
HIGHWAY 1
BALL FIELDS
WAVECREST ROAD
BOYS & GIRLS CLUB
RETAIL AND COMMERCIAL AREA

WAVECREST VILLAGE, L.L.C.

March 29, 2004

Mr. Chris Kern
California Coastal Commission
45 Fremont Street
San Francisco, CA 94105-2219

Ms. Susan Craig
California Coastal Commission
725 Front St., Ste. 300
Santa Cruz, CA 95060

Re: Wavecrest Village Project Description

Dear Mr. Kern and Ms. Craig:

Please find enclosed the revised project description for Wavecrest Village. I would like to thank you for providing the plans used by Commission staff in their analysis of Pacific Ridge. We used these plans, at your suggestion, as a template for our revised project information. I trust you will find that the enclosed information meets and, in many cases, exceeds the information provided to staff in your analysis of Pacific Ridge.

We are enclosing the following information as part of this submittal:

- A narrative description of the revised Wavecrest Village Project.
- An illustrative plan prepared by EDAW for the revised project (We are enclosing full scale and reduced scale plans on 8½" x 11").
- A landscape plan for the revised project
- A Preliminary Stormwater Drainage Report for the revised Wavecrest Village project prepared by BKF Engineers.
- A Preliminary Grading Plan for the revised Wavecrest Village project prepared by BKF Engineers.
- Architectural concept plans for the residential units in the Northern Residential Area as prepared by Hunt Hale Jones, Architects and Simpson Design Group, Architects.

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This revised project description also refers to and incorporates information previously provided to staff in numerous submittals over the past years.

I want to thank you for your time over the past several weeks in reviewing preliminary information which assisted us in completing the enclosed project description under a very tight time frame. If there is additional information needed for your review in preparation of a staff report, please don't hesitate to contact me.

I will see you Thursday at our site visit.

Sincerely,

Patrick K. Fitzgerald

Cc: City Council Members, City of Half Moon Bay
Dr. John Bayless, Cabrillo Unified School District
Bill Barrett, WVLLC
Jack Leibster, Planning Director, City of Half Moon Bay

WAVECREST VILLAGE: REVISED PROJECT DESCRIPTION

1. INTRODUCTION

The Wavecrest Village project ("the project") constitutes a phased master planned community by Wavecrest Village LLC, in conjunction with the Cabrillo Unified School District, the Boys and Girls Club of the Coastside, and the City of Half Moon Bay, on 206.7 acres in the City of Half Moon Bay, San Mateo County.[1] (*Tab 1 Location* Map *August 2000 Wavecrest Project Description.)*

*(**Note:** We will reference tabs of the August 4 2000 Wavecrest Project Description provided to staff throughout this revised project description.)*

The project site is located on an uplifted marine terrace between Highway 1 and the 60-70 feet high Pacific Ocean bluffs, within the certified Local Coastal Program (LCP) urban limit line of Half Moon Bay. (Tab 2, Location Aerial Photograph.) The project site consists of four separate ownerships and includes (a) 206 small lots in an antiquated substandard subdivision, south of Wavecrest Road, (b) 10 larger parcels that have been farmed within the past five years, and (c) Wavecrest Road and five City paper street rights-of-way within the small lot subdivision. (*Please see Tab 3 of the August 2000 Wavecrest Project, Existing Property Ownership Map*)[2]

The site contains no blue line (permanent or intermittent) natural streams, but presently conveys on- and off-site agricultural and highway drainage waters through several man-made ditches that discharge onto a large percolation area and a County maintained drainage channel located off-site. (*Please see Tab 4 of the August 2000 Wavecrest Project, USGS Half Moon Bay 7.5 Minute Quadrangle Sheet*) The sandy beach at the foot of the bluffs beyond the westerly edge of the site is already in public ownership.

The project applicants have prepared, and the City Council has approved with clarifications and conditions, a Planned Unit Development (PUD) to implement the objectives, land uses, public access, conservation, and development controls of the certified LCP for the Wavecrest Restoration Planned Development District.

The applicant has revised that project after meetings and discussions with Coastal Commission staff and public hearings before the Commission in 2000 and 2001. The Revised Wavecrest Village Project is described herein. The project is described by eight major categories within the following Project Description.

Specifically, the areas are:

1) ***Coastal Bluff and View Corridor***
2) ***Northern Residential Area***
3) ***Middle School***
4) ***Sports Fields***
5) ***Visitor Serving Commercial Site***

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[1] Certified Half Moon Bay LCP Land Use Plan ("the LUP") 'Development Conditions" Section 9.3.6(a) and (r), and discussion at 159.

[2] The four property owners are Concar Enterprises, Inc. (6 large agricultural lots), Pepper Lane Properties LLC (2 large agricultural lots, North Wavecrest Partners L.P. (3 large agricultural lots and 206 small lots, and the City of Half Moon Bay (5 street rights-of-way within the small lot subdivision). Although the project site is less than the whole 490-acre North Project Area of the Wavecrest Restoration Plan, the LCP specifically allows a PUD, as here, where its component parcels are in separate ownership.

6) ***Boys and Girls Club***
7) ***Southern Residential Area***
8) ***Open Space Areas***

This Revised Project Description includes the previous submittals prepared by the applicant and submitted to the Coastal Commission staff except as noted in this Project Description.

2. SUMMARY OF PRINCIPAL PROJECT PROVISIONS

The Revised Wavecrest Village Project provides the following primary use classifications, and associated conservation and development standards, to implement the permissible kinds, densities, intensities, and locations contained in the LCP for the project site:

(a) Preservation of over 125+/- acres (60% of the project site) in open space on the blufftop, riparian preserve, along the view corridor from Highway 1 to the blufftop and Pacific Ocean, significant portions of the antiquated subdivision, along the Highway 1 and Smith Parkway landscape corridors, and in interior neighborhood parks.

(b) Dedication, improvement, and maintenance of a comprehensive and extensive system of public accessways to and along the blufftop shoreline.

(c) Development of a new Cabrillo Unified School District **Middle School** campus and a **Boys and Girls Club** of the Coastside.

(d) Modernization of **Sports Fields**.

(e) A **Visitor Serving Commercial** site totaling 123,000 +/- square feet.

(f) Creation of open space in an antiquated 206 unit small-lot subdivision (***Southern Open Space)***, some lots of which are located within a substantial arroyo that supports significant riparian-association habitat.

(g) Conservation of mapped wetlands, as defined in the LCP, and provision of associated 100-feet wide buffer areas.

(f) Construction of a total of 164 market-rate and 40 below market rate housing units.

(h) Restoring and enhancing declining and deteriorating wetlands in the ***Northern Residential Area***.

(i) Implementation of Best Management Practices to control and enhance present (primarily offsite) agricultural process water discharges and storm water runoff through implementation of proposed drainage improvements (including the extensive use of bio-swales).

(k) Implementation of associated infrastructure improvements, including turn and deceleration/acceleration lanes and signalization at the South Main Street-Higgins/Purissima Road/Highway 1 intersection entrance to the project, intersection and roadway improvements at Wavecrest Road, partial relocation (without alteration in size) of the area's sewer main, and extension of existing utilities into the project site from adjacent corridors.

3. WAVECREST VILLAGE MASTER PLANNED COMMUNITY

This Revised Project description herein includes the specific information and materials, which individually and collectively constitute the Wavecrest Village project components and hence the Wavecrest Village project "development" under the meaning of the LCP and Coastal Act (Pub. Res. Code Sec. 30106), for which the applicants seek coastal development permit approval.

A. Proposed Uses, Densities, and Intensities

As shown in Part D, "Wavecrest Village Project Land Uses Uses", below, the project provides for nine use types as part of the project:

1) Open space, including bluff, grassland, windbreak tree, and riparian habitats, public view corridor, restored wetland areas, vegetated drainage pond, and neighborhood open space.

2) Dedicated public accessways, scenic overlook, and supporting facilities.

3) Public sports fields and associated facilities.

4) Clustered market rate and below market rate housing.

5) A public Middle School campus for up to 1,150 students with associated recreational and sports fields.

6) A non-profit Boys and Girls Club community facility.

7) A visitor serving commercial/retail center.

8) Resubdivision of existing parcels.

9) Associated water, sewer, agricultural and storm drainage, other utility, and roadway infrastructure improvements, including signalization and turn lane improvements at the intersection of South Main Street and Highway 1.

The proposed project uses will take the place, as specifically indicated below, of recently dry-farmed lands, grassland and windbreak trees and former pasture. A 1.4-acre agricultural pond will also be restored and improved to facilitate drainage from the ***Northern Residential Area***.

