

4.16 UTILITIES

The Build Alternative was evaluated to identify potential long-term and construction-related impacts on existing utilities in the study area. Existing utilities include public or private providers of electricity, water, sewer, natural gas, telephone, data, fiber optic and other communications that could be affected by construction activities.

NOTE TO READER: *This EA provides a tiered environmental review. Chapter 4 evaluates the project specific environmental impacts associated with construction of the North Study Area Build Alternative (See Section 3.4 for description). Chapter 5 provides a corridor level discussion of the South Study Area (See Section 3.5). Specific project footprint improvements are not currently defined for the South Study Area.*

4.16.1 What Methods, Assumptions and Resources Were Considered in the Evaluation of Utilities?

Utilities generally lack physical boundaries and were therefore identified within an area extending a 1/2 mile out from each side of the proposed Build Alternative footprint. Utilities located within this defined study area boundary are assessed in this report.

4.16.2 What Are the Existing Utilities in the Study Area?

Existing utilities in the study area include the following:

Electrical Service

Electrical service providers that could be affected by the Build Alternative include:



- ◆ Puget Sound Energy.
- ◆ Joint Base Lewis-McChord (JBLM).
- ◆ Tacoma Public Utilities – Tacoma Power provides service to JBLM through the electrical sub-station located on the east side of I-5 in the vicinity of the Gravelly Lake Drive interchange.

Communication Facilities

Communication service providers that could be affected by the Build Alternative include:

- ◆ JBLM.
- ◆ AT&T.
- ◆ CenturyLink.
- ◆ MCI/Verizon Business.
- ◆ Level 3 Communications.

Drinking Water

Utilities providing potable water service include:

- ◆ JBLM.
- ◆ City of DuPont.
- ◆ Lakewood Water District.

Natural Gas / Liquid Propane

Puget Sound Energy is the only provider of natural gas and/or liquid propane in the study area.

Solid Waste Disposal

Solid waste disposal services in the study area are provided by LeMay Inc. and Pierce County Refuse.

Stormwater Management

JBLM owns and maintains several stormwater facilities in the study area that could be affected by the Build Alternative. These facilities are identified below and documented in greater detail in the *Preliminary Stormwater Management Memorandum*, Osborn Consulting for WSDOT, February 2016.

- ◆ There is a JBLM stormwater pond near the I-5 northbound off-ramp southwest of the Steilacoom-DuPont Road interchange. The pond outlets to the north, crossing I-5 in the vicinity of Steilacoom-DuPont Road with a joint WSDOT/JBLM outfall to Bell Marsh.
- ◆ East of the Steilacoom-DuPont Road interchange there is a JBLM stormwater drain system crossing I-5 to the north at Pendleton Avenue. A WSDOT/JBLM outfall is located to the north toward Bell Marsh.
- ◆ A JBLM storm drain and cross-culvert on the east side of the 41st Division/Main Gate interchange is assumed to outfall on the west side of the rail tracks outside the WSDOT right of way.
- ◆ Just east of the 41st Division/Main Gate interchange a JBLM storm drain and crossing passes northward with an outfall to American Lake.

Sewer Service

Pierce County Public Works and Utilities provides sanitary sewer service to the surrounding area including the cities of DuPont and Lakewood. The waste water is managed in accordance with the Pierce County Unified Sewer Plan.

JBLM operates its own onsite sanitary sewer system and waste water treatment facility. JBLM waste water is managed in compliance with the National Pollutant Discharge Elimination System (NPDES) permit administered by the Environmental Protection Agency (EPA), which includes effluent limitations and various monitoring requirements.

There may be a few scattered residences and businesses within the unincorporated areas of Pierce County that are not connected to a municipal sewer system. These would depend on private onsite treatment systems, typically septic tanks or leach/drain fields.

4.16.3 What Impacts to Utilities Would Occur with the No Build Alternative?

No construction would occur under the No Build Alternative, so no effects would occur to utilities.

4.16.4 What Long-Term Utility Impacts Would Occur with the Build Alternative?

The construction of the Build Alternative would benefit utilities and enhance safety for the traveling public by placing any above-ground utilities outside of the roadway control zone. This would reduce the risk of crashes by errant vehicles and provide a safe buffer area for utility maintenance vehicles.

4.16.5 How Would Utilities Be Affected During Construction of the Build Alternative?

Many of the existing utilities are located in the area planned for new road or freeway travel lanes, interchanges, and the shared use path. Current WSDOT policy requires that all conflicting utilities within the construction boundaries of a project be relocated or mitigated prior to a project being advertised for construction bidding. This allows the project to be built without risk of impacts to those utilities.

Utilities that would likely be impacted and require relocation to accommodate the needs of the Build Alternative include:

- ◆ Puget Sound Energy power and natural gas lines.
- ◆ JBLM power, water, sewer, and communication lines.
- ◆ CenturyLink communication lines.
- ◆ Cities of DuPont and Lakewood water district drinking water lines.
- ◆ Pierce County sanitary sewer lines and possibly private septic tanks and leach/drain fields.

Anticipated Effects to Utility Customers

The adjustments and relocations of utilities would result in minimal service interruptions, typically lasting only minutes.

The solid waste service provider may need to establish new service routes to accommodate the location of the new interchanges, which could affect pickup schedules. However, for most customers there should be no disruptions to solid waste pickup.

4.16.6 How Can the Impacts of the Build Alternative Be Minimized or Mitigated?

Early and frequent communications with utility companies would occur during the design phase. Utilities affected by the Build Alternative would be identified as early as possible and the utility relocation/mitigation needs communicated to the utilities for action. Relocation or mitigation plans would be developed jointly between the design team and the utility to insure that relocation/mitigation actions would meet utility companies' needs, as well as any applicable safety, regulatory, or industry standards.

4.16.7 Would There Be Any Unavoidable Adverse Impacts from the Build Alternative?

Effects to utilities may include service interruptions to power, water, communications, gas, and any other utilities as may be identified or encountered during the construction of the Build Alternative. However these interruptions would be planned, intermittent, and temporary.

No significant adverse impacts to utilities are anticipated.