

**NATURAL RESOURCE AREAS
and ASSOCIATED NATURAL RESOURCES
in PACIFIC GROVE
2010 update by the Natural Resources Commission**

INTRODUCTION

Pacific Grove is an extraordinary area rich with natural resources that are treasured by residents and visitors. This document is intended to map those resources and serve as a guide for what is here and what is notable about our natural resources, and to outline who is responsible for protecting, preserving and maintaining them.

There are 58 areas of significant natural resources with numbers in this text that correspond to the site locations on one of the 18 maps of Pacific Grove attached to this report. The kinds of natural resources are clustered in this report and similar areas are assembled as categories. After the numbered listings, there is an appendix of notes about unique plants, animals, soils and minerals found in Pacific Grove.

It is impossible to identify every particular natural resource and all possible changes and impacts on them. This report is intended as a step in that process and would benefit from continuing review and revision.

This version is a general update of a report presented to the City Council in September 2005, which wasn't utilized. The current Natural Resources Commission decided to resurrect that report and update it so it might become a useful and helpful reference.

The original survey and report was requested by a City Manager dealing with public controversy over the City's removal of a thicket that turned out to be an important nesting area for birds and our local deer. The Beautification and Natural Resources Committee at the time (forerunner of the current Natural Resources Commission) included the head of a college biology department and an internationally recognized birder who were instrumental in the two-year survey to gather and coordinate information about Pacific Grove's natural resources. Their report included thresholds for closer review when anything more than routine maintenance or emergency responses were considered in areas of natural resources.

This 2010 update drops those thresholds in favor of simply mapping and explaining the natural resources within the boundaries of Pacific Grove. It adds two additional sites; incorporates changes of ownership or contract that affect eight sites; adds grant restrictions on two nature preserves; and includes changes in state and federal regulations that affect eight of the 58 sites in Pacific Grove.

MARINE RESOURCES

(1) ***Marine Water Quality*** — Marine waters of Monterey Bay and the Pacific Ocean along Pacific Grove.

Location: Waters adjacent to the entire Pacific Grove shoreline, approximately 4.5 miles in length.

Responsible Agencies: Monterey Bay National Marine Sanctuary, California Water Resources Control Board, Regional Water Quality Control Board, and all of the agencies on the list for emergency response to a spill, including the City's departments of Fire, Police and Public Works, United States Coast Guard, Monterey County Department of Health, and Monterey Regional Water Pollution Control Agency.

(**Note:** The City shoreline between the Monterey Bay Aquarium and Point Pinos (at Asilomar Avenue) is an Area of Special Biological Significance (ASBS) as defined in the California Ocean Plan. This is California State ASBS # 19, or the Pacific Grove ASBS. The responsible agencies include the California Water Resources Control Board, Regional Water Quality Control Board, and Monterey Bay National Marine Sanctuary.

(2) ***Lovers Point State Marine Reserve*** — Marine waters of Monterey Bay adjacent to the shoreline between the Monterey Bay Aquarium and Lovers Point.

Location: Monterey Bay waters from the western edge of the Monterey Bay Aquarium (near the Monterey boundary) to the tip of Lovers Point. The Reserve includes Hopkins Marine Station and its nature refuge, nearshore habitats and the organisms that live within them. The boundary extends offshore to a complex set of latitudinal and longitudinal coordinates that can be seen on California's Marine Life Protection Act Web site (<http://www.dfg.ca.gov/mlpa/>). .

Responsible Agencies: California Department of Fish and Game and Monterey Bay National Marine Sanctuary; Hopkins Marine Station monitors and protects waters within its portion of this area.

(**Note:** This "State Marine Reserve" designation is intended to prevent disturbance and pollution and prohibits fishing or "take" of any other living resources without a specific, scientific collection permit from the California Department of Fish and Game.)

(3) ***Pacific Grove Marine Gardens State Marine Conservation Area*** — Marine waters of Monterey Bay and the Pacific Ocean adjacent to the shoreline from Lovers Point to Point Pinos.

Location: Marine waters from the tip of Lovers Point and along the shoreline parks to the northernmost tip of Point Pinos. (The coordinates for the offshore boundaries can be seen on California's Marine Life Protection Act Web site, <http://www.dfg.ca.gov/mlpa/>.)

Responsible Agencies: California Department of Fish and Game and Monterey Bay National Marine Sanctuary.

(**Note:** This “State Marine Conservation Area” designation prohibits any take of living marine resources except for 1) recreational, hook-and-line fishing for finfish and 2) commercial kelp harvesting with a valid permit.)

(4) *Asilomar State Marine Reserve* — Marine waters from Point Pinos to Point Joe in Pebble Beach.

Location: Pacific Ocean waters from the tip of Point Pinos, along the entire shoreline of Asilomar, past the city boundary and into Pebble Beach to Point Joe. (The coordinates for the offshore boundaries can be seen on California’s Marine Life Protection Act Web site, <http://www.dfg.ca.gov/mlpa/>.)

Responsible Agencies: California Department of Fish and Game and Monterey Bay National Marine Sanctuary.

(**Note:** This Reserve designation prohibits fishing or “take” of any other living resources without a specific permit from the California Department of Fish and Game.)

SHORELINE RESOURCES

(5) *Bird Rocks* — Rock outcrops along the Pacific Grove shoreline regularly used as roosts by many seabirds and shorebirds, and nest sites for some of these same birds that shouldn’t be disturbed.

Location: Three major roosts are in the Point Pinos area: just north of the Great Tidepool (itself just north of Rocky Shores); the tip of Point Pinos proper; and at Lucas Point just offshore from the north end of Asilomar Avenue. Other roost rocks occur at Hopkins Marine Station; just offshore Perkins Park near Naiad Street; and along Asilomar State Beach (more variable and ephemeral use of these roosts).

Responsible Agencies: U.S. Bureau of Land Management (administering the California Coastal National Monument), U.S. Fish and Wildlife Service (protecting the birds), and Monterey Bay National Marine Sanctuary.

(6) *Harbor Seal Haul-out Rocks and Beaches* — Some of the above bird rocks also serve as haul-out rocks for Harbor Seals that rest during the daytime so they can hunt food at night.

Location: The principal haul-out rocks are on the east side of Hopkins Marine Station, east of Lovers Point, along Perkins Park, Point Pinos, and Asilomar State Beach.

Responsible Agencies: U.S. Bureau of Land Management (administering the California Coastal National Monument), National Marine Fisheries Service (protecting marine mammals), Monterey Bay National Marine Sanctuary; Hopkins Marine Station monitors and protects the rocks inside its area.

(7) *Major Harbor Seal Pupping Beach* — The beach used in spring by most of the female Harbor Seals of the Monterey Peninsula to give birth and provide early care for their pups.

Location: This beach, which is said to be the biggest harbor seal haul-out site on the West Coast, is alongside the Coastal Trail, on the northwest side of Hopkins Marine Station. It is protected by the steel fence that surrounds the Hopkins property.

Responsible Agencies: National Marine Fisheries Service (protecting marine mammals), Monterey Bay National Marine Sanctuary; Hopkins Marine Station monitors and protects the beaches inside its area.

(8) Supplemental Harbor Seal Pupping Beach — Monterey Peninsula Harbor Seals spilled over from their favorite pupping beach at Hopkins Marine Station to a small beach a few blocks to the west in 2006 and have been returning each spring. The spillover beach hosted about a fourth of the record number of 80 Harbor Seal pups born in Pacific Grove in 2009.

Location: This beach is right at the bottom of 5th Street, on the northeast corner of a cove that is alongside the Coastal Trail and generally accessible at low tides.

Responsible Agencies: National Marine Fisheries Service (protecting marine mammals), Monterey Bay National Marine Sanctuary, and City of Pacific Grove (which erects temporary fencing in April and May to keep people from disturbing the nursing Harbor Seals, as per a Harbor Seal Policy adopted by the City Council on Dec. 19, 2007, which calls for temporary protection for any nursing Harbor Seal mothers and pups on any beach within the City).

(9) The Great Tidepool — Our largest tidepool, was made famous by the writings of Ed Ricketts and John Steinbeck. It is a remarkable habitat with extraordinary biological communities within it that could be damaged by trampling or illegal taking of marine organisms.

Location: Just north of Rocky Shores, across the road from the west corner of the golf course.

Responsible Agencies: California Department of Fish and Game, and Monterey Bay National Marine Sanctuary.

(10) Tidepools of Hopkins Marine Station — Tidepools on the Hopkins Marine Station.

Location: Along the shore within the boundaries of the Hopkins Marine Station.

Responsible Agencies: California Department of Fish and Game, Monterey Bay National Marine Sanctuary; Hopkins Marine Station monitors and protects the tidepools inside its area.

(11) Tidepools of Monterey Bay Aquarium — Tidepools of the Aquarium.

Location: The shore at the Monterey Bay Aquarium.

Responsible Agencies : California Department of Fish and Game, Monterey Bay National Marine Sanctuary; Monterey Bay Aquarium cares for the tidepools in its area.

(12) Other Tidepools — Tidepools scattered along the Pacific Grove shore in the intertidal zone.

Location: Scattered along the Pacific Grove shoreline.

Responsible Agencies: California Department of Fish and Game, Monterey Bay National Marine Sanctuary; and California Department of Parks and Recreation for tidepools of Asilomar State Beach.

(13) **Lovers Point Beach** — The beach protected by Lovers Point, used by many people.