B. Project Boundaries and Relationship to Adjoining Uses

1. Project Boundaries

The exterior boundaries of the Wavecrest Village PUD are shown in Tab 1, Location Map. Specifically, they consist of:

On the northwest, the westerly property line (PL) along the Pacific Ocean bluffs of existing Parcel APN 065-011-010 (Concar Enterprises, Inc.).

On the north, the northerly PL of existing Parcel APN 065-011 -010 (Concar Enterprises, Inc.), between the Pacific Ocean bluff and the intersection with the State of California Highway 1 ROW.

On the east, the easterly PL in existing Parcel APN 065-011-010 (Concar Enterprises, Inc.), fronting on the State of California Highway 1 ROW, south along the easterly boundary (defined by metes and bounds) of Parcel APN 065-110-100 (North Wavecrest Partners), to the southeasterly comer of the Wavecrest Road ROW at the westerly boundary of the State of California Highway 1 ROW.

On the south, from the easterly boundary of the State of California Highway 1 ROW at the intersection with the southerly boundary of the Wavecrest Road ROW, west +1322 feet along that southerly boundary of Wavecrest Road ROW to the unnamed 20-foot wide (paper) street ROW, then south +763 feet along the easterly boundary of that unnamed street to the southeasterly comer of the (paper) Harvard Street ROW, then south ±1,594 feet along the easterly PL of APN 65-110-020 (North Wavecrest Properties), then west +962 feet along the southerly PL of APN 65-110-020, then north ±794 feet along the westerly PL of APN 65-110-020, then west +211 feet along the southerly boundary of (paper) Harvard Avenue, to the intersection with the easterly boundary of the (paper) Park Avenue ROW.

On the southwest, from the southwesterly comer of Harvard Avenue, north ±763 feet along the easterly boundary of (paper) Park Avenue, to the northeasterly comer of the Intersection with the existing Wavecrest Road ROW, then north +959 feet along the westerly PL of APN 065-011-050 (Half Moon Bay LLC), then west + 1,758 feet along the south side of Lot 41 of APN 065-011 -010 (Concar Enterprises, Inc.) to the starting point of the PUD boundary.

Excluded from the PUD boundaries are (1) all parcels west of (paper) Park Avenue, south of Lot 41 of APN 065-011 -010 (Concar Enterprises, Inc.) and north of Redondo Beach Road, (2) Parcels APN 065-086-050 (Lane), -170 (Bosque), -190 (Hammell), 065-082-030 (Devine), 065-084-010 (Weistrop), and 065-110-010 (Halstead), (3) all Parcels between (paper) Marinero Avenue and Redondo Beach Road, from (paper) Park Avenue on the west to (paper) Occidental Avenue on the east, and (4) all Parcels east of the unnamed 20-foot wide paper street and its continuation, Occidental Avenue, between Wavecrest Road on the north and Redondo Beach Road on the south.

2. Relationship of Wavecrest Village Project Uses to Surrounding Area

The map in Tab 8, Wavecrest Village Project and Surrounding Uses, spatially depicts the relationships of the uses, densities and intensities proposed in the Wavecrest Village Project to existing uses within a 300-foot wide band around the project site.

2.1. To the west of the northerly part of the project site (***Coastal Bluff and View Corridor***) are the 40-60 foot high Half Moon Bay bluffs, the unnamed 300-foot long, steep-sided arroyo that bisects the bluff near the southwesterly corner of the parcel, the sandy beach, and the Pacific Ocean beyond.

The proposed Open Space uses of the ***Coastal Bluff and View Corridor*** continue the existing open space qualities of the bluff inland and provide public views from Highway 1 and

intermediate public areas toward the shoreline. The L. C. Smith windbreak of acclimated trees will be permanently protected as a visual resource.

The proposed lateral Coastside Trail is located 50-100 feet inland of the bluff edge to both afford spectacular direct shoreline and distant ocean views, while minimizing adverse effects on the bluffs or on public safety by reasonably setting back the public accessway from the bluff top edge. The trail segment is aligned to connect with future adjacent lateral trail segments (by others) to the north and south, and also connects via a proposed signed vertical (East-West) trail system to the Highway 1 corridor and South Main Street (downtown Half Moon Bay).

Trail improvements will be made by the project developer to maximize opportunities for public access and recreation, commensurate with resource protection. For this reason, as well as those of public safety, difficulty to provide accessibility for disabled persons, and likely very high maintenance costs because of its location on the open ocean, steep bluff shoreline, development of a 40-60 foot high public access stairway to connect the blufftop trail with the beach along this segment of the shoreline has been determined to be infeasible. (*Please see Tab 10 of the August 2000 Wavecrest Village Project Description, Evaluation of Vertical Bluff Face Access Stairway, Wavecrest Village, Half Moon Bay.*) Low-rise signs warning trail users of the hazards associated with the bluff edge, and prohibiting climbing up or down the bluff face, will be posted to protect the natural resource and public safety.

The Project neither proposes nor allows structural development on the parts of the bluff face or bluff top within the project site. With the exception of the public trail, community garden and drainage improvements, no structural development is proposed as part of the Project within 1,000 feet of the bluff top.

To the west of the ***Sports Fields*** and the ***Southern Open Space***, the uplifted marine terrace consists of remnant native bunch grassland, intermixed with naturalized trees and shrubs that is incised by one major (unnamed) vegetated "riparian" arroyo and two smaller ones. This area includes numerous small lots and several paper streets in an antiquated subdivision, whose owners elected **not** to participate in the Wavecrest Village Project. The area presently contains a small farmhouse and associated structures, an 18-inch sewer main in a 10-foot wide sanitary sewer easement (SSE) and maintenance road that runs in the (paper) Park Avenue ROW, and its filled crossing of the unnamed vegetated arroyo. Agricultural waste water may be discharged into the arroyo, which drains into a series of small pools just above the ocean beach, +1,000 feet north of Redondo Beach Road.

2.2. To the north of the ***Coastal Bluff*** and the ***Northern Residential Area*** lies a +1,310-foot long heavily vegetated regional storm water runoff drainage channel ("channel"), within a 60-foot wide parcel owned by the County of San Mateo. The 10-foot wide SSE continues in a northerly direction through this area. An approved LCP Amendment (de Benedetti) and recent project development (Magnolia Homes) is north of the ***Northern Residential Area***. The substantially built-out Arleta Park one and two story SFH residential subdivision is located to the north of Magnolia Street, and a church is located near the corner of Highway 1 and Seymour Street ROW.

The channel serves to drain various agricultural, residential and other areas to the north and east, as well as the Wavecrest Village site, Highway 1, 12.5 acres of nurseries located south of Wavecrest Road, and +67-acres east of Highway 1. (*Please see Tab 4 of the August 4 2000*

Wavecrest Village Project Description, Wavecrest Village Project Area Topographical Map (1996); USGS Half Moon Bay Quadrangle Topographical Map (1997).) The channel discharges into an eroded pocket beach of the bluff some 20-90 feet north of the northerly ***Coastal Bluff*** property line (PL).

Included as an exhibit to this revised project description is a Conceptual drainage plan prepared for the revised project by BKF Engineers. This revised plan proposes the extensive use of bio swales throughout the project to facilitate water treatment before discharge to the ocean as well as maintain and enhance deteriorating wetlands on the project site. For further detail ,please see the enclosed report.

The +1,500-foot long L. C. Smith windbreak of naturalized trees parallels and overhangs the existing channel. On the west, it extends 30-60 feet south onto the Northern Residential Area; on the east, +700 feet. (Tab 2, Locations Aerial Photograph.) The marine terrace to the north of the channel, west of the SSE, consists of a former County dump site.

2.3. To the east of proposed Wavecrest Village Project, and the entrance at proposed Smith Parkway (Main Street Extended), lie the State of California Highway 1 ROW, the unsignalized intersection with South Main Street and Higgins-Purissima Road, the Half Moon Bay Fire District station, agricultural parcels planted in field crops, the historic Johnson House, and several vacant parcels. A +43,133 SF exholding parcel, owned by others and developed with residential and associated structures, is located along the easterly edge of the ***Visitor Serving Commercial site***, south of proposed Smith Parkway.

The Smith Parkway (Main Street Extended) intersection with Highway 1 and South Main Street/Higgins-Purissima Road will be improved with four-way signalization and turn/acceleration/deceleration lanes to implement the City conditions of approval to achieve an intersection LOS A during weekend evening peak traffic periods and an LOS B during weekend afternoon peak periods.[5]

Other uses to the east of the project, south of Wavecrest Road, consist of 12.5 acres of fenced commercial nursery space located east of the ***Southern Open Space Area*** and low density residential uses and hobby farms.

2.4. To the south of Wavecrest Road, between Highway 1 and the ***Southern Open Space Area***, the project site is adjoined (from east to west) by an inn (restaurant and lodging), several singe-family residences, and a 2-acre parcel. South of these uses is the previously mentioned commercial nursery facilities.

