"Summary Appraisal Report"

of

The " Juan Perez" Parcel
825 Acres of Vacant Oceanfront Land
State Road 187 – Kilometer Marker 10.3 –12.3
Municipality of Loiza, Puerto Rico USA

Prepared for
Megaproductions, Inc.

Prepared By

Global Valuation, Inc.
3727 SE Ocean Boulevard, Suite 200
Sewall's Point, FL 34996
(772) 215-5738, Fax (772) 463-0493
www.globalvaluation.com

April 2003

Global VALUATION

Worldwide Appraisal Services

Western Style Appraisals

International Real Estate Appraisals

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Due Diligence

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Global VALUATION

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Introduction

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Global VALUATION

April 30, 2003

Mr. Anthony Hurley, General Manager
Megaproductions, Inc.
1401 Shefford Road
Baltimore, Maryland

Dear Mr. Hurley:

In accordance with our contract, I have inspected and appraised the subject property.

The subject property is briefly described as the "Juan Perez" Parcel and consists of 850 cuerdos (approximately 825 acres) of vacant land located at State Road 187, between kilometer marker 10.3 and 12.3 in the municipality of Loiza, Puerto Rico USA. The property features two kilometers of wide, white sandy beaches along the Atlantic Ocean and antique use rights which allow a wide variety of uses on the land including tourism, recreational, mining and energy uses.

Another feature is a large sand deposit on the parcel. "Islote de Juan Perez" contains over 30 million cubic meters of useable sand, which can be abstracted and sold on site. The sand is of good quality and has many uses, including construction materials and industrial uses. The sand is briefly described as: (Holecene and Pleistocene) sand, predominately composed of shell fragments cemented by calcium carbonate.

This is a Real Property (Land) and a Personal Property (Sand) Appraisal completed in accordance with The Uniform Standards of Professional Appraisal Practice (USPAP), as promulgated by the Appraisal Foundation, which is authorized by the United States Congress as the source of appraisal standards and appraiser qualifications. This letter is accompanied by an Appraisal Report prepared under the "Summary Appraisal Report" option.

The scope of the Personal Property Appraisal (Sand) is to estimate the prospective market value assuming an annual sales volume of one million cubic meters is sold, "on a wholesale basis on site." The scope of the Real Property Appraisal (Land) is to estimate the current market value "As Is."

We have completed an investigation of the local, regional and national mineral market and the real estate market. Based upon all of the information, market data consultations and analysis, it is our opinion that the subject property has a market value, as of April 30, 2003 of:

real property	**$340,000,000**
personal property	**$110,000,000**
total property	**$450,000,000**

Four Hundred Fifty Million Dollars
($450,000,000)

We certify that we have no interest past or present in the subject property and that our conclusions of value are based on Internationally accepted techniques, methods and procedures. Moreover, our fee is not contingent upon a specified value conclusion. The value conclusions are subject to the Assumptions and Limiting Conditions, presented in the Appraisal Report.

Respectfully submitted,

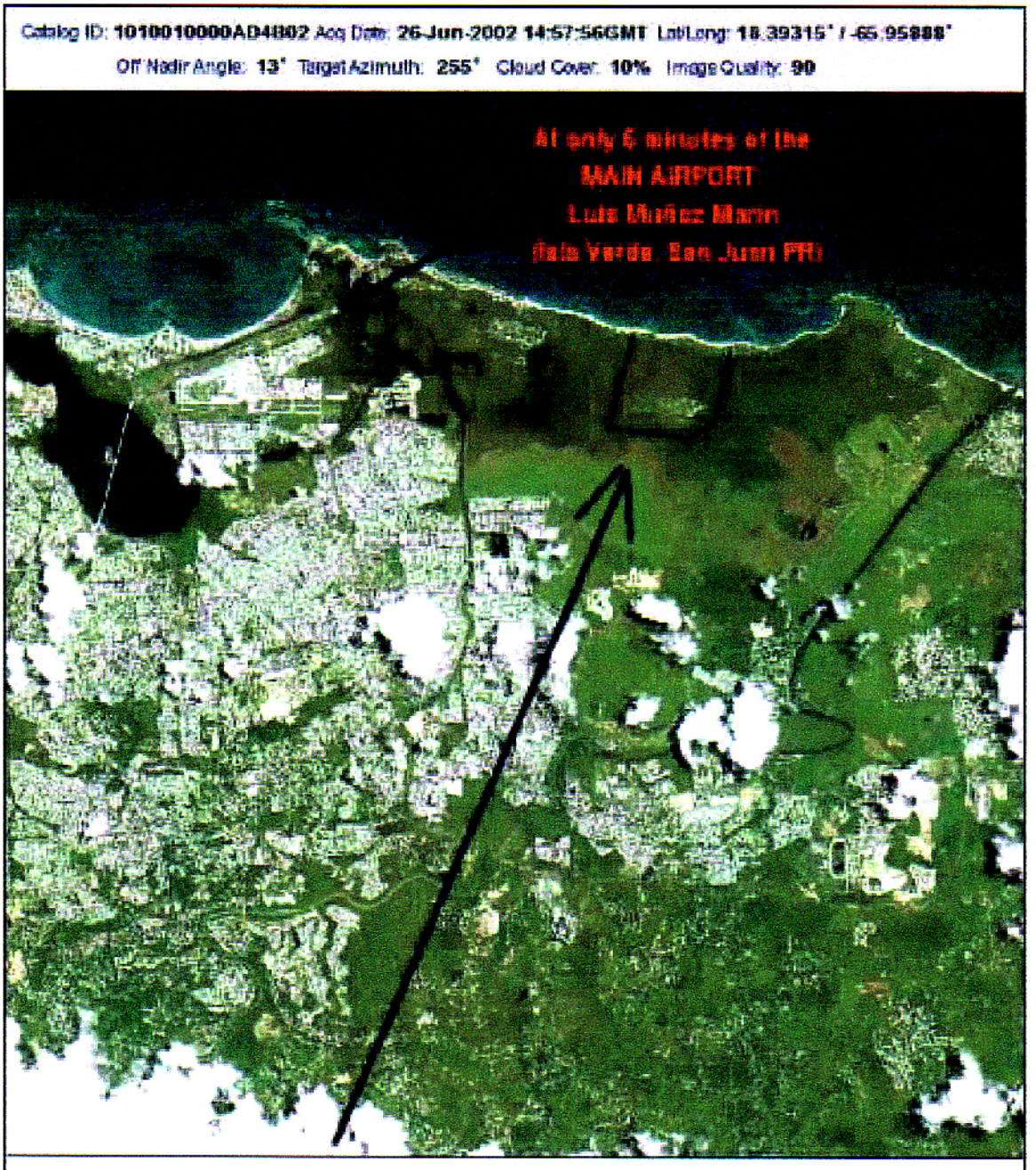
Thomas G. Spears, ASA
President & CEO

AMERICAN SOCIETY OF ASA APPRAISERS

EXECUTIVE SUMMARY

Subject Property	The "Juan Perez" Parcel, 850 cuerdos (825 acres) of Vacant Oceanfront Land
Location	State Road 187 between kilometer markers 10.3 and 12.3, municipality of Loiza, Puerto Rico USA
Special Assumptions	The Personal Property valuation is predicated upon abstracting and selling one million cubic meters of sand annually, on a wholesale basis on site.
Type of Appraisal	Real Property (Land) and Personal Property (Sand) appraisal, uniform standards of Professional Appraisal Practices (USPAP) prepared under the "Summary Appraisal Report" option.
Property Description	The subject property is briefly described as the "Juan Perez" Parcel and consists of 850 cuerdos (approximately 825 acres) of vacant land located at State Road 187, between kilometer marker 10.3 and 12.3 in the municipality of Loiza, Puerto Rico USA. The property features two kilometers of wide, white sandy beaches along the Atlantic Ocean and antique use rights, which allow a wide variety of uses on the land including tourism, recreational, mining and energy uses. Another feature is the large sand deposit on the parcel. "Islote de Juan Perez" contains over 30 million cubic meters of useable sand, which can be abstracted and sold on site. The sand is of good quality and has many uses, including construction materials and industrial uses. The sand is briefly described as: (Holocene and Pleistocene) sand, predominantly composed of shell fragments cemented by calcium carbonate, generally 1 meter of less thick.
Highest and Best Use	Mixed use including developing a Destination Resort Subdivision, Water and Electricity Plants and Mining the Sand.
Effective Date of Appraisal	April 30, 2002
Interest Appraised	Fee simple interest of the Real Property, the sand is personal property.
Zoning	Antique Uses Rights Doctrine Turistico – Commercial, Recreation, Energy, Mining, etc.
Market Value Conclusions	**Real Property** **$340,000,000** **Personal Property** **$110,000,000** **Total Property** **$450,000,000**

Four Hundred Fifty Million Dollars
($450,000,000)



Waterfront Caribbean Paradise

Farm JOHN PEREZ

826 acres of raw land (3,340,836.26 sq. mt.)

Road 187 Km. 10.3 to 12.3 Loiza Puerto Rico USA

CERTIFICATE OF VALUE

This Appraisal is completed in accordance with the Uniform Standards of Professional Appraisal Practice (USPAP) as promulgated by the appraisal Standards Board of the Appraisal Foundation, which is authorized by the United States Congress as the source of appraisal standards and appraiser qualifications. The Appraisal Report is prepared under the "Summary Appraisal Report" option.

We certify that, to the best of our knowledge and belief:

- The statements of fact contained in this report are true and correct.
- The reported analysis, opinions, and conclusions are limited only by the reported assumptions and limiting conditions, and is our personal, impartial, and unbiased professional analyses, opinions and conclusions.
- We have no present or prospective interest in the property that is the subject of this report, and no personal interest with respect to the parties involved.
- We have no bias with respect to the property that is the subject of this report or to the parties involved with this assignment.
- Our engagement in this assignment was not contingent upon developing or reporting predetermined results.
- Our compensation, or future employment for completing this assignment is not contingent upon the development or reporting of a predetermined value or direction in value that favors the causes of the client, the amount of the value opinion, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of this appraisal.
- Thomas G. Spears, ASA, has made a personal inspection of the property that is the subject of this report. Michael G. Horton, MAI has not personally inspected the property.
- Thomas G. Spears has applied for a Temporary Practice permit, which will be issued by the Puerto Rico Board of Examiners of Real Estate Appraisers.
- No one provided significant professional assistance to the person signing this report.
- The scope of the Personal Property Appraisal (Sand) is to estimate the prospective market value assuming an annual sales volume of one million cubic meters is sold on a wholesale basis, on site. The scope of the Real Property Appraisal (Land) is to estimate the current market value "As Is."
- The subject property is briefly described as the "Juan Perez" Parcel and consists of 850 cuerdos (or approximately 825 acres) of vacant land located at State Road 187, between kilometer marker 10.3 and 12.3 in the municipality of Loiza, Puerto Rico USA. The property features two kilometers of wide, white sandy beaches along the Atlantic Ocean and antique use rights which allow a wide variety of uses on the land including tourism, recreational, mining and energy uses. Another feature is the large sand deposits on the parcel. "Islote de Juan Perez" contains over 30 million cubic meters of useable sand, which can be abstracted and sold on site. The sand is of good quality and has many uses, including construction materials and industrial uses. The sand is briefly described as: (Holecene and Pleistocene) sand, predominately composed of shell fragments cemented by calcium carbonate, generally 1 meter of less thick.

We have completed an investigation of the national, regional and local mineral market and real estate market. Based upon all of the market data, consultation research investigations and analysis, it is our opinion that the subject property has a market value, as of April 30, 2003 of:

Real Property	**$340,000,000**
Personal Property	**$110,000,000**
Total Property	**$450,000,000**

FOUR HUNDRED FIFTY MILLION DOLLARS
$450,000,000

Thomas G. Spears, ASA President & CEO
State Certified General Appraiser # RZ 0001243

Michael G. Horton, MAI
State Certified General Appraiser # RZ 0001755

GLOBAL VALUATION INTRODUCTION

Excellence in Appraisal Services is the Hallmark of Global Valuation and that's why our clients keep counting on us for all their Appraisal needs. Our commitment to our clients has propelled us to a global leadership position in the Appraisal Industry.

Global Valuation provides all types of Appraisals Including Real Property (Real Estate) Personal Property (FF&E) and Intangible Property (Business Valuations). We have the capabilities to deliver "Western Style" state of the art narrative appraisal reports. Global Valuation draws on the talents of the company's professionals and their extensive knowledge of global markets. With to-days global technologies, Global Valuation can accurately analyze any market, anywhere in the world.

Our reports always meet or exceed the requirements of the Uniform Standard of Professional Appraisal Practice (USPAP), as established by the Appraisal Standards Board of The Appraisal Foundation in America. The Appraisal Foundation is authorized by the United States Congress as the source of appraisal standards and appraiser qualifications.

Global Valuation appraisers always provide qualified, accurate and timely appraisal reports, our appraisers are State Certified and members of The American Society of Appraisers (ASA) or The Appraisal Institute (MAI). These International organizations are members of the Appraisal Standards Board and represent two of the eight sponsoring groups of The Appraisal Foundation.

Complex "Special Purpose" properties are our specialty including but not limited to Theme Parks, Amusement Parks, Water Parks, Family Entertainment Centers, Golf Courses and Country Clubs, Resorts Hotels etc. Global Valuation also specializes in Going-Concern valuations, which refer to the total property value including Real Property, Personal Property and Intangible Property.

Customer needs always come first; they will always be met and will usually exceed expectations. We have the team, talent and resources to deliver your appraisal on time and within budget.

Let Global Valuation analyze the market for your next project. We deliver.

Sincerely,

Thomas G. Spears, ASA
President & CEO

Excellence

in appraisal services

is the hallmark of

Global VALUATION

That is why our clients keep counting on us for all their appraisal needs. Our commitment to our clients has propelled us to a global leadership position in the appraisal industry.

Our appraisal reports always meet or exceed the requirements of the Uniform Standards of Professional Appraisal Practice as established by the Appraisal Standards Board of the Appraisal Foundation. The Appraisal Foundation is authorized by the United States Congress as the source of appraisal standards and appraiser qualifications.

Global Valuation appraisers always provide credible, accurate and timely appraisal reports and they are State Certified members of either the American Society of Appraisers (ASA) or The Appraisal Institute (MAI). These international organizations are members of the Appraisal Standards Board and represent two of the eight sponsors of The Appraisal Foundation.

Global Valuation provides all types of appraisals including real property (real estate), personal property (FF&E) and intangible property (business valuations). We have the capabilities to deliver a "Western Style" state of the art narrative appraisal report anywhere in the world.

Worldwide Appraisal

Real Property (Real Estate) Appraisal Reports

* Special purpose properties
* Commercial properties
* Industrial properties
* Residential properties
* Agricultural Properties

Appraisal review reports

* Technical review reports
* Administrative review reports

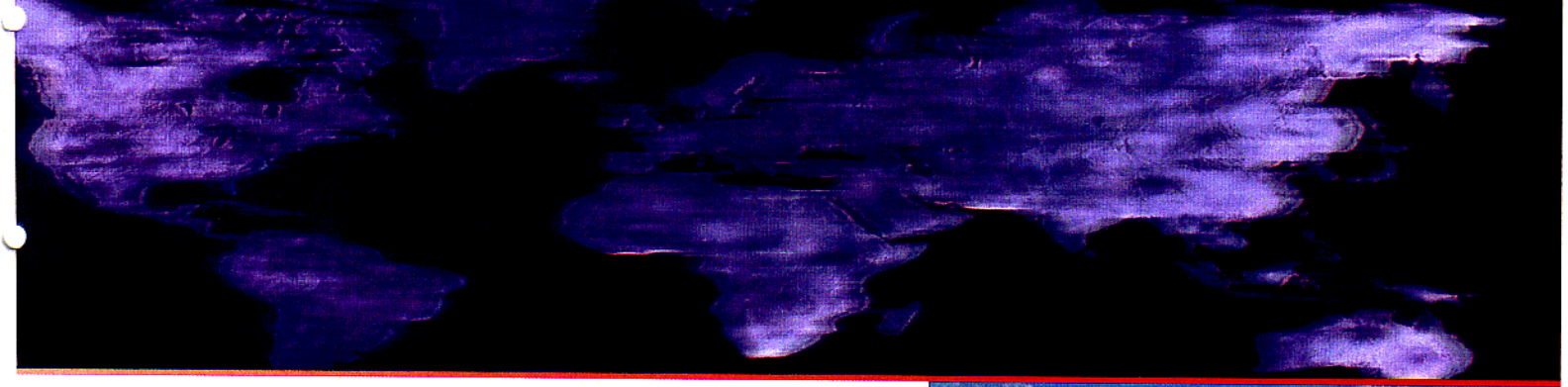
Mass Appraisal Reports

* Portfolio appraisals

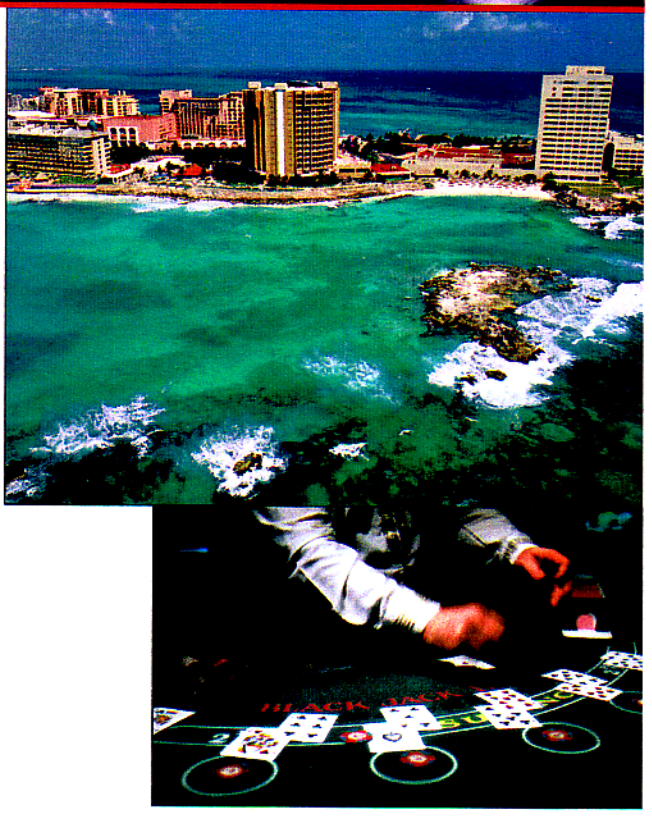
Personal Property (FF&E)

Furniture, fixtures and equipment appraisal reports are available for all types of property including, but not limted to:

* Alpine ski resorts
* Hospitals
* Theme parks
* Amusement parks
* Water parks
* Family entertainment centers
* Hotels
* Manufacturing plants
* Casinos and gambling centers



Services



Consulting reports

* Feasibility studies
* Market studies
* Marketability studies
* Cost-benefit studies
* Pricing and rent projection studies
* Counseling
* Expert witness testimony
* Due diligence

Intangible Property (Business Valuations)

Business valuation depicts the rights and activity inherent in the ownership of an operating entity (individual, public or private) pursuing an economic activity.

* Business valuations
* Fairness / Solvency opinions

Complex special purpose properties are our specialty, including but not limited to theme parks, amusement parks, water parks, family entertainment centers, golf courses, resorts, etc.

Global Valuation also specializes in Going-Concern Valuations, which refer to the total property value including real property, personal property and intangible property.

In order to provide state-of-the-art appraisal reports, Global Valuation draws on the talents of the companies, professionals and their extensive knowledge of global markets. With today's global technologies, Global Valuation can accurately analyze any market, anywhere in the world.

Customer needs always come first. They will always be met and will usually exceed expectations.

We have the team, talent and resources to deliver your appraisal on time, and within budget.

Let Global Valuation analyze the market for your next project.

We deliver.

Qualifications of

THOMAS G. SPEARS, ASA

Global Valuation
3727 SE Ocean Boulevard Suite 200 – Sewall's Point, Florida – 34996
Phone: (772) 463-9212 Fax: (772) 463-0493
E-mail: tgs@globalvaluation.com

AMERICAN SOCIETY OF APPRAISERS

Florida State-Certified General Appraiser **# RZ0001243 ****
Member, American Society of Appraisers **ASA # 007583 ***
Florida Licensed Real Estate Broker **# BKO143326**
Member, National Association of Realtors
Member, Florida Association of Realtors
Member, Martin County Association of Realtors

THE APPRAISAL FOUNDATION
Authorized by Congress as the Source of Appraisal Standards and Appraiser Qualifications

The Federal Government has established a certification requirement of appraisers under FIRREA, Tile XI. Thomas G. Spears is certified under this program through November 30, 2004.

The American Society of Appraisers conducts a mandatory program of continuing education for its designated members. ASA's who meet the minimum standards of this program are awarded periodic educational certification. Thomas G. Spears, ASA, Senior Member, is certified under this program through August 2, 2003.

Mr. Spears is a professional Real Estate Appraiser with over 30 years experience in the industry. He has traveled extensively throughout North, South, and Central America, the Caribbean Basin, Western and Eastern Europe, Africa and Asia, performing and supervising large-scale appraisal consulting and review assignments. He specializes in Special Purpose Properties including Amusement Parks, Theme Parks, Water Parks, Family Entertainment Centers, Golf Courses, Resorts and U.S. Embassy Posts. Mr. Spears has completed valuations and consulting assignments in the new emerging Eurasian markets including Uzbekistan, Ukraine, Estonia, Lithuania and Russia. He has recently completed major valuation and consulting assignments in Hungary, China, Mexico, Panama, Belize, Turkey, Africa, Jamaica, The U.S. Virgin Islands, The Bahamas and the United States of America. Mr. Spears has extensive residential experience including over 5,000 single-family residential appraisals in Florida for local and national clients. He has appraised numerous homes, townhouses, villas and U.S. Ambassador Estates in U.S. Embassy posts for the U.S. Department of State.

Global VALUATION

Professional Experience

1993-Present	**Global Valuation** **President & CEO** Overseeing operations, supervising, and performing large- scale appraisal, consulting and review projects on a Worldwide basis.
1989-1992	**Appraisal Group, Inc.** **President** Overseeing operations in Europe and America managing and performing large-scale appraisal consulting and review assignments on a Worldwide basis.
1985-1988	**Thomas G. Spears, P.A.** **President** Overseeing operations in America managing and performing large- scale appraisal assignments on a national basis.
1981-1984	**Joseph J. Blake and Associates, Inc.** **Southeast Regional Manager** Managed appraisal operations for Florida, Georgia, North Carolina, South Carolina, Mississippi, Alabama and Tennessee.
1971-1980	**Southeast Mortgage Company** **Appraisal Specialist** Completed high volume of commercial, Industrial and residential appraisals, throughout Florida.

Mr. Spears has extensive experience performing large-scale appraisal assignments in North America, South America, Europe, Africa and Asia. Assignments have recently been completed in the following Continents, Countries, States and Territories.

North America

United States of America

Alabama
Alaska
Arizona
California
Colorado
Connecticut
Delaware
Florida
Georgia
Hawaii
Illinois
Indiana
Kentucky
Louisiana
Massachusetts
Michigan
Minnesota
Mississippi
Missouri
Nevada
New York
New Hampshire
North Carolina
Oklahoma
Oregon
Pennsylvania
South Carolina
Tennessee
Utah
Virginia
Vermont
Washington D.C.

Caribbean Region

Nassau Island, Bahamas
Grand Bahama Island, Bahamas
Andross Island, Bahamas
Great Inagua Island, Bahamas
Great Exuma Island, Bahamas
Cat Island, Bahamas
Antigua Island
Barbuda Island
Jamaica Island
St. Thomas Island, U.S. Virgin Islands.
St. Croix Island, U.S. Virgin Islands.

Mexico

Los Cabos, Baja California Sur.
Ensenada, Baja California
Tecate, Baja California
San Felipe, Baja California
Puertecitos, Baja California
Champoton, Campeche, Yucatan Peninsula
Ciudad del Carmen, Campeche, Yucatan Peninsula
Sabancuy, Campeche, Yucatan Peninsula
Isla Mujeres, Quintana Roo, Yucatan Peninsula
Cancun Quintana Roo, Yucatan Peninsula
Mexico City, District Federal
Ciudad Juarez, Chihuahua

Central America

Turneff Islands, Belize
Bayoneta Island, Balboa, Panama
Cañas & Resbalon Islands, Balboa, Panama
Panama City, Panama

South America

Venezuela

Margarita Island
Caracas

Europe

Budapest, Hungary
ST. Petersburg, Russia
Kiev, Ukraine
Tashkent, Uzbekistan
Talin, Estonia

Mugla – Milas, Turkey
Istanbul, Turkey
Kusadasi, Turkey
Manavgot, Turkey

Africa

Republic of Seychelles

Mahe Island, Seychelles
La Digue Island Seychelles

Asia

Republic of China

Ximen, China

Global

Affiliations Past & Present

Florida State-Certified General Appraiser – (#RZ0001243)

Florida Licensed Real Estate Broker – (#BK0143326)

American Society of Appraisers - (A.S.A.)

