

**CONTESTACIONES DE PDMPI A COMENTARIOS DE LAS AGENCIAS FEDERALES AL "PUBLIC NOTICE" PARA EL JPA # 287 , PALMAS DEL MAR SHOPPING CENTER**

<i>FECHA</i>	<i>AGENCIA</i>	<i>COMENTARIOS</i>	<i>ACCIONES TOMADAS POR PMPPI</i>
13/marzo/03	Oficina Estatal de Preservación Histórica	Solicita la preparación de un Estudio Arqueológico Fase I-A.	El 29 de mayo de 2003 PDMPI presenta ante la Oficina Estatal de Preservación Histórica (OEPH) el Estudio Arqueológico Fase I-A para el proyecto.
24/marzo/03	Servicio Forestal de los Estados Unidos	(Ver comunicación del 15 de abril de 2003)	
1/abril/03	Servicio Nacional de Pesca Marina-División del Servicio de Conservación de Habitáculos	El Servicio Nacional de Pesca Marina-División del Servicio de Conservación de Habitáculos ("SNPM") indica que los comentarios provistos por el Servicio Federal de Pesca y Vida Silvestre también representan los del SNPM. Además, indica lo siguiente con relación al proyecto: "the work could adversely impact fishery resources for which the National Marine Fisheries Service is responsible."	
3/abril/03	Servicio Federal de Pesca y Vida Silvestre	(Ver comunicación del 15 de abril de 2003)	

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15/abril/03	Cuerpo de Ingenieros del Ejército de los Estados Unidos	Incluye una lista de los comentarios recibidos por el Cuerpo de Ingenieros del Ejército de los Estados Unidos ("CIE") en respuesta al aviso público relacionado con la Solicitud de Permiso 2100106183(IP-JR) y requiere una respuesta detallada por escrito a los mismos.	PDMPI presenta respuestas a los comentarios del CIE y las agencias comentadoras en el <u>Análisis de Alternativas</u> y el <u>Plan de Mitigación</u> sometido el 1 de julio de 2003 al CIE y las agencias comentadoras.

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		<p>Con relación a los comentarios del Servicio Federal de Pesca y Vida Silvestre, el CIE indica que mediante comunicación con fecha de 3 de abril de 2003 recibió los siguientes señalamientos: "The Service does not believe that the channeling or placement in culverts of the streams is necessary because the project can be built around the existing stream systems. They sustain the proposed mitigation plan does not meet the criteria established in the Regulatory Guidelines Letter 01-1, because the plan lacks details regarding baseline information, goals, work plan, site protection, financial assurances, long term maintenance, etc. The Service stated that the proposed stream mitigation would take place in an artificial channel that does not follow any of the criteria of natural stream design. They indicated that the proposed gabion wall is subject to failure due to the undermining of the gabions during high flows and flood conditions. The Service recommended the applicant should consider alternate designs for the project that incorporates existing natural features."</p>	<p>Véase <u>Análisis de Alternativas</u>, Sección IV-A y B. Además, Sección V-L</p> <p>Respecto a los comentarios relacionados con el diseño del Canal Artificial, el sistema de gabiones, y la recomendación de incorporar elementos naturales en el diseño del Canal Artificial, ver <u>Plan de Mitigación</u> del 1 de julio de 2003, y el <u>Plan de Mitigación Enmendado</u> de marzo de 2006.</p>

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		<p>Mediante comunicación del 1 de abril de 2003 el SNPM indica que los comentarios provistos por el Servicio Federal de Pesca y Vida Silvestre también representan sus comentarios. Además indica lo siguiente con relación al proyecto: "the work could adversely impact fishery resources for which the National Marine Fisheries Service is responsible."</p>	<p>PDMPI se encuentra redactando un <u>Addendum al Análisis de Alternativas</u> para aclarar que el proyecto no afectará adversamente recursos pesqueros.</p>
		<p>Con relación a los comentarios del Servicio Forestal de los Estados Unidos, el CIE indica que mediante comunicación con fecha de 24 de marzo de 2003 recibió los siguientes señalamientos:</p> <p>"The Service questioned how the new channel would perform flood attenuation functions, biofiltering and sediment retention functions. The Service pointed out the new channel would act as a pond, that raises the question of how the flow functions of the old channel be performed at the site. They added that the proposed mitigation appears to be separated from the river, and that it is not clear if it will perform the functions of the more mature wetland being displaced. The Service also indicated the argument about past modifications of the tributary system it is not clear. This fact would preclude further modifications because of the cumulative impacts on the overall ecologic system."</p>	<p>Véase <u>Análisis de Alternativas</u>, Sección V-C, D y E, y ver el <u>Plan de Mitigación</u> del 1 de julio de 2003, y el <u>Plan de Mitigación Enmendado</u> de marzo de 2006.</p>

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		Mediante comunicación, con fecha de 13 de marzo de 2003, la Oficina Estatal de Preservación Histórica solicita la preparación de un Estudio Arqueológico Fase I-A.	El 29 de mayo de 2003 PDMPI presenta ante la OEPH el Estudio Arqueológico Fase I-A para el proyecto.
		El CIE menciona que concurre con los comentarios presentados por las agencias por las siguientes razones: "Gabion structures do not last long and are subject to be damaged by flooding events. This could affect not only the flooding control capacity of the project but the mitigation site proposed. Alternatives to the project design, the buildings layout, the proposed mitigation site and channel design must be evaluated, in order to support the preferred alternative. The performance of the archaeological study prior to perform any work is important to comply with applicable regulations. The proposed mitigation plan should be prepared in detail accordingly."	Véase <u>Análisis de Alternativas</u> , Sección V-D y E y ver Sección IV. Además, ver el <u>Plan de Mitigación</u> del 1 de julio de 2003, y el <u>Plan de Mitigación Enmendado</u> de marzo de 2006. Con respecto al requerimiento de los estudios arqueológicos, PDMPI sometió a la OEPH copias de los estudios arqueológicos Fase I-A y Fase I-B para el proyecto el 29 de mayo de 2003 y el 24 de octubre de 2003 respectivamente.
		Además, el CIE requirió la siguiente información para revisar la propuesta de PDMPI: "a. The public and/or private need for the project and the benefits to be derived."	Véase <u>Análisis de Alternativas</u> , Sección II-A.

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		<p>“b. Why the proposed project, and the activities associated with it must be located on these aquatic resources? It is presumed other alternatives exist to locate a shopping center rather to place it within aquatic resources at this particular site. Please discuss alternate location sites that have been considered and why those alternatives are not practicable. A practicable alternative is defined as an alternative that is available and capable of being done after taking into consideration cost, existing technology, and logistics in light of the overall project purpose. The purpose of this analysis is to demonstrate that a suitable alternate site, with less impact to aquatic resources, was not found. The 404(b)(1) guidelines make the presumption that other alternative exists unless proven otherwise.”</p>	<p>Véase <u>Análisis de Alternativas</u>, Sección IV-B.</p>
		<p>“c. In order to consider the possibility to minimize the environmental impact of your project, by eliminating or reducing the project scope, sections, or dimensions; what could be the least acceptable plan modification that you could be able to accept? Minimization implies a reduction of its impacts. Therefore, we request that the avoidance and minimization analysis be provided at this time.”</p>	<p>Véase <u>Análisis de Alternativas</u>, Sección V-K.</p>

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		<p>"d. You must provide a detailed compensatory mitigation plan to compensate for the loss of wetlands and streams that are being directly impacted by the project. The plan may be proposed by creating wetlands from uplands, or enhancing a degraded wetland that was previously disturbed, to compensate for the unavoidable impacts, once you provide a satisfactory response to the previous sections. The purpose is to show how compensatory work will balance the project impacts. The possible implementation of a mitigation plan including exact location, surface area to be earth-worked, plan view and cross section drawings, planting scheme, monitoring plan, contingency plan in case of planting failure, or other impacts, etc."</p>	<p>Véase <u>Análisis de Alternativas</u>, Sección V-K y L.</p> <p>Véase además <u>Plan de Mitigación</u> del 1 de julio de 2003, y <u>Plan de Mitigación Enmendado</u> de marzo de 2006.</p>
		<p>"e. What is the status of the Water Quality Certificate from the Puerto Rico Environmental Quality Board?"</p>	<p>Véase <u>Análisis de Alternativas</u>, Sección V-M 1. El Certificado de Calidad de Agua que deberá emitir la JCA depende del cumplimiento ambiental del proyecto propuesto. Esta DIA-F se somete ante la Junta de Planificación con el fin de cumplir con la Ley de Política Pública Ambiental del ELA.</p>

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		El CIE explica que mantendría la solicitud en suspenso hasta recibir la respuesta de PDMPI.	El 1 de julio de 2003 PDMPI presenta el <u>Análisis de Alternativas</u> y el <u>Plan de Mitigación</u> ante el CIE.
26/junio/03	Oficina Estatal de Preservación Histórica	Requiere a PDMPI la preparación de un Estudio Fase I-B (con muestreos del subsuelo).	PDMPI radica el Estudio Arqueológico Fase I-B ante la OEPH el 24 de octubre de 2003.
8/agosto/03	Servicio Federal de Pesca y Vida Silvestre	Se indica que PDMPI no seleccionó la mejor alternativa ambiental y presenta una serie de comentarios al respecto, los cuales se incluyen a continuación:	
		"The illustration of the concept consists of a bubble diagram shown in Exhibit 14. Other designs received more detailed analysis. This indicates that very little thought went into discarding the avoidance alternative and gave no thought to a hybrid that minimizes impacts. As a result the currently selected Alternative promotes full impact of all wetlands on the site, with little though at avoidance and minimization."	PDMPI se encuentra redactando un <u>Addendum al Análisis de Alternativas</u> para proveer un esquema más preciso del concepto incluido en el <u>Exhibit 14</u> de dicho documento, y una explicación detallada de los criterios utilizados para descartar dicho concepto.

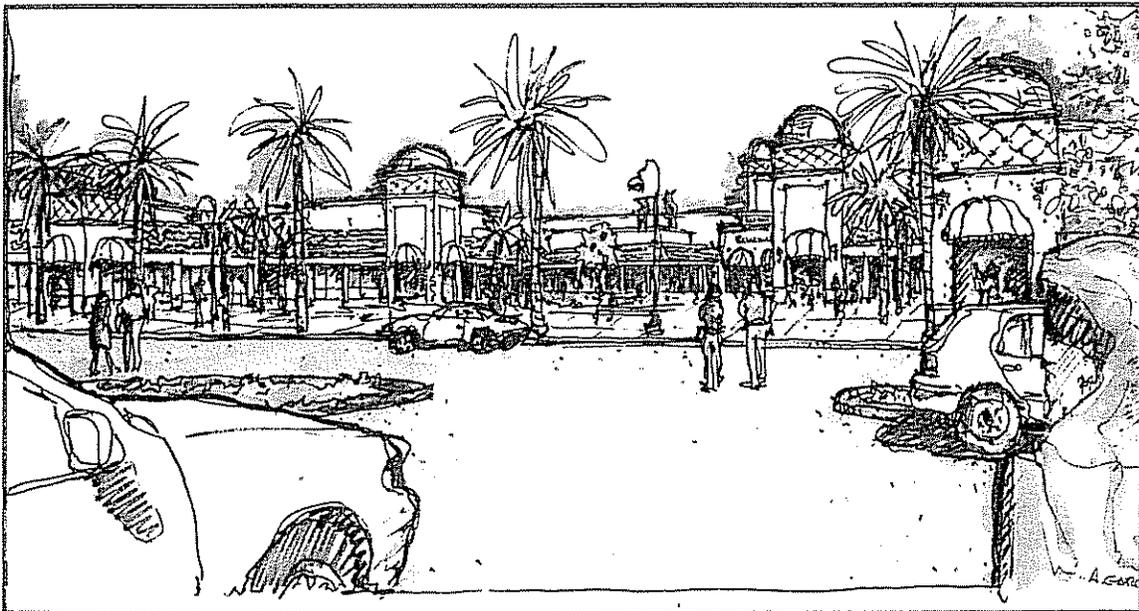
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		<p>“The proposed construction of a new stream channel and 8,400 square meters of marsh is experimental at best. There are no assurances that the proposed channel will function as designed.”</p>	<p>Ver <u>Plan de Mitigación Enmendado</u> en el <b>Apéndice D-d</b> de esta DIA-F, en particular el plan de siembra y el plan de mantenimiento.</p>
		<p>“The mitigation plan is sketchy at best and does not come close to complying with the recent guidance on mitigation plans (COE RGL 02-02). The mitigation plan expounds the values of wetlands, none of which seem to apply to the wetlands on the project site according to the documentation enclosed. The proposed stream relocation channel is a typical vertical wall U shaped channel that will somehow attempt to recreate a natural stream using reno mattress and gabions. If the applicant wishes to recreate a natural stream it should be engineered using the techniques discussed in Applied River Morphology and the Stream Corridor Restoration Manual.”</p>	<p>Estos comentarios se atienden mediante la revisión del <u>Plan de Mitigación Enmendado</u> para atender estos señalamientos y cumplir con las guías COE RGL 02-02. Ver <b>Apéndice D-d</b> de la DIA-F.</p>
		<p>“The proposed stream mitigation is in the same location marked "detention pond" in Exhibit 19 the selected alternative. We assume that this area will receive storm water runoff from the project and parking area. The parking area makes no effort to develop a parking with built in grassed retention swales, to improve water quality prior to discharging into the "mitigation" area. Enclosed is a cross section of a well designed parking lot with storm water detention swales. If the applicant insists on single level parking rather than concentrate all parking into a multilevel structure, we recommend that storm water retention swales be incorporated into the project design.”</p>	<p>Ver Carta de Trámite al <u>Plan de Mitigación Enmendado</u> de marzo de 2006 donde se responde a la recomendación de incorporar “storm water detention swales” en el proyecto.</p>

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		<p>“Based on the above, we believe that the applicant's alternatives analysis and mitigation plan should be accepted by the Corps. The concept of avoiding impacts by building several shopping nuclei should be further explored with onsite mitigation and enhancement.”</p>	No comentarios.
23/sept/03	SNPM	<p>El SNPM emite una comunicación indicando que los comentarios sometidos por el Servicio Federal de Pesca y Vida Silvestre, mediante comunicaciones con fecha de 3 de abril y 8 de agosto de 2003, representan la posición del SNPM con relación al proyecto.</p> <p>El SNPM también indica que continúa creyendo que debido a que el proyecto impacta al Río Candelero y al sistema de humedales asociados a éste “the work could adversely impact fishery resources for which the National Marine Fisheries Service is responsible.”</p>	<p>PDMPI se encuentra redactando un <u>Addendum al Análisis de Alternativas</u> para aclarar que el proyecto no afectará adversamente recursos pesqueros.</p>
25/nov/03	Oficina Estatal de Preservación Histórica	<p>En esta comunicación la Oficina Estatal de Preservación Histórica indica lo siguiente: “While we believe that an Agency’s finding of no historic properties affected is appropriate for this undertaking, the Federal Agency will need to submit an official determination for our review in order to complete the Section 106 review.”</p>	<p>La OEPH solicita al CIE que emita una determinación oficial de que no se han identificado propiedades históricas con el fin de completar la revisión bajo la Sección 106.</p>

