MILL TOWN CENTER
BUSINESS AND INDUSTRIAL PARK
WAIPAHU • OAHU • HAWAII

FINAL
URBAN DESIGN PLAN

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1.0 INTRODUCTION

1.1 PURPOSE OF PLAN

The purpose of this Urban Design Plan (UDP) is to: 1) satisfy a condition of the Unilateral Agreement for Ordinance 96-69; 2) create a cohesive, visually unified industrial/business park that is compatible with adjacent properties; and 3) create an industrial subdivision that will be desirable to future buyers, tenants and the surrounding community.

1.2 PROJECT AREA

The project is located north of Waipahu Street in Waipahu. (See Figure 1) The project will be accessible by Paiwa and Waipahu streets (the former which connects directly onto the H-1 Freeway approximately one mile north of the property). The project site is approximately 37 acres in size and is located entirely within TMK 9-4-02: 04 (portion). (See Figure 2) The site is irregular in shape.

Unique characteristics of the project site include: proximity to the Waipahu Town Center, Hans L’Orange Park, and residential areas. These adjacent relationships require a well-coordinated effort to develop this parcel with a sense of design consistency and compatibility with Waipahu’s historic character. The Hans L’Orange Park, the historic character of the sugar mill site, proposed and existing civic/recreational facilities, and bordering residences, serve as a contextual basis for the formulation of this UDP. (See Figure 3)

1.3 PLAN OBJECTIVES

The objectives of this UDP are to: (1) provide a transportation circulation plan to insure adequate access to the project and the surrounding community, (2) provide site planning standards to guide the overall development of the park as well as the development of individual lots within the park, (3) provide general architectural standards to regulate the form and character of buildings within the park, (4) provide general landscaping standards to enhance the visual quality through the use of plantings within the park, and (5) establish a Design Review Committee (DRC), and a design review process to enforce the UDP.

2.0 URBAN DESIGN PLAN

2.1 ZONING AND LAND USE

The project site is presently designated Industrial on the Central Oahu Development Plan Land Use Map. The site is zoned I-1 Limited Industrial District (by Ordinance 96-69). The project site is

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unused, currently vacant, and is mostly clear except for some areas which contain overgrown vegetation and a few small structures.

2.2 SITE ANALYSIS

2.2.1 TOPOGRAPHY

The ground surface generally slopes in the southerly (makai) direction. The site generally has average slopes of 1 to 7 percent, except along its western edge where it slopes towards Waikiki Stream and along its southwestern edge along Waipahu Street. The site was once part of a sugar plantation camp that has been razed. The site is now mostly covered with bare soil and was used for outdoor storage and circulation for cane haul trucks.

2.2.2 SOIL/DRAINAGE

The USDA Soil Survey classifies the site as containing mostly Waipahu Silty Clay (WzC, WzB) soils which are characterized as generally level soils in areas with rainfall of 25 to 35 inches annually. Runoff is medium and the erosion hazard is moderate.

Storm runoff from the project site flows to three drainageways in the vicinity of the property. These drainageways are the Waikiki Stream, the Kapakahi Stream and the Kahu/Wailani Stream Drainage Channel, all of which eventually drain into Pearl Harbor. The property is outside of the flood zone as defined by the Federal Emergency Management Agency’s (FEMA) Insurance Rate Map.

2.2.3 VIEWS

The City and County of Honolulu, has conducted a comprehensive viewseshad assessment documented in "Coastal View Study, City and County of Honolulu Department of Land Utilization, 1987". In this study, the existing visual resources of the entire Oahu coastline are inventoryed, prioritized, and documented. According to the Coastal View Study, the Waipahu viewseshad is residential, commercial, and industrial. Farrington Highway is designated as a "Coastal Roadway", however, no significant coastal visual resources in the vicinity of the project are identified in the Study.

Views onto the project site are only available from Manager’s Drive and from the adjoining Jack Hall Memorial Housing Project and from the site’s frontage along Paiwa Street. No significant natural resources or other significant landforms are present on site.

2.2.4 PEDESTRIAN AND VEHICULAR CIRCULATION AND ACCESS

Presently, there is no public pedestrian and vehicular access on the property. Pedestrian access in the general vicinity is generally limited to along City streets. The project is designed to be accessible from both Paiwa and Waipahu Streets. (See Figure 3) Paiwa Street is a collector road which runs

2 Revised 2/11/97
FIGURE 3
Surrounding Land Uses
(Proposed & Existing)
URBAN DESIGN PLAN

Source: Community Planning Inc.
north-south between the newly developed Waieke area and Farrington Highway (south of Farrington Highway, it continues as Awanui Street). From the Waieke residential area (near the Waieke Golf Club) to just south of the H-1 Eastbound Ramps, Paiwa Street is a four-lane, divided roadway fronting mostly residential uses as well as the Waieke Shopping Center. Between the H-1 Eastbound Ramps and Hiapo Street, Paiwa Street is an access restricted, four lane undivided collector road fronting mainly residential uses. From south of Hiapo Street through Farrington Highway, Paiwa Street operates as a two-lane roadway. Near the project area, Paiwa Street is signalized at Waipahu Street, Paiwa Place, Hapapa Street, Hiapo Street, H-1 Eastbound Ramps, H-1 Westbound Ramps and Lumiaina Street.

Paiwa Place is an east-west street with no outlet, serving only residential uses. Construction was recently completed to extend Paiwa Place west of Paiwa Street to serve the Waieke Center Employee Parking Lot. This will also ultimately serve as a secondary entry for the industrial subdivision. As noted above, traffic signals have been installed and are in operation.

Waipahu Street is a two-lane city collector street which runs east-west between Kunia Road and Kamehameha Highway. Waipahu Street is a major collector/distributor road through Waipahu Town serving residences, small commercial areas, parks and schools. On certain segments, Waipahu Street is a narrow street with curving alignments. Near the project area, Waipahu Street is signalized at Depot Road, Mokuola Street and Paiwa Street.

Mokuola Street is a two-lane city street which runs north-south between Waipahu Street and Farrington Highway (south of Farrington Highway, it continues as Awalau Street). Near the project area, Mokuola Street serves mainly residential uses as well as the Waipahu Civic Center and some commercial uses.

