

## IDEAL BASIC INDUSTRIES, ROCK PRODUCTS TEXADA ISLAND.

Ideal Basic Industries has been operating their Rock Products limestone quarry on Texada Island since 1957. From a relatively modest beginning it has grown to become a major supplier of limestone, aggregates, and rip rap for the markets of British Columbia and the American northwest.

Texada Island is located some sixty miles north of Vancouver, B.C. in the Georgia Strait between Vancouver Island and mainland British Columbia. It is thirty miles long in a north-west, southeast direction and is four to five miles across.

The majority of the limestone is found in the northern third of the island. The portion of this limestone being quarried by Ideal is described as the lower member and possibly part of the middle member of the Triassic Marble Bay formation. The strata dip 10 to 12 degrees northeasterly and strike north-westerly. Several faults trending N 10° W have fractured and offset the formation. Dykes trending in the same direction have been intruded during at least two separate periods.

Within the quarry area, dykes appear to occupy nearly vertical fracture zones, particularly those which are 10 to 15 feet thick. These dykes trend N 15° W and are commonly resistant to erosion. Smaller dykes ranging from 1 to 3 feet, either cross-cut the larger dykes at about N 45° W or run parallel to them. These dykes erode slightly below the limestone surface and show no indications of post intrusive faulting.

The limestone can be described as medium to dark grey, even textured and cryptocrystalline. Minute irregular veinlets containing minor amounts of silica and pyrite are present but are not readily apparent to the eye. This high quality chemical grade limestone is being used by pulpmills, smelters and in the manufacture of cement and chemical grade lime.

The present quarry covers an area of approximately 65 acres with a limestone depth potential of over 700 feet where it lies on the Karmutsen volcanic basement. The volcanics have a similar dip and strike generally to the limestone.

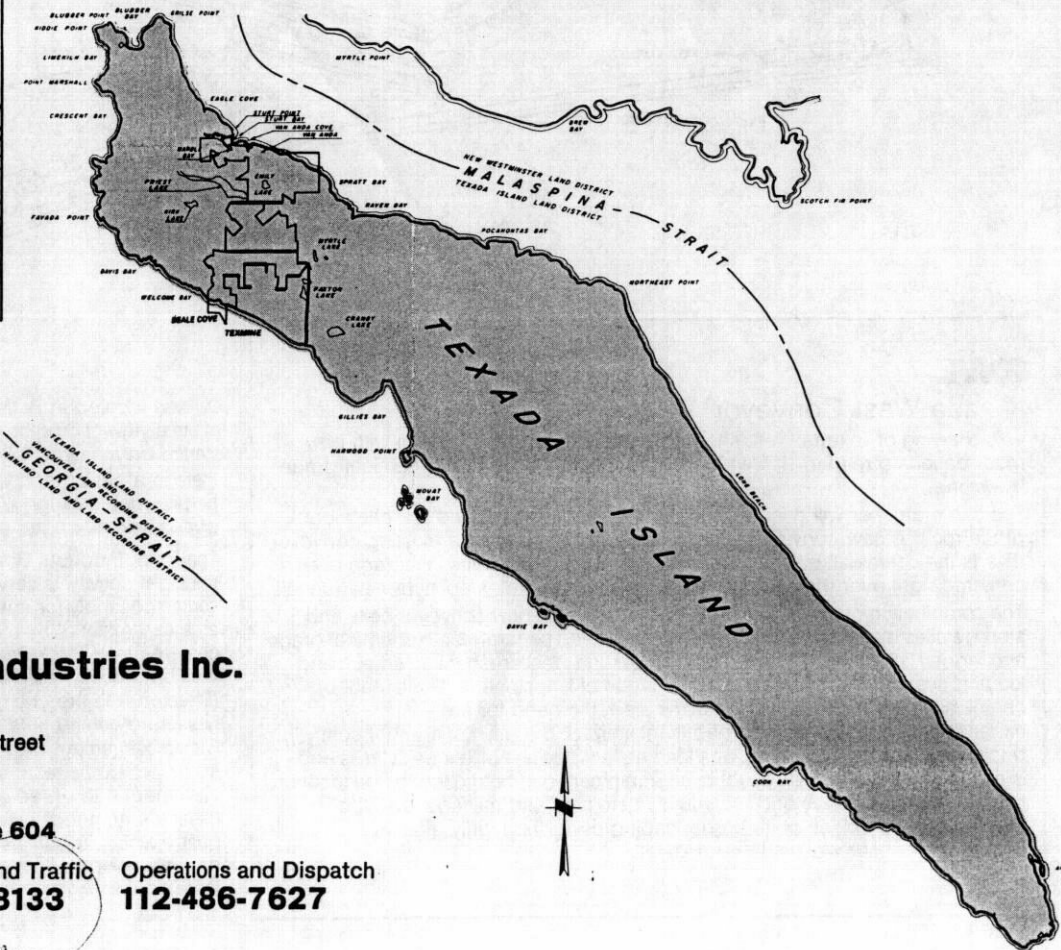
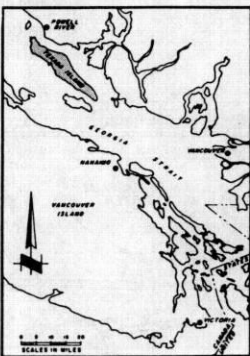
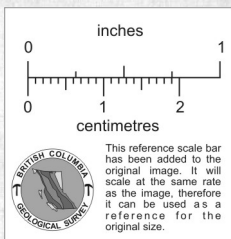
Rotary or down-the-hole drilling provides the boreholes for blasting with ANFO or high explosive. Bench heights average 33 feet. Front-end loaders and trucks feed an impact crusher in closed screening circuit at a capacity rate of 1000 tons per hour to produce a minus two inch product. This product is stockpiled and shipped to cement plants or to aggregate users on the lower mainland. Chemical grade limestone is crushed in the same system with the two inch minus product being processed further on two 8' x 20' double decked screens.

