

PROJECT INFORMATION DOCUMENT

Chapter 3. Purpose & Need

Gateway Pacific Terminal

Whatcom County, Washington

Pacific International Terminals, Inc.

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CHAPTER 3 PURPOSE AND NEED

Chapter 3 describes Pacific International Terminals' objective in developing the Gateway Pacific Terminal, including the purpose and the need for the proposed project.

3.1 PURPOSE OF THE PROPOSED ACTION

The purpose of the proposed Gateway Pacific Terminal project is:

To develop and successfully operate a multimodal marine terminal, including a deep-draft wharf with access trestle and other associated upland facilities, for export and import of multiple dry bulk commodities ("multimodal deep-water bulk terminal") within the Cherry Point Industrial UGA to meet international and domestic demand. Development and operation of this Terminal further Pacific International Terminals, Inc.'s, business interests as an international, multimodal terminal developer and operator.

While achieving its purpose for Pacific International Terminals, the Gateway Pacific Terminal would further advance the economic development and environmental protection goals of the Whatcom County Comprehensive Plan's Cherry Point Industrial UGA and the Washington Department of Natural Resources designated Cherry Point Aquatic Reserve.

3.2 PACIFIC INTERNATIONAL TERMINALS, INC.'S, STATEMENT OF NEED

The proposed project would meet three principal needs, each of which provides a basis for the proposed project:

1. The need to ship bulk cargo to and from Asia and other markets to meet current and future market demand;
2. The need for deepwater, bulk marine terminals in the Puget Sound region; and
3. The need for community and economic development in Whatcom County consistent with the Whatcom County Comprehensive Plan for the Cherry Point Industrial UGA.

To ensure a reasonable level of success, Pacific International Terminals needs to develop the project in a manner that responds to existing and future market demands and economic development opportunities, based on commercially efficient and effective design and operation of the Terminal, while taking appropriate measures to minimize adverse impacts on the environment.

3.2.1 The Need to Ship Bulk Commodities to and from International Markets

The Pacific Rim markets currently need a number of commodities that the US can export, including but not limited to coal, industrial minerals, aggregates, ores, wood products, and grains (see

Chapter 4 for a list of potential commodities that would be handled at the Terminal). The current and forecasted Pacific Rim demand for these commodities has been widely documented (International Monetary Fund 2010; Leow and Salamat 2010).

Forecasted growth in trade strains the capacity at US ports, particularly on the West Coast, which provides access to Pacific Rim countries. Asia represents the largest demand for commodities in the Pacific Rim region, especially China, India, Japan, and South Korea. This region includes the world's second and third largest economies in China and Japan (Barboza 2010). Estimates predict that Asia will account for 61 percent of the growth in global demand for commodities over the 15-year period from 2001 to 2015 (Griswold 2007; Park 2004). Gross domestic product for Asia as a whole was projected to grow by about 8 percent in 2010 and by at least 7 percent in 2011, with the economies of China, India, Japan, Taiwan, and South Korea leading the way (International Monetary Fund 2010). Economic growth and improvement in the quality of life and life expectancy in Asia and across the region have created large demands for a wide range of commodities, and the demand is predicted to remain high for the long term (Leow and Salamat 2010).

The Gateway Pacific Terminal will help meet the current and expected future demand for specific commodities and for handling increased shipping trade that requires a multimodal, deep-water marine terminal.

3.2.2 The Need for a Multimodal Deep-Water Bulk Marine Terminal in the Puget Sound Region

Because of their physical nature (large quantities of voluminous, dry materials), dry bulk commodities are shipped in bulk rather than as containerized cargo. Bulk commodity cargo generally requires large ships with deep drafts. The use of large vessels allows bulk commodities to be transported more efficiently at lower cost per ton than smaller vessels would allow. The use of larger vessels also results in reduced traffic in ports and on constrained waterways.

The average size of vessels calling at US ports is growing steadily. As a result, by 2000 more than one quarter of the vessel calls to ports in the US were constrained by channel and port depths (USACE 2008). The US Maritime Administration has determined that the average size of vessels has increased as vessels have been replaced in recent years. In 2008, the average size of bulk carriers had increased 11 percent over the previous 5 years. This increase reflects the deployment of Capesize vessels into the international bulk carrier fleet. The large dimensions and deep drafts of these vessels mean that only large, deep-water terminals are capable of receiving these vessels (USACE 2008).

On the West Coast of North America, Prince Rupert, Vancouver, DeltaPort, Cherry Point, Seattle, Tacoma, and Los Angeles/Long Beach are the only locations where navigation channels with sufficiently deep drafts (greater than 50-foot depth) are available to accommodate these vessels (Ausenco Sandwell 2010a). Of those seven locations, three are located in the Pacific Northwest region of the United States. Two of these locations, Seattle and Tacoma, are already developed as ports. The Cherry Point Industrial UGA is a third location in the Pacific Northwest with the natural physical attributes to accommodate deep-draft vessels.

Over the past few decades, the demand for container terminals has also increased. As a result, most large ports in the Puget Sound region and along the West Coast with deep-water access are located in urban centers and have upgraded existing container terminals, or plan to develop new container terminals rather than deep-water bulk terminals.¹ Because container terminals occupy and are expected to continue to occupy ports with deep-water access and the substantial adjacent uplands suitable for marine terminals, the need for multimodal, deep-water bulk marine terminals is not being met in the Pacific Northwest region. No bulk marine terminal development projects are currently planned in the Puget Sound region. Moreover, ports on the Columbia River are limited by the 42-foot depth of the dredged navigation channel, and as a result can serve only smaller vessel sizes (light-loaded Panamax). Further, the Columbia River ports have been and will continue to be dependent upon continuous dredging to maintain terminal depths.