**ALTERNATIVE ANALYSIS  
FOR THE PROPOSED  
PALMAS DEL MAR SHOPPING CENTER**



Submitted by

**Palmas del Mar Properties Inc.  
Humacao, Puerto Rico**

To

**U.S. Army Corps of Engineers**

July 1, 2003

**USACOE  
200106183 (IP-JR)**

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## EXHIBITS

- EXHIBIT 1: Planning Board Resolution Fourth Extension Location Consultation 70-012-URB November 30, 1972
- EXHIBIT 2: EQB Resolution R-02-6-1 March 8, 2002
- EXHIBIT 3: Palmas Del Mar Environmental Impact Statement 1972  
Figure 1: Location Map  
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- EXHIBIT 4: Commercial Parcel Acquired Property
- EXHIBIT 5: Master Land Use Plan for Palmas Del Mar January 1974 - Planning Board Certified Copy
- EXHIBIT 6: Informe Núm. 74-URB-012 ORPC - Feb. 28, 1974 and Plan
- EXHIBIT 7: Palmas Del Mar Master Plan May 1, 1973 – PSC Certified
- EXHIBIT 8: Planning Board Extension Report 75-SPD-080 and Palmas Del Mar Land Use Plan
- EXHIBIT 9: Planning Board Resolution and Palmas Del Mar Master Plan May 22, 2000
- EXHIBIT 10: Planning Board Tourism Zoning District Resolution and Plan November 2000
- EXHIBIT 11: Palmas Del Mar Plan of Existing Conditions June, 2003
- EXHIBIT 12: Commercial Parcel Topographic Plan and Boundaries
- EXHIBIT 13: Commercial Parcel Aerial Photo
- EXHIBIT 14: Alternative A: *Design Around Existing Stream System*
- EXHIBIT 15: Alternative B: *Design a Typical Strip Shopping Center*
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- EXHIBIT 18: Alternative E: *Design a Town Center*
- EXHIBIT 19: Alternative F: *Design a Main Street Concept*
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- EXHIBIT 21:            Alternative F: *Sketch Perspective (Aerial)*
- EXHIBIT 22:            Commercial Project Grading Plan (Advanced Print)
- EXHIBIT 23:            Commercial Project HH Study and DNER Endorsement
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## I. INTRODUCTION

This report was prepared by Palmas del Mar Properties, Inc. (Palmas), a subsidiary of Maxxam Property Company, in support of its application to fill approximately 5.7 acres of waters of the United States at an approximately 60-cuerdas parcel located across the main gate of the Palmas del Mar Master Planned community in Humacao, Puerto Rico. Palmas proposes to develop a 662,750 square foot Shopping Center, of which approximately 492,700 square feet will be dedicated to retail sales and approximately 114,800 square feet will be dedicated to services. The project will involve the relocation of approximately 400 meters of the channel of an unnamed tributary to the Candelerio River; the filling of approximately 400 lineal meters of the existing channel of the unnamed tributary, and of approximately 750 lineal meters of an intermittent northern tributary to the unnamed tributary of the Candelerio River. As is explained in greater detail in the mitigation plan, Palmas will complete the required mitigation for all permitted wetland impacts upon issuance of the permit.

The purpose of this analysis is to evaluate whether there are any practicable alternative locations for the proposed project that would have less adverse impact on the aquatic ecosystem. This report also analyzes the steps that have been taken by Palmas to avoid wetland areas and minimize wetland impacts. Mitigation for unavoidable wetland impacts is discussed in a separate mitigation plan.

## II. BACKGROUND AND NEED FOR PROJECT

### A. Description of the Work

Palmas has submitted an application to the U.S. Army Corps of Engineers for a Clean Water Act Section 404 permit to discharge dredged or fill material into approximately 5.7 acres of jurisdictional waters of the United States, including headwaters streams and adjacent wetlands. The discharges will be associated with the construction of a Shopping Center, which is to be known as Palmas Shopping Village, to provide goods and services to the residents and visitors of the Palmas del Mar Master Planned community and of adjacent communities. The construction activity covered by this application is anticipated to occur over an approximately two-year period of time.

The proposed project will consist of an approximately 662,750 square foot Shopping Center, of which approximately 492,700 square feet will be dedicated to retail sales, and approximately 114,800 square feet will be dedicated to services. The proposed design for the Shopping Center is the "main street" concept. The main feature of this design is that it is laid out in a linear fashion along a "main street". The project objective is to provide a pleasant environment conducive to pedestrian activity, while conveying a sense of place for Palmas del Mar's residents, visitors, and residents of surrounding communities.

## Alternative Analysis for the Proposed Palmas del Mar Shopping Center

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The proposed main street design takes into consideration two important market-product issues related to the proposed project. First, the architectural design seeks to maximize synergies with the Palmas del Mar community. It is intended to emphasize the lifestyle of Palmas del Mar's residents and visiting tourists. Thus, the architectural design of the center will adopt Palmas del Mar's predominant Caribbean and Mediterranean architectural style.

Secondly, the "main street" concept also seeks to offer market area customers a different shopping alternative and experience. The proposed Shopping Center main goal is to draw clientele from a broad geographic area to sustain an appropriate sales level in the proposed 662,750 square foot facility. In a region where the competition is limited to medium and large community strip Shopping Centers, a main street format having Palmas del Mar's sense of place, should have the required differentiating elements to attract customers from a larger geographic extension.

The site layout of the facility provides the required spaces to accommodate tenants that will serve both the Palmas del Mar's residents and visitors, and that of the Region. Space on each end of the main street will be provided for big or medium size box tenants. The objective is to accommodate in these spaces off-price retailers, and super-savings stores to create a value-oriented format offering good quality, fair prices, selection and service that attracts consumer's attention and dollars.

The layout will also generate a pedestrian activity that should be socially appealing and entertaining to the visitor. The focal point of the project is a large central plaza surrounded by restaurants and entertainment venues, including an 8-theater cinema-plex. The cluster of entertainment activity around the plaza will create an entertainment anchor that should draw customers from the center's market area and beyond. Another very important impact of this setting is that it will increase consumers' average visiting hours, overall pedestrian traffic in the facility and average expenditures per visitors.

The proposed Shopping Center will be attractive for the family as a whole, young and adults alike. The central plaza would incorporate a water feature (splash fountain) in the shape of a sun to provide a soothing, cooling effect for adults as well as a fun, splash zone for children. The plaza would also have an open-air amphitheater for outdoor performances and scheduled events.

In summary, the proposed project should provide visitors with a "Palmas downtown shopping experience", while offering customers value shopping and entertainment for the family as a whole. The uniqueness of the proposed project in the Region and in all of Puerto Rico will reflect upon the success of the project and the Shopping Center positioning as the only true regional center on the East of Puerto Rico.

**B. History of the Palmas del Mar Master Planned Community and the Commercial Parcel**

Most of the land that comprises Palmas del Mar territory today was originally acquired by Palmas (through its predecessor Palmas del Mar Company) in 1969<sup>(1)</sup>. The territory was historically farmed for sugarcane production, from at least the mid-1930s until approximately the late 60's. More recently, the area was used for cattle grazing. Cattle were removed from most of the Palmas' territory in 1988. At the present time approximately 57 percent of Palmas' territory has been developed as a resort and residential community, as indicated in the plan of existing conditions on **Exhibit 11**. As we will discuss here, development in the Palmas del Mar Master Planned community commenced prior to passage of the Clean Water Act and implementation of the EPA's guidelines and Corps regulations.

The initial Palmas del Mar Master Plan approved by the Puerto Rico Planning Board in December 11, 1969 through Location Consultation Number 70-012-Urb has evolved to adapt to historical changes in the Puerto Rico and the U.S. economy, the real estate market, and the tourism industry. To date, two hotels; inner harbor boats slips facilities; Tennis Courts; 36 holes of golf (two courses); Golf Country Club; a private school (Palmas Academy); a Beach Club; neighborhood retail areas; and approximately 2,300 residential and condo-hotel units have been constructed in Palmas del Mar.

Through the Fourth Extension to the Location Consultation Number 70-012-Urb of November 30, 1972 the Palmas del Mar's Master Plan was expanded to include the development of a Commercial Area on a tract of land of approximately 90.75 cuerdas, among other uses such as a school and related recreational facilities. (Refer to **Exhibit 1**, Certified copy of the November 30, 1972 Planning Board Resolution). In 1972 an Environmental Impact Statement (EIS) for the Palmas del Mar Master Planned Community was prepared and authorized by the Public Service Commission in that same year (2). The 1972 EIS describes the site of the Palmas del Mar community as follows:

*"This project is located along a ten kilometer long stretch of the eastern coast of Puerto Rico in the municipalities of Humacao and Yabucoa. The largest part of the project is located in the Candeleiro Abajo Ward (Barrio) of Humacao. Smaller sections are included, in the north, in the Buena Vista Ward of Humacao and, in the south, in the Playa Ward of Yabucoa. Figure 1 shows in detail the boundaries of the project which covers approximately 2,500 acres".* (EIS, page.3) (Refer to Figure 1, Location Map, for the boundaries of Palmas del Mar as presented in the EIS, **Exhibit 3**)

Likewise, the description of the Land Use Plan in the EIS states that the projected Palmas del Mar resort will be developed to provide its residents and visitors with integrated residential, commercial and recreational facilities. Among the proposed land uses, the EIS specifically states the following:

## Alternative Analysis for the Proposed Palmas del Mar Shopping Center

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*"A small neighborhood shopping center to serve retail and office activities has been approved at the north end of the site in the Buena Vista hills "* (1972 EIS, Section c Commercial, page 40).

A review of the resort area in Figure 1 of the EIS shows that the north end boundary of the Palmas del Mar area comprises a portion of the parcel of land proposed to build the Shopping Center. The surface area of this part of the Palmas del Mar territory was later increased with the acquisition of a 43.29 cuerdas tract of land, which bounds with the Palmas del Mar Area (See **Exhibit 4**, "Commercial Parcel Acquired Property"). Subsequently, the surface area of this part of the Palmas del Mar territory was reduced with the construction of Highway PR-53 and the widening of PR-906. The parcel of land proposed to build the Shopping Center is comprised of two (2) portions: one, which forms part of the Palmas del Mar territory depicted in Figure 1 of the EIS, and a second tract identified as "Acquired Property" in the previously referred plan.

In 1974 the Planning Board approved a revised Master Plan for Palmas del Mar that included the proposed site for the Shopping Center. (See **Exhibit 5**, Master Land Use Plan for Palmas del Mar, Planning Board Resolution 70-012-URB, Copy Certified by the Planning Board on April 23, 2002). The proposed site was clearly identified in that Master Plan for "Commercial Use". In that same year the Puerto Rico Planning Board approved the construction of the tap water "force line" to serve the initial 300 units of the Palmas del Mar Resort. The "force line" was built within the boundaries of the north end of Buena Vista Hills. (See "Informe Num. 74-URB-012 ORPC Feb. 28, 1974", Case Num. 73-015-URB; and Tap Water Force Line Plan attached in **Exhibit 6**).

In tandem to this approvals at the Planning Board, in 1974 the Public Service Commission granted to Palmas del Mar Utilities Corporation a Franchise authorizing this non-profit corporation to build and operate an aqueduct and sewerage system and to provide such services to the Palmas del Mar Resort, within the territorial limits specifically described in the May 1, 1973 Master Plan for Palmas del Mar. (See **Exhibit 7** showing plan and Public Service Commission Certification of same). The parcel proposed for the Shopping Center was clearly depicted in that Master Plan for commercial use, and thus PDMU has the authority to provide water and sewerage services to the project.

On June 24, 1977, the Planning Board approved and partially adopted through the Extension Report 75-SPD-080 the "Palmas del Mar Land Use Master Plan and Preliminary Development", approving the development of 11,591 housing units. (See **Exhibit 8**). In that Master Plan the parcel proposed for the location of the Shopping Center was designated for "Commercial and Light Industry".

The Palmas del Mar Master Plan revised and approved by the Planning Board in May 22, 2000 designates the proposed site for the Shopping Center for Future Development. (Refer to **Exhibit 9**, Planning Board Resolution 87-51-04-90-JPU, Eight Extension, May 22, 2000 and Certified Master Plan). On September 13, 2000 Palmas submitted to the Planning Board Location Consultation Number 2000-51-0876-JPU to

## Alternative Analysis for the Proposed Palmas del Mar Shopping Center

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develop the proposed Shopping Center. A Preliminary Environmental Impact Statement (P-EIS) was submitted by the Planning Board to the Environmental Quality Board for public review on June, 2001. As of June 2003 the environmental review process for the Actualized P-EIS for the Shopping Center has not concluded.

Finally, on November 28, 2000 the Planning Board adopted the Tourism Zoning District for the municipalities of Humacao and Naguabo, assigning a C-4 zoning district to this parcel (Refer to **Exhibit 10**).

### III. DESCRIPTION OF PROJECT DEVELOPMENT

#### A. Original Plan

As mentioned in the preceding section, the original land use plan for Palmas del Mar was conceived by Palmas in the late 1960s. Palmas obtained local approvals for its development plans from the Planning Board in 1969, and through subsequent submittals of revisions to the Master Plan. As part of the proposed and approved land use plan a Commercial Area was designated for the area of Buena Vista Hills.

#### B. EIS

The EIS reflects Palmas' commitment to harmonizing its resort development with the natural environment. The resort has always had a particular orientation toward outdoor recreation. The original proposed land use plan for Palmas del Mar is illustrated in Figure 5 of the EIS. (Refer to **Exhibit 3**).

The EIS acknowledges that the Palmas del Mar resort project would result in substantial changes in the existing patterns of land use. However, the EIS concludes that the new land uses, part of an integrated resort complex, are compatible with each other, with existing land uses, and with socioeconomic conditions. On the subject of environmental impacts, the EIS states that the development was designed to maintain the current topography as well as to avoid unnecessary destruction of vegetation.

Road planning is also addressed the EIS. It notes that, unlike most coastal development, the main traffic arteries will be located further inland, rather than directly parallel and adjacent to the coastline. The roads were located to minimize disruption of topography and vegetation.

Location of retail land uses is also discussed in the EIS. The observations, conclusions, and alternatives analysis addressed in the EIS should be considered by the Corps in its evaluation of the proposed Shopping Center.

**C. Current Conditions**

The current conditions at Palmas del Mar are depicted in **Exhibit 11**. From the original plan, two 18-hole golf courses have been built. Candelero Drive branches off from Palmas Drive, providing access to the Candelero Hotel and existing residential projects. The north end of the property is at this moment inaccessible. The central areas of the property are accessible by Palmas Drive. Existing improvements such as the utility plant; residential and tourist oriented projects; recreational facilities, including the beach club and the country club; golf and tennis; and designated open green areas and preserves constitute constraints on the scope of alternatives under this application.

**D. Development of Current Proposal**

**1. Defining the Project Goals – a Brief History**

Palmas del Mar is a planned resort community unique to Puerto Rico in its scope and quality of offerings. The only one of its kind on the island, Palmas del Mar has grown to about 2,300 residential and tourist units since its origin in the early 1970's. It is slated to reach about 9,953 units once completed.

Palmas del Mar is an upscale community that for many years has been perceived primarily as a second home market to stateside and local persons both for vacation and investment purposes. In the past decade, however, Palmas del Mar has steadily transitioned into primarily a first home market. One of the principal reasons for this is that Palmas del Mar offers an excellent residential alternative with an exceptional quality of life that has appealed to local professionals from as far away as the San Juan metro area. The trend towards first home buyers in Palmas del Mar is expected to continue as Palmas del Mar increases its amenities to include a new hotel, full service marina, and a place of worship, to name a few.

Palmas del Mar is perceived as a safe environment, offering family-oriented activities that include horseback riding, tennis, golf, jogging trails, bike trails, watersports and boating, among others. Also, a Beach Club was opened in 2001 that includes a swimming pool and restaurant. As an additional attraction to families, the Palmas Academy School was improved to include all academic offerings from kindergarten to the 12<sup>th</sup> grade.

