



# Bradwood Landing

## FEASIBILITY OF EROSION CONTROL FOR BRADWOOD LNG TERMINAL SITE DURING OPERATIONS

A small proportion (less than 25 percent) of the Terminal site would be comprised of impervious surface (roadway, rooftop, enclosed structures and facilities). The remainder of the site would either be landscaping or a loosely packed gravel surface overlying dredged materials. Soils at the site have high infiltration rates. Rain falling on landscaped and graveled areas would infiltrate directly into the ground except during major storms. Any runoff from these areas would be routed to vegetated swales. Vegetated swales provide some removal of contaminants in stormwater before it either infiltrates into the ground or discharges to surface waters. The vegetated swales would discharge into infiltration basins, which would allow for additional treatment before infiltration or discharge to surface waters. Rain falling on roofs and paved areas would also be conveyed to vegetated swales. Because soils are porous, some or all of the flow in the vegetated swales would infiltrate into the ground. The dimensions of the swales and the type of vegetation in them would be determined during final design of the facilities. It is expected that placement of some topsoil in the swales would be necessary to enable plant growth.

During Terminal operations most stormwater runoff would be infiltrated into the ground in accordance with the conditions contained in a 1200-Z permit issued by the DEQ. The 1200-Z permit requires that the permit application include a Stormwater Pollution Control Plan. The Stormwater Pollution Control Plan would include Best Management Practices (BMPs) for management of stormwater at industrial sites and would be prepared once the design of the Terminal has been finalized.

Stormwater runoff generated during operation of the Terminal would be managed in accordance with DEQ and Clatsop County requirements. Most stormwater runoff would be infiltrated into the ground. The SWPPP for Operation would include a number of BMPs, including a maintenance schedule that would be implemented to minimize pollutants in stormwater runoff and allow for appropriate treatment of stormwater runoff prior to disposal to the ground.

A conceptual drainage design has been developed that employs sedimentation and filtration processes to treat stormwater and infiltration for disposal. The area within the perimeter berm is divided into two drainage areas: an eastern area and a western area.