2.2.5 OPPORTUNITIES AND CONSTRAINTS

The principal opportunities and constraints of the property are the following: the adjoining land uses; the direction of the predominant trade winds; the difference in elevation of the adjoining Hans L’Orange Park; and the limited visibility of the site from surrounding major streets. (See Figure 4)

Existing land uses that adjoin the project site are limited to the Jack Hall Housing project (multi-family), the Waipahu Honpa Hongwanji (both of which are located along approximately half of the mauka boundary of the site) and Hans L’Orange Park. The remaining portion of the mauka boundary (known as the Managers Drive parcel) is proposed for residential, school or memorial park, according to the Waipahu Town Plan, as discussed in Section 2.3.2 below. The proximity of residential uses raises concerns about the potential for nuisance odors, fugitive emissions and noise concerns, although it should be noted that the Managers Drive Parcel, Jack Hall Housing and the Honpa Hongwanji are all upwind of the project site during predominant trade wind conditions.

Although a portion of the project site borders Hans L’Orange Park, the park is approximately 20 feet lower than the adjoining industrial subdivision site. The ball field is oriented towards the south and
away from the subdivision. The difference in elevation also acts to minimize the interface between the ballfield and the proposed industrial uses.

As previously mentioned, views of the site from major thoroughfares would be primarily limited to the frontage along Paiwa Street.

2.3 URBAN FORM

2.3.1 NEIGHBORHOOD STRUCTURE

In addition to the Managers Drive Parcel, Jack Hall Housing and the Honpa Hongwanji, the “neighborhood” will consist of the proposed Hans L’Orange Park expansion site and the proposed Mill Town Center Commercial area which will include approximately 13 acres of commercial use, a heritage area, a YMCA, and Filipino Community (FilCom) Center.

2.3.2 COMMUNITY STRUCTURE

In January 1995, the Honolulu City Council adopted Resolution No. 94-309, C.D. 1 to endorse the City Planning Department’s preparation of a community-based Special Area Plan for Waipahu (or Waipahu Town Plan). The Resolution called for the Waipahu Town Plan to provide comprehensive, long-range objectives to guide land use and public improvements, as well as specific plans for certain improvements, including transportation improvements, which address the needs and concerns of the community and enhance the long-term livability and economic vitality of Waipahu.

In February 1995, the Planning Department sponsored a visioning workshop to gauge community interests and desires regarding the future of Waipahu. As directed by the City Council Resolution, a Waipahu Town Plan Task Force was also convened to advise the Planning Department and provide community input to the planning process. The Task Force included members of the Waipahu 2000 Update Committee, Waipahu Business Association, Waipahu Neighborhood Board, the Planning Department, and members of the State Senate, State House of Representatives, the City Council members representing Waipahu, and other members of the community. The Waipahu Town Plan Task Force’s Preferred Plan proposes the development of light industrial subdivision “adjacent and mauka of the sugar mill, with certain restrictions or provision on the types of businesses allowed (businesses could include construction-related companies, automotive maintenance/repair shops, food distributors, clothing/footwear/sporting equipment manufacturers, and warehouse and storage operations).” (See Figure 5) The City Council accepted the recommendations of the Waipahu Town Plan and commended the Waipahu Town Task Force for their efforts through Resolution 96-14. On March 21, 1996, the Waipahu Neighborhood Board unanimously voted “to urge both public and private sectors to establish a timely and expedient implementation of the Waipahu Town Plan.”
WAIPAHU
SPECIAL AREA PLAN

- Commercial
- Park
- Wildlife Sanctuary
- West Waipahu Comm./Ind.
- Light Industrial
- Educational Institution
- Res./Mem.Park/Church
- Comm. Recreation/Park
- Public Facilities
- Old Town Commercial Area
- Exist/Planned Residential
- Land Use Anchor
- Major Intersection
- Shoreline Bikeway
- Pedestrian/Bikeway
- Railroad Restoration
- Blast Zone
- Recreational Access-Pearl Harbor

Preferred Plan

FIGURE 5
Waipahu Special Area Plan
URBAN DESIGN PLAN

Source: City and County of Honolulu Planning Department
2.3.3 DEVELOPMENT CONCEPTS

The project consists of 64 ± lots, which range in size but generally average 20,000 square feet. (See Figure 6) The development of the master plan for the project evolved around the sites contextual relationship with the surrounding community.

Due to the proximity of the project to existing and proposed residential uses (limited to along the mauka boundary of the project site), every effort will be made to mitigate the potential odor, emission and noise impact that could be generated by the industrial subdivision. This starts from the conceptual layout of the subdivision adjoining the residential and apartment zoned districts. By observing an area where such a condition exists (Gentry Waipio), there is a precedent that guides the design of a special area, “Zone A” (Figure 7), within the industrial subdivision.

The structures on industrial lots at Gentry Waipio that are located along the common boundaries to adjoining residential lots are examples of how noise and odor impacts may be reduced by using large, continuous buildings and walls as sound attenuation barriers. The use of a minimum 50-foot wide building as a sound barrier structure provides the following mitigation measures:

- The building can also be used to contain noise levels from the workplace activities.
- The building depth provides a positive distance buffer between the outdoor noise sources and the residential property boundary.
- A building structure of 50-foot depth will generally provide more sound attenuation than a thin wall of the same height.

It is also proposed that there will be a 20 foot landscaped buffer along the mauka boundary of the industrial subdivision (refer to Zone A of Figure 7). Since buildings in the residential and apartment zoned areas are setback from the property line, and the site’s I-1 zoning has transitional height setbacks for lots adjoining residential and apartment zoned districts, the distance between residences and the proposed industrial buildings will be greater than 20 feet.

It is also proposed that there be wing walls connecting buildings and/or no side yards allowed for lots in Zone A (adjoining residential and apartment zoned districts). The future industrial buildings then will form a continuous barrier and act as an additional form of buffer (in addition to a setback) for adjoining residences.

In addition, it should be noted that there are a number of factors that would serve to minimize the potential for adjoining residents to be impacted by nuisance odors and fugitive emissions:

- The project area is down wind of the residential and apartment zoned areas during normal conditions.
- Amfac Property Development Corp. (herein referred to as Amfac) will reiterate Federal and State guidelines addressing odors and emissions in the guidelines in the Declaration of Covenants Conditions and Restrictions for the project area.