Vacant parcels separate the southerly boundary of the project site from Redondo Beach Road and the Ocean Colony residential, golf course, and visitor-resort community.

C. Wavecrest Village Project Site and Adjacent Area Natural Landscapes

Tab 4 of the *August 4 2000 Wavecrest Village Project Description* depicts (1) the terrestrial topography of the project site and an adjacent 300-foot wide band at 2-foot contour intervals, (2) the location of trees as well as riparian and LCP wetland habitats (environmentally sensitive habitat areas), and (3) the bluffs along the western face of the site. Tab 11 of the *August 4 2000 Wavecrest Village Project Description* contains a species list of existing vegetation and Tab 12 provides the assessment of the condition of trees on the site, as contained in the Final EIR and supplemented for the ***Boys and Girls Club***.

The project site is located on a geologically uplifted marine terrace, which slopes gradually from the coastal range of hills east of Highway 1 to the 68-70 foot high bluffs on the west. The westerly property line (PL) of the project site generally follows the top of the bluff line and does not extend down the face of the bluff to the beach. The project site contains no mudflats, fresh- or saltwater marshes, swamps, intermittent or permanent streams, or lakes. (The riparian corridor in the southwesterly part of the site, which continues southwesterly towards the ocean, has been established since at least the 1950's and is proposed by the project to be permanently conserved through dedication for open space.)

In its natural condition prior to the advent of farming and grazing in the 19th Century, the site, which is exposed to the prevailing northwesterly winds, supported native bunch grasses on the marine terrace. Remnant populations occur on the westerly side of the ***Coastal Bluff and View Corridor*** and in several larger areas to the west of (paper) Park Avenue, outside the project site. The project site contains no dunes, rocky outcroppings, or coastal hills on the marine terrace; it also contains no significant natural topographical relief other than the Pacific Ocean bluffs.

The delineated LCP jurisdictional wetlands on the project site are proposed to be permanently protected through application of a 100-foot wide buffer, provision of continued water inflow, recordation of a perpetual open space and conservation easement across both, and performance of an annual monitoring report.

Wetlands Research Associates (WRA) has provided Commission staff with addendums to their Ponding and Vegetation study since our last public hearing. The Commission's biologist prepared an analysis reviewing WRA's submittals and other pertinent information. That analysis is incorporated by reference. The project applicant has designed the revised Wavecrest Village project to avoid the LCP wetlands and other areas of potential concern on the site. Further review with the Commission's biologist is currently underway.

Narrow man-made agricultural drainage ditches with de minimis vegetation and habitat value (that are specifically excluded from the Coastal Commission's regulatory definitions) trend along Wavecrest Road in a straight line and flow at a right angle north and then, at another right angle, west to the ***Coastal Bluff and View Corridor***.

In addition to the overall benefit to water quality resulting from BMP-processing of currently unfiltered agricultural and highway runoff as described in the Preliminary Drainage Plan prepared by BKF Engineers, the restored and enhanced wetland features will also provide significant resource benefit by contributing to the likely emergence of seasonal wetland and related habitat values.

The deteriorating ±70,000 SF bermed irrigation pond in the proposed ***Northern Residential Area*** is proposed to be restored and enhanced as a wetland feature more fully described in Dr. Josselyn's *Wavecrest Village Development – Wetland Restoration Program Description* submitted in April 2001.

Near the southwesterly corner of the project site, the applicant has proposed a ***Southern Open Space Area***, which contains the upper reach of an unnamed arroyo that has been densely colonized with riparian-association species, in part due to agricultural wastewater discharges from greenhouse nurseries located east of the project site. The riparian canopy reaches, but does not substantially exceed in height, the wind burn line along the adjacent marine terrace elevations.

The mature and prominent L. C. Smith eucalyptus windbreak extends along the northerly project site, just south of the County-maintained regional drainage channel. It, and a parallel windbreak of cypress trees along the southwesterly corner of the ***Coastal Bluff***.

The project site is not listed in the relevant archeological, paleontological, or cultural-historical landmark data bases as containing any such known or potential resources.

D. Proposed Wavecrest Village Project Land Uses

As specified in Table 1, the Wavecrest Village Project proposes the following specific land uses, acreages, densities and intensities of use on the 206.7 acre project site.

In summary, the Wavecrest Village PUD allocates +/- 120 acres to open space (60.67% of the area), +22 acres to market rate and below market rate residential units (10.6%), +/- 8.85 acres to Visitor Serving Commercial Area (4.3%), +/-22 acres to the new Middle School (10.6%), +/- 2.5 acres to the Boys and Girls Club and Sports Fields parking (1.21%), +/- 11.9 acres to the Sports Fields (5.76%), +/- 1 acre to the Community Garden (.5%) and +/- 13 acres to streets, sidewalks and miscellaneous uses (6.3%).

E. Proposed Specific Development Standards

The Wavecrest Village project and its residential, commercial, school, Boys & Girls Club, sports fields, streets, parking, and open space areas are designed to be consistent with the conservation and development standards in the certified LCP and the Wavecrest Village Project Specific Plan, except as amended in this Revised Project Description.

F. Proposed Project Lot and Street Layout, and Street and Highway 1 Intersection Improvements

1. The Revised Wavecrest Village Project Plans depict the proposed lot and street layout for the project.

In summary:

a) Smith Parkway (Main Street Extended) is proposed to be developed as a public street, to be dedicated to the City, to the west of the proposed improved intersection of Highway 1 and South Main Street (see part (3), below).

Smith Parkway will consist of one-way westbound and eastbound travel and turn lanes, separated by a maintained central landscape island as the parkway approaches the intersection with the street leading to the ***Northern Residential Area*** and ***Middle School***. Eastbound Smith Parkway will expand from one to two lanes 250 feet west of the Highway 1 intersection. A turn lane through the landscape island into and from the proposed northern sections of the ***Visitor Serving Commercial Site*** west of the Highway 1 intersection with Smith Parkway/South Main Street.

The project proposes vehicular travel lanes in Smith Parkway to be 14- feet wide, inclusive of Class III bike lanes along their outer edge. On the north side of the parkway and an intervening 7-feet wide planter corridor a nearly 8-feet wide public path is proposed.

(b) The project proposes to develop the interior streets of the ***Northern Residential Area*** as private, ungated streets in a 54-foot wide ROW. The typical street will consist of two 10 feet wide vehicular travel lanes, two 8 foot wide parking lanes, two 4-feet wide street tree landscaping corridors and two 5-feet wide public sidewalks.

(c) The project proposes to redevelop Wavecrest Road along 2,630 feet, between Highway 1 on the east and the westerly boundary of the ***Sports Fields***.

Existing Wavecrest Road will be widened from its current deteriorated narrow paved track to provide for two 12-feet wide vehicular travel lanes and an 8-foot wide parallel parking corridor on the north side of the street. A 5-foot wide PUE will be located on the both sides of Wavecrest Road.

Proposed public Wavecrest Road is bounded on the north, within the project site, by ***Sports Fields***, ***Boys & Girls Club, Southern Residential Area*** and the southern segment of the ***Visitor Serving Commercial Site***.

2. Street and Lot Layout in the ***Northern Residential Area.***

The revised Wavecrest Village Project plan depicts the proposed lot and street layout and associated open space for the ***Northern Residential Area***.

In summary, the ***Northern Residential Area*** development project consists of:

(a) The subdivision and structural development of 164 residential lots of various product types more fully described as attachments to this project description. There will be 71 residential lots that are typically sized 5,250 square feet (or 50' x 105'). There will be 38 residential lots that are typically sized 3,375 square feet (or 45' x 75'). Finally, in the ***Northern Residential Area***, there will be 55 14,4000 square foot lots that will hold five single family residences shared off single drive entrance. Further detail on lot sizes, floor plans and elevations are attached to this project description.

(b) The designation and construction of private streets within the ***Northern Residential Area*** each with a 54-feet wide ROW, and with two 10-feet wide vehicular travel lanes, two 8-foot wide parking corridors, and respective 4-feet wide street tree landscaping corridors, and public 5 wide sidewalks.

(c) Development of landscaped areas within the ***Northern Residential Area***.

3. Intersection Improvements at Highway 1 and South Main Street

The *August 4 2000 Wavecrest Village Project Description* depicts the proposed intersection improvements at Highway 1 and South Main Street, including in the State of California Highway 1 ROW and the City South Main street ROW. These improvements constitute mitigation, pursuant to the FEIR, to bring the present weekend afternoon peak hour Highway 1-South Main Street intersection LOS F to a LOS A during weekday evening peak periods and to LOS B during weekend afternoon periods. (Wilson Engineering, "Traffic Impact Study", 1998, page 14.)

