Requirements Specifications

Alphaport Upgrade

**Version 0.3**

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# Revision History Table

Table 1

|  |  |  |  |
| --- | --- | --- | --- |
| Version Number | Version Date | Added By: | Revision Description |
| 0.1 | 02-Dec-2011 | JM | Document created |
| 0.2 | 15- Dec-2011 | JM | Added the detailed descriptions for Features 1.0-4.0 |
| 0.3 | 18- Dec-2011 | JM | Added the detailed descriptions for Features 5.0-10.0 |

# Sign-Off Matrix

Table

|  |  |  |  |
| --- | --- | --- | --- |
| Name & Title | Project Role | Date | Signature |
| Guy Ruggeri | Federal Government - Representative |  |  |
| Christian Goranson | State Government - Representative |  |  |
| Darryl Lass | Municipal Government - Representative |  |  |
| Allan Minier | President and CEO |  |  |
| Clayton Tilford | Director, Engineering |  |  |
| Christian Agan | Director, IT |  |  |
| Erik Baldon | Director, Logistics |  |  |
| Roxie Manhart | Director, Legal |  |  |
| Louisa Basquez | Director, PR |  |  |
| Karina Mcmasters | Director, Sales and Marketing |  |  |
| Clinton Divito | Project Manager |  |  |
| Jamie Smeltzer | Shipping Company A - Representative |  |  |
| Mathew Mallo | Shipping Company B - Representative |  |  |
| Hugh Deford | Shipping Company C - Representative |  |  |
| Carmella Ducasse | Shipping Company D - Representative |  |  |
| Julio Ebel | Shipping Company E - Representative |  |  |

# Introduction

## Document Purpose

This document is the Requirements Specification for the "Alphaport Upgrade" project. It addresses intended audiences, scope, user classes and detailed requirements of the future product. The Requirements Specification document is a configuration item and must be placed under change control once agreed. Updates to the Requirements Specification must be reviewed and approved by the Project Manager and any relevant stakeholders for the section that is changed.

## Intended Audience

This document is intended for the following audiences:

* Project manager
* IT Team
* Engineering team
* Marketing team
* PR team
* Legal team
* Planning team
* Logistics team
* Security team
* Construction contractors
* Executive management
* External stakeholders

The rest of the Requirements Specification document contains the overview of the project scope and any relevant reference documents. The next section describes key product features, user classes and the product environment. Finally, the document focuses on the detailed requirements of the "Alphaport Upgrade" project.

## Project Scope

The scope of the project consists of design, build and deployment of an additional container terminal with the capacity of 1.5 million TEUs (twenty-foot equivalent units) at the existing Alphaport facility by Q4 2017.

## References

Table

|  |  |
| --- | --- |
| Document Title | URL Link |
| National Building Code | Click here to access the document |
| State Environmental Assessment Act | Click here to access the document |
| Federal Environmental Assessment Act | Click here to access the document |
| National Standards Association | Click here to access the document |
| International Ship and Port-facility Security (ISPS) Code | Click here to access the document |

# Product Description

## Product Features

Table

|  |  |
| --- | --- |
| Feature ID | Feature Description |
| F 1.0 | Land acquisition |
| F 2.0 | Legal aspects |
| F 3.0 | Public relations (including federal, state and municipal governments) |
| F 4.0 | Marketing (including Chinese, Japanese Indian and Korean markets) |
| F 5.0 | Planning - Building Design |
| F 6.0 | Construction |
| F 7.0 | Engineering |
| F 8.0 | IT components |
| F 9.0 | Logistics (including building a road and bus connection) |
| F10.0 | Security |

## User Classes and Characteristics

Table

|  |  |  |
| --- | --- | --- |
| User Class | Characteristics | Favored? |
| Shipping companies | Both individuals and corporate | Yes |
| Port employees | Internal department |  |
| HQ employees | Internal department |  |

## Product Environment

The new facility shall be located to the East of the existing Alphaport territory (see Figure 1).

Figure 1



# Product Features and Requirements

## F 1.0 - Land acquisition and environmental cleanup

Table

|  |  |  |  |
| --- | --- | --- | --- |
| Feature ID | Req ID | Requirement Description | Priority |
| F1.0 | R 1.1 | Land acquisition | Must Have |
|  | R 1.2 | Environmental cleanup | Must Have |

## F 2.0 - Legal aspects

Table

|  |  |  |  |
| --- | --- | --- | --- |
| Feature ID | Req ID | Requirement Description | Priority |
| F2.0 | R 2.1 | Legal agreements with the federal government | Must Have |
|  | R 2.2 | Legal agreements with the state government | Must Have |
|  | R 2.3 | Legal agreements with the municipal government | Must Have |
|  | R 2.4 | Legal agreements with the local Native tribes | Must Have |