Perhaps even more alluring is that Palmas del Mar offers it's residents and visitors the freedom of moving about in an open and extensive environment of well-maintained landscaped areas with a sense of safety. Because it is access controlled with extensive security, this freedom of movement provides a feeling of peace and well-being that is not typical in other locations in Puerto Rico. It is worthy to note that the lush vegetation so characteristic of the Palmas del Mar environment is maintained through the recycling of water, an increasingly valuable resource

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With the improvements to State Road PR-30 and the completion of Highway PR-53, once remote Palmas del Mar is now seen as a viable commute, even from San Juan. It is, in today's market, a value-oriented, first home alternative to the expensive housing projects that have sprouted up around the eastern region of Puerto Rico. As a master planned community in its 34<sup>th</sup> year of existence, Palmas del Mar represents an excellent alternative to the urban sprawl that has taken foothold in the region.

One of the offerings that Palmas has planned to provide to its residents and visitors is a Shopping Center consistent with the needs and character of its resort atmosphere. Currently Palmas del Mar residents and visitors, as well as residents from the neighboring communities, are physically separated by the PR-53 toll booth from their only proximate shopping alternatives: the strip centers on the north end of Humacao. As the Palmas del Mar community has grown, so has the community around it. There is a need for a new shopping alternative for this area that would be served by the proposed Shopping Center.

As discussed before, since the inception of its master plan in the early 1970's, the selected site has been designated as the future commercial parcel to serve Palmas del Mar and the surrounding communities, anticipating that in the course of its population growth the resulting market would mature to the point of defining the right time for its development. More recently, the Planning Board, on its own accord, designated the entire site as a C-4 commercial district, precisely the zoning suitable for the proposed Shopping Center. In fact, this designation allows for a much larger Shopping Center than that proposed, as we shall see in the alternatives evaluated.

The timing for this project was prompted a few years back by several events that eventually shaped the on-site alternatives studied and more so, the alternative selected for development. The first of these events occurred 5 years ago when Palmas was approached by a major national retailer that was interested in opening a store on the proposed Shopping Center site. Soon thereafter, important local merchants and a major gasoline retailer all showed interest in the site.

These were all clear indicators that the timing was right for the development of the Shopping Center, and Palmas set out as it has done characteristically with all of its development projects; to methodically study the possibility. However, a critical event occurred after the approach by a major national retailer that served as a definite catalyst to accelerate the development of the commercial parcel. This major retailer's approach to Palmas consisted of a proposal to develop a typical strip center with itself as the anchor tenant and the usual potpourri of small tenants as filler. This was perceived by Palmas as an unsightly "cookie cutter" design that has been repeated many times, and considered it to be out of character with Palmas del Mar.

Palmas did not envision the same, tired, non-descript, sea-of-asphalt, sign-cluttered Shopping Center as an appropriate on-site solution to the proposed Shopping Center, though this alternative is economically feasible. It was not a solution in keeping

## Alternative Analysis for the Proposed Palmas del Mar Shopping Center

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with the environment of Palmas del Mar, and more specifically, certainly not the image it wanted to project on its front door.

Instead, Palmas desired a Shopping Center that had the flavor and feel of the casual, tropical Mediterranean ambiance that is characteristic of its projects. Even more importantly, Palmas felt that the project provided a unique opportunity to reach out to the surrounding communities. It envisioned a project that could promote social interaction between residents of all social strata by providing a pleasant atmosphere with ample landscaping, public spaces and oriented to the pedestrian.

Palmas set out to explore on-site alternatives that would produce such a project. The concept to be pursued must be compatible with the architectural character of Palmas del Mar, be economically feasible and provide for social interaction by having a sense of place and providing an experience beyond that than just another typical Shopping Center.

### IV. ALTERNATIVES ANALYSIS

#### A. Introduction

In general, EPA's Section 404(b)(1) guidelines direct that the Corps shall not permit discharges of dredged or fill material if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic environment, so long as the alternative does not itself involve other significant adverse environmental consequences. (40 C.F.R. § 230.10(a)). The Corps can consider sites that were available to the applicant at the time the property was purchased. (*Bersani v. United States Environmental Protection Agency*, 674 F. Supp. 405 (N.D. N. Y. 1987), ~ 850 F.2d 36 (2d Cir. 1988), cert. denied, 461 U.S. 927 (1989)). If an activity will impact a "special aquatic site," including wetlands, the Corps shall presume practicable alternatives that do not involve special aquatic sites are available for nonwetland-dependent activities. (40 C.F.R. § 230.10(a)(3)).

As stated before, the current applicant and its predecessor have owned Palmas del Mar territory and planned for an integrated resort development well before passage of the Clean Water Act and implementation of the EPA's guidelines and Corps regulations. At the time Palmas purchased this land, there existed no federal statutory constraint to its development activities in wetlands. The initial Palmas del Mar land use plans were developed and approved by local authorities prior to enactment of Section 404 of the Clean Water Act. Moreover, it was not until several years after Palmas committed to development of this community, with the same general scope and layout as the current proposal, that the EPA developed its Section 404(b)(1) guidelines, the Corps acknowledged their binding effect, and the courts issued interpretations that shape the Corps' current alternatives analysis, as in the *Sweeden's Swamp* case (*Bersani*). Therefore, because Palmas purchased this property long before enactment of Section 404 and promulgation of the EPA guidelines, the presumption of alternative non-aquatic sites is inapplicable to a Section 404 application for the remaining phases of Palmas del Mar.<sup>(3)</sup>

## Alternative Analysis for the Proposed Palmas del Mar Shopping Center

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The EIS considered alternative distribution of land uses and activities in Palmas' territory, including commercial uses north of the Buena Vista area. Because (1) Palmas considered alternatives prior to committing to this development in the early 1970's and; (2) this general development plan has been approved by the Commonwealth of Puerto Rico, Palmas is not in the position of other permit applicants who could have avoided sites involving wetlands prior to submission of a permit application. Palmas purchased this land prior to enactment of the Clean Water Act, committed to a resort development here with the knowledge and consent of the Commonwealth's environmental and land use authorities, and has undertaken to avoid wetlands on this site to the greatest extent practicable.

### **B. Construction of the Shopping Center**

The purpose of the proposed project in this application is to provide goods and services to the residents and visitors of the Palmas del Mar Master Planned community and residents of adjacent communities. Although on its face, a Shopping Center may not appear to be a water dependent activity, in this case the relative location of the headwater streams and adjacent wetland areas require the location of the project in the waters of the United States to serve its purpose. According to EPA's Section 404(b)(1) guidelines, practicable alternatives are limited to those alternatives that do not involve a discharge of dredged or fill material into waters of the United States or the ocean. (40 C.F.R. § 230.10(a)(1)(i)). An alternative is practicable if it is available and capable of being done, after taking into consideration cost, existing technology and logistics in light of overall project purposes. (*Id.* at § 230.10(a)(2)). "If it is otherwise a practicable alternative, an area not presently owned by the applicant which could reasonably be obtained, utilized, expanded or managed in order to fulfill the basic purpose of the proposed activity may be considered". (*Id.*)

The following is a discussion of alternatives considered by Palmas relating to the proposed Shopping Center:

#### **1. No Shopping Center Construction**

Not constructing the Shopping Center is not a practicable alternative to the proposed work. The purpose of this project is to provide goods and services to the residents and visitors of the Palmas del Mar Master Planned community and residents of adjacent communities. Since this parcel has been zoned by the Puerto Planning Board for commercial use through a C-4 district designation, failure to construct the project would leave these valuable tracts of land unusable for any development purpose other than agriculture. (Refer to **Exhibit 10**, Naguabo-Humacao Tourism Interest Zoning Map and related Planning Board Resolution).

**2. Off-Site Alternatives**

Off-site locations are not practicable alternatives to the preferred plan identified by Palmas in this report and need not be considered by the Corps. First, the Palmas del Mar resort was planned by Palmas, scrutinized for environmental impacts in an Environmental Impact Statement, and permitted by the local land use authorities prior to the enactment of the Clean Water Act and the development of the Corps' Section 404 regulations. The plans approved by Commonwealth authorities in the late 60's, and as subsequently amended, anticipated development of these areas, including substantial wetland impacts, for resort condominiums, shopping areas and golf courses. Existing developments of the Palmas del Mar community have been constructed pursuant to the original plan.

Because of the substantial commitment of resources to this project prior to passage of Section 404 and development of the Corps' wetland program, the EPA guidelines do not require nor would it be reasonable for the Corps to suggest that Palmas should abandon its development plans for this property and consider off-site locations. Moreover, case law addressing this issue indicates that the Corps need not consider offsite locations for the proposed Shopping Center. In *Sylvester v. United States Army Corps of Engineers*, the Ninth Circuit Court of Appeals evaluated the Sacramento District's consideration of a permit to fill eleven acres of wetlands to build a golf course associated with the Resort at Squaw Creek development. 882 F.2d 407 (9th Cir. 1989). This case notes that the Corps has a duty to consider the applicant's purpose in evaluating whether an alternative site is practicable. In this case, as with Palmas del Mar, the location of the resort and resort buildings was fixed by decisions not involving the Corps of Engineers. The Corps should consider the relationship of the proposed Shopping Center to the entire resort project. (882 F.2d at 409). In *Sylvester*, the Corps appropriately concluded that off-site alternatives would not meet the developer's basic purpose and need and would not be practicable alternatives. The court upheld the Corps' rejection of off-site locations for a resort-associated golf course.

**3. On-site Alternatives**

Given that there are no practical and feasible off-site alternatives to locate the Shopping Center, Palmas focused its efforts in assessing the best on-site alternatives for the project. What follows is a discussion of the factors and analyses conducted by Palmas in making that assessment.

**a. Shopping Center Typology**

There are various, clearly identifiable configurations for shopping centers in today's highly competitive retail environment. In order to produce a successful Shopping Center one has to achieve the right combination of tenants (tenant mix) within a particular center type that will address the market for which it is intended. This is a lengthy and complex process that involves the coordinated effort of many professionals over a long period of planning, leasing, financing, legal contracts, design and

## Alternative Analysis for the Proposed Palmas del Mar Shopping Center

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construction work; and continuing non-stop operations, management and marketing that will endure for the life of the center.

The ability of a new Shopping Center to stand up to the competition, and more so to withstand the test of time, depends on the interaction of a complex set of variables that as a whole shape the center into a desirable shopping destination. Whether we talk about *big-box* tenants in *strip centers*, *category killers* in *power centers*, *traditional anchors* in *regional malls*, *entertainment anchors* in *mega-malls*, *destination stores* in *out-parcels*, a *neighborhood center* or any of the endless combinations of store/center types recognized in the jargon of the Shopping Center industry, one thing remains clear: the survivability of a Shopping Center is reflected by its ability to turn a profit consistently. If it does not, it means that the stores are not selling well year after year. If this continues, the center will start to deteriorate as good tenants seek ways to forego lease agreements for better locations.

Eventually, as its cash flow dwindles, the center deteriorates until it finally "goes dark" or some higher and better use is found for the property. The most beautiful site with the most astonishing architecture imaginable cannot survive if the stores do not consistently sell their goods and turn a profit. The result will be a center that dies or morphs into a different use.

This multi-billion dollar industry is served by its own association, the International Council of Shopping Centers (ICSC) that works very closely with the Urban Land Institute, a planning think-tank, in monitoring the pulse of this dynamic industry. This industry as a whole is composed of planners, developers, architects, lawyers, engineers (civil, structural, traffic, mechanical, electrical, acoustical and others), lighting experts, security experts, interior designers, environmentalists, contractors, estimators, graphic artists, economists, accountants, merchants, Shopping Center executives and owners, as well as marketing and leasing experts.

Countless books have been written on this subject and it is beyond the scope of this Alternative Analysis to attempt an even moderately comprehensive review of the subject of Shopping Centers or what makes them successful. What we hope to achieve in this section is to explain in general terms the on-site alternatives that Palmas explored and why Palmas selected the proposed alternative as a viable Shopping Center design. Our focus will be for the most part on the physical planning aspects and the restraints that the site imposes on these.

### **b. General Shopping Center Design Guidelines**

During the planning and design process, there are thousands of constraints that need to be addressed by an array of professionals involved in shaping the Shopping Center. The more specialized the center is, the more complex the inter-relationship of these variables becomes and the more crucial it is that the concept of the center remains in focus.

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The following outline covers some of the more basic design and planning considerations that should be properly addressed for virtually any Shopping Center of a regional nature to be successful.

### Location:

- Location is the single most important element in the success of a regional Shopping Center.
- Demographics define the Shopping Center's market.
- The market defines the Shopping Center size and tenant mix.
- A suitable public roadway system provides the Shopping Center's access to the market.
- A good location is a function of all of the above.
- A good Shopping Center location is a good location at the right time.

### Lease Plan Configuration:

- Anchor tenants are considered destinations and attract shoppers.
- Anchor tenants are usually at the opposite end of pedestrian corridors to create flow along the front of small stores.
- Anchor tenants require a large parking field (critical mass of parking) in front of their entrances.
- Small stores benefit from the shoppers flow drawn in by the anchor tenants.
- The success of the small stores is critical to a Shopping Center's cash flow and profitability.
- The relationship between anchor tenants and small stores is of vital importance to the economic well being of the center.

### Vehicular Access/Egress and Internal Circulation:

- The perception of time expended in getting to and from the intended shopping destination is very important to today's time-strapped shopper.
- The shopper's perception of time expended in getting to and from the intended shopping destination affects future shopper visits, therefore the bottom line.
- The shopper's perception of time expended is positively affected by good, free flowing vehicular access/egress to the public roadway system and parking fields.
- Good access/egress to the public roadway system is a function of adequate driveway capacity and stacking where needed to accommodate the "metered flow" typical of most Shopping Centers.
- Good internal circulation improves shopper access to parking fields.
- Good internal circulation is dependent on internal roadway capacities and clear circulation patterns that help reduce traffic friction points.
- The separation in the movement of different vehicle types (i.e.: shopper vs. service vehicles) helps to maintain good internal circulation.

### Parking Layout and Distribution

- Shopping Center parking is a function of gross leasable area (GLA) and tenant mix.

## Alternative Analysis for the Proposed Palmas del Mar Shopping Center

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- Shopping Center parking is oftentimes expressed in parking ratios (per 1,000 square feet of GLA) and planned for the center's 20<sup>th</sup> highest hour.
- Shopping Center parking is usually divided into critical masses of parking, or *parking fields*, that are strategically sized and located with respect to the proposed tenant uses, in particular as relates to the anchor tenants.
- Well-planned parking fields are an important element to the shopper's perception of time in/time out in making purchases.
- Well-planned parking fields provide easy to understand circulation to facilitate shopper "hunting" (looking for a space) during hours of increased center activity.
- As a general rule, 90 degree parking, double-striped, in standard sized stalls are best.
- Parking columns should be perpendicular to storefronts.

### Service and Maintenance areas

- Service and Maintenance areas are generally located in the rear of center, away from shoppers.
- The interface between heavy truck traffic and shopper traffic needs to be addressed.
- Service areas generally are planned as pockets serving various stores (service courts) for efficiency and security reasons.

### Center Appearance and Other Considerations:

- The aesthetics in a center's design is a function of its intended market.
- Design continuity in the center is usually perceived as a positive and unifying factor.
- Landscaping is attractive to a center, but need to be carefully planned for ease of surveillance and related security concerns.

### c. **General Site Analysis**

The proposed site is approximately 60 cuerdas. The site is oblong shaped in the north-south axis, forming a point on the north end at the grade-separated interchange of highway PR-53 and state road PR-906. The property is bounded to the west by PR-53 (elevated) and land belonging to the successors of Fernandez-Garzot family. The south end of the property is bounded by the Candelerio River. The east side of the property is bounded by state road PR-906.

The site slopes from north to south and is steepest on the north end, with a gentle slope where it meets the river on the south. The site is grassy and mostly devoid of trees. It has been used intermittently for cattle grazing. Drainage streams run from north to south and north to southeast towards the Candelerio river basin. (See **Exhibit 12**).