Other factors that were taken into the design of the subdivision include:

- The interface with the adjacent but grade-separated Hans L’Orange Park;
- The site’s frontage along Paiwa Street;
- The site’s frontage along a tree-lined and grade-separated portion of Waipahu Street; and
- The desire to limit direct access to primary project streets.

A landscaped buffer is proposed along the edge bordering Hans L’Orange Park. This includes that portion of Street Y, which adjoins the park and provides open vistas of the playing field and Waipahu beyond.

It is proposed that a landscaped buffer be provided along Paiwa Street, which would include entry features at the Street Y intersection.

It is proposed that the existing trees along that portion of the industrial subdivision fronting Waipahu Street be retained, unless the City acquires land to change the current “Z” curve to a safer “S” curve.

It is further proposed that except for three lots, all lots will have no direct access to primary streets (Street X, Street Y and the Mokuola Street Extension). This will minimize situations of large vehicles reversing onto streets and especially minimize conflicts with other thru traffic.

Other potential issues of concerns that are better addressed by development standards and landscaping (described elsewhere) include:

- The proximity to a small portion of the proposed Hans L’Orange Park Expansion Area; and
- The project’s appearance along its perimeter, especially that portion of the project across Street X from the proposed Mill Town Center Commercial area (“Zone B”).

In summary, the development concept for the industrial subdivision was refined to respond to community concerns which resulted in a design that is actually less efficient and more costly (some single-loaded and duplicative roadways and extra roadway lengths) than would normally be used, but should result in minimizing impacts on the project’s existing and future neighbors.
2.3.4 CIRCULATION SYSTEMS

The circulation system for the project includes a hierarchical network that links the industrial subdivision with the surrounding community, as well as provides for efficient access within the site for the various modes of transportation. (See Figure 8) Included in the circulation network are accommodations for vehicular access, pedestrian and transit.

2.3.4.1 PRIMARY STREETS (MOKUOLA STREET EXTENSION, STREET X, AND STREET Y)

Primary Streets serve as the primary circulation corridors linking the industrial subdivision to adjacent streets and properties. These streets shall have a 60-foot right-of-way comprised of 44 feet of pavement and an 8-foot wide planting strip/sidewalk on each side. Except for lots 1, 2, and 3 (Figure 8), direct access onto these streets shall be prohibited. No private driveway or other provisions for access, other than access to the Hongwanji Mission and/or a dedicated street, shall be constructed to connect with these streets. No on-street parking will be permitted on these streets. (See Figure 9)

2.3.4.2 SECONDARY STREETS (ALL OTHER STREETS)

The remaining streets within the property as depicted on the subdivision plan for the industrial subdivision shall have a 60-foot right-of-way comprised of 44 feet of pavement and an 8-foot wide planting strip/sidewalk on either side. (See Figure 10) On-street parking will be permitted on these streets.

2.3.4.3 PEDESTRIAN ACCESS

In addition to sidewalks along project streets, a pedestrian easement shall be provided from within the industrial area south of the Mokuola Street Extension, near the intersection of Street “X” and Mokuola Street Extension (Figure 8). Another pedestrian easement shall be provided at the end of the cul-de-sac north of the Mokuola Street Extension (Figure 8). A third pedestrian easement shall be provided at the mauka end of the Mokuola Street Extension (Figure 8). These easements will allow pedestrian and bicycle access to the makai areas of the property, and beyond to the Waipahu town core, to: 1) encourage patronization of existing Waipahu Town business, and 2) encourage pedestrian travel in lieu of vehicles for short stops. (See Figure 8)

The pedestrian easements shall be 10 feet wide, with a 5 foot-wide paved walkway which allows for 2 wheelchairs to pass each other, lighted with bollards and/or street lamps as necessary for safety, fenced on both sides (6 feet high) and with identification signage at both ends of each easement.

To allow for pedestrian access from the residential communities north of the project, Amfac has sent a letter requesting that the City Department of Housing and Community Development designate and
The figures and related graphics presented in this document are open to interpretation by design professionals. They do no depict any actual structure, nor are they meant to represent any particular graphic scale.
provide basic improvements (fencing, paving, lighting, etc.) for a pedestrian easement along Manager’s Drive from the Mokuola Street extension to Hiapo Street.

2.3.4.4 BICYCLE ACCESS

Bicycle access shall be provided through a bike route system within the rights-of-way of the primary and secondary streets, and the pedestrian easements within the industrial subdivision (Figure 8). The bikeway system will provide access to lots within the subdivision from the surrounding community.

2.3.4.5 TRANSIT STOPS

Pending demonstrated service demand, City bus service could be provided to connect the industrial subdivision with the existing transit service pattern. This linkage would provide for improved regional access to Waipahu Town and surrounding areas, which would reduce the dependency on automobiles as the primary mode of transportation. According to the Honolulu Public Transit Authority (HPTA), transit stops would most likely be best sited near the intersection of Street “X” on Mokuola Street (Figure 8). According to HPTA, there is adequate right-of-way (60 feet) within the Mokuola Street Extension to accommodate transit stops.

2.3.5 DEVELOPMENT STANDARDS

2.3.5.1 SITE PLANNING

Site Planning guidelines address the overall character of the industrial park, as well as the layout of individual lots within the industrial park. They serve to assure that development is coordinated and maintains a cohesive visual character throughout the park. Besides providing for a sense of continuity and cohesion within the park, the guidelines specifically address impacts to existing and proposed uses on the mauka portion of the site (such as the Jack Hall Housing, the Hongwanji Mission, and the Manager’s Drive site), and the historic character of existing and proposed commercial, civic and recreational uses which border the makai portion of the site.

The proposed architecture, including building orientation, massing and building-to-building transition, should be sensitive to the surrounding existing and future residential and commercial communities and open spaces.

2.3.5.1.1 Lot Size/Yards/Setbacks

The average lot size will be approximately 20,000 square feet, reflecting the market demand for such a fee simple product. This exceeds the minimum lot size requirement in the Land Use Ordinance of 7,500 square feet.

Yards (setbacks) are the minimum distances between a property line and a building. They are required to assure that a building is not too close to a street or adjacent property and that adequate
space is provided for light, ventilation, privacy, sound control, open space, landscaping, and parking. (See Figure 11) A minimum 10-foot front yard setback shall be provided for all parcels. (See Figure 12)

It is also proposed that there be wing walls connecting buildings and/or no side yards allowed for lots in Zone A (adjoining residential and apartment zoned districts). The future industrial buildings then will form a continuous barrier and act as an additional form of buffer (in addition to a setback) for adjoining residences.

