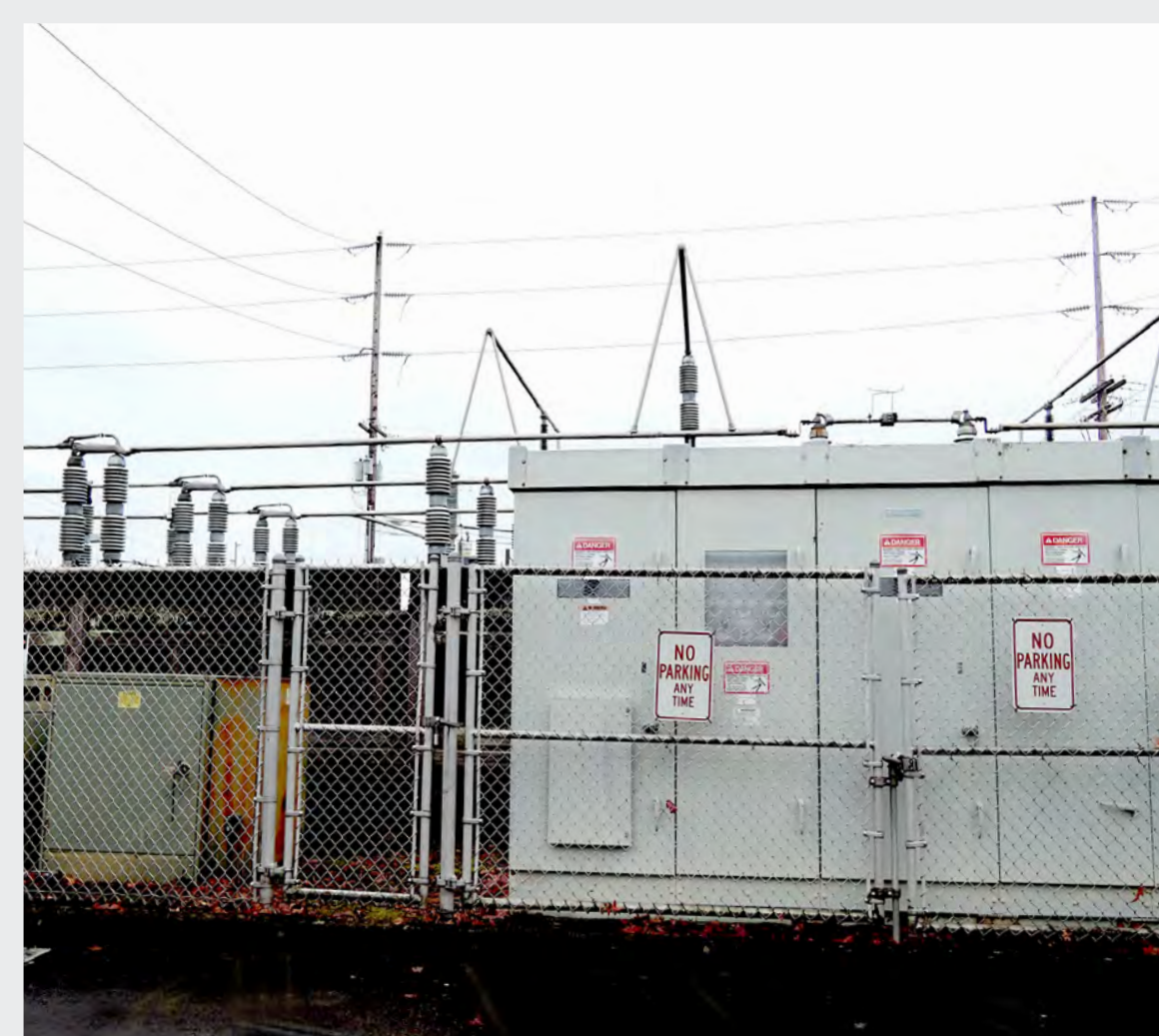
Next Steps and Goals

- ❖ Complete joint Sea Level Rise Response Plan to protect entire BITP through broader downtown effort
- ❖ Complete a detailed vulnerability assessment of plant electrical systems
- ❖ Coordinate with PSE to ensure protection of Thurston Ave substation
- ❖ Develop design standards for future projects to minimize vulnerabilities
- ❖ Better understand risk of increased peak flows from combined storm/sewer system
- ❖ Identify potential actions to protect plant from both overland flooding and the combined system

Headworks West Primaries 1st Anoxic 1st Aeration



BEFORE



AFTER