Given the site boundaries, the only feasible point of entry into the site, for both physical and visual reasons is from PR-906. This road was built years ago to its full planned operating width and includes two of the three planned access points into the future Shopping Center site. (Refer to **Exhibit 13**, Aerial Photo). The three proposed

access points into the site from PR-906 were approved by the PR Highway Authority. The access to the site is one of the most important elements in evaluating possible on-site Shopping Center alternatives.

### **d. Preferred Alternative**

The process to select the preferred alternative consisted in evaluating a series of on-site alternatives during various design sessions in which Palmas assembled a team of experts to brainstorm the site configurations presented by the architect. This team included some of the leading experts in the fields of economics, commercial real estate, commercial appraisal, marketing, and some of the top management, leasing and operations experts.

The following on-site alternatives were studied and evaluated by the assembled team of specialists in sessions that took place over a period of many months. A brief summary is included describing the reasons why each of these was either rejected or accepted.

#### **Alternative A:**

##### **Design Around Existing Stream System (Not Selected):**

As seen in the concept sketch included as **Exhibit 14**, the attempt to design around the existing stream and wetland system is not suitable since it would severely fragment the Shopping Center into separate, irregular plots. These fragmented plots would represent a costly and impractical impediment to site engineering, including, but not limited to:

- The need to be interconnected by numerous bridge structures over the existing stream system (requiring fill and excavation in said system).
- The need for a complicated, non-functional grading plan that would require costly and extensive earthwork, steep-slope control and expensive retaining walls.
- The need to cross the existing stream system with utilities (storm, sanitary, potable water, fire protection water, electrical, CATV, and telephone lines).
- A grossly inefficient, extensive and expensive utilities distribution system to reach all the fragmented sites.
- A highly ineffective traffic circulation pattern created by the nature of the inter-connecting bridge structures between the parcel fragments.
- Parking fields would be irregular, inefficient and confusing for the shopper.
- A dysfunctional pedestrian circulation system that would not be conducive to generating cross-traffic between stores on each of the fragmented parcels.
- The need for extensive fences to protect each pad site generated by the fragmentation of the main parcel.

The costs, complexities and inherent inefficiencies involving the site engineering elements of this alternative would be grossly overshadowed by the fact that the resulting patchwork of irregular lots would severely limit tenant possibilities and configurations.

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Any attempt at designing the Palmas Shopping Center based on this alternative would result in a lease plan that would not be accepted by the retail industry and as such nearly impossible to lease. This alternative was therefore discarded.

### Alternative B:

#### Design a Typical Strip Shopping Center (Not Selected):

This alternative included as **Exhibit 15** was studied for the purposes of comparison with other concepts since it represented a "known quantity" readily understood by all of the team members. Although economically feasible, it was not selected for the reasons previously mentioned in Section III.D.1.

### Alternative C:

#### Design a Typical Covered Mall (Not Selected):

The alternative of a traditional, "dumb-bell" shaped, covered mall with a main corridor connecting large, two-story anchor tenants at each end of an enclosed mall with small scale GLA in between was also evaluated. (Refer to site plan, **Exhibit 16**). As in the previous alternative, this configuration is also highly recognizable and was readily understood by the team members, so it served as a good basis for discussion and comparison. Additionally, the concept also presented an opportunity to explore the full area allowed under the C-4 zoning district. At about 1.6 million square feet of possible GLA, this alternative was more than two and one-half times bigger than the selected alternative.

This on-site alternative was not selected for both conceptual as well as practical reasons. Conceptually, this alternative was not in keeping with the basic goals established by ownership, i.e., much too large, inward looking, oriented primarily to the automobile, lacking the outdoor, pedestrian-oriented experience, dependent entirely on air conditioning, and so on. On a practical level, this alternative also presented some serious difficulties such as higher building costs, difficult to phase, higher initial commitment, more dependent on traditional anchor tenants, much harder to lease to the small tenants. It also did not adapt to a site that for access and visual purposes only has one front towards PR-906 to the east. Finally, it would provide far greater retail sales capacity than the market area could support.

In all, the project would present much higher risks, and would prove very difficult to lease and to finance. This alternative was therefore discarded.

### Alternative D:

#### Design a Hybrid Mall (Not Selected)

This alternative was a variation of the covered mall that adds an additional component of retail GLA that faces outward, in this case eastward, towards the front of the site. (Refer to site plan, **Exhibit 17**). As in the previous alternative, the hybrid mall concept also maximized allowable square footage

## Alternative Analysis for the Proposed Palmas del Mar Shopping Center

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A relatively new Shopping Center configuration, this type of Shopping Center has evolved to adapt to some of the newer retail concepts. Larger stores than the typical in-line mall store, these outward (and sometimes also inward) facing stores are usually destination oriented, oftentimes combinations of retail and entertainment (sometimes referred to as *eater-tainment* in the retail world). These stores are oriented to bringing additional traffic to the mall and often have extended hours of use, thus the need for the exterior exposure.

This alternative was considered more ambitious and even more risky than the traditional covered mall design. For this and the other reasons that apply to the covered mall on-site alternative, the hybrid mall concept was not selected.

### Alternative E:

#### Design A Town Center (Not Selected):

This on-site design alternative was an attempt at exploring another type of Shopping Center configuration that has seen resurgence in the last decade or so: the Town Center. This type of Shopping Center draws on some of the nostalgic elements of traditional small town life that it evokes, using a grid element to organizing shops around a town square and along cross streets, albeit without losing sight of the needs that modern-day retail venues and shoppers require. (Refer to site plan, **Exhibit 18**).

This alternative was explored to take into consideration the possibility of achieving the maximum amount of retail GLA permitted under the zoning district, while at the same time trying to achieve the community oriented goals that Palmas had defined as a prerequisite.

While this alternative considers a gross area nearly equal to the traditional and hybrid mall alternatives, it differs considerably insofar as it does not rely on an air-conditioned, enclosed space to promote pedestrian movement and therefore social interaction.

In a very conceptual manner, this alternative brings into play the pedestrian street concept organized by a grid structure that intends to emulate the structure of a small town. It also insinuates the addition of a considerable amount of office space that is meant to provide a permanent resident base.

This alternative was considered by the team to be headed in the right direction, lending validity to the concept that pedestrian and vehicular flow can co-exist in an amiable environment. Despite this, it was still considered to be too ambitious and large-scaled to be economically feasible. Also, the Palmas del Mar master plan includes an office park, as well as other amenities, on the opposite side of PR-906, thereby creating a conflict with this alternative.

Although inspiring, this alternative was also not selected.

### Alternative F:

#### Design a Main Street Concept (Selected)

The *main street* concept was selected by the project team as an economically viable on-site alternative that best balanced the conceptual and practical goals and objectives that Palmas had established for the proposed Palmas Shopping Center.

The design concept features a wide, tree lined main street with canopied retail shops on a ground level and large end-cap anchor tenants to help promote pedestrian movement along the street. A limited number of shops are placed facing outward, toward the Shopping Center's access and main parking fields. (Refer to site plan, **Exhibit 19**). A second floor above the retail shops would provide suitable office space for professional and service oriented uses and will create additional draw to the center. (Refer to conceptual section sketch, **Exhibit 20**) The main street opens in the middle to a large, public square that is the focal point of the project. (Refer to sketch perspective, **Exhibit 21**).

Also visible from the Shopping Center's access and main parking fields, this centralized, plaza features:

- an open-air amphitheater for musical, theatrical and other public events,
- pleasing architectural design with a Caribbean and Mediterranean flavor,
- splash fountain as a cool and soothing water element and fun kid's place, and
- landscaping, flags and other amenities to help create a festive and pleasant environment. (See sketch perspective and sketch section).

The square is conceived as a pedestrian activity center that will help to extend shopper visits. Sit-down restaurants surround the square and would feature outdoor seating to add to the experience of the plaza. In the center of the square, facing east, a cinema multi-plex is planned that, together with the other elements, will make of this central square what is known in the industry as an *entertainment anchor*.

Other features of the selected alternative include:

- Excellent vehicular access and clear, easy to understand internal circulation.
- Well-sized and appropriately located parking fields.
- Cross malls strategically located to feed the main street from parking areas.
- Adequate separation of service vehicles from shopper vehicles.
- Functional and discretely located service areas.
- A linear plan easy to build in phases and that adapts easily to the site topography.

This concept represents a complete departure from the typical strip-center or air-conditioned, covered mall that has been repeated over and over in Puerto Rico. It would be the first regional center of its type on the island, an important point that led the economists on the team to consider a greater capture market area, thus enhancing the financial viability of the project.

In summary, the selected alternative contains the elements that the team felt would best serve the needs of Palmas del Mar and neighboring communities.

## V. POTENTIAL IMPACTS ON PHYSICAL AND CHEMICAL CHARACTERISTICS

The purpose of this section is to evaluate the potential impacts on the physical and chemical characteristics of the on-site selected alternative.

### A. Potential impacts to substrate

The substrate of the aquatic ecosystem underlies open waters of the United States and constitutes the surface of wetlands. It consists of organic and inorganic solid materials and includes water and other liquids or gases that fill the spaces between solid particles. Activities relating to the dredging or filling of materials can result in changes in the complex physical, chemical, and biological characteristics of the substrate.

The substrate of approximately 5.7 acres of waters of the United States in the site will be permanently converted to uplands as a result of the grading and filling required to construct the proposed project. The waters being impacted consists of approximately 2.82 acres of wet meadow herbaceous wetlands and approximately 2.88 acres of unnamed drainage channels tributaries to the Candelero River. The substrate within these waters will be filled and modified to elevations of approximately 15 meters for the construction of the proposed Shopping Center. Impacts to the substrate will occur during the cutting of the higher areas of the site and the moving of the material to lower areas. The material to be used consists primarily of Teja gravelly sandy loam. An advanced print of the grading plan for the proposed project was included in Attachment F of the Actualized P-EIS. (Refer to **Exhibit 22**).

As previously indicated, up to 5.7 acres of waters of the United States will be filled and the construction of a new channel along the southwest property boundary will result in the creation of approximately 8,400 square meters of new deep marsh area and pool and riffle complexes. In addition to performing the flood flow alteration function of the existing channel, the new channel will perform water quality functions such as contaminant and sediment filtering and will provide habitats for birds, reptiles and amphibians. Also, the Applicant proposes the creation of an approximately 6.6-acre forested wetland adjacent to the Candelero River. Further, this newly created forested wetland will provide additional flood flow alteration functions, as well as water quality and terrestrial and aquatic habitat functions and values currently not available in the area.

### B. Potential impacts relating to suspended particulates / turbidity

The excavation, filling, and grading activities during the construction phase of the proposed project could cause increased runoff in the area and potential sediment releases

## Alternative Analysis for the Proposed Palmas del Mar Shopping Center

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to the channels which connect to an unnamed tributary of the Candelero River. These discharges could result in a temporary increase in the amount of suspended particulates and turbidity in water reaching the streams and waterways, which include the Candelero River and the unnamed creek. The Candelero River will also be affected by the location of filling material on a portion of its floodway and the channeling of 400 meters of the unnamed creek, which flows along the west boundary of the proposed project to the Candelero River. In addition, the filling of 135 lineal meters of an intermittent tributary to the unnamed tributary and the piping of 750 lineal meters of an intermittent northern tributary to the unnamed tributary could also result in a temporary increase in the amount of suspended particulates and turbidity in water including the Candelero River and the unnamed creek. All of these channels have been impacted for agricultural purposes in the past and none of them currently have the original natural channels. The bed of Candelero River will be protected considering the hydrological features of the sector in the final design of the proposed Shopping Center. The new channel along the southwest property boundary will perform water quality functions, such as contaminant and sediment filtering, by the creation of approximately 8,400 square meters of new marsh area.

The measures to protect the adjacent bodies of water are analyzed in the H-H Study endorsed by the Department of Natural and Environmental Resources. (Refer to **Exhibit 23**). In addition, a Control of Erosion and Sedimentation Plan (CES Plan) will be prepared in order to include the necessary and legally required measures to protect the water bodies. The State Environmental Quality Board prior to its implementation must authorize this CES Plan. In order to minimize the potential impacts relating to suspended particulates and turbidity Palmas will implement and rigorously enforce the project's CES Plan. Measures to be implemented will include the location of silt fences, reinforced with hay bales to avoid the flow of sediments to the water bodies.

In addition, general and specific requirements for storm water management during construction and operation will be considered in the Storm Water Pollution Prevention Plan that will be prepared prior to commencing construction activities. The implementation of these measures will assure the control of storm water quality including the control of suspended particulates and turbidity. During the construction phase, sediments transported by storm water runoff will be collected in a sedimentation pond prior to its discharge to the Candelero River. Furthermore, suspended particulates and turbidity will be regulated as part of the Water Quality Certificate conditions that will be obtained prior to commencing filling activities.

We expect no adverse impacts caused by the filling activities.

### **C. Potential impacts on water**

The discharge of fill material can change the chemistry and the physical characteristics of the receiving water at a disposal site. In this case, the fill material will be primarily obtained from the same site by cutting the higher areas of the site and moving the material to the lower areas. The material to be used consists primarily of

## Alternative Analysis for the Proposed Palmas del Mar Shopping Center

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Teja gravelly sandy loam and should additional material be needed. clean clay material will be obtained. Changes in the clarity, color, odor and taste of water and significant addition of contaminants are not expected to occur. The suitability of the impacted water bodies for the populations of aquatic organisms and for human consumption, recreation, and aesthetics will be minimally affected.

In addition, general and specific requirements for storm water management during construction will be considered in the Storm Water Pollution Prevention Plan that will be prepared prior to commencing construction activities. The implementation of these measures will assure the control of storm water quality, including the control of suspended particulates and turbidity. During the construction phase, sediments transported by storm water runoff will be collected in a sedimentation pond prior to its discharge to the Candelero River.

Long-term adverse effects are not anticipated on freshwater, estuaries or marine aquatic habitat during the construction or operational phase of the proposed project. In addition, the filling activities are subject to the conditions of a Water Quality Certificate. The other aforementioned controls in connection to storm water quality will also provide additional protection measures.

### **D. Potential impacts on current patterns and water circulation**

The proposed project is located within an area that has two tributaries to the Candelero River. In addition, the area has four natural drainage lines joined in one drainage channel, which discharges to the Candelero River. The fill would eliminate water circulation on 5.7 acres of the project area. This area includes 11,303 square meters of wet meadows. The discharge of dredged or fill material would definitely modify current patterns. The existing creek channel's primary function was that of floodwater transportation and storage. However, the new channel along the southwest property boundary will result in the creation of 8,400 square meters of new marsh and riffle and pool complexes area and will have a flood flow alteration function equal or greater to that of the existing channel. In addition, the new channel will perform water quality functions, such as contaminant and sediment filtering, as well as will provide habitat for birds, reptiles and amphibians.

Palmas del Mar has a Master Drainage Plan, which considers several detention areas for the development of the Palmas del Mar Complex. These detention areas were designed to attenuate the post development peak outflow during the 100-year storm water event. None of these detention areas were located in the commercial project parcel. Detention areas throughout the Palmas del Mar Complex considered the increased discharge of storm water due to the impermeability of the commercial parcel and provide a measure to mitigate the increase on the peak discharge that will occur as a result of the commercial parcel development. The Master Drainage Plan governs the Hydrological and Hydraulic (H-H) Study prepared for the Shopping Center's parcel, thus it does not propose an additional retention pond to individually mitigate the storm water of the commercial project at the site. The retention areas within Palmas del Mar do not require

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special maintenance since there are wetlands next to the Candelero River, an artificial lake and green areas. The Department of Natural and Environmental Resources (DNER) issued a letter indicating that the Master Drainage Plan of Palmas del Mar is acceptable from a technical standpoint. (Refer to **Exhibit 24**, DNER letter of October 4, 2002).

