Ray Tenorio

Lieutenant Governor

BUREAU OF
STATISTICS & PLANS
SAGAN PLANU SIHA YAN EMFOTMASION

Government of Guam P.O. Box 2950 Hagåtña, Guam 96932 Tel: (671) 472-4201/3 Fax: (671) 477-1812 Carl V. Dominguez

Carl V. Dominguez
Director
Manuel Q. Cruz
Deputy Director

OCT 2 9 2018

#### **MEMORANDUM**

TO:

Chairman, Guam Land Use Commission

VIA:

Executive Secretary, Department of Land Management

FROM:

Director, Bureau of Statistics and Plans

SUBJECT:

**Application No. 2017-47** 

Location: Lot 5111-3-1NEW, Municipality of Tamuning-Tumon-Harmon

**Applicant:** LULU Investment Industry Co. LTD

Proposed Use: Zone Variance (Height)\Tentative Development Plan in a "H"

**Hotel-Resort Zone** 

**Håfa Adai!** The applicant, LULU Investment Industry Co., LTD., represented by FC Benavente, is requesting for a Height Zone Variance and a Tentative Development Plan to construct a 33 unit 3-storey apartment complex in a "H" Hotel-Resort Zone within the Municipality of Tamuning-Tumon-Harmon.

The subject lot is 3,878 square meters or 41,742 square feet. Lot 5111-3-1NEW is fronting Leon Guerrero Drive, via Happy Landing Road, on Marine Corp Drive, a major thoroughfare. The adjacent surrounding properties include single family homes, apartment complexes, strip malls, St. John's Church and School, East West Building, Guam Telephone Authority, LMS Landscape, Capitol Hotel, Grand Plaza Hotel, Tumon Police Precinct, and other regularly associated activities in the "H" zone.

The Bureau of Statistics and Plans (Bureau) has completed its review of the subject application and provides the following comments and conditions.

Land Use. The Bureau finds that the proposed project is within the tourist/resort use category according to the North and Central Guam Land Use Plan (NCGLUP) Future Land Use Map designations. The NCGLUP is approved as an element of the Guam Comprehensive Development Plan (GCDP). The subject property is identified as "Tourist/Resort" designation in the Future Land Use Map of the NCGLUP, as stated in Policy LU-1 (f).

Releived! | 30/18

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**Tourist Resort.** The Tourist/Resort land use category applies to areas needed for commercial uses to serve the traveling public, including hotels/motels, condominiums-hotels, single family and multiple family residential uses, gold courses and other typical resort services and retail uses. These categories are located primarily along the shoreline and include existing and future tourist and resort areas.

In order to meet the goals and objectives of the NCGLUP, the applicant shall be required to comply with the guidance to adhere to the concept of affordable development as proposed within the North and Central Guam Land Use Plan. Housing Policy H-9 States:

"Provide a requirement or incentives for inclusion of affordable housing in larger residential developments. For example, consider a requirement or incentives to provide at least 15% of housing units built at a price affordable to households earning 80% to 120% of local income adjusted for family size. Incentives could include density increases, flexibility in development standards or other measures."

The Bureau finds that the proposed project is in line with the NCGLUP's Future Land Use Map designations

Aquifer Protection. The subject property is located within the boundary of the Ground Water Protection Zone of the Northern Guam Lens Aquifer (NGLA) so any groundwater contamination can be impacted directly. The aquifer is an essential resource for Guam and is the primary source of drinking water for eighty percent of the island population. Moreover, the U.S. Environmental Protection Agency has designated the NGLA a sole source aquifer for Guam's drinking water. Therefore, it is of paramount importance to prevent sources of contamination from entering Guam's water supply. The primary goal for protecting the aquifer is to safeguard human health and the environment by maintaining water quality for continued use.

The Bureau is concerned that the proposed construction of a 33 unit 3-storey apartment complex will trigger adverse effects in the aquifer if measures are not in place to control erosion and sedimentation during and after construction of the project. Controlling sedimentation from construction sites is a priority with regards to stormwater controls and impacts to receiving water bodies within the project site. Moreover, the proposed project increases impervious surfaces in the form of roads, rooftops, driveways, sidewalks, and parking lots. These surfaces greatly increase runoff volume accelerating erosion and carry pollutants into the aquifer.

The Bureau requires that the applicant:

1. Implement best management practices (BMP) to manage stormwater runoff on site, prevent runoff from flooding to surrounding neighbors, and avoid contaminating Guam's sole source aquifer in accordance with the CNMI and Guam Stormwater Management Manual.

The Bureau requires the applicant to incorporate bio-retention features to the planter lane dividers and Cul-de-sac loops and modify the road slope plan so the islands serve as a feature to help manage stormwater. Additional BMPs may be found in the CNMI and Guam Stormwater Management Manual in the Bureau's website <a href="https://www.bsp.guam.gov">www.bsp.guam.gov</a> under the Guam Coastal Management Program.

2. Consult with Guam EPA for an aquifer protection review pursuant to the "Federal Safe Drinking Water Act," SS 1424 and Guam Safe Drinking Water Act, " 10 GCA Chapter 53.

Coordinate with the Guam Waterworks Authority (GWA) for water resource conservation and ensure the NGLA is protected through compliance with the "Water Pollution Control Act," 10 GCA Chapter 47; "Water Resources Conservation Act," 22 GCA Chapter 5; 10 GCA Chapter 46, as amended by P.L. 17-97, and the Guam Water Resource Development & Operating Regulations

**Erosion Control.** Controlling erosion and sediment flow from construction sites are a priority with regard to stormwater impacts to receiving water bodies within the project site, which includes the NGLA. The Bureau requires that LULU Investment Company LTD., prevent adverse impacts from construction site runoff by employing BMPs. These BMPs include the following but are not limited to:

- 1. Install perimeter sediment controls to retain or filter concentrated runoff from disturbed areas to trap or retain sediment before it leaves a construction site.
- 2. Minimize unnecessary clearing and grading to preserve existing natural areas.
- 3. Stabilize construction entrance and install necessary perimeter controls and diversions.
- 4. Disturbed areas shall be stabilized as soon as possible after construction.
- 5. Steep slopes shall be protected from erosion by limiting clearing of these areas.
- 6. Where feasible, schedule construction during the dry season.

The applicant must refer to the CNMI and Guam Stormwater Management Manual, October 2006, the Guam Erosion & Sediment Control Field Guide available at <a href="https://www.bsp.guam.gov">www.bsp.guam.gov</a> or at the Guam Environmental Protection Agency (GEPA) for detailed construction stormwater treatment criteria and standards, bio-retention areas, and rain garden specifications.

Low Impact Development (LID). This area has seen an increase in impervious surfaces throughout the years. In between the years 2005 and 2011, the impervious surface area increased by more than 5.17% according to National Oceanic Atmospheric Administration's (NOAA) Coastal Change Analysis Program (C-CAP). As surface area increases so does the risk of flooding and decreased water quality and in order to minimize negative impacts best management practices should be incorporated.

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The LID approach works with nature to manage stormwater as close to its source as possible. LID employs principles such as preserving and recreating natural landscape features and minimizing the use of impervious surfaces to create functional and appealing site drainage that treats stormwater as a resource rather than a waste product. Impervious surfaces from roads, parking lots, driveways, sidewalks, and rooftops accelerate stormwater runoff.

Considering the growing concerns of flooding due to increased impervious surfaces, the applicant is required to implement LID practices such as permeable parking and walkways, grassed swales, island bio-retentions, and/or rain gardens into the landscape as a means to reduce runoff and control erosion from their property. An electronic file of the Island Stormwater Practice Design Specifications is available on the Bureau's website at <a href="https://www.bsp.guam.gov">www.bsp.guam.gov</a> under the Guam Coastal Management Program.

**Historical and Archaeological Resources.** The Bureau recommends that the applicant coordinate with Department of Parks and Recreation, State Historic Preservation Office to ensure the preservation, protection, excavation, and evaluation of specimens and sites pursuant to Historical Objects and Sites, 21 GCA, Chapter 76.

**Height Zone Variance.** Pursuant to 5GCA Chapter 1 Article 2 Section 1200 (c), (d) Section 1201(a) (5) the Bureau requires the applicant to comply with the following conditions:

Visual Quality – Guam's visual quality policy states that the preservation and enhancement of, and respect for the island's scenic resources shall be encouraged through increased enforcement and compliance with sign, litter, zoning, subdivision, building, and other related laws. Based on Guam law, the proposed development would be non-conforming according to 21 GCA Chapter 61 Section 61616 for height variance.

Therefore, the structure proposed under this variance will be required to incorporate green building designs consistent with the North and Central Guam Land Use Plan Policy LU-5. Examples could include, but are not limited to installing a green roof to increase open space and those listed in Stormwater Management in Pacific and Caribbean Islands: A Practitioner's Guide to Implementing LID.

In conclusion, the Bureau **recommends Approval with conditions** and finds that construction activities and impervious surfaces from the proposed project can adversely affect Guam's sole source aquifer and surrounding neighbors if BMPs are not in place to manage stormwater runoff on site. Therefore, the Bureau advises the applicant, LULU Investment Industry Co. LTD., to comply with above listed conditions if this application is approved.

As government officials, it is our primary responsibility to ensure that the construction and operations of this proposed endeavor are in a manner designed to protect public health,

BSP Position Statement ARC 2017-47 Page 5

safety, and to promote the public welfare and convenience. We also encourage the applicant to protect Guam's natural resources and to ensure they are used in a sustainable manner. Si Yu'os Ma'ase'.

CARL V. DOMINGUEZ
Director

cc: GEPA DPR DPW GWA

**GPA** 



Carl V. Dominguez
Director
Manuel Q. Cruz
Deputy Director

MAY 0 1 2018

Ray Tenorio
Lieutenant Governor

Government of Guam P.O. Box 2950 Hagåtña, Guam 96932 Tel: (671) 472-4201/3 Fax: (671) 477-1812

### **MEMORANDUM**

TO:

Director, Department of Land Management

**ATTN:** Division of Planning

**FROM:** Director, Bureau of Statistics and Plans

**SUBJECT: APPLICATION NO. SZC 2018-25** 

**LOCATION:** Mangilao Lot No. 2391-9-1-1 **APPLICANT:** Ronald B. & Elaine M. Aguon

PROPOSED USE: Rezone from "A" Agriculture to "R-2" Multi-Family

**Dwelling** 

**Buenas yan Håfa Adai!** The applicant, Mr. Ronald B. and Ms. Elaine M. Aguon, are requesting for a summary zone change from "A" (Rural/Agriculture) zone to "R-2" (Multi-Family Dwelling) in order to construct a residential duplex for family and rental on Lot 2391-9-1-1 in the Municipality of Mangilao.

The subject property is approximately 10,000 square feet or just about .25% of an acre. The property can be accessed through Vietnam Veterans Highway with surrounding land uses consist of single and multi-family dwelling units. The subject lot is currently vacant, and all basic infrastructure such as water and power including sewer is available and located 100 ft. from the proposed development.

The Bureau of Statistics and Plans (Bureau) has completed its review of the application and provides the following comments and recommendations.

**Summary Zone Change**. The applicant has submitted a Summary Zone Change application which outlined a sketch of building setbacks, structure location, site parking plan, stormwater site retention, a landscaping plan, erosion best management practices, access and any accompanying covenants. The Bureau emphasizes and cautions the applicant that, according to the Summary Zone Change Guidelines, "any deviation from the accompanying site development plans shall nullify said zone change under this process."

The applicant are required to implement best management practices before, during, and after construction of the duplex to control erosion, sediment, and runoff on site. The applicant is further advised to consult with Guam Environmental Protection Agency for effective implementation of these practices that may include but are not limited to the following:

- 1. Install perimeter sediment controls to retain or filter concentrated runoff from disturbed areas to trap or retain sediment before it leaves a construction site.
- 2. Minimize unnecessary clearing and grading to preserve existing natural areas.
- 3. Disturbed areas shall be stabilized as soon as feasibly possible after construction.
- 4. Where feasible, schedule construction during dry season.

With this in mind, the Bureau recommends that the applicant take a proactive approach to stormwater retention on the property and minimize as much impacts not only on-site but also to neighboring properties as well. Swales and rain gardens are an example of diversified measures towards that end. For guidance on these practices, an electronic file of the guidebook "Island Stormwater Practice Design Specifications" is available at the Bureau's, Guam Coastal Management Program's website www.bsp3.guam.gov.

In conclusion, The Bureau recommends Approval to the proposed Summary Zone Change request and that all other requirements as per the permitting agencies are adhered to inclusive of incorporating best management practices for the protection of Guam's natural resources. Si Yu'os Ma'ase.

MANUEL Q. CRUZ Acting Director



Ray Tenorio Lieutenant Governor

**Eddie Baza Calvo**Governor of Guam

Government of Guam P.O. Box 2950 Hagåtña, Guam 96932 Tel: (671) 472-4201/3 Fax: (671) 477-1812 Carl V. Dominguez
Director
Manuel Q. Cruz
Deputy Director

#### **MEMORANDUM**

TO:

Director

Department of Land Management

FROM:

Director

Bureau of Statistics and Plans

SUBJECT:

Reconsideration on position statement

Bill 269-34

Location: Mangilao Lot 3 Tract 1942

Applicant: Robert Cruz

Proposed Use: Rezone from R-1 to R2

Hafa Adai! As a result of new information regarding the above mentioned subject lot, the Bureau of Statistics and Plans (Bureau), is issuing this memorandum as a reconsideration of our position as an Application Review Committee member.

It has come to the Bureau's attention that the owner does not have the means to connect to a public sewer system and does not have the adequate property size to implement an appropriate wastewater disposal system based on the future use of the property. The Bureau is concerned of direct, and cumulative impacts to the Norther Guam Lenz Aquifer and Therefore, the application to rezone this property and intended use is contrary to the elements in the North and Central Guam Land Use Plan.