The proposed Gateway Pacific Terminal would help meet the need for deep-water bulk marine terminals that have the ability to effectively and efficiently transfer cargo between overland and waterborne modes of transport in the Puget Sound region.

3.2.3 The Need for Community and Economic Development

Both the US Government and Washington State have adopted policies and commenced initiatives to expand interstate commerce and export trade. The proposed project would help to implement both the *President's National Export Initiative* (Office of the President 2010) and the Governor's 6-Point Export Plan (Office of the Governor 2010).

The objective of the President's initiative is to double American exports over the next 5 years, starting in 2010. A critical component of stimulating economic growth in the US is ensuring that businesses can actively participate in international markets by increasing their export of goods, services, and agricultural products. The State of Washington has likewise taken steps to increase the number of Washington state companies exporting goods and services and thereby help increase exports from

¹ See, for example, Port of Seattle's Harbor Development Strategy for Marine Cargo and Container Terminal Development Plan, and similar plans from other ports and harbors, including the Ports of Los Angeles, Long Beach, Oakland, and Tacoma.

the state by 30 percent by 2015 (Office of the Governor 2010). Washington State's 6-point export plan was designed to generate economic growth by expanding opportunities for exporters. The 6-point plan aims to enhance the state's ability to move goods efficiently by supporting investments in infrastructure.

The US Department of Transportation's (USDOT) Maritime Administration determined that marine terminals are an essential link between US and foreign commerce and between waterborne transport and overland modes of transport, which together deliver goods to businesses and consumers (USACE 2008). The USDOT Maritime Administration also determined that port development and growth through increased capacity, increased efficiency, and technological improvement are crucial to support the national economy (IHS Global Insight 2009).

At the local level, Whatcom County has reiterated the need for economic and community development. The most recent update to the Whatcom County Comprehensive Plan (Plan) calls for continued development of the Cherry Point Industrial UGA (Whatcom County 2010). The Comprehensive Plan is based on many years of studies, planning, and agreements among federal, Tribal, regional, state, and local governments and interested businesses, citizens, and the community. The Plan identifies the need for natural resource industries and the potential for the Cherry Point Industrial UGA to meet this need. The County's Shoreline Master Program designates the Terminal project area as part of the Cherry Point Management Area, and specifically allows port and water-dependent uses.

The Terminal is consistent with the goals of the WDNR's Cherry Point Aquatic Reserve designation for the area and with the Reserve's Management Plan (WDNR 2010), which specifically allows this proposed development.

This project furthers state and national policies regarding international trade and economic development. The project also helps meet the economic development and other needs identified in the Whatcom County Comprehensive Plan to continue to develop the Cherry Point Industrial UGA, specifically with a multimodal, deep-water bulk marine terminal.

3.2.4 The Need for an Appropriate Site

The commercial success of the project requires a site that is strategically located to respond to existing and future market demands and economic opportunities. The site must also possess unique features and characteristics to ensure efficient and cost-effective Terminal operations. Specifically, to maximize annual throughput of commodities and to achieve the economies of scale necessary to ship low to medium value bulk commodities to international markets profitably, large trains and ships are required. A deep-draft wharf is necessary to accommodate the Panamax and Capesize vessels that

currently service the commodity fleet and allow these vessels to be safely loaded or unloaded (US Maritime Administration 2009a). Since operation of these large, oceangoing vessels is the most costly part of transporting bulk commodities, the time that each vessel spends at dock must be kept to a minimum. To achieve this operating efficiency, the Terminal must have sufficient land area, rail capacity, and ancillary infrastructure to marshal large quantities of bulk cargo quickly to or from a vessel. A large land area is needed to provide sufficient space to effectively unload and store cargo.

To meet these needs, Pacific International Terminals requires a property that:

- Is located on the West Coast of the US;
- Is of sufficient size to effectively accommodate the handling and storage of large quantities of dry bulk commodities;
- Is appropriately designated and zoned for use as a marine terminal;
- Can support a deep-water marine terminal and wharf;
- Has proximity and access to rail of sufficient length, configuration, and capacity to support the proposed use;
- Has proximity and access to major roads; and
- Has a sufficient supply of industrial water and energy.

The proposed Gateway Pacific Terminal project area meets all these criteria. The project area is strategically located and has been zoned, designated, and permitted for development as a marine terminal. The project location can accommodate the deep draft vessels required for the successful operation of the Terminal without any development or maintenance dredging.

The upland commodities handling and storage facilities are of sufficient capacity to stockpile, consistent with industry standards, on the order of 6 to 8 percent of annual throughput. The storage and handling facilities have also been designed to accommodate a complete high-capacity train within designated rail loops at the Terminal site.

To avoid interference with main line rail traffic, the Terminal is designed to accommodate trains up to 8,500 feet long within the project area. To promote efficient train handling, tracks are designed in a loop to maximize rail access and minimize area used. A rail loop of this size creates a large interior space well suited to material storage in stockpiles. The stockpile capacity required is proportional to annual throughput, since sufficient storage space must be available to efficiently handle cargo unloaded from trains and loaded into vessels. For the East Loop, the recommended percentage of annual throughput would be approximately 2.9 million metric tons, which is consistent with the

designed stockyard capacity for that area (approximately 2.75 million metric tons). Handling of different commodities requires that the commodities be segregated. Therefore, separate storage and handling areas within the facility are required and would be accommodated with the Terminal design. Finally, the project location provides ready access to key transportation arteries and industrial water and energy sources used by existing industries.