The mitigation area will provide additional area to offset any impacts associated with the increased flow of storm water during rain events and decreased water retention of the site. In addition, the Hydrological and Hydraulic Study evaluates the sizing, location and orientation of all required new and existing culverts and earthen channels. Under future conditions, the reach of the west-east unnamed creek crossing through the site will be replaced with an open channel sized to contain 100-year flood flows and will be realigned to cross along the southern property limit, discharging into Rio Candelero at a location 590 feet upstream of the PR-906 bridge. The reach of the north-south dry-bed stream crossing the site will be replaced with a new culvert sized for 100-yr flows. Furthermore, during the construction phase Palmas will comply with the requirements of a Water Quality Certificate, and will implement a number of control and protection measures herein discussed.

### **E. Potential impacts on normal water fluctuation**

Proposed filling activities would permanently alter the water fluctuation patterns on 5.7 acres of the project area. This area includes 11,303 square meters of wet meadows. In addition, the discharge of the fill material and covering with impervious material will eliminate or reduce the ability of the site to detain storm water.

Palmas performed a Hydrological and Hydraulic Study and detention areas were assigned within the Palmas del Mar Complex to attenuate the post-development peak outflow from the Palmas del Mar site under the 100-year storm water event. The total watershed draining through Palmas del Mar and discharging into Candelero River was analyzed by the H-H Study under pre and post development conditions and the detention storage areas throughout the Palmas del Mar Complex were used to attenuate the total peak flow from the entire Palmas del Mar area. The study also evaluated the sizing, location and orientation of all required new and existing culverts and earthen channels. Under future conditions, the reach of the west-east unnamed creek crossing through the site will be replaced with an open earthen channel sized to contain 100-yr flood flows and will be realigned to cross along the southern property limit, discharging into Rio Candelero at a location 590 feet upstream of the PR-906 bridge.

The proposed Shopping Center may somewhat increase the peak flows and have erosion and sedimentation impacts. Potential indirect changes to vegetation and aquatic animals may occur if normal water fluctuations are substantially changed. The proposed on-site mitigation will relocate drainage flows, which will continue discharging to the Candelero River. The implementation of the Mitigation Plan in the area adjacent to the proposed site and to the Candelero River will also attenuate changes to normal water fluctuation. In addition, the detention storage areas throughout Palmas del Mar will attenuate the total peak flow from the entire Palmas del Mar Complex.

**F. Potential impacts on salinity gradients**

This section does not apply to the current analysis.

**G. Potential Impacts on Biological Characteristics**

**1. Potential impacts on threatened and endangered species**

The Applicant performed a Flora and Fauna Study of the proposed project site. No critical, endemic, threatened or endangered species included in the lists of the Department of Natural and Environmental or the U.S. Fish and Wildlife Service were identified within the project site or its immediate surroundings.

**2. Potential impacts to fish, crustaceans, mollusks, and other aquatic organisms in the food web**

The proposed project will impact a total of 5.7 acres of waters of the United States consisting of approximately 2.88 acres of stream channels and approximately 2.82 acres of wet meadow wetland area. The wet meadow provides habitat to mollusks, amphibians, reptiles and, to a limited extent, birds. The creation of wetlands conditions in the 6.6 acres area adjacent to the Candelerio River and the relocation of the intermittent channel, which would also create 2.07 acres (8,400 square meters) of new pool and riffle complexes and deep marsh area prior to impacting the above-mentioned areas will offset any potential adverse impacts to organisms in the food chain web since it will provide habitat for birds, mollusks, amphibians and reptiles.

**3. Potential impacts on other wildlife**

The proposed project will involve excavation and filling activities. The creek channels to be impacted had been previously impacted for agricultural purposes and the existing channels are not the original natural channels. From the 1950's until the 1990's, the site was also used for cattle grazing. The channel of the primary tributary was channeled from its beginning approximately 1.5 kilometers upstream to the project boundary during the construction of PR-53. These activities impacted the original conditions of this site.

As previously stated, no endemic, endangered, threatened, critical or otherwise protected upland or wetland species were found in the proposed project area. Flora and fauna resources found at the proposed site may be impacted due to the excavation and fill process during the proposed project construction. The impact of the proposed project will be one of substitution of wetland species. The conceptual Mitigation Plan proposes the planting of *Pterocarpus officinalis* and *Annona glabra* in the 6.6 acres area adjacent to the Candelerio River. In addition, the periphery of the mitigation area will be planted with *Manilkara bidentata* and *Sthalia monosperma*. These mitigation measures will result in the creation of an enhanced wetland. It will also result in a net increase of trees available for nesting or as travel corridors for birds. In addition, the relocation of the 400

meters channel will create wetland area on-site, which will provide and encourage the habitat for wildlife. These activities will offset any impacts to wildlife of the proposed filling activities on 5.7 acres.

**H. Potential Effects on Aquatic Sites**

**1. Potential impacts on sanctuaries and refuges**

Since no sanctuaries or refuges exist in the project area no impact from the proposed action is expected to occur on sanctuaries and refuges.

**2. Potential impacts on wetlands**

The applicant proposes to fill approximately 2.82 acres of herbaceous wetlands and 2.88 acres of intermittent unnamed drainage channels. (Refer to **Exhibit 25**). It will involve the relocation of approximately 400 meters of the channel of an unnamed tributary to the Candelerio River (Creek 1). The filling of approximately 400 lineal meters of existing channel of Creek 1, the filling of 135 lineal meters of an intermittent tributary (Creek 2) to Creek 1, and the piping of approximately 750 lineal meters of an intermittent northern tributary (Creek 3) to Creek 1. The existing creek channels primary function is that of floodwater transportation and storage. The channel relocation would create 2.07 acres (8,400 square meters) of new marsh area. The new channel will perform flood attenuation functions, and water quality functions such as contaminant and sediment filtering as well as provide habitat for birds, reptiles and amphibians. The applicant will implement a Mitigation Plan for compensation of lands filled as a result of the proposed project. A compensatory mitigation of 6.6 acres (26,500 square meters) adjacent to Candelerio River is proposed. The Conceptual Mitigation Plan will consider the planting of *Pterocarpus officinalis* and *Annona glabra*. In addition, *Manikara bidentata* and *Sthalia monosperma* are proposed to be planted within the mitigation area periphery.

**3. Potential impacts on mud flats**

This section does not apply to the proposed project.

**4. Potential impacts on vegetated shallows**

This section does not apply to the proposed project.

**5. Potential impacts on coral reefs**

This section does not apply to the proposed project.

**6. Potential impacts on riffle and pool complexes**

No pool and riffle complexes exist within the project site. However, the Applicant proposes to create a series of pool and riffle complexes within the proposed new channel to increase water turbulence and thus, the oxygen content within the water column. These pool and riffle complexes will also add habitat features of great ecological value to the area. Therefore, the proposed project will result in potential positive impacts to the environment.

**I. Potential Effects on Human Use**

**1. Potential effects on municipal and private water supplies**

There are no municipal or private water supplies in the immediate surroundings of the proposed project, nor do the Candelero River or its tributaries feed any of those systems. In addition, no potable water wells are located within a distance of 460 meters from the limits of the proposed project area. A test well, however, was constructed in the commercial parcel area. The test well results indicated that underground water is brackish. In addition, the cross section of the test well showed the presence of clay lenses, which prevents the vertical recharge of the aquifer with fresh water. Thus, underground water cannot be used for supplying potable water without desalinization treatment.

The potable water service will be supplied to the proposed project through an existing eight-inch pipeline in Road PR-906 owned by Palmas del Mar Utilities Corporation (PDMU). The estimated drinking water consumption during the construction phase is approximately 1,000 GPD and during the operation approximately 120,000 GPD. PDMU indicated that has the necessary capacity and infrastructure to offer the required potable water service to the proposed project. PDMU was authorized by the Public Service Commission to operate a water and wastewater system according to the conditions established in a franchise. Said Franchise also establishes a commitment from the Puerto Rico Aqueduct and Sewer Authority to provide to PDMU up to three million gallons of water per day in order to satisfy the future water demand of the Community of Palmas del Mar. By letter dated January 10, 2003, PRASA reiterated its commitment to continue providing the potable water supply to PDMU for the development of Palmas del Mar. (Refer to **Exhibit 26**, PRASA letter).

The wastewater will be discharged to PDMU's sewer system, which is connected to a Secondary Advanced Wastewater Treatment Plant with a capacity of 1.2 million gallons per day. The effluent of this wastewater treatment plant is used for the irrigation of golf courses and green areas at the Palmas del Mar community.

Sediments dragged by storm water will be captured in a retention pond prior to its disposal to the Candelero River during the earth movement phase until the parking areas are paved. The Palmas del Mar area to the south of the Candelero River will provide a

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capture source for the whole project, compensating for making impermeable the commercial project site.

The proposed Shopping Center will not affect any surface or underground water used as sources of a water supply system. In addition, the Applicant does not expect to significantly affect the water distribution in the region. Measures will be taken to avoid sediment transportation, which may cause changes in color, the presence of suspended particulates and turbidity in order to protect the quality of water bodies in the surroundings. These measures consist in the installation of silt fences in strategic places to avoid the earth access to the bodies of water. The silt fences will be reinforced with hay bales at the drainage area where the earth movement is being performed to avoid the free access of sediments to the bodies of water.

### **2. Potential effects on recreational and commercial fisheries**

No recreational and commercial fisheries exist within the project area or the immediate vicinity. Therefore, no impacts are expected on these resources.

### **3. Potential effects on water-related recreation**

No water-related recreation exists within the proposed project site or the immediate vicinity. Therefore, no impacts from the proposed project are expected.

### **4. Potential effects on aesthetics**

The project area was once used for the production of sugar cane. Subsequently, the parcel and its surroundings were used as lands for cattle grazing. All of the creek channels were previously impacted for agricultural purposes and the existing channels are not the original natural channels. There is no essential fish habitat in the project area and there are no endangered or threatened species in the project area. The project site currently consists of a pasture with no significant aesthetic value.

The discharge of dredged or fill material will not degrade the water quality, will not create distracting disposal sites, inducing inappropriate development, will not encourage unplanned and incompatible human access and will not destroy vital elements contributing to the compositional harmony or unity and visual distinctiveness. In addition, the design of the Shopping Center will provide a pleasant environment which will encourage the visitors' pedestrian activity and at the same time will create a center-town environment for the community of Palmas del Mar. Palmas' Shopping Center is a theme center based on a Main Street concept with a central public square promoting pedestrian activity in an open-air environment. The proposed project will enhance the aesthetics by considering the architectural and environmental improvement elements in its design.

**5. Potential effects on parks, national and historical monuments, national seashores, wilderness areas, research sites, and similar preserves**

No parks, national and historical monuments, national seashores, wilderness areas, research sites, and similar preserves exist within the proposed project site or its immediate vicinity. Therefore, the proposed project will not result in any impact to any of these resources.

**J. Evaluation of Fill Material**

**1. General evaluation of fill material**

The purpose of the fill is to raise the elevation of the site to approximately 15 meters for the construction of the Shopping Center. The fill material will be primarily obtained from the same site by cutting the higher areas of the site and moving the material to the lower areas. The material to be used consists primarily of Teja gravelly sandy loam. Additional material, if needed, will consist of clean clay material which will be supplied by the Oriental Truckers Cooperative, entity which has an agreement with a quarry owned by the Perelló Estate to obtain this fill material.

According to the Preliminary Subsoil Investigation Report, at building locations, the last 24-inches of embankment must be constructed using a select material which based on the AASHTO Soil Classification meets or exceeds an A-2-4 type. The subsurface soils of the second horizon at the highland area (not the top soil) are suitable to be used for the construction of fill embankments. The construction of embankments will be conducted under very controlled conditions. The placement of fill will be performed placing the selected fill or backfill in layers not exceeding 8-inches in thickness and impacted with a minimum degree of compaction of 95% of the fill material maximum dry density. Every slope surface to be filled must be stepped in order to key-in the fill embankment. All earthwork activities will be observed by a geotechnical engineer, including the identification and removal of unsuitable materials, laboratory testing and approval of proposed fill materials, in-situ testing of compacted materials for quality control and observation of footing excavations.

All bodies of water present and adjacent to the parcel will be protected from erosion and sediments pollution by implementing a CES Plan. Erosion control devices over every slope will arrest the migration of soil particles. In addition, well-designed drainage facilities provided near the crest of every permanent slope will prevent surface water from running over the face of the slope and through the soil.

**2. Chemical, Biological, and Physical Evaluation and Testing**

The principal concerns of the discharge fill material containing contaminants are the potential effects on the water column and on communities of aquatic organisms. Fill material may be excluded from the Guidelines evaluation if the likelihood of contamination is acceptably low. As previously explained, the Preliminary Soil Study

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provides fill criteria for discharge activities. Fill material from the parcel will be used for such purposes. The parcel was used for agricultural purposes and later was used for cattle grazing. This property was acquired by Palmas' predecessor Palmas del Mar Company in the late 1960's, thus its historic use does not suggest the likelihood of contamination. On the other hand, borrowed fill will be obtained from a local quarry. The Applicant does not foresee any likelihood of contamination.

### **K. Actions to Minimize Adverse Effects**

In addition to avoiding impacts when practicable, the 404(b)(1) Guidelines require that steps be taken to minimize those impacts to the aquatic environment, which cannot be avoided. Said analysis was performed according to the Guidelines' requirement that "... no discharge of dredged or fill material shall be permitted unless appropriate and practicable steps have been taken which will minimize potential adverse impacts of the discharge on the aquatic ecosystem."

#### **1. Actions Concerning the Location of the Discharge**

The purpose of the filling activities is to raise the elevation of the site to an elevation of approximately 15 meters for the construction of the Shopping Center. The discharge will involve the filling of approximately 400 lineal meters of the existing channel of an unnamed tributary to the Candelero River (Creek 1), the filling of 135 lineal meters of an intermittent tributary (Creek 2) to Creek 1, and the piping of approximately 750 lineal meters of an intermittent tributary (Creek 3) to Creek 1, resulting in the impacting of approximately 5.7 acres of waters of the United States. All excavation and material placement will be conducted by track hoe or similar equipment from the upland areas; thus, the substrate is composed of material similar to that being discharged.

#### **2. Actions Concerning the Material to be discharged**

This subsection contemplates the disposal of materials in a manner such that physicochemical conditions are maintained and the potency and availability of pollutants are reduced. According to the Soil Classification tests performed at the parcel, selected samples of soil classified as A-2-6 and A-1-b, based on the AASTHO Soil Classification System. Such soils are suitable to be used for the construction of embankments. For filling activities, the Applicant will select material meeting or exceeding an A-2-6 or better.

#### **3. Actions Controlling the Material After Discharge**

The effects of the fill material after discharge may be controlled by selecting discharge methods and disposal sites in order to reduce the potential for erosion, slumping or leaching of materials into the surrounding aquatic ecosystem. The parcel will be graded to an approximate elevation of 15 meters. The protection measures for the bodies of water present at and adjacent to the site are analyzed in the H-H Study

approved by the DNER for the Shopping Center. In addition, a Control of Erosion and Sedimentation Plan will be prepared incorporating the protection measures required by law to protect the bodies of water. The HH study determined that the increase in the flooding level at the Candelero River is not greater than 0.03 meters at any point along said River.

**4. Actions Affecting the Method of Dispersion**

During the construction phase, silt fences will be installed in strategic places to prevent loose earthen material from reaching the bodies of water. These silt fences will be reinforced with hay bales at the drainages where earth movements will take place to prevent the free access of sediments to said bodies of water.

**5. Actions Related to Technology**

The Applicant will employ appropriate maintenance and operation of equipment or machinery, including adequate training, staffing and working procedures to minimize the potential damage to the environment. In addition, Palmas will employ the appropriate machinery and method of transport (by truck) of the material for discharge.