National Association of Realtors - (N.A.R)

Florida Association of Realtors - (F.A.R)

National Association of Realtors, Appraisal Section Member

National Association of Real Estate Appraisers, Member CREA

American Society of Appraisers, Affiliate Firms Committee

American Institute of Real Estate Appraisers, Candidate

Society of Real Estate Appraisers, Associate Member

Appraisal Foundation, Affiliate Member

Associate Member, Appraisal Institute

Martin County Board of Realtors, Realtor - Member

Appraisal Education

APPRAISAL INSTITUTE®

Course 1-A	Principles, Methods & Techniques of Appraisal
Course 1-B	Capitalization Theory and Techniques
Course 2-1	Case Studies in Real Estate Valuation
Course 2-2	Valuation Analysis and Report Writing
Course 2-3	Standards of Professional Practice
Course R-2	Residential Case Study
Course 08	Single Family Residential Appraisal
Course 101	Introduction to Appraising Real Property
Course 201	Principles of Income Property Appraising

College Equivalency Award

Experience Credit Award. 5,250 hours Specialized Experience

Residential Appraisal Seminar

Narrative Report Seminar

Feasibility Analysis Seminar

Appraising Apartment Seminar

AMERICAN SOCIETY OF APPRAISERS

ASA

American Society of Appraisers USPAP/15 hours 12/99

Global

"THE PROOF IS IN THE PASSING"

GOLD COAST SCHOOL of REAL ESTATE

Florida Real Estate Commission Course I

Florida Real Estate Commission Course II

Florida Real Estate License Law Course I
Florida Real Estate License Law Course II

Plan Reading for Appraisers	23 Hours 7/94
USPAP/Florida Law Update	7 Hours 7/94
Real Estate Finance	23 Hours 10/96
USPAP/Florida Law Update	7 Hours 10/96
USPAP/Florida Law Update	7 Hours 8/98
Standard Three Review	8 Hours 8/98
Environmental Considerations	8 Hours 8/98
Red Flags Property inspection	7 Hours 8/98
FHA 4150.2 Course Seminar	8 Hours 11/00
Blueprint Reading	7 Hours 11/00
USPAP Standard 3 Review	8 Hours 11/00
USPAP/Florida Law Update	7 Hours 11/00
USPAP/Florida Law Update	7 Hours 04/02
Comprehensive Continuing Education	23 Hours 04/02

Global VALUATION

Qualifications of

MICHAEL G. HORTON, MIA

Global Valuation
3727 SE Ocean Boulevard Suite 200 – Sewall's Point, Florida – 34996
Phone: (772) 463-9212 Fax: (772) 463-0493

FLORIDA STATE CERTIFIED GENERAL APPRAISER ***#RZ 0001755***
APPAISAL INSTITUTE MEMBER ***MAI #10750***
FLORIDA LICENSED REAL ESTATE BROKER
SPECIAL MASTER TO PALM BEACH COUNTY VALUE ADUSTMENT BOARD
FHA APPROVED

THE APPRAISAL FOUNDATION
Authorized by Congress as the Source of Appraisal Standards and Appraiser Qualifications

The Federal Government has established a certification requirement of appraisers under FIRREA, Tile XI. Michael G. Horton is certified under this program through November 30, 2004.

State Certified General Appraiser RZ 0001755 – Expiration Date: Nov. 30, 2004

Mr. Horton is a professional Real Estate Appraiser with over 15 years experience in the industry. Residential properties: appraised single family, waterfront estate homes, condominiums, and small income properties. Commercial properties: include office buildings, churches, hotels, retail stores, shopping centers, marinas, golf courses, theme parks, agricultural, vacant land, subdivisions and apartment complexes. He's has appraised properties in Florida, Bahamas and in the Virgin Islands. As a commercial broker, he has been involved in several high-end multi-million dollar commercial properties. He was President of Commercial Investment Members (CIM) of the Palm Beach Chapter for four years. CIM is an organization to promote networking in the real estate commercial profession. Michael is a graduate of Dale Carnegie Sales Course and a weekly Host of Radio Station WPBR 1340AM.

Global VALUATION

Professional Experience

1995 – PRESENT	HORTON GROUP, INC., Owner Independent contractor completed high volume of Commercial, Industrial and Residential appraisals throughout south Florida.
1997	Mortgage Information Services, Inc.
1993-1994	RGF Appraisers & Consultants
1987-1992	Pardue, Heid, Church, Smith & Waller

Formal Education

Gordon Military College – Associate of Arts Degree
University of Nebraska at Omaha – Bachelor of General Studies Business & Computer Science

Appraisal Education

APPRAISAL INSTITUTE

Standards of Professional Practice, Part C	2002
Real Estate Fraud	2001
Uniform Standards of Professional Appraisal Practice	2000
Appraisal Principles	2000
FHA	2000
Residential Sales Comparison	1998
Small Hotel Evaluation	1998
Advanced Income Capitalization	1996
Appraisal of Nursing Facilities	1996
Appraisal Review / Residential Properties	1995
Advanced Cost & Sales Comparison Approaches	1994
Basic Valuation Procedures	1988
Litigation Valuation	1988
Real Estate Appraisal Principles	1987
Capitalization Theory and Technique, Part "A"	1987
Capitalization Theory and Technique, Part "B"	1987
Standards of Professional Appraisal Practice (USPAP)	1987
Attended numerous seminars sponsored by the Appraisal Institute	

SOCIETY OF REAL ESTATE APPRAISERS

Principles of Income Property Appraising	1988

FT. LAUDERDALE BOARD OF REALTORS

Commercial Investment I	1985

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Part Two
Premises of the Appraisal

Type of Appraisal and Report Format
Assumptions and Limiting Conditions
Purpose, Use and Intended Users of the Appraisal
Definitions of Market Value and Terms
Date of Appraisal and Date of Report
Property Rights Appraised
Scope of the Appraisal
Sales History of the Subject Property

TYPE OF APPRAISAL AND REPORT FORMAT

This is a Personal Property Appraisal completed in accordance with Standard 7 Personal Property Appraisal, Development and Standard 8 Personal Property Appraisal, Reporting and a Real Property Appraisal completed in accordance with Standard 1 Real Property Appraisal, Development and Standard 2 Real Property Appraisal, Reporting, Uniform Standards of Professional Appraisal Practice (USPAP) as promulgated by the Appraisal Standards Board of the Appraisal Foundation which is authorized by the United States Congress as the source of appraisal standards and appraiser qualifications. The Appraisal Report is prepared under the "Summary Appraisal Report" option.

ASSUMPTIONS AND LIMITING CONDITIONS

The value conclusions and the certification within this report are made expressly subject to the following assumptions and limiting conditions as well as any special limiting conditions in this report, which are incorporated herein by reference.

THIS APPRAISAL REPORT HAS BEEN MADE WITH THE FOLLOWING GENERAL ASSUMPTIONS:

This valuation is predicated upon selling one million cubic meters of sand per year on a wholesale basis, on site. The appraisers have relied upon furnished documents, which estimate that there are approximately thirty million usable cubic meters of usable sand deposits identified as "Islote de Juan Perez" in the subject parcel.

No responsibility is assumed for the legal description provided or for matters pertaining to legal or title considerations. Title to the property is assumed to be good and marketable unless otherwise stated.

The property is appraised free and clear of any and all liens or encumbrances unless otherwise stated.

Responsible ownership and competent property management are assumed.

All engineering studies are assumed to be correct. The illustrative material in this report is included only to help the reader visualize the property.

It is assumed that there are no hidden or unapparent conditions of the property, subsoil, or structures that render it more or less valuable. No responsibility is assumed for such conditions or for obtaining the engineering studies that may be required to discover them.

It is assumed that the property is in full compliance with all applicable environmental regulations and laws unless the lack of compliance is stated, described, and considered in the appraisal report.

It is assumed that the property conforms to all applicable zoning and use regulations and restrictions unless nonconformity has been identified, described and considered in the appraisal report.

It is assumed that all required licenses, certificates of occupancy, consents, and other legislative or administrative authority from any government or private entity or organization have been or can be obtained or renewed for any use on which the value estimate contained in this report is based.

Unless otherwise stated in this report the existence of hazardous materials, which may or may not be present on the property, was not observed by Global Valuation. The appraiser has no knowledge of the existence of such materials on or in the property. The appraiser, however, is not qualified to detect such substances. The presence of substances such as asbestos, urea-formaldehyde foam insulation, and other potentially hazardous materials may affect the value of the property. The value estimated is predicated on the assumption that there is no such material on or in the property that would cause a loss in value. No responsibility is assumed for such conditions or for any expertise or engineering knowledge required to discover them. The client is urged to retain an expert in this field, if desired.

THIS APPRAISAL REPORT HAS BEEN MADE WITH THE FOLLOWING LIMITING CONDITIONS:

Possession of this report, or a copy thereof, does not carry with it the right of publication.

The appraiser, by reason of this appraisal, is not required to give further consultation or testimony or to be in attendance in court with reference to the property in question unless financial arrangements have been previously made. **Litigation fees are $2,000 per day plus expenses.**

Neither all nor any part of the contents of this report (especially any conclusions as to value, the identity of the appraiser, or the firm which the appraiser is connected) shall be disseminated to the public through advertising, public relations, news, sales, or other media without the prior written consent and approval of the appraiser.

This appraisal was prepared by Global Valuation, It consists of trade secrets and commercial and financial information, which are privileged and confidential and exempted from disclosure under 5 U.S.C. 552 (b) (4). Please notify Thomas G. Spears, President and CEO of any request of reproduction of this appraisal.

This report remains the property of Global Valuation, and contains proprietary information; the use of this report is expressly prohibited unless all contractual obligations for payment thereof have been completed.

The reader of this report is encouraged to verify the contents and status by direct contact with Thomas G. Spears, President and CEO at:

Worldwide Appraisal Services
3727 SE Ocean Boulevard, Suite 200
Sewall's Point, FL 34996
(772) 215-5738, Fax (772) 463-0493
www.globalvaluation.com

PURPOSE, USE AND INTENDED USERS OF THE APPRAISAL

The purpose of an appraisal is the stated reason and scope of an appraisal assignment, which, is established by the client. The purpose of this appraisal is to estimate the market value "As Is" of the subject Real Property (Land) and the prospective market value "As Abstracted" of the subject Personal Property (Sand). The use or function of an appraisal is the manner in which a client employs the information contained in the appraisal report. The function of this appraisal is to assist our client in obtaining financing. The intended users of this report are those who will be relying on this appraisal. Intended users other than our client are investors and lenders of Personal and Real Property.

DEFINITIONS OF MARKET VALUE AND TERMS

MARKET VALUE as defined by the Appraisal Standards Board of the Appraisal Foundation / Uniform Standards of Professional Appraisal Practice (USPAP), is the most probable price which a property should bring in a competitive and open market under all conditions requisite to a fair sale, the buyer and seller, each acting prudently and knowledgeably and assuming the price is not affected by undue stimulus. Implicit in this definition is the consummation of a sale as of a specified date and the passing of title from seller to buyer under conditions whereby:

1. buyer and seller are typically motivated;
2. both parties are well informed or well advised, and each acting in what they consider their own best interest;
3. a reasonable time is allowed for exposure in the open market;
4. payment is made in terms of cash in U.S. dollars or in terms of financial arrangements comparable thereto; and
5. the price represents the normal consideration for the property sold unaffected by special or creative financing or sales concessions granted by anyone associated with the sale.

PROSPECTIVE MARKET VALUE a forecast of the value expected at a specific future date. In this case, the crushed stone is sold out over a seventeen-year holding period.

MARKET VALUE TERMS are the values expressed in this report are the current purchasing power of the United States Dollar.

DATE OF THE APPRAISAL AND DATE OF REPORT

April 30, 2003

PROPERTY RIGHTS APPRAISED

The valuation of real property includes both the physical real estate and the rights that one or more individuals or legal entities may hold or contemplate holding in the ownership or use of the land and improvements, special attention must be given to limitations or ownership rights, which include easements, encroachments liens, leases, and the disposition of air or subsurface rights. In this case, the property rights appraised are the Fee Simple Estate. The Personal Property is thirty- million cubic meters of sand (minerals).

Definition of Fee Simple Estate - Absolute ownership of real estate that is unencumbered by any other interest or estate and is subject only to the limitations imposed by government agencies.

Definition of Real Property - All interests, benefits, and rights inherent in the ownership of physical

real estate; the bundle of rights with which the ownership of the real estate is endowed. In some states, real property is defined by statute and is synonymous with real estate.

Definition of Real Estate - Physical land and appurtenances attached to the land, e.g., structures. An identified parcel or tract of land, including improvements, if any.

Definition of Personal Property – Identifiable portable and tangible objects that are considered by the general public to be "personal," e.g., furnishings, artwork, antiques, gems and jewelry, collectibles, machinery and equipment; all property that is not classified as real estate. (USPAP , 1992 edition) Personal property includes movable items that are not permanently affixed to, and part of, the real estate.

SCOPE OF THE APPRAISAL

The scope of this assignment is to estimate the prospective market value of the Personal Property and the current market value "As Is" of the Real Property.

General Data consists of information about trends in the social, economic, governmental, and environmental forces that affect property value. Global Valuation has gathered all the required general data necessary to estimate the value of the subject property.

Specific Data relate to the property being appraised and to the comparable properties. These data include quality, location and accessibility of the properties. We have collected verified and analyzed all the required specific data necessary to estimate the value of the subject property including specific data for the subject property and all comparable properties utilized in this analysis.

Competitive Supply and Demand Data relate to the competitive position of the property in its future market. Supply data include inventories of existing competitive properties and absorption rates. Demand data may consist of population, income employment, and survey data pertaining to potential property buyers. Global Valuation has gathered and verified all the required competitive supply and demand data necessary to estimate the value of the subject property. Internationally accepted methods of data analysis have been developed for this valuation. The most appropriate methods in this case are The Sales Comparison Approach and the Income Capitalization Approach.

The Sales Comparison Approach is most useful when a number of similar properties have recently been sold in the subject's marketplace. The subject property has been compared to several similar properties and a range in which the value indication for the subject property will fall has been developed.

The Income Capitalization Approach has been employed using a Discounted Cash Flow Analysis or Yield Capitalization. Certain assumptions are made based upon market support including a discount rate range from 11.0% to 12.0%, selling one million cubic meters of sand per year and expenses associated with abstracting the sand.

SALES HISTORY OF THE SUBJECT PROPERTY

Title to this land has been in the Alberto Medina Lopez family prior to the U. S. and Spain treaty.

Global VALUATION

Part Three
Presentation of Data

Identification of the Subject Property
Area Profile

IDENTIFICATION OF THE SUBJECT PROPERTY
REAL PROPERTY

Description

The subject property consists of 850.00 cuerdas (825.521) acres) of vacant, land featuring two kilometers of wide white sandy beach along the Atlantic Ocean, all public services and communications at the site, and a large sand deposit identified as Islote de Juan Perez containing approximately 30 million cubic meters of useable sand.

Legal Description

Property: No. 57 recorded at page 62 Volume 2 of Loiza Registry of the Property of Carolina, Third Section Vacant land denominated "Juan Perez" located in Montenegro Ward of the Municipality of Loiza, with an area of 850.00 cuerdos of land bounded by the north with the sea; by the south, with property "Hacienda" Teodoro Chevremont; at the east, with lands of Public Property (Hacienda) and by the West Property "Hacienda" names Piñones. All located in the Commonwealth of Puerto Rico, USA.

Assessments and Taxes

According to the Carolina tax assessors department, the subject property has not been assessed for several years and is in the process of being assessed. The subject property is identified as PIN# 065-000-001-04-000.

Easements

State Road No. 187 runs through the property in an east –west direction, no other easements are indicated on the survey. Utility easements along state road 187 appear to be a safe assumption.

Soil Analysis

According to the Geologic Map of the Carolina Quadrangle, Puerto Rico prepared by Watson H. Monroe in 1977, the subject property soil consists of

Qbs	Beach Deposits (Holocene and Pleistocene)-Fine to medium sand on beach and coastal dunes; composed largely or rounded shell fragments mixed with minor quantities of fine quartz grains and fine grains of volcanic rock fragments.
Qbq	Beach Deposits (Holocene and Pleistocene)-Sand on beaches and abandoned beach ridges composed largely of fine quarts grains mixed with minor quantities of shell fragments and volcanic rock fragments.
QBR	Beach Rock (Holocene and Pleistocene)-Beach sand predominantly composed of shell fragments cemented by calcium carbonate.
Qs	Swamp deposits (Holocene and Pleistocene)-Sandy muck and clayey sand: some areas underlain by peat (Roberts and others, 1942). Much of the area now covered by artificial fill (af) was originally swamp deposit.

Site Improvements

All public services and communications are at this site along State Road 187, which runs through the property in an east-west direction. It is important to note that there are several squatters on the property who have developed small residences; this valuation does not take into consideration any dwellings on the land.

Ownership

The property is owned by Alberto Mendina Lopez.

Zoning

According to the zoning maps, the subject property is zoned Touristico –Commercial and Recreational Contemplative. A wide variety of commercial uses are allowed including resort hotels, golf courses, and recreational developments. The Juan Perez parcel is subject to an antique uses rights doctrine. The doctrine was established prior to the USA/Spain treaty and allows a wide variety of uses including tourism, recreation, mining, and energy uses. Another important right according to the doctrine is that the beachfront areas of the subject property are PRIVATE.

Size and Shape

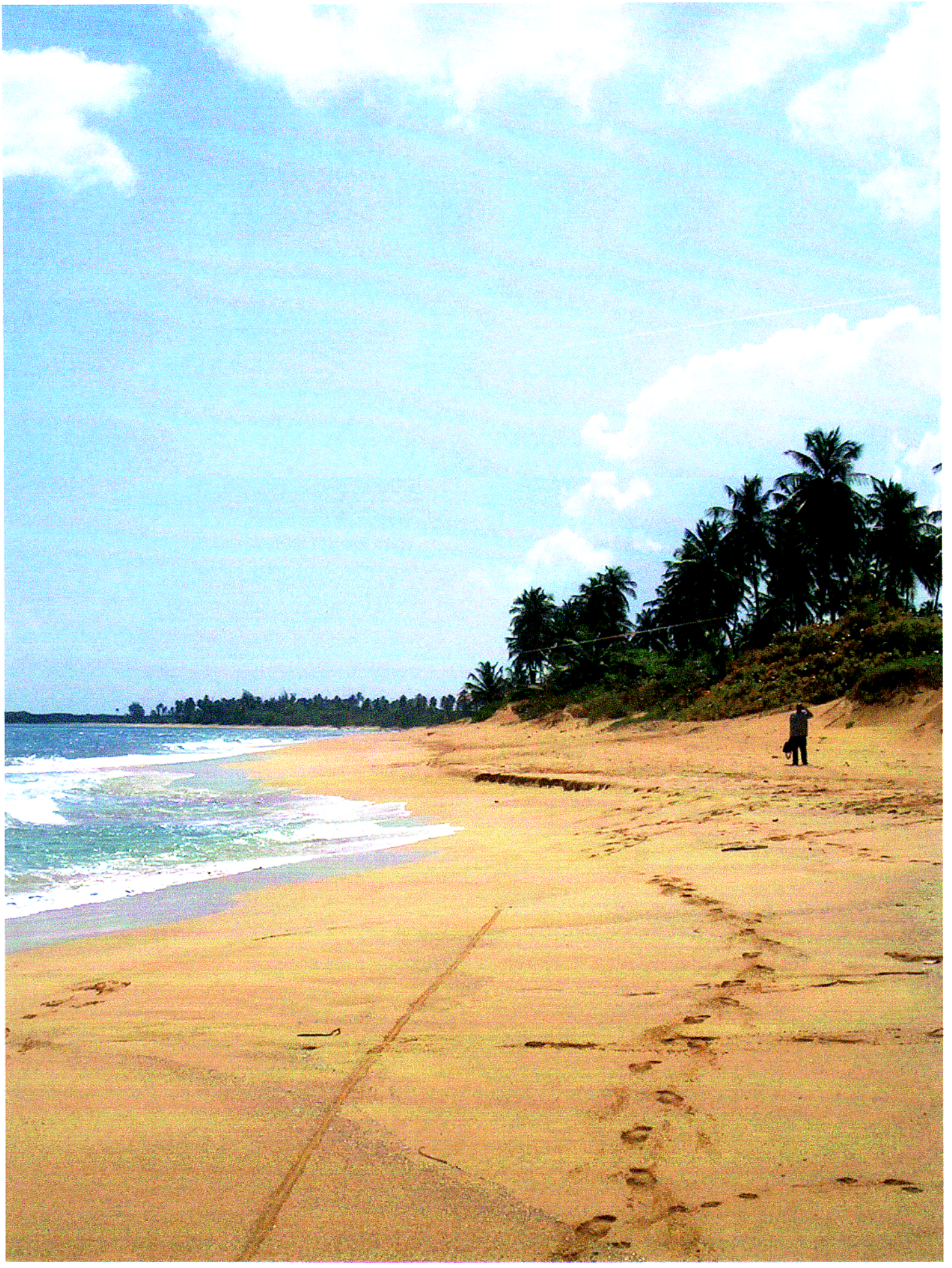
The subject property is irregular in shape and contains a total area of 850.00 cuerdos or 825.521 acres.