The screened products (-2" + 3/4, -3/4 + 5/16, and -5/16) are stockpiled for loading over a reclaim tunnel. All crushed limestone is shipped on open barges. The reclaiming and barge loading system has a capacity of 2000 tons per hour.

Waste rock is stockpiled for further treatment or direct shipment as fill. Large boulders produced during quarrying are stockpiled and segregated to supply the rip rap markets on the coast.

Company holdings both owned and leased ensure a continuing supply of limestone for construction and industry for many decades to come.

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# IDEAL

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**about**  
**IDEAL**

**TEXADA**  
Rock Products Division

# TEXADA

This issue of "About Ideal" takes you to the timbered and rocky outpost that is Texada Island and the people of Ideal Basic Industries who work hard at contributing to the success of the company through the Rock Products Division. It will give you a bird's-eye view of what has been planned on an approved project to improve company operations at Texada. It will show you the quarry operation and how Ideal Basic people, in a Canadian environment, do their jobs in one of the island's major

activities which provides income and a good life for these company employees located thousands of miles from most of the company's other operations.

Ideal Basic Industries has a number of subsidiary operations related to the two main businesses of the company, portland cement and potash. Some of these are the natural outgrowth of business progress in which the company gradually became involved in a subsidiary operation because of needs for fuel, raw materials, transportation and other essentials in keeping the business going.

One such subsidiary of the cement division, the Rock Products

companies as paper mills. Since the material must still be removed from the deposit in order to get at the purer limestone, if it can be sold at a profit, it is worth the time and effort to do so.

Sales office for the Rock Products Division is located in Vancouver, British Columbia, and has a staff of four. The limestone deposit is located on Texada Island, British Columbia, between Vancouver Island and the mainland of Canada. The bodies of water which surround the island are the Strait of Georgia on the west side and Malaspina Strait on the east side between the island and the Canadian mainland. Thirty-two people including a staff of five man the limestone operation. The quarry has a maximum rated capacity of 3.6 million tons per year on a 2-shift basis using existing equipment.