**6. Actions Affecting Plant and Animal Populations**

The site was selected to avoid impacting areas having unique habitat or other value, including habitat of threatened or endangered species. In addition, the new channel along the southwest property boundary will result in the creation of approximately 8,400 square meters of new marsh area, which will perform water quality functions, such as contaminated and sediment filtering, as well as providing habitat for birds, reptiles and amphibians.

**7. Actions Affecting Human Use**

As noted above, the basic project's purpose is to provide goods and services to the community of Palmas del Mar and surrounding communities. The project will enhance the development of the Palmas del Mar Tourist-Residential Resort. As previously discussed in section IV.3.b., there are certain design principles which have been taken into consideration for the project to fulfill its intended purpose of catering to Palmas del Mar's residents and visitors, as well as to customers in the surrounding communities. Aesthetics relates to the projected market and attracts and extends the shoppers' stay. In addition, the project will also offer commercial and employment alternatives for the residents of Humacao and the adjacent municipalities.

**L. Compensation (Conceptual Mitigation Plan)**

Palmas proposes to fill approximately 5.7 acres of waters of the United States, including 2.82 acres of herbaceous wetlands and 2.88 acres of drainage channels, to construct a Shopping Center. The relocation and channeling of unnamed tributaries of

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Candelero River are included in the impacted estimate. The channels relocation would create 2.07 acres (8,400 square meters) of wetlands. The new channel will perform flood attenuation functions as well as biofiltering and sediments retention functions. Palmas will implement a Mitigation Plan for compensation of lands filled as a result of the proposed project. In addition to the new channel wetlands, a compensatory mitigation of 6.6 acres (26,500 square meters) adjacent to the Candelero River is proposed. The Conceptual Mitigation Plan will include the planting of *Pterocarpus officinalis* and *Annona glabra*. In addition, *Manikara bidentata* and *Sthalia monosperma* (an endangered species) will be planted within the mitigation area periphery.

Palmas will also comply with the regulatory provision of Planning Regulation Number 25, which requires mitigating the amount of trees lost during the development phase. In addition, the area will be enhanced with architectural landscaping.

### **M. Compliance with restrictions on discharge**

#### **1. Compliance with pertinent legislation**

No discharge will be allowed if the Applicant is not in compliance with: (1) Water Quality Standards: The Environmental Quality Board must issue a Water Quality Certificate including those conditions which the Applicant must comply; (2) NPDES General Storm Water Permit for Construction Activities; (3) Toxic effluent standards: Potential discharges under Section 307 of the Clean Water Act, as amended, are not expected; (4) Endangered Species Act: There are no endangered or threatened species within the proposed project area.

#### **2. Potential degradation of waters of the United States**

No discharge shall be permitted which will cause or contribute to significant degradation of waters of the United States. According to the 404 (b)(1) Guidelines, the effects which may contribute to significant degradation include effects on human health or welfare; effects on life stages of aquatic life and other wildlife dependant on aquatic ecosystems; effects on aquatic ecosystems diversity, productivity and stability; and effects on recreational, aesthetic and economic values.

*Effects on Human health or welfare:* As discussed previously, the proposed activity will not result in significant degradation of human health and welfare.

*Effects on Life stages of aquatic life and other wildlife dependant on aquatic ecosystems:* This item includes the transfer, concentration, and spread of pollutants or their byproducts outside of the disposal site through biological, chemical, and physical processes. Potential impacts to biological, chemical and physical processes are discussed in Sections G and H. The proposed activity will not result in significant degradation to the aquatic ecosystem.

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*Effects on the Aquatic Ecosystem Diversity, Productivity and Stability:* Potential effects to the aquatic ecosystem diversity include loss of fish and wildlife habitat or loss of the capacity of a wetland to assimilate nutrients or purify water. Section H of this document describes the potential effects to the aquatic ecosystem diversity, productivity and stability. The proposed project will not result in significant degradation to aquatic ecosystem diversity, productivity and stability.

*Effects on the Recreational, Aesthetic and Economic Values:* This item includes the effects of the filling activities on recreational, aesthetic and economic values. Section I of this document describes the potential effects to the recreational, aesthetic and economic values. The proposed project will not result in significant degradation to recreational, aesthetic and economic values.

Considering the above collectively, the proposed project will not result in significant degradation of waters of the United States.

### **3. Measures to minimize potential adverse impacts on the aquatic ecosystem**

According to the Guidelines, no discharge of dredged or fill material shall be permitted unless appropriate and practicable steps have been taken which will minimize potential adverse impacts of the discharge on the aquatic ecosystem. A number of mitigation and minimization measures will be implemented as part of the proposed project. Mitigation measures are discussed in detail in Section K. The proposed project has considered all possible measures to minimize potential impacts on the aquatic ecosystem.

## **N. Factual Determinations**

### **1. Physical substrate determinations**

The substrate of approximately 5.7 acres of herbaceous wetlands and streams will be permanently converted to uplands as a result of the grading and filling required to construct the proposed project. The substrate within wetlands would be filled and modified to elevations of approximately 15 meters for the construction of the proposed commercial center. Impacts to wetland substrate will occur during the cutting of the higher areas of the site and the moving of the material to lower areas. The material to be used consists primarily of Teja gravelly sandy loam. The bulk and composition of the discharge material and the location, and method of discharges will minimize the degree of impact on the substrate. An advanced print of the grading plan for the proposed project was included in Attachment F of the Actualized P-EIS. (Refer to **Exhibit 22**)

As previously indicated, up to 5.7 acres of herbaceous wetlands and streams will be filled and the construction of a new channel along the southwest property boundary will result in the creation of approximately 8,400 square meters of new marsh and pool and riffle complex area. In addition to performing the flood flow alteration function of the existing channel, the new channel will perform water quality functions such as

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contaminant and sediment filtering and will provide habitats for birds, reptiles and amphibians. Mitigation efforts, which will be performed on site and at the 6.6 acres area adjacent to the Candelero River, will disrupt the existing substrate through restoration and enhancement actions. The individual and cumulative losses of the wetland will not result in significant impacts to the physical substrate.

### 2. Water circulation, fluctuation, and salinity determinations

The proposed project is located within an area that has two tributaries to the Candelero River. In addition, the area has four natural drainage lines joined in one drainage channel, which discharges to the Candelero River. The fill would eliminate water circulation on 5.7 acres of the project area. This area includes 11,303 square meters of wet meadows. The discharge of dredged or fill material will modify current patterns. The existing creek channels primary function was that of floodwater transportation and storage. However, the new channel along the southwest property boundary will result in the creation of 8,400 square meters of new marsh area and will have a flood flow alternative function. In addition, the new channel will perform water quality functions, such as contaminant and sediment filtering, as well as will provide habitat for birds, reptiles and amphibians. The Mitigation Plan will offset any impacts associated with the increased flow of storm water during rain events and decreased water retention of the site. In addition, the Hydrological and Hydraulic Study evaluates the sizing, location and orientation of all required new and existing culverts and earthen channels. Furthermore, during the construction phase the petitioner will comply with the requirements of a Water Quality Certificate, and will implement a number of control and protection measures herein discussed.

Regarding the effects on fluctuation, the proposed filling activities would permanently alter the water fluctuation patterns on 5.7 acres of the project area. This area includes 11,303 square meters of wet meadows. In addition, the discharge of fill material would eliminate or reduce the ability of the site to detain storm water. The proposed project will increase the peak flow, and erosion and sedimentation impacts. Potential indirect changes to vegetation and aquatic animals may occur if normal water fluctuations are substantially changed. The proposed on-site mitigation will relocate drainage flows, which will continue discharging to the Candelero River. The implementation of the Mitigation Plan in the area adjacent to the proposed site and to the Candelero River will also attenuate changes to normal water fluctuation. In addition, the detention storage areas throughout the Palmas del Mar Complex will attenuate the total peak flow from the entire Palmas del Mar site.

No effects expected on salinity gradients. Considering the above, the individual and cumulative losses of the wetlands will not result in significant impacts to water circulation, fluctuation or salinity.

### 3. Suspended particulates/turbidity determinations

The performance of excavation, filling, and grading activities during the construction phase of the proposed project could cause increased runoff in the area and potential sediment releases to the channels, which connect to an unnamed tributary of the Candelero River. These discharges could result in a temporary increase in the amount of suspended particulates and turbidity in water reaching the streams and waterways, which include the Candelero River and the unnamed creek. The Candelero River will also be affected by the location of filling material on a portion of its floodway and the channeling of 400 meters of the unnamed creek, which flows along the west boundary of the proposed project to the Candelero River. In addition, the filling of 135 lineal meters of an intermittent tributary to the unnamed tributary and the piping of 750 lineal meters of an intermittent northern tributary to the unnamed tributary could also result in a temporary increase in the amount of suspended particulates and turbidity in water including the Candelero River and the unnamed creek. All these creeks and channels have been, in the past, impacted for agricultural purposes and none of them currently have the original natural channels. The creek bordering the property, as well as the river bed of Candelero River will be protected considering the hydrological features of the sector in the final design of the proposed commercial project. The new channel along the southwest property boundary will perform water quality functioning, such as contaminant and sediment filtering, by the creation of approximately 8, 400 square meters of new marsh area.

The measures to protect on site and adjacent bodies of waters are analyzed in the H-H Study endorsed by the Department of Natural and Environmental Resources. In addition, a Control of Erosion and Sedimentation Plan (CES Plan) will be prepared in order to include the necessary and legally required measures to protect the water bodies. The superficial drainage crossing the proposed project area from east to west will be substituted by a PVC or cement pipeline, providing a PVC-lined or cement section through which storm water will flow. No erosion will occur in this lined section. The remaining drainage in said parcel will remain as natural opened channels with vegetation covering its banks, which have been designed to decrease their flow speed in order to avoid erosion on channels.

In addition, general and specific requirements for storm water management during construction and operation will be considered in a Storm Water Pollution Prevention Plan, which will be prepared prior to commencing construction activities. The implementation of these measures will assure the control of storm water quality including the control of suspended particulates and turbidity. Furthermore, suspended particulates and turbidity will be regulated as part of the Water Quality Certificate conditions that will be obtained prior to commence dredging and filling activities.

The individual and cumulative losses of wetlands will not result in significant impacts to the water quality concerns of suspended particulates and turbidity.

**4. Contaminant determinations**

The suitability of the fill material is discussed in Section J. The proposed project will not result in the contamination of the aquatic ecosystem

**5. Aquatic ecosystem and organism determinations**

Filling of wetlands will result in the conversion of 5.7 acres of wetlands to uplands. The proposed action would result in the loss of a wetland ecosystem, which provides biological functions to the society including flood storage, wildlife habitat, food chain support, and sediment retention and detention. The compensatory mitigation that will be implemented, the conditions of the WQC, as well as the CES Permit and other permit requirements will offset adverse impacts associated with the wetlands loss. Considering the above, the individual and cumulative losses of the wetland will not result in significant impacts to the aquatic ecosystem.

**6. Proposed disposal site mixing zone determinations**

This section does not apply to the proposed action.

**7. Determination of cumulative effects on the aquatic ecosystem**

In order to provide mitigation to offset the specific and cumulative impacts of the project, Palmas proposes the creation of wetland habitats adjacent to the site. This mitigation will be implemented in the channel relocation area and in the area adjacent to the Candelero River. This site will also enhance the riparian corridor along the Candelero River.

Although the proposed project and mitigation does not reverse the past adverse impacts, the proposed project will not contribute to cumulative adverse degradation of the aquatic environment except for wetlands grassy vegetation. The mitigation will be provided to offset the impacts relating to the proposed action.

**8. Determination of secondary effects on the aquatic ecosystem**

As part of the proposed project a compensatory mitigation will be implemented. In addition, requirements included in the Water Quality Certificate and the special conditions of environmental permits required for the proposed action will offset any foreseeable secondary impacts on water quality and wildlife habitat. Considering the aforementioned, in light of the discussions of this document, the proposed project will not result in adverse degradation of the aquatic resources through secondary effects.

**VI. CONCLUSIONS**

The nature of the proposed project does not impose impairment to the functional values of the area. Instead, the project intends to assure and enhance the sustainable use

## Alternative Analysis for the Proposed Palmas del Mar Shopping Center

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of the recreational, tourist and natural resources of the area. As described in this document, the proposed project does not represent a negative impact to the resources of the parcel and adjacent sites. Rather, the proposed project responds to the needs of the community to provide commercial services in accessible areas, adjacent to urban developments in an environmentally sensitive manner.

The proposed site for a Shopping Center to provide the residents and visitors to Palmas del Mar community, as well as to the residents of adjacent communities with an alternative area for their use and enjoyment satisfies the EPA's alternative analysis requirements for the following reasons. First, because Palmas has owned the property since before enactment of the Clean Water Act, and the proposed Shopping Center is an integral part of Palmas del Mar community, the Corps should not consider off-site non-wetland alternatives in its alternative analysis. Rather, the Corps is limited to on-site alternatives that are practicable, in terms of feasibility, logistics, and cost and that satisfy the applicant's purpose. There are no practicable non-wetland alternatives to the proposed project site. As was explained in greater detail in this report, wetland fills associated with construction of the project were unavoidable, and were designed to involve the minimum amount of wetland impacts.

There are no alternative, non-wetland locations for the project and all wetland fills have been avoided to the maximum extent possible, and minimized where avoidance was not practicable. Mitigation for unavoidable wetland fills is addressed in a separate report.

## Alternative Analysis for the Proposed Palmas del Mar Shopping Center

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### Footnotes:

- (1) Palmas del Mar Company merged with Maxxam Property Company in 1987. Palmas del Mar Properties, Inc. is now a subsidiary of Maxxam Property Company.
- (2) On March 8, 2002, the State Environmental Quality Board reiterated that the EIS for Palmas del Mar complies with Article 4c of the Commonwealth's Environmental Law # 9 of June 12, 1970, as amended, through Resolution R-02-6-1. (Refer to **Exhibit 2**).
- (3) EPA's guidelines were published in interim form in 1975, 40 Fed. Reg. 41292 (Sept. 5, 1975), and in final form in 1980, 45 Fed. Reg. 85336 (Dec. 14, 1980). The Corps did not acknowledge that EPA's guidelines were binding until 1984, 49 Fed. Reg. 12660 (Mar. 29, 1984). An applicant's obligation to consider non-wetland sites before purchasing property was not affirmed by the Courts until the Second Circuit's decision in Bersabi in 1988.

**EXHIBIT 1:**

**Planning Board Resolution  
Fourth Extension Location  
Consultation 70-012-URB  
November 30, 1972**

ESTADO LIBRE ASOCIADO DE  
Oficina del Gobernador  
JUNTA DE PLANIFICACION  
Santurce, Puerto Rico

Cuarta Extensión al  
Informe Núm. 70-Urb-001-(CF)

NOV. 13 1972

Caso Núm. 70-012-URB.

AUTORIZANDO EXTENSION DEL PROYECTO TURISTICO  
PALMAS DEL MAR EN HUMACAO

"Esta Junta de Planificación de Puerto Rico en su reunión del 17 de junio de 1971 y mediante el Informe Núm. 70-Urb-001-(CF) del Caso Núm. 70-012-URB., aprobó el desarrollo conceptual para el complejo turístico Palmas del Mar" en los barrios Buena Vista y Candelero Abajo de Humacao y Yabucón, respectivamente.

Posteriormente, mediante la primera extensión al referido informe se aprobó el desarrollo preliminar de la primera etapa del proyecto, el cual abarcará una área de 547.65 cuerdas.

Con fecha del 18 de noviembre de 1971, mediante la Segunda Extensión al Informe Núm. 70-Urb-001-(CF) esta Junta aprobó un desarrollo conceptual alterno incluyendo la totalidad de la finca, ésto es, 1896.80 cuerdas.