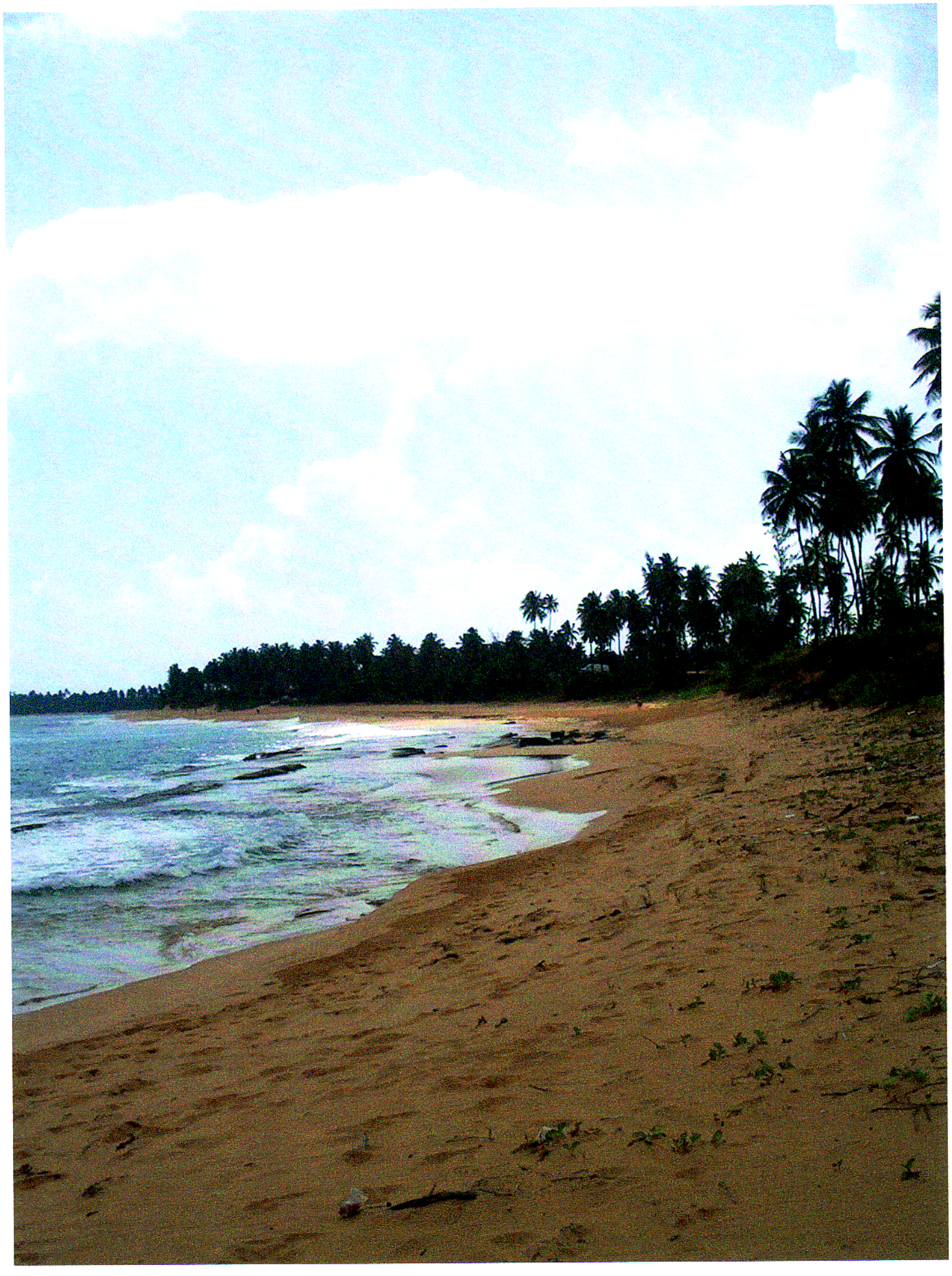
Topography

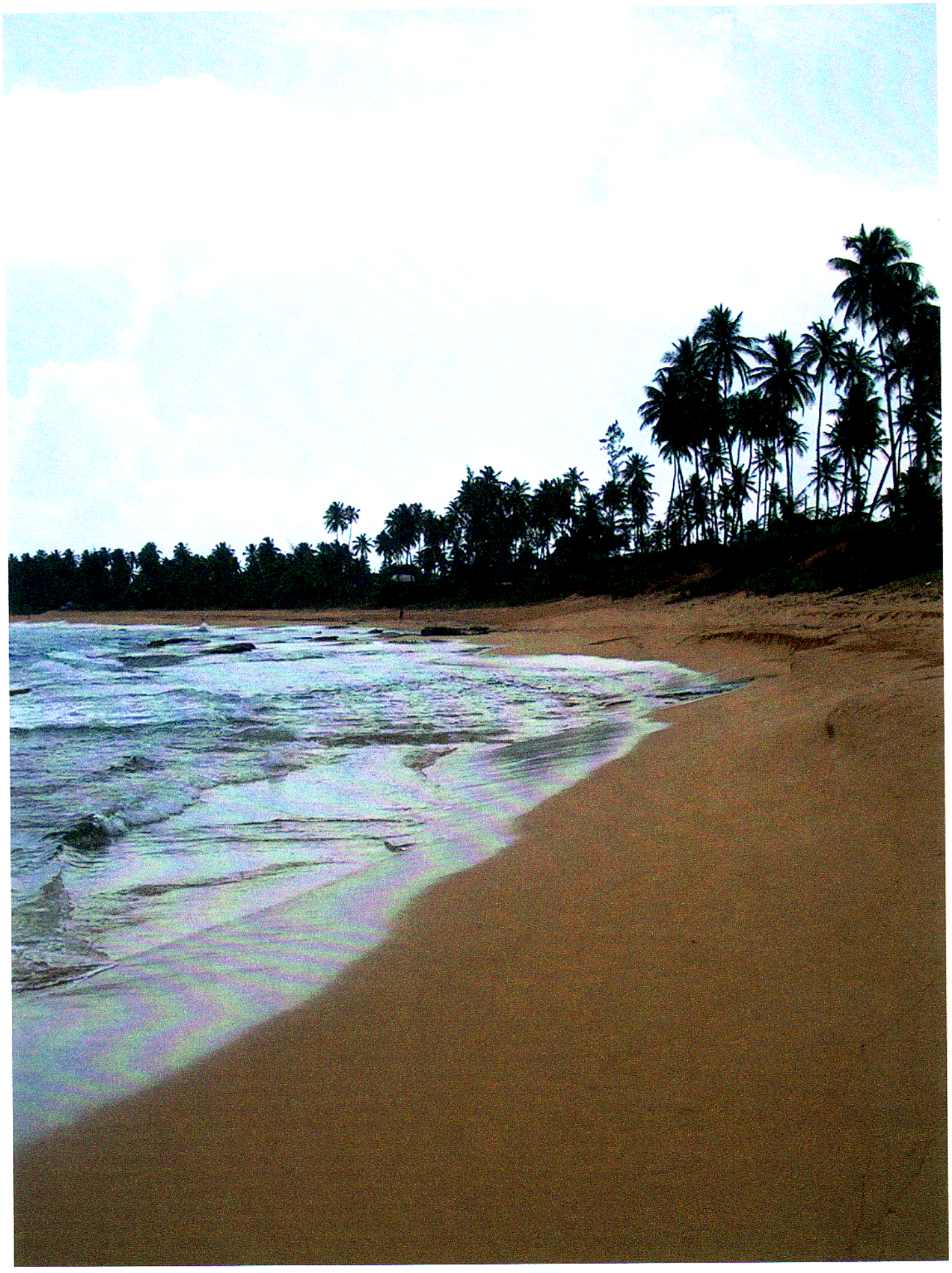
The property features two kilometers of wide white sandy beaches along the Atlantic Ocean, sand dunes appear to range from 5-10 meters. The property also features a 60.5 cuerda or 58.78 acre sand deposit, marshland and mangrove swamp area. According to the geological map of the Carolina Quadrangle 1977, most of the swamp deposits are now covered by artificial fill. Global Valuation is not qualified to estimate the amount of fill required or in fact if any fill is required. The subject property will be developed with a large complex mixed use project with resort hotels, a golf course, etc. Based on a land development of this magnitude, lakes, canals and waterways will be dredged and this material may be used as fill, etc.

Access

The subject property is easily accessible via State Road 187.







IDENTIFICATION OF THE SUBJECT PROPERTY
PERSONAL PROPERTY

The subject property features a sand deposit identified as Islote de Juan Perez containing a total land area of 60.47957 cuerdos or 58.738 acres. The previously described geological map indicates that there is a large quantity of sand and it is briefly described as: (Holocene and Pleistocene) – Sand composed largely of fine quality grains mixed with minor quantities of shell fragments and volcanic rock fragments.

According to the Geological maps, there is over 60 million cubic meters of sand at Islote de Juan Perez and engineering companies have estimated that approximately 30 million cubic meters of sand are useable after existing bog is washed away. Geomorphologic notes of the Carolina Quadrangle taken from the survey follow:

GEOMORPHOLOGIC NOTES

The boundary between the interior highlands of Puerto Rico and the northern coastal plain is just north of the southern border of the Carolina quadrangle. The rocks in the interior highlands consist largely of volcanic and intrusive rocks and associated sedimentary rocks (Pease, 1968 and Seiders, 1971); these are of Early Cretaceous to Eocene age. North of the boundary the coastal plain consists largely of alluvial deposits and limestone.

The Río Grande de Loiza, which has the largest drainage basin in Puerto Rico, flows from the hilly interior into the northern coastal plain at the southern edge of the quadrangle. The headwaters of the river are in intrusive rocks, largely quartz diorite of the San Lorenzo batholith, which have weathered to clayey quartz sand. Hence the flood plain of the river is underlain by alluvium composed largely of quartz sand, but containing cobbles of rock derived from the formations through which the river flows on its way north from the batholith.

The river has had a complex Quaternary history in the coastal plain. Apparently it first flowed northward from Carolina between the alluvial fan and terrace deposits of barrio Sabana Abajo and the limestone hills of barrio Hoyo Mulas. The river entered the sea near Boca de Cangrejos, as is shown by the deposits of fine quartz sand that form the beach toward the southwest. Eventually, deposition of the abundant sediment filled this channel, and the river was diverted to the east and flowed in a complicated series of meanders, partly through the limestone hills northwest of Santa Barbara. The old courses of the river are now marked by abandoned meanders and ox-bow lakes.

Eventually all distributaries flowing toward Boca de Cangrejos were blocked by silting and the river was again diverted eastward to the vicinity of Canóvanas and Santa Barbara, where it now flows in a remarkably straight course north to the coast at Loíza Aldea. As in the area west of Boca de Cangrejos the beach deposits near Loíza Aldea are composed of quartz sand brought in by the river. Quartz is very rare in the deposits along the Playa de las Tres Palmitas, the beach between Punta Vacia Talega and Boca de Cangrejos, which is composed largely of finely ground shell fragments.

The straight course of the river from Santa Barbara to the coast has never been satisfactorily explained. The earliest maps of Puerto Rico, made in the seventeenth century, show the river with its present course; and there is no record of straightening the channel of the river, so apparently the straight course is a natural one. Natural levees on both sides of the river rise about 3 m. Swamp deposits on both sides of the river are lagoons that have been gradually silted as the river overflowed its natural levees during floods, leaving only Laguna la Torrecilla and Laguna de Piñones as remnants.

In contrast to the Río Grande de Loíza, Quebrada Blasina flowed northward in a meandering course until it was straightened by dredging in the early 1960's in order to drain its flood plain for housing projects.

ECONOMIC AND ENGINEERING GEOLOGY

The only metalliferous deposits observed in the Carolina quadrangle are small quantities of magnetite concentrated in thin lenses in quartz beach sand at the mouth of the Río Grande de Loíza (Guillou and Glass, 1957, p. 281, tables 1, 2, plate 15). One lens contained 14 percent magnetite, and other thin lenses had as much as 10 percent. The lenses are so thin, however, that the magnetite does not constitute an exploitable resource.

Large quantities are available of such nonmetallic resources as clay, limestone, chalk, sand and gravel, and rock suitable for use as fill.

CLAY

A deposit of clay used at La Cerámica terracotta plant was described by Cadilla (1958). Another much smaller deposit, possibly suitable for bricks, crops out at the side of Puerto Rico Route 3, 1 km west-southwest of the plaza at Canóvanas.

LIMESTONE

Hard dense algal limestone of the Guaracanal Formation crops out south of Route 3 in a narrow belt from 1.5 to 2 km west of the plaza at Canóvanas and on the south side of a ridge about 2 km east of the plaza at Carolina and immediately north of the Río Grande de Loíza. This limestone will make excellent concrete aggregate and is pure enough to be used as a source of lime.

The Aymamón Limestone consists largely of soft chalk, but most of it is very pure calcium carbonate that has been dissolved at the surface and reprecipitated as a carapace of very hard dense limestone. The surface case-hardened part can be excavated and used as fill or as terrazo chips, but the softer parts, soon reached in quarries, are not suitable. The entire unit is suitable for the manufacture of high-quality lime, except for some thin lenses of calcitic dolomite present on the westernmost hill at Loíza Aldea.

FILL

The Aguada Limestone consists of 30–40 m of alternating beds of rather tough, slightly earthy limestone and of very calcareous sandy claystone. This limestone makes very good fill and has been used as road metal on many of the cane-field roads.

The thin-bedded Río Piedras Siltstone that forms the Cerros del Comandante in barrio San Antón has been extracted from several quarries for coarse fill.

Continued...

Continued...

SAND AND GRAVEL

Virtually unlimited supplies of sand and gravel are available in the alluvial deposits of the Rio Grande de Loiza in the area bounded by Carolina, Hoyo Mulas, and Canóvanas. Sand and gravel have been excavated extensively in the valley south of Carolina.

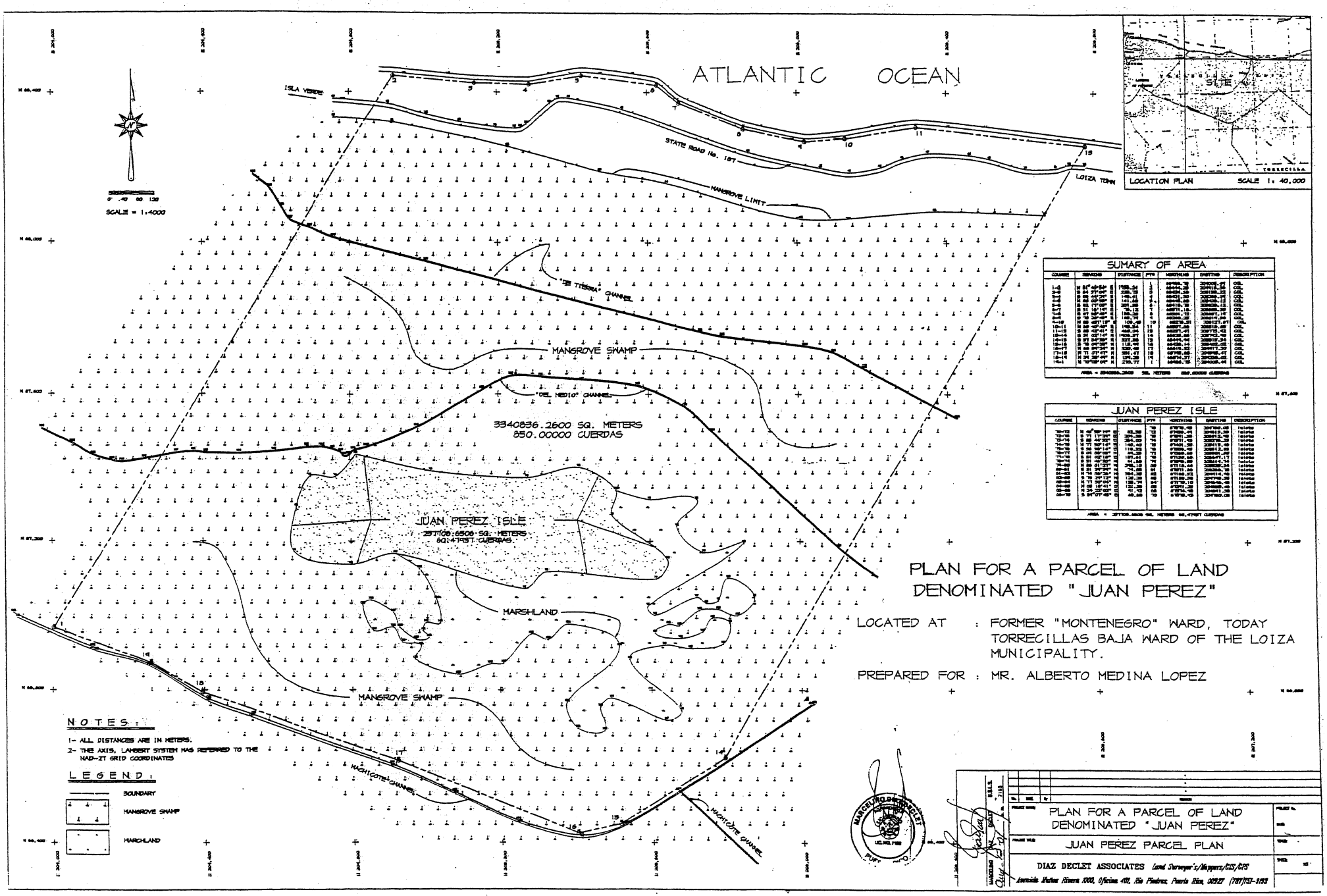
The low dunes south of the beach between Punta Maldonado and Punta Vacia Talega have been excavated as a source of building sand, but the quantity is limited. This sand is composed principally of shell fragments.

Large quantities of quartz sand are available in the beach ridges located more than a kilometer inland in the area south of Punta Vacia Talega. Additional large quantities of somewhat carbonaceous sand are found in the long ridge about 600 m south of Punta Maldonado, in the ridges south of Piñones, and at Islote de Juan Peréz.

INUNDATIONS

All areas of the quadrangle shown as underlain by alluvium or swamp are subject to frequent floods.

The areas of alluvium at the sides of the Rio Grande de Loiza between Canóvanas and Loíza Aldea are natural levees. They are higher than land farther from the river, but they are formed by the deposit of alluvium from the river waters during high floods when the velocity of the flood water drops as the river spreads beyond its channel. These strips of higher land are particularly susceptible to flooding.



PLAN FOR A PARCEL OF LAND DENOMINATED "JUAN PEREZ"

LOCATED AT : FORMER "MONTENEGRO" WARD, TODAY TORRECILLAS BAJA WARD OF THE LOIZA MUNICIPALITY.

PREPARED FOR : MR. ALBERTO MEDINA LOPEZ

NOTES:

1- ALL DISTANCES ARE IN METERS.

2- THE AXIS, LAMBERT SYSTEM HAS REFERRED TO THE NAD-27 GRID COORDINATES

LEGEND:

BOUNDARY

MANGROVE SWAMP

MARSHLAND

PLAN FOR A PARCEL OF LAND DENOMINATED "JUAN PEREZ"

JUAN PEREZ PARCEL PLAN

DIAZ DECLET ASSOCIATES Land Surveyor's/Mappers/CIS/GIS

Avenida Hector Rivera 1000, Oficina 401, Rio Piedras, Puerto Rico, 00927 (787)753-9153

AREA PROFILE

The subject property is located in the municipality of Loiza, Puerto Rico USA. Loiza is located approximately five (5) miles west of Metropolitan San Juan. Loiza is characterized by small commercial establishments, which cater to the tourists and locals who visit the beaches. The Rio Grande de Loiza is a River, which runs through Loiza. A summary of important facts relative to Puerto Rico's economy, geography etc. follows:

Welcome to PUERTO RICO!

Description

Location:
Caribbean, island between the Caribbean Sea and the North Atlantic Ocean, east of the Dominican Republic. (about 1,000 miles (1,600 km) southeast of Miami, Florida).

Geographic Coordinates: Latitude: 18 15 N Longitude: 66 30 W

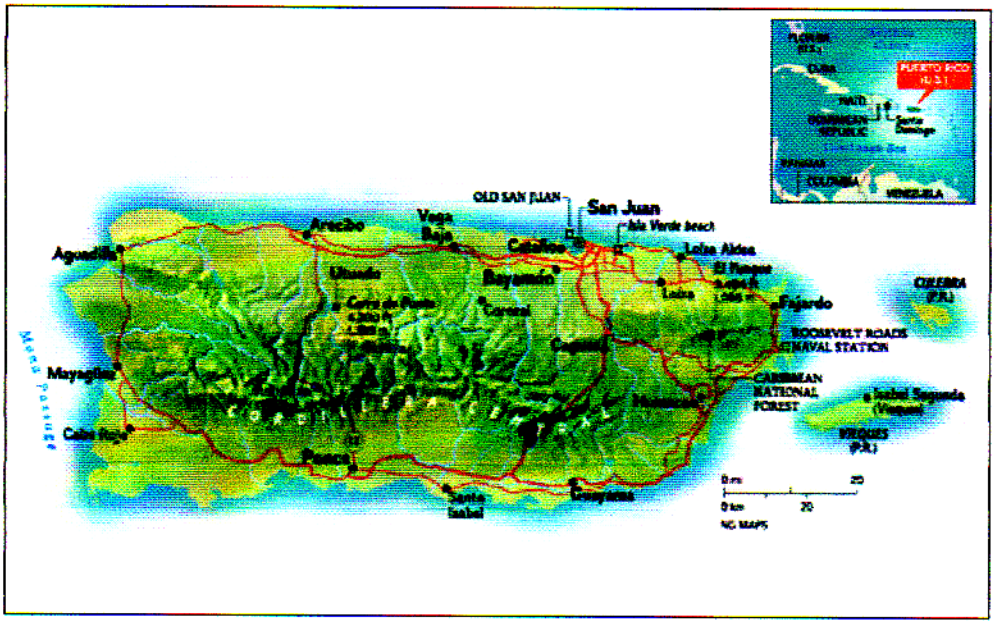
Total Area: 9,104 sq km (3,515 sq mi or 100 by 35 miles).

Land Area: 8,959 sq km
Comparative area: approximately three times the size of Rhode Island.

Water Area: 145 sq km

Map references: Central America and the Caribbean.

Limits:
To the west by Haití and the Dominican Republic (La Hispañola), separated by the Mona Passage ("Mona Canal"), to the east by the Virgin Islands, to the north by the Atlantic Ocean, and to the south by the Caribbean Sea.



Source: National Geographic Society

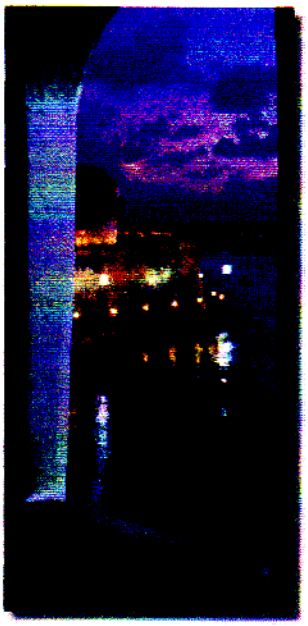
Interesting Fact:
Puerto Rico is close to the deepest submarine depression in the North Atlantic Ocean. The Puerto Rico Trench, roughly parallel to the northern coast of the island of Puerto Rico and lying about 75 miles (120 km) to the north. The Puerto Rico Trench is about 1,090 miles (1,750 km) long and 60 miles (100 km) wide. The deepest point in the Atlantic Ocean, the Milwaukee Depth gloss, lies within the Puerto Rico Trench, at a depth of 27,493 feet (8,380 meters) in the western end of the trench, about 100 miles (160 km) northwest of Puerto Rico. The origin of the trench can be traced back to the beginning of the Tertiary period. The Puerto Rico Trench appears to be part of a complex system of sinistral strike-slip faults in the north Caribbean; the trench seems to have been opened continuously for about 70 million years. It is partially filled with sediments.

The Caribbean's greatest known depth is Cayman Trench (Bartlett Deep) between Cuba and Jamaica, at approximately 25,216 feet (7,686 meters) below sea level.

Land boundaries: 0 km.

Coastline: 501 km.

Borders:
Puerto Rico is under the U.S. customs jurisdiction. Borders are open between P.R. and the U.S., allowing for free movement of people and merchandise.



Maritime claims:

- Continental shelf: 200 m (depth)
- Exclusive economic zone: 200 nm
- Territorial sea: 12 nm

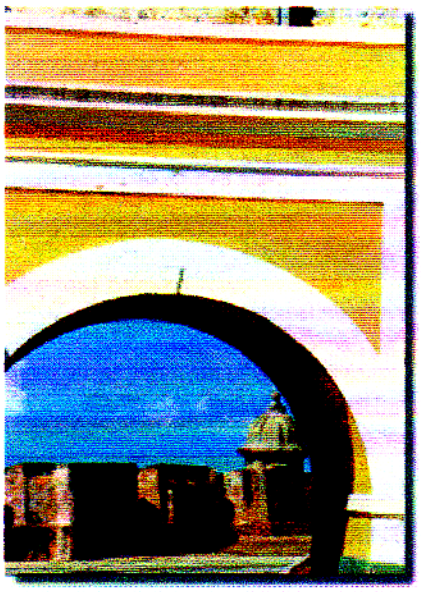
Capital: San Juan (founded in 1508, by Juan Ponce de León).

Administrative Divisions: None (Commonwealth associated with the U.S.); there are no first-order administrative divisions as defined by the U.S. Government, but there are 78 municipalities. Other territories include: Mona (5,517 hectares), Monito (15 hectares), Desecheo (122 hectares), and Caja de Muertos (202 hectares). Numerous other small cays lie offshore of Puerto Rico.

Interesting Facts:
Mona and Monito Islands are located between Puerto Rico and the Dominican Republic. These small islands are considered the Galápagos Islands of the Caribbean Sea. No other reef and offshore island habitat within U.S. jurisdiction possesses such ecological uniqueness, invaluable habitat, and biological diversity within such a reduced surface area. For these reasons, Mona and Monito Islands have been recognized by the Commonwealth of Puerto Rico as a Natural Reserve. The islands are a critical habitat of endangered marine turtles, sea birds and occasional migratory marine mammals.

Political Division: 8 senatorial districts, 40 representative districts, 78 municipalities.

Major Cities:
Ponce, Caguas, Mayagüez, Bayamón, Carolina, Arecibo, Guaynabo, Cayey, Aguadilla, and Fajardo.



Most Popular City Destinations:
San Juan, Ponce, Mayagüez, Bayamón, Fajardo, San Germán Cayey, and Caguas.

Time: Atlantic Standard (AST), which is one hour later (+1) than Eastern Standard Time (EST) and four hours earlier (-4) than Greenwich Mean Time (GMT), however, the island does not observe Daylight Savings Time.

Language: Spanish and English are the official languages.
English is spoken for about 1/4 of the population- with limited capabilities. English is required in all federal matters. English is spoken in all major tourist areas (%80 Spanish, %20 other).

Interesting Facts:
Language has been a central issue in Puerto Rican education and culture since 1898. Until 1930 U.S. authorities insisted upon making English the language of instruction in the schools, the intent being to produce English-speaking persons of American culture in the same way this is done in the United States public schools. But strong resistance to the policy finally brought a change to the use of Spanish as the basic school language, English becoming a second language studied by all. In 1991 the Puerto Rican legislature, following the lead of the pro-commonwealth Popular Democratic Party and the governor, Rafael Hernández Colon, endorsed a bill that made Spanish the island's official language, thus reversing a 1902 law that gave both Spanish and English official recognition. In 1993 the pro-statehood governor, Pedro J. Rossello, signed legislation restoring equal status to Spanish and English.

According to Ethnologue Spanish is the second language in the world, after Mandarin Chinese and ahead of English. Puerto Rico accounts for less than 4 million of the 332,000,000 who speak Spanish. (est. 1999)

National Holiday: November 19 (The Discovery of Puerto Rico date).
All U.S. government holidays are celebrated in Puerto Rico. Additionally, there are nine local holidays, which usually honor important leaders or events in the island's history. Government offices, banks, the post office and most stores are closed on the official holidays.

National Hymn (Anthem): "La Borinqueña"
The national hymn reflects the character of the people very accurately. The air, "*La Borinqueña*", recalls the island's Indian past. It was originally a dance measure. Now in a slower tone, and the orchestration of Ramón Collado, the Puerto Rican

anthem has a gracious, melancholic tone, agreeably free of the bombast that often characterizes national anthem.

National Bird: Stripe-headed tanager (spyndalis zena) ("reina mora")

National Flower: Puerto Rican hibiscus (Thespesia grandiflora; Maga grandiflora; Montezuma) ("flor de maga")

National Tree: Silk-cotton tree (ceiba pentandra) ("ceiba")

National Symbol:
While the coqui -a tiny frog found everywhere in the island- is only an "unofficial national symbol", its image figures prominently in Puerto Rican culture and heritage.

> **Interesting Fact:**
> When Puerto Ricans want to express our nationality, we say "I'm as Puerto Rican as a coquí." (*Soy de aquí como el coquí.*)

Motto: Puerto Rico lo hace mejor! (Puerto Rico does it better!)

Books:

- Fodor's Puerto Rico (Fodor's Puerto Rico)

Other Resources:

- Puerto Rico Map Source: Frommer's Puerto Rico, 5th Edition
- Porto [Puerto] Rico, 1920 Map from Putnam's Handy Volume Atlas of the World.