## F 3.0 - Public relations (including federal, state and municipal governments)

Table

|  |  |  |  |
| --- | --- | --- | --- |
| Feature ID | Req ID | Requirement Description | Priority |
| F3.0 | R 3.1 | Documentation for the federal government | Must Have |
|  | R 3.2 | Presentations for the federal government | Must Have |
|  | R 3.3 | Documentation for the state government | Must Have |
|  | R 3.4 | Presentations for the state government | Must Have |
|  | R 3.5 | Documentation for the municipal government | Must Have |
|  | R 3.6 | Presentations for the municipal government | Must Have |
|  | R 3.7 | Presentations for the local population | Should Have |

## F 4.0 - Marketing (including Chinese, Japanese, Indian and Korean markets)

Table

|  |  |  |  |
| --- | --- | --- | --- |
| Feature ID | Req ID | Requirement Description | Priority |
| F4.0 | R 4.1 | Marketing program for China markets | Must Have |
|  | R 4.2 | Marketing program for Japan markets | Must Have |
|  | R 4.3 | Marketing program for India markets | Should Have |
|  | R 4.4 | Marketing program for Korea markets | Should Have |

## F 5.0 - Planning - Facility Design

Table

|  |  |  |  |
| --- | --- | --- | --- |
| Feature ID | Req ID | Requirement Description | Priority |
| F5.0 | R 5.1 | Wharf to create the new berth  R 5.1.1 - Water depth along the berth will be minus 15.8 metres  R 5.1.2 - A 15 m wide road access corridor providing access to the tug berth | Must Have |
|  | R 5.2 | Container storage yard | Must Have |
|  | R 5.3 | Tug moorage area  R 5.3.1 - Floating dock,  R 5.3.2 - Walkway  R 5.3.3 - Dredged channel | Must Have |
|  | R 5.4 | Ship access channel  R 5.4.1 - Elevation of approximately –16 meters (to provide access and adequate draft for container ships) | Must Have |
|  | R 5.5 | Terminal services and infrastructure  R 5.5.1 - Paved container yard area  R 5.5.2 - Reefer towers  R 5.5.3 - Truck out-gate  R 5.5.4 - Truck out-gate building  R 5.5.5 - Substation building  R 5.5.6 - Union lunchroom  R 5.5.7 - Union parking lot  R 5.5.8 - Lighting towers  R 5.5.9 - Communication systems  R 5.5.10 - Electrical power systems  R 5.5.11 - Storm sewer  R 5.5.12 - Sanitary sewer  R 5.5.13 - Water distribution  R 5.5.14 - Fuelling facilities  R 5.5.15 - Terminal parking  R 5.5.16 - Rails for ship-to-shore gantry cranes | Must Have |

## F 6.0 - Construction

See Features 5.0 (all), 7.0 (all), 9.0 (all) and 10 (all)

## F 7.0 - Engineering

Table

|  |  |  |  |
| --- | --- | --- | --- |
| Feature ID | Req ID | Requirement Description | Priority |
| F7.0 | R 7.1 | Environmental habitat  R 7.1.1 - Excavation of the causeway shoreline  R 7.1.2 - Log removal and salt marsh restoration  R 7.1.3 - Caisson habitat openings  R 7.1.4 - Sub tidal rock reef creation | Should Have |

## F 8.0 - IT components

Table

|  |  |  |  |
| --- | --- | --- | --- |
| Feature ID | Req ID | Requirement Description | Priority |
| F8.0 | R 8.1 | Facilities - hardware | Must Have |
|  | R 8.2 | Facilities - network | Must Have |
|  | R 8.3 | Facilities - software | Must Have |
|  | R 8.4 | Integration with existing systems | Must Have |

## F 9.0 - Logistics

|  |  |  |  |
| --- | --- | --- | --- |
| Feature ID | Req ID | Requirement Description | Priority |
| F9.0 | R 9.1 | Additional rail track | Must Have |
|  | R 9.2 | Additional road | Must Have |
|  | R 9.3 | Existing road improvements | Should Have |

## F10.0 - Security

Table

|  |  |  |  |
| --- | --- | --- | --- |
| Feature ID | Req ID | Requirement Description | Priority |
| F10.0 | R 10.1 | Fencing  R 10.1.1 - 1.8 m high chain link fence topped with three strands of barbed wire | Must Have |
|  | R 10.2 | Road and pedestrian fence gates - manually operated | Must Have |
|  | R 10.3 | Security cameras | Must Have |

**NOTE:** The security requirements will be designed and operated to meet the latest security standards in the *"International Ship and Port-facility Security (ISPS) Code"*

# Appendix

N/A