Goal LU 3. Promote and protect the long-term health, character and identity of the village communities

Policy LU-10 Provide for incremental growth in already developed areas to take advantage of existing investments in transportation and utility systems and to reduce impacts on the Northern Aquifer. In providing for infill growth, assure the adequacy of water, roads and other public services.

The Bureau recommends disapproval of this zone change until such time that adequate protection of health of the community and freshwater sources can be obtained.



BSP Position Statement ZC Application Mr. R. Cruz Page 2

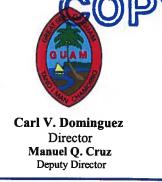
As government officials, it is our primary responsibility to ensure that the construction and operations of this proposed endeavor are in a manner designed to protect the public health, safety, and general welfare of the people within the Territory of Guam. Si Yu'os Ma'ase'.

CARL V. DOMINGUEZ

Director



**Ray Tenorio** Lieutenant Governor Government of Guam P.O. Box 2950 Hagåtña, Guam 96932 Tel: (671) 472-4201/3 Fax: (671) 477-1812



**MEMORANDUM** 

MAY 0 1 2018

TO:

Director, Department of Land Management

ATTN:

Division of Planning

FROM:

Director, Bureau of Statistics and Plans

**SUBJECT:** 

**Application No. 2018-27** 

Location: Tract 67, Lot 2382-13-1, Municipality of Santa Rita

Applicant: Ms. Suzette R. Agudo

**Håfa Adai!** The applicant, Ms. Suzette R. Agudo, represented by Mr. Harry D. Guiterrez, is requesting a minor setback variance from the required 15 foot front yard setback to an 12.5 feet setback or 2.5 feet past the minimum requirement and as set forth in Guam's Zoning Law. The property is identified as Lot 2382-13-1 in the Municipality of Santa Rita and designated as an "A" Rural/Agricultural zone.

The Bureau of Statistics and Plans (Bureau) has completed its review of the setback variance requests and finds the use compatible with the surrounding area and is consistent with the Guam Master Plan and North and Central Guam Land Use Plan. We find that the 2 foot distance requested for variance is nominal, and is not expected to be a detriment to surrounding landowners if certain conditions are met with complied with.

The applicant has provided evidence that the structure was built in the 1970's and included a Retracement Survey Sketch by Surveyor V. Olivares, Registered Land Surveyor #77, that identifies the existing dwelling and setbacks on the property. Within PL 27-91, there are conditions set out and must be adhered to in its entirety and the conditions are as follows:

1. The variance is for not more than three (3) feet beyond the setback requirement of only 1 (1) yard (side, front, or rear) to allow the suitable location of a structure where practical difficulties exist due to special circumstances applicable to the building or property, including size, shape, topography, location or surroundings, depriving such property of privileges enjoyed by other properties in the vicinity and under identical zoning classification consistent with the general welfare of the adjacent neighbors.



- 2. The granting of the variance does not authorize a use or activity which is not authorized by the zone regulations governing the parcel or property.
- 3. Water runoff from the roof line of any structure shall not encroach beyond the property line of the parcel.
- 4. No encroachment onto an area engrossed by a grant of easement shall occur.
- 5. Concurrence from the adjacent property owners located along the property line closest to the setback encroachment shall be obtained.
- 6. Real property chattels or any transient residential accommodations including breakfast inns, motels or hotels are not considered as residential dwellings for the purpose of this subsection.
- 7. No other setback variance shall be granted by the Commission on the parcel affected by the grant of variance through this subsection. The physical removal of any structure or a portion thereof approved through this subsection shall void the restrictions imposed by this subsection.
- 8. The Department shall notify all contiguous property owners of the proposed minor setback variance. Upon notification by the Department, the property owners shall have thirty (30) days to submit written objections to the Director.

Please refer to GCA Title 21 Chapter 61Subsection 616116 Variances for further details.

The Bureau **recommends approval** to the request for an 12.5 foot front yard setback variance based on 21 GCA Real Property Ch. 61 Zoning Law Subsection 616116 which specifically states setback variances may be granted if "variance is not more than 3 feet beyond setback requirement of only 1 yard (side, front, or rear)".

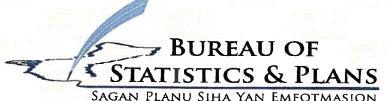
As government officials, it is our primary responsibility to ensure that the construction and operations of this proposed endeavor are in a manner designed to protect the public health, safety, and general welfare of the people within the Territory of Guam. *Si Yu'os Ma'ase'*.

MANUEL Q. CRUZ

**Acting Director** 

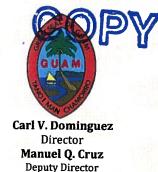
Lieutenant Governor

Ray Tenorio



Government of Guam

P.O. Box 2950 Hagåtña, Guam 96932 Tel: (671) 472-4201/3 Fax: (671) 477-1812



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#### **MEMORANDUM**

To:

Chairman, Guam Land Use Planning

Via:

Executive Secretary, Department of Land Management

From:

Director, Bureau of Statistics and Plans

Subject:

**APPLICATION NO. 2017-46** 

LOCATION: Lot 4-R1NEW, Tract 154, Municipality of Yigo

**APPLICANT:** Tre Vista Tentative Subdivision c/o Mr. Daniel Swavely **PROPOSED USE:** Tentative Subdivision for the Construction of Thirty-

Six (36) Single Family House Lots

**Håfa Adai!** The applicant, IAN Corporation, represented by Mr. Daniel Swavely, is requesting a tentative subdivision for the proposed construction of thirty-six (36) single family dwellings on Lot 4-R1NEW, Tract 154, in a "R-1" Single Family Dwelling Zone in the Municipality of Yigo.

The subject lot is 27,503 square meters or 296,040 square feet. Lot 4-R1NEW, Tract 154, is located along Route 1, Marine Corp Drive, a major thoroughfare. The adjacent surrounding properties include the single family homes, apartment complexes, strip malls, Yigo Catholic Church, Shell and Mobil Service Stations, McDonald's, convenience stores, St. Paul's Christian and Dominican Schools, Yigo Sports Complex, GAIN Animal Shelter, and Anderson Airforce Base.

The Bureau of Statistics and Plans (Bureau) has completed its review of the subject application and provides the following comments and recommendations:

Land Use. The North and Central Guam Land Use Plan (NCGLUP) is approved as an element of the Guam Comprehensive Development Plan (GCDP). The subject property is identified as "Village Center" designation in the Future Land Use Map of the NCGLUP, as stated in Policy LU-1 (e) Village Center:

"The Village Center category is intended to provide flexibility for a compatible mix of residential, commercial, public facility, medical and other service uses, and open space uses at a scale and pattern that is consistent with traditional Chamorro villages and

neighborhoods (similar to the urban neighborhoods proposed the Hagatna Redevelopment Masterplan). Uses may be mixed vertically, such as retail street level, with residential above, or horizontally, with a mixed of uses next to each other in separate buildings. The designation applies to the existing Dededo and Yigo villages, on a smaller scale to Mangilao and Barrigada, along with two new areas in the northern part of the Island. Flexibility is encouraged in this category, recognizing that the exact mix and configuration of uses must be responsive to community needs and history. Future implementation may include development standards to ensure preservation of existing historic structures. Development should occur in a manner that creates a central focal point and supports bicycle and pedestrian linkages to the surrounding areas."

The Bureau finds that the proposed project is in line with the NCGLUP's Future Land Use Map designations.

Aquifer Protection. The applicant's Yigo property is located above the Northern Guam Lens Aquifer (NGLA). The NGLA is an essential resource for Guam and is the primary source of drinking water for eighty percent of the island's population. Moreover, the U.S. Environmental Protection Agency has designated the NGLA as Guam's sole source aquifer. Therefore, it is of paramount importance to prevent sources of contamination from entering Guam's water supply. The primary goal for protecting the aquifer is to safeguard human health and the environment by maintaining water quality for continued use.

The Bureau is concerned that the proposed construction of thirty-six single family homes will trigger adverse effects in the aquifer if measures are not in place to control erosion and sedimentation during and after construction of the project. Controlling sedimentation from construction sites is a priority with regards to stormwater controls and impacts to receiving water bodies within the project site. Moreover, the proposed project increases impervious surfaces in the form of roads, rooftops, driveways, sidewalks, and parking lots. These surfaces greatly increase runoff volume accelerating erosion and carry pollutants into the aquifer.

The Bureau requires that the applicant:

1. Implement best management practices (BMP) to manage stormwater runoff on site, prevent runoff from flooding surrounding neighbors, and avoid contaminating Guam's sole source aquifer in accordance with the CNMI and Guam Stormwater Management Manual.

The Bureau requires the applicant to incorporate bio-retention features to the planter lane dividers and Cul-de-sac loops and modify the road slope plan so the islands serve as a feature to help management stormwater. Additional BMPs may be found in the CNMI and Guam Stormwater Management Manual in the Bureau's website <a href="https://www.bsp.guam.gov">www.bsp.guam.gov</a> under the Guam Coastal Management Program.

- 2. Consult with Guam EPA for an aquifer protection review pursuant to the "Federal Safe Drinking Water Act," SS 1424 and Guam Safe Drinking Water Act, " 10 GCA Chapter 53.
- 3. Coordinate with the Guam Waterworks Authority (GWA) for water resource conservation and ensure the NGLA is protected through compliance with the "Water Pollution Control Act," 10 GCA Chapter 47; "Water Resources Conservation Act," 22 GCA Chapter 5; 10 GCA Chapter 46, as amended by P.L. 17-97, and the Guam Water Resource Development & Operating Regulations.

**Erosion Control.** Controlling erosion and sediment flow from construction sites are a priority with regard to stormwater impacts to receiving water bodies within the project site, which includes the NGLA. The Bureau recommends that IAN Corporation prevent adverse impacts from construction site runoff by employing BMPs. These BMPs include the following but are not limited to:

- 1. Install perimeter sediment controls to retain or filter concentrated runoff from disturbed areas to trap or retain sediment before it leaves a construction site.
- 2. Minimize unnecessary clearing and grading to preserve existing natural areas.
- 3. Stabilize construction entrance and install necessary perimeter controls and diversions.
- 4. Disturbed areas shall be stabilized as soon as feasibility possible after construction.
- 5. Steep slopes shall be protected from erosion by limiting clearing of these areas.
- 6. Where feasible, schedule construction during the dry season.

The applicant should refer to the CNMI and Guam Stormwater Management Manual, October 2006, the Guam Erosion & Sediment Control Field Guide available at <a href="https://www.bsp.guam.gov">www.bsp.guam.gov</a> or at the Guam Environmental Protection Agency (GEPA) for detailed construction stormwater treatment criteria and standards, bio-retention areas, and rain garden specifications.

Low Impact Development (LID) and Stormwater Management. This area has seen an increase in impervious surfaces throughout the years. Between the years 2005 and 2011, the impervious surface area increased by more than 5 (five) percent according to National Oceanic Atmospheric Administration's (NOAA) Coastal Change Analysis Program (C-CAP). As surface area increases so does the risk of flooding and degradation of water quality. The Bureau is concerned that additional impervious surfaces may exacerbate flooding in the area and surrounding neighbors if BMPs are not in place to manage runoff on the property.

The LID approach works with nature to manage stormwater as close to its source as possible. LID employs principles such as preserving and recreating natural landscape features while minimizing the use of impervious surfaces to create functional and appealing site drainage that treats stormwater as a resource rather than a waste product.

Considering the growing concerns of flooding due to increased impervious surface, the applicant is highly encouraged to implement LID practices such as permeable parking and walkways, grassed swales, island bio-retentions, green roofs, and/or rain gardens into the landscape as a means to reduce runoff and control erosion from their property. An electronic file of the Island Stormwater Practice Design Specifications is available on the Bureau's website at <a href="https://www.bsp.guam.gov">www.bsp.guam.gov</a> under the Guam Coastal Management Program.

Native Flora. Protection from invasive species is critical to preserving Guam's native plant and animal species. Therefore, the applicant is advised to avoid the use of invasive plants in their landscape plan. The use of native plants requires little to no fertilizer for growth. The Bureau encourages consultation with the Department of Agriculture's Division of Forestry and Soil Resources on using native plants and organic fertilizers to avoid additional contaminants from entering the aquifer. The applicant may also seek guidance from Guam EPA regarding their Pesticide Control Program.

**Historic Preservation.** The applicant must obtain concurrence from the Department of Parks and Recreation, Historic Preservation Division, that the proposed development does not affect historic properties.

In conclusion, the Bureau **recommends Approval with conditions** and finds that construction activities and impervious surfaces from the proposed project can adversely affect Guam's sole source aquifer and surrounding neighbors if BMPs are not in place to manage stormwater runoff on site. Therefore, the Bureau advises the applicant, IAN Corporation, to comply with above listed conditions if this application is approved.

As government officials, it is our primary responsibility to ensure that the construction and operations of this proposed endeavor are in a manner designed to protect public health, safety, and to promote the public welfare and convenience. We also encourage the applicant to protect Guam's natural resources and to ensure they are used in a sustainable manner. Si Yu'os Ma'ase'.

CARL V. DOMINGUEZ

cc: GEPA

DPW

**GWA** 

DPR

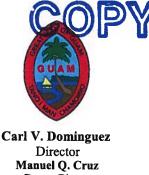
GPA



Ray Tenorio Lieutenant Governor

**Eddie Baza Calvo** Governor of Guam

> **Government of Guam** P.O. Box 2950 Hagåtña, Guam 96932 Tel: (671) 472-4201/3 Fax: (671) 477-1812



Deputy Director

**MEMORANDUM** 

MAY 0 1 2018

TO:

Director, Department of Land Management

ATTN:

**Division of Planning** 

FROM:

Director, Bureau of Statistics and Plans

**SUBJECT:** 

Application No. 2018-34

Location: Tract 268, Lot 18NEW, Block 9, Municipality of Yona

Applicant: TRI Inc.