In summary, the project for which applicants seek a coastal development permit from the Coastal Commission proposes that:

(a) A four-way traffic signal be installed and operated at the Highway 1 intersection with Smith Parkway and South Main Street/Higgins-Purissima Road.

(b) Southbound Highway 1 be improved with one 12-feet wide south-to- westbound deceleration and turn lane into Smith Parkway, and one 12- feet wide south-to-east/northeast bound deceleration and turn lane into South Main Street and Higgins-Purissima Road. Curbs will be provided along all turn lane improvements in the median or shoulder of Highway 1. The project does not alter the size of the existing two southbound through lanes of Highway I at this location.

(c) Northbound Highway 1 be improved with one 12-feet wide north-to- westbound deceleration and turn lane into Smith Parkway. The project does not affect the existing northbound through lane, but locates a new combined through-and-right-turn lane of Highway 1 at this location to replace the existing sinuous off ramp.

(d) The curve of westbound South Main Street to north Highway 1 be clearly delineated (striped) and a curved quasi-triangular raised island be located at the intersection's to further direct turning traffic.

(e) A westbound through lane to Smith Parkway and a dedicated westbound to southbound Highway 1 turn lane be located in the South Main Street curve east and northeast of the intersection.

(f) A 12-foot wide acceleration lane be located in Highway 1 from the southbound turn from Smith Parkway, and a merging lane be located in the triangulated median from South Main Street to southbound Highway 1.

4. Street and Lot Layout in ***the Southern Residential Area***

The revised Wavecrest Village Project plan depicts the proposed lot and street layout and associated open space for the ***Southern Residential Area***.

(a) The subdivision and structural development of forty residential units consisting of 26 residential lots typically sized at 2,400 square feet (40' x 60'). There also will be two rental apartment units of eight units per building that are typically sized at approximately 8,500 sf.

(b) The designation and construction of public streets within the ***Southern Residential Area*** each with a 54-feet wide ROW, and with two 10-feet wide vehicular travel lanes (that accommodate a Class III bike lane), two 8-foot wide parking corridors, and respective 4-feet wide street tree landscaping corridors, and public 5 wide sidewalks.

(c) Development of landscaped areas within the ***Southern Residential Area***.

All proposed streets within the project site will be provided with curbs, curb ramps to accommodate disabled persons, and with drains and gutters that direct storm runoff water as described in the preliminary drainage plan.

G. Typical Building Elevations and Design

1. Residential Buildings

Please find enclosed prototype plans for the typical market-rate single family homes and affordable homes proposed by the project for low density residential development in the ***Northern Residential Area*** and the ***Southern Residential Area***.

In summary, the **Northern Residential Area** will consist of three product types with a variety of floor plans in one and two story elements in a visually cohesive neighborhood. The structures either face or are located adjacent to each other and where houses have a primary orientation toward the street. The prototypes depict homes that will have clearly identifiable building entries that include porches and integrated balconies, recessed garage doors, varied garage placement relative to the street and individual houses, interesting window configurations, and varied roof and wall planes. The project also proposes implementation of a street tree and shrub landscape corridor along adjacent sidewalks and curbside parking. We have included conceptual elevations and site plans for the three product types as part of this submittal.

Also included are elevations and site plans for the smaller single family residential homes and apartment units located in the **Southern Residential Area**. As depicted in the project plans, this residential component proposes medium density affordable and smaller single family homes and duplexes that will utilize creative siting of a mix in the sizes and floor plans in combination with such architectural features as porches, balconies, other usable private open space, garage and building facade variation to create a varied and aesthetically interesting street presentation.

2. Commercial Buildings

We have provided typical elevations for the ***Visitor Serving Commercial*** building prototypes in past submittals. The prototypes are designed for retail uses on the first floor with second story office space. As described in our April submittal, the Revised Wavecrest Village Project proposes the development of 123,000 sf of retail and office space at a Floor Area Ratio (FAR) of .3.

In summary, the design and presentation of the proposed commercial buildings in the Wavecrest Village mixed-use commercial project provide:

(a) One two-story Commercial building of approximately +/- 36,000 square feet accessed from Smith Parkway and associated parking and landscaped sidewalks with ground floor pedestrian-oriented retail spaces and second floor office space.

(b) Five two story Commercial buildings totaling +/- 87,000 square feet accessed from Wavecrest Road and including associated parking and landscaped sidewalks with ground floor pedestrian-oriented retail spaces and second floor office space.

3. ***Middle School***

The Cabrillo Unified School District ("CUSD") has designed a middle school campus for up to 1,150 students in grades 6, 7, and 8, and 50-60 instructors, support staff, and maintenance personnel, which will vary with, and depend on, the programs incorporated into the school's curriculum. The school is proposed to operate between 8:15 am and 3:00 pm on a traditional school year. After school activities will include athletics, band practice, club meetings, and similar functions.

CUSD proposes up to 82,000 SF of building floor area, including 40 classrooms and 25,000 SF of covered walkways that will be located on the northerly half of ***the Middle School*** site, and turf and landscape areas for sports fields that will be located on the southerly half of the site. CUSD's objective is to create a physical setting that will foster interdisciplinary teaching and communication among faculty, staff, and students, as well as to allow for flexibility to accommodate a variety of teaching styles and programs. The campus is designed to provide a wide variety of specialty spaces for science and other laboratory electives; multi-purpose spaces for drama, music, physical education, and extracurricular activities; and athletic fields and recreational facilities that allow for community, as well as school, use. All spaces anticipate the increased use of technology and buildings are designed to be constructed of materials that require low maintenance and upkeep, while withstanding the rigors of an active middle school body.

We have provided Commission staff with the typical building design and the list of components for the ***Middle School*** campus in past submittals.

Also shown on the revised Wavecrest Village illustrative plan (and provided to staff in previous submittals), ***the Middle School*** outdoor areas are proposed to include a 400-meter athletic track (with an interior multi-purpose sports field and adjacent high jump, long jump, and shot put areas), one Pony League baseball and one softball field, basketball courts, volleyball courts, tennis courts and other uses.

4. ***Boys and Girls Club***

As depicted on Tab 22, Boys and Girls Club Site Plan, this non-profit community youth facility is proposed to be located south of Wavecrest Road and directly across the street from the proposed Middle School campus. ***The Boys and Girls Club*** is proposed to include the following buildings, structures, and landscape areas:

(a) A 26,850 SF main building with a 36-ft peak at the high roof, and a 42-ft cupola maximum height, that includes a gymnasium, a games area, a multi-use area, a teen center, kitchen, administrative space, restrooms and other miscellaneous space.

(b) 50 automobile parking spaces for the **Boys and Girls Club** and adjacent **Sports Fields.**

H. Location and Acreage of Open Space

As depicted in the revised Wavecrest Village illustrative plan, the Wavecrest Village project provides 125 acres of open space (60% of the 206.7 acre Project site) and an additional +/- 26 acres of active recreational open space at the Middle School and City Sports Fields.

The project will dedicate the ***Coastal Bluffs***, Riparian Preserve and **Sports Fields** to the City in fee-simple.

I. Preliminary Landscape and Grading Plans

Included with this submittal is a revised Preliminary Landscape plan prepared by EDAW for the Wavecrest Village project.

Development of the very slightly sloped project site involves only a small amount of grading to excavate footings for residences, the school buildings, Boys and Girls Club, commercial building piers, and to create the base for the associated streets, public accessways, utility infrastructure, parking lots, and landscaped areas. *BKF Engineers* have prepared a preliminary grading plan that is included with this submittal. The grading for the project is estimated to balance on site with cut and fill estimates (with the appropriate variances for this level of detail) shown on the plan.

J. CEQA

The Draft Environmental Impact Report (DEIR) and Final Environmental Impact Report (FEIR) of the Wavecrest Village Specific Plan specifically address, analyze, and mitigate, as appropriate, the potentially significant environmental effects from the proposed Wavecrest Village Project.

The DEIR and FEIR have previously been submitted by the City under separate cover to the Coastal Commission through the State Clearinghouse environmental review process.

K. Public Access Improvements

The Wavecrest Village Project Illustrative Plan depicts the extensive system of public accessways. All public accessways will be signed and accessible to disabled persons.

All public accessways in the ***Coastal Bluffs*** and ***Open Space*** will be constructed of compacted natural materials. Public access sidewalks and/or plaza areas will be paved.

Class III bike lanes will be located in the outer part of vehicular travel lanes in collector streets. Bicycles will also be permitted on the Coastside Trail in the ***Coastal Bluff***.

Coastal access parking will be located at the westerly end of Smith Parkway, south of the ***Northern Residential Area***.

In cooperation with the City and State of California, the project will place "Coastal Access" signs in or along the Highway 1 ROW north and south of the intersections with Smith Parkway.