No side and rear yard setback shall be required from property lines adjoining other industrial lots within the subdivision. For side and rear yard property lines that adjoin streets or the Hans L’Orange Park, a setback of 10 feet shall be required. For property lines adjoining Zone A, a 20-foot setback shall be provided (Figure 7). This exceeds the minimum rear yard setback (10 feet for yards adjoining an A-1 District, and 15 feet for yards adjoining an R-5 District) required under the current LUO. For property lines adjoining Street X, a 20-foot setback shall be provided (Figure 7).

2.3.5.1.2 Open Space/Lot Coverage/Landscaping

The maximum building area shall comply with the development standards established in the Land Use Ordinance. All portions of the lot shall be landscaped, except for portions of the lot used for buildings, parking, walkways, drainage or storage, and shall be suitably constructed or paved for such use. However, if that front, side or rear yard setback area abuts a street, park or residential/apartment zoned area or the perimeter of the project, the landscaping requirements shall be set forth in Section 2.4.2.

2.3.5.1.3 Building Heights/Height Setbacks

The maximum building height shall be 40 feet as required in the Land Use Ordinance. For lots within Zone A (Figure 7) that abut residential/apartment zoned areas on the mauka end of the site, further setbacks in the form of a building envelope are required to ease the transition between the industrial and adjoining residential/apartment zoned areas (See Figure 13). This envelope will limit the massing at the rear areas of these lots to control the visual impact of the industrial subdivision on adjacent residential/apartment zoned properties.

2.3.5.1.4 Parking/Loading Location

Off-street. Each development shall provide sufficient off-street parking to accommodate parking needs for the site (per the off-street requirements of the LUO). Parking should be partially screened from adjoining properties, and from major entrances, streets and common areas by walls, earthmounds and/or landscaping.

On-street. No on-street parking will be permitted on Mokuola Street Extension, Street X and Street Y (Figure 8).

Revised 2/11/97
FIGURE 11
Setbacks (Plan View)

The figures and related graphics presented in this document are open to interpretation by design professionals. They do not depict any actual structure, nor are they meant to represent any particular graphic scale.
FIGURE 12
Front Yard Setback (Section View)

The figures and related graphics presented in this document are open to interpretation by design professionals. They do no depict any actual structure, nor are they meant to represent any particular graphic scale.
FIGURE 13
Typical Building Heights Adjoining A-1 or R-5 (Residential) Zoning Districts

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Loading shall occur only in areas designated for loading and service activities. Loading areas shall be designed so loading of trucks, trailers and other vehicles does not occur in the street. No loading or unloading areas shall be located on the side of any lot adjoining the Mokuula Street Extension, Paiwa Street, Street X and Street Y (except for lots 1, 2, and 3 as shown on Figure 8). Loading and unloading areas for lots 1, 2, and 3 (Figure 8) that are located on the Mokuula Street Extension, Street X, or Street Y shall be partially screened from view from that street. For loading areas on secondary streets, visual barriers (such as walls and landscaping) shall be provided to minimize the visual impacts from public streets or adjacent lots. (See Figure 14)

2.3.5.1.5 Outdoor Storage Areas and Refuse Collection Areas

All outdoor storage and refuse collection areas shall be visually screened from streets with a completely opaque screen consisting of walls and/or landscaping. No storage or refuse collection areas shall be permitted within the front yard setback area. (See Figure 15)

2.3.5.2 BUILDING DESIGN

The intent of these building design guidelines is to create an "industrial/business park" environment which is compatible with and complements the historic character of uses proposed in the Waipahu 2000 Plan, Waipahu Town Plan, and uses adjacent to the property. This will be accomplished through guidelines which promote compatibility and continuity of building scale, forms, design features, materials and color, while allowing for individual expression of each structure. The following guidelines establish an appropriate range or palette for scale, form, height, materials, details and color to ensure the new buildings are visually unified and compatible with their context.

Proposed building forms (including roof forms) and building materials shall consider the desired vernacular of Old Waipahu Town and the Sugar Mill facilities. The designation of and special design guidelines for zones (Zones A and B) could address highly visible lots along the project perimeter and major streets (Figure 7).

2.3.5.2.1 Building Mass

The scale of a building is not just a function of its bulk or massing and height. There is also an apparent scale which is determined by the context in which the building is seen and by the way the building form is articulated.

An appropriate scale for the buildings in the industrial subdivision is somewhere in between the scale of the existing commercial buildings on Waipahu Street and the large scale of the old mill buildings. The design of buildings around the perimeter of the site should be considered in relation to the scale of any buildings which are adjacent. The scale of new buildings should also be appropriate to the size of the lots on which they sit. Continuity and compatibility within the
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FIGURE 15
Screening of Refuse Collection Area

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subdivision, as well as with the historic character of uses within the Waipahu 2000 Plan and Waipahu Town Plan and adjacent uses, are a key goal.

An appropriate scale for elevations may be established by subdividing the height of the facade into three zones, a base, middle and top (see Figure 16). The length of a facade can also be subdivided into regular bays which express the structure or construction of the building. Important functional and symbolic elements of the building should also be articulated, such as the entrance. These elements often relate the scale of the building to a human scale.

Large building forms can be broken down into a series of repeated bays, this reduces the scale and sets up a visual rhythm (see Figure 16). For buildings within Zone A, some attention to continuity should be applied to the “wall” of buildings facing the adjacent residential area. This could occur through the application of one color palette for the “wall” facing the adjacent residential area.

2.3.5.2.2 Architectural Character

Form is another word for the building’s shape, including the shape of the roof. Forms have proportions, the size relationship of one building element to another, such as width to height.

Simple strong forms are appropriate, rectangular buildings with a pitched roof are encouraged. Groups of buildings should be related to each other as a ‘family’ of shapes or forms. Forms should be repeated and combined in simple ways (see Figures 16 and 17). Avoid complex building forms and complex junctions between buildings.