Håfa Adai! The applicant, TRI Inc., represented by FC Benavente Planners, is requesting a minor setback variance from the required 15 foot front yard setback to a 13.0 feet setback or 2 feet past the minimum requirement and as set forth in Guam's Zoning Law. The property is identified as Lot 18NEW - Block 9 in the Municipality of Yona and designated as an "R-1" One-Family Dwelling zone.

The Bureau of Statistics and Plans (Bureau) has completed its review of the setback variance requests and finds the use compatible with the surrounding area and is consistent with the Guam Master Plan and North and Central Guam Land Use Plan. We find that the 2 foot distance requested for variance is nominal, and is not expected to be a detriment to surrounding landowners if certain conditions are met with complied with.

The applicant has provided Retracement Survey Sketch by Surveyor F.L.G. Castro, Registered Land Surveyor #19, which identifies the setbacks on the property. Within PL 27-91, there are conditions set out and must be adhered to in its entirety and the conditions are as follows:

1. The variance is for not more than three (3) feet beyond the setback requirement of only 1 (1) yard (side, front, or rear) to allow the suitable location of a structure where practical difficulties exist due to special circumstances applicable to the building or property, including size, shape, topography, location or surroundings, depriving such property of privileges enjoyed by other properties in the vicinity and under identical zoning classification consistent with the general welfare of the adjacent neighbors.



- 2. The granting of the variance does not authorize a use or activity which is not authorized by the zone regulations governing the parcel or property.
- 3. Water runoff from the roof line of any structure shall not encroach beyond the property line of the parcel.
- 4. No encroachment onto an area engrossed by a grant of easement shall occur.
- 5. Concurrence from the adjacent property owners located along the property line closest to the setback encroachment shall be obtained.
- 6. Real property chattels or any transient residential accommodations including breakfast inns, motels or hotels are not considered as residential dwellings for the purpose of this subsection.
- 7. No other setback variance shall be granted by the Commission on the parcel affected by the grant of variance through this subsection. The physical removal of any structure or a portion thereof approved through this subsection shall void the restrictions imposed by this subsection.
- 8. The Department shall notify all contiguous property owners of the proposed minor setback variance. Upon notification by the Department, the property owners shall have thirty (30) days to submit written objections to the Director.

Please refer to GCA Title 21 Chapter 61Subsection 616116 Variances for further details.

The Bureau **recommends approval** to the request for an 2 foot front yard setback variance based on 21 GCA Real Property Ch. 61 Zoning Law Subsection 616116 which specifically states setback variances may be granted if "variance is not more than 3 feet beyond setback requirement of only 1 yard (side, front, or rear)".

As government officials, it is our primary responsibility to ensure that the construction and operations of this proposed endeavor are in a manner designed to protect the public health, safety, and general welfare of the people within the Territory of Guam. *Si Yu'os Ma'ase'*.

MANUEL Q. CRUZ

Acting Director



Ray Tenorio
Lieutenant Governor

**Eddie Baza Calvo** 

Governor of Guam

Government of Guam P.O. Box 2950 Hagåtña, Guam 96932 Tel: (671) 472-4201/3 Fax: (671) 477-1812 Carl V. Dominguez
Director
Manuel Q. Cruz
Deputy Director

MAY 0 1 2018

### **MEMORANDUM**

TO:

Director, Department of Land Management

ATTN:

Division of Planning

FROM:

Director, Bureau of Statistics and Plans

**SUBJECT:** 

**Application No. 2018-30** 

Location: Tract 91008, Lot 5, Block 2, Municipality of Yigo

Applicant: Karen Pan & Ideal Realty, LLC

**Håfa Adai!** The applicant, Karen Pan & Ideal Realty, LLC, represented by Harry D. Guiterrez, is requesting a minor setback variance from the required 15 foot front yard setback to a 12 feet setback or 3 feet past the minimum requirement and as set forth in Guam's Zoning Law. The property is identified as Lot 5 – Block 2 in the Municipality of Yigo and designated as an "A" Rural/Agricultural zone.

The Bureau of Statistics and Plans (Bureau) has completed its review of the setback variance requests and finds the use compatible with the surrounding area and is consistent with the Guam Master Plan and North and Central Guam Land Use Plan. We find that the 3 foot distance requested for variance is nominal, and is not expected to be a detriment to surrounding landowners if certain conditions are met with complied with.

The applicant has provided evidence that the structure was built in early 2003 and included a Retracement Survey Sketch by Surveyor M. Santos, Registered Land Surveyor #53, that identifies the existing dwelling and setbacks on the property. Within PL 27-91, there are conditions set out and must be adhered to in its entirety and the conditions are as follows:

1. The variance is for not more than three (3) feet beyond the setback requirement of only 1 (1) yard (side, front, or rear) to allow the suitable location of a structure where practical difficulties exist due to special circumstances applicable to the building or property, including size, shape, topography, location or surroundings, depriving such property of privileges enjoyed by other properties in the vicinity and under identical zoning classification consistent with the general welfare of the adjacent neighbors.



- 2. The granting of the variance does not authorize a use or activity which is not authorized by the zone regulations governing the parcel or property.
- 3. Water runoff from the roof line of any structure shall not encroach beyond the property line of the parcel.
- 4. No encroachment onto an area engrossed by a grant of easement shall occur.
- 5. Concurrence from the adjacent property owners located along the property line closest to the setback encroachment shall be obtained.
- 6. Real property chattels or any transient residential accommodations including breakfast inns, motels or hotels are not considered as residential dwellings for the purpose of this subsection.
- 7. No other setback variance shall be granted by the Commission on the parcel affected by the grant of variance through this subsection. The physical removal of any structure or a portion thereof approved through this subsection shall void the restrictions imposed by this subsection.
- 8. The Department shall notify all contiguous property owners of the proposed minor setback variance. Upon notification by the Department, the property owners shall have thirty (30) days to submit written objections to the Director.

Please refer to GCA Title 21 Chapter 61Subsection 616116 Variances for further details.

The Bureau **recommends approval** to the request for an 3 foot front yard setback variance based on 21 GCA Real Property Ch. 61 Zoning Law Subsection 616116 which specifically states setback variances may be granted if "variance is not more than 3 feet beyond setback requirement of only 1 yard (side, front, or rear)".

As government officials, it is our primary responsibility to ensure that the construction and operations of this proposed endeavor are in a manner designed to protect the public health, safety, and general welfare of the people within the Territory of Guam. *Si Yu'os Ma'ase'*.

MANUEL Q. CRUZ

Acting Director



Carl V. Dominguez
Director
Manuel Q. Cruz
Deputy Director

**Ray Tenorio** Lieutenant Governor Government of Guam P.O. Box 2950 Hagåtña, Guam 96932 Tel: (671) 472-4201/3 Fax: (671) 477-1812

### **MEMORANDUM**

To:

Chairman, Guam Land Use Planning

Via:

Executive Secretary, Department of Land Management

From:

Director, Bureau of Statistics and Plans

Subject:

**APPLICATION NO. 2018-32** 

LOCATION: Lot 1143-R1, Municipality of Barrigada

**APPLICANT:** LF Corporation

PROPOSED USE: Rezone from "C" Commercial and "R-2" Multi

Dwelling Zone to a Full "C" Commercial Zone

**Håfa Adai!** The applicant, LF Corporation, represented by Mr. Harry D. Guiterrez, is requesting for a zone change from "C" Commercial and "R-2" Multi Dwelling Zone to a *full* "C" Commercial Zone for the construction of a 2-story commercial building consisting of retail, office, and storage spaces complete with parking and rear loading dock. The subject lot is 17,424 square meters or 187,549 square feet. Lot 1143-R1 is located along Vietnam Veteran's Highway, one of Guam's major thoroughfare. The adjacent surrounding properties include the Palmridge Hotel, Shell and Mobil Service Stations, McDonald's, convenience stores, Harvest Christian Academy, Guam International Airport Authority, churches, single family dwellings, apartment complexes, condominiums, and a GHURA housing development.

The Bureau of Statistics and Plans (Bureau) has completed its review of the zone change requests and finds the use compatible with the surrounding area and is consistent with the Kabales Planu Para Guahan and North and Central Guam Land Use Plan and provides the following comments and recommendations:

**Stormwater Management.** Managing stormwater is a key element in the protection of Guam's water resources. Surface runoff carries pollutants into Guam waters causing siltation and increasing sediment loads. The terrain of the subject property is flat and a change from a natural environment to a hardscape environment greatly increases runoff volume created during normal rains and storms which can cause erosion and flooding.

With this in mind, the Bureau requires that the applicant take a proactive approach to stormwater retention on the property and minimize as much impacts, not only on-site, but

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BSP Position Statement ARC 2018-32 Page 2 of 3

also to neighboring properties as well. Swales and rain gardens are an example of diversified measures towards that end. For guidance on these practices, an electronic file of the guidebook "Island Stormwater Practice Design Specifications" is available at the Bureau's, Guam Coastal Management Program's website <a href="www.bsp3.guam.gov">www.bsp3.guam.gov</a>

**Erosion Control.** Controlling erosion and sediment flow from construction sites are a priority with regard to stormwater impacts to surface receiving water bodies within the project site. The Bureau recommends that the applicant prevent adverse impacts from construction site runoff by employing best management practices.

The applicant must refer to the CNMI and Guam Stormwater Management Manual, October 2006, the Guam Erosion & Sediment Control Field Guide available at <a href="www.bsp.guam.gov">www.bsp.guam.gov</a> or at the Guam Environmental Protection Agency (GEPA) for detailed construction stormwater treatment criteria and standards, bio-retention areas, and rain garden specifications.

Low Impact Development (LID) Practices. According to National Oceanic Atmospheric Administration's (NOAA) Coastal Change Analysis Program (C-CAP), 40.4% of the Agana watershed is developed and 21.6% is impervious. Areas with impervious surface rates approaching or exceeding 12 percent to 15 percent will likely experience negative impacts to water quality. Severe degradation can be expected when rates reach 25 percent. The Bureau is concerned that additional impervious surfaces may exacerbate flooding in the area and surrounding neighborhoods if practices are not in place to manage runoff on the property.

The LID approach works with nature to manage stormwater as close to its source as possible. LID employs principles such as preserving and recreating natural landscape features while minimizing the use of impervious surfaces to create functional and appealing site drainage that treats stormwater as a resource rather than a waste product.

Considering the growing concerns of flooding due to increased impervious surface, the applicant is highly encouraged to implement LID practices such as permeable parking and walkways, grassed swales, island bio-retentions, green roofs, and/or rain gardens into the landscape as a means to reduce runoff and control erosion from their property. An electronic file of the Island Stormwater Practice Design Specifications is available on the Bureau's website at <a href="https://www.bsp.guam.gov">www.bsp.guam.gov</a> under the Guam Coastal Management Program.

**Native Flora.** Protection from invasive species is critical to preserving Guam's native plant and animal species. Therefore, the applicant is advised to avoid the use of invasive plants in their landscape plan. The use of native plants requires little to no fertilizer for growth. The Bureau encourages consultation with the Department of Agriculture's Division of Forestry and Soil Resources on using native plants and organic fertilizers to avoid additional contaminants from entering the aquifer. The applicant may also seek guidance from Guam EPA regarding their Pesticide Control Program.

BSP Position Statement ARC 2018-32 Page 3 of 3

In light of the points presented above, the Bureau **recommends Approval** to the zone change request from "C" Commercial and "R-2" Multiple Dwelling Zone to a *full* "C" Commercial Zone. The Bureau finds that the proposed commercial activity is compatible with its surrounding uses. Accordingly, the applicant is encouraged to prevent contaminants by controlling erosion during construction and managing stormwater runoff on site. Subsequently, if this application is approved, the Bureau recommends the applicant to comply with the recommendations stipulated above.

As government officials, it is our primary responsibility to ensure that the construction and operations of this proposed endeavor are in a manner designed to protect public health, safety, and to promote the public welfare and convenience. We also encourage the applicant to protect Guam's natural resources and to ensure they are used in a sustainable manner. Si Yu'os Ma'ase'.

CARL V/DOMINGUEZ

CC:

**GEPA** 

DPW

**GWA** 

DPR

**GPA** 



Carl V. Dominguez
Director

**Ray Tenorio** Lieutenant Governor Government of Guam
P.O. Box 2950 Hagåtña, Guam 96932
Tel: (671) 472-4201/3
Fax: (671) 477-1812

Carl V. Domingue
Director
Manuel Q. Cruz
Deputy Director

**MEMORANDUM** 

AUG 3 1 2018

TO:

Director, Department of Land Management

ATTN:

**Division of Planning** 

FROM:

Director, Bureau of Statistics and Plans

**SUBJECT:** 

Application No. 2018-35A/B/C/D

**Location:** Parcel 1 – Lot 5093-R1-R2-1NEW-NEW-R1NEW-R1

Parcel 2 – Lot 5093-R1-2-R2
Parcel 3 – Lot 5095-2-R4-5
Parcel 4 – Lot 5092-5NEW
Parcel 5 – Lot 5092-6

Parcel 6 - Lot 5092-7

**Applicant:** Tumon Sands Plaza (TSP), Municipality of Tamuning

**Proposed Use:** Tentative Development Plan for the construction of a Virtual Reality Entertainment Center, Additional Parking Structure, and Zone

Variance for Height and Setback

**Håfa Adai!** The applicant, Tumon Sands Plaza (TSP), represented by Mr. Dan D. Swavely, request a tentative development plan for the construction of a Virtual Reality Entertainment Center (VREC) and additional 2-story parking structure. The applicant also requests for sign and minor setback variances to accommodate the new modern décor for TSP upscale renovation and new vendor mix. In addition, the application requests for a height variance of 17' - 6'' in order to accommodate the multi-level activity area required for the reality experiences of the entertainment center and partial encroachment to TSP's front yard setback.