All public accessways identified in this project description for non-residential parcels will be (a) improved by the applicants as conditions precedent to occupancy of the first building or permitted use (e.g., sports fields) in the respective development, (b) dedicated through public access easements (PAE's) to the City, and (c) maintained by the City. Public accessways (e.g., sidewalks or paths) through the residential subdivisions will be improved by applicants, dedicated to the City as PAE'S, and maintained by the Homeowners' Association.

Wavecrest Village

Table # 1
Uses / Acreage (approximate)

	Acres	Total	Percentage
Northern Residential			
11 lots (120 x 120)	3.63		
71 (50 x 105)	9.99		
38 (45 x 75)	6.03		
Total Northern Residential	19.65	**19.65**	
Southern Residential			
24 (40 x 60)	1.4		
2 (8 plex)	1		
Total Southern Residential	2.4	**2.4**	
Total Residential		**22.05**	***10.7%***
Middle School		***22***	***10.6%***
Boys & Girls Club (including parking for Sports Fields)		***2.5***	***1.2%***
Sports Fields		***11.9***	***5.8%***
Community Garden		***1***	***0.5%***
Visitor Serving Retail/Commercial Area			
1) Northern Segment - off Smith Parkway	2.6		
2) Southern Segment - off Wavecrest Road	6.25		
Total Visitor Serving Retail/Commercial Area	8.85	***8.85***	***4.3%***
Roads & sidewalks			
Northern portion of site (above entry main road)	7.9		
Southern portion of site incl. Wavecrest Rd.	5.1		
Total Roads & sidewalks	13	***13***	***6.3%***
Open Space		***125.4***	***60.7%***
Total Project Area		***206.7***	***100.0%***

Drainage Report

PRELIMINARY
STORMWATER DRAINAGE REPORT
FOR THE
NORTHERN PORTION OF
WAVECREST VILLAGE

BKF ENGINEERS
540 Price Avenue
Redwood City, CA 94063

March 29, 2004
Job No. 19990154-10

DESIGN ENGINEER:

BKF ENGINEERS
540 Price Avenue
Redwood City, CA 94063
Edward Boscacci, Jr. P.E.
Project Engineer
David Evans, P.E.
Principal-in-Charge

PRELIMINARY STORM DRAIN REPORT
FOR THE NORTHERN PORTION OF WAVECREST VILLAGE

APPROVAL STATEMENT

This report has been prepared by me or persons under my direction according to standards set forth by the City of Half Moon Bay and the State of California.

Edward Boscacci

Edward Boscacci, Jr. P.E.
Project Engineer

PRELIMINARY STORM DRAIN REPORT
FOR THE NORTHERN PORTION OF WAVECREST VILLAGE

INTRODUCTION

North Wavecrest Partners proposes development of Wavecrest Village on a 206.7-acre site in Half Moon Bay. The site is shown on Figure 1. Development consists of riparian preservation, landscape buffer, a Boys and Girls Club, a Sports Field, a School Site, a Mixed-use Commercial site, and residential development.

The purpose of this report is to document proposed storm drainage, storm water detention facilities and stormwater treatment facilities to serve the northern portion of the project, as shown on Figure 1.

SUMMARY

Storm drainage facilities are recommended for the Northern portions of the Wavecrest Village projects in Half Moon Bay. The existing swale through the site will be widened to about 50-feet wide to convey the 100-year storm event through the site to downstream drainage facilities with an average depth of 3 feet and a water level 0.5 feet below the existing ground surface. A low flow channel will be constructed within the widened channel, creating a compound channel. The purpose of the low flow channel section is to maintain sediment transport.

A storm drain detention basin is proposed to mitigate increased flow with proposed development. With the proposed detention pond, the peak flow rate of runoff from the site will be less than the corresponding existing peak rate of discharge. The proposed facilities are in conformance with the City of Half Moon Bay requirements for the project.

On-site storm drainage systems will convey flow from the pockets of project development to bioswales. Flow will be treated in bioswales. The bioswales will discharge to the proposed widened open channel through the site.

BACKGROUND

Improvements are for a development concept proposed on a drawing of North Wavecrest dated March of 2004 by EDAW (EDAW Plan). The EDAW Plan includes development of the North Wavecrest area with about 31 acres of impervious surfaces within the 120 acre development area shown on Figure 1. The remaining portion of the development will remain as open space.

The storm drainage plan for Wavecrest Village has been modified several times to account for changes in wetland delineations and subsequent revisions to the proposed land uses. The report, Stormwater Drainage Report for the Northern and Central Portions of Wavecrest Village, by Brian Kangas Foulk dated September and December 1999, (1999 Drainage Report) provided a plan for a project with about 81 acres of impervious lands. At that time, a single large detention

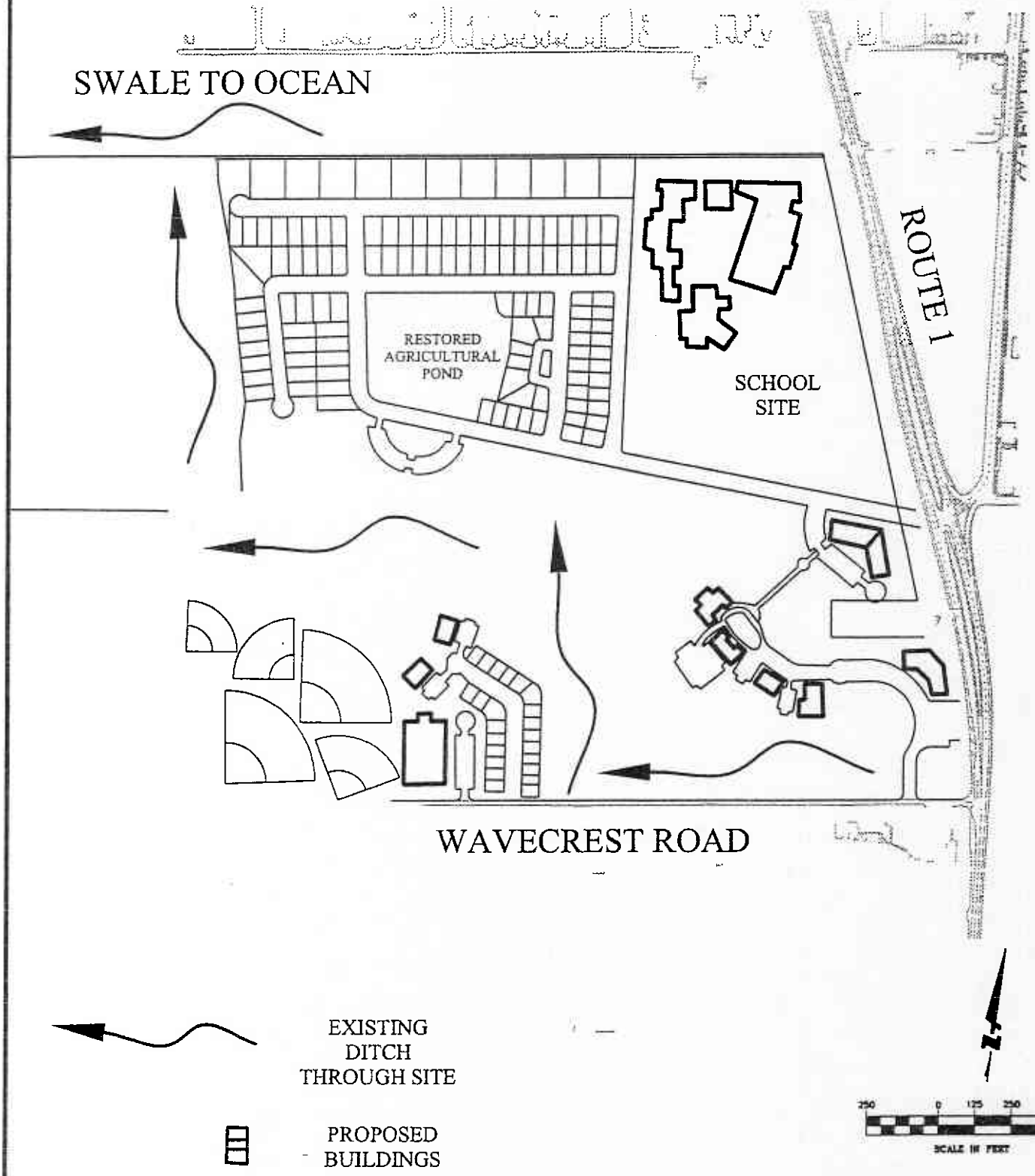

FIGURE 1
WAVECREST VILLAGE
PROPOSED SITE PLAN

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PLOT TIME: 03-29-04
PLOTTED BY: edb

basin was proposed at the northwestern portion of the property. This detention basin provided both stormwater treatment and 10-year storm event stormwater detention.