The use of pitched roofs, hip roofs, gable roofs, and shed roofs are recommended. (See Figure 18) An appropriate slope for a gable roof would be in the range of 22 to 30 degrees, which follows the precedent of the roof forms of the buildings of the mill complex. Roof forms should be simple and combined in simple geometries. Where a building has a ‘pop-out’ as shown in Figure 18, the roof of the pop-out should be integrated into the main roof. Roof overhangs proportional to the overall building mass, are also encouraged to provide shade and add to the character of the building. Flat roofed buildings shall include marquees and/or parapets.

The details of a material’s or functional element's shape, color and/or texture, as well as obviously decorative elements, can constitute the ornamentation of a building.

Architectural details should be used to provide appropriate scale and proportion to facades (see Figure 16). Details should be related to the properties of the materials from which the building is made. Avoid cluttering up facades of the building with too many decorative elements. Decorative elements may be appropriate in the following areas: parapet/roof interface, structural supports, columns, corner, door and window trims, foundation articulation. The use of awnings, molding and trim can be especially helpful in articulating the facade of a building fronting a street.
FIGURE 16
Desirable Building Scale

FIGURE 17
Desirable Building Forms

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FIGURE 18
Desirable Roof Shapes

FIGURE 19
Materials Scale - Metal Panel Profile

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2.3.5.2.3 Materials/Colors/Finishes

A quality of industrial buildings is that they are typically built with practical materials and simple construction.

Simple, plain materials should be encouraged. Building materials must be permanent in nature to ensure quality and lasting good looks. If split faced CMU, stucco and painted concrete are used, facades shall include building elements reflective of the character of Old Waipahu Town, such as marquees and/or parapets. If plain (non-decorative) CMU is used, it shall be plastered to cover grouting. Avoid veneer materials (wood veneer, brick veneer). Rock walls may be used for the base of buildings. The use of other building materials not described above will be permitted as approved by the Design Review Committee (DRC).

Some materials have a scale to their appearance. Materials should be selected which are of an appropriate scale to the building or part of the building where they are used. Figure 19 illustrates three sheet metal panel profiles. The large scale profile would only be appropriate to use on the largest scaled buildings, the medium and small scale profiles are more likely to be appropriate for buildings in the industrial subdivision.

Large areas of glass are not appropriate. Glass should be clear or lightly tinted. Avoid dark tinted, colored or mirror glass.

Colors should be muted; earth tones are encouraged. Bright, pure hues should not be used. Garish colors should always be avoided. The color scheme should be coordinated with adjacent properties.

Four colors should be sufficient - base, walls, trim, and roof. Dark colors are best for the base of the building. A light to medium color (not bright white) is appropriate for the main body of the building. If trim is desired to be highlighted - dark or overly contrasting colors should be avoided or used very selectively. In general, the trim may be painted using a slightly lighter or darker shade of the main color. The color of the roof, if visible, should also be coordinated with the wall and trim colors.

Use of high gloss paints, highly reflective materials and finishes is discouraged.

2.3.5.2.4 Walls and Fences

Walls and fences used for visual screening, grade separations, security and/or sound attenuation should have a cohesiveness (similar materials, form, texture, and color) with the adjacent architecture and/or surrounding environment. All project boundary, perimeter, or property line walls, retaining walls and fences shall be approved by the DRC and conform to the following general guidelines:

1) Materials and colors of fences and walls shall be compatible with the building architecture.

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2) No fence or wall shall be located within the Front Yard Setback area.

3) No fence shall obstruct visibility for motorists or pedestrians nor in any way constitute a hazard.

4) Chain link fencing may be permitted only if green vinyl clad.

5) Screen fences and walls shall be a height at least equal to that of the materials or equipment to that of the materials or equipment being stored/screened. Screen fences/walls shall be a minimum height of six (6) feet and a maximum height of ten (10) feet.

6) All walls and fences shall comply with LUO requirements.

2.3.5.2.5 Lighting

Exterior lighting shall be provided in a manner that does not detract from the architectural character of the building. Lighting can serve to both dramatize and highlight the landscape or a building, and create an overall sense of continuity throughout the project. Lighting should be used to create the same attractive setting for the landscape and structure experienced during the daylight hours. Light sources should be recessed, screened or shielded to minimize glare or excessive light spillage on neighboring sites.

If exterior lighting is provided, these standards should be followed:

All lighting potentially visible from an adjacent street, except bollard or (pole lighting up to 16 feet in height), shall be indirect or shall incorporate a full cut-off shield type fixture. (See Figure 20)

Service area lighting shall be contained within the service yard boundaries and enclosure walls. No light spillover should occur outside the service area. The light source should not be visible from the street. (See Figure 21)

Building illumination and architectural lighting shall be indirect in character (no visible light source). Indirect wall lighting or "wall washing", overhead down lighting, or interior illumination which spills outside is encouraged. Architectural lighting should articulate and animate the particular building design as well as provide the required functional lighting for safety and clarity of pedestrian movement. (See Figure 22)

2.3.5.2.6 Signage

To avoid the appearance of visual clutter, signs for individual buildings should be attractive in appearance, blend with building facades, and be compatible in scale. To allow sufficient, though not excessive, business identification, the name of each business shall be permitted to clearly and individually identify the facilities it occupies when viewed from the fronting street.
FIGURE 20
Conceal Light Source-Moolighting Effect

FIGURE 21
Service Area Lighting

FIGURE 22
Building Lighting: Lighting standards

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These signage design guidelines shall be used to create a standardization of signs for the industrial subdivision. Signage is a major contributing factor to the image of the subdivision and its tenants. To avoid the appearance of visual clutter, signs for the individual buildings/tenants should be attractive, blend with the building facade(s) and enhance the architecture. Signs shall comply with all signage requirements of the LUO and require approval by the DRC. Guidelines for the signs are established to ensure a coordinated and unified approach for all such signs and to establish size, quantity, location, color, materials, illumination, lettering size and style.

No sign shall be erected and/or maintained in the industrial subdivision except in conformity with all applicable zoning ordinances, rules, regulations and in accordance with the following provisions:

1) Except as hereinafter provided, the only signs permitted shall be signs which identify a person, firm, company corporation or other business entity operating a business on the property where such sign is located and/or which identify a product or service produced and/or sold on the property where such sign is located. The use of logos, trademarks or logo colors are permissible, provided all intended uses are submitted for review and approval to the DRC.