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Welcome to PUERTO RICO!

Economy

Puerto Rico has one of the most dynamic economies in the Caribbean region. Plantation sugar production dominated Puerto Rico's economy until the 1940s. Industry has surpassed agriculture as the primary sector of economic activity and income. Encouraged by duty free access to the U.S. and by tax incentives, U.S. firms have invested heavily in Puerto Rico since the 1950s (U.S. minimum wage laws apply). As a result, Puerto Rico's export and import has prosper, nearly doubled between fiscal years 1987 and 1997.

Recently the economy has suffered budget cuts from U.S. The Puerto Rican economy has depended heavily on the tax incentives given to U.S. mainland companies and on federal transfers. In 1993, President Clinton aimed to cut the Section 936 glos tax exemption for U.S. companies and introduced legislation to Congress to replace it with a more modest tax credit linked to wages paid by those companies in Puerto Rico rather than to profits. It is estimated that 100,000 Puerto Ricans were employed by companies operating under Section 936 (of which 23,000 are in pharmaceuticals) and another 200,000 are indirectly employed. In President Clinton's 1998 budget submission to Congress, proposed that existing Section 30A of the tax code be made permanent to provide an estimated U.S. $417mn a year in tax incentives to compensate for the phasing out of Section 936. Section 30A allows companies to claim 60% of wages and capital investment as allowances against tax. New firms may opt to incorporate themselves in Puerto Rico as "controlled foreign corporations" and receive the tax benefits provided by Section 901 of the U.S. Internal Revenue Code. Puerto Rico's government aims to make up for the 936 loss by providing new local incentives, cutting taxes and encouraging economic development in other industries.

On the other hand, the agreement between the U.S., Canada and Mexico for the North American Free Trade Agreement (NAFTA) also has implications for Puerto Rico because of competition for jobs and investment. Although wage levels are lower in Mexico, Section 30A gives companies in Puerto Rico an advantage in pharmaceuticals and hi-tec industries. In low-skill labour-intensive manufacturing, such as clothing and footwear, Mexico has the advantage. Puerto Rico currently employs 30,000 in the clothing industry.

By some economists Puerto Rico's economy is considered somewhat fictitious. Puerto Rico has very few natural resources of economic value and its economy

relies mainly on Federal Aid from the United States Government, which depends on the industrialization programs and the tax incentives that U.S. offers. Economists believe that reinstating IRS Section 936 or making IRS Section 30A permanent for U.S. firms operating in Puerto Rico is not the best way to stimulate sustainable development on the island.

Important industries include pharmaceuticals, electronics, textiles, petrochemicals, processed foods, clothing, and textiles. Sugar production has lost out to dairy production and other livestock products as the main source of income in the agricultural sector. The principal livestock are cattle, pigs, and poultry. Tourism has traditionally been an important source of income for the island, with estimated arrivals of nearly 3.9 million tourists in 1993, and a 7% of the Island's GNP, the tourism industry employees over 60,000 people.

The main government expenditures are on health, education, and welfare.

Duties on imports from countries outside the U.S. tariff wall are collected at Puerto Rico's borders but sent to the Puerto Rico Treasury, not the U.S. Treasury.

Currency: United States dollar (US$)
Since Puerto Rico is part of the United States, the island's currency is the U.S. dollar.

Coins: 1, 5, 10, 25 (cents) 1 (dollar) Bills: $1, $2, $5, $10, $20, $50, $100, $500, $1,000, $5,000, and $10,000. On July 14, 1969, the Treasury Department and the Federal Reserve Board announced that they would immediately stop distributing currency in denominations of $500, $1,000, $5,000 and $10,000. Production of these denominations stopped during World War II. Their main purpose was for bank transfer payments. Note that the US dollar is often referred by locals as "peso".

Trade partners: U.S.

Gross National Product (GNP): $38.1 billion; per capita: $9,973 (1999)

Gross Domestic Product (GDP) - purchasing power parity - $43.9 billion (2001 est.)

GDP per capita: purchasing power parity - $11,200 (2001 est.)
Puerto Rican workers are covered by the U.S. federal minimum wage requirements. Labor costs are below the mainland average, but are higher than in other areas of the Caribbean Basin.

Gross Domestic Product rate: real growth rate - 2.2% (2001 est.)

GDP - composition by sector:
agriculture: 1%
industry: 45%
services: 54% (1999 est.)

Average hourly wage: $8.08/hour, well below the U.S. average.

Household income and expenditure:

Average family size: 3.6
Income per family: U.S. $27,017
Sources of income: wages and salaries 56.3%, transfers 29.5%, self-employment 6.4%, rent 5.2%, other 2.6%; expenditure (1995): food and beverages 20.4%, transportation 13.6%, health care 13.4%, housing and energy 12.2%, household furnishings 12.0%, recreation 8.9%. (1995)

Inflation Rate (consumer prices): 5.7% (2000 est.)

General Merchandise Tax: 0 percent; Puerto Rico does not charge GMT.

Finance:
There are currently 19 commercial banks in Puerto Rico, most of them local corporations. Local banks institutions includes: Banco Popular, which is considered the largest banking institution in the island, with over one hundred branches throughout the island, Banco de Ponce, Banco de San Juan, and Banco Mercantil de Puerto Rico; and branches of US: Citibank and FirstBank; and foreign banks: Banco Bilbao-Vizcaya, and Banco Santander, the second largest bank in Puerto Rico. The government owns and operates two specialized banks– the Government Development Bank (GDB) and the Economic Development Bank (EDB).
Banks offer a wide range of products and services such as checking and savings accounts, CDs, IRAs, loans, credit and debit cards, and electronic banking. Automatic teller machines are abundant, commonly referred to as ATHs. Banks are insured by the Federal Deposit Insurance Corporation. They are subject to all Federal controls applicable to banks in the United States of America.

Labor Force: 1.3 million (2000)
By occupation: agriculture 3%, industry 20%, services 77% (2000 est.)

Construction Growth: 15% (1997 est.)
Construction is currently one of the most dynamic activities in Puerto Rico's economy. Since the mid-1980s, the construction industry has grown faster than most other economic sectors, helping to sustain the overall growth of the economy.

Organized Labor:
115,000 members in 4 unions; the largest is the General Confederation of Puerto Rican Workers with 35,000 members (1983).

Population Economically Active: total 1,228,000; activity rate 32.2% (participation rates: ages 16-64, 52.9%; female 39.4%; unemployed 13.8%). (1995)

Unemployment Rate: 9.5% (2000)

Budget:

revenues: $6.7 billion

expenditures: $9.6 billion, including capital expenditures of $NA (FY99/00)

Exports:

$34 billion (1999)

Commodities: pharmaceuticals, chemicals, metal products, electronics, apparel, canned tuna, rum, food, textiles, sugar, coffee, beverage concentrates, medical equipment, and instruments (1999).

Export Destinations: (1999)

United States	30,535,216.1	89.4%
Dominican Republic	730,579.5	2.14%
Netherlands	445,836.5	1.31%
Germany	411,938.9	1.21%
France	380,750.5	1.12%
Italy	335,382.6	0.98%
United Kingdom	327,906.6	0.96%
Japan	267,728.0	0.78%
Switzerland	166,443.8	0.49%
Belgium	158,611.9	0.47%
Canada	125,750.7	0.37%
Mexico	75,434.0	0.22%
Ireland	58,317.3	0.17%
China	46,303.7	0.14%
Spain	37,057.4	0.11%
Korea, Republic of	27,001.1	0.08%
Venezuela	17,992.9	0.05%
Total	$34,148,251.5	

Values expressed in thousands of dollars.

Imports: $23 billion (1999)

Commodities: chemicals, electrical machinery, food, transport equipment, non-electrical machinery, petroleum and petroleum products, professional and scientific instruments, clothing and textiles.

Sources of Import: (1999)

United States	15,135,955.0	65.51%
Ireland	1,898,437.9	8.22%
Japan	1,275,956.9	5.52%
Dominican Republic	805,593.8	3.49%
United Kingdom	784,102.3	3.39%
Venezuela	513,461.2	2.22%
Mexico	472,025.5	2.04%
France	346,589.7	1.50%
Germany	340,000.5	1.47%

Italy	292,490.2	1.27%
Belgium	265,579.9	1.15%
Canada	239,722.7	1.04%
Korea, Republic of	183,944.4	0.80%
China	167,641.1	0.73%
Switzerland	155,723.6	0.67%
Spain	138,189.8	0.60%
Netherlands	88,758.0	0.38%
Total	$23,104,172.4	

Values expressed in thousands of dollars.

External Debt: $NA

Public Debt: U.S.$15,993,600,000. (outstanding; 1995)

Industries:
Manufacturing accounts for 55.5% of GDP: manufacturing of pharmaceuticals, chemicals, machinery, electronics, apparel, food products, instrument, textiles, clothing, and tourism.

Manufacturing:
In the late 1940s, manufacturing was seen as the means by which Puerto Rico could develop economically, as political leaders of the time considered agricultural countries to be underdeveloped and industrial countries developed. As a consequence the government launched an industrialization program known as "Operation Bootstrap." Under this program the island was to become industrialized by providing labor locally, inviting investment of external capital, importing the raw materials, and exporting the finished products to the U.S. market. To entice participation, tax exemptions and differential rental rates for industrial buildings were offered. As a result, Puerto Rico's economy shifted labor from agriculture to manufacturing and tourism.
Puerto Rico's manufacturing sector has shifted from the original labor-intensive industries, such as the manufacturing of food, tobacco, leather, and apparel products, to more capital-intensive industries, such as pharmaceuticals, chemicals, machinery, and electronics. Major manufacturing activities in the order in which they contribute to the manufacturing domestic income are chemical and allied products, machinery and metal products, food and kindred products, apparel and related products, printing and publishing, leather and leather products, stone, clay, and glass products, tobacco, paper and allied products, and textile mill products. San Juan and Mayagüez are the leading centers for making clothing.

Manufacturing Average Hourly Earning: $7.85

Manufacturing Average Weekly Earning: $310.86

Percentage of Manufacturing Employment by Industry Group:
Chemical and allied products 18.2%, Apparel and other textile products 15.5%, Electronic 15.2%, Food and kindred products 13.2%, Instruments and related products 9.8%, Paper and related products 4.7%, all other manufacturing 23.3%

Resources: (1999)

Fuel
Purchase: 35,631,482 barrels
Fish
7,493,000 pounds
Total value: $16,791,000
Livestock
38,680,000 pounds
Total value: $31,908,000
Minerals
Mining activities are limited to quarry operations
Electricity
Annual energy production: 20,140.8 megawatts/hour
Total capacity: 5390 megawatts/hour

Energy:
Oil is the dominant fuel in Puerto Rico's energy mix, accounting for 97.7% of total primary energy consumption (0.35 quadrillion Btu) in 1999.

Motor Gasoline: 2,550,000 metric tons coal equivalent
Electricity: 1,690,000 metric tons coal equivalent
Energy Consumption: 2,493 kwh per capita

Electricity Costs:
The cost of electrical services in the industrial sector depends on the consumption and the kind of service provided. (example for services provided under 50 KVA included below)

monthly charge = $5.00
energy per KW/hr = $0.065,
fuel adjustment charge per KW/hr = $0.034858

Industrial Production Growth Rate: 5% (1994)

Tourism:
Receipts from visitors: U.S. $1,826,100,000 (1995)
Expenditures by national abroad: U.S. $833,000,000 (1995)
Tourist Receipts: U.S. $1,736,600,000 (1994)

Agriculture:
Until 1955, agriculture constituted Puerto Rico's main economic sector. Sugar cane, mostly for export to the American market, was the main crop, followed by coffee and tobacco. Sugar cane production declined as prices remained low, agricultural labor migrated to the United States, and urban expansion took over much sugar cane land. Coffee production, taking place mostly in

the mountainous areas away from the pressures of urban expansion and supported by guaranteed minimum prices, has remained stable. Tobacco production has virtually disappeared. Considerable expansion has occurred in the production of dairy products, beef, pork, eggs, and poultry, although significant amounts of these products are still imported, primarily from the United States. There is also production of fruits and garden vegetables as well as of starchy vegetables, such as bananas and plantains.
Today, agriculture accounts for only 3% of labor force and less than 1% of GDP, concentrating primarily to crops which can be sold in the United States. Coffee is the most valuable crop, followed by vegetables, sugar cane, fruits (pineapples, plantains, bananas), milk, eggs, and livestock (cattle, chickens, pork).

Economic aid: none

Economic Development:
Economic Development Administration (Administración de Fomento Económico) 787-758-4747
Puerto Rico Industrial Development Company 1-888-577-4326
Small Business Administration 787-766-5572

Interesting Facts:

- Migration has played a large role in social and economic changes since the 1950s. In the 1950s and 1960s, the government encouraged a massive migration of poor agricultural workers to the east coast of the US to help create a predominantly industrial economy. The number of Puerto Ricans is now about equal to the island's population.

- Puerto Ricans are another immigrant group that has had a significant impact on the economy and culture of New York since World War II. Several hundred thousand reside in the state, mostly in New York City. After a heavy immigration of Puerto Ricans during the 1950s and early 60's, the growing economic strength of Puerto Rico led to a considerable reduction, with those entering the state being largely offset by those returning to Puerto Rico.

- Some of the best-educated young people leave because of better opportunities and labor conditions on the mainland.

- Statistics show that it has some of the most favorable economic conditions; the gross national product (GNP) is growing much more rapidly than the population, and the GNP per capita is one of the highest in the Caribbean, but in comparison with the United States, Puerto Rico is still below that of the poorest state in the mainland, Mississippi. In 1989, Puerto Rico received 72 times more food stamps than Mississippi, half the island's population currently receives food stamps.

Other Resources:

- Dawn's Virtual Currency Collection
- The Decline of the Plantation Economy and the Puerto Rican Migration of the 1950s by César J. Ayala (Acrobat file)
- Planilla de Contribución sobre ingresos
- Poverty among Puerto Ricansin the United States

- Puerto Rico Department of Labor and Human Resources
- Working in the U.S. FAQ

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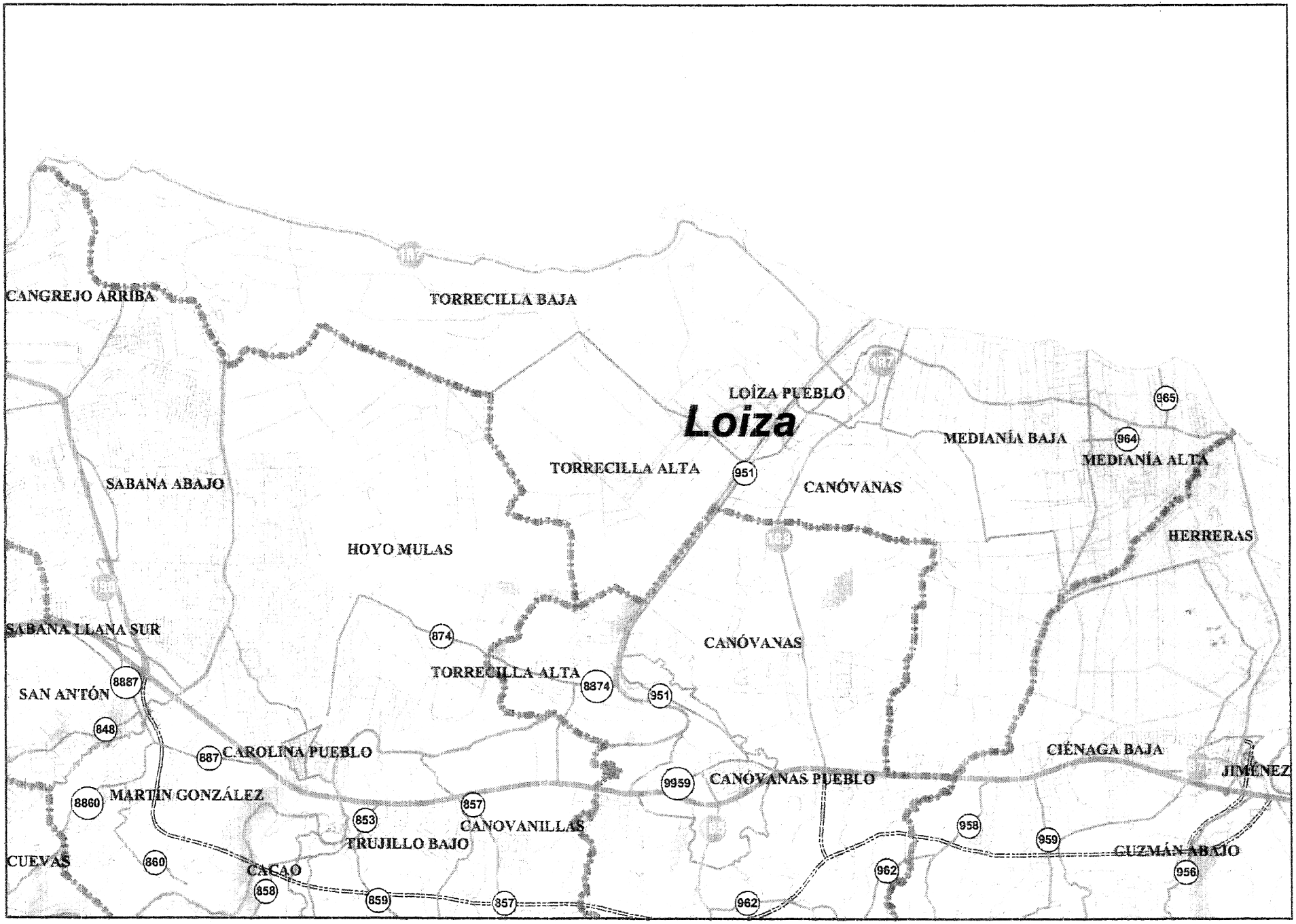


Elevación en metros

0 - 1 | 1 - 50 | 50 - 100 | 100 - 200 | 200 - 300 | 300 - 400 | 400 - 500 | 500 - 600 | 600 - 700 | 700 - 800 | 800 - 900 | 900 - 1,000 | 1,000 - 1,100 | 1,100 - 1,200 | 1,200 - 1,338

Municipio de Loiza

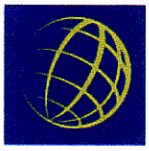
kilómetros

0 0.2 0.4 0.8 1.2 1.6

Global VALUATION

Part Four
Analysis of the Data and Conclusions

Highest and Best Use Analysis
Valuation Process
Land Valuation
The Mineral Industry Overview
Sales Comparison Approach
Income Capitalization Approach
Reconciliation of Value Indications
Parameters of Value Conclusions
Exposure Time



HIGHEST AND BEST USE ANALYSIS
REAL PROPERTY

The economic principles of supply and demand, substitution, balance, and conformity are basic tools for analyzing the relationships between economic behavior and appraisal. The interdependent factors that influence value, i.e. utility, scarcity, desire, and effective purchasing power, are also economic in origin because modern value and appraisal theory has evolved from neoclassical economic thought.

The relationships between economic behavior and appraisal are clearly evident in real estate markets. In these markets where buyers and sellers of property rights interact, market value has great significance to debt and equity capital investors. In all types of property transactions, market value estimates based on careful analyses of market behavior are needed to shape financial decisions that affect individuals, neighborhoods, businesses, and governments.

An understanding of market behavior is essential to the concept of highest and best use. Market forces create market value, so the interaction between market forces and highest and best use is of crucial importance. When the purpose of an appraisal is to estimate market value, highest and best use analysis identifies the most profitable, competitive use to which the property can be put. Therefore, highest and best use is a market-driven concept.

Definition: Highest and best use may be defined as:

The reasonably probable and legal use of vacant land or an improved property, which is physically possible, appropriately supported, financially feasible, and that results in the highest value.

The highest and best use of a specific parcel of land is shaped by the competitive forces within the market where the property is located. Therefore, analysis and interpretations of highest and best use is an economic study of market forces focused on the subject property.

Market forces also shape market value. The general data that are collected and analyzed to estimate property value are also used to formulate an opinion of the property's highest and best use as of the appraisal date. In all valuation assignments, value estimates are based on use. The highest and best use of a property to be appraised provides the foundation for a thorough investigation of the competitive positions of market participants. Consequently, highest and best use can be described as the foundation on which market value rests.

Appraisal theory holds that as long as the value of a property as improved is greater than the site as unimproved, the highest and best use is use of the property as improved. Once the value of the land exceeds the value of the improved property, the highest and best use becomes use of the land as though vacant. Each parcel of real estate may have a highest and best use of the land or site as though vacant and a different highest and best use of the property as improved.

The highest and best use of both land as though vacant and property as improved must meet four criteria. The highest and best use must be legally permissible, physically possible, financially feasible, and maximally productive.

Highest and Best Use as Vacant

The Highest and Best Use as Vacant analysis assumes a parcel of land as vacant or that it can be made vacant through a demolition of any improvements. The four criteria are then applied to the subject site as though vacant.

Legally Permissible

The use must be legal. The use must be probable, not speculative or conjectural. There must be a profitable demand for such a use and it must return to the land the highest net return for the longest period of time. The Juan Perez parcel is subject to an antique uses rights doctrine, which allows a wide variety of uses including Tourism, Recreational, Mining and Energy Uses. The doctrine was established prior to the USA/Spain Treaty and grants the rights for a "Private" beach.

Physically Possible

The first constraint imposed on the possible use of the property is that dictated by the physical aspects of the site itself. Size, shape and terrain of the parcel of land affect the uses to which it can be developed. The utility of the parcel may depend on its frontage and depth. Also considered is the capacity and availability of public utilities. In general, the larger the site, the greater the potential for achieving economies of scale or flexibility in development. The Juan Perez Parcel contains 850 cuerdos or approximately 825 acres. The parcel is large enough for several uses including a destination resort subdivision and all amenities associated with a resort, water and electricity production plants and a sand mining operation. All public services and communications are at the site all along State Road 187.

Financially Feasible

After determining which uses are physically possible and legally permissible, we have eliminated many uses from consideration. Then the uses that meet the first two criteria are analyzed further to determine which are likely to produce an income, or return, equal to or greater than the amount needed to satisfy operating expenses, financial obligations and capital amortization. All uses that are expected to produce a positive return are regarded as financially feasible. A destination resort subdivision; water and electricity production plants and a mining operation are all financially feasible uses.

Maximally Productive

While in most valuation/analysis cases, the legality of use and physical adaptability of a site or improvement to a use is readily ascertainable, rarely is the most profitable-marketable use apparent. Several alternative uses must be tested to determine the most profitable use; the most maximally productive use is a destination resort subdivision, water and electricity production plants and a mining operation.

Conclusion

Based upon all of this data and analysis, competitive market forces within the subject's marketplace indicate the Highest and Best Use of the subject property "As Vacant" is to develop a destination resort subdivision and all amenities associated with a resort, water and electricity production plants and a sand mining operation.

HIGHEST AND BEST USE ANALYSIS
PERSONAL PROPERTY

The subject personal property consists of over 30 million cubic meters of usable sand. According to U.S. Geological Surveys, available on shore sources of sand in Puerto Rico are depleting rapidly. Because the cost of transporting sand is high, Puerto Rico is looking for offshore sand deposits to fill the demand. Accordingly, demand for the subject offshore sand is excellent. The highest and best use for the subject sand deposit is to mine the sand.