This drainage plan follows the design parameters presented in the 1999 Drainage Plan. The drainage concepts have changed because the development area is significantly reduced and stormwater treatment requirements have been better defined.

DESIGN PARAMETERS

The following design parameters are used for evaluating proposed storm water drainage and detention facilities within Wavecrest Village:

Hydrology

- With development, the peak flow rate will increase because of increased impervious area and reduced times of concentration. Stormwater detention is proposed within the on-site detention basin and bioswales to attenuate flows leaving the site. Following development, the peak flow rate from the project area during the 10-year storm events shall be less than or equal to the peak flow rate prior to construction of the Wavecrest Village Specific Plan facilities. The design does not account for future improvements outside the Wavecrest Village area. If such development occurs, these areas will be responsible for detaining their own project flows. The project discharges to an existing swale that is on County lands.

- Peak flows from areas east of Highway 1 are calculated assuming no upstream storage and no flow between drainage areas. The two ponds located east of Highway 1 do not contribute runoff to the project area. The ditch parallel to and east of Highway 1 has a high point about 400 feet south of the Wavecrest Road culverts. Backup at the Wavecrest Road culvert could cause flows to overtop the high point and flow southerly. No flow reduction has been included in this report for flows that might overtop the high point.

- The detention basin system is analyzed using the U.S Army Corps of Engineers HEC-HMS Rainfall Runoff computer model.

- Rainfall intensity amounts were taken from the Department of Water Resources Bulletin 195, Rainfall Analysis for Drainage Design (Station Name Pacifica USGA). An intensity chart is attached (see Appendix B). The precipitation pattern for the HEC-1 model is developed using an alternating block method.

- The rainfall runoff component is computed using a uniform loss coefficient. The uniform loss component is calculated to provide a peak flow for existing conditions that corresponds to the flow calculated using the Rational Method. When a uniform loss coefficient of 1.1 inches per hour is used, results are similar to those computed using the Rational Method.

- The following are used as the percentage of impervious area for the various proposed development types:

  Residential areas are modeled as 50 percent impervious.
  Ballfields and landscape buffers are modeled as pervious.
  The areas east of Highway 1 are modeled as 3 percent impervious.
  The building areas, parking areas and track at the school site are modeled as 90 percent impervious. The remaining portions of the school site are modeled as 20 percent impervious.

- The time of concentration is calculated using the Kirpich equation:
  $Tc=0.0078 * (L^{1.5}/S^{0.5})^{0.77}$, with a minimum time of concentration of 10 minutes.

Hydraulics

- The open channel systems are analyzed using the U.S. Army Corps of Engineers HEC-RAS computer program.

- A Manning's Roughness of 0.050 is used for the open channels. A roughness coefficient of 0.250 is used for bioswales flowing at a maximum depth of 4 inches.

- The starting water level is from the HEC-HMS Computer Model.

- The system shall have a minimum of one-foot freeboard from the top of curb to the hydraulic grade line for a 10-year storm event.

Treatment

- Stormwater treatment is provided in bioswales for the 0.2 inch per hour storm event. About 85% of rainfall will be treated for facilities sized for this rainfall rate.

- Bioswales are sized to convey the treatment flow with a minimum slope of 0.5 percent and a maximum depth of 4 inches.

Detention Storage at Restored Agricultural Pond

The detention storage shall be sized to reduce the peak discharge from the design 10-year storm event so that it is less than that which would occur prior to project development. The detention basin will be located at the site of the existing agricultural drainage pond and will be

The detention basin has a maximum depth of 3 feet.

EXISTING CONDITIONS

Site Drainage

The project area drains toward an existing swale that discharges to the Pacific Ocean adjacent to the proposed alignment of Seymour Road. The existing drainage areas are shown in Figure 2.

The peak runoff to the swale at the site outfall point is 141 cfs for the 10-year event. Peak flow rates for Subareas shown on Figure 2 are presented in Table 1 in Appendix A. Analyses are based on existing development at the Nurseries, the subarea east of Highway 1, and the area west of Highway 1 and north of Wavecrest Village.

PROPOSED CONDITIONS

With development of the project area, about 31 acres would be converted from pervious soils to impervious surface such as building, pavement or walkway. Figure 3 shows the drainage areas for the proposed conditions. Table 2 lists projected percentage of impervious area with development of Wavecrest Village. Without mitigation, the added impervious area would cause an increase in the runoff to the downstream swales. Flows for proposed conditions are presented in Table 2.

Stormwater Detention at Restored Agricultural Pond

With proposed development and no stormwater detention, the peak flow during the 10-year event would increase by 34 cfs. To mitigate this increase in runoff, a stormwater detention basin is proposed at the restored agricultural pond that will be supplemented by storage within bioswales. Runoff will be held within the restored agricultural pond and bioswales and released to the downstream system at a rate that does not cause an increase in flow to the downstream system. The layout of the restored agricultural pond is conceptual. The layout may be adjusted to provide a more natural fit within the site topography.

The proposed basin would have a bottom area of 0.75 acres (about 250 feet long by 125 feet wide). The bottom will have sideslopes of 3 horizontal to 1 vertical. The pond would have twin 24-inch diameter discharge pipes. The 10-year water level in the pond would be about 2.2 feet