2) Signs may be illuminated by either rear illumination (box fluorescents or channel type) or lighted from a detached, non-apparent light source. If box fluorescents are used, the background shall be colored and not white. Any exposed light source, flashing or moving character type sign shall not be permissible. Second floor establishment signs shall not be illuminated.

3) Multi-business/tenants in a building, not fronting a street or public way, are allowed one sign per ground floor establishment; this sign shall be wall mounted. This sign shall be limited to 6 square feet in size and mounted adjacent to the main entry door and within the lease line of the tenant. For each second floor business/tenant not fronting a street or public way, one wall sign shall be permitted, if they have an exterior entrance. This sign shall be limited to 3 square feet in size and mounted adjacent to the exterior entry door and within the lease line of the tenant.

4) One ground sign (12 sq. ft. sign area) for identification or directory purposes may be erected. This sign shall not be directly illuminated and the ground sign shall not exceed 3 feet in height. This sign shall count as one of the two permissible signs for all ground floor establishments within the zoning lot. Refer to Figure 23.

5) Wall signs for business/tenant identification shall be located within the lease line of the establishment and not exceed a height of 20 feet or be mounted 2 feet below the fascia line of the roof whichever is lower. Wall signs shall not exceed a length of 25 feet. Wall signs shall be permitted only on the front wall facing the street where primary vehicular access is permitted Refer to Figures 24 and 25.

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FIGURE 23
Typical Ground Sign - Two Sided Sign
No Scale

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FIGURE 24
Elevation of a Typical Sign for Ground floor Establishments
No Scale

FIGURE 25
Mounting Height of Typical Wall Mounted Sign
for Ground Floor Establishments
No Scale

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6) The total sign area measured shall be the total area of the geometric shape, inclusive of any borders, which constitutes the background or field on which the information is displayed. If the sign does not have a background or field, the total area shall be deemed to be the total regular geometric shape which encompasses all the information.

7) One sign for depicting the street address of a building or tenant is permitted and shall be wall mounted. This shall not exceed 1 square foot in area per sign.

8) Imagination and creativity should be incorporated into the design of the sign. The sign should reflect the historic and overall architectural theme of Waipahu Town. Detail, trims and border treatment are highly encouraged in the design.

9) Materials used to construct the sign shall be of a high exterior grade. All materials used shall compliment the exterior of the building and enhance the design of the sign.

10) Colors for the sign should ensure readability of the information and be complimentary to the building colors. The use of standard or established logo colors within the sign may be permitted if approved by the DRC. A coat of exterior protective graffiti finish shall be applied to all sign(s), frames, etc.

11) No signs, pictorial symbols, logos, or murals shall be painted directly onto any exterior surface of any building or wall.

12) The ground sign shall be located in the interior landscaped area beyond the front yard and adjacent to the vehicular access to the Lot. The ground sign can be incorporated as part of a wall facing the front yard. To provide a uniform streetscape character within the industrial subdivision, all ground signs shall comply with the design standards illustrated in Figure 23: Ground Sign Standards.

13) No temporary sign shall be erected and/or maintained in the industrial subdivision, unless it conforms to the standards, as noted below. All temporary signs shall be non-illuminated and no sign shall be located in any required setback area. Temporary signs shall be removed after a 6-month period, with extensions allowed by the DRC.

A) A temporary sign advertising the Sale, Lease or hire of the lot or site on which the sign is located. This sign shall not exceed 8 sq. ft. in area.

B) A temporary sign announcing the construction on the site on which the sign is located. This sign shall not exceed 32 sq. ft. in area.

C) A temporary sign announcing the future business/tenants on the site on which the sign is located. This sign shall not exceed 32 sq. ft. in area.
14) Banners, posters, decals, placards, pictures and notices that are visible (directly or indirectly) from anywhere outside of the business/tenant’s premises shall be prohibited, unless mentioned above or are approved by the DRC.

15) It is the Owner/Tenant responsibility to obtain a written approval from the DRC before installing any signs. The Owner/Tenant shall provide the following sign information approval by the DRC. The submittal shall be in the form of scale drawings and indicate the following:

- Sign elevations (plan and location)
- Construction details (material, mounting, etc.)
- Colors to be used and type of finish for the sign
- Sign illumination
- Type style and size of letters
- Contractor(s) who shall construct and install the sign

16) All signs shall conform to all sign and building code ordinances of the City and County of Honolulu and be approved by the DRC. All required permits and fees shall be the responsibility of the Owner/Tenant and all permits shall be obtained prior to installation of any sign.

17) The DRC has the right to refuse approval, if it deems the sign to be in conflict with the guidelines mentioned above and/or is a negative image to the overall character of the industrial subdivision.

2.3.5.3 TELECOMMUNICATION FACILITIES MASTER PLAN

The installation of antennas associated with telecommunications facilities shall comply with the Land Use Ordinance. Freestanding (not attached to a building or structure) antenna structures (including a freestanding tower, pole, mast or similar structure, exceeding three inches in diameter or horizontal dimension used as the supporting structure for a transmitting antenna) associated with telecommunications facilities shall not exceed the elevation of the top of the Oahu Sugar Mill Stack (232 feet above mean sea level). Any freestanding antenna structure exceeding 50 feet in height shall be required to publicly brief the Waipahu Neighborhood Board in one or more meetings before submitting any applicable permit applications. Freestanding antenna structures shall not be allowed on Lots 1, 2, 3 and 4 as shown on Figure 26, Telecommunications Master Plan.

Sites where antennas “blend in” with existing structures and heights (such as on interior lots, on the interior of a lot, and attached to structures) are preferred to locations where the structure will create greater visual impact (such as in the forefront of public views [from Manager’s Drive Site, Jack Hall Housing, Waipahu Hongwanji], close to major streets [Paiwa Street], or monopoles). When locating antennas on rooftops, seek more internal locations on a structure and avoid locating these facilities
close to the perimeter/parapet of the building. In Zone A, roof-mounted antennas shall be located on the makai side of rooftops, and in Zone B, on the mauka side of rooftops.

In Zone A, antennas shall be sited a minimum of 70 feet from the property line adjoining residential areas.