THE VALUATION PROCESS

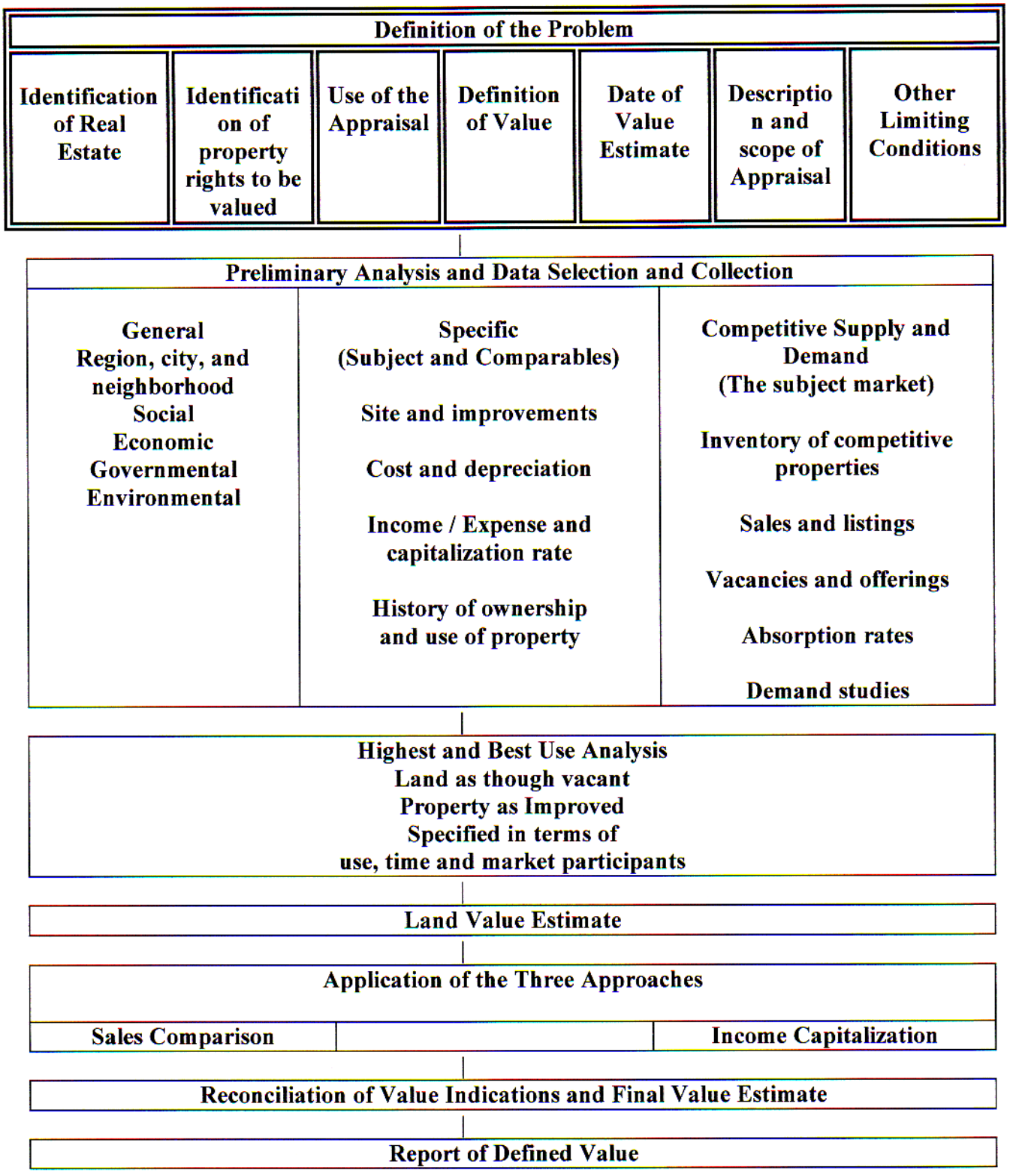
The valuation process is a systematic procedure employed to provide the answers to a client's questions about market value. It is accomplished through specific steps; the number of steps followed depends on the nature of the appraisal assignment and the data available.

In assignments to estimate market value, the ultimate goal of the valuation process is a well-supported value conclusion that reflects all the factors that influence the market value of the property being appraised. To complete the valuation process the appraiser integrates the information drawn from market research, data analysis and from the application of approaches to form a value conclusion.

The valuation process is a methodology used to solve a client's specific question about property value. This process begins with identification of the specific problem to be solved and ends when a solution is reported to the client. It is applicable in valuing the subject property. The analytical structure will be specifically applied to the property addressing its unique characteristics.

The Sales Comparison Approach is developed for the valuation of the Real Property (Land). The Income Capitalization Approach is developed for the Personal Property (Sand). The Valuation Process is outlined on the next page.

VALUATION PROCESS SUMMARY CHART



LAND VALUATION

If land has utility for a specific use and there is demand for that use, the land has value to a particular category of users. There are many principles and factors that must be considered for land valuation and the valuation of land requires careful analysis of a complex variety of factors.

Anticipation, change, supply and demand, substitution and balance are appraisal principles that influence land value. Anticipation means that value is created by the expectation of benefits to be derived in the future.

The supply and demand for land in a particular location tends toward equilibrium. If supply declines and demand remains stable or increases, prices rise. Conversely, if the supply of sites for a particular use increases and demand remains stable or declines, prices fall.

Land value is substantially affected by the interplay of supply and demand, but it is the economic use of a site that determines its value in a particular market.

The appraisal of land focuses on valuing the property rights attached to the land. These include the rights to develop the land within certain limits, to lease it to others, to alter its topography, to subdivide it and to assemble it. Because the supply of land cannot keep pace with the demand for it, governments regulate how land can be used and developed.

The physical characteristics of land, the available utilities, and site improvements affect land use and value. The physical characteristics of a parcel of land that are considered are size and shape, frontage, topography, location and view.

The availability of utilities such as water, sewers, electricity, natural gas and telephone service also influences the use and development potential of a parcel of land. Utilities may be provided by off-site facilities such as public water mains, sewers, and power lines or by on-site facilities such as public water mains, sewers, and power lines or by on-site facilities such as spring basins, drilled domestic wells, and septic tanks.

Land Valuation Techniques

The six internationally accepted procedures / techniques used to value land are:

1. Sales Comparison Approach
2. Allocation
3. Extraction
4. Subdivision Development
5. Land Residual
6. Ground Rent Capitalization

All six procedures are derived from the three basic approaches to value. Sales comparison and income capitalization (i.e. ground rent capitalization) can be directly applied to land valuation. Allocation and extraction procedures reflect the influence of the sales comparison and cost approaches. Subdivision development draws on elements of all three approaches. All of these procedures/techniques were considered, for the purpose of this analysis, the Sales Comparison Approach will be utilized.

Sales Comparison

The Sales Comparison Approach may be used to value land that is actually vacant or land that is being considered as though vacant for appraisal purposes. Sales comparison is the most common technique for valuing land and it is the preferred method when comparable sales are available. To apply this method, sales of similar parcels of land are analyzed, compared and adjusted to provide a value indication for the

land being appraised. In the comparison process the similarity or dissimilarity of the parcels is considered.

Global Valuation, Inc. has gathered data on actual sales as well as listings. Next, we identify the similarities and differences in the data, rank the data according to their relevance, adjust the sales prices of the comparables to account for the dissimilar characteristics of the land being appraised, and form a conclusion as to the most reasonable and probable market value of the subject land.

Elements of comparison include property rights, legal encumbrances, financing term, conditions of sale (motivation), market conditions (sale data), location, physical characteristics, available utilities, zoning, and highest and best use. The most variable elements of comparison are the physical characteristics of the site, which include its size and shape, frontage, topography, location and view. The units of comparison applied in this analysis are sale price per acre.

Size is generally a less important element of comparison than date and location. Zoning is often the most basic criterion in selecting comparables. Sites zoned the same as the subject property is the most appropriate comparables.

After comparable data are collected and categorized and the comparable properties are examined and described, sales data can be assembled in an organized, logical manner. Adjustment for dissimilarities between the subject property and the comparable properties are made to the sale price of the comparables.

A sale price adjustment can be simply an acknowledgment of a property's superior or inferior quality or it may be a precise dollar sum or percentage. Adjustments can also be totaled and factored into the comparable sale prices. Typically, adjustments are made in a particular order - i.e., adjustments for property rights, financing, and sale and market conditions are made before adjustments for location and physical characteristics. All adjustments are presented in a logical and understandable manner in the appraisal report.

Details of comparable land sales, a summary chart, analysis and conclusion begin on the next page.

COMPARABLE LAND SALE NO. 1

Location	State Road No. 187, Km. 5.9, Loiza, Puerto Rico
Seller	Juan Suarez Miranda
Buyer	Playa de Berwind Corp.
Date of Sale	October 2, 2000
Sale Price	$3,412,540.00
Area (Cdas.)	33.94 Cuerdas
Price/Cuerda	$100,546
Legal Data	Deed No. 2, before A. J. Benezar Zequeira, Esp.
Approvals	No Approvals

COMPARABLE LAND SALE NO. 2

Location	Site of Bahia Mar Hostal, Parcels 4 & 5, Playa Sardinas II Ward, Culebra, Puerto Rico
Seller	Suen. Carrillo Romero
Buyer	Culebra Resorts Associates
Date of Sale	May 15, 2000
Sale Price	$676,020.00
Area (Cdas.)	5.70 Cuerdas
Price/Cuerda	$118,600
Legal Data	Deed No. 149 before Ismael H. Herrero, Esq.
Approvals	No Approvals

COMPARABLE LAND SALE NO. 3

Location	West and Interior of Km. 3.2 of PR-107, Borinquen Ward Aguadilla, Puerto Rico
Seller	Mr. Manuel Garraron Perez and Ms. Priscilla Vallecillo Emanuelli
Buyer	Mr. Carlos J. Delgado Hernandez
Date of Sale	February 11, 2002
Sale Price	$1,410,000.00
Area (Cdas.)	8.36 Cuerdas
Price/Cuerda	$168,660
Flood Zone	Zone X – Minimal flood hazard
Approvals	No approvals

COMPARABLE LAND SALE NO. 4

Location	Site of on-going Paseo Las Olas Residential Subdivision Lot No. 5, Paseos de Dorado Complex, South and Interior of Km.8.6 of PR-693, Pueblo and Higuillar Wards, Dorado, Puerto Rico
Seller	Paseos de Dorado, Inc.
Buyer	Desarrolladora M.R.V., S.E.
Date of Sale	March 14, 2001
Sale Price	$5,445,000
Area of Parcel	20.4511 cuerdas
Unit Price ($/Cuerda)	$266,245
Number of Units	112
Price Per Unit	$48,616
Density (Units/Cuerda)	5.5
Zoning	R-O (Low density residential)
Highest and Best Use	Single-Family Residential
Topography	Level
Configuration	Rectangular
Flood Zone Classification	Zone "X" – Area of minimal flooding
Infrastructure	All available to site
Legal Date	Deed No.3 before Alberto J. Perez Hernandez, Esquire
Terms of Sale	This transaction required a $25,000 option and a $1,450,000 down payment at closing, with the balance of $3,970,000 in a mortgage note payable to the seller, accruing annual interest of 9% rate, payable 36 months after closing date. This mortgage note was subordinated to the construction loan of the project and required a payment of $20,000 with the closing of each of the first 88 project units, $250,000 per unit for the next 8 units sold, and a final payment of $210,000 with the closing of the 98th units sold.

COMPARABLE LAND SALE NO. 5

Location	Site of proposed Brighton Country Club Development, Corner of PR-693 and Jose E. Efron Avenue, East of Paseos de Dorado Complex, Pueblo and Higullar Wards, Dorado, Puerto Rico
Seller	Brighton-Dorado Group, Inc.
Buyer	Zone "X" – Area of minimal flooding Brighton Country Club at Dorado, Inc.
Date of Sale	January 30, 2001
Sale Price	$6,500,000
Area of Parcel	16.7448 cuerdas
Unit Price ($/Cuerda)	$388,180
Number of Units	137
Price Per Unit	$47,445
Density	8.2
Zoning	R-O (Low density residential)
Highest and Best Use	Residential
Topography	Level
Configuration	Irregular
Flood Zone Classification	Zone "X" – Area of minimal flooding Zone AE 00 Base flood elevations determined
Infrastructure	All available to site
Legal Data	Deed No. 5 before Luis R. Rodriguez Nevarez, Esquire
Terms of Sale	This transaction was executed with a $2,370,000 down payment at closing, with the remaining balance of $4,130,000 to be paid as follows, a $1,000,00 reserved by the buyer from the sale price to be paid eventually for the deferred payment to the original owner, $1,280,000 to be paid no later than 120 days from closing date and $1,850,000 to be paid no later than three years from the closing date.

COMPARABLE LAND SALE NO. 6

Location	Site of proposed Costa Verde Development Parcel PP-13, Palmas del Mar Resort, East of Kilometer 10.5, PR-906, Candelero Ward, Humancao, Puerto Rico
Seller	Pamas del Mar Properties, Inc., represented by Mr. Jaime Morgan Stubbe, President
Buyer	Fairway Homes, Inc., represented by Mr. Jose A. Casillas Fernandez
Date of Sale	August 29, 2002
Sale Price	$4,914,000
Area of Parcel	14.94 cuerdas
Unit Price ($/Cuerda)	$328,916
Number of Units	42
Price Per Unit	$117,000
Density	2.8
Zoning	Outside Planning Board Zoning Map
Highest and Best Use	Residential-Tourist (Palmas del Mar Conceptual Land Use Plan)
Topography	Level
Configuration	Irregular
Flood Zone Classification	Zone "A" –Area of 100-year flood
Infrastructure	All available to site
Legal Data	Deed No. 9 Irmarie Rivera Gorritz, Esquire

COMPARABLE LAND SALE NO. 7

Location	Site of Aquabella Development, Parcel RC-12, Palmas del Mar Resort, East of Km.10.5 of PR-906, Candelero Ward, Humancao, Puerto Rico
Seller	Palmas del Mar Properties, Inc., represented by Mr. Jaime Morgan Stubbe, President
Buyer	Maranello, Inc., represented by Mr. Alfonso Valdes
Date of Sale	July 17, 2001
Sale Price	$10,874,999
Area of Parcel	17.0 cuerdas
Unit Price ($1 Cuerda)	$639,706/Cuerda
Number of Units	136
Price Per Unit	$79,963
Density (Units/ Cuerdo)	8
Zoning	Residential-Tourist
Highest and Best Use **Topography**	Residential Level
Configuration	Irregular
Flood Zone Classification	Zone "A" –Area of 100-year flood
Infrastructure	All available to site
Legal Data	Deed No. 30 before Eugenio Javier Torres Oyola, Esquire
Terms of Sale	$6,092,800 note by Grantor at 1% over prime, with a maturity date of 42 months after closing or after the closing of the unit that represents 80% of the project units, which ever occurs first. Note to be paid with gross sales
Comments	In addition to the minimum purchase price of $7,616,000/Cuerda, the purchaser has to pay the seller a percentage (additional purchase price, or "kicker") of the gross sales precede in excess of the average sale price. The minimum gross sale was stipulated at $47,5000,000 of $360,000 per unit. Based on the minimum gross sale, the purchase price results in a 16% acquisition cost. After taking into consideration the kickers. Therefore, the final estimated purchase price is expected to be 19% of the estimated final gross sellout. In terms of unitary indications, the final purchase is expected to be $79,963 per unit, or $639,706 per cuerda.

COMPARABLE LAND SALE NO. 8

Location	Parcel RC-3 Palmas del Mar Master Plan, Palmas del Mar, Candelero Ward, Humacao, Puerto Rico. Site of Maralago.
Grantor	Palmas del Mar Properties, Inc.
Grantee	RC-3, Inc.
Date of Sale	February 2002
Area of Parcel	7 Cuerdas
Sale Price	$8,253,825
Unit Price	$1,179,118/Cuerdas
Number of Units	72
Price Per Unit	$114,637
Legal Data	Deed before Maria Luisa Fuster, Esp.
Terms of Sale	Equivalent to all cash to seller $6.4 mm plus % of sales
Property Rights Conveyed	Fee Simple Estate
Zoning	Residential (Palmas del Mar Dev. Master Plan)
Topography	Level, below street grade
Flood Zone Classification	Zone "C"; minimal flood hazard
Ocean/Beach Frontage	None
Highest and Best Use	High-end residential
Comments	The seller indicated that $6,400,000 is the minimum sale price of this property. The seller will receive a percentage of the profit of the sales of the units as agreed between the buyer and the seller in a profit schedule retained in their agreement. The seller estimated final unit price to be approximately $300 per square meter.

Summary of Comparable Land Sales

Comparable Sale No.	Sale Date	Land Area Querdas	Sale Price/Cuerda	Zoning Approvals
1	10/00	33.94	$100,546	None
2	5/00	5.70	$118,600	None
3	2/02	8.36	$168,660	None
4	3/01	20.45	$266,245	R-O (low density residential)
5	1/01	16.74	$388,180	R-O (low density residential)
6	8/02	14.94	$328,916	Palmas Del Mar Resort Residential—Tourist
7	7/01	17.00	$639,706	Palmas Del Mar Resort Residential – Tourist
8	2/02	7.00	$1,179,188	Palmas Del Mar Resort Residential – Tourist

High	**$1,179,118**
Low	**$100,546**
Mean	**$398,746**

Analysis and Conclusion

The eight (8) comparable land sales indicated are unadjusted sale price range from approximately $100,000 to over $1,000,000 per cuerda, an extremely wide range. Comparable Sales No. 1, 2 and 3 represent the very low-end of the range at $100,546, $118,600 and $168,660 per cuarda respectively. These parcels are not located on the ocean and have not been approved for any type of developments.

Comparable Sales No. 4, 5 and 6 represent the middle of the range at $266,245, $388,180 and $328,916 respectively. These parcels are not located on the ocean, they are located within resort subdivisions and they have been approved for low-density residential developments.

Comparable Sales No. 7 and 8 represent the high-end of the range at $639,706 and $1,179,118 respectively. These are oceanfront parcels approved for residential – Tourist developments.

The Juan Perez Parcel features two kilometers of wide, white, sandy beaches along the Atlantic Ocean. The parcel is zoned for all sorts of tourism, recreational and commercial uses and there are antique uses rights, which grant the rights for a "Private Beach". The subject property is located about five miles east of Metropolitan San Juan and the International Airport and all public services are at the property. Demand for Oceanfront land is excellent and the supply is limited, especially large parcels like the subject, zoned for tourism. Adjustments for size are offset by differences in zoning, oceanfront location, supply and demand, etc. Based upon all of this market data, consultations and analysis and considering all of the subject's

physical characteristics and locational attributes, which have a positive effect on market value, it is our opinion that the subject Real Property (Land) has a market value "As Is" of $400,000 per cuerda or ($400,000 x 850) $340,000,000. This is equivalent to $411,900 per acre.

Three Hundred Forty Million Dollars
$340,000,000

SAND VALUATION

In order to estimate the market value of the subject sand, Global Valuation has reviewed the most recent U.S. Geological Surveys for the production of sand and gravel in the United States of America and the Commonwealth of Puerto Rico.

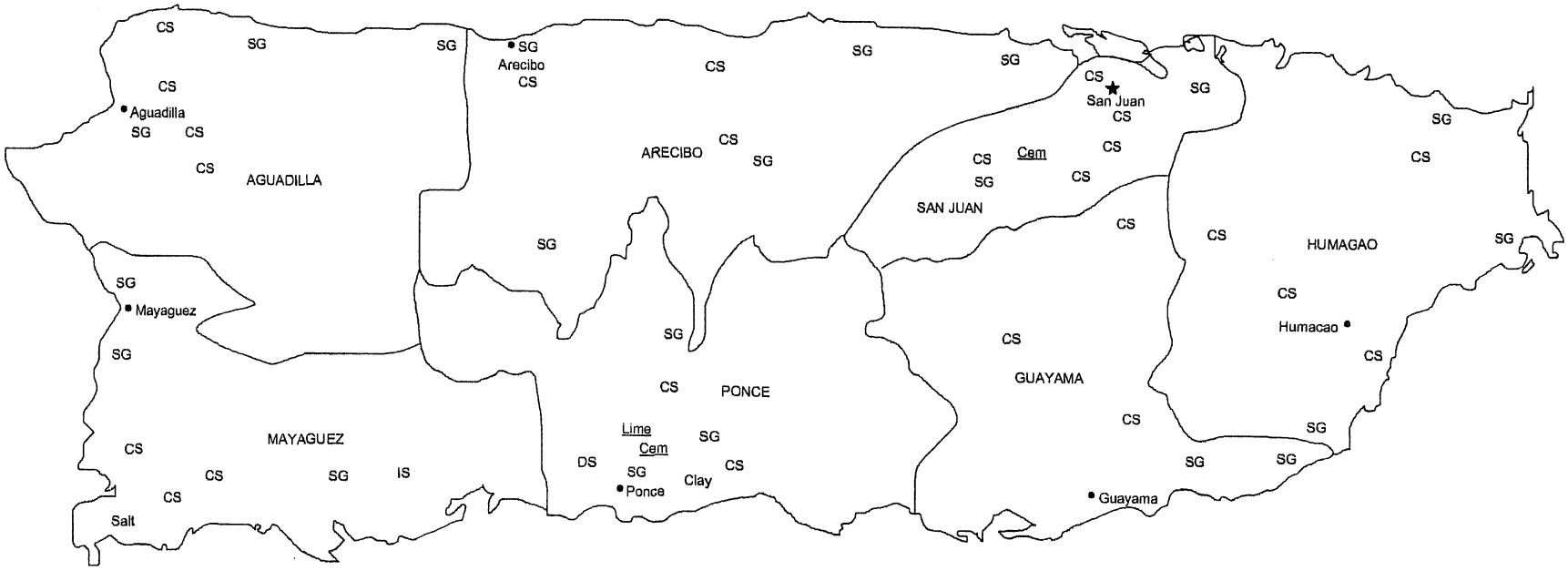
According to the U.S. Geological Survey (USGS), years of sand mining from beaches and dunes have caused serious erosion, flooding, and storm damage problems for coastal Puerto Rico. Sand is necessary for the construction industry and also is important for beach – replenishment projects. Available onshore sources of sand in Puerto Rico are depleting rapidly. Because the cost of transporting sand is high, Puerto Rico is looking for offshore deposits to fill the demand. The subject sand deposit "Islote de Juan Perez" is located offshore; accordingly, demand for the subject sand is excellent.

The USGS indicates that the 2001 production of non-fuel raw minerals was 186 million dollars. Combined sand and gravel (industrial), stone and other crushed stone minerals produced in 2001 was 132 million dollars. A summary of the Mineral Industry of Puerto Rico and the Administered Islands publications for the last 10 years begins on the next page followed by the Income Capitalization Approach valuation of the subject sand deposits.

Non-Fuel Raw Mineral
Puerto Rico USA

Year	Combination Value of Sand and Gravel Production
2001	132,000
2000	143,000
1999	178,000
1998	156,000
1997	158,000
1996	153,000
1995	146,000
1994	128,000
1993	125,582
1992	123,887

PUERTO RICO



LEGEND **MINERAL SYMBOLS** **(Major producing areas)**

———	District boundary	Cem	Cement plant	Lime	Lime plant
★	Capital	Clay	Common clay	Salt	Salt
•	City	CS	Crushed stone	SG	Construction sand and gravel
		DS	Dimension stone		
		IS	Industrial sand		

0 100 Kilometers

Source: Department of Natural Resources, Commonwealth of Puerto Rico/U.S. Geological Survey (2001)

THE MINERAL INDUSTRY OF PUERTO RICO AND THE ADMINISTERED ISLANDS

This chapter has been prepared under a Memorandum of Understanding between the U.S. Geological Survey and the Department of Natural Resources, Bureau of Geology, Commonwealth of Puerto Rico, for collecting information on all nonfuel minerals.

In 2001, the estimated value[1] of nonfuel raw mineral production for Puerto Rico[2] was $186 million, based upon preliminary U.S. Geological Survey (USGS) data. If ranked in comparison with the 50 States, Puerto Rico would rank 40th in total nonfuel mineral production value. Portland cement, by value, continued to be the Commonwealth's leading nonfuel mineral commodity, followed by crushed stone. Construction sand and gravel was produced in Puerto Rico, but production data are not available. The collection and compilation of production data for construction sand and gravel were discontinued in 1973 by the U.S. Bureau of Mines (the Federal Government agency then responsible for collecting domestic raw nonfuel mineral production data) because of a low rate of response to surveys by the industry (Sikich and Alonso, 1993). The data for dimension stone, as well as for industrial sand and gravel, were withheld to protect company proprietary data.

Metals have not been mined in Puerto Rico since the Juncos iron mine closed in 1953; prospects for resuming metal mining in the near future do not appear to be likely. However, metal occurrences are common on the island, and the possibility of developing a metal deposit should not be completely discounted (Sikich and Alonso, 1993).

Of the U.S. Administered Islands, only American Samoa and Guam have reported nonfuel mineral production data, and these have been limited to crushed stone. American Samoa's data have been withheld to protect company proprietary data (table 1).

[1]The terms "nonfuel mineral production" and related "values" encompass variations in meaning, depending upon the minerals or mineral products. Production may be measured by mine shipments, mineral commodity sales, or marketable production (including consumption by producers) as is applicable to the individual mineral commodity.

All 2001 USGS mineral production data published in this chapter are preliminary estimates as of August 2002 and are expected to change. For some mineral commodities, such as construction sand and gravel, crushed stone, and portland cement, estimates are updated periodically. To obtain the most current information, please contact the appropriate USGS mineral commodity specialist. Specialist contact information may be retrieved over the Internet at URL http://minerals.usgs.gov/minerals/contacts/comdir.html; alternatively, specialists' names and telephone numbers may be obtained by calling USGS information at (703) 648-4000 or by calling the USGS Earth Science Information Center at 1-888-ASK-USGS (275-8747). All Mineral Industry Surveys—mineral commodity, State, and country—also may be retrieved over the Internet at URL http://minerals.usgs.gov/minerals.

[2]While a Memorandum of Understanding (MOU) was officially made between the U.S. Geological Survey (USGS) and the Commonwealth of Puerto Rico, MOUs were not established with the Commonwealth of the Northern Mariana Islands, U.S. Caribbean and Pacific Island Possessions, or the U.S. Trust Territory of the Pacific Islands. Nevertheless, data on nonfuel mineral production were reported to the USGS for the island of Guam of the Pacific Island Possessions. These data appear in table 1.

Reference Cited

Sikich, S.W., and Alonso, R.M., 1993, The mineral industries of Puerto Rico, Northern Marianas, Island Possessions, and Trust Territory: U.S. Bureau of Mines Minerals Yearbook 1992, v. II, p. 467-470.