Ingo, Palmas del Mar Company, por conducto de Passlaqua y Cía. y solicita de esta Junta que el área que constituye el frente de playa de las facilidades de balneario se reduzca la franja marítimo terrestre de 50 metros, según requerido en el informe original, a 35 metros.

Dicha petición se basa en la deseabilidad de conservar la conformación arenosa existente y además lograr vista hacia la playa a través de la transparencia que se obtiene acercando dichas facilidades a las existentes agrupaciones de arbustos de uvas de playa (*Coccoloba uvífera* L).

El mencionado planteamiento fue sometido a la consideración de esta Junta en su reunión del 3 de febrero de 1972, la cual mediante la Segunda Extensión al Informe Núm. 70-Urb-001-(CF) autorizó que se reduzca la franja marítima terrestre a 35 metros.

Ingo la parte proponente por conducto del Arq. Esteban Padilla solicita que dicha franja marítimo terrestre sea reducida a 20 metros por razones de diseño.

La propuesta fue sometida a la consideración de esta Junta en su reunión del 26 de octubre de 1972 la cual mediante la Tercera Extensión al Informe Número 70-URB-001-(CF) autoriza que se reduzca la franja marítima terrestre a 20 metros.

Ahora la parte proponente por conducto del Arq. Esteban Padilla mediante comunicaciones escritas y fechada el 16 de octubre de 1972 solicita de esta Junta la autori-

zición para la extensión de la Urb. "Palmas del Mar" por un total adicional de 983.75.

75. Informe el arquitecto Esteban Pedilla que el proyecto Palmas del Mar está ya en plena construcción. En vista del interés demostrado por el público puertorriqueño y ante la necesidad de proveer un acceso directo al proyecto desde la carretera #3 capaz de aceptar el volumen de tránsito anticipado, necesidad esta que ya se había previsto al someter el proyecto original a la consideración de esa Honorable Junta indicando una franja de terreno entre el proyecto y la Carretera #3. Como admisión futura, se ha adquirido ya una parcela de 437.75 cuerdas y cedido los 546.00 cuerdas adicionales para un total de 983.75 cuerdas que son ahora objeto de esta petición de ampliación de aprobación.

A continuación se presenta un desglose de los terrenos bajo estudio.

<u>USO</u>	<u>(CUERDAS APROX.)</u>
Area Comercial	90.75
Fut. Carretera #3	11.65
Residencial	163.00
Escuela y Faa. Rec.	30.00
(Concrete Plant & Casting Yard)	8.14
Servicios Central	28.85
Oficinas	10.00
Centro de Información y Parking	43.12
Golf #2 (Extensión)	86.66
Golf #3	160.00
Jardines de Palmas	36.65
Foresta Tropical (Conservación)	29.49
Condominio	13.77
Tennis Village (Ext.)	12.78
Otros	31.50
Area Verde	20.92
<b>TOTAL</b>	<b>893.75</b>

La propuesta fue sometida a la consideración de esta Junta en su reunión del 13 de noviembre de 1972 la cual consideró aceptable.

Sin embargo la Junta ordena que dicha aprobación sea condicionada al endoso del Departamento de Agricultura de manera que la parte proponente deberá presentar con respecto a los planos finales dicho endoso del Departamento de Agricultura para los

SECRETARIA DE AGRICULTURA  
 JUNTA DE REGULACION

terrenos que hacen objeto de esta consulta.

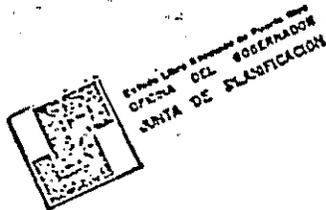
Por lo presente y tomando en consideración lo anteriormente expuesto esta Junta de Planificación de Puerto Rico AUTORIZA la Extensión del Proyecto "Palmas del Mar" Caso Núm. 70-012-UPB. para una superficie de alrededor de 983.75 cuerdas.

DISPONIENDOSE, que: (1) los demás requerimientos y disposiciones del informe original y extensiones anteriores quedarán inalteradas y en vigor para todos los efectos legales, (2) cualquier parte afectada podrá solicitar una reconsideración de la acción tomada por esta Junta de Planificación de Puerto Rico dentro de los treinta (30) días subsiguientes a la fecha de notificación de dicha acción."

CERTIFICO: Que la anterior copia es fiel y exacta del informe <sup>110V 13472</sup> ~~disputado 30472~~ de la Junta de Planificación de Puerto Rico en su reunión celebrada en y para su notificación y uso general expido la presente bajo mi firma y sello oficial de la Junta en San Juan, Puerto Rico, a

NOV 30 1972

*Teresa Biaggi Lugo*  
Teresa Biaggi Lugo  
Secretaria



**EXHIBIT 2**

**EQB Resolution R-02-6-1**  
**March 8, 2002**

IN RE: \* R-02-6-1  
\*  
PALMAS DEL MAR PROPERTIES, INC. \* SOBRE: VIGENCIA DE DOCUMENTO  
\* AMBIENTAL; DETERMINACIÓN DE  
Peticionario \* CUMPLIMIENTO CON ARTÍCULO 4-C  
\*  
\* DIA-JCA-72-016(JP)  
\*\*\*\*\*

### RESOLUCIÓN Y NOTIFICACIÓN

En reunión ordinaria celebrada el 8 de marzo de 2002 se sometió ante la consideración de la Junta de Gobierno de la Junta de Calidad Ambiental (en adelante "JCA") una solicitud de fecha 7 de noviembre de 2001 presentada por Palmas del Mar Properties, Inc. (en adelante "PDMPI") a través de su representante legal, el bufete *Goldman, Antonetti & Córdova*, para que se determine la vigencia de la Declaración de Impacto Ambiental (JCA-72-016-JP) preparada en el año 1972 para el Plan Maestro del complejo turístico-residencial de Palmas del Mar, ubicado en el barrio Candelero Abajo en el Municipio de Humacao. Además, el Peticionario solicita de esta Honorable Junta que emita una resolución aclaratoria a los efectos de que los proyectos contemplados originalmente bajo la Declaración de Impacto Ambiental anteriormente mencionada, han cumplido con los requisitos del Artículo 4-C de la Ley sobre Política Pública Ambiental (en adelante "LPPA"), Ley Número 9 del 18 de junio de 1970, según enmendada.

#### I. INTRODUCCIÓN

La Declaración de Impacto Ambiental (en adelante "DIA") de Palmas del Mar es un documento ambiental que incluye un análisis, evaluación y discusión de los posibles impactos ambientales asociados al desarrollo por etapas del complejo turístico-residencial de Palmas del Mar Resort. Dicho documento contemplaba la construcción de aproximadamente 12,500 unidades de viviendas y, además, incorporaba los parámetros para dotar al proyecto propuesto de la infraestructura necesaria, facilidades y servicios comunitarios, comercio y otros usos accesorios. Para esto, se elaboró un Plan Maestro de Palmas del Mar el cual fue aprobado por la Junta de Planificación.

El Peticionario expresa en su solicitud que el término de vigencia de diez (10) años para una DIA establecido en la Regla 225 (B) del Reglamento de la Junta de Calidad Ambiental para el

Proceso de Presentación, Evaluación y Trámite de Documentos Ambientales (en adelante "RPETDA"), durante el cual las acciones propuestas que son evaluadas bajo el Artículo 4-C de la LPPA deben ser comenzadas o realizadas, afecta una serie de proyectos que actualmente se encuentran en su fase final de diseño y planificación. Argumenta el Peticionario que la DIA Programática de Palmas del Mar está aún vigente ya que Palmas del Mar ha estado en continuo desarrollo de acuerdo a los usos contemplados en el documento ambiental y el mismo no ha sufrido cambios significativos. Además, señala el Peticionario que el número máximo de unidades de vivienda fue el objetivo utilizado desde un principio para planificar las necesidades de infraestructura del complejo turístico-residencial.

El RPETDA fue promulgado por la Junta de Calidad Ambiental, a tenor con las disposiciones de la LPPA y la Ley de Procedimiento Administrativo Uniforme, Ley Número 170 del 12 de agosto de 1988, según enmendada. Dicho Reglamento que rige todo el procedimiento referente a los documentos ambientales no contempla el término o concepto "DIA Programática" utilizado por la parte peticionaria y, por lo tanto, no existe para efectos del proceso reglamentario en discusión. El documento ambiental<sup>1</sup> preparado en el año 1972 para el Plan Maestro del complejo turístico-residencial de Palmas del Mar es una Declaración de Impacto Ambiental Final (DIA-F) bajo el RPETDA.

### III. RESOLUCIÓN

Luego de discutidos todos los méritos de este asunto y al amparo de los poderes y facultades que le confiere a esta Junta de Calidad Ambiental la Ley Núm. 9 del 18 de junio de 1970, según enmendada, conocida como la Ley sobre Política Pública Ambiental y del Reglamento de la Junta de Calidad Ambiental para la Preparación, Presentación, Evaluación y Trámite de Documentos Ambientales (en adelante "RPETDA"), por la presente esta Junta **RESUELVE:**

Declarar **HA LUGAR** la Solicitud de vigencia de la Declaración de Impacto Ambiental Final (en adelante "DIA-F") de Palmas del Mar. La Junta de Gobierno considera que la DIA-F de Palmas del Mar fue aprobada y mantiene su vigencia; aclarándose que en caso de que haya cambios en los proyectos, se deberá suplimentar la misma. Para cualquier otro proyecto o cambios que se contemplen, tiene que someterse un documento ambiental. Por otro lado, la Evaluación Ambiental

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<sup>1</sup> (JCA-72-016-JP)

(EA-87-0040 JP) para el desarrollo conocido como proyecto residencial-comercial "El Morro" fue presentada y evaluada en una fecha posterior a la DIA-F de Palmas del Mar y, por tanto, no forma parte de esta última.

Se ORDENA al Área de Asesoramiento Científico que reconstruya el expediente de la JCA sobre la DIA-F de Palmas del Mar, requiriéndole a la agencia proponente que nos provea copia certificada de los documentos necesarios sobre este proyecto.

#### IV. APERCIBIMIENTO Y NOTIFICACIÓN

Se apercibe a las partes del epígrafe que la parte afectada por esta Resolución podrá acudir al Tribunal de Circuito de Apelaciones en treinta (30) días para revisión judicial o podrán radicar una Moción de Reconsideración de esta Resolución en un término de veinte (20) días desde la fecha del archivo en autos.

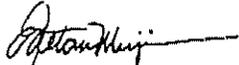
El solicitante deberá enviar copia de tal escrito por correo certificado y acuso de recibo a todas las partes que hayan intervenido en los procedimientos. Estos últimos tendrán diez (10) días naturales contados a partir de la notificación para expresarse sobre la solicitud de reconsideración. Si no lo hicieran dentro del término establecido, se entenderá que renuncian a su derecho de réplica.

La Junta dentro de los quince (15) días, de haberse presentado dicha moción deberá considerarla. Si la rechazar de plano o no actuare dentro de los quince (15) días el término para instar Recurso de Apelación comenzará a correr nuevamente desde que se notifique dicha denegatoria o desde que expiren esos quince (15) días, según sea el caso. Si se tomare alguna determinación en su consideración, el término para instar Recurso de Apelación empezará a contarse desde la fecha de la notificación de la Resolución de la Junta resolviendo definitivamente la moción cuya Resolución deberá ser emitida y archivada en autos dentro de los noventa (90) días subsiguientes a la radicación de la moción. Si la Junta dejare de tomar alguna acción en relación con la Moción de Reconsideración dentro de los noventa (90) días de haber sido radicada una moción acogida bajo estudio, el término para instar Recurso de Apelación comenzará a contarse a partir de la expiración de dicho término de noventa (90) días, salvo que el Tribunal, por justa causa, autorice a la Junta una prórroga para resolver por un tiempo razonable.

NOTIFIQUESE A: Lcda. Alicia Lumboy, Bufete Goldman, Antonetti & Córdova, American International Plaza, Ave. Muñoz Rivera # 250, Hato Rey, Puerto Rico 00918; y personalmente a los

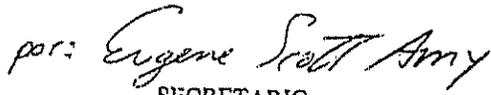
siguientes funcionarios de la Junta de Calidad Ambiental: Biol. Flor del Vallo, Vicepresidenta; Ing. Jorge Marrero, Miembro Asociado; Dra. Ivonne Santiago, Miembro Alterno; Ldo. Eugene Scott, Asesor Legal; Lda. Zoraida Samó, Directora Oficina de Asuntos Legales; y al Sr. Fernando Guzmán, Director Interino Área de Asesoramiento Científico.

DADA en San Juan, Puerto Rico, a 8 de marzo de 2002.

  
ESTEBAN MUJICA COTTO  
PRESIDENTE

CERTIFICO: Que he notificado personalmente copia fiel y exacta de la presente Resolución a las partes mencionadas en el Notifíquese, habiendo archivado el original en autos,

En San Juan, Puerto Rico, a 2<sup>7</sup> de marzo de 2002.

por:   
SECRETARIO  
JUNTA DE GOBIERNO

**EXHIBIT 3:**

**Palmas Del Mar  
Environmental Impact  
Statement 1972**

**Figure 1: Location Map**

**Figure 5: Proposed Land Use Plan**

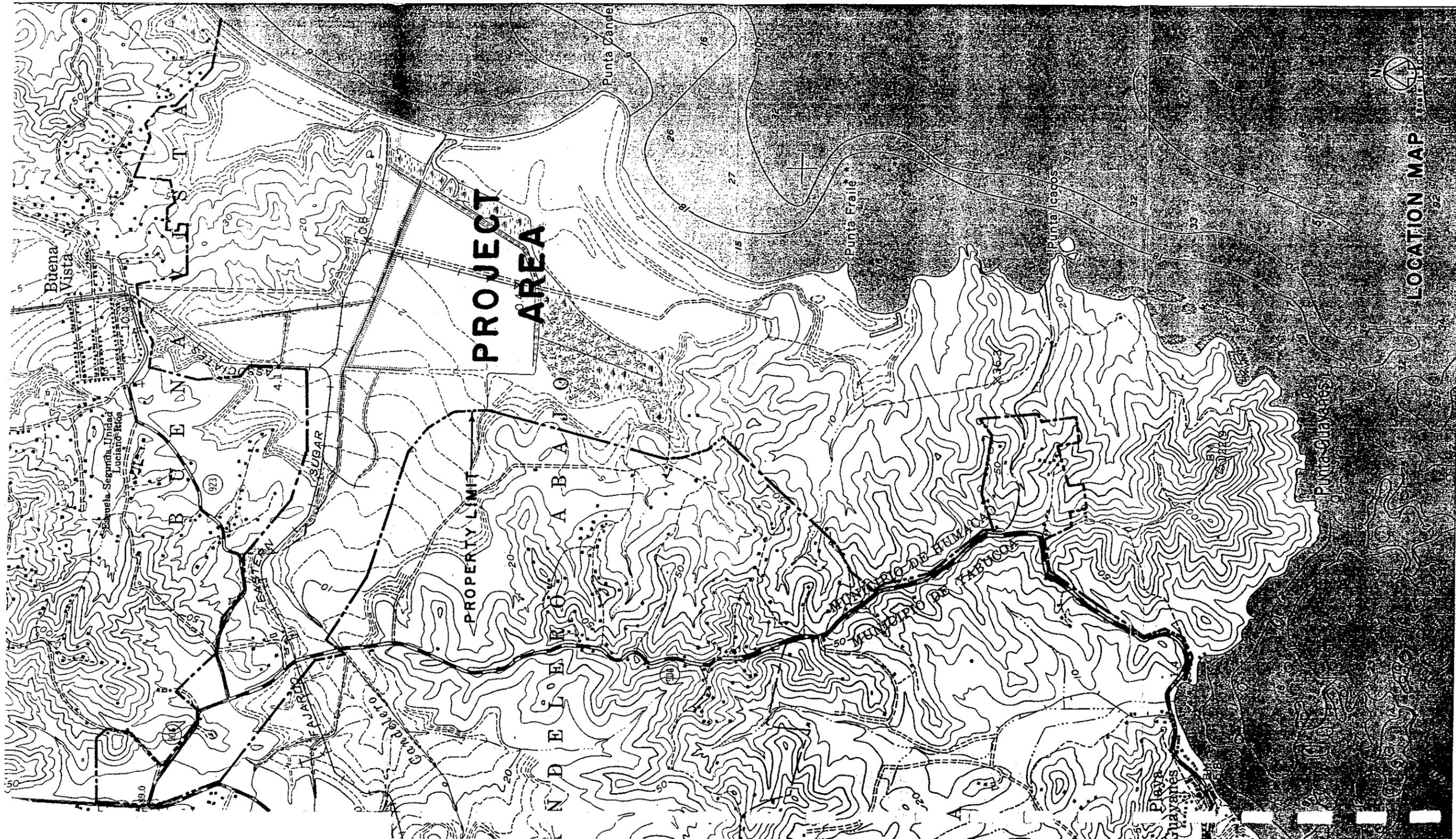


Exhibit 3:  
 Palmas Del Mar Environmental Impact Statement 1972  
 Figure 1: Location Map