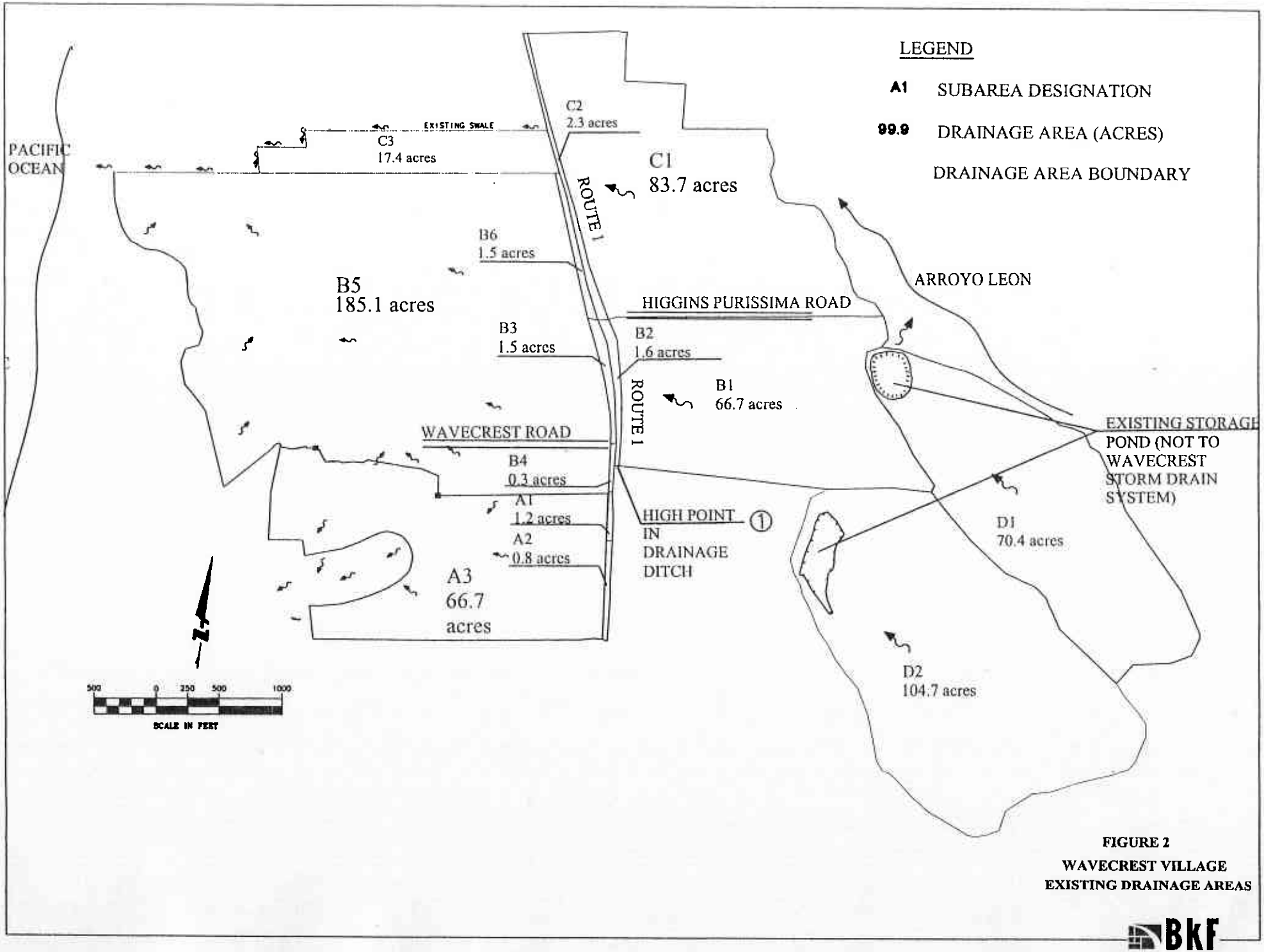

FIGURE 2
WAVECREST VILLAGE
EXISTING DRAINAGE AREAS

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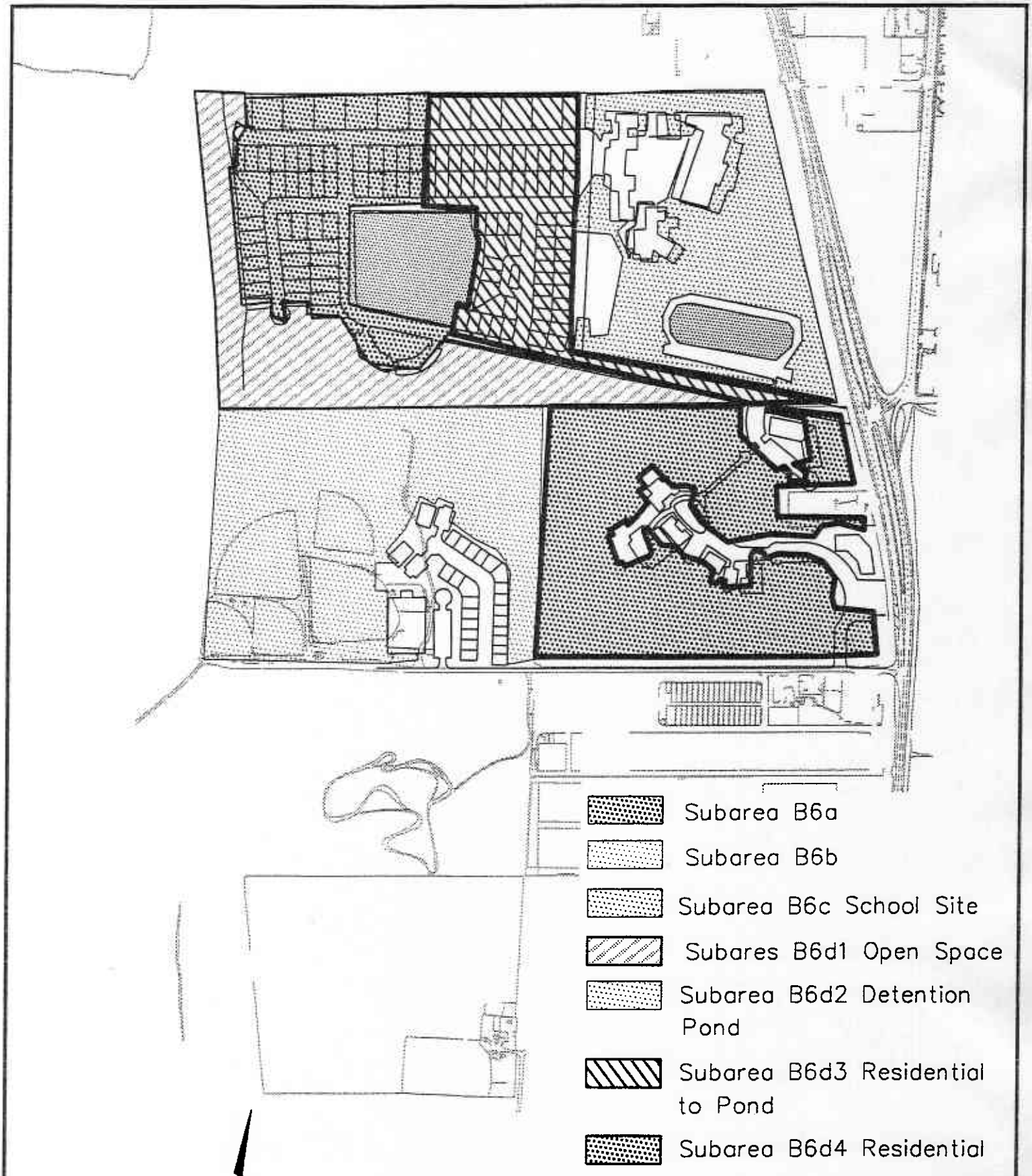

FIGURE 3
WAVECREST VILLAGE
IMPERVIOUS SURFACE AREAS

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deep, and the pond would detain 2.2 acre-feet at the peak of the 10-year storm event. With the proposed storage, the peak flow at the site is less than under existing conditions.

With the proposed outlet facilities and storage volumes, the post-project flow from the project will be less than the flow from the project for existing conditions. Peak flows from the storm drain system through the site and from the unnamed Creek to the north of the property are summarized in Table 3:

Table 3
Peak Runoff Rate
With Stormwater Detention

	Peak Flow Rate 10-Year Event Wavecrest System (cfs)
Existing Conditions	241
Proposed Condition No Detention basin	274
Proposed Condition With Detention	235

Discharge from the pond will be through a bioswale. The total drainage area to the detention pond is about 38 acres, with a runoff coefficient of about 0.4. For a rainfall intensity of 0.2 inch per hour, the design treatment flow is 3.1 cfs. A series of parallel bioswales with a combined width of 50 feet is recommended for treating and conveying discharge from the detention basin.

Emergency Overflow Spillways

The detention basins will have emergency overflow spillway sized for an attenuated 100-year storm event with no flow through the low level outlet. There will be an additional 1-foot freeboard provided. A 20-foot wide spillway is recommended.

On-site Storm Drain System

Runoff will be conveyed to detention and bioswales through on-site storm drain systems. These systems are not sized at this time. Storm drain lines will have a minimum of 0.3 percent slope. Open ditches will have a minimum of 0.5 percent slope.

The local drainage systems will discharge to the existing ditch through the site. The ditch will be widened to about 50-feet wide to convey the 100-year storm event through the site to downstream drainage facilities with an average depth of 3 feet and a water level 0.5 feet below the existing ground surface. A low flow channel will be constructed within the widened channel,