### Project Overview

The property can be easily access via Pale San Vitores Road with the surrounding property area consisting of restaurants, retail/commercial businesses, apartments and condominiums, the Sand Castle, DFS Galleria and hotels. The property now encompasses approximately 132,084 gross sq. ft.

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TSP proposes to construct a Virtual Reality Entertainment Center, a new one-story elevated structure built over TSP's existing northeastern parking lot. The 19,960 sq. ft. addition will have access from the second floor of TSP and offer family entertainment activities where everyone can experience virtual reality games and activities.

Also included in the TSP application is a request to construct a new two-story parking structure built at TSP's western parking lot. Fulfilling this requirement will allow for the addition of three new restaurants specifically Red Lobster, the Olive Garden, and an establishment yet to be determined. The steel frame structure will span a portion of TSP's existing parking lot that will include an additional 173 stalls.

Moreover, a partial setback variance is required for a portion of TSP's front yard to accommodate outdoor dining patios and for an upgraded front entry. The setback variance from the required 15 foot front yard setback to a 10 feet setback or 5 feet past the minimum requirement and as set forth in Guam's Zoning Law.

21 GCA stipulates that the maximum allowed signage is limited to 10%, however, TSP is requesting a variance of 20% signage to adequately advertise all of its stores, restaurants, and reality entertainment center in a banner style near the roofline along most of the front façade as well as at storefronts and display windows.

Finally, a partial side yard, zero setback in the TSP northern lot line and height variance is requested for the construction of a new reality entertainment center that is set along approximately 40% of its back wall abutting an easement along TSP's northern lot line.

#### Standards for Review

Pursuant to E.O. 96-26 § 300, BSP has reviewed the application to assess potential immediate, near, and long-term impacts/effects with the following:

- 1. Comprehensive Planning: Article 2, Ch 1, 5 GCA
- 2. Coastal Zone Management Act Of 1972 as amended through U.S. P.L. 104-150 (The Coastal Zone Protection Act of 1996)
- 3. GCMP's Development and Resources policies as established by Executive Order 78-37

The Bureau of Statistics and Plans (Bureau) has completed its review of the attached application and provides the following comments and conditions. Should the Commission approve the tentative development plan and variance requests, the applicant must address the following concerns and adhere to conditions prior to approval.

# Tentative Development Plan Application (items 1 - 5)

# **Development Policy**

This project is generally staying within its original footprint and is compatible to Guam's Urban Development Policy, Land Use Plan, and Zoning. The application is consistent and does not conflict with this policy.

### **Resources Policy**

Pursuant to 5GCA Chapter 1Article 2 Section 1200 (c), (d) and Section 1201(a) (5) the Bureau requires the applicant to comply with the following conditions

# **Water Quality**

- a. Employ erosion and sediment controls during the construction of the parking structure to control erosion on site and avoid effects to surrounding neighbors. BMP including silt fencing may be found in the CNMI Guam Stormwater Management Manual, October 2006.
- b. Coordinate with the Guam Environmental Protection Agency (GEPA) for effective implementation of erosion control methods.
- c. Consult with GEPA for an aquifer protection review pursuant to the "Federal Safe Drinking Water Act," S1424 and Guam Safe Drinking Water Act, 10 GCA Chapter 53.
- d. Integrate Low Impact Development and Stormwater Management practices in the design of buildings, driveways, parking lots, roads and other surfaces as a method of controlling stormwater.

#### Fragile Areas

- a. Coordinate with Department of Parks and Recreation, State Historic Preservation Office to ensure the preservation, protection, excavation, and evaluation of specimens and sites pursuant to "Historical Objects and Sites", 21 GCA, Chapter 76.
- b. Consult with the Department of Agriculture divisions of Forestry and Soil Resources and Agricultural Services on using native plants to avoid and/or minimize the spread of invasive species as a result of landscaping designs.

# Variance Application #1

### **Development Policy**

The variance needed to accommodate patio and outdoor dining features is not only consistent with Guam's Development Policy, it has smart growth features which improves connectivity through creating free-flowing access to commercial services.

### **Resources Policy**

Pursuant to 5GCA Chapter 1Article 2 Section 1200 (c), (d) and Section 1201(a) (5) the Bureau requires the applicant to comply with the following conditions

BSP Position Statement ARC 2018-35 A/B/C/D Page 4

## Water Quality

See conditions above under Tentative Development Plan Application (items 1 – 5)

### Fragile Areas

 Consult with the Department of Agriculture divisions of Forestry and Soil Resources and Agricultural Services on using native plants to avoid and/or minimize the spread of invasive species as a result of landscaping designs

#### Public Access

• Ensure that construction does not obstruct or impeded sidewalk access nor put pedestrians in any form of danger who are walking near the construction site along this part of San Vitores road.

### Variance Application #2

### **Development Policy**

The application is consistent and does not conflict with this policy

### **Resources Policy**

Pursuant to 5GCA Chapter 1Article 2 Section 1200 (c), (d) and Section 1201(a) (5) the Bureau requires the applicant to comply with the following conditions

### Visual Quality

- Signs will neither contain flashing, moving or video elements.
- Provide assurance to the Government that no future applications and or permits will be sought to cut trees outside or in the view plane of TSP's signage will be sought in the future.

#### Variance Application # 3

#### Development Policy

The application is consistent and does not conflict with this policy

### **Resources Policy**

Pursuant to 5GCA Chapter 1Article 2 Section 1200 (c), (d) and Section 1201(a) (5) the Bureau requires the applicant to comply with the following conditions

### **Visual Quality**

 Guam's visual quality policy states that the preservation and enhancement of, and respect for the island's scenic resources shall be encouraged though increased enforcement and compliance with sign, litter, zoning, subdivision, building, and other related laws. Based on Guam law, the proposed activity would be non-conforming according to 21 GCA Chapter 61 section 61616 for both height and setback. **BSP Position Statement** ARC 2018-35 A/B/C/D Page 5

> Therefore, the structure proposed under this variance will be required to incorporate green building designs consistent with North and Central Guam Land Use Plan Policy LU-5. Examples could include, but are not limited to installing a green roof to increase open space and those listed in Stormwater Management in Pacific and Caribbean Islands: A Practitioner's Gide to Implanting LID.

The Bureau recommends approval based on the applicant meeting the aforementioned conditions.

As government officials, it is our primary responsibility to ensure that the construction and operations of this proposed endeavor are in a manner designed to protect the public health, safety, and to promote the public welfare and convenience. We also encourage the applicant to protect Guam's natural resources and to ensure they are used in a sustainable manner. Si Yu'os Ma'ase'.

CARL V DOMINGUEZ

Cc: GEPA

**DPW** 

**GWA** 

DPR

**GPA** 



Carl V. Dominguez
Director
Manuel Q. Cruz

**Deputy Director** 

RECEIVED

**Ray Tenorio** Lieutenant Governor Government of Guam P.O. Box 2950 Hagåtña, Guam 96932 Tel: (671) 472-4201/3 Fax: (671) 477-1812

### **MEMORANDUM**

SFP 2 6 2019

To:

Chairman, Guam Land Use Planning

Via:

Executive Secretary, Department of Land Management

From:

Director, Bureau of Statistics and Plans

Subject:

**APPLICATION NO. 2018-31** 

LOCATION: Lot 5172-3-9, Municipality of Tamuning

APPLICANT: Wan Yuan Jewelry, Inc.

PROPOSED: Zone Change Request from "R-2" Multiple Dwelling Zone

to "LC" Limited Commercial Zone

**Håfa Adai!** The applicant, Wan Yuan Jewelry, Inc., represented by Mr. Harry D. Gutierrez is requesting for a zone change from "R-2" Multiple Dwelling Zone to a "LC" Limited Commercial Zone for the proposed use of a 2-storey structure. The subject lot is 750 square meters or 8073 square feet. Lot 5172-3-9 is located along Camp Watkins Road, a major thoroughfare in the Municipality of Tamuning, and will feature a retail gift shop and accessory storage on the first floor with a professional office and residential unit on the second floor. The adjacent surrounding properties include grocery stores, apartment and condominiums, medical clinics, hotels, retail stores and water outlets, churches, schools, and single family homes.

The Bureau of Statistics and Plans (Bureau) has completed its review of the zone change request and finds the use compatible with the surrounding area and is consistent with the Kabales Planu Para Guahan and the North and Central Land Use Plan and provides the following comments and recommendations:

**Stormwater Management.** Managing stormwater is a key element in the protection of Guam's water resources. Surface runoff carries pollutants into Guam waters causing siltation and increasing sediment loads. The terrain of the subject property is downward sloping and the change from a natural environment to a hardscape environment greatly increases runoff volume created during normal rains and storms, as well as waterway velocities, erosion, and flooding.

With this in mind, the Bureau requires that the applicant take a proactive approach to stormwater retention on the property and minimize as much impacts, not only on-site, but also to neighboring properties as well. Swales and rain gardens are an example of diversified measures to manage stormwater. For guidance on these practices, an electronic file of the guidebook "Island Stormwater Practice Design Specifications" is available at the Bureau's, Guam Coastal Management Program's website <a href="https://www.bsp3.guam.gov">www.bsp3.guam.gov</a>

**Erosion Control.** Controlling erosion and sediment flow from construction sites are a priority with regard to stormwater impacts to surface receiving water bodies within the project site. The Bureau requires that the applicant prevent adverse impacts from construction site runoff by employing best management practices. These practices include the following, but are not limited to:

- 1. Installing perimeter sediment controls to retain or filter concentrated runoff from disturbed areas to trap or retain sediment before it leaves the construction site.
- 2. Where feasible, schedule construction during dry season.
- 3. Stabilize construction entrances to reduce the tracking of sediment/mud from the construction site onto paved roads and parking lots.

The applicant must refer to the CNMI and Guam Stormwater Management Manual, October 2006, the Guam Erosion & Sediment Control Field Guide available at <a href="https://www.bsp.guam.gov">www.bsp.guam.gov</a> or at the Guam Environmental Protection Agency (GEPA) for detailed construction stormwater treatment criteria and standards, bio-retention areas, and rain garden specifications.

Low Impact Development (LID) Practices. According to National Oceanic Atmospheric Administration's (NOAA) Coastal Change Analysis Program (C-CAP), 50.6% of the Agana watershed is developed and 30.9% is impervious. Areas with impervious surface rates approaching or exceeding 12 percent to 15 percent will likely experience negative impacts to water quality. Severe degradation can be expected when rates reach 25 percent. The Bureau is concerned that additional impervious surfaces may exacerbate flooding in the area and surrounding neighborhoods if practices are not in place to manage runoff on the property.

The LID approach works with nature to manage stormwater as close to its source as possible. LID employs principles such as preserving and recreating natural landscape features while minimizing the use of impervious surfaces to create functional and appealing site drainage that treats stormwater as a resource rather than a waste product.

Considering the growing concerns of flooding due to increased impervious surface, the applicant must implement LID practices such as permeable parking and walkways, grassed swales, island bio-retentions, green roofs, and/or rain gardens into the landscape as a means to reduce runoff and control erosion from their property. An electronic file of the Island

BSP Position Statement ARC 2018-31 Page 3 of 3

Stormwater Practice Design Specifications is available on the Bureau's website at <a href="https://www.bsp.guam.gov">www.bsp.guam.gov</a> under the Guam Coastal Management Program.

**Native Flora.** Protection from invasive species is critical to preserving Guam's native plant and animal species. Therefore, the applicant is advised to avoid the use of invasive plants in their landscape plan. The use of native plants requires little to no fertilizer for growth. The Bureau encourages consultation with the Department of Agriculture's Division of Forestry and Soil Resources on using native plants and organic fertilizers to avoid additional contaminants from entering the aquifer. The applicant may also seek guidance from Guam EPA regarding their Pesticide Control Program.

In light of the points presented above, the Bureau **recommends Approval with conditions** to the zone change request from "R-2" Multiple Dwelling Zone to the "LC" Limited Commercial Zone. The Bureau finds that the proposed commercial activity is compatible with its surrounding uses. Accordingly, the applicant is encouraged to prevent contaminants by controlling erosion during construction and managing stormwater runoff on site. Subsequently, if this application is approved, the Bureau recommends the applicant to comply with the recommendations stipulated above.

As government officials, it is our primary responsibility to ensure that the construction and operations of this proposed endeavor are in a manner designed to protect public health, safety, and to promote the public welfare and convenience. We also encourage the applicant to protect Guam's natural resources and to ensure they are used in a sustainable manner. Si Yu'os Ma'ase'.

CARL V. DOMINGUEZ
Director

CC:

**GEPA** 

**DPW** 

**GWA** 

DPR

**GPA** 



Carl V. Dominguez
Director
Manuel Q. Cruz
Deputy Director

**Ray Tenorio** Lieutenant Governor Government of Guam P.O. Box 2950 Hagåtña, Guam 96932 Tel: (671) 472-4201/3 Fax: (671) 477-1812

OCT 0 1 2018 -

#### **MEMORANDUM**

To:

Chairman, Guam Land Use Planning

Via:

Executive Secretary, Department of Land Management

From:

Director, Bureau of Statistics and Plans

Subject:

**APPLICATION NO. 2018-21** 

**LOCATION:** 2303-R8NEW, Municipality of Mangilao

**APPLICANT:** TRI, Inc. c/o FC Benavente

PROPOSED USE: Tentative Subdivision for the Construction of 17

Single Family House Lots in a "R-1" Zone

**Håfa Adai!** The applicant, TRI, Inc., represented by FC Benavente, is requesting a tentative subdivision for the proposed construction of 17 single family dwellings on Lot 2303-R8NEW in a "R-1" One Family Dwelling Zone in the Municipality of Mangilao.