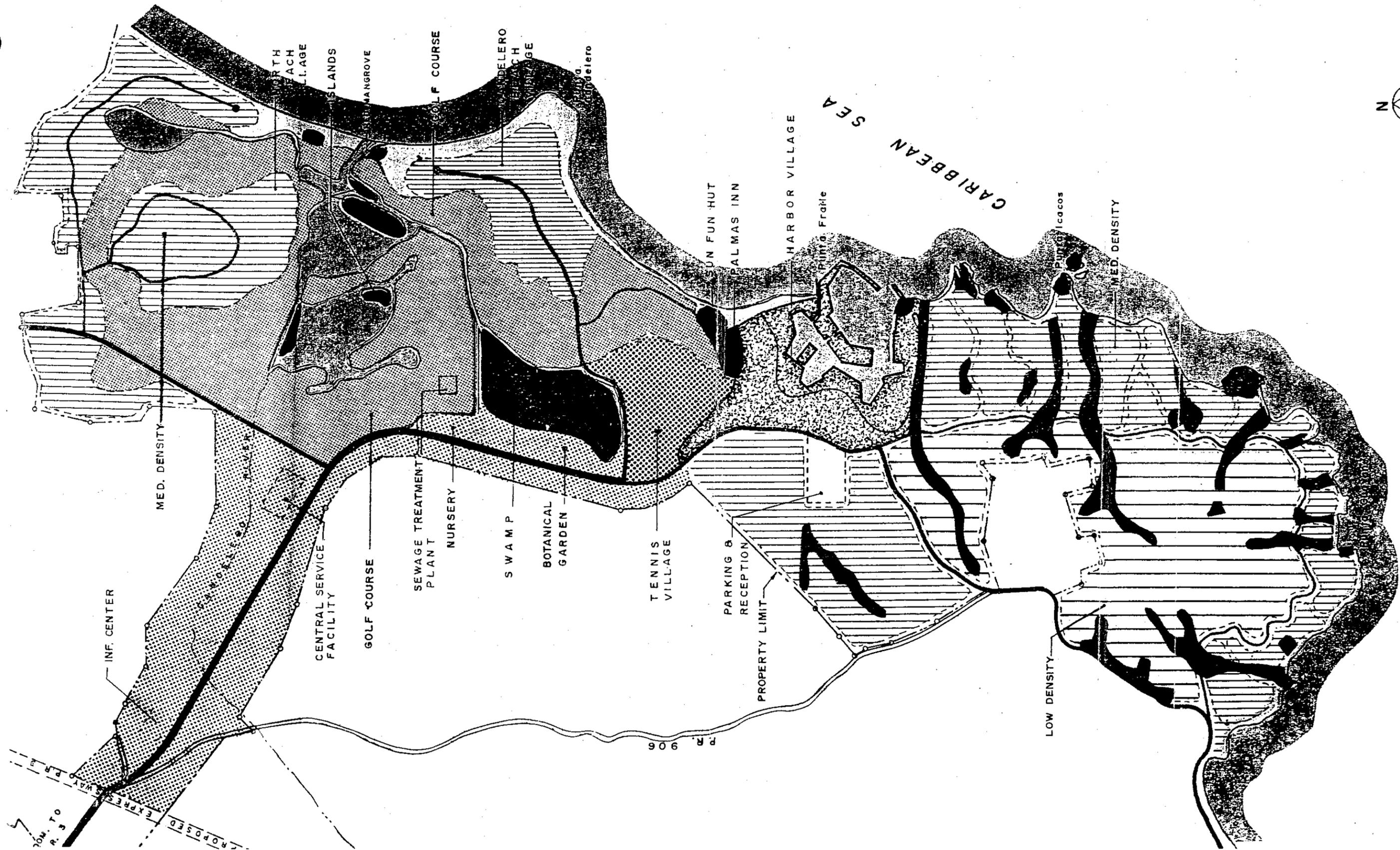


Exhibit 3:  
 Palmas Del Mar Environmental Impact Statement 1972  
 Figure 5: Proposed Land Use Plan

PROPOSED LAND USES

FIG. 5

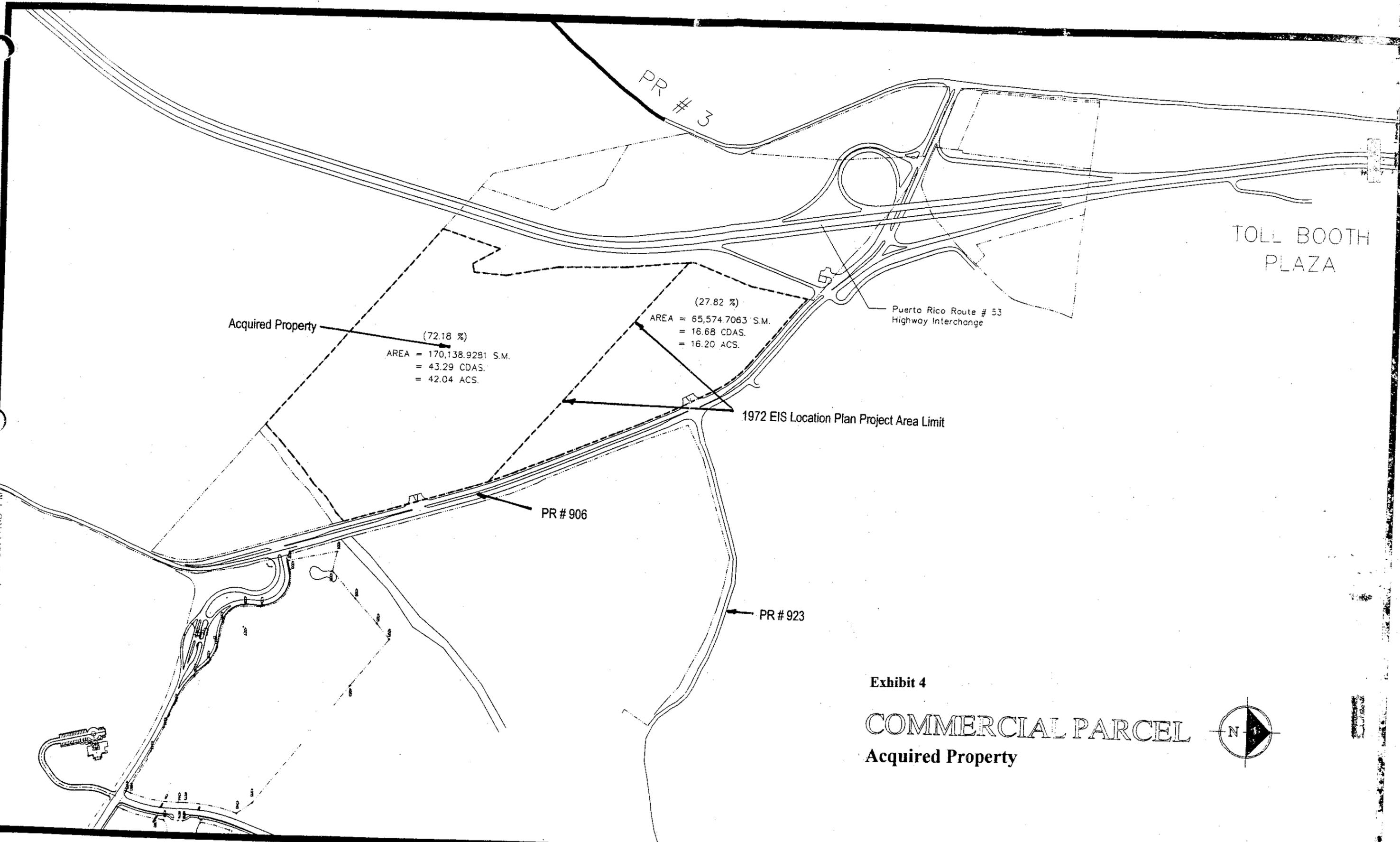


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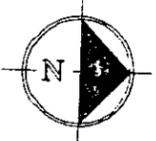
**EXHIBIT 4:**

**Commercial Parcel  
Acquired Property**

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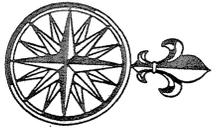
**Exhibit 4**  
**COMMERCIAL PARCEL**  
**Acquired Property**



**EXHIBIT 5:**

**Master Land Use Plan for  
Palmas Del Mar January 1974 -  
Planning Board Certified Copy**

Exhibit 5  
Master Land Use Plan for  
Palmas Del Mar January 1974  
Planning Board Certified Copy



Master Land Use Plan  
**PALMAS DEL MAR**  
THE SEA PINES RESORT IN PUERTO RICO

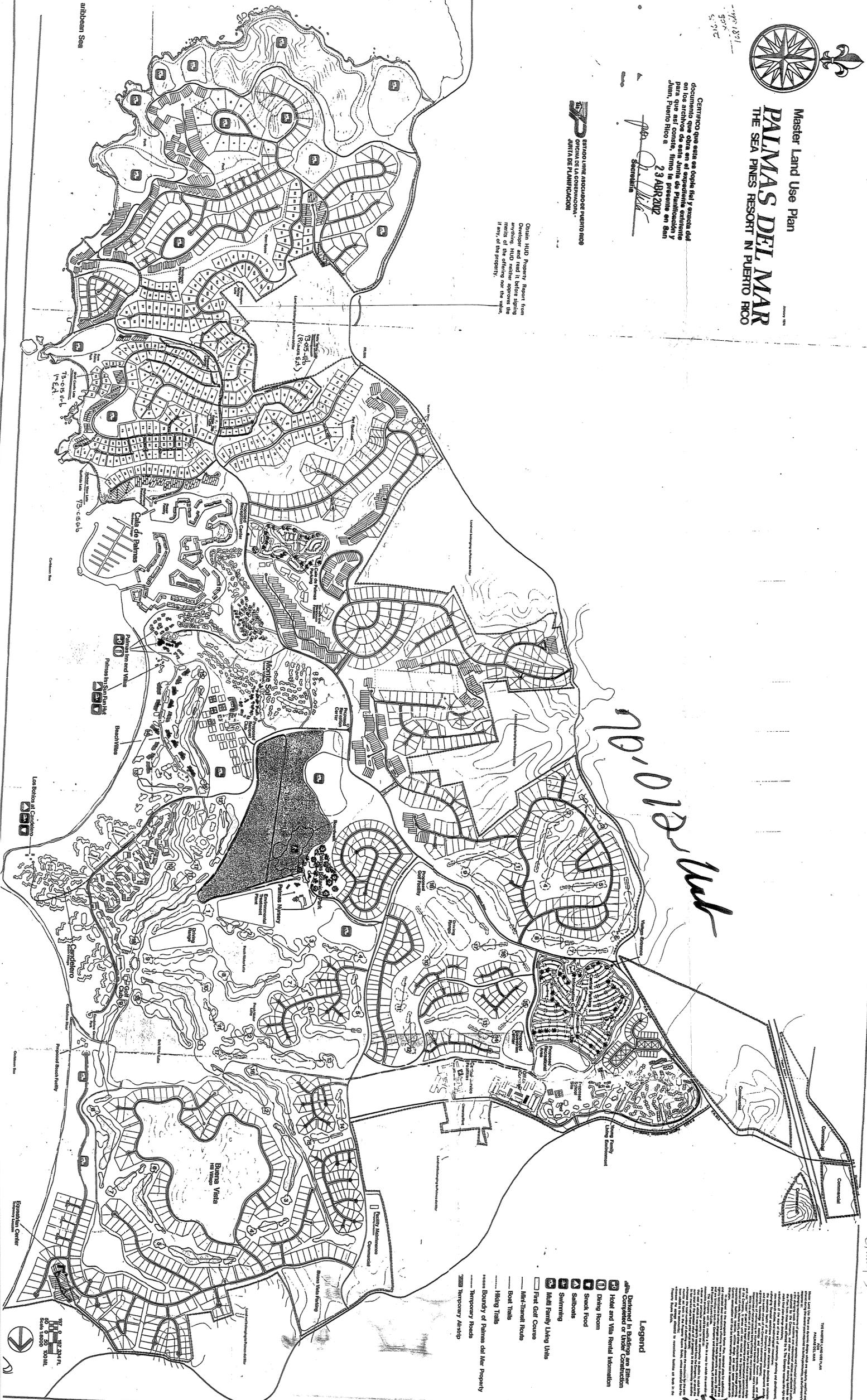
1871  
507  
5,915

Documento que está en copia fiel y exacta del  
original que está en los expedientes anteriores  
por los archivos de esta Junta de Planificación y  
que así consta, firmo la presente en San  
Juan, Puerto Rico a  
**23 ABR 2002**

*[Signature]*  
Secretaria

ESTADO LIBRE ASOCIADO DE PUERTO RICO  
OFICINA DE LA GOBERNACION  
JUNTA DE PLANIFICACION

Obtain HUD Property Report from  
Developer and review before signing  
anything. HUD neither endorses nor  
guarantees the accuracy of the information  
in any of the property.

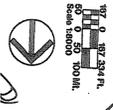


90,012 sq ft

**Legend**

- ⬢ Outlined in Buildings are either Completed or Under Construction
- ⬢ Hotel and Villa Rental Information
- ⬢ Dining Room
- ⬢ Snack Food
- ⬢ Sulfur
- ⬢ Swimming
- ⬢ Multi Family Living Units
- ⬢ First Golf Course
- ⬢ Mini-Transit Route
- ⬢ Boat Trails
- ⬢ Hiking Trails
- ⬢ Temporary Roads
- ⬢ Temporary At-Risk

THIS MAP IS A PRELIMINARY PLAN AND IS NOT TO BE USED FOR CONSTRUCTION OR OTHER PURPOSES WITHOUT THE WRITTEN CONSENT OF THE PLANNING BOARD. THE PLANNING BOARD IS NOT RESPONSIBLE FOR ANY ERRORS OR OMISSIONS IN THIS MAP. THE PLANNING BOARD IS NOT RESPONSIBLE FOR ANY DAMAGES, INCLUDING CONSEQUENTIAL DAMAGES, ARISING FROM THE USE OF THIS MAP. THE PLANNING BOARD IS NOT RESPONSIBLE FOR ANY DAMAGES, INCLUDING CONSEQUENTIAL DAMAGES, ARISING FROM THE USE OF THIS MAP.



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