2.4 LANDSCAPING

Landscaping can enhance the attractiveness of industrial areas by softening the mass of buildings, providing a “park-like” setting, and providing visual continuity throughout the project. Landscaping will play a key role in conveying an impression of the site as a coherent, unified development. Landscaping should also minimize visual impacts associated with the industrial subdivision on adjacent areas such as existing and proposed commercial, residential, and civic uses. Landscaping also plays a key role in assuring compatibility with uses proposed within the Waipahu 2000 Plan and Waipahu Town Plan. To accomplish these objectives, the landscaping concept for the industrial subdivision includes the provision of a landscape buffer along the perimeter of the project, entry elements at the Paiwa Street/Street Y entry to the project and the intersection of Street Y and the Mokuola Street Extension, and the provision of street trees along all streets within the property. Plant materials suited to the Waipahu climate should be installed. A permanent automatic irrigation system shall be provided. (See Figure 27) In addition, a landscape master plan for each lot, incorporating the required landscape buffers and including the specification of plant materials from the master Plant List (Appendix A), will be required of each lot owner.

2.4.1 STREETSCAPE DESIGN

2.4.1.1 GENERAL STREET LANDSCAPING GUIDELINES

Trees shall be planted on each side of the street except where they interfere with street sight distance requirements. The primary ground cover within street right-of-ways shall be grass lawn. Canopy-form street trees shall be planted at a maximum spacing of 50 feet on center. Proposed vertical-form trees along Streets “X” and “Y” should be spaced no greater than 30 feet apart.

2.4.1.2 LANDSCAPE GUIDELINES FOR PRIMARY STREETS

Due to their higher visual exposure, the streetscape concept for primary streets should consider the use of flowering trees or shrubs, where appropriate.

Mokuola Street Extension. The streetscape concept for the Mokuola Street Extension should consist of a regularly spaced, linear street tree pattern of medium to large canopy trees. (See Figure 27)

Street X and Street Y. The streetscape concept for Street X and Street Y should consist of a regularly spaced, linear street tree pattern of upright trees. These trees are recommended to help mitigate impacts of views from adjacent properties. (See Figure 27)
LEGEND

- Mokuola Street Extension
  Medium to Large Canopy Trees (Typical)
- Street X Upright Trees (Typical)
- Street Y Upright Trees (Typical)
- Secondary Streets
  Medium Canopy Trees (Typical)

FIGURE 27
Conceptual Landscape Master Plan
URBAN DESIGN PLAN

- 0 200 400 FEET
2.4.1.3 LANDSCAPE GUIDELINES FOR SECONDARY STREETS

The streetscape concept for secondary streets shall consist of a regularly spaced, linear street tree pattern of medium canopy trees. (See Figure 27)

2.4.2 LANDSCAPE BUFFERS

Landscape buffers are established to assure that sufficient landscaping is provided within the setback areas to assure a sense of visual continuity. (See Figure 28) They are considered the project image zone and include landscaping within each lot fronting a public or private street, or which border the perimeter of the project. Landscape easements shall be provided by Amfac in favor of the Association of owners (the “Association”) of lots. Landscaping within the front yard setbacks shall be installed and maintained by the individual lot owners subject to approval by the Association. If an individual lot owner fails to properly install and maintain these areas, the Association shall have the ability, via the landscape easement to install and/or maintain these areas and charge the individual lot owners. Landscaping of all other easements and common areas shall be provided by Amfac and maintained by the Association and shall be performed in conformance with standards established by the DRC.

2.4.2.1 LOTS ADJACENT TO RESIDENTIAL AREAS

For lots adjoining the residential/apartment zoned area (Zone A), a 20-foot landscape easement will be provided along the side adjacent to the residential/apartment zoned area. (See Figure 28) A solid 6-foot wall will be constructed at the property line adjoining the residential/apartment zoned area, unless otherwise approved by the adjacent properties. The buffer will be landscaped with a combination of berms, trees and groundcover which is consistent with the overall character of the area. Landscaping of these areas shall include vertical-form trees at 30 feet on center to screen the project structures from residents. Storage areas or any other building improvements, other than minor utility installations and lighting (shielded to prevent glare and light spillage), shall not be permitted within the landscape buffer area.

2.4.2.2 LOTS ADJACENT TO STREET X

For lots adjoining Street X (Zone B), a 20-foot buffer will be provided. (See Figures 28 and 29). The buffer will be landscaped with a combination of vertical trees and groundcover. A maximum 8-foot retaining wall will be allowed for each lot, and the wall must be located at a line which delineates the limit of construction for each lot (20 feet from Street X). All retaining walls facing Street X shall be finished with a moss-rock veneer.

2.4.2.3 FRONT YARD STREET FRONTAGE

The first 10 feet of the front yard of any lot or site which is adjacent to a street, should be landscaped with an effective combination of berms, vertical trees, hedges, and/or groundcover, consistent with
LEGEND

- Zone A
- Zone B
- 20-Foot Landscape Buffer
- 10-Foot (Front Yard) Landscape Buffer
- 10-Foot Landscape Buffer
- Entry Features

FIGURE 28
Landscape Buffers
URBAN DESIGN PLAN

0 200 400 FEET
FIGURE 29
Street X Landscape Standards

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the overall character of the project. (See Figure 30) A minimum of one tree per lot shall be provided within the required front yard. An integrated landscape screening element (such as a wall or fence) shall be erected at a distance of 10 feet back from the property line (the wall or fence must be located on the interior, lot side of the 10-foot setback line), except for such portions of the setback used for driveways, walkways, and drainage areas, to provide access to the site from the street. Parking, storage areas or any other building improvements, other than minor utility installations and lighting (shielded to prevent glare and light spillage), shall not be permitted within the landscape buffer area.

2.4.2.4 LOTS ADJACENT TO THE PERIMETER OF THE PROPERTY, HANS L’ORANGE PARK AND/OR REAR OR SIDE YARDS ADJACENT TO A STREET

Except for lots in Zone A, the first 10-feet of any lot or site along the perimeter of the project or Hans L’Orange Park, or rear or side yards adjacent to a street, shall be landscaped with an effective combination of berms, vertical trees, hedges, and/or groundcover, consistent with the overall character of the project. Parking, storage areas or any other building improvements, other than minor utility installations and lighting (shielded to prevent glare and light spillage), shall not be permitted within these landscape buffer areas.