TABLE 1
NONFUEL RAW MINERAL PRODUCTION IN THE COMMONWEALTH OF PUERTO RICO AND ISLANDS ADMINISTERED BY THE UNITED STATES 1/ 2/

(Thousand metric tons and thousand dollars unless otherwise specified)

Mineral		1999		2000		2001 p/	
		Quantity	Value	Quantity	Value	Quantity	Value
Puerto Rico:							
Cement, portland	metric tons	W	W	1,660 e/	W	1,540 e/	W
Clays, common		159	W	141	458	144	458
Lime		27	3,770	16	2,750	15	1,000
Salt		45	1,500	45	1,500	45	1,500
Stone, crushed		13,200	56,800	10,800	51,000	10,800	51,000
Combined values of sand and gravel (industrial), stone (dimension marble), and values indicated by symbol W		XX	178,000	XX	143,000 r/	XX	132,000
Total		XX	240,000	XX	199,000 r/	XX	186,000
Administered Islands:							
American Samoa, stone, crushed		W	(3/)	--	--	--	--
Guam, stone, crushed		1,740	11,800	121	856	121	856
Virgin Islands, stone, crushed limestone and traprock		W	(3/)	W	(3/)	W	(3/)
Total		XX	11,800	XX	856	XX	856

e/ Estimated. p/ Preliminary. W Withheld to avoid disclosing company proprietary data; value included with "Combined values" data. XX Not applicable. -- Zero.

1/ Production as measured by mine shipments, sales, or marketable production (including consumption by producers).

2/ Data are rounded to three significant digits; may not add to totals shown.

3/ Withheld to avoid disclosing company proprietary data.

THE MINERAL INDUSTRY OF PUERTO RICO AND THE ADMINISTERED ISLANDS

This chapter has been prepared under a Memorandum of Understanding between the U.S. Geological Survey and the Department of Natural Resources, Bureau of Geology, for collecting information on all nonfuel minerals.

In 2000, the estimated value[1] of nonfuel mineral production for Puerto Rico[2] was $159 million, based upon preliminary U.S. Geological Survey (USGS) data. If ranked in comparison with the 50 States, Puerto Rico would rank 42d in total nonfuel mineral production value. Portland cement, by value, was the Commonwealth's leading nonfuel mineral commodity. Crushed stone for many years has been the second leading mineral and most likely continues as such, but the USGS has no comprehensive data owing to a low response rate to its crushed stone canvasses. Therefore, no preliminary estimate has been made for 2000. Construction sand and gravel was produced in Puerto Rico, but production data are not available. The collection and compilation of production data for construction sand and gravel were discontinued in 1973 by the U.S. Bureau of Mines (the Federal Government agency then responsible for collecting domestic raw nonfuel mineral production data) because of a low rate of response to surveys by the industry (Sikich and Alonso, 1993). The data for dimension stone, as well as for industrial sand and gravel, were withheld to protect company proprietary data.

Metals have not been mined in Puerto Rico since the Juncos iron mine closed in 1953; prospects for resuming metal mining in the near future do not appear to be likely. However, metal occurrences are common on the island, and the possibility of developing a metal deposit should not be completely discounted (Sikich and Alonso, 1993).

Of the U.S. Administered Islands, Guam is the only one from which nonfuel mineral production has been reported, and this has been limited to crushed stone. Owing to a low response rate, no preliminary data are available for 2000.

[1]The terms "nonfuel mineral production" and related "values" encompass variations in meaning, depending upon the minerals or mineral products. Production may be measured by mine shipments, mineral commodity sales, or marketable production (including consumption by producers) as is applicable to the individual mineral commodity.

All 2000 USGS mineral production data published in this chapter are preliminary estimates as of July 2001 and are expected to change. For some mineral commodities, such as construction sand and gravel, crushed stone, and portland cement, estimates are updated periodically. To obtain the most current information, please contact the appropriate USGS mineral commodity specialist. A telephone listing of the specialists may be retrieved over the Internet at URL http://minerals.usgs.gov/minerals/contacts/comdir.html, by using MINES FaxBack at (703) 648-4999 from a fax machine with a touch-tone handset (request Document #1000 for a telephone listing of all mineral commodity specialists), or by calling USGS information at (703) 648-4000 for the specialist's name and number. All Mineral Industry Surveys—mineral commodity, State, and country—also may be retrieved over the Internet at URL http://minerals.usgs.gov/minerals; facsimile copies may be obtained from MINES FaxBack.

[2]While a Memorandum of Understanding (MOU) was officially made between the U.S. Geological Survey (USGS) and the Commonwealth of Puerto Rico, MOUs were not established with the Commonwealth of the Northern Mariana Islands, U.S. Caribbean and Pacific Island Possessions, or the U.S. Trust Territory of the Pacific Islands. Nevertheless, data on nonfuel mineral production were reported to the USGS for the island of Guam of the Pacific Island Possessions. These data appear in table 1.

Reference Cited

Sikich, S.W., and Alonso, R.M., 1993, The mineral industries of Puerto Rico, Northern Marianas, Island Possessions, and Trust Territory: U.S. Bureau of Mines Minerals Yearbook 1992, v. II, p. 467-470.

TABLE 1
NONFUEL RAW MINERAL PRODUCTION IN THE COMMONWEALTH OF PUERTO RICO
AND ISLANDS ADMINISTERED BY THE UNITED STATES 1/ 2/

(Thousand metric tons and thousand dollars unless otherwise specified)

Mineral	1998		1999		2000 p/	
	Quantity	Value	Quantity	Value	Quantity	Value
Puerto Rico:						
Cement, portland metric tons	1,590	W	W	W	1,600	W
Clays, common	W	W	159	W	139	W
Lime	37	4,800	27	3,770	25	3,500
Salt	45	1,500	45	1,500	45	1,500
Stone, crushed	12,700	58,600	13,200	56,800	NA	NA
Combined value of sand and gravel (industrial), stone (dimension marble), and values indicated by symbol W	XX	156,000	XX	178,000	XX	154,000
Total	XX	221,000	XX	240,000	XX	159,000
Administered Islands:						
Guam: Stone, crushed	1,850	14,100	1,740	11,800	NA	NA
Combined values of American Samoa {stone [crushed (1998-99)]} and Virgin Islands {stone [crushed limestone and traprock (1998-99)]}	XX	(3/)	XX	(3/)	NA	NA
Total	XX	14,100	XX	11,800	XX	NA

p/ Preliminary. NA Not available. W Withheld to avoid disclosing company proprietary data; value included with "Combined values" data.
XX Not applicable.
1/ Production as measured by mine shipments, sales, or marketable production (including consumption by producers).
2/ Data are rounded to no more than three significant digits; may not add to totals shown.
3/ Withheld to avoid disclosing company proprietary data.

THE MINERAL INDUSTRY OF PUERTO RICO AND THE ADMINISTERED ISLANDS

This chapter has been prepared under a Memorandum of Understanding between the U.S. Geological Survey and the Department of Natural Resources, Bureau of Geology, for collecting information on all nonfuel minerals.

In 1999, the preliminary estimated value[1] of nonfuel mineral production for Puerto Rico[2] was $165 million, according to the U.S. Geological Survey (USGS). If ranked in comparison with the 50 States, Puerto Rico would rank 42d in total nonfuel mineral production value. Portland cement, by value, was the Commonwealth's leading nonfuel mineral commodity. Crushed stone for many years has been the second-leading mineral, and most likely continues as such, but the USGS has no comprehensive data owing to a low response rate to its crushed stone canvasses. Therefore, no preliminary estimate has been made for 1999. Construction sand and gravel is produced in Puerto Rico, but production data are not available. The collection and compilation of production data for construction sand and gravel were discontinued in 1973 by the U.S. Bureau of Mines (the Federal Government agency then responsible for collecting domestic raw nonfuel mineral production data) because of a low rate of response to surveys by the industry (Sikich and Alonso, 1993, p. 469). The data for dimension stone, as well as for industrial sand and gravel, were withheld to protect company proprietary data.

Metals have not been mined in Puerto Rico since the Juncos iron mine closed in 1953; prospects for resuming metal mining in the near future do not appear to be likely. However, metal occurrences are common on the island and the possibility of developing a metal deposit should not be completely discounted (Sikich and Alonso, 1993).

Of the U.S. Administered Islands, Guam is the only one from which nonfuel mineral production has been reported and this has been limited to crushed stone. Owing to a low response rate, no preliminary data are available for 1999.

[1]The terms "nonfuel mineral production" and related "values" encompass variations in meaning, depending upon the minerals or mineral products. Production may be measured by mine shipments, mineral commodity sales, or marketable production (including consumption by producers) as is applicable to the individual mineral commodity.

All 1999 USGS mineral production data published in this chapter are preliminary estimates as of May 2000, and are expected to change. For some mineral commodities, such as, construction sand and gravel, crushed stone, and portland cement, estimates are updated periodically. To obtain the most current information, please contact the appropriate USGS mineral commodity specialist. A telephone listing for the specialists may be retrieved over the Internet at URL http://minerals.usgs.gov/minerals/contacts/comdir.html, by using MINES FaxBack at (703) 648-4999 from a fax machine with a touch-tone handset (request Document #1000 for a telephone listing of all mineral commodity specialists), or by calling USGS information at (703) 648-4000 for the specialist's name and number. All Mineral Industry Surveys–mineral commodity, State, and country–also may be retrieved over the Internet at URL http://minerals.usgs.gov/minerals; facsimile copies may be obtained from MINES FaxBack.

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TABLE 1
NONFUEL RAW MINERAL PRODUCTION IN THE COMMONWEALTH OF PUERTO RICO AND ISLANDS ADMINISTERED BY THE UNITED STATES 1/ 2/

(Thousand metric tons and thousand dollars unless otherwise specified)

Mineral		1997 Quantity	1997 Value	1998 Quantity	1998 Value	1999 p/ Quantity	1999 p/ Value
Puerto Rico:							
Cement: Portland	metric tons	W	(3/)	1,590	W	1,630	W
Clays: Common		W	363	W	W	W	W
Lime		32	4,580	37	4,800	35	4,530
Salt		45	1,500	45	1,500	45	1,500
Stone: Crushed		14,000	71,300	12,700	58,600	NA	NA
Combined value of other industrial minerals		XX	(3/)	XX	156,000	XX	159,000
Total		XX	77,700 4/	XX	221,000	XX	165,000
Administered Islands:							
Guam: Stone: Crushed		1,760	10,500	1,850	14,100	NA	NA

p/ Preliminary. NA Not available. W Withheld to avoid disclosing company proprietary data; value included with "Combined values" data. XX Not applicable.

1/ Production as measured by mine shipments, sales, or marketable production (including consumption by producers).

2/ Data are rounded to no more than three significant digits; may not add to totals shown.

3/ Withheld to avoid disclosing company proprietary data.

4/ Total does not include value of items withheld.

THE MINERAL INDUSTRY OF PUERTO RICO AND THE ADMINISTERED ISLANDS

This chapter has been prepared under a Memorandum of Understanding between the U.S. Geological Survey and the Department of Natural Resources, Bureau of Geology, for collecting information on all nonfuel minerals.

In 1998, the preliminary estimated value[1] of nonfuel mineral production for Puerto Rico[2] was $252 million, according to the U.S. Geological Survey (USGS). If ranked in comparison with the 50 States, Puerto Rico would rank 39th in total nonfuel mineral production value. Portland cement and crushed stone, by value, were the Commonwealth's leading nonfuel mineral commodities. Of the U.S. Administered Islands, Guam is the only one from which nonfuel mineral production has recently been reported to the USGS; reported production has been limited to that from crushed stone companies (table 1).

In 1998, portland cement accounted for the largest share of Puerto Rico's increase in nonfuel mineral value; all other nonfuel minerals increased in value except industrial sand and gravel and salt, which were unchanged. No dimension marble was produced in Puerto Rico in 1997, but production resumed in 1998. The data for dimension stone, as well as for industrial sand and gravel, are withheld to protect company proprietary data. In 1997, crushed stone followed by portland cement accounted for most of the increase in the Commonwealth's nonfuel mineral value.

Construction sand and gravel is produced in Puerto Rico, but production data do not appear in table 1. The collection and compilation of production data for construction sand and gravel mined in the Commonwealth were discontinued in 1973 by the U.S. Bureau of Mines (the Federal Government agency then responsible for the collection of domestic raw nonfuel mineral production data). This data collection ceased because of low rate of response by the industry (Sikich and Alonso, 1993, p. 469).

Metals have not been mined in Puerto Rico since the Juncos iron mine closed in 1953; prospects for resuming metal mining in the near future do not appear to be likely. However, as noted in a publication of the former U.S. Bureau of Mines, metal occurrences are common on the island and the possibility of developing a metal deposit should not be completely discounted (Sikich and Alonso, 1993).

The U.S. Geological Survey will release Open File Report 98-38 on CD-ROM in 2000. The publication is entitled *Geology, Geochemistry, Geophysics, Mineral Occurrences and Mineral Resource Assessment for the Commonwealth of Puerto Rico*. The data were compiled by W.J. Bawiec (U.S. Geological Survey, oral commun., 2000).

[1]The terms "nonfuel mineral production" and related "values" encompass variations in meaning, depending on the minerals or mineral products. Production may be measured by mine shipments, mineral commodity sales, or marketable production (including consumption by producers) as is applicable to the individual mineral commodity.

All 1998 USGS mineral production data published in this chapter are preliminary estimates as of February 1999 and are expected to change. Crushed stone and portland cement estimates are updated periodically. To obtain the most current information, please contact the appropriate USGS mineral commodity specialist. A telephone listing for the specialists may be retrieved over the Internet at http://minerals.usgs.gov/minerals/contacts/comdir.html; by using MINES FaxBack at (703) 648-4999 from a fax machine with a touch-tone handset (request Document #1000 for a telephone listing of all mineral commodity specialists); or by calling USGS information at (703) 648-4000 for the specialist's name and number. All Mineral Industry Surveys—mineral commodity, State, and country—also may be retrieved over the Internet at http://minerals.usgs.gov/minerals; facsimile copies may be obtained from MINES FaxBack.

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Reference Cited

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TABLE 1
NONFUEL RAW MINERAL PRODUCTION IN THE COMMONWEALTH OF PUERTO RICO
AND ISLANDS ADMINISTERED BY THE UNITED STATES 1/ 2/

(Thousand metric tons and thousand dollars unless otherwise specified)

Mineral		1996		1997		1998 p/	
		Quantity	Value	Quantity	Value	Quantity	Value
Puerto Rico:							
Cement: Portland	metric tons	1,550	W	W	W	1,730	W
Clays: Common		W	W	W	363	W	W
Lime		38	5,050	32	4,580	34	4,600
Salt		45	1,500	45	1,500	45	1,500
Stone: Crushed		13,200	52,500	14,000	71,300	14,500	72,000
Combined value of other industrial minerals		XX	153,000	XX	(3/)	XX	174,000
Total		XX	212,000	XX	77,700 4/	XX	252,000
Administered Islands, Guam: Stone, crushed		1,660	13,800	1,760	10,500	1,800	11,000

p/ Preliminary. W Withheld to avoid disclosing company proprietary data; value included with "Combined value" data.
XX Not applicable.
1/ Production as measured by mine shipments, sales, or marketable production (including consumption by producers).
2/ Data are rounded to three significant digits; may not add to totals shown.
3/ Withheld to avoid disclosing company proprietary data.
4/ Total does not include values of items withheld.

THE MINERAL INDUSTRY OF PUERTO RICO AND THE ADMINISTERED ISLANDS

This chapter has been prepared under a Memorandum of Understanding between the U.S. Geological Survey and the Department of Natural Resources, Commonwealth of Puerto Rico, for collecting information on all nonfuel minerals.

In 1997, the estimated value[1] of nonfuel mineral commodities produced in Puerto Rico[2] was $217 million, according to the U.S. Geological Survey (USGS). Portland cement and crushed stone by value were the Commonwealth's leading nonfuel mineral commodities. If ranked in comparison with the 50 States, Puerto Rico would rank 39th in total nonfuel mineral production value. Of the U.S. Administered Islands, only crushed stone companies from the island of Guam have of late reported raw mineral production to the USGS. In 1997, portland cement, common clays, and lime values increased; industrial sand and gravel dropped in value. All other nonfuel minerals remained the same. In 1996, the major cause of the drop in Puerto Rico's nonfuel mineral value was a $54.5 million decrease in the value of crushed stone (*table 1*).

Construction sand and gravel is produced on Puerto Rico, but production data do not appear in table 1. The collection and compilation of production data for construction sand and gravel mined in the Commonwealth was discontinued in 1973 by the U.S. Bureau of Mines (the Federal Government agency then responsible for the collection of domestic raw nonfuel mineral production data). This data collection ceased because of low level response by the industry (Sikich and Alonso, 1993). Regarding the U.S. Administered Islands, companies only from the Pacific Island Possessions of Guam and American Samoa have reported production to the USGS during the last several years (*table 1*).

A team of scientists from the U. S. Department of the Interior's Minerals Management Service (MMS) learned that the Commonwealth of Puerto Rico is running out of land-based sand and gravel resources and is moving towards a crisis situation for construction aggregate supplies. Island officials estimated that land-based deposits will be exhausted by the year 2000 (People, Land, and Water, 1997-98).

The Commonwealth is currently permitting sand and gravel extraction from coastal sand dunes and parts of beaches. Alternative sources include dredging offshore deposits, manufacturing sand from crushed rock, and importing aggregates from other islands.

Because of MMS's offshore mineral expertise, the Puerto Rico Department of Natural and Environmental Resources (DNER) officially requested that the Service review the island's sand and gravel supply situation, assess the feasibility of developing the island's offshore sand resources for construction aggregate materials, and recommend environmental studies to assess potential adverse impacts on the environment should the Commonwealth decide to proceed with offshore mineral development.

MMS subsequently prepared a report which details recommendations on how best to proceed with leasing and development of three of the island's largest offshore sand deposits. The report focused on physical oceanographic and biologic studies needed to assess the environmental consequences associated with the mining of the deposits, including cost estimates and length of time to complete.

The costs of such studies would be borne by the Government of Puerto Rico. However, MMS expressed its willingness to serve as a consultant to the island's DNER and to help in contracting for the recommended studies. Commonwealth officials are currently reviewing the MMS report and evaluating the options for mining the island's offshore sand and gravel deposits.

Metals have not been mined in Puerto Rico since the Juncos iron mine closed in 1953; prospects for resuming metal mining in the near future do not appear to be likely. However, as noted in a publication of the former U.S. Bureau of Mines regarding the Commonwealth of Puerto Rico, metal occurrences are common on the island and the possibility of future development of an economic metal deposit should not be completely discounted.

References Cited

Sikich, S. W., and Alonso, R. M., 1993, The Mineral Industries of Puerto Rico, Northern Marianas, Island Possessions, and Trust Territory: U. S. Bureau of Mines Minerals Yearbook 1992, v. 2, p. 467-468 and 470.

People, Land, and Water, 1997, Working With America: Evaluating Puerto Rico's Sand and Gravel Resources, The U.S. Department of the Interior, December 1997-January 1998, p. 25.

[1]The terms "nonfuel mineral production" and related "values" encompass variations in meaning, depending on the minerals or mineral products. Production may be measured by mine shipments, mineral commodity sales, or marketable production (including consumption by producers) as is applicable to the individual mineral commodity. All 1997 USGS mineral production data published in this chapter are estimates as of January 1998. Crushed stone and portland cement estimates are updated periodically. To obtain the most current information, please contact the appropriate USGS mineral commodity specialist. Call MINES FaxBack at (703) 648-4999 from a fax machine with a touch-tone handset, and request Document # 1000 for a telephone listing of all mineral commodity specialists, or call USGS information at (703) 648-4000 for the specialist's name and number. This telephone listing may also be retrieved over the Internet at http://minerals.er.usgs.gov/minerals/contacts/comdir.html . All Mineral Industry Surveys–mineral commodity, State, and country–also may be retrieved by way of MINES FaxBack or over the Internet at http://minerals.er.usgs.gov/minerals/.

[2]While a memorandum of understanding (MOU) was officially made between the U.S. Geological Survey (USGS) and the Commonwealth of Puerto Rico, MOU's were not established with the Commonwealth of the Northern Mariana Islands, U.S. Caribbean and Pacific Island Possessions, or the U.S. Trust Territory of the Pacific Islands. Nevertheless, data on nonfuel mineral production were reported to the USGS for the islands of American Samoa and Guam of the Pacific Island Possessions. These data appear in table 1.

TABLE 1
NONFUEL RAW MINERAL PRODUCTION IN THE COMMONWEALTH OF PUERTO RICO AND ISLANDS ADMINISTERED BY THE UNITED STATES 1/ 2/

(Thousand metric tons and thousand dollars unless otherwise specified)

Mineral	1995		1996		1997 p/	
	Quantity	Value	Quantity	Value	Quantity	Value
Puerto Rico:						
Cement, portland	1,410	W	1,550	W	1,580	W
Lime	23	2,970	38	5,050	38	5,080
Salt	–	–	45	1,500	45	1,500
Stone, crushed	15,300	107,000	13,200	52,500	13,200	52,500
Combined value of clays (common), sand and gravel (industrial), stone (dimension marble), and values indicated by symbol W	XX	146,000	XX	153,000	XX	158,000
Total	XX	256,000	XX	212,000	XX	217,000
Administered Islands:						
American Samoa: Stone, crushed	(3/)	(3/)	–	–	–	–
Guam: Stone, crushed	2,060	17,400	1,660	13,800	1,600	13,800
Total 4/	XX	17,400	XX	13,800	XX	13,800

p/ Preliminary. W Withheld to avoid disclosing company proprietary data; value included with "Combined value" data. XX Not applicable.
1/ Production as measured by mine shipments, sales, or marketable production (including consumption by producers).
2/ Data are rounded to three significant digits; may not add to totals shown.
3/ Withheld to avoid disclosing company proprietary data.
4/ Total does not include values of items withheld.

THE MINERAL INDUSTRY OF PUERTO RICO AND THE ADMINISTERED ISLANDS

This chapter has been prepared under a Memorandum of Understanding between the U.S. Bureau of Mines, U.S. Department of the Interior, and the Department of Natural Resources, Commonwealth of Puerto Rico, for collecting information on all nonfuel minerals.

In 1996, the estimated value[1] of nonfuel mineral commodities produced in Puerto Rico was $109 million, according to the U.S. Geological Survey (USGS). Data have been withheld for portland cement, industrial sand and gravel, dimension stone, and common clays (in descending order of value) to protect company proprietary data. Consequently, a comparison of Puerto Rico's total nonfuel mineral values from year to year *(see table 1)* would not be truly representative of changes occurring in the Commonwealth's nonfuel mineral economy. Portland cement and crushed stone by value were the island's leading nonfuel mineral commodities.

If ranked in comparison with the 50 States, Puerto Rico would rank 37th if the four withheld commodities were included in the Commonwealth's total nonfuel mineral value. If based on table 1, it would rank approximately 44th. In 1996, the value of portland cement increased by more than 7% above that of 1995. Nonfuel minerals whose values decreased by small amounts in 1996 included lime and industrial sand and gravel. Crushed stone, common clay, and dimension stone values were estimated to remain virtually the same in 1996 as in 1995. While crushed stone values for American Samoa and Guam remained virtually the same (data withheld for both) from 1995 to 1996, those for the Virgin Islands increased slightly.

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[1]The terms "nonfuel mineral production" and related "values" encompass variations in meaning, depending on the minerals or mineral products. Production may be measured by mine shipments, mineral commodity sales, or marketable production (including consumption by producers) as is applicable to the individual mineral commodity.

All 1996 USGS mineral production data published in this chapter are estimates as of February 1997. The rushed stone estimate is updated periodically. To obtain the most current information, please contact the appropriate USGS mineral commodity specialist. Call MINES FaxBack at (703) 648-4999 from a fax machine with a touch-tone handset, and request Document # 1000 for a telephone listing of all mineral commodity specialists, or call USGS information at (703) 648-4000 for the specialist's name and number. This telephone listing may also be retrieved over the Internet at http://minerals.er.usgs.gov/minerals/contacts/comdir.html

TABLE 1
NONFUEL RAW MINERAL PRODUCTION IN THE COMMONWEALTH OF PUERTO RICO AND ISLANDS ADMINISTERED BY THE UNITED STATES 1/ 2/

(Thousand metric tons and thousand dollars unless otherwise specified)

	1994		1995		1996 p/	
Mineral	Quantity	Value	Quantity	Value	Quantity	Value
Puerto Rico:						
Cement (portland)	W	W	–	–	1,520	W
Clays	119	338	W	W	W	W
Lime	23	2,970	23	2,970	16	2,090
Stone (crushed)	10,500	78,400	15,300	107,000	15,300	107,000
Total 3/	XX	81,700	XX	110,000	XX	109,000
Administered Islands:						
American Samoa: Stone (crushed)	84	W	W	W	W	W
Guam: Stone (crushed)	2,150	12,700	2,060	17,400	2,100	17,400
Total 3/	XX	12,700	XX	17,400	XX	17,400

p/ Preliminary. W Withheld to avoid disclosing company proprietary data; not included in "Total." XX Not applicable.
1/ Production as measured by mine shipments, sales, or marketable production (including consumption by producers).
2/ Data are rounded to three significant digits; may not add to totals shown.
3/ Total does not include values of items withheld.

THE MINERAL INDUSTRY OF PUERTO RICO AND THE ADMINISTERED ISLANDS

This chapter has been prepared under a Memorandum of Understanding between the U.S. Bureau of Mines, U.S. Department of the Interior, and the Department of Natural Resources, Commonwealth of Puerto Rico, for collecting information on all nonfuel minerals.