The subject lot is 12,200 square meters or 131,319 square feet. Lot 2303-R8NEW is located along Route 10 and Old Price Road. The adjacent surrounding properties include single family homes, apartment complexes, Wendy's Restaurant, First Church of God, L.P. Untalan Middle School, Hornet Sporting Goods, American Medical Clinic, laundromat, video, and convenience stores.

The Bureau of Statistics and Plans (Bureau) has completed its review of the subject application and provides the following comments and conditions:

**Land Use.** The North and Central Guam Land Use Plan (NCGLUP) is approved as an element of the Guam Comprehensive Development Plan (GCDP). The subject property is identified as "Village Center" designation in the Future Land Use Map of the NCGLUP, as stated in Policy LU-1 (e) Village Center:

"The Village Center category is intended to provide flexibility for a compatible mix of residential, commercial, public facility, medical and other service uses, and open space uses at a scale and pattern that is consistent with traditional Chamorro villages and

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neighborhoods (similar to the urban neighborhoods proposed the Hagatna Redevelopment Masterplan). Uses may be mixed vertically, such as retail street level, with residential above, or horizontally, with a mixed of uses next to each other in separate buildings. The designation applies to the existing Dededo and Yigo villages, on a smaller scale to Mangilao and Barrigada, along with two new areas in the northern part of the Island. Flexibility is encouraged in this category, recognizing that the exact mix and configuration of uses must be responsive to community needs and history. Future implementation may include development standards to ensure preservation of existing historic structures. Development should occur in a manner that creates a central focal point and supports bicycle and pedestrian linkages to the surrounding areas."

In order to meet the goals and objectives of the NCGLUP, the applicant shall be required to comply with the guidance to adhere to the concept of affordable development as proposed within the North and Central Guam Land Use Plan. Housing Policy H-9 States:

"Provide a requirement or incentives for inclusion of affordable housing in larger residential developments. For example, consider a requirement or incentives to provide at least 15% of housing units built at a price affordable to households earning 80% to 120% of local income adjusted for family size. Incentives could include density increases, flexibility in development standards or other measures."

The Bureau finds that the proposed project is in line with the NCGLUP's Future Land Use Map designations.

Aquifer Protection. The Mangilao property lies on the boundary of the Northern Guam Lens Aquifer (NGLA). The NGLA is an essential resource for Guam and is the primary source of drinking water for eighty percent of the island's population. Moreover, the U.S. Environmental Protection Agency has designated the NGLA as Guam's sole source aquifer. Therefore, it is of paramount importance to prevent sources of contamination from entering Guam's water supply. The primary goal for protecting the aquifer is to safeguard human health and the environment by maintaining water quality for continued use.

The Bureau is concerned that the proposed construction of 17 single family homes will trigger adverse effects in the aquifer if measures are not in place to control erosion and sedimentation during and after construction of the project. Controlling sedimentation from construction sites is a priority with regards to stormwater controls and impacts to receiving water bodies within the project site. Moreover, the proposed project increases impervious surfaces in the form of roads, rooftops, driveways, sidewalks, and parking lots. These surfaces greatly increase runoff volume accelerating erosion and carry pollutants into the aquifer.

The Bureau requires that the applicant:

1. Implement best management practices (BMP) to manage stormwater runoff on site, prevent runoff from flooding surrounding neighbors, and avoid contaminating Guam's sole source aquifer in accordance with the CNMI and Guam Stormwater Management Manual.

The Bureau requires the applicant to incorporate bio-retention features to the planter lane dividers and Cul-de-sac loops and modify the road slope plan so the islands serve as a feature to help management stormwater. Additional BMPs may be found in the manual in the Bureau's website <a href="https://www.bsp.guam.gov">www.bsp.guam.gov</a> under the Guam Coastal Management Program.

- Consult with Guam EPA for an aquifer protection review pursuant to the "Federal Safe Drinking Water Act," SS 1424 and Guam Safe Drinking Water Act, " 10 GCA Chapter 53.
- 3. Coordinate with the Guam Waterworks Authority (GWA) for water resource conservation and ensure the NGLA is protected through compliance with the "Water Pollution Control Act," 10 GCA Chapter 47; "Water Resources Conservation Act," 22 GCA Chapter 5; 10 GCA Chapter 46, as amended by P.L. 17-97, and the Guam Water Resource Development & Operating Regulations.

**Erosion Control.** Controlling erosion and sediment flow from construction sites are a priority with regard to stormwater impacts to receiving water bodies within the project site, which includes the NGLA. The Bureau requires that TRI, Inc., prevent adverse impacts from construction site runoff by employing BMPs. These BMPs include the following but are not limited to:

- 1. Install perimeter sediment controls to retain or filter concentrated runoff from disturbed areas to trap or retain sediment before it leaves a construction site.
- 2. Minimize unnecessary clearing and grading to preserve existing natural areas.
- 3. Stabilize construction entrance and install necessary perimeter controls and diversions.
- 4. Disturbed areas shall be stabilized as soon as possible after construction.
- 5. Steep slopes shall be protected from erosion by limiting clearing of these areas.
- 6. Where feasible, schedule construction during the dry season.

The applicant must refer to the CNMI and Guam Stormwater Management Manual, October 2006, the Guam Erosion & Sediment Control Field Guide available at <a href="https://www.bsp.guam.gov">www.bsp.guam.gov</a> or at the Guam Environmental Protection Agency (GEPA) for detailed construction stormwater treatment criteria and standards, bio-retention areas, and rain garden specifications.

BSP Position Statement ARC 2018-21 Page 4 of 5

Low Impact Development (LID) and Stormwater Management. This area has seen an increase in impervious surfaces throughout the years. Between the years 2005 and 2011, the impervious surface area increased by more than 5 (five) percent according to National Oceanic Atmospheric Administration's (NOAA) Coastal Change Analysis Program (C-CAP). A

As surface area increases so does the risk of flooding and degradation of water quality. The Bureau is concerned that additional impervious surfaces may exacerbate flooding in the area and surrounding neighbors if BMPs are not in place to manage runoff on the property.

The LID approach works with nature to manage stormwater as close to its source as possible. LID employs principles such as preserving and recreating natural landscape features while minimizing the use of impervious surfaces to create functional and appealing site drainage that treats stormwater as a resource rather than a waste product.

Considering the growing concerns of flooding due to increased impervious surface, the applicant is required to implement LID practices such as permeable parking and walkways, grassed swales, island bio-retentions, and/or rain gardens into the landscape as a means to reduce runoff and control erosion from their property. An electronic file of the Island Stormwater Practice Design Specifications is available on the Bureau's website at <a href="https://www.bsp.guam.gov">www.bsp.guam.gov</a> under the Guam Coastal Management Program.

**Native Flora.** Protection from invasive species is critical to preserving Guam's native plant and animal species. Therefore, the applicant is advised to avoid the use of invasive plants in their landscape plan. The use of native plants requires little to no fertilizer for growth. The Bureau encourages consultation with the Department of Agriculture's Division of Forestry and Soil Resources on using native plants and organic fertilizers to avoid additional contaminants from entering the aquifer. The applicant may also seek guidance from Guam EPA regarding their Pesticide Control Program.

**Historic Preservation.** The applicant must obtain concurrence from the Department of Parks and Recreation, Historic Preservation Division, that the proposed development does not affect historic properties.

In conclusion, the Bureau **recommends Approval with conditions** and finds that construction activities and impervious surfaces from the proposed project can adversely affect Guam's sole source aquifer and surrounding neighbors if BMPs are not in place to manage stormwater runoff on site. Therefore, the Bureau advises the applicant, TRI, Inc., to comply with above listed conditions if this application is approved.

As government officials, it is our primary responsibility to ensure that the construction and operations of this proposed endeavor are in a manner designed to protect public health,

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safety, and to promote the public welfare and convenience. We also encourage the applicant to protect Guam's natural resources and to ensure they are used in a sustainable manner. Si Yu'os Ma'ase'.

CARL V POMINGUEZ

Director

cc:

**GEPA** 

DPW

**GWA** 

DPR

**GPA** 



Carl V. Dominguez
Director
Manuel Q. Cruz
Deputy Director

**Ray Tenorio** Lieutenant Governor Government of Guam
P.O. Box 2950 Hagåtña, Guam 96932
Tel: (671) 472-4201/3
Fax: (671) 477-1812

OCT 0 1 2018

### **MEMORANDUM**

To:

Chairman, Guam Land Use Planning

Via:

Executive Secretary, Department of Land Management

From:

Director, Bureau of Statistics and Plans

Subject:

**APPLICATION NO. 2018-24** 

LOCATION: 7110-New-New-1, 7110-New-New-2, 7110-New-New-

R2, Municipality of Yigo

APPLICANT: Wellborn LLC c/o Mr. H.D. Gutierrez

**PROPOSED USE:** Tentative Subdivision for the Construction of 121 Single Family House Lots in a split zone of "R-2" Multiple Dwelling Zone

and "C" Commercial Zone

**Håfa Adai!** The applicant, Wellborn, LLC, represented by Mr. Harry D. Gutierrez, is requesting a tentative subdivision for the proposed construction of 121 single family dwellings on Lots 7110-New-New-1 & 2 and 7110-New-New-R2 in a split zone of "R-2" Multiple Dwelling Zone and "C" Commercial Zone in the Municipality of Yigo.

The subject lot is 126,367 square meters or 1,360,189 square feet. Lots 7110-New-New 1 & 2 and 7110-New-New-R2 are located along Route 1, Marine Corp Drive, a major thoroughfare. The adjacent surrounding properties include single family homes, apartment complexes, strip malls, Yigo Catholic Church, Shell and Mobil Service Stations, McDonald's, convenience stores, St. Paul's Christian and Dominican Schools, Yigo Sports Complex, GAIN Animal Shelter, and Anderson Airforce Base.

The Bureau of Statistics and Plans (Bureau) has completed its review of the subject application and provides the following comments and conditions:

**Land Use.** The North and Central Guam Land Use Plan (NCGLUP) is approved as an element of the Guam Comprehensive Development Plan (GCDP). The subject property is identified as "Village Center" designation in the Future Land Use Map of the NCGLUP, as stated in Policy LU-1 (e) Village Center:

Received! 10/03/18

"The Village Center category is intended to provide flexibility for a compatible mix of residential, commercial, public facility, medical and other service uses, and open space uses at a scale and pattern that is consistent with traditional Chamorro villages and neighborhoods (similar to the urban neighborhoods proposed the Hagatna Redevelopment Masterplan). Uses may be mixed vertically, such as retail street level, with residential above, or horizontally, with a mixed of uses next to each other in separate buildings. The designation applies to the existing Dededo and Yigo villages, on a smaller scale to Mangilao and Barrigada, along with two new areas in the northern part of the Island. Flexibility is encouraged in this category, recognizing that the exact mix and configuration of uses must be responsive to community needs and history. Future implementation may include development standards to ensure preservation of existing historic structures. Development should occur in a manner that creates a central focal point and supports bicycle and pedestrian linkages to the surrounding areas."

In order to meet the goals and objectives of the NCGLUP, the applicant shall be required to comply with the guidance to adhere to the concept of affordable development as proposed within the North and Central Guam Land Use Plan. Housing Policy H-9 States:

"Provide a requirement or incentives for inclusion of affordable housing in larger residential developments. For example, consider a requirement or incentives to provide at least 15% of housing units built at a price affordable to households earning 80% to 120% of local income adjusted for family size. Incentives could include density increases, flexibility in development standards or other measures."

The Bureau finds that the proposed project is in line with the NCGLUP's Future Land Use Map designations.

**Aquifer Protection.** The Yigo property is located above the Northern Guam Lens Aquifer (NGLA). The NGLA is an essential resource for Guam and is the primary source of drinking water for eighty percent of the island's population. Moreover, the U.S. Environmental Protection Agency has designated the NGLA as Guam's sole source aquifer. Therefore, it is of paramount importance to prevent sources of contamination from entering Guam's water supply. The primary goal for protecting the aquifer is to safeguard human health and the environment by maintaining water quality for continued use.

The Bureau is concerned that the proposed construction of 121 single family homes will trigger adverse effects in the aquifer if measures are not in place to control erosion and sedimentation during and after construction of the project. Controlling sedimentation from construction sites is a priority with regards to stormwater controls and impacts to receiving water bodies within the project site. Moreover, the proposed project increases impervious surfaces in the form of roads, rooftops, driveways, sidewalks, and parking lots. These surfaces greatly increase runoff volume accelerating erosion and carry pollutants into the aquifer.

The Bureau requires that the applicant:

1. Implement best management practices (BMP) to manage stormwater runoff on site, prevent runoff from flooding to surrounding neighbors, and avoid contaminating Guam's sole source aquifer in accordance with the CNMI and Guam Stormwater Management Manual.

The Bureau requires the applicant to incorporate bio-retention features to the planter lane dividers and Cul-de-sac loops and modify the road slope plan so the islands serve as a feature to help management stormwater. Additional BMPs may be found in the manual in the Bureau's website <a href="www.bsp.guam.gov">www.bsp.guam.gov</a> under the Guam Coastal Management Program.