Location: The cove on the southeast side of Lovers Point.

Responsible Agencies: Monterey Bay National Marine Sanctuary and P.G. Public Works Department.

(14) **Beach at foot of Sea Palm Avenue** — A pocket beach rich in marine life.

Location: The cove between Otters Point and Lovers Point, at the foot of Sea Palm Avenue.

Responsible Agencies: Monterey Bay National Marine Sanctuary and P.G. Public Works Department.

(15) **Beaches at Point Pinos** — Small beaches rich in marine life.

Location: Along the shore around Point Pinos.

Responsible Agencies: Monterey Bay National Marine Sanctuary and P.G. Public Works Department.

(16) **Beaches in Asilomar State Beach** — Small beaches rich in marine life.

Location: Along the shore in Asilomar State Beach, from Rocky Shores to the north end of Spanish Bay Beach (Moss Beach).

Responsible Agencies: California Department of Parks and Recreation, and Monterey Bay National Marine Sanctuary.

(17) **North End of Spanish Bay Beach (Moss Beach)** Within Pacific Grove and Asilomar State Beach, popular for surfing.

Location: At the west corner of Pacific Grove, within Asilomar State Beach and bordering Pebble Beach.

Responsible Agencies: California Department of Parks and Recreation, and Monterey Bay National Marine Sanctuary.

FRESHWATER AND BRACKISH WATER RESOURCES

(18) **Crespi Pond** — A brackish to fresh water pond famous for its great number of bird species.

Location: On the Pacific Grove Municipal Golf Course (17th hole), between Point Pinos and the north end of Asilomar Avenue.

Responsible Agencies: P.G. Golf Department, P.G. Public Works Department, U.S. Fish and Wildlife Service, and California Department of Fish and Game.

Special Note: Under no circumstances should bullfrogs be introduced to this or any other waters within Pacific Grove.

(19) **Majella Slough** — A small riparian corridor ending in a small brackish pond behind the north end of Spanish Bay Beach (Moss Beach).

Location: Along the border between Pacific Grove and Pebble Beach Company's Links at Spanish Bay; much is within Asilomar State Beach.

Responsible Agencies: California Department of Parks and Recreation (Asilomar State Beach), California Department of Fish and Game, U.S. Fish and Wildlife Service (because it is a wetland), Monterey Bay National Marine Sanctuary (because it flows to the bay), Pebble Beach Company (included in the management plan for The Links at Spanish Bay), and Monterey County (because Pebble Beach is not an incorporated city).

(20) *Small Seasonal Pond at Asilomar Conference Grounds* — Perhaps potential breeding habitat for the California Red-legged Frog, federally listed as Threatened.

Location: Just to the north of the main entrance to Asilomar Conference Grounds, at Sinex and Asilomar Avenues.

Responsible Agencies: California Department of Parks and Recreation, U.S. Fish and Wildlife Service, and California Department of Fish and Game.

(21) *Stream in Greenwood Park* — Flows seasonally.

Location: Greenwood Park, at the bottom of the gully.

Responsible Agencies: P.G. Department of Public Works, Monterey Bay National Marine Sanctuary (because it flows into the bay), and U.S. Fish and Wildlife Service (if it qualifies as a wetland).

TERRESTRIAL HABITATS AND VEGETATION

(22) *Point Pinos Reservation Dunes* — Managed by the Pacific Grove Golf Department

Location: On and around the golf turf areas of the back nine holes of the Pacific Grove Golf Links and the Point Pinos Lighthouse.

Responsible Agencies: P.G. Golf Department, U.S. General Services Agency (to oversee restoration agreement for transfer of Coast Guard land to the City), California Department of Fish and Game, and California Department of Toxic Substances.

(23) *Asilomar State Beach Dunes* — These have been restored by the California Department of Parks and Recreation.

Location: Along the western side of Asilomar State Beach, on both sides of Sunset Drive.

Responsible Agencies: California Department of Parks and Recreation, U.S. Fish and Wildlife Service (for endangered species), and California Department of Fish and Game (for endangered species).

(24) *Asilomar Dunes Neighborhood* — Development in the environmentally sensitive area is under special control, and native dune vegetation restoration is mandated for development projects.

Location: The Asilomar Dunes neighborhood lies north of Asilomar State Conference Grounds, south of Lighthouse Avenue, and almost entirely between Asilomar Avenue and Sunset Drive.

Responsible Agency: P.G. Community Development Department.

(25) *Point Pinos Lighthouse Grounds* — Mostly native vegetation with non-native grasses and some weeds.

Location: Within the perimeter fence around the Point Pinos Lighthouse.

Responsible Agencies: Heritage Society of Pacific Grove, P.G. Golf Department, and U.S. General Services Agency (along with U.S. Fish and Wildlife Service to oversee restoration agreement required for transfer of Coast Guard land to the City).

Special Note: The U.S. Coast Guard still owns the one-acre site and two houses next to the parking lot.

Special Note: The U.S. Navy owns the building near the end of Lighthouse Avenue that houses the National Marine Fisheries Service research facility and the pine grove adjacent to it on the fenced, four-acre site at the corner of Lighthouse and Asilomar Avenues.

(26) *Native Plant Gardens of Pacific Grove Museum of Natural History* — Only Monterey County native plants.

Location: All grounds of the Pacific Grove Museum of Natural History, between Central, Forest and Grand Avenues.

Responsible Agency: P.G. Museum of Natural History.

(27) *Thicket at El Carmelo Cemetery* — The thicket has been replanted with native plants to replace a non-native plant thicket removed in 2002.

Location: El Carmelo Cemetery, east side.

Responsible Agency: P.G. Public Works Department.

(28) *Monterey Pine Forest in George Washington Park* — Sometimes used as a Monarch Butterfly clustering site (see item 37).

Location: George Washington Park, west of Alder Street, east of Melrose Avenue, south of Short Street and north of Sinex Avenue.

Responsible Agencies: P.G. Natural Resources Commission (which has jurisdiction of this park's management plan), and P.G. Public Works Department. (Special care must be taken with regard to avoiding impact to the Monarch Butterflies and their clustering areas.)

(29) *Monterey Pine Forest at Asilomar State Conference Grounds* — Primarily the Monterey Pine trees, as the Conference Grounds has replaced most of the understory.

Location: Asilomar Conference Grounds, on both sides of Asilomar Avenue north of Sunset Drive.

Responsible Agency: California Department of Parks and Recreation.

(30) *Monterey Pine Forest at First United Methodist Church* — One end of contiguous Monterey Pine Forest extending into Pebble Beach and the Lynn "Rip" Van Winkle Open Space.

Location: Along south side of Sunset Drive, between Seventeen Mile Drive and Mission Linen and Uniform Service.

Responsible Agency: First United Methodist Church (land owner).

- (31) *Lynn "Rip" Van Winkle Open Space* — A joint project of the City of Pacific Grove and the Monterey Peninsula Regional Parks District, plus the Del Monte Forest Foundation for the adjacent forest within Pebble Beach.

Location: West side of Congress Avenue, between Forest Lodge Road and Mission Linen and Uniform Service.

Responsible Agencies: P.G. Public Works Department and Monterey Peninsula Regional Parks District.

Special Note: This 20-acre stand of Monterey pine forest was dedicated as a nature preserve prohibiting alterations, cutting or removing trees, or adding buildings without the consent of the regional parks district. There is also a deed restriction prohibiting cutting trees without authorization from the Del Monte Forest Foundation.

- (32) *Monterey Cypresses around Point Pinos Maintenance Yard* — The former wastewater treatment plant, important to migrant and vagrant birds.

Location: At Point Pinos, just west of Crespi Pond.

Responsible Agencies: P.G. Golf Department and U.S. Fish and Wildlife Service.

- (33) *Monterey Cypresses east of Crespi Pond* — Between Crespi Pond and the 18th Fairway of the P.G. Municipal Golf Links, important to migrant and vagrant birds.

Location: At Point Pinos, just east and south of Crespi Pond.

Responsible Agencies: P.G. Golf Department and U.S. Fish and Wildlife Service.

- (34) *Monterey Cypresses in El Carmelo Cemetery* — Important to migrant and vagrant birds.

Location: El Carmelo Cemetery, south-central portion.

Responsible Agency: P.G. Public Works Department (Cemetery Division).

- (35) *Monterey Cypresses in Esplanade Park* — Important to migrant and vagrant birds.

Location: Esplanade Park, along Seventeen Mile Drive between Del Monte Blvd. and Ocean View Blvd.

Responsible Agency: P.G. Public Works Department

- (36) *Vegetation along Union Pacific Right of Way* — A *de facto* public trail.

Location: Mostly running parallel to and between Crocker and Grove Acre avenues.

Responsible Agency: Southern Pacific Company (Union Pacific Railroad). (The City has been exploring ways to acquire this property to ensure its future as a public trail.)

Special Note: Hayward Park, at the Sinex Avenue end of the Union Pacific Right of Way, is leased from the railroad by the Heritage Society of Pacific Grove, which built and owns the Asilomar Whistlestop replica in the park.

(37) ***Monarch Grove Sanctuary*** — The primary clustering site for overwintering monarch butterflies, usually from early October to early March, and the site for visitor viewing and interpretation by Butterfly Docents.

Location: Between Ridge Road and Grove Acre Avenue, north of residences on Short Street.