2.4.3 SCREENING OF UNDESIRABLE VIEWS

Screening views of parking areas, outdoor storage areas, refuse collection areas, utilities, and loading spaces and other undesirable views identified by the Design Review Committee (DRC) can be enhanced through proper landscaping techniques. To enhance the overall aesthetic and effectiveness of screening, the use of screening elements such as berms, walls and fencing, in combination with landscaping comprised of a combination of trees, hedges, shrubs, and groundcover are encouraged as approved by the DRC. (See Figure 30)

2.4.4 PROJECT ENTRIES

In order to provide a sense of arrival to the business/industrial park, entry features should be provided at the intersection of Paiwa Street and Street Y and at the intersection of the western interior subdivision street and the Mokuola Street extension. These entry statements will be highlighted through the use of a combination of medium flowering canopy trees or palms, accent shrubs and ground cover. The use of berming, signage and rock walls will also help to enhance the entry into the project. (See Figure 31)
A. FRONT YARD WITH ADJACENT BUILDING

B. FRONT YARD WITH ADJACENT PARKING AREA SCREENED WITH HEDGE

C. FRONT YARD LANDSCAPING WITH SCREEN WALL AND PARKING AREA

FIGURE 30
Front Yard Landscaping

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FIGURE 31
Prototypical Entry Feature

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3.0 IMPLEMENTATION

3.1 DEVELOPMENT STRATEGIES/PHASING SCHEDULE

Development of the industrial subdivision will be completed in phases. The first phase includes the construction of Street Y, the Mokuola Street Extension (extending to Street Y) and sections of the secondary street network in the northeastern portion of the site and improvements to Waipahu Street. The completion of this phase will provide an alternative route for motorists and thereby relieve the Waipahu/Paiwa Street intersection traffic. Allowing Amfac to construct this phase of the project before the City improves the Waipahu/Paiwa Street intersection can greatly reduce construction bottlenecks at that intersection. The second phase of the project includes completion of the extension of Mokuola Street to the mauka edge of the property, completion of the secondary street system in the southwestern portion of the site, and improvements to Waipahu Street. The construction of Street X and improvements to Waipahu Street will be implemented when the proposed commercial area is developed.

In summary, Amfac shall be responsible for constructing: Street “Y”, the Mokuola Street Extension, and all project internal roadways (“secondary streets”); street landscaping; pedestrian ways within the easements to be provided; initial common area landscaping; entry features; and site grading. The future individual property owners shall be responsible for all other improvements.

3.2 COMPLIANCE WITH URBAN DESIGN PLAN

To create a visually unified development, the UDP supplements the existing regulatory controls established by the City and County of Honolulu, including the zoning and subdivision standards and regulations. The UDP guidelines are general and advisory in nature and are not intended to be narrowly construed nor mechanically applied. Rather, they are intended to be broadly and flexibly interpreted in light of changing legal and factual circumstances. Where any conflict arises between the County regulations and standards and guidelines included in the UDP, the more restrictive provisions shall prevail. These guidelines are established for aesthetic considerations only. Neither Amfac, the association, the board of directors of the association, the DRC, or any committee, employee, officer, director, or member of any of the foregoing shall be held liable for regarding the structural integrity, soundness of design or construction of facilities within the industrial subdivision.

3.2.1 COVENANTS TO ASSURE COMPLIANCE

Enforcement of the UDP shall be accomplished by a Design Review Committee (DRC) established by Amfac. All developers will be required to present proposed projects to the DRC to show conformance with this UDP, the Design Guidelines, and the Covenants, Conditions and Restrictions (CC&R’s) to be provided for the project. Project approval by the DRC is required prior to construction. The CC&R’s shall establish a mandatory association of owners, to approve rules and guidelines, maintain common area landscaping, enforce the CC&R’s, UDP, and rules and guidelines.
In addition to DRC approval, applicants shall satisfy governmental codes, ordinances and regulations, and will be required to obtain required approvals from all relevant agencies. Nothing herein removes or otherwise affects the responsibility of each project developer for satisfying all applicable laws, codes and ordinances, and for obtaining all permits and approvals required by law. Should a conflict arise between any of the provisions of this UDP, any law, code or ordinance, or any permit or approval condition, the stricter provision shall prevail.

3.2.2 DESIGN REVIEW COMMITTEE

3.2.2.1 MEMBERSHIP

To aid in the review of proposed developments, Amfac (the landowner and/or master developer) shall create a design review committee, hereafter referred to as the Design Review Committee (DRC). The DRC may later be turned over to the Association at Amfac’s discretion.

3.2.2.2 DUTIES AND RESPONSIBILITIES

The purpose of the review by the DRC is to assure the success of the industrial subdivision as a development which has a clearly defined image and is well integrated with its surrounding community. The DRC may in its sole discretion, disapprove plans that it determines may result in a possible reduction in value or utility of adjoining properties because of proposed improvements or uses considered to be unsightly or disharmonious with existing improvements, or in conflict with this UDP.

Activities or uses which result in noise, smoke, odors, dust, vibration, and glaring night lighting or the use of toxic materials and other such nuisances which can create an unsafe, obnoxious, or offensive impact on industrial uses in the park in general or upon any specific property are prohibited, unless adequate facilities which reduce the impact to acceptable levels are constructed and maintained at all times or other approved mitigation measures are taken.

The DRC shall review schematic, preliminary and construction drawings prior to the construction or alteration of property within the industrial subdivision. The DRC will also be responsible for, and has the right to continually refine this UDP in order to ensure a high standard and quality of development.

The primary responsibility of the DRC is to review all proposed site planning and architectural improvements, including buildings, landscaping, signage, walls, fences, entry treatments, irrigation plans, and lighting, in order to maintain a high standard of development. A prior written approval from the DRC on all proposed improvements is required to proceed to the next step as outlined below and in the Design Guidelines.

In no event may plans be submitted to the City and County of Honolulu for grading and building permits (for preliminary or final approval) prior to the review and approval of the DRC or written

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waiver of said approval process. Also, no construction (including grading, excavation or fill work) shall be performed or commenced on any development parcel or lot without the prior approval of the DRC.

A specific plan review process with submittal requirements and additional design guidelines/details (rules and regulations) will be established to facilitate a timely review and approval of all plans. This process provides the DRC with a clear and complete understanding of the proposed improvements prior to construction and assurance of conformity with the UDP.