- 2. Consult with Guam EPA for an aquifer protection review pursuant to the "Federal Safe Drinking Water Act," SS 1424 and Guam Safe Drinking Water Act, "10 GCA Chapter 53.
- 3. Coordinate with the Guam Waterworks Authority (GWA) for water resource conservation and ensure the NGLA is protected through compliance with the "Water Pollution Control Act," 10 GCA Chapter 47; "Water Resources Conservation Act," 22 GCA Chapter 5; 10 GCA Chapter 46, as amended by P.L. 17-97, and the Guam Water Resource Development & Operating Regulations.

**Erosion Control.** Controlling erosion and sediment flow from construction sites are a priority with regard to stormwater impacts to receiving water bodies within the project site, which includes the NGLA. The Bureau requires that Wellborn, LLC, prevent adverse impacts from construction site runoff by employing BMPs. These BMPs include the following but are not limited to:

- 1. Install perimeter sediment controls to retain or filter concentrated runoff from disturbed areas to trap or retain sediment before it leaves a construction site.
- 2. Minimize unnecessary clearing and grading to preserve existing natural areas.
- 3. Stabilize construction entrance and install necessary perimeter controls and diversions.
- 4. Disturbed areas shall be stabilized as soon as possible after construction.
- 5. Steep slopes shall be protected from erosion by limiting clearing of these areas.
- 6. Where feasible, schedule construction during the dry season.

The applicant must refer to the CNMI and Guam Stormwater Management Manual, October 2006, the Guam Erosion & Sediment Control Field Guide available at <a href="https://www.bsp.guam.gov">www.bsp.guam.gov</a> or at the Guam Environmental Protection Agency (GEPA) for detailed construction stormwater treatment criteria and standards, bio-retention areas, and rain garden specifications.

Low Impact Development (LID) and Stormwater Management. This area has seen an increase in impervious surfaces throughout the years. Between the years 2005 and 2011, the impervious surface area increased by more than 5 (five) percent according to National Oceanic Atmospheric Administration's (NOAA) Coastal Change Analysis Program (C-CAP). As surface area increases so does the risk of flooding and degradation of water quality. The Bureau is concerned that additional impervious surfaces may exacerbate flooding in the area and surrounding neighbors if BMPs are not in place to manage runoff on the property.

The LID approach works with nature to manage stormwater as close to its source as possible. LID employs principles such as preserving and recreating natural landscape features while minimizing the use of impervious surfaces to create functional and appealing site drainage that treats stormwater as a resource rather than a waste product.

Considering the growing concerns of flooding due to increased impervious surface, the applicant is required to implement LID practices such as permeable parking and walkways, grassed swales, island bio-retentions, and/or rain gardens into the landscape as a means to reduce runoff and control erosion from their property. An electronic file of the Island Stormwater Practice Design Specifications is available on the Bureau's website at <a href="https://www.bsp.guam.gov">www.bsp.guam.gov</a> under the Guam Coastal Management Program.

**Native Flora.** Protection from invasive species is critical to preserving Guam's native plant and animal species. Therefore, the applicant is advised to avoid the use of invasive plants in their landscape plan. The use of native plants requires little to no fertilizer for growth. The Bureau encourages consultation with the Department of Agriculture's Division of Forestry and Soil Resources on using native plants and organic fertilizers to avoid additional contaminants from entering the aquifer. The applicant may also seek guidance from Guam EPA regarding their Pesticide Control Program.

**Historic Preservation.** The applicant must obtain concurrence from the Department of Parks and Recreation, Historic Preservation Division, that the proposed development does not affect historic properties.

In conclusion, the Bureau **recommends Approval with conditions** and finds that construction activities and impervious surfaces from the proposed project can adversely affect Guam's sole source aquifer and surrounding neighbors if BMPs are not in place to manage stormwater runoff on site. Therefore, the Bureau advises the applicant, Wellborn, LLC, to comply with above listed conditions if this application is approved.

As government officials, it is our primary responsibility to ensure that the construction and operations of this proposed endeavor are in a manner designed to protect public health,

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safety, and to promote the public welfare and convenience. We also encourage the applicant to protect Guam's natural resources and to ensure they are used in a sustainable manner. Si Yu'os Ma'ase'.

CARL V. DOMINGUEZ
Director

GEPA

DPW

cc:

GWA

DPR

**GPA** 





COAD

Carl V. Dominguez
Director
Manuel Q. Cruz
Deputy Director

Ray Tenorio
Lieutenant Governor

Government of Guam
P.O. Box 2950 Hagåtña, Guam 96932
Tel: (671) 472-4201/3
Fax: (671) 477-1812

# AUG 0 9 2018

# **MEMORANDUM**

TO:

Director, Department of Land Management

ATTN:

Division of Planning

FROM:

Director, Bureau of Statistics and Plans

SUBJECT:

**APPLICATION NO. SZC 2018-37** 

LOCATION: Dededo, Lot 1-3NEW-3, Block 4, Tract 537

APPLICANT: Leonarda D. Salindong

PROPOSED USE: Rezone from "A" Agriculture to "R-2" Multi-Family

**Dwelling** 

**Buenas yan Håfa Adai!** The applicant, Ms. Leonarda D. Salindong, is requesting for a Summary Zone Change from "A" (Rural/Agriculture) zone to "R-2" (Multi-Family Dwelling) in order to construct two (2) duplexes for family and rental on Lot 1-3NEW-3 BL4 TRT 537 in the Municipality of Dededo.

The subject property is approximately 13,185 square feet or approximately 0.3 acre. The property can be accessed through Y-Seng Song Road with surrounding land uses that consist of single and multi-family dwelling units and a housing development. The subject lot is currently occupied, and all basic infrastructure such as water and power including sewer is available and located 200 ft. from the proposed development.

The Bureau of Statistics and Plans (Bureau) has completed its review of the application and provides the following comments and recommendations.

Summary Zone Change. The applicant has submitted a Summary Zone Change application which outlined a sketch of building setbacks, structure location, site parking plan, stormwater site retention, a landscaping plan, erosion best management practices, access and any accompanying covenants. The Bureau emphasizes and cautions the applicant that, according to the Summary Zone Change Guidelines, "any deviation from the accompanying site development plans shall nullify said zone change under this process."

The applicant is required to implement best management practices before, during, and after construction of the duplex to control erosion, sediment, and runoff on site. The applicant is further advised to consult with Guam Environmental Protection Agency for effective implementation of these practices that may include but are not limited to the following:

- 1. Install perimeter sediment controls to retain or filter concentrated runoff from disturbed areas to trap or retain sediment before it leaves a construction site.
- 2. Minimize unnecessary clearing and grading to preserve existing natural areas.
- 3. Disturbed areas shall be stabilized as soon as feasibly possible after construction.
- 4. Where feasible, schedule construction during dry season.

With this in mind, the Bureau recommends that the applicant take a proactive approach to stormwater retention on the property and minimize as much impacts not only on-site but also to neighboring properties as well. Swales and rain gardens are an example of diversified measures to manage stormwater. For guidance on these practices, an electronic file of the guidebook "Island Stormwater Practice Design Specifications" is available at the Bureau's, Guam Coastal Management Program's website <a href="https://www.bsp3.guam.gov">www.bsp3.guam.gov</a>.

In conclusion, The Bureau recommends approval to the proposed Summary Zone Change request and that all other requirements from permitting agencies are adhered to inclusive of incorporating best management practices for the protection of Guam's natural resources. Si Yu'os Ma'ase.

CARL V. DOMINGUEZ





Ray Tenorio Lieutenant Governor

Government of Guam P.O. Box 2950 Hagåtña, Guam 96932 Tel: (671) 472-4201/3 Fax: (671) 477-1812



Manuel Q. Cruz Deputy Director

# AUG 0 9 2018

## **MEMORANDUM**

TO:

**Director, Department of Land Management** 

ATTN:

Division of Planning

FROM:

Director, Bureau of Statistics and Plans

SUBJECT: APPLICATION NO. SZC 2018-44

LOCATION: Santa Rita, Lot 8, Block 2, Tract 67

APPLICANT: Suzette R. Agudo

PROPOSED USE: Rezone from "A" Agriculture to "R-2" Multi-Family

Dwelling

Buenas yan Håfa Adai! The applicant, Ms. Suzette R. Agudo, represented by Mr. Harry D. Guiterrez, is requesting for a Summary Zone Change from "A" (Rural/Agriculture) zone to "R-2" (Multi-Family Dwelling) in order to put into zoning compliance an existing residential duplex for family and rental on Lot 8, Block 2, Tract 67 in the Municipality of Santa Rita.

The subject property is approximately 10,026 square feet or approximately .23 acre and can be accessed through Father Ferdinand Way Route just off Route 12. Surrounding land uses consist of single and multi-family dwelling units, a GHURA housing development, and Southern High School. The subject lot is currently occupied, and all basic infrastructure such as water and power including sewer is available and located 100 ft. from the proposed development.

The Bureau of Statistics and Plans (Bureau) has completed its review of the application and provides the following comments and recommendations.

Summary Zone Change. The applicant has submitted a Summary Zone Change application which outlined a sketch of building setbacks, structure location, site parking plan, stormwater site retention, a landscaping plan, erosion best management practices, access and any accompanying covenants. The Bureau emphasizes and cautions the applicant that, according to the Summary Zone Change Guidelines, "any deviation from

# the accompanying site development plans shall nullify said zone change under this process."

The applicant is required to implement best management practices before, during, and after construction of the duplex to control erosion, sediment, and runoff on site. The applicant is further advised to consult with Guam Environmental Protection Agency for effective implementation of these practices that may include but are not limited to the following:

- 1. Install perimeter sediment controls to retain or filter concentrated runoff from disturbed areas to trap or retain sediment before it leaves a construction site.
- 2. Minimize unnecessary clearing and grading to preserve existing natural areas.
- 3. Disturbed areas shall be stabilized as soon as feasibly possible after construction.
- 4. Where feasible, schedule construction during dry season.

With this in mind, the Bureau recommends that the applicant take a proactive approach to stormwater retention on the property and minimize as much impacts not only on-site but also to neighboring properties as well. Swales and rain gardens are an example of diversified measure to manage stormwater. For guidance on these practices, an electronic file of the guidebook "Island Stormwater Practice Design Specifications" is available at the Bureau's, Guam Coastal Management Program's website <a href="https://www.bsp3.guam.gov">www.bsp3.guam.gov</a>.

In conclusion, The Bureau recommends approval to the proposed Summary Zone Change request and that all other requirements from permitting agencies are adhered to inclusive of incorporating best management practices for the protection of Guam's natural resources. Si Yu'os Ma'ase.

CARL V. DOMINGUEZ





SAGAN PLANU SIHA YAN EMFOTMASION

Ray Tenorio Lieutenant Governor

**Eddie Baza Calvo** 

Governor of Guam

Government of Guam P.O. Box 2950 Hagåtña, Guam 96932 Tel: (671) 472-4201/3 Fax: (671) 477-1812



AUG 0 9 2018

#### **MEMORANDUM**

TO:

Director, Department of Land Management

ATTN:

Division of Planning

FROM:

Director, Bureau of Statistics and Plans

**SUBJECT:** 

**Application No. 2018-38** 

Location: Lot 9-1-R1NEW-2, Tract 243, Municipality of Yigo

Applicant: Mr. Neeraj Nagarajan Proposed Use: Minor Setback Variance

Håfa Adai! The applicant, Mr. Neeraj Nagarajan, is requesting a minor setback variance from the required 8 foot side yard setback to a 6 feet setback or 2 feet past the minimum requirement as set forth in Guam's Zoning Law. The property is identified as Lot 9-1-R1NEW-2, Tract 243 in the Municipality of Yigo and designated as an "R-1" One-Family Dwelling zone.

The Bureau of Statistics and Plans (Bureau) has completed its review of the setback variance request and finds the use compatible with the surrounding area and is consistent with the Guam Master Plan and North and Central Guam Land Use Plan. We find that the 2 foot distance requested for variance is nominal, and is not expected to be a detriment to surrounding landowners if certain conditions are met and complied with.

The applicant has provided evidence that the structure was built in 1996 and included a Retracement Survey Sketch by Surveyor E.B. Santos, Registered Land Surveyor, that identifies the existing dwelling and setbacks on the property. Within PL 27-91, there are conditions set out and must be adhered to in its entirety and the conditions are as follows:

1. The variance is for not more than three (3) feet beyond the setback requirement of only 1 (1) yard (side, front, or rear) to allow the suitable location of a structure where practical difficulties exist due to special circumstances applicable to the building or property, including size, shape, topography, location or surroundings, depriving such property of privileges enjoyed by other properties in the vicinity and under identical zoning classification consistent with the general welfare of the adjacent neighbors.

- 2. The granting of the variance does not authorize a use or activity which is not authorized by the zone regulations governing the parcel or property.
- 3. Water runoff from the roof line of any structure shall not encroach beyond the property line of the parcel.
- 4. No encroachment onto an area engrossed by a grant of easement shall occur.
- 5. Concurrence from the adjacent property owners located along the property line closest to the setback encroachment shall be obtained.
- 6. Real property chattels or any transient residential accommodations including breakfast inns, motels or hotels are not considered as residential dwellings for the purpose of this subsection.
- 7. No other setback variance shall be granted by the Commission on the parcel affected by the grant of variance through this subsection. The physical removal of any structure or a portion thereof approved through this subsection shall void the restrictions imposed by this subsection.
- 8. The Department shall notify all contiguous property owners of the proposed minor setback variance. Upon notification by the Department, the property owners shall have thirty (30) days to submit written objections to the Director.

The Bureau **recommends approval** to the request for a 2-foot front yard setback variance based on 21 GCA Real Property Ch. 61 Zoning Law Subsection 616116 which specifically states setback variances may be granted if "variance is not more than 3 feet beyond setback requirement of only 1 yard (side, front, or rear)".