Responsible Agencies: The city is reviewing the habitat management plan and management of the Monarch Grove Sanctuary and will define roles of responsibility in oversight. The P.G. Public Works Department will implement the vegetation management plan, P.G. Museum of Natural History will manage monarch education and interpretation and the P.G. Community Development Department will administer restrictions on construction, painting, etc. adjacent to the Monarch Grove Sanctuary, especially during the butterfly clustering season. (Also, the California Department of Fish and Game has no-alteration restrictions on the property because it provided a \$200,000 grant through its Wildlife Conservation Board to help the City buy the property in 1992).

(38) ***Butterfly "Hospitality Zone"*** — The "butterfly hospitality zone" near the Sanctuary, both residential and commercial properties, which may be used either for foraging or clustering.

Location: Especially within a block or two of the Sanctuary. Late in some winter clustering seasons many or most of the butterflies move their clustering site(s) west to private property between the Union Pacific Railroad right of way and Grove Acre Avenue.

Responsible Agencies: Southern Pacific Co. (Union Pacific Railroad) and the owners of private property within the "Hospitality Zone." (Any proposed construction or tree cutting in the forested strip west of the Sanctuary, between the Southern Pacific right of way and Grove Acre Avenue, warrants careful review.)

(39) ***Monarch Butterfly Habitat in George Washington Park*** — In 2003 butterflies again clustered in this area in significant numbers (low thousands) for the first time since 1996. The mixture of Coast Live Oaks under Monterey Pines is used.

Location: George Washington Park south of Pine Avenue, about half way from the west end of Spruce Avenue to Melrose Avenue.

Responsible Agencies: P.G. Natural Resources Commission (which has jurisdiction of this park's management plan), P.G. Public Works Department, and P.G. Museum of Natural History if and when sufficient butterflies cluster there to require education and interpretation in George Washington Park. (Observed trampling of understory vegetation in this area would indicate that protective barriers are needed.)

(40) ***Monarch Butterfly Habitat in El Carmelo Cemetery*** — Monterey Pines sometimes used for clustering during the fall arrival period.

Location: Row of Monterey Pines along the east edge of the Cemetery, beside the P.G. Public Golf Course.

Responsible Agency: P.G. Public Works Department (Cemetery Division).

PARKS (CITY)

Lynn "Rip" Van Winkle Open Space - See item 31 above in Terrestrial Habitats and Vegetation

(41) George Washington Park — See above for Monterey Pine Forest and Monarch Butterfly habitat. (Special care must be taken with regard to avoiding impact to the Monarch Butterflies and their clustering areas.)

Location: West of Alder Street, east of Melrose Avenue, south of Short Street, and north of Sinex Avenue.

Responsible Agencies: P.G. Natural Resources Commission (has jurisdiction of the three fourths of the park, defined as a natural area in the park's management plan), P.G. Public Works Department, and P.G. Recreation Department.

(42) Esplanade Park — See item 35 above for Monterey Cypress.

Location: Along Seventeen Mile Drive between Del Monte Blvd. and Ocean View Blvd.

Responsible Agency: P.G. Public Works Department

(43) Elmarie Dyke Open Space — A collaboration with the Monterey Peninsula Regional Park District.

Location: Adjacent to the south side of Chautauqua Hall, between 16th and 17th streets.

Responsible Agencies: P.G. Public Works Department, P. G. Natural Resources Commission, and Monterey Peninsula Regional Park District (collaborator).

(44) Andy Jacobsen Park — An open space.

Location: Fronting Ocean View Boulevard between 6th and 7th streets.

Responsible Agency: P.G. Public Works Department.

(45) Greenwood Park — An open space

Location: Bounded by Ocean View Boulevard, Central Avenue, 12th Street, and 13th Street.

Responsible Agencies: P.G. Public Works Department and Monterey Bay National Marine Sanctuary (for stream flow into the bay).

(46) Chase Park — An open space.

Location: At the north corner of Jewell Avenue and 17th Street

Responsible Agency: P.G. Public Works Department.

(47) Higgins Park — An open space

Location: At the northeast corner of Forest and David avenues.

Responsible Agency: P.G. Public Works Department.

(48 - 51) Berwick Park, Lovers Point Park, Perkins Park and Shoreline Park — A continuous strip of parks along the shore of Monterey Bay.

Location: Seaward of Ocean View Boulevard, between Asilomar Avenue and Hopkins Marine Station.

Responsible Agencies: P.G. Public Works Department and P.G. Recreation Department.

Special Note: The non-native "Magic Carpet" iceplant should not be allowed to spread from Perkins Park.

(52) *Earl "Topper" Arnett Park* — A recreational park.

Location: Along Piedmont Avenue

Responsible Agencies: P.G. Public Works Department and P.G. Recreation Department.

(53) *Caledonia Park* — A recreational park.

Location: Along Caledonia Street between Central and Pacific Avenues.

Responsible Agencies: P.G. Public Works Department and P.G. Recreation Department.

(54) *Jewell Park* — A recreational park.

Location: Bounded by Park Place, Central, Forest and Grand Avenues.

Responsible Agencies: P.G. Public Works Department and P.G. Recreation Department.

(55) *Platt Park* — A recreational park.

Location: Bounded by Morse Drive, Platt Court and MacFarland Avenue.

Responsible Agencies: P.G. Public Works Department and P.G. Recreation Department.

RECREATION FACILITIES (CITY) — Note that these large areas of turf are used as foraging habitat by many birds such as Killdeer, American Robins and gulls, especially during wet weather.

(56) *Municipal Ball Park* — A large area of turf (see above).

Location: At Seventeen Mile Drive, Short Street, and Pico Avenue.

Responsible Agencies: P.G. Recreation Department and P.G. Public Works Department.

(57) *Pacific Grove Municipal Golf Course* — See above for many special habitat areas and other natural resources, especially on the Point Pinos Reservation.

Location: *Back Nine:* Point Pinos Reservation, bounded by Asilomar Avenue, Lighthouse Avenue, Sunset Drive, and Ocean View Boulevard.

Front Nine: Running from Asilomar Avenue to Pacific Avenue, also bounded by Del Monte Boulevard, Crest Avenue, Sea Palm Avenue, Briggs Avenue, Jewell Avenue, the El Carmelo Cemetery.

Responsible Agencies: P.G. Golf Department, California Department of Fish and Game, and U.S. General Services Agency (to oversee restoration agreement for transfer of Coast Guard land to the City).

(58) *Athletic Fields and Grounds of Pacific Grove Unified School District* — Many large areas of turf (see above); many Monterey Pines and other trees.

Location: P.G. High School, P.G. Middle School, Robert H. Down School, Forest Grove Elementary School, David Avenue School, and Lighthouse Adult School.

Responsible Agency: Pacific Grove Unified School District

SOIL AND MINERAL RESOURCES

Granite, either solid or decomposed, forms outcrops along the shoreline. Other soil types do occur.

Sand composes both the beaches and dunes at various points along the shoreline.

Dune soil is sandy soil with very limited organic content that forms the dunes in the Asilomar area and along the golf course. Other soil types should not be imported into these area and weed seeds should not be introduced.

NOTABLE PLANTS, INCLUDING SOME ENDANGERED SPECIES AND INVADERS

Menzie's Wallflower – Listed as endangered by the U.S. Fish and Wildlife Service. There is a tiny population in a remnant dune at Point Pinos, north of the 15th tee, which should be protected.

Tidestrom's Lupine – Listed as endangered by the U.S. Fish and Wildlife Service. This is a clover-like plant found in various locations in the dunes around Point Pinos, along Asilomar State Beach and on private property in the Asilomar Dunes neighborhood.

Monterey Spineflower – Listed as threatened by the U.S. Fish and Wildlife Service.

Invasive Non-Native Species – Many are undesirable but could already be past the point at which they could be eradicated. They are not resources that should be conserved. In the specific case of the non-native "Magic Carpet" iceplant in Perkins Park, it should not be allowed to spread from its present location.

ANIMALS OF PACIFIC GROVE

Monarch Butterfly – Symbol of Pacific Grove and a major visitor attraction. They can cluster in the Monarch Grove Sanctuary, sometimes in a section of George Washinton Park and in El Carmelo Cemetery, usually between early October and early March. The city has an ordinance prohibiting disturbing butterflies, setting a fine of \$1,000 for such offense.

Sea otter – Listed as a threatened species by the U.S. Fish and Wildlife Service. The iconic animal can be seen in marine waters along the entire shoreline and, occasionally, hauled out on

one of the rocks or a beach. They are especially vulnerable to oily or greasy discharges and spills.

Harbor seal – These native marine mammals can be found in daytime on rocks along the Pacific Grove shoreline or on any beach where they aren't disturbed, but their favorite haul-out area is the beach west of the buildings at Hopkins Marine Station, which is protected by the Hopkins fence. They are nocturnal animals that rest and sleep in daytime then go out in the ocean at night to feed. The Monterey Peninsula colony along Monterey, Pacific Grove and Pebble Beach, has most of its pups on the beach at Hopkins during April and May. The city adopted a harbor seal policy in 2007 that provides: 1) harbor seals and nursing pups on any beach in Pacific Grove will be protected by temporary beach closures or fencing for the month of nursing and 2) adult seal colonization of the popular beach at Lovers Point will be discouraged by means acceptable to the National Marine Fisheries Service.

Elephant seal – Much larger and more aggressive seals that have been appearing regularly on the West beach at Hopkins Marine Station for brief visits since about 2005. They have also occasionally hauled out on the main beach at Lovers Point for overnight rest stops.

California sea lion – Larger and much noisier than the city's resident harbor seals, California sea lions are rarely seen on Pacific Grove beaches and offshore rocks but their barking is frequently heard throughout the city from the animals' favorite haul-out rocks on the jetty at the end of the Coast Guard Pier in Monterey. Sea lions are generally there in large numbers in fall, winter and spring months then most travel to the Channel Islands in summer for the annual mating and pupping season.

Black legless lizard – A candidate being considered by the U.S. Fish and Wildlife Service, but not now listed as endangered or threatened. This snake-like lizard lives mostly underground, burrowing into sand dunes in the Asilomar Dunes neighborhood and probably on Asilomar State Beach and in the Point Pinos area.

Back-tailed mule deer – They are wild but habituated to humans in Pacific Grove. They may be found anywhere in the city, but are usually most abundant in the western part of the city from the Point Pinos area and El Carmelo Cemetery through the Asilomar Dunes and neighborhood along the Union Pacific Railroad right of way to Asilomar State Beach.

Northern raccoon – They are wild, but thrive in close proximity to humans. They shouldn't be intentionally fed.

Squirrels - The California ground squirrels along the shoreline are native to the area, as are Western gray squirrels in the forested portions of the city. But the Western gray squirrels are generally being run out of the habitat by Eastern fox squirrels that have apparently been spreading from Pebble Beach.

Invasive, non-native mammal species – In addition to Eastern fox squirrels, other undesirable species being found here include red foxes, mostly in the areas of Point Pinos and Asilomar State Beach; brown (Norway) rats and black rats, found especially along the shoreline with riprap.

BIRDS

Seabirds – Many species, including gulls, terns, cormorants, Brown Pelicans, sea ducks, shearwaters, alcids, loons, grebes and others utilize the marine waters along the entire shoreline, roost on the rocks, and bathe and drink in Crespi Pond. Except for gulls, most seabirds appear on beaches only when sick or injured.

Shorebirds – Many species, including American Black Oystercatcher, plovers, sandpipers, Sanderling, Whimbrel, turnstones, Surfbird, Wandering Tattler, Willet, Marbled Godwit and others can be found along the entire shoreline on beaches, rocks, in tidepools, Crespi Pond, the brackish pond at the bottom of Majella Slough or foraging on turf, especially after rain.

Freshwater Birds – They use Crespi Pond almost exclusively.

Breeding Landbirds – Songbirds and other terrestrial birds that breed in Pacific Grove are, for the most part, permanent residents. They can be found throughout the city but many species are restricted to more natural or near-natural habitats such as in Lynn “Rip” Van Winkle Open Space and, to a lesser extent, the forested areas of Western Pacific Grove. These species tend to require understory vegetation such as the brush in George Washington Park and along the Union Pacific Railroad right of way. Feral cats are major predators.

Migrant and Wintering Landbirds – These are birds generally present only outside of breeding season. They can be found throughout Pacific Grove but many species are attracted to the more natural areas described above, often because of the understory vegetation.

Vagrant Birds – These are birds that have strayed from their normal migratory routes. There is a long history of birders monitoring them especially in the Monterey Cypress trees around the Point Pinos Maintenance Yard east of Crespi Pond, in El Carmelo Cemetery, in Esplanade Park and the riparian strip of Majella Slough. .



1.) Marine Water Quality

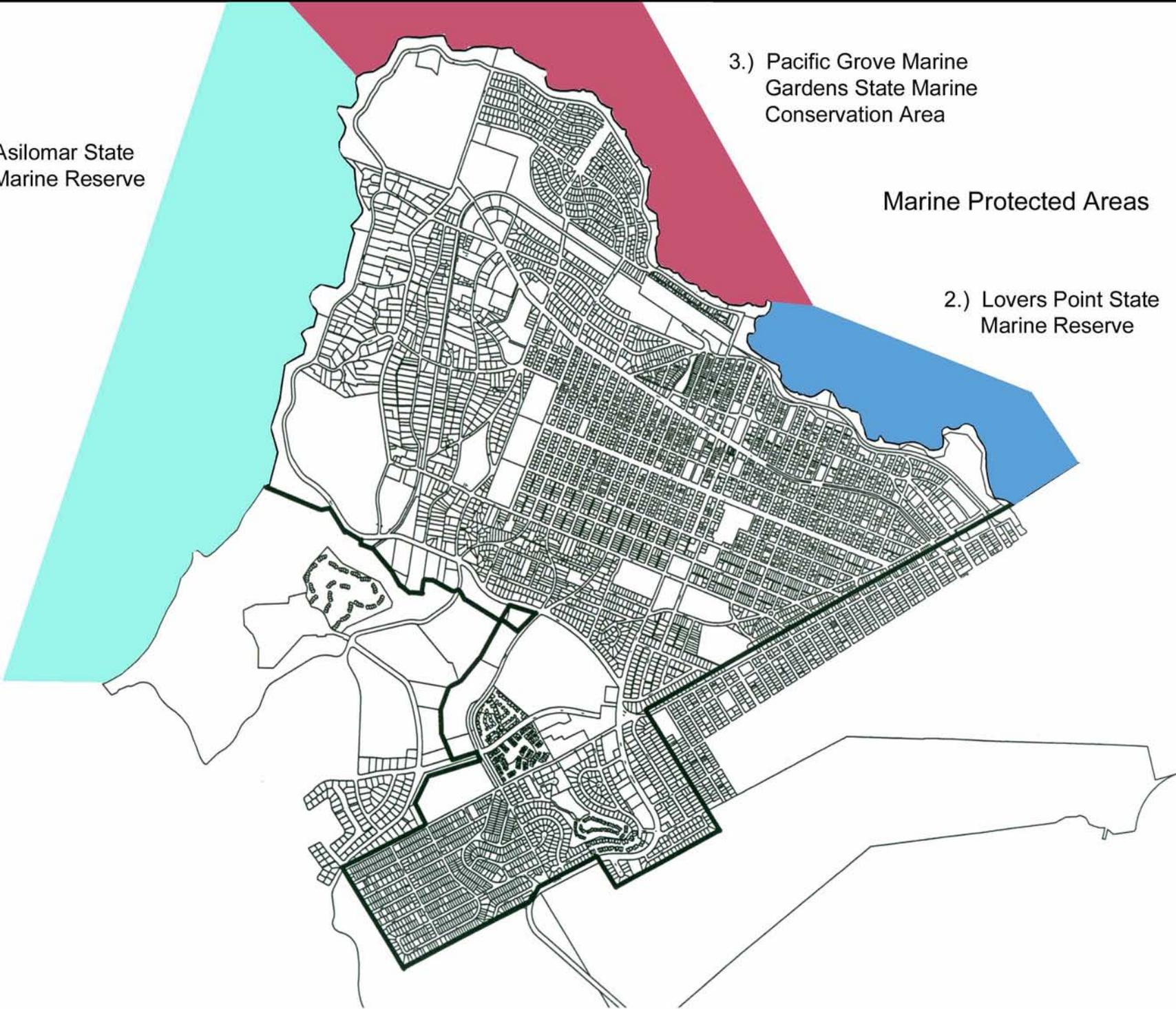
CA State Area of Special Biological Significance (ASBS) # 19

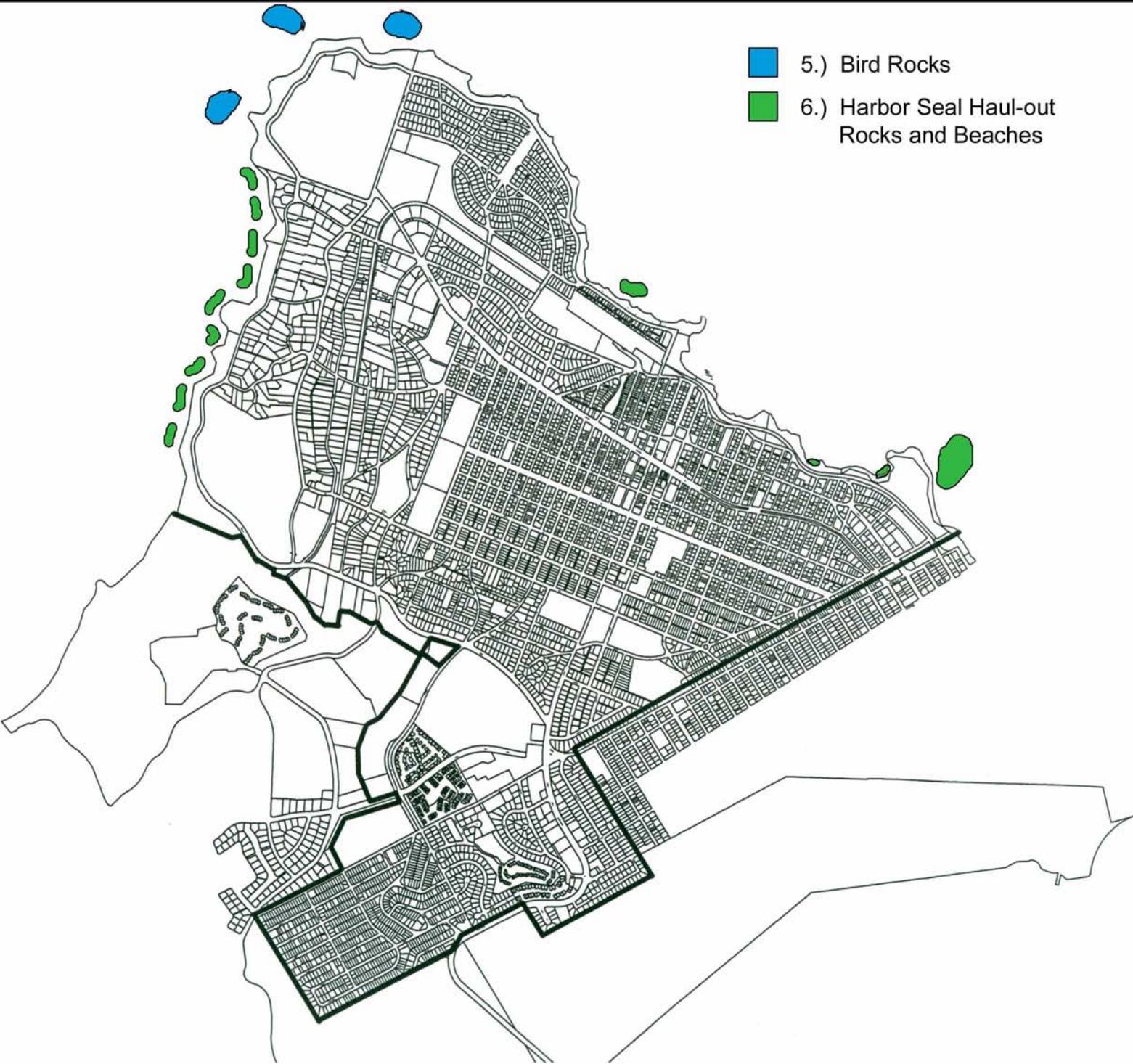
4.) Asilomar State
Marine Reserve

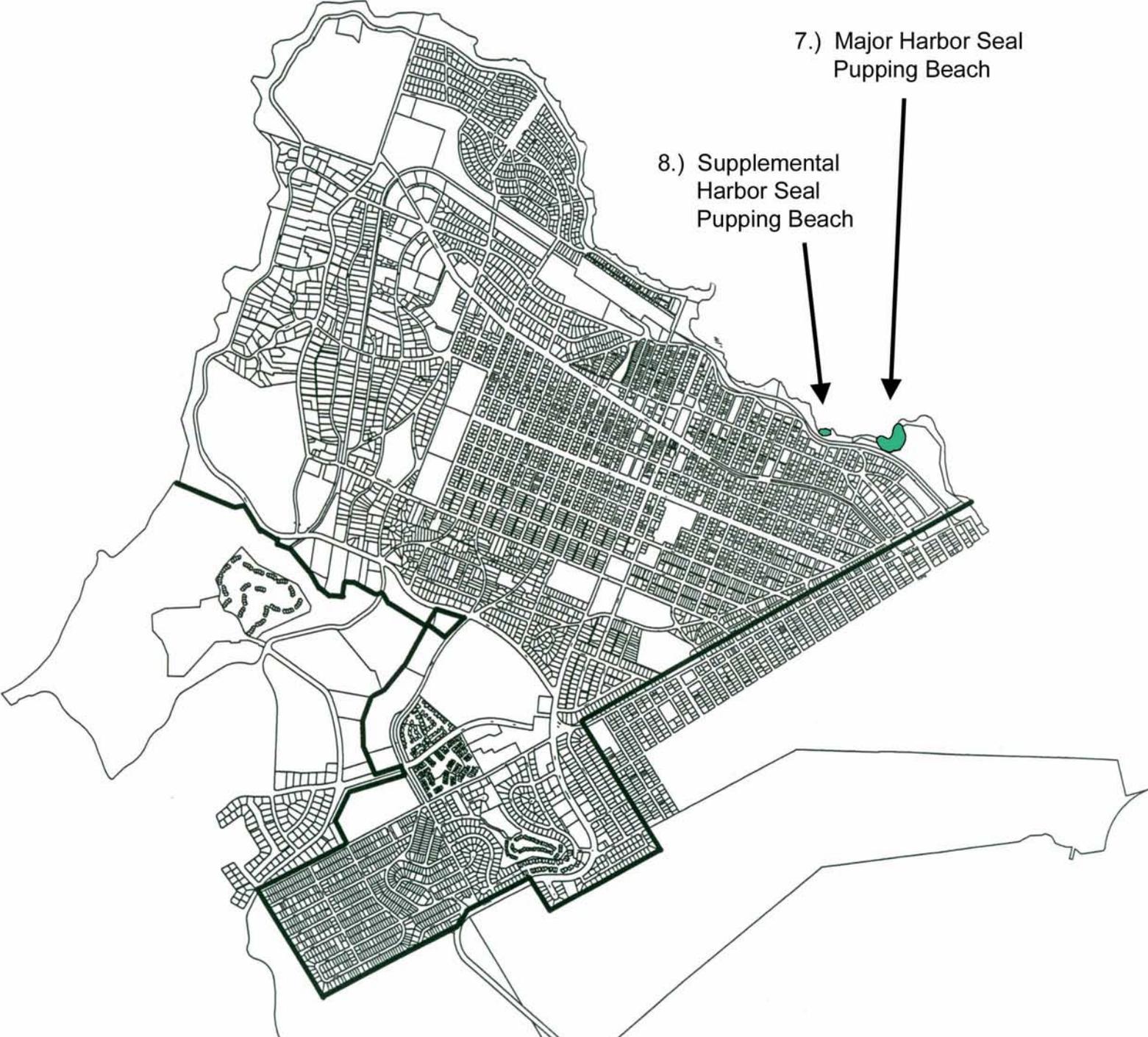
3.) Pacific Grove Marine
Gardens State Marine
Conservation Area

Marine Protected Areas

2.) Lovers Point State
Marine Reserve







7.) Major Harbor Seal
Pupping Beach

8.) Supplemental
Harbor Seal
Pupping Beach

9.) The Great Tide Pool



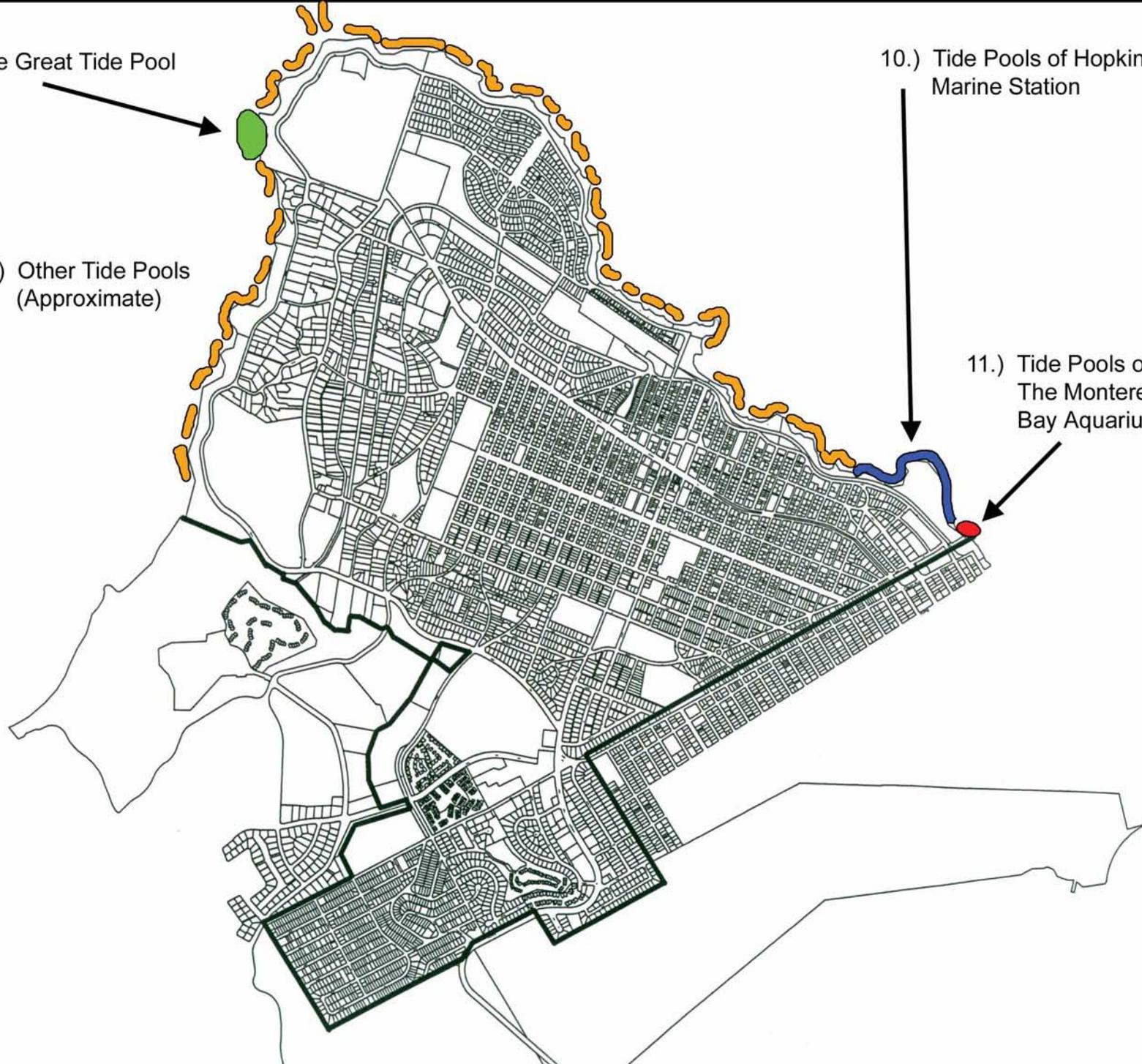
12.) Other Tide Pools
(Approximate)

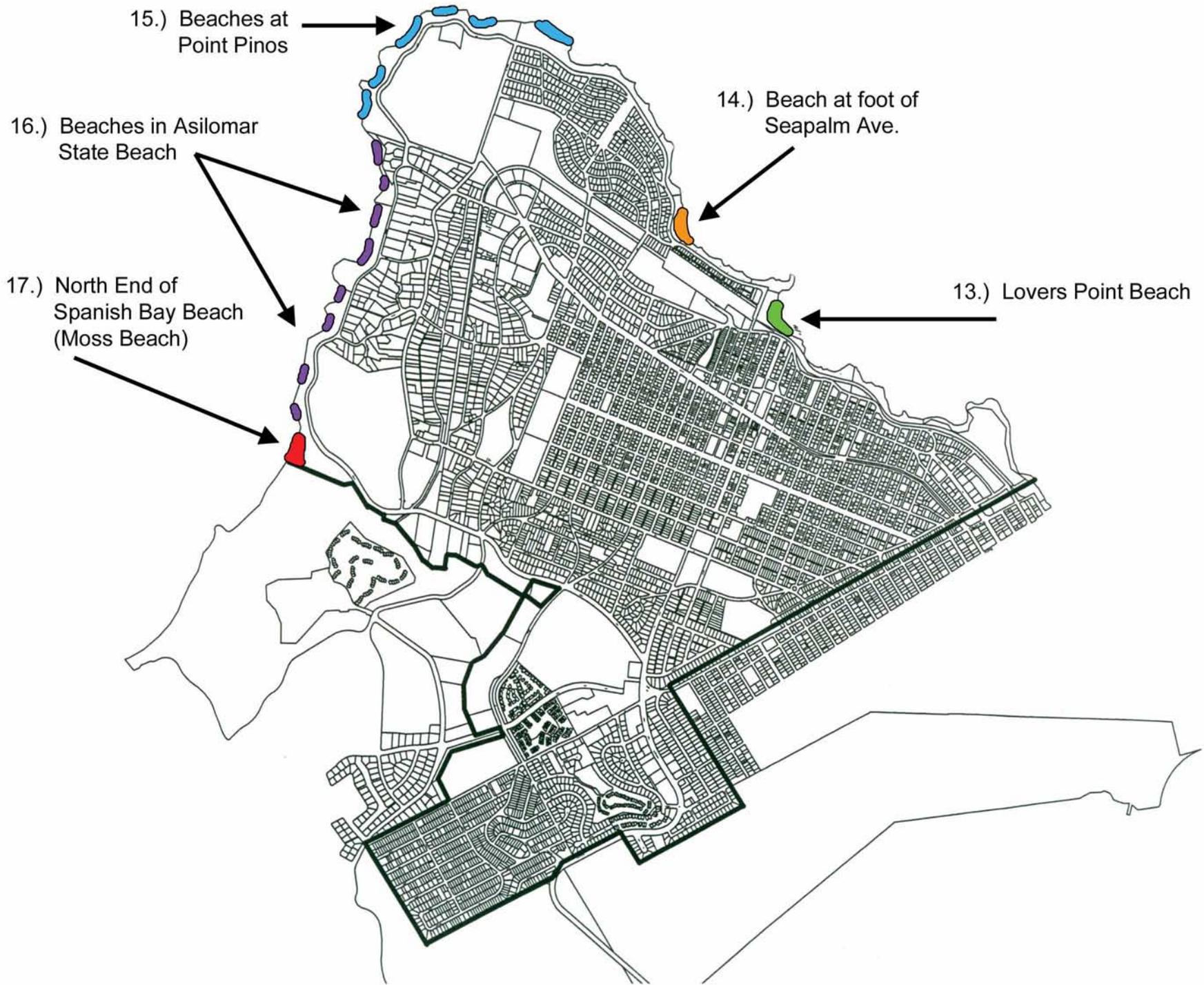


10.) Tide Pools of Hopkins
Marine Station



11.) Tide Pools of
The Monterey
Bay Aquarium



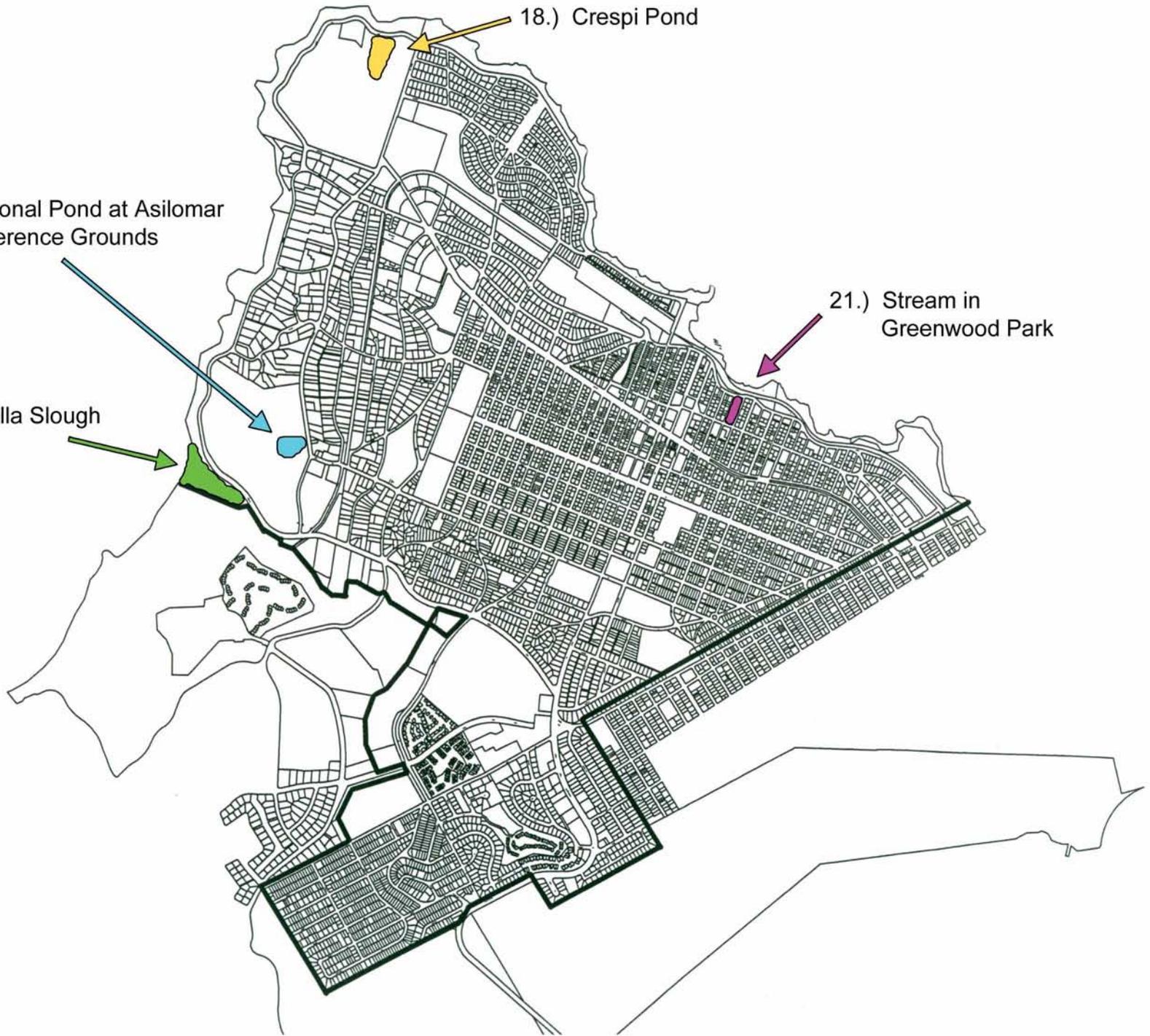


20.) Seasonal Pond at Asilomar
Conference Grounds

19.) Majella Slough

18.) Crespi Pond

21.) Stream in
Greenwood Park



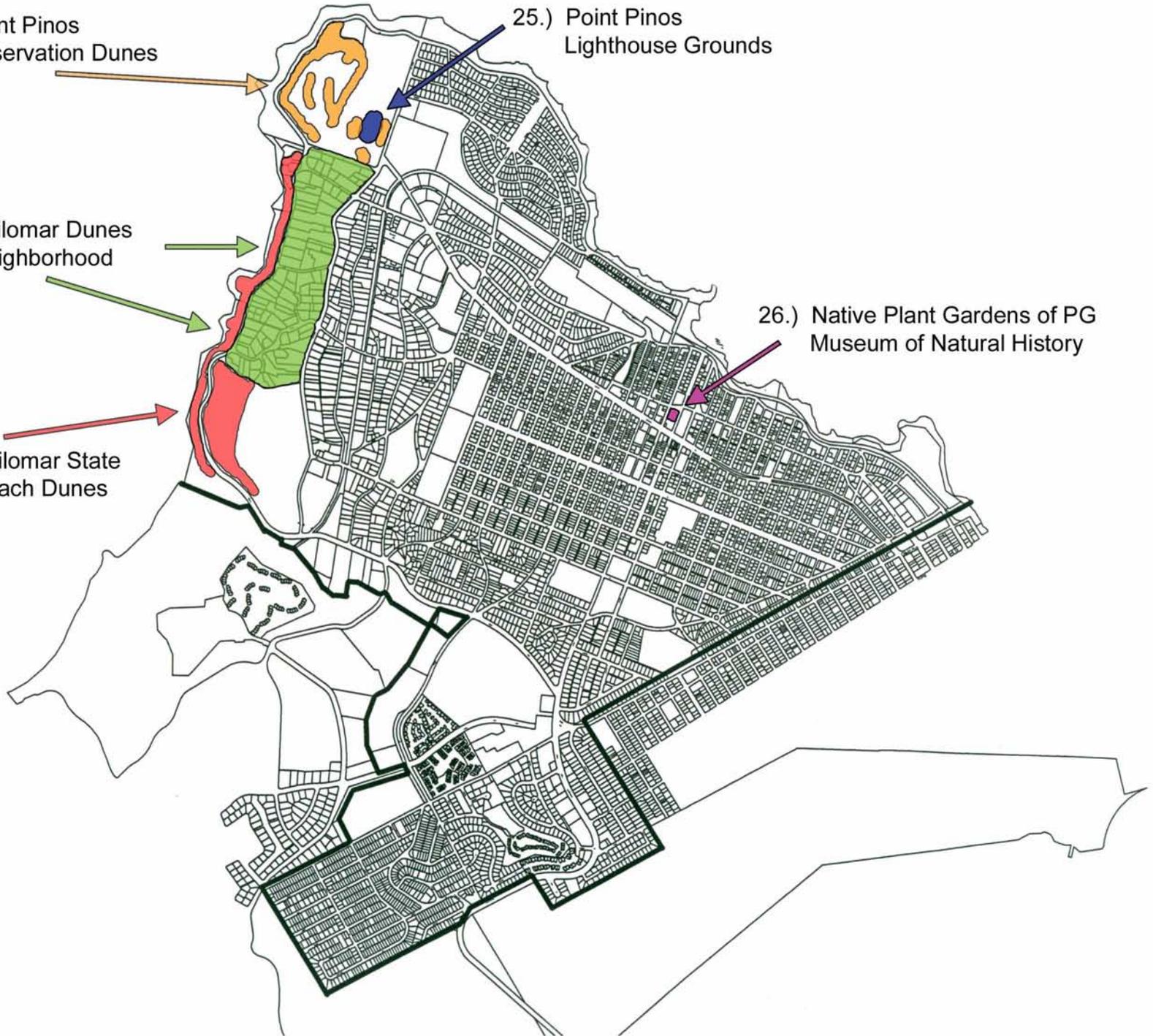
22.) Point Pinos
Reservation Dunes

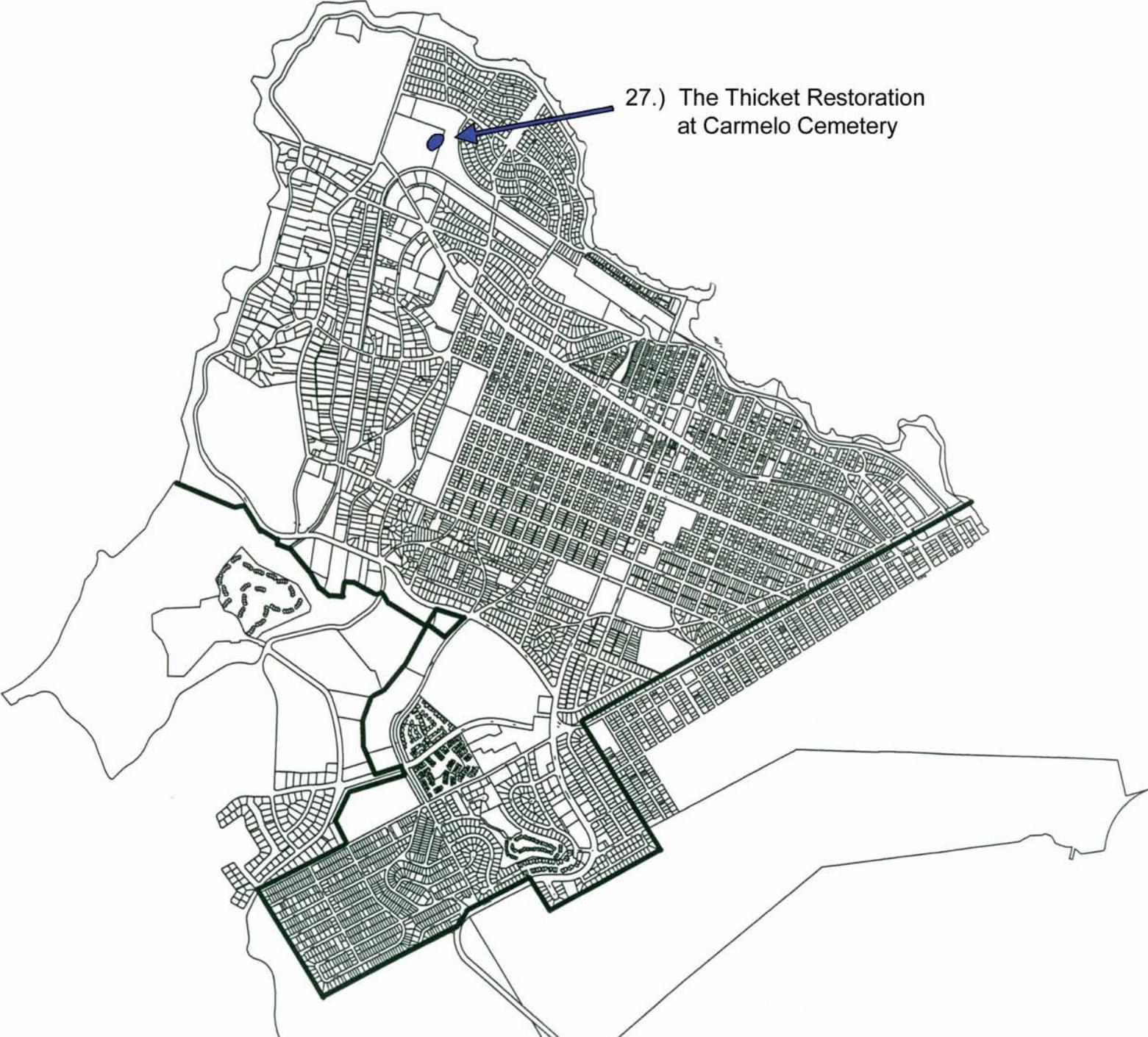
25.) Point Pinos
Lighthouse Grounds

24.) Asilomar Dunes
Neighborhood

26.) Native Plant Gardens of PG
Museum of Natural History

23.) Asilomar State
Beach Dunes





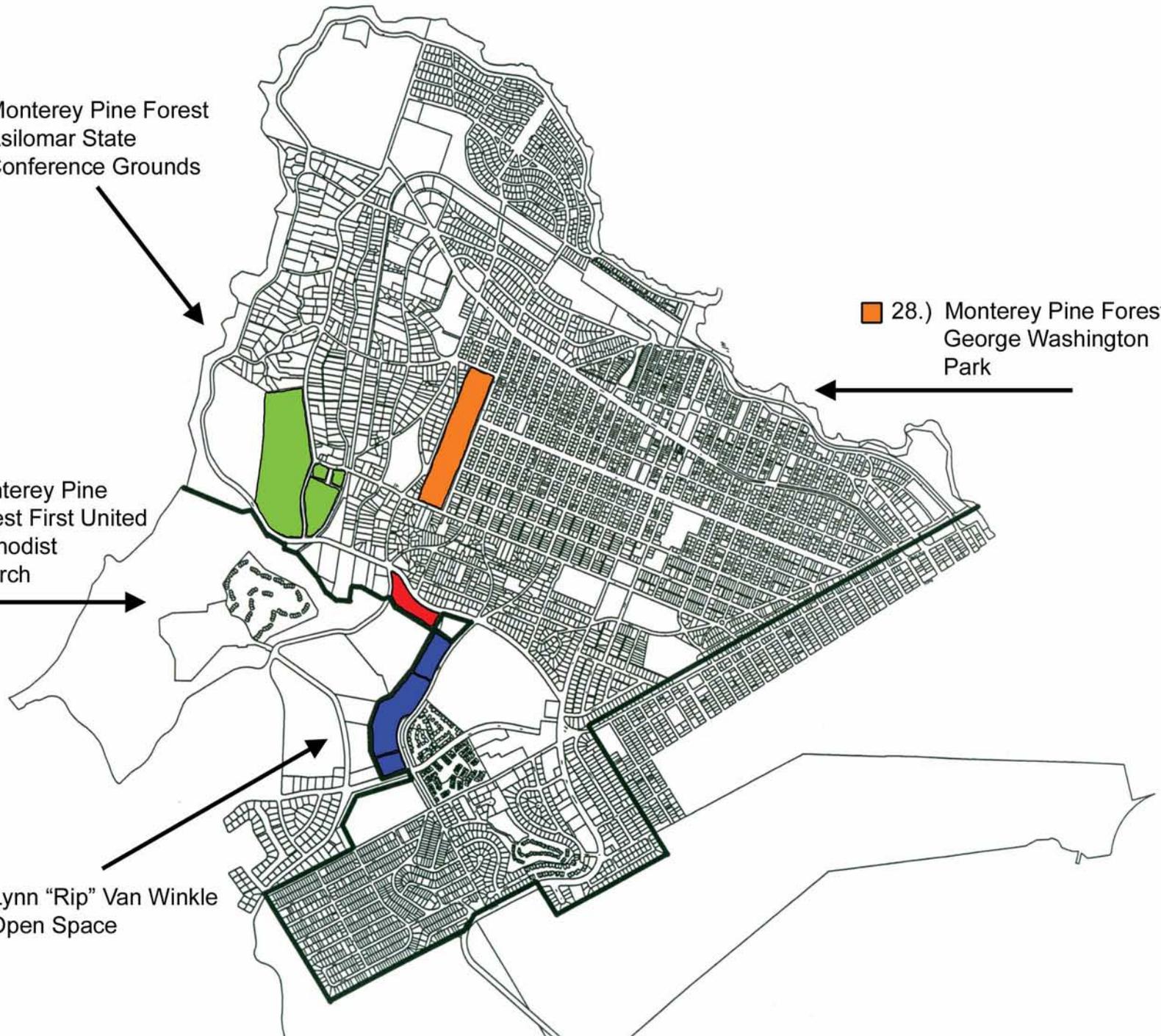
27.) The Thicket Restoration
at Carmelo Cemetery

29.) Monterey Pine Forest
Asilomar State
Conference Grounds

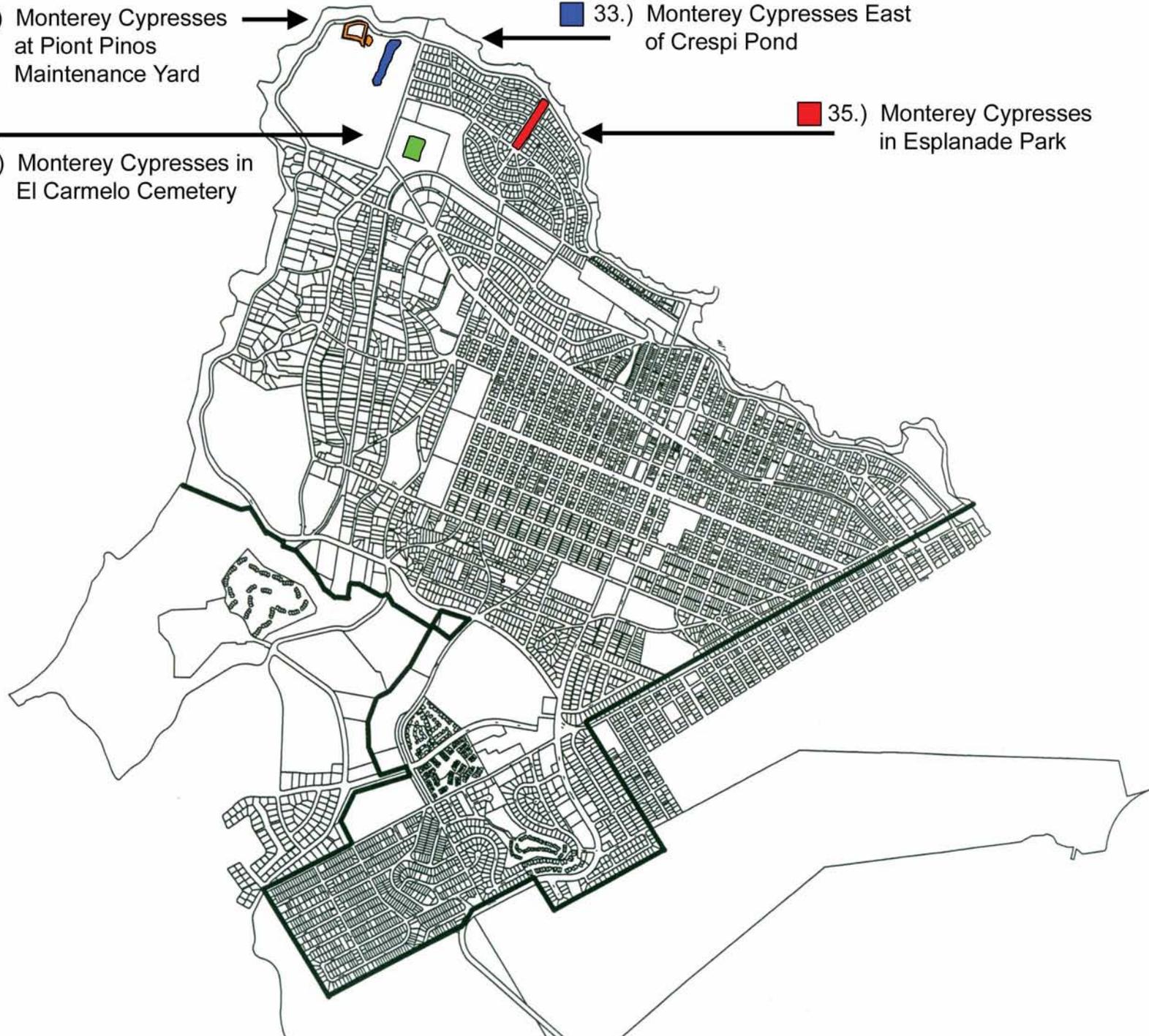
28.) Monterey Pine Forest
George Washington
Park

30.) Monterey Pine
Forest First United
Methodist
Church

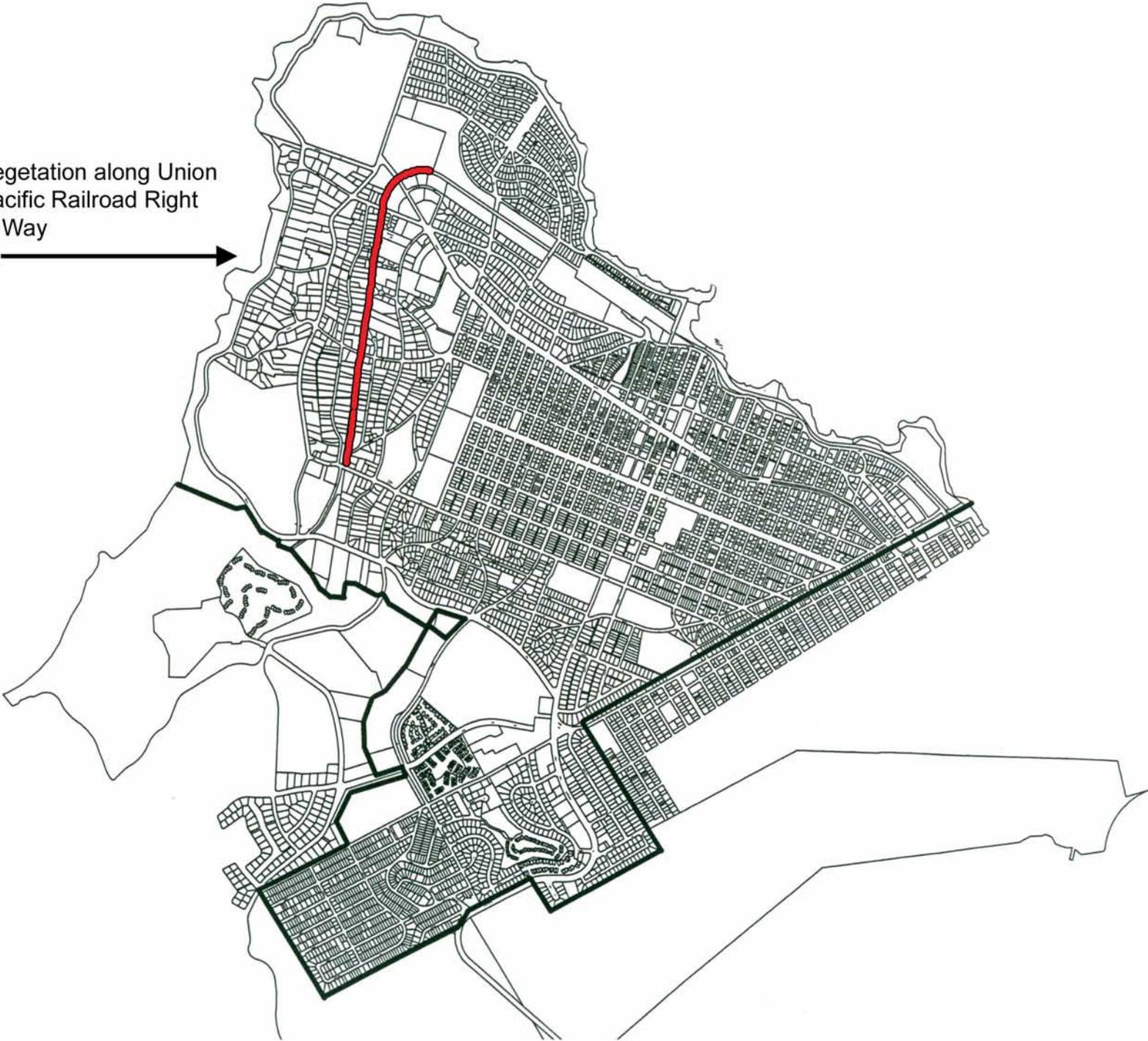
31.) Lynn "Rip" Van Winkle
Open Space