In 1995, the estimated value[1] of nonfuel mineral commodities produced in Puerto Rico was $85 million, according to the U.S. Geological Survey (USGS). Data have been withheld for portland cement and industrial sand and gravel to protect company proprietary data. Consequently, a comparison of the State's total nonfuel mineral values from year to year (see table 1) would not be truly representative of changes occurring in the Commonwealth's nonfuel mineral economy. Portland cement and crushed stone by value were the island's leading nonfuel mineral commodities, accounting for the large majority of the reported total for Puerto Rico. If ranked in comparison with the 50 United States, Puerto Rico would rank 43d based on table 1 or close to 39th if portland cement and industrial sand and gravel were included in the State's total nonfuel mineral value. Compared with 1994, the mineral commodity values for crushed stone, lime, industrial sand and gravel, and common clays increased for Puerto Rico. The value of portland cement decreased slightly. Crushed stone values for American Samoa, Guam, and the Virgin Islands (data withheld) increased.

Based on USGS estimates of the quantities of nonfuel mineral commodities produced on all of the aforementioned islands, production increased for all except portland cement and industrial sand and gravel in Puerto Rico.

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[1]The terms "nonfuel mineral production" and related "values" encompass variations in meaning, depending on the minerals or mineral products. Production may be measured by mine shipments, mineral commodity sales, or marketable production (including consumption by producers) as is applicable to the individual mineral commodity.

All 1995 USGS mineral production data are estimates as of Dec. 1995. Crushed stone and portland cement estimates are updated periodically. To obtain the most current information, please contact the appropriate USGS mineral commodity specialist. Call MINES FaxBack at (703) 648-4999 from a fax machine with a touch-tone handset and request Document No. 1000 for a telephone listing of all mineral commodity specialists or call USGS information at (703) 648-4000 for the specialist's name and number.

TABLE 1

NONFUEL RAW MINERAL PRODUCTION[1 2] IN THE COMMONWEALTH OF PUERTO RICO AND ISLANDS ADMINISTERED BY THE UNITED STATES

Mineral		1993		1994		1995[p]	
		Quantity	Value (thousands)	Quantity	Value (thousands)	Quantity	Value (thousands)
PUERTO RICO							
Cement (portland)	metric tons	1,310,000	$72,600	W	W	W	W
Clays	thousand metric tons	155	508	119	$338	140	$370
Lime	do.	—	—	23	2,970	27	3,650
Sand and gravel (industrial)	metric tons	[e]58,000	[e]1,400	W	W	W	W
Stone (crushed)	thousand metric tons	7,850	51,100	10,500	78,400	10,900	80,800
Total		XX	126,000	XX	[3]81,700	XX	[3]84,800
ADMINISTERED ISLANDS							
American Samoa:							
Stone (crushed)	thousand metric tons	83	W	84	W	90	W
Guam: Stone (crushed)	do.	1,370	15,100	2,150	12,700	2,200	13,100
Total[3]		XX	15,100	XX	12,700	XX	13,100

[e]Estimated. [p]Preliminary. W Withheld to avoid disclosing company proprietary data; not included in "Total." XX Not applicable.
[1]Production as measured by mine shipments, sales, or marketable production (including consumption by producers).
[2]Data are rounded to three significant digits; may not add to totals shown.
[3]Total does not include values of items withheld.

THE MINERAL INDUSTRY OF PUERTO RICO

This chapter has been prepared under a Memorandum of Understanding between the U.S. Bureau of Mines, U.S. Department of the Interior, and the Department of Natural Resources, Commonwealth of Puerto Rico, for collecting information on all nonfuel minerals.

In 1994, the estimated value[2] of nonfuel mineral commodities produced in Puerto Rico was $128 million, a 2% increase as compared with that of 1993, according to the U.S. Bureau of Mines (USBM). This followed a 1.5% increase in value from 1992 to 1993. The combined values of portland cement and crushed stone, the island's leading and second-leading mineral commodities, accounted for almost 97% of the reported total for Puerto Rico. The estimated value of construction sand and gravel, traditionally the third-leading mineral commodity on the island, was not available, also not having been included with data of either of the previous 2 years. In addition, the value of another important mineral commodity, industrial sand, was withheld and not included in the reported value to protect proprietary data of the island's only industrial sand producer. Although these two minerals were not included in the island's total, the reported value of Puerto Rico's mineral production would place it 43d if ranked in a comparison with the 50 United States. Compared with that of 1993, the mineral commodity values for crushed stone, lime, and common clays increased. Decreases occurred for industrial sand and gravel.

Based on USBM estimates of the quantities of minerals produced in the United States and its Territories during 1994, production of portland cement, crushed stone, and lime increased in Puerto Rico while common clay production slightly decreased. Increases in the estimated production of crushed stone were also reported in 1994 for the U.S.-administered islands of American Samoa and Guam.

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[1]While a Memorandum of Understanding (MOU) was officially made between the U.S. Bureau of Mines (USBM) and the Commonwealth of Puerto Rico, MOU's were not established with the Commonwealth of the Northern Mariana Islands, U.S. Caribbean and Pacific Island Possessions, nor the U.S. Trust Territory of the Pacific Islands. Nevertheless, data on nonfuel mineral production was reported to the USBM for the islands of American Samoa and Guam of the Pacific Island Possessions. These data appear in table 1.

[2]The term value in this document refers to the monetary value of nonfuel minerals as represented by either mine shipments, mineral commodity sales, or marketable production as is applicable to the individual mineral commodities.

TABLE 1
NONFUEL RAW MINERAL PRODUCTION[1] IN THE COMMONWEALTH OF PUERTO RICO AND ISLANDS ADMINISTERED BY THE UNITED STATES

Mineral		1992		1993		1994[p]	
		Quantity	Value (thousands)	Quantity	Value (thousands)	Quantity	Value (thousands)
PUERTO RICO							
Cement (portland)	thousand metric tons	1,298	$119,643	1,310	$72,619	1,444	$72,600
Clays	do.	W	527	155	508	149	519
Lime	do.	27	3,717	—	—	25	3,830
Sand and gravel (industrial)	do.	W	W	58	1,396	W	W
Stone (crushed)	do.	NA	NA	7,845	51,059	[e]8,000	[e]51,000
Total		XX	[2]123,887	XX	125,582	XX	[2 3]128,000
ADMINISTERED ISLANDS							
American Samoa (crushed)	thousand metric tons	—	—	83	W	[e]100	W
Guam: Stone (crushed)	do.	—	—	1,373	15,095	[e]1,400	[e]15,100
Total		XX	—	XX	[2]15,095	XX	[2 3]15,100

[e]Estimated. NA Not available. W Withheld to avoid disclosing company proprietary data; not included in "Total." XX Not applicable.
[1]Production as measured by mine shipments, sales, or marketable production (including consumption by producers).
[2]Total does not include value of item withheld.
[3]Data do not add to total shown because of independent rounding.

TABLE 2

PUERTO RICO: CRUSHED STONE[1] SOLD OR USED BY PRODUCERS IN 1993, BY USE

Use	Quantity (thousand metric tons)	Value (thousands)	Unit value
Coarse aggregate (+1 1/2 inch): Riprap and jetty stone[2]	148	$1,162	$7.85
Coarse aggregate, graded:			
Concrete aggregate, coarse	825	5,448	6.60
Bituminous aggregate, coarse	3	21	7.00
Bituminous surface-treatment aggregate	53	312	5.89
Other graded coarse aggregate	50	355	7.10
Fine aggregate (-3/8 inch):			
Stone sand, concrete	243	1,894	7.79
Stone sand, bituminous mix or seal	372	2,325	6.25
Screening, undesignated	(3)	1	4.96
Other fine aggregate	82	547	6.67
Coarse and fine aggregates:			
Graded road base or subbase	66	364	5.52
Unpaved road surfacing	W	W	4.29
Terrazzo and exposed aggregate	31	271	8.74
Other construction materials	132	656	4.97
Roofing granules	W	W	7.02
Other miscellaneous uses:			
Other specified uses not listed[4]	1,221	6,150	5.04
Unspecified:[5]			
Actual	143	(6)	(6)
Estimated	4,476	32,730	7.31
Total[7]	7,845	51,059	6.51
Total[8 9]	8,648	51,059	5.90

W Withheld to avoid disclosing company proprietary data; included with "Other construction materials."
[1]Includes granite, limestone, marble, miscellaneous stone, sandstone, and volcanic cinder and scoria; excludes sandstone value from State total to avoid disclosing company proprietary data.
[2]Includes filter stone and macadam.
[3]Less than 1/2 unit.
[4]Includes poultry grit and mineral food, cement manufacture, and other fillers or extenders.
[5]Includes production reported without a breakdown by use and estimates for nonrespondents.
[6]Excludes sandstone value from State total to avoid disclosing company proprietary data.
[7]Data may not add to totals shown because of independent rounding.
[8]One short ton is equal to 907 kilograms or 2,000 pounds. To convert metric tons to short tons, divide metric tons by 0.907185.
[9]Total shown in thousand short tons and thousand dollars.

TABLE 3

PUERTO RICO: CRUSHED STONE SOLD OR USED, BY KIND

Kind	1991[1]				1993			
	Number of quarries	Quantity (thousand metric tons)	Value (thousands)	Unit value	Number of quarries	Quantity (thousand metric tons)	Value (thousands)	Unit value
Limestone	30	'r5,875	'r$35,740	'r$6.08	29	6,161	$41,195	$6.69
Marble	'r3	'r503	'r3,330	'r6.62	3	230	1,575	6.85
Granite	1	W	W	7.39	4	495	3,865	7.81
Sandstone and quartzite	'r5	'r462	'r2,582	'r5.59	3	W	([2])	([2])
Volcanic cinder and scoria	'r1	W	W	'r6.51	1	W	1,180	W
Miscellaneous stone	2	W	W	10.08	3	468	3,246	6.94
Total[3]	XX	'r8,008	49,839	6.22	XX	7,845	51,059	6.51
Total[4 5]	XX	'r8,827	49,839	5.65	XX	8,648	51,059	5.90

'rRevised. W Withheld to avoid disclosing company proprietary data; included with "Total." XX Not applicable.

[1]Includes "sandstone and quartzite," reported with no distinction between the two.

[2]Excludes sandstone value from State total to avoid disclosing company proprietary data.

[3]Data may not add to totals shown because of independent rounding.

[4]One short ton is equal to 907 kilograms or 2,000 pounds. To convert metric tons to short tons, divide metric tons by 0.907185.

[5]Total shown in thousand short tons and thousand dollars.

THE INCOME CAPITALIZATION APPROACH

Income-producing real estate is typically purchased as an investment, and from an investor's point of view earning power is the critical element affecting property value. One basic investment premise is that the higher the earnings, the higher the value. An investor who purchases income producing real estate is essentially trading present dollars for the right to receive future dollars. The income capitalization approach to value consists of methods, techniques, and mathematical procedures that an appraiser uses to analyze a property's capacity to generate benefits (i.e., usually the monetary benefits of income and reversion) and convert these benefits into an indication of present value.

The income capitalization approach is one of three internationally accepted approaches used in the valuation process. However, it is not an independent system of valuation that is unrelated to the other approaches. The valuation process as a whole is composed of integrated, interrelated, and inseparable techniques and procedures designed to produce a convincing and reliable estimate of market value.

Anticipation and Change

The principle of anticipation is fundamental to the approach. Because value is created by the expectation of benefits to be derived in the future, value may be defined as the present worth of all rights to these future benefits. All income capitalization methods, techniques, and procedures attempt to consider anticipated future benefits and estimate their present value. This may involve either forecasting the anticipated future income or selecting a capitalization rate that implicitly reflects the anticipated pattern of change in income over time.

The approach must also consider how change affects the value of income-producing properties. To provide sound value indications, investors' expectations of changes in income levels, the expenses required to ensure income, and probable increases or decreases in property value must be carefully addressed and forecast. The capitalization procedure used to value the property must reflect the fact that the actual change in income, expenses, and property values may be different than originally anticipated by investors at the time of the appraisal. The more uncertainty there is about how these variables will change, the riskier the property investment.

Future Benefits

The benefits of owning specific rights in income-producing real estate include the right to receive all profits accruing to the real property over the holding period (i.e., the term of ownership) plus the proceeds from resale or reversion of the property at the termination of the investment. Various measures of future benefits are considered in the income capitalization approach. Commonly used measures of future benefits for office buildings include rental rates, vacancy rates, operating expenses, net operating income and reversionary benefits.

Rates of Return

In applying the income capitalization approach, assumptions are made that the investor's ultimate objective is a total return that exceeds the amount invested. Therefore, the investor's expected return consists of 1) full recovery of the amount invested (i.e., the return of capital), and 2) a profit or reward (i.e., a return on capital). Many rates, or measures of return, can be used in capitalization.

All rates of return can be categorized as either income rates (also referred to as cash flow rates) or yield rates. The overall capitalization rate and equity capitalization rate are income rates. The interest rate, discount rate, internal rate of return, and equity yield rate are yield rates.

Under certain conditions the yield rate for a particular property may be numerically equivalent to the corresponding income rate; nevertheless, the rates are not conceptually the same nor are they interchangeable. An income rate is the ratio of one year's income to value; the rate is usually calculated with the income for the first year, although the income for the previous year may be used. In some cases the incomes for several years might be averaged to obtain a representative income figure. A yield rate is applied to a series of individual incomes to obtain the present value of each.

The rate is usually calculated with the income for the first year, although the income for the previous year may be used. In some cases the incomes for several years might be averaged to obtain a representative income figure.

In the income capitalization rate, both income rates and yield rates can be derived for, and applied to, any component of real property rights or the underlying physical real estate.

Yield Rates

A **yield rate** is a rate of return on capital; it is usually expressed as a compound annual percentage rate. The yield rate considers all expected property benefits, including the proceeds from sale at the termination of the investment. The term interest rate usually refers to the yield rate for debt capital, not equity capital.

A **discount rate** is a yield rate used to convert future payments or receipts into present value. The resulting present value represents the amount of capital to be invested so that the investor's expected yield equals the specified discount rate.

Internal rate of return refers to the yield rate that is earned or expected for a given capital investment over the period of ownership. The internal rate of return for an investment is the yield rate that equates the present value of the future benefits of the investment to the amount of capital invested. The internal rate of return applies to all expected benefits, including the proceeds from resale at the termination of the investment. It can be used to measure the return on any capital investment, before or after income taxes.

An **overall yield rate** is a rate of return on the total capitol investment. It takes into consideration changes in income over the investment holding period as well as the reversion at the end of the holding period. It does not, however, consider the effect of debt financing; it is calculated as if the property was purchased with no debt capitol. The overall yield rate can be viewed as the combined yield on both the debt and equity capitol. Conceptually it is a weighted average of the equity yield rate, which is discussed below, and the mortgage yield, or mortgage interest rate. (In practice the overall yield rate is not usually calculated by averaging the equity yield rate and the mortgage interest rate because the ratio of debt and equity changes each year as the loan is amortized and the property value changes.)

An **equity yield rate** is a rate of return on equity capitol. It may be distinguished from a rate of return on debt capitol, which is usually referred to as an interest rate. The equity yield rate is the equity investor's internal rate of return; it considers the effect of the debt financing on the cash flow to the equity investor (equity dividend).

Risk

The element of risk must be considered in applying the income capitalization approach. The anticipation of receiving future benefits creates value, but the possibility of losing future benefits detracts from value. Higher rewards are required in return for accepting higher risk. This belief is fundamental to the real estate market and the valuation of income-producing properties.

It is generally accepted that all investments are predicated on the expectation of receiving a return on capital that represents the time value of money with an appropriate adjustment for perceived risk. The minimum rate of return for invested capital is sometimes referred to as the safe, or riskless, rate.

Theoretically the difference between the total rate of return on capital and the safe rate may be considered a premium to compensate the investor for risk, the burden of management, and the illiquidity of invested capital.

To real estate investors, risk is the chance of incurring a financial loss and the uncertainty of realizing projected future benefits. Most investors avoid excessive risk; they prefer certainty to uncertainty and expect a reward in return for assuming a risk. The income or yield rate used in capitalization must be consistent with market evidence and reflect the level of risk associated with receiving the anticipated benefits.

Income Capitalization Approach Methods

Yield capitalization will be utilized for the purpose of this analysis

Yield Capitalization

Yield capitalization is a method used to convert future benefits into present value by discounting each future benefit at an appropriate yield rate or by developing an overall rate that explicitly reflects the investment's income pattern, value change, and yield rate. The method is profit - yield-oriented, simulating typical investor assumptions with formulas that calculate the present value of expected benefits assuming specified profit or yield requirements.

The procedure used to convert periodic income and reversion into present value is called discounting; the required yield rate of return is called the discount rate. The discounting procedure presumes that the investor will receive a satisfactory return on the investment and complete recovery of the capital invested. The method is referred to as yield capitalization because it analyzes whether an investment property will produce the particular level of profit or yield required.

Discounted Cash Flow Analysis

The concept of discounted cash flow analysis, or yield capitalization, serves as the most comprehensive form of real estate analysis and valuation, which is available in the industry. The methods associated with this concept have been used for years in the capital budgeting function of financial management. The accounting profession and others have also used discounted cash flow methods of evaluating investments and for performing cost-benefit analyses. Moreover, professional real estate appraisers and analysts are using the concept in their practices as a result of market demands for more sophisticated valuation work.

The discounted cash flow analysis is essentially a process of evaluating the return on invested cash equity. The income to be processed in the application of the discounted cash flow methods is therefore the annual amounts of cash flow, which are expected to be generated by the investment during the income projection period, or investment-holding period. In summary, this concept is exceptionally fundamental in its application and, moreover, it most reflects the time-value relationship of money. Incomes and expenditures are not always received or incurred in equal amounts.

Selection of Capitalization Rates

Inherent in the utilization of the Income Capitalization Approach is the selection of a proper and appropriate capitalization rate; a rate equivalent to a yield command on alternative investments. The main criteria in the selection of Capitalization Rates are based on a comparison of the subject property with other similar forms of investments. A comparison with long-term bonds and mortgage interest rates important, since they are another alternative investment.

Yield Comparisons

In order to estimate an appropriate yield rate for the subject property we have reviewed the Korpacz real property investor survey for appropriate yield and dividend comparisons to real estate. The Korpacz Yield indicator (KYI) is a composite IRR average of the market surveyed. In 2002, the KYI range from 11.65% in January to 11.47% in October. Based upon this market data, the risks associated with a mining operation in Puerto Rico and the extremely high demand for offshore sand in Puerto Rico, it is our opinion that an appropriate, supportable yield rate for this analysis is 11 to 12 percent. A summary for the Korpacz survey is present on the next page.

PRICEWATERHOUSECOOPERS

Korpacz Real Estate Investor Survey®

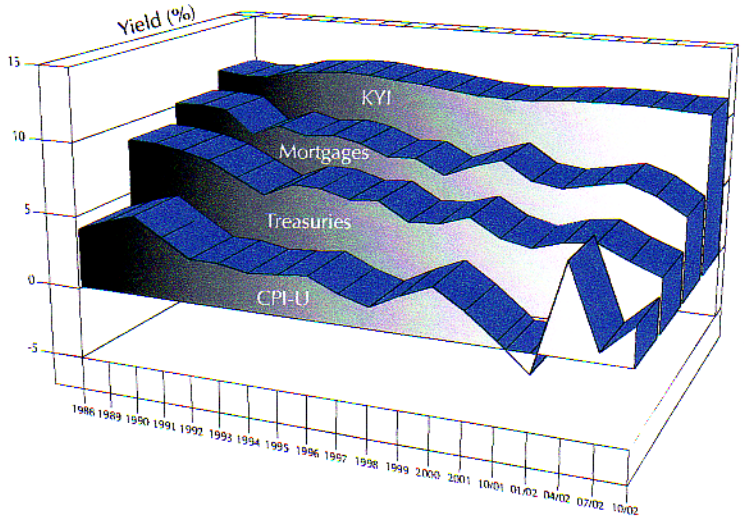
Fourth Quarter 2002

YIELD COMPARISONS
October 1, 2002

	1998 AVERAGE	1999 AVERAGE	2000 AVERAGE	2001 AVERAGE	2001 OCTOBER	2002 JANUARY	2002 APRIL	2002 JULY	2002 OCTOBER
Korpacz Yield Indicator (KYI)[a]	11.35%	11.28%	11.29%	11.54%	11.61%	11.65%	11.61%	11.51%	11.47%
Long-Term Mortgages[b]	6.93%	7.76%	8.43%	7.16%	6.90%	7.32%	7.76%	7.08%	5.90%
10-Year Treasuries[c]	5.34%	5.45%	6.10%	4.96%	4.55%	5.20%	5.44%	4.47%	3.71%
Consumer Price Index Change[d]	1.48%	2.54%	3.41%	2.11%	0.45%	-1.35%	6.10%	0.67%	2.67%
SPREAD TO KYI (Basis Points)									
Long-Term Mortgages	442	352	286	438	471	433	385	443	557
10-Year Treasuries	602	583	519	658	706	645	617	704	776
Consumer Price Index Change	987	874	788	943	1116	1300	551	1084	880

a. A composite IRR average of the markets surveyed.
b. 10-year or longer term for commercial and industrial property. Source: Crittenden Publishing, Inc.; compiled by PricewaterhouseCoopers LLP.
c. Source: Federal Reserve; the annual average change is the mean of the four corresponding quarters.
d. Source: U.S. Department of Labor; quarterly changes are annualized based on the index change from the prior quarter; the annual average change is the mean of the four corresponding quarters.

COMPARATIVE YIELDS
October 1, 2002



DIVIDEND COMPARISONS
October 1, 2002

	1998 AVERAGE	1999 AVERAGE	2000 AVERAGE	2001 AVERAGE	2001 OCTOBER	2002 JANUARY	2002 APRIL	2002 JULY	2002 OCTOBER
Korpacz Dividend Indicator (KDI)[a]	9.08%	9.13%	9.14%	9.42%	9.52%	9.56%	9.59%	9.53%	9.50%
Equity REITs[b]	6.01%	7.76%	7.20%	6.40%	6.75%	7.14%	6.44%	6.21%	7.01%
S&P 500[c]	1.57%	1.28%	1.13%	1.33%	1.51%	1.36%	1.38%	1.72%	1.95%
SPREAD TO KDI (Basis Points)									
Equity REITs	307	137	194	302	277	242	315	332	249
S&P 500	751	785	801	809	801	820	821	781	755

a. A composite OAR (initial rate of return in an all-cash transaction) average of the markets surveyed.
b. Source: National Association of Real Estate Investment Trusts; average annualized dividend yield calculated by PricewaterhouseCoopers LLP; dividend yields are as of the last day of the prior quarter.
c. Source: Standard & Poors; average annual dividend yield calculated by PricewaterhouseCoopers LLP; dividend yields are quarterly yields as of the last day of the prior quarter.

Revenue and Expenses

This valuation is predicated upon forming a joint venture with a local, successful sand mining company. The company will be responsible for all the costs associated with adstracting the sand, which will be sold on a wholesale basis free on board (F.O.B.) at the site. All profits from the sale will be divided 50% for the Mining Company and 50% for the owners.

Revenue

According to local mining companies interviewed, approximately, 1,000,000 cubic meters of sand could be produced and sold on an annual basis. Based upon the quality of the sand at the subject site estimate at 30 million cubic meters of usable sand, a 30-year sell out period is estimated for this analysis. Global Valuation has interviewed several local sand mining companies and users in order to estimate a supportable sale price per cubic meter of sand on a wholesale basis. The sales prices average $21 per cubic meter. The total USA (2000) production of (industrial) sand and gravel was 28.5 billion metric tons valued at $18.40 per metric ton. This is equivalent to $36.80 per cubic meter. Based on this market data, annual gross revenue is estimated at (1,000,000 cm X $21/cm) $21,000,000.

Abstraction Costs/Expenses

The total cost of mining abstraction, loading, equipment, labor and management is estimated at 50% of Gross Revenue.

A discounted cash flow analysis begins on the next page followed by a USGS survey of sand and gravel production and values in the USA, and a sand value estimate from a local sand mining company.

Software : ARGUS Ver. 9.0.00
File : Islote Juan Perez, Puerto Rico
Property Type : General
Portfolio : Global Valuation,Inc.