As government officials, it is our primary responsibility to ensure that the construction and operations of this proposed endeavor are in a manner designed to protect the public health, safety, and general welfare of the people within the Territory of Coam. Si Yu'os Ma'ase'.

CARL V/DOMINGUEZ



Carl V. Dominguez
Director
Manuel Q. Cruz
Deputy Director

**Ray Tenorio** Lieutenant Governor Government of Guam P.O. Box 2950 Hagåtña, Guam 96932 Tel: (671) 472-4201/3 Fax: (671) 477-1812

## **MEMORANDUM**

To:

Chairman, Guam Land Use Planning

Via:

Executive Secretary, Department of Land Management

From:

Director, Bureau of Statistics and Plans

Subject:

**APPLICATION NO. 2018-36** 

**LOCATION:** Lot 2066-REM-22, Municipality of Mongmong-Toto-Maite

APPLICANT: Cornerstone Valuation Guam, Inc.

PROPOSED: Zone Change Request from "A" Rural Zone to "LC" Limited

**Commercial Zone** 

**Håfa Adai!** The applicant, Cornerstone Valuation Guam, Inc., represented by Mr. Harry D. Guiterrez, is requesting for a zone change from "A" Rural Zone to a "LC" Limited Commercial Zone. Lot 2066-REM-22 is located in Tiyan Parkway in the Municipality of Mongmong-Toto-Maite and is 2,218 square meters or 24,086 square feet. A single-story duplex structure building is currently situated on the said property. The applicant intends to use one unit for office related activities while the other unit remains residential.

The surrounding properties include single family dwellings, apartments/condominiums, commercial offices, Guam International Airport Authority, fuel stations, McDonalds, Hotel Palmridge, and Harvest Christian Academy.

The Bureau of Statistics and Plans (Bureau) has completed its review of the zone change request and finds the use compatible with the surrounding area and is consistent with the Kabales Planu Para Guahan and the North and Central Land Use Plan and provides the following comments and recommendations:

**Stormwater Management.** Managing stormwater is a key element in the protection of Guam's water resources. Surface runoff carries pollutants into Guam waters causing siltation and increasing sediment loads. The terrain of the subject property is flat and the change from a natural environment to a hardscape environment greatly increases runoff volume created during normal rains and storms which can cause erosion and flooding.

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With this in mind, the Bureau requires that the applicant take a proactive approach to stormwater retention on the property and minimize as much impacts, not only on-site, but also to neighboring properties as well. Swales and rain gardens are an example of diversified measures to manage stormwater. For guidance on these practices, an electronic file of the guidebook "Island Stormwater Practice Design Specifications" is available at the Bureau's, Guam Coastal Management Program's website <a href="https://www.bsp3.guam.gov">www.bsp3.guam.gov</a>

**Erosion Control.** Controlling erosion and sediment flow from construction sites are a priority with regard to stormwater impacts to surface receiving water bodies within the project site. The Bureau requires that the applicant prevent adverse impacts from construction site runoff by employing best management practices.

The applicant must refer to the CNMI and Guam Stormwater Management Manual, October 2006, the Guam Erosion & Sediment Control Field Guide available at <a href="https://www.bsp.guam.gov">www.bsp.guam.gov</a> or at the Guam Environmental Protection Agency (GEPA) for detailed construction stormwater treatment criteria and standards, bio-retention areas, and rain garden specifications.

Low Impact Development (LID) Practices. According to National Oceanic Atmospheric Administration's (NOAA) Coastal Change Analysis Program (C-CAP), 50.6% of the Agana watershed is developed and 30.9% is impervious. Areas with impervious surface rates approaching or exceeding 12 percent to 15 percent will likely experience negative impacts to water quality. Severe degradation can be expected when rates reach 25 percent. The Bureau is concerned that additional impervious surfaces may exacerbate flooding in the area and surrounding neighborhoods if practices are not in place to manage runoff on the property.

The LID approach works with nature to manage stormwater as close to its source as possible. LID employs principles such as preserving and recreating natural landscape features while minimizing the use of impervious surfaces to create functional and appealing site drainage that treats stormwater as a resource rather than a waste product.

Considering the growing concerns of flooding due to increased impervious surface, the applicant must implement LID practices such as permeable parking and walkways, grassed swales, island bio-retentions, green roofs, and/or rain gardens into the landscape as a means to reduce runoff and control erosion from their property. An electronic file of the Island Stormwater Practice Design Specifications is available on the Bureau's website at <a href="https://www.bsp.guam.gov">www.bsp.guam.gov</a> under the Guam Coastal Management Program.

**Native Flora.** Protection from invasive species is critical to preserving Guam's native plant and animal species. Therefore, the applicant must avoid the use of invasive plants in their landscape plan. The use of native plants requires little to no fertilizer for growth. The Bureau encourages consultation with the Department of Agriculture's Division of Forestry and Soil Resources on using native plants and organic fertilizers to avoid additional contaminants

BSP Position Statement ARC 2018-36 Page 3 of 3

from entering the aquifer. The applicant may also seek guidance from Guam EPA regarding their Pesticide Control Program.

In light of the points presented above, the Bureau **recommends Approval** to the zone change request from "A" Rural Zone to the "LC" Limited Commercial Zone. The Bureau finds that the proposed commercial activity is compatible with its surrounding uses. Accordingly, the applicant is encouraged to prevent contaminants by controlling erosion during construction and managing stormwater runoff on site. Subsequently, if this application is approved, the Bureau recommends the applicant to comply with the recommendations stipulated above.

As government officials, it is our primary responsibility to ensure that the construction and operations of this proposed endeavor are in a manner designed to protect public health, safety, and to promote the public welfare and convenience. We also encourage the applicant to protect Guam's natural resources and to ensure they are used in a sustainable manner. Si Yu'os Ma'ase'.

CARL V. DØMINGUEZ
Director

cc:

**GEPA** 

DPW

**GWA** 

DPR

**GPA** 



Carl V. Dominguez
Director
Manuel Q. Cruz
Deputy Director

Ray Tenorio Lieutenant Governor Government of Guam P.O. Box 2950 Hagåtña, Guam 96932 Tel: (671) 472-4201/3 Fax: (671) 477-1812

OCT 0 1 2018

## **MEMORANDUM**

To:

Chairman, Guam Land Use Planning

Via:

Executive Secretary, Department of Land Management

From:

Director, Bureau of Statistics and Plans

Subject:

**APPLICATION NO. 2018-42** 

**LOCATION:** 5378-1EAST-3, Municipality of Mangilao

**APPLICANT:** Sang Woo Suk c/o HD Gutierrez

PROPOSED USE: Conditional Use Permit to Construct a Modular Food

Establishment in a "R-2" Multiple Dwelling Zone

**Håfa Adai!** The applicant, Sang Wook Suk, represented by Mr. Harry D. Gutierrez, is requesting a conditional use permit for the proposed construction of a modular food establishment on Lot 5378-1EAST-3 in a "R-2" Multiple Dwelling Zone in the Municipality of Mangilao.

The subject lot is 777 square meters or 8,363 square feet and is located along Route 10 (Vietnam Veteran's Highway). The applicant proposes to construct a 414 square foot full food service operation/restaurant with kitchen, outside dining area, loading area, 14 parking spaces to include two (2) ADA stalls for persons with disabilities. The adjacent surrounding properties include single family homes, apartment complexes, KFC Fast Food, Payless Supermarket, Bank of Guam, Department of Public Health and Social Services, the University of Guam, Father Duenas Memorial High School, convenience stores, and laundromat/water outlets.

The Bureau of Statistics and Plans (Bureau) has completed its review of the subject application and provides the following comments and recommendations:

Land Use. The North and Central Guam Land Use Plan (NCGLUP) is approved as an element of the Guam Comprehensive Development Plan (GCDP). The subject property is identified as "Village Center" designation in the Future Land Use Map of the NCGLUP, as stated in Policy LU-1 (e) Village Center:

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"The Village Center category is intended to provide flexibility for a compatible mix of residential, commercial, public facility, medical and other service uses, and open space uses at a scale and pattern that is consistent with traditional Chamorro villages and neighborhoods (similar to the urban neighborhoods proposed the Hagatna Redevelopment Masterplan). Uses may be mixed vertically, such as retail street level, with residential above, or horizontally, with a mixed of uses next to each other in separate buildings. The designation applies to the existing Dededo and Yigo villages, on a smaller scale to Mangilao and Barrigada, along with two new areas in the northern part of the Island. Flexibility is encouraged in this category, recognizing that the exact mix and configuration of uses must be responsive to community needs and history. Future implementation may include development standards to ensure preservation of existing historic structures. Development should occur in a manner that creates a central focal point and supports bicycle and pedestrian linkages to the surrounding areas."

The Bureau finds that the proposed project is in line with the NCGLUP's Future Land Use Map designations.

**Aquifer Protection.** The Mangilao property lies within the boundary of the Northern Guam Lens Aquifer (NGLA). The NGLA is an essential resource for Guam and is the primary source of drinking water for eighty percent of the island's population. Moreover, the U.S. Environmental Protection Agency has designated the NGLA as Guam's sole source aquifer. Therefore, it is of paramount importance to prevent sources of contamination from entering Guam's water supply. The primary goal for protecting the aquifer is to safeguard human health and the environment by maintaining water quality for continued use.

The Bureau is concerned that the proposed construction of the modular food establishment will trigger adverse effects in the aquifer if measures are not in place to control erosion and sedimentation during and after construction of the project. Controlling sedimentation from construction sites is a priority with regards to stormwater controls and impacts to receiving water bodies within the project site. Moreover, the proposed project increases impervious surfaces in the form of roads, rooftops, driveways, and parking lots. These surfaces greatly increase runoff volume accelerating erosion and carry pollutants into the aquifer.

The Bureau requires that the applicant:

1. Implement best management practices (BMP) to manage stormwater runoff on site, prevent runoff from flooding surrounding neighbors, and avoid contaminating Guam's sole source aquifer in accordance with the CNMI and Guam Stormwater Management Manual.

The Bureau requires the applicant to incorporate bio-retention features to help management stormwater. Additional BMPs may be found in the manual in the Bureau's website <a href="https://www.bsp.guam.gov">www.bsp.guam.gov</a> under the Guam Coastal Management Program.

- 2. Consult with Guam EPA for an aquifer protection review pursuant to the "Federal Safe Drinking Water Act," SS 1424 and Guam Safe Drinking Water Act, " 10 GCA Chapter 53.
- 3. Coordinate with the Guam Waterworks Authority (GWA) for water resource conservation and ensure the NGLA is protected through compliance with the "Water Pollution Control Act," 10 GCA Chapter 47; "Water Resources Conservation Act," 22 GCA Chapter 5; 10 GCA Chapter 46, as amended by P.L. 17-97, and the Guam Water Resource Development & Operating Regulations.

**Erosion Control.** Controlling erosion and sediment flow from construction sites are a priority with regard to stormwater impacts to receiving water bodies within the project site. The Bureau requires that Sang Woo Suk prevent adverse impacts from construction site runoff by employing best management practices.

The applicant must refer to the CNMI and Guam Stormwater Management Manual, October 2006, the Guam Erosion & Sediment Control Field Guide available at <a href="https://www.bsp.guam.gov">www.bsp.guam.gov</a> or at the Guam Environmental Protection Agency (GEPA) for detailed construction stormwater treatment criteria and standards, bio-retention areas, and rain garden specifications.

Low Impact Development (LID) and Stormwater Management. This area has seen an increase in impervious surfaces throughout the years. Between the years 2005 and 2011, the impervious surface area increased by more than 5 (five) percent according to National Oceanic Atmospheric Administration's (NOAA) Coastal Change Analysis Program (C-CAP). As surface area increases so does the risk of flooding and degradation of water quality. The Bureau is concerned that additional impervious surfaces may exacerbate flooding in the area and surrounding neighbors if BMPs are not in place to manage runoff on the property.

The LID approach works with nature to manage stormwater as close to its source as possible. LID employs principles such as preserving and recreating natural landscape features while minimizing the use of impervious surfaces to create functional and appealing site drainage that treats stormwater as a resource rather than a waste product.

Considering the growing concerns of flooding due to increased impervious surface, the applicant is required to implement LID practices such as permeable parking and walkways, grassed swales, island bio-retentions, and/or rain gardens into the landscape as a means to reduce runoff and control erosion from their property. An electronic file of the Island Stormwater Practice Design Specifications is available on the Bureau's website at <a href="https://www.bsp.guam.gov">www.bsp.guam.gov</a> under the Guam Coastal Management Program.

**Native Flora.** Protection from invasive species is critical to preserving Guam's native plant and animal species. Therefore, the applicant is advised to avoid the use of invasive plants in their landscape plan. The use of native plants requires little to no fertilizer for growth. The

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Bureau encourages consultation with the Department of Agriculture's Division of Forestry and Soil Resources on using native plants and organic fertilizers to avoid additional contaminants from entering the aquifer. The applicant may also seek guidance from Guam EPA regarding their Pesticide Control Program.

**Historic Preservation.** The applicant must obtain concurrence from the Department of Parks and Recreation, Historic Preservation Division, that the proposed development does not affect historic properties.

In conclusion, the Bureau **recommends Approval with conditions** and finds that construction activities and impervious surfaces from the proposed project can adversely affect Guam's sole source aquifer and surrounding neighbors if BMPs are not in place to manage stormwater runoff on site. Therefore, the Bureau advises the applicant, Sang Woo Suk, to comply with above listed conditions if this application is approved.

As government officials, it is our primary responsibility to ensure that the construction and operations of this proposed endeavor are in a manner designed to protect public health, safety, and to promote the public welfare and convenience. We also encourage the applicant to protect Guam's natural resources and to ensure they are used in a sustainable manner. Si Yu'os Ma'ase'.