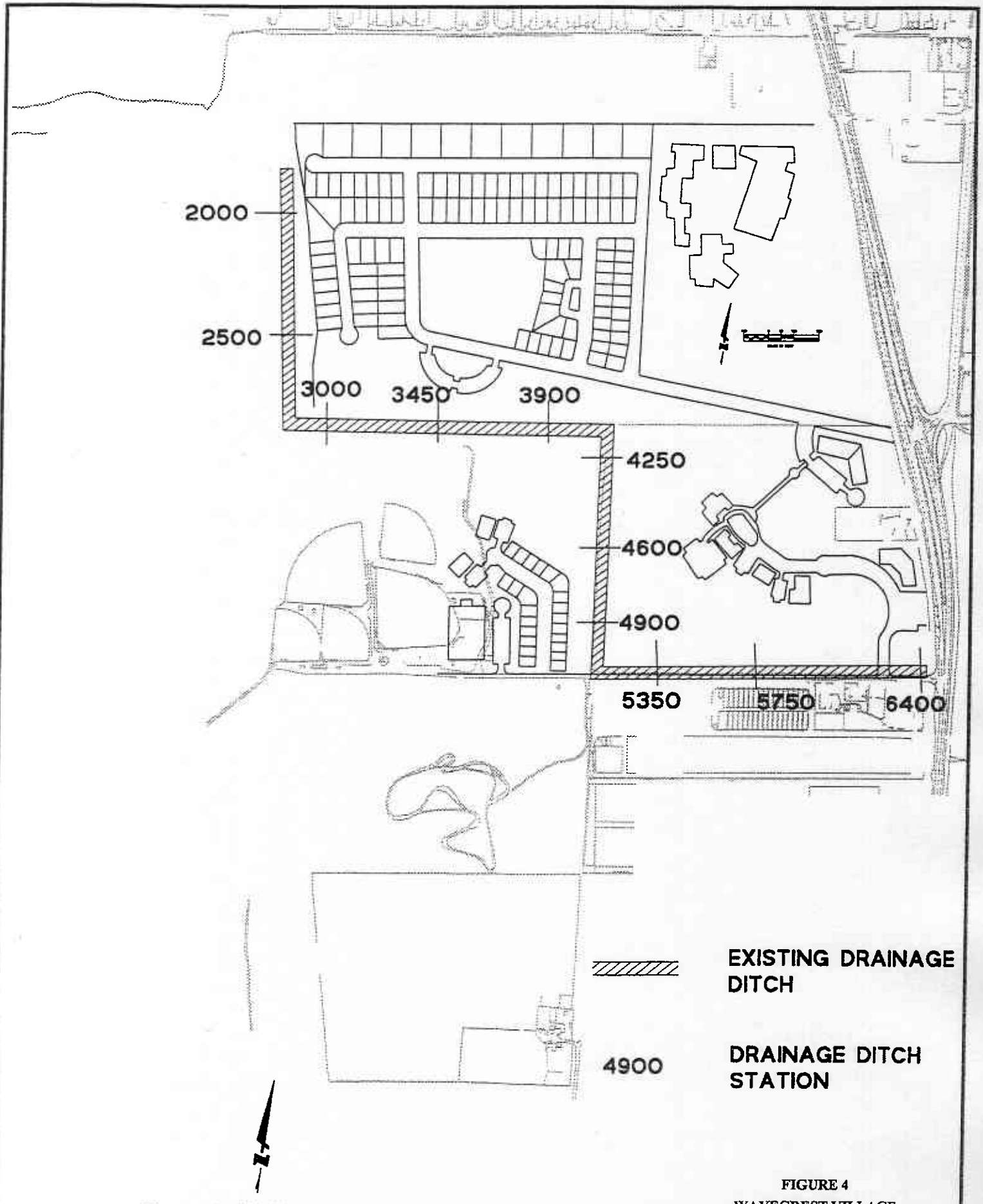

FIGURE 4
WAVECREST VILLAGE
DITCH LOCATION AND CROSS SECTIONS

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creating a compound channel. The purpose of the low flow channel section is to maintain sediment transport. Cross section locations are shown on Figure 4. Table 4 presents water levels and hydraulic information.

CONCLUSION

The proposed stormwater detention at the restored agricultural pond and proposed drainage facilities for Wavecrest Village can meet the City of Half Moon Bay drainage standards and hydraulics conditions approval. This report shall be the basis of the project site improvements. Any deviation from this report shall be documented for city approval.

The proposed detention basin reduces peak flows to the off-site drainage swale to pre-project levels. The detention basin can be graded to blend in with the site topography as directed by the City of Half Moon Bay.

APPENDIX A
TABLES

NORTH WAVECREST

TABLE 1

Existing Conditions, Peak 10 and 100-Year Runoff, Drainage Area, Percent Impervious and Lag Time

Subarea	Descriprion	Peak Flow, 10-Year (cfs)	Peak Flow, 100-Year (cfs)	Area (acres)	Percent Impervious	Lag Time (hours)
Drainage, Subarea B						
B1	Offsite, East of Highway 1	56	112	66.7	3	0.11
B2	Highway 1	3	4	1.6	90	0.10
B4	Highway 1, west side	1	1	0.3	90	0.10
B5	West of Highway 1	176	331	185.1	8	0.10
B3 and B6	Highway 1, west side	5	8	3.0	90	0.10
Total, Subarea B		241	456	256.7	8	

NORTH WAVECREST

TABLE 2

Proposed Conditions without Detention, Peak 10 and 100-Year Runoff, Drainage Area, Percent Impervious and Lag Time

Subarea	Descriprion	Peak Flow 10-Year Event (cfs)	Peak Flow 100-Year Event (cfs)	Drainage Area (acres)	Percent Impervious	Impervious Area (acres)	Lag Time (hours)
Drainage, Subarea B							
B1	Offsite, East of Highway 1	55.9	112.2	66.7	3	2.0	0.11
B2	Highway 1, east side	2.9	4.3	1.6	90	1.4	0.10
B3 & B6	Highway 1, west side	5.5	8.1	3.0	90	2.7	0.10
B4	Highway 1, west side	0.6	0.9	0.3	90	0.3	0.10
B5	Nurseries	20.7	31.3	12.1	80	9.7	0.10
B6a	Residential & Wetlands	26.4	48.8	26.8	11	3.0	0.10
B6b	Residiential & Ballfields	27.5	51.3	28.5	9	2.7	0.10
B6c	School Site	30.7	49.8	22.4	48	10.6	0.10
B6d1	Open Space	10.2	19.9	11.7	0	0.0	0.10
B6d2	Detention Pond	3.7	7.3	4.3	0	0.0	0.10
B6d3	Residential to Pond	17.1	27.7	12.3	50	6.1	0.10
B6d4	Residential to Swale	17.1	27.7	12.3	50	6.1	0.10
B7	Wavecrest Road	4.6	6.9	2.5	90	2.3	0.10
B8	Open Space	51.1	94.9	52.5	10	5.2	0.10
Total, Subarea B		273.9	491.0	257.0		52.3	

NORTH WAVECREST

TABLE 4

Proposed Hydraulics in Widened Ditch through Site

River Station	Flow (cfs)	Minimum Channel Elevation (feet)	Water Level (feet)	Energy Grade (feet)	Energy Slope (ft)	Channel Velocity (ft/s)	Flow Area (sq ft)	Top Width (feet)
6400	125	86	88.35	89.09	0.036693	6.91	18.08	12.39
5750	125	79	82.08	82.13	0.001252	1.83	68.33	28.33
5350	212	77.5	80.51	80.72	0.005542	3.7	57.27	25.04
4900	212	76	79.08	79.16	0.001929	2.36	89.64	35.3
4600	212	75	76.82	77.58	0.034027	6.98	30.38	20.3
4250	258	71	74.34	74.4	0.000897	1.86	142.72	49.37
3900	258	70	73.6	73.8	0.004158	3.55	72.7	27
3450	258	68.5	70.94	71.22	0.008364	4.26	60.59	29.74
3000	440	66	69.48	69.62	0.002365	2.94	149.66	49.93
2500	440	63	66.53	67.18	0.014156	6.48	67.94	25.54
2000	480	58.5	61.57	61.93	0.008008	4.87	98.5	38.26

APPENDIX B
PRECIPITATION

NORTH WAVECREST

TABLE B1
Precipitation Pattern

Time (hr:min)	10-Year (inches)	100-Year (inches)	Time (hr:min)	10-Year (inches)	100-Year (inches)
1:05	0.042	0.028	4:00	0.210	0.141
1:10	0.042	0.028	4:05	0.146	0.098
1:15	0.043	0.029	4:10	0.121	0.081
1:20	0.043	0.029	4:15	0.106	0.071
1:25	0.045	0.030	4:20	0.095	0.064
1:30	0.045	0.030	4:25	0.088	0.059
1:35	0.045	0.030	4:30	0.082	0.055
1:40	0.046	0.031	4:35	0.077	0.052
1:45	0.046	0.031	4:40	0.075	0.050
1:50	0.048	0.032	4:45	0.072	0.048
1:55	0.048	0.032	4:50	0.069	0.046
2:00	0.049	0.033	4:55	0.066	0.044
2:05	0.051	0.034	5:00	0.063	0.042
2:10	0.051	0.034	5:05	0.061	0.041
2:15	0.052	0.035	5:10	0.060	0.040
2:20	0.054	0.036	5:15	0.058	0.039
2:25	0.055	0.037	5:20	0.057	0.038
2:30	0.055	0.037	5:25	0.055	0.037
2:35	0.057	0.038	5:30	0.054	0.036
2:40	0.058	0.039	5:35	0.052	0.035
2:45	0.061	0.041	5:40	0.052	0.035
2:50	0.063	0.042	5:45	0.051	0.034
2:55	0.064	0.043	5:50	0.049	0.033
3:00	0.067	0.045	5:55	0.049	0.033
3:05	0.070	0.047	6:00	0.048	0.032
3:10	0.073	0.049	6:05	0.048	0.032
3:15	0.076	0.051	6:10	0.046	0.031
3:20	0.080	0.054	6:15	0.046	0.031
3:25	0.085	0.057	6:20	0.045	0.030
3:30	0.092	0.062	6:25	0.045	0.030
3:35	0.100	0.067	6:30	0.043	0.029
3:40	0.112	0.075	6:35	0.043	0.029
3:45	0.131	0.088	6:40	0.043	0.029
3:50	0.297	0.199	6:45	0.042	0.028
3:55	0.297	0.199	6:50	0.042	0.028
			6:55	0.042	0.028
			7:00	0.000	0.000

Date: 3/30/04	No.	Revisions
Scale: 1"=100'		
Design: DH		
Drawn: MB		
Approved: DH		
Job No. 1688254		

WAVECREST VILLAGE
PRELIMINARY GRADING PLAN

HALF MOON BAY — SAN MATEO COUNTY — CALIFORNIA

BKF
ENGINEERS / SURVEYORS / PLANNERS
540 PRICE AVENUE
REDWOOD CITY, CA 94063
650-482-6300
650-482-6399 (FAX)

EARTHWORK SUMMARY

TOTAL CUT 50,800 C.Y.
TOTAL FILL 50,800 C.Y.