Islote Juan Perez
State Road 187-Klm 10.3 -12.3
Municapility of Loiza, Puerto Rico,USA

Date : 4/29/03
Time : 12:45
Ref# : AAL
Page : 1

SCHEDULE OF PROSPECTIVE CASH FLOW
In Inflated Dollars for the Fiscal Year Beginning 4/1/2003

For the Years Ending	Year 1 Mar-2004	Year 2 Mar-2005	Year 3 Mar-2006	Year 4 Mar-2007	Year 5 Mar-2008	Year 6 Mar-2009	Year 7 Mar-2010	Year 8 Mar-2011	Year 9 Mar-2012	Year 10 Mar-2013	Year 11 Mar-2014	Year 12 Mar-2015	Year 13 Mar-2016
GROSS REVENUE													
Sand	$21,000,000	$21,630,000	$22,278,900	$22,947,267	$23,635,685	$24,344,756	$25,075,098	$25,827,351	$26,602,172	$27,400,237	$28,222,244	$29,068,911	$29,940,979
TOTAL GROSS REVENUE	21,000,000	21,630,000	22,278,900	22,947,267	23,635,685	24,344,756	25,075,098	25,827,351	26,602,172	27,400,237	28,222,244	29,068,911	29,940,979
EFFECTIVE GROSS REVENUE	21,000,000	21,630,000	22,278,900	22,947,267	23,635,685	24,344,756	25,075,098	25,827,351	26,602,172	27,400,237	28,222,244	29,068,911	29,940,979
OPERATING EXPENSES													
Abstraction Cost	10,500,000	10,815,000	11,139,450	11,473,634	11,817,843	12,172,378	12,537,549	12,913,676	13,301,086	13,700,118	14,111,122	14,534,456	14,970,489
TOTAL OPERATING EXPENSES	10,500,000	10,815,000	11,139,450	11,473,634	11,817,843	12,172,378	12,537,549	12,913,676	13,301,086	13,700,118	14,111,122	14,534,456	14,970,489
NET OPERATING INCOME	10,500,000	10,815,000	11,139,450	11,473,633	11,817,842	12,172,378	12,537,549	12,913,675	13,301,086	13,700,119	14,111,122	14,534,455	14,970,490
CASH FLOW BEFORE DEBT SERVICE & TAXES	$10,500,000	$10,815,000	$11,139,450	$11,473,633	$11,817,842	$12,172,378	$12,537,549	$12,913,675	$13,301,086	$13,700,119	$14,111,122	$14,534,455	$14,970,490

Islote Juan Perez
State Road 187-Klm 10.3 -12.3
Municapility of Loiza, Puerto Rico,USA

SCHEDULE OF PROSPECTIVE CASH FLOW
In Inflated Dollars for the Fiscal Year Beginning 4/1/2003

For the Years Ending	Year 14 Mar-2017	Year 15 Mar-2018	Year 16 Mar-2019	Year 17 Mar-2020	Year 18 Mar-2021	Year 19 Mar-2022	Year 20 Mar-2023	Year 21 Mar-2024	Year 22 Mar-2025	Year 23 Mar-2026	Year 24 Mar-2027	Year 25 Mar-2028	Year 26 Mar-2029
GROSS REVENUE													
Sand	$30,839,208	$31,764,384	$32,717,316	$33,698,835	$34,709,800	$35,751,094	$36,823,627	$37,928,336	$39,066,186	$40,238,172	$41,445,317	$42,688,676	$43,969,337
TOTAL GROSS REVENUE	30,839,208	31,764,384	32,717,316	33,698,835	34,709,800	35,751,094	36,823,627	37,928,336	39,066,186	40,238,172	41,445,317	42,688,676	43,969,337
EFFECTIVE GROSS REVENUE	30,839,208	31,764,384	32,717,316	33,698,835	34,709,800	35,751,094	36,823,627	37,928,336	39,066,186	40,238,172	41,445,317	42,688,676	43,969,337
OPERATING EXPENSES													
Abstraction Cost	15,419,604	15,882,192	16,358,658	16,849,418	17,354,900	17,875,547	18,411,814	18,964,168	19,533,093	20,119,086	20,722,658	21,344,338	21,984,668
TOTAL OPERATING EXPENSES	15,419,604	15,882,192	16,358,658	16,849,418	17,354,900	17,875,547	18,411,814	18,964,168	19,533,093	20,119,086	20,722,658	21,344,338	21,984,668
NET OPERATING INCOME	15,419,604	15,882,192	16,358,658	16,849,417	17,354,900	17,875,547	18,411,813	18,964,168	19,533,093	20,119,086	20,722,659	21,344,338	21,984,669
CASH FLOW BEFORE DEBT SERVICE & TAXES	$15,419,604	$15,882,192	$16,358,658	$16,849,417	$17,354,900	$17,875,547	$18,411,813	$18,964,168	$19,533,093	$20,119,086	$20,722,659	$21,344,338	$21,984,669

Islote Juan Perez
State Road 187-Klm 10.3 -12.3
Municapility of Loiza, Puerto Rico,USA

SCHEDULE OF PROSPECTIVE CASH FLOW
In Inflated Dollars for the Fiscal Year Beginning 4/1/2003

For the Years Ending	Year 27 Mar-2030	Year 28 Mar-2031	Year 29 Mar-2032	Year 30 Mar-2033
GROSS REVENUE				
Sand	$45,288,417	$46,647,069	$48,046,481	$49,487,876
TOTAL GROSS REVENUE	45,288,417	46,647,069	48,046,481	49,487,876
EFFECTIVE GROSS REVENUE	45,288,417	46,647,069	48,046,481	49,487,876
OPERATING EXPENSES				
Abstraction Cost	22,644,208	23,323,535	24,023,241	24,743,938
TOTAL OPERATING EXPENSES	22,644,208	23,323,535	24,023,241	24,743,938
NET OPERATING INCOME	22,644,209	23,323,534	24,023,240	24,743,938
CASH FLOW BEFORE DEBT SERVICE & TAXES	$22,644,209	$23,323,534	$24,023,240	$24,743,938

Software : ARGUS Ver. 9.0.00
File : Islote Juan Perez, Puerto Rico
Property Type : General
Portfolio : Global Valuation,Inc.

Islote Juan Perez
State Road 187-Klm 10.3 -12.3
Municipality of Loiza, Puerto Rico,USA

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PROSPECTIVE PRESENT VALUE
Cash Flow Before Debt Service plus Property Resale
Discounted Annually (Endpoint on Cash Flow & Resale) over a 30-Year Period

Analysis Period	For the Year Ending	Annual Cash Flow	P.V. of Cash Flow @ 9.00%	P.V. of Cash Flow @ 10.00%	P.V. of Cash Flow @ 11.00%	P.V. of Cash Flow @ 12.00%	P.V. of Cash Flow @ 13.00%	P.V. of Cash Flow @ 14.00%	P.V. of Cash Flow @ 15.00%
Year 1	Mar-2004	$10,500,000	$9,633,028	$9,545,455	$9,459,459	$9,375,000	$9,292,035	$9,210,526	$9,130,435
Year 2	Mar-2005	10,815,000	9,102,769	8,938,016	8,777,697	8,621,652	8,469,732	8,321,792	8,177,694
Year 3	Mar-2006	11,139,450	8,601,699	8,369,234	8,145,070	7,928,840	7,720,197	7,518,811	7,324,369
Year 4	Mar-2007	11,473,633	8,128,211	7,836,645	7,558,037	7,291,701	7,036,994	6,793,312	6,560,087
Year 5	Mar-2008	11,817,842	7,680,786	7,337,951	7,013,314	6,705,761	6,414,252	6,137,817	5,875,556
Year 6	Mar-2009	12,172,378	7,257,992	6,870,990	6,507,851	6,166,906	5,846,618	5,545,571	5,262,455
Year 7	Mar-2010	12,537,549	6,858,468	6,433,745	6,038,816	5,671,350	5,329,219	5,010,473	4,713,329
Year 8	Mar-2011	12,913,675	6,480,938	6,024,324	5,603,585	5,215,617	4,857,606	4,527,006	4,221,503
Year 9	Mar-2012	13,301,086	6,124,190	5,640,959	5,199,724	4,796,505	4,427,730	4,090,189	3,780,999
Year 10	Mar-2013	13,700,119	5,787,078	5,281,989	4,824,970	4,411,072	4,035,895	3,695,522	3,386,460
Year 11	Mar-2014	14,111,122	5,468,523	4,945,862	4,477,223	4,056,610	3,678,737	3,338,937	3,033,090
Year 12	Mar-2015	14,534,455	5,167,504	4,631,126	4,154,541	3,730,633	3,353,184	3,016,759	2,716,593
Year 13	Mar-2016	14,970,490	4,883,054	4,336,417	3,855,114	3,430,850	3,056,443	2,725,668	2,433,123
Year 14	Mar-2017	15,419,604	4,614,262	4,060,464	3,577,269	3,155,156	2,785,961	2,462,664	2,179,232
Year 15	Mar-2018	15,882,192	4,360,266	3,802,070	3,319,447	2,901,617	2,539,415	2,225,040	1,951,834
Year 16	Mar-2019	16,358,658	4,120,251	3,560,121	3,080,208	2,668,452	2,314,689	2,010,342	1,748,164
Year 17	Mar-2020	16,849,417	3,893,448	3,333,567	2,858,210	2,454,022	2,109,849	1,816,362	1,565,747
Year 18	Mar-2021	17,354,900	3,679,131	3,121,432	2,652,214	2,256,824	1,923,136	1,641,099	1,402,365
Year 19	Mar-2022	17,875,547	3,476,609	2,922,795	2,461,063	2,075,472	1,752,948	1,482,747	1,256,031
Year 20	Mar-2023	18,411,813	3,285,236	2,736,798	2,283,689	1,908,693	1,597,819	1,339,676	1,124,967
Year 21	Mar-2024	18,964,168	3,104,398	2,562,639	2,119,099	1,755,316	1,456,420	1,210,408	1,007,579
Year 22	Mar-2025	19,533,093	2,933,513	2,399,562	1,966,371	1,614,264	1,327,532	1,093,615	902,441
Year 23	Mar-2026	20,119,086	2,772,035	2,246,862	1,824,651	1,484,546	1,210,052	988,090	808,272
Year 24	Mar-2027	20,722,659	2,619,447	2,103,881	1,693,144	1,365,253	1,102,968	892,748	723,932
Year 25	Mar-2028	21,344,338	2,475,257	1,969,997	1,571,116	1,255,544	1,005,360	806,606	648,390
Year 26	Mar-2029	21,984,669	2,339,004	1,844,633	1,457,883	1,154,653	916,390	728,776	580,733
Year 27	Mar-2030	22,644,209	2,210,251	1,727,248	1,352,809	1,061,868	835,294	658,455	520,134
Year 28	Mar-2031	23,323,534	2,088,587	1,617,332	1,255,310	976,539	761,374	594,920	465,859
Year 29	Mar-2032	24,023,240	1,973,618	1,514,411	1,164,837	898,068	693,995	537,515	417,248
Year 30	Mar-2033	24,743,938	1,864,978	1,418,039	1,080,885	825,901	632,581	485,650	373,709
Total Cash Flow		499,541,864	142,984,531	129,134,564	117,333,606	107,214,685	98,484,425	90,907,096	84,292,330
Total Property Present Value			**********	**********	**********	**********	$98,484,425	$90,907,096	$84,292,330
			==========	==========	==========	==========	==========	==========	==========
Rounded to Thousands			**********	**********	**********	**********	$98,484,000	$90,907,000	$84,292,000
			==========	==========	==========	==========	==========	==========	==========
Per SqFt			**********	**********	**********	**********	**********	**********	**********
PERCENTAGE VALUE DISTRIBUTION									
Prospective Income			100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Prospective Property Resale									
			==========	==========	==========	==========	==========	==========	==========
			100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Conclusion

This discounted Cash Flow Analysis utilizing a discount or yield rate from 11% to 12% indicate a prospective value range from $107 million to $117 million.

Based upon this market data and analysis, it is our opinion that the subject Personal Property has a prospective market value as of April 30, 2003 of 110 million dollars.

One Hundred Ten Million Dollars
$110,000,000

USGS

Open-File Report 01-006

SAND AND GRAVEL (INDUSTRIAL) STATISTICS

By Kenneth E. Porter and Wallace P. Bolen

[All values in metric tons (t) unless otherwise noted]

Last modification: August 30, 2002

Year	Primary production	Imports	Exports	Apparent consumption	Unit value ($/t)	Unit value (98$/t)	World production
1902	1,220,000			1,220,000	0.90	17.00	
1903	1,170,000			1,170,000	1.07	19.00	
1904	4,410,000			4,410,000	0.74	13.00	
1905	4,670,000			4,670,000	0.82	15.00	
1906	5,430,000			5,430,000	0.73	13.00	
1907	5,890,000			5,890,000	0.77	13.00	
1908	3,730,000			3,730,000	0.80	14.00	
1909	5,020,000			5,020,000	0.78	14.00	
1910	6,030,000			6,030,000	0.78	14.00	
1911	6,950,000			6,950,000	0.72	13.00	
1912	8,190,000			8,190,000	0.68	11.00	
1913	7,120,000			7,120,000	0.76	12.50	
1914	6,380,000			6,380,000	0.84	13.60	
1915	7,740,000			7,740,000	0.64	10.30	
1916	9,010,000			9,010,000	0.78	11.60	
1917	8,940,000			8,940,000	1.09	13.90	
1918	9,110,000			9,110,000	1.40	15.20	
1919	7,700,000			8,240,000	1.32	12.40	
1920	9,680,000			10,800,000	1.62	13.20	
1921	5,180,000			6,000,000	1.42	12.90	
1922	7,970,000	0		7,970,000	1.36	13.20	
1923	10,400,000	2,100		10,400,000	1.43	13.70	
1924	9,680,000	0		10,300,000	1.31	12.50	
1925	10,800,000	3,800		10,800,000	1.28	11.90	
1926	11,600,000	8,000		11,600,000	1.23	11.30	
1927	10,100,000	9,680		10,100,000	1.20	11.30	
1928	10,400,000	39,100		10,400,000	1.41	13.40	
1929	11,700,000	285,000		12,000,000	1.23	11.70	
1930	7,630,000	22,400		7,660,000	1.32	12.90	

1931	5,550,000	31,800	198,000	5,380,000	1.29	13.80	
1932	3,720,000	24,100	87,100	3,650,000	1.27	15.20	
1933	4,740,000	23,800	74,800	4,690,000	1.28	16.10	
1934	5,480,000	22,200	30,400	5,480,000	1.38	16.80	
1935	6,840,000	40,200	33,900	6,840,000	1.32	15.70	
1936	8,500,000	48,000	45,300	8,500,000	1.27	14.90	
1937	9,960,000	46,300	60,900	9,950,000	1.30	14.80	
1938	5,910,000	30,700	32,300	5,910,000	1.37	15.90	
1939	7,870,000	21,500	25,200	7,870,000	1.33	15.60	
1940	9,660,000	3,930		9,660,000	1.31	15.20	
1941	13,000,000	0		13,000,000	1.38	15.30	
1942	14,300,000	0		14,300,000	1.49	14.90	
1943	15,600,000	16		15,600,000	1.52	14.30	
1944	16,000,000	14		16,000,000	1.51	14.00	
1945	14,200,000	0		14,200,000	1.52	13.80	
1946	14,500,000	4,540		14,500,000	1.59	13.30	
1947	16,300,000	7,080		16,300,000	1.72	12.60	
1948	15,300,000	15,300		15,300,000	1.91	12.90	
1949	12,600,000	10,400		12,600,000	2.03	13.90	
1950	15,600,000	8,340		15,600,000	2.06	14.00	
1951	17,200,000	5,680		17,200,000	2.20	13.80	
1952	15,700,000	3,640		15,700,000	2.33	14.30	
1953	16,500,000	5,160		16,500,000	2.44	14.90	
1954	15,100,000	9,370		15,100,000	2.83	17.20	
1955	18,000,000	154		18,000,000	2.73	16.60	
1956	19,200,000	434		19,200,000	3.08	18.50	
1957	17,400,000	1,530		17,400,000	3.02	17.50	
1958	14,100,000	5,910		14,100,000	3.30	18.60	
1959	16,600,000	92		16,600,000	3.00	16.80	
1960	16,600,000	9,980		16,600,000	3.55	19.50	
1961	16,400,000	0		16,400,000	3.60	19.60	
1962	18,200,000	28,100		18,300,000	3.68	19.80	
1963	19,100,000	20,900		19,200,000	3.58	19.10	
1964	21,100,000	36,300		21,200,000	3.52	18.50	
1965	23,000,000	9,980		23,000,000	3.48	18.00	
1966	23,900,000	16,300		23,900,000	3.63	18.20	

1967	23,000,000	39,900		23,000,000	3.74	18.30	
1968	24,500,000	22,700		24,500,000	3.81	17.90	
1969	26,300,000	39,000		26,400,000	3.88	17.25	
1970	26,400,000	58,100		26,500,000	3.83	16.08	
1971	23,700,000	43,500	797,000	23,000,000	3.85	15.50	
1972	26,800,000	44,500	952,000	25,900,000	4.20	16.37	
1973	26,300,000	43,500	767,000	25,600,000	4.19	15.37	
1974	26,400,000	42,600	1,020,000	25,400,000	5.26	17.39	
1975	24,800,000	40,800	1,970,000	22,800,000	6.06	18.36	
1976	27,100,000	55,300	2,320,000	24,900,000	6.27	17.96	
1977	28,400,000	31,800	2,230,000	26,300,000	7.41	19.94	
1978	29,800,000	41,700	2,540,000	27,300,000	8.34	20.84	
1979	30,400,000	64,400	1,080,000	29,400,000	9.34	20.98	
1980	26,900,000	35,400	1,070,000	25,800,000	10.91	21.59	
1981	27,200,000	3,630	1,030,000	26,200,000	12.21	21.89	
1982	24,900,000	81,600	742,000	24,200,000	13.03	22.01	
1983	24,100,000	52,600	950,000	23,200,000	13.88	22.71	
1984	26,700,000	23,600	1,080,000	25,600,000	14.15	22.21	
1985	26,700,000	73,500	786,000	25,900,000	14.01	21.23	
1986	24,900,000	79,800	770,000	24,200,000	14.44	21.47	
1987	25,400,000	94,300	688,000	24,800,000	14.33	20.56	
1988	25,800,000	39,000	962,000	24,900,000	15.01	20.69	
1989	26,500,000	31,800	1,870,000	24,700,000	15.49	20.37	124,700,000
1990	25,800,000	66,000	1,000,000	24,800,000	16.93	21.12	120,800,000
1991	23,200,000	83,000	1,490,000	21,900,000	16.81	20.12	110,400,000
1992	25,200,000	164,000	1,340,000	24,000,000	17.24	20.03	110,100,000
1993	26,200,000	44,000	1,750,000	24,500,000	17.33	19.56	110,000,000
1994	27,300,000	24,000	1,880,000	25,400,000	17.86	19.64	110,000,000
1995	28,200,000	65,000	1,870,000	26,400,000	17.82	19.06	120,000,000
1996	27,800,000	7,000	1,430,000	26,400,000	17.88	18.58	117,000,000
1997	28,500,000	39,000	980,000	27,600,000	17.93	18.21	119,000,000
1998	28,200,000	44,000	2,400,000	26,200,000	18.19	18.19	110,000,000
1999	28,900,000	211,000	1,670,000	27,400,000	18.64	18.19	107,000,000
2000	28,500,000	135,000	1,570,000	28,000,000	18.40	17.61	107,000,000

Sand and Gravel (Industrial) Worksheet Notes

Data Sources

The sources of data for the industrial sand and gravel worksheet are the mineral statistics publications of the U.S. Bureau of Mines and the U.S. Geological Survey-Minerals Yearbook (MYB) and its predecessor, Mineral Resources of the United States (MR); and Mineral Commodity Summaries (MCS) and its predecessor, Commodity Data Summaries (CDS). The years of publication and corresponding years of data coverage are listed in the References section below. Blank cells in the worksheet indicate that data were not available.

Primary Production

U.S. production data collection and reporting did not start for industrial sand until 1902. Before 1902, sand was included with stone and included only silica sand for glass making. Construction and industrial sand and gravel production were reported together in table 1 in the MR and the MYB through 1958 and were split between "commercial" and "government" (state, county, municipalities, and federal). Categories were split between construction and industrial according to the following guidelines: Construction sand includes building, paving, railroad ballast, and other (excluding ground sand-crushed silica grains that have been reduced to minus 325 mesh size). The reporting of gravel production prior to 1959 did not indicate any industrial applications, therefore the assumption was made that all gravel production data were for construction applications. After 1958, some gravel was used for industrial applications, such as filtration, ferrosilicon, and nonmetallic flux for sulfur production. Industrial sand includes glass, molding, grinding and polishing (also blast sand), fire or furnace, engine, and filter (ground sand is included in the "other" category and is separated out for inclusion with industrial). Construction and industrial sand and gravel statistics were reported separately in a combined chapter starting with the 1959 MYB and in separate chapters starting with the 1988 MYB.

Imports

U.S. import data for industrial sand were reported in tables starting with the 1922 MR and continues to be reported in the MYB and the MCS.

Exports

Export data for all sand and gravel were reported in foreign trade section text starting with the 1922 MR. Construction and industrial sand and gravel export data could not be separated for the years 1931-39. It was assumed all export data for the years 1931-39 were for industrial sand and gravel. Sand and gravel export data were not separately classified by the U.S. Department of Commerce for the years 1940-62 and could not be reported in the worksheet.

Apparent Consumption

Apparent consumption was estimated using the following formula:

APPARENT CONSUMPTION = PRIMARY PRODUCTION + IMPORTS - EXPORTS.

Import and export data have very little effect on the amount of apparent consumption because of their relative insignificance compared to primary production.

Unit Value ($/t)

Unit values are estimated by summing the values for different species of sand and gravel, which are in turn are divided by the total primary production. Imports and exports were not considered in determining unit value because quantities are insignificant compared to primary production, and values were not available. Data for quantities and values from which unit values were estimated are from the MR and the MYB.

Unit Value (98$/t)

The Consumer Price Index conversion factor, with 1998 as the base year, is used to adjust unit value in current U.S. dollars to the unit value in constant 1998 U.S. dollars.

World Production

World production data reporting of industrial sand and gravel started in 1969 in the MCS. Data prior to 1969 were not available for other countries and therefore were not reported.

References

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U.S. Geological Survey, 1901-27, Mineral Resources of the United States, 1900-23.
U.S. Geological Survey, 1997-2001, Mineral Commodity Summaries, 1997-2001.
U.S. Geological Survey, 1997-2002, Minerals Yearbook, v. I, 1995-2000.
U.S. Geological Survey and U.S. Bureau of Mines, 1996, Mineral Commodity Summaries, 1996.

For more information, please contact:

Wallace P. Bolen
USGS Sand and Gravel (Industrial) Commodity Specialist
(703) 648-7727
wbolen@usgs.gov

Kenneth E. Porter
Minerals and Materials Analysis Section, USGS
(303) 236-8747 x 232
porter@usgs.gov

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Return to USGS

URL: http://minerals.usgs.gov/minerals/pubs/of01-006/sandgrvlind.html
Contacts: wbolen@usgs.gov, porter@usgs.gov
Last modification: August 30, 2002
(jg)

ARENERO DE LA MONTAÑA, INC.
APARTADO 542 - CIALES, PUERTO RICO 00638
TEL. 862-4531

April 17, 2003

To whom it may concern:

The price for beach sand by cubic meter is as follows:

- ✓ Wholesale $21.00
- ✓ Retail $62.00

Cordially,

ARENERO DE LA MONTAÑA, INC. 1998 103,293 PUERTO RICO

Eng. Rosa Avalo, Manager
Tel./fax: 1-787-862-4531
e-mail: amontana@prtc.net

RECONCILIATION OF VALUE INDICATORS

The real property (Land) was valued via the sales comparison approach at $340,000,000 or $400,000 per cuerda. The personal property (Sand) was valued via the income capitalization approach at $110,000,000.

We have completed an investigation of the local, regional and national mineral market and real estate market. Bases upon all of the following information, market data consultations and analysis it is our opinion that the subject property has a market value, as of April 30, 2003 of:

Real Property	**$340,000,000**
Personal Property	**$110,000,000**
Total Property	**$450,000,000**

Four Hundred Fifty Million Dollars
($450,000,000)

PARAMETERS OF VALUE CONCLUSION

An appraisal of real estate is an option of value.

Due to the many influences that affect supply and demand and the imperfections that exist in the market, the appraisal of real estate remains an inexact science.

The client must recognize that at any given moment in time before or after the effective date of value, the property value may be different from what the appraiser has estimated. Real estate investment has a high degree of risk and performance and success is dependent management, market liquidity, and all sorts of outside influences. Remember that is for any reason subsequent events (after the effective date) worldwide, national, regional, local or neighborhood occur, the value of the property will change.

The developer, the lender, and subsequent property owners must each analyze and measure the risks as the see it, at any moment in time. The appraisal, therefore, is a judgment tool offering a supported opinion of the present worth of anticipation benefits subject to the investment risks, measured mainly by such market data available as of the effective date of appraisal.

In conclusion, however, while an appraisal cannot be guaranteed or absolutely proven, if the opinion of value, as expressed and demonstrated, is not influences by sentiment, sympathy, bias, personal interest, or lack of understanding, and is, in fact, a sincere effort by a competent impartial valuator, then the conclusions so developed may properly be considered as a basis of negotiation between owner and prospective purchaser, or between lender and borrower or between condemner and condemnee.

EXPOSURE TIME

Exposure time is the time a property remains on the market. The estimated length of time the property interested being appraised would have been offered on the market prior to the hypothetical consummation of the sale at market value on the effective date of the appraisal; retrospective estimate based upon an analysis of past events assuming a competitive and open market. Exposure time is always presumed to occur prior to the effective date of the appraisal. The overall concept of reasonable exposure encompasses not only adequate, sufficient and reasonable time but also adequate, sufficient and reasonable effort. We have estimated exposure time for the subject property at one million cubic meters of sand per year for thirty years, exposure time for the Real Property is estimated at one to two years.