CARL V. DOMINGUEZ

Director

cc:

**GEPA** 

**DPW** 

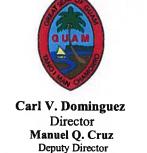
**GWA** 

DPR

**GPA** 



**Ray Tenorio** Lieutenant Governor Government of Guam
P.O. Box 2950 Hagåtña, Guam 96932
Tel: (671) 472-4201/3
Fax: (671) 477-1812



SEP 2 0 2018

#### **MEMORANDUM**

TO:

Director, Department of Land Management

ATTN:

Division of Planning

FROM:

Director, Bureau of Statistics and Plans

**SUBJECT:** 

**Application No. 2018-54** 

Location: Lot 31-1, Block 10, Municipality of Dededo

Applicant: Premiere Properties Management & Greenville Properties, LLC

**Håfa Adai!** The applicant, Premiere Properties Management and Greenville Properties, LLC, represented by Mr. Harry D. Gutierrez is requesting a minor setback variance from the required 8 feet left side yard setback to a 5'3" feet setback or 2'7" feet past the minimum requirement and as set forth in Guam's Zoning Law. The property is identified as Lot 31-1 – Block 10 in the Municipality of Dededo and designated as an "R-1" One-Family Dwelling Zone.

The Bureau of Statistics and Plans (Bureau) has completed its review of the setback variance requests and finds the use compatible with the surrounding area and is consistent with the Kabales Planu Para Guahan and North and Central Guam Land Use Plan. We find that the 2'7" foot distance requested for variance is nominal, and is not expected to be a detriment to surrounding landowners if certain conditions are met with complied with.

The applicant has provided evidence that the structure was built in 1969 and remodeled in 1987. Within PL 27-91, there are conditions set out and must be adhered to in its entirety and the conditions are as follows:

1. The variance is for not more than three (3) feet beyond the setback requirement of only one (1) yard (side, front, or rear) to allow the suitable location of a structure where practical difficulties exist due to special circumstances applicable to the building or property, including size, shape, topography, location or surroundings, depriving such property of privileges enjoyed by other properties in the vicinity and under identical zoning classification consistent with the general welfare of the adjacent neighbors.

- 2. The granting of the variance does not authorize a use or activity which is not authorized by the zone regulations governing the parcel or property.
- 3. Water runoff from the roof line of any structure shall not encroach beyond the property line of the parcel.
- 4. No encroachment onto an area engrossed by a grant of easement shall occur.
- 5. Concurrence from the adjacent property owners located along the property line closest to the setback encroachment shall be obtained.
- 6. Real property chattels or any transient residential accommodations including breakfast inns, motels or hotels are not considered as residential dwellings for the purpose of this subsection.
- 7. No other setback variance shall be granted by the Commission on the parcel affected by the grant of variance through this subsection. The physical removal of any structure or a portion thereof approved through this subsection shall void the restrictions imposed by this subsection.
- 8. The Department shall notify all contiguous property owners of the proposed minor setback variance. Upon notification by the Department, the property owners shall have thirty (30) days to submit written objections to the Director.

Please refer to GCA Title 21 Chapter 61Subsection 616116 Variances for further details.

The Bureau **recommends approval** to the request for a 5'3" left side yard setback variance based on 21 GCA Real Property Ch. 61 Zoning Law Subsection 616116 which specifically states setback variances may be granted if "variance is not more than 3 feet beyond setback requirement of only 1 yard (side, front, or rear)".

As government officials, it is our primary responsibility to ensure that the construction and operations of this proposed endeavor are in a manner designed to protect the public health, safety, and general welfare of the people within the Territory of Guam. Si Yu'os Ma'ase'.

CARL V. DOMINGUEZ

Director



**Ray Tenorio** Lieutenant Governor Government of Guam P.O. Box 2950 Hagåtña, Guam 96932 Tel: (671) 472-4201/3 Fax: (671) 477-1812



Carl V. Dominguez
Director
Manuel Q. Cruz
Deputy Director

#### **MEMORANDUM**

TO:

Chairman, Guam Land Use Commission

VIA:

Executive Secretary, Department of Land Management

FROM:

Director, Bureau of Statistics and Plans

**SUBJECT:** 

**Application No. 2018-40** 

**Location:** Lots B-3-R4, B-3-REM-14, B-3-REM-R14, Municipality of Inarajan

Applicant: Hanwha Energy Corporation c/o TG Engineers, PC

Proposal: Conditional Use to develop, construct, and operate a Renewable

Energy Facility in an "A" (Rural) Zone

**Håfa Adai!** The applicant, Hanwha Energy Corporation (HEC) represented by TG Engineers, PC, is requesting for a Conditional Use in an "A" Zone to construct and implement a 60 megawatt Solar Photovoltaic and Energy Storage System (ESS) in the municipality of Inarajan. The property contains a total area of 809,455 square meters or 8,712,901 square feet which is approximately 200 acres in size.

The applicant is proposing to develop a solar panel farm which includes a 115 kV transmission interconnection to the GPA grid extending from the Malojloj project site to the Piti Substation. There will be approximately 250,000 panels proposed that will cover about 200 acres. The facilities on this compound will consist of an operations and maintenance building, a building for 24 hour personnel, and a building that will serve as a storage and restroom.

The location of the project site can be found in the Malojloj, Inarajan, Guam commonly referred to as the Dandan area and adjacent to and just north of the existing NRG 25 MW Solar Facility. The current make-up of the site location include single family dwellings, vacant overgrowth forested properties, the Layon Landfill, NRG Solar Facility, and NASA Tracking Station.

The Bureau of Statistics and Plans (Bureau) has completed its review of the subject application and provides the following comments and recommendations.

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**Land Use.** The Bureau finds that the proposed project falls in line with the Kabales Planu Para Guahan. The applicant is seeking alternate methods of power generation through solar cells and other renewable energy systems.

**Water Resource Protection.** On Guam, streams are present mainly in the south where low-permeability volcanic rocks slow the infiltration of rainwater and allow ground-water discharge to streams. Heavy rainfall and high runoff cause intense flooding in the stream drainage basins. Because the volcanic rocks have low permeability, ground water saturates the aquifer to tens to hundreds of feet above sea level and discharges at springs and into stream valleys. Therefore, it is of paramount importance to prevent sources of contamination from entering Guam's water supply.

**Erosion Control.** The alteration of vegetated areas to a solar facility with buildings, parking lots, roads and other surfaces that prevent water from percolating and filtering into the ground greatly increases the runoff volume created during storms. Studies show that impervious surfaces can be directly correlated to increased runoff volumes as well as waterway velocities, erosion, and flooding. Controlling erosion and sediment runoff is a major factor in the protection of Guam's vital water resource.

The applicant is required to implement best management practices (BMPs) on site to control erosion and sediment before, during and after construction of the project. The applicant is advised to consult with Guam EPA for effective implementation of BMPs. These practices may include but are not limited to the following:

- 1. Install perimeter sediment controls to retain or filter concentrated runoff from disturbed areas to trap or retain sediment before it leaves the residential property.
- 2. Minimize unnecessary clearing and grading to preserve existing natural areas.
- 3. Stabilize construction entrance and install necessary perimeter controls and diversions.
- 4. Disturbed areas shall be stabilized as soon as feasibly possible after construction.
- 5. Steep slopes shall be protected from erosion by limiting clearing of these areas.
- 6. Where feasible, schedule construction during dry season.

The applicant must refer to the CNMI and Guam Stormwater Management Manual, October 2006, the Guam Erosion & Sediment Control Field Guide available at <a href="https://www.bsp.guam.gov">www.bsp.guam.gov</a> or at the Guam Environmental Protection Agency (GEPA) for detailed construction stormwater treatment criteria and standards, bio-retention areas, and rain garden specifications.

**Low Impact Development (LID).** The project site lies within the Malojloj Watershed located north of Inarajan Village. In the south, vegetation is dominated by savanna and patches of forest, mostly riverine forests that form along valleys and ravines. The low-lying portions of river valleys are occupied by swamp forests, marshes, and occasional cultivated clearings. As surface area increases so does the risk of flooding and degradation of water quality.

BSP Position Statement ARC 2018-40 Page 3

The LID approach works with nature to manage stormwater as close to its source as possible. LID employs principles such as preserving and recreating natural landscape features and minimizing the use of impervious surfaces to create functional and appealing site drainage that treats stormwater as a resource rather than a waste product. Impervious surfaces from roads, parking lots, driveways, and rooftops accelerate stormwater runoff. The Bureau is concerned that once impervious surfaces are installed, commercial pollutants are easily washed into the aquifer and nearby coastal waters. If not properly managed, this activity can adversely impact Guam's drinking water source and surrounding neighbors if measures are not in place to manage runoff on the property.

The Bureau requires the applicant to consider a green approach by implementing island bioretention, permeable parking and walkways, grassed swales and/or rain gardens as a means to avoid or minimize runoff from their property. These approaches will add great benefits such as low maintenance, stormwater management, aquifer recharge, beautification, and neighborhood collaboration and pride in accordance with the North and Central Guam Land Use Plan. An electronic file of the guidebook "Island Stormwater Practice Design Specifications" is available on the Bureau's, Guam Coastal Management Program's website <a href="https://www.bsp.guam.gov">www.bsp.guam.gov</a>.

**Historical and Archaeological Resources.** The Bureau recommends that the applicant coordinate with the Department of Parks and Recreation, State Historic Preservation Office to ensure the preservation, protection, excavation, and evaluation of specimens and sites pursuant to Historical Objects and Sites, 21 GCA, Chapter 76.

In light of the many concerns above, **the Bureau recommends approval to the Conditional Use request.** The Solar Project is expected to provide additional source of clean power from the sun as an alternative to fossil fuels which would be a cost savings measure and promote a cleaner environment to the residents of Guam.

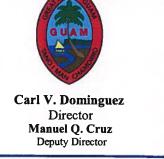
As government officials, it is our primary responsibility to ensure that the construction and operations of this proposed endeavor are in a manner designed to protect the public health, safety, and to promote the public welfare and convenience. We also encourage the applicant to protect Guam's natural resources and to ensure they are used in a sustainable manner. Si Yu'os Ma'ase'.

CARL V. DOMINGUEZ
Director

cc: GEPA DPR DPW GWA GPA



**Ray Tenorio** Lieutenant Governor Government of Guam P.O. Box 2950 Hagåtña, Guam 96932 Tel: (671) 472-4201/3 Fax: (671) 477-1812



#### **MEMORANDUM**

TO:

Director, Department of Land Management

ATTN:

Division of Planning

FROM:

Director, Bureau of Statistics and Plans

SUBJECT:

**Application No. 2018-61** 

Location: Lot 21, Block 4, Municipality of Agat

Applicant: Guadalupe Q. Fejeran

**Håfa Adai!** The applicant, Ms. Guadalupe Q. Fejeran, is requesting a minor setback variance from the required 8 feet left side yard setback to a 6'6" feet setback or 1'4" feet past the minimum requirement and as set forth in Guam's Zoning Law. The property is identified as Lot 21 – Block 4 in the Municipality of Agat and designated as an "R-1" One-Family Dwelling Zone.

The Bureau of Statistics and Plans (Bureau) has completed its review of the setback variance requests and finds the use compatible with the surrounding area and is consistent with the Kabales Planu Para Guahan. We find that the 1'4" foot distance requested for variance is nominal, and is not expected to be a detriment to surrounding landowners if certain conditions are met and complied with.

The applicant has provided evidence that the structure was built in 1991 and included a Retracement Survey Sketch by Virgilio P. Olivares, Registered Land Surveyor #77, that identifies the existing dwelling and setbacks on the property. Within PL 27-91, there are conditions set out and must be adhered to in its entirety and the conditions are as follows:

1. The variance is for not more than three (3) feet beyond the setback requirement of only one (1) yard (side, front, or rear) to allow the suitable location of a structure where practical difficulties exist due to special circumstances applicable to the building or property, including size, shape, topography, location or surroundings, depriving such property of privileges enjoyed by other properties in the vicinity and under identical zoning classification consistent with the general welfare of the adjacent neighbors.

- 2. The granting of the variance does not authorize a use or activity which is not authorized by the zone regulations governing the parcel or property.
- 3. Water runoff from the roof line of any structure shall not encroach beyond the property line of the parcel.
- 4. No encroachment onto an area engrossed by a grant of easement shall occur.
- 5. Concurrence from the adjacent property owners located along the property line closest to the setback encroachment shall be obtained.
- 6. Real property chattels or any transient residential accommodations including breakfast inns, motels or hotels are not considered as residential dwellings for the purpose of this subsection.
- 7. No other setback variance shall be granted by the Commission on the parcel affected by the grant of variance through this subsection. The physical removal of any structure or a portion thereof approved through this subsection shall void the restrictions imposed by this subsection.
- 8. The Department shall notify all contiguous property owners of the proposed minor setback variance. Upon notification by the Department, the property owners shall have thirty (30) days to submit written objections to the Director.

Please refer to GCA Title 21 Chapter 61Subsection 616116 Variances for further details.

The Bureau **recommends approval** to the request for a 6'6" left side yard setback variance based on 21 GCA Real Property Ch. 61 Zoning Law Subsection 616116 which specifically states setback variances may be granted if "variance is not more than 3 feet beyond setback requirement of only 1 yard (side, front, or rear)".

As government officials, it is our primary responsibility to ensure that the construction and operations of this proposed endeavor are in a manner designed to protect the public health, safety, and general welfare of the people within the Territory of Guam. Si Yu'os Ma'ase'.

CARL V. DOMINGUEZ

Director (