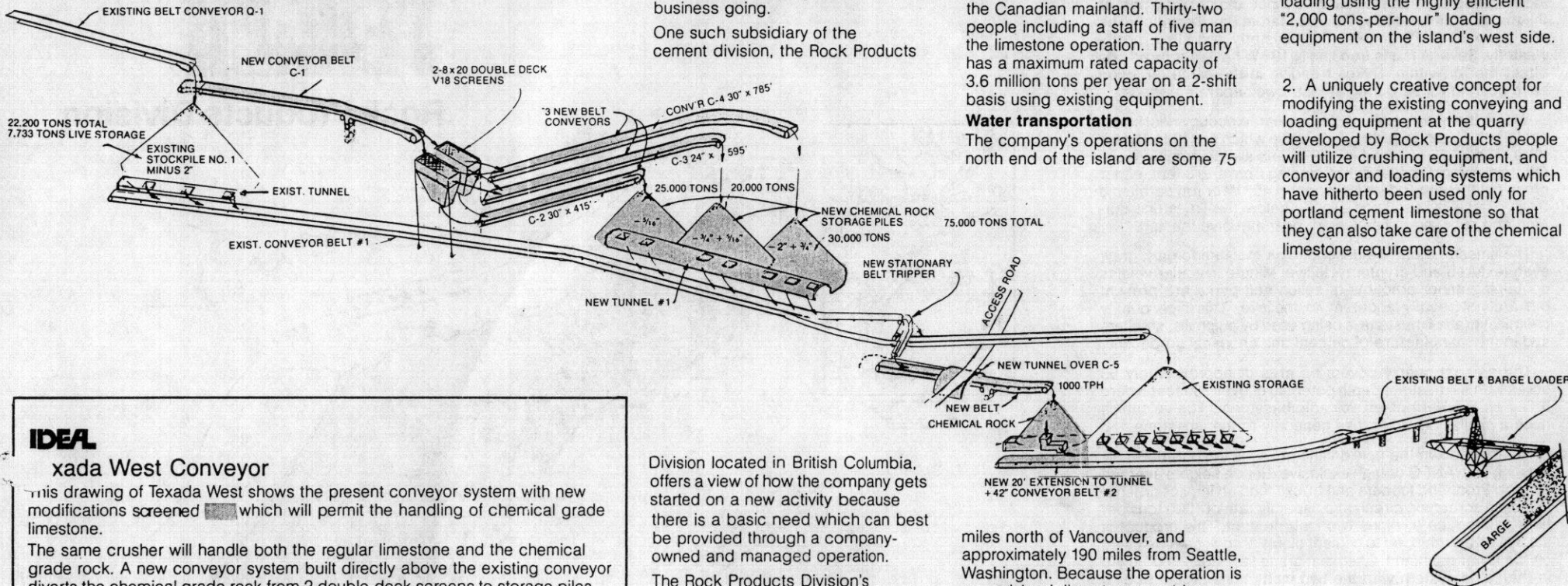
### Water transportation

The company's operations on the north end of the island are some 75

this valuable ma. The project, known as "Texada Chemwest", will make these important changes in present operations:

1. Facilities for crushing, transporting and loading of chemical limestone to barges anchored in Marble Bay on the east side of the island will be shut down. This will eliminate a 4-mile haul of chemical-grade limestone by truck from the quarry and will concentrate all crushing activities at the crusher up in the quarry and handle all barge-loading using the highly efficient "2,000 tons-per-hour" loading equipment on the island's west side.

2. A uniquely creative concept for modifying the existing conveying and loading equipment at the quarry developed by Rock Products people will utilize crushing equipment, and conveyor and loading systems which have hitherto been used only for portland cement limestone so that they can also take care of the chemical limestone requirements.



## IDEAL Texada West Conveyor

This drawing of Texada West shows the present conveyor system with new modifications necessary which will permit the handling of chemical grade limestone.

The same crusher will handle both the regular limestone and the chemical grade rock. A new conveyor system built directly above the existing conveyor diverts the chemical grade rock from 2 double-deck screens to storage piles centered right over the original conveyor which is protected by a new tunnel.

The combination of the old conveyor system and the new conveyor belts and storage piles make it possible to handle and keep separate both chemical grade and regular limestone. Thus, the existing Texada West crusher and screen and loading system can be used for both types of limestone; a 4-mile haul of chemical-grade rock by truck is eliminated; the need for an expensive-to-maintain quarry road is minimized; the maintenance of costly duplicate crushing, screening, and loading facilities on both sides of the island is no longer necessary; all production equipment can be moved to one location for maximum efficiency and minimum waste time and mileage; and the division can handle all of its barge loading using the highly efficient 2,000-ton-per-hour west side equipment.

Division located in British Columbia, offers a view of how the company gets started on a new activity because there is a basic need which can best be provided through a company-owned and managed operation.

The Rock Products Division's principal activity is serving as the source of supply for limestone needed as a raw material by the Seattle cement plant. Rock Products also sells high quality calcium carbonate (limestone) to the chemical industry, has future contracts to supply a new Canadian cement plant which will soon come on stream, and provide customers with riprap and rock fill materials from those parts of the quarry where impurities in the deposit make the quarry rock unusable for the production of cement, chemical use, or use by such other

miles north of Vancouver, and approximately 190 miles from Seattle, Washington. Because the operation is on an island, limestone must be loaded and transported via barges using a deep-water loading facility on the west side. This is advantageous because the low cost of water transportation helps to overcome problems of the distance to the market.

On January 26, 1977 the Board of Directors of Ideal Basic Industries okayed a project for Texada which is very important to the profitable operation of the division in reducing costs in the production of chemical-grade limestone and improving the company's position in the supply of

3. The need for maintenance of extensive quarry roads and the division of company bulldozers, quarry trucks, front-end loaders and personnel between 2 locations will be reduced to one location improving efficiency, production equipment utilization, and time and mileage required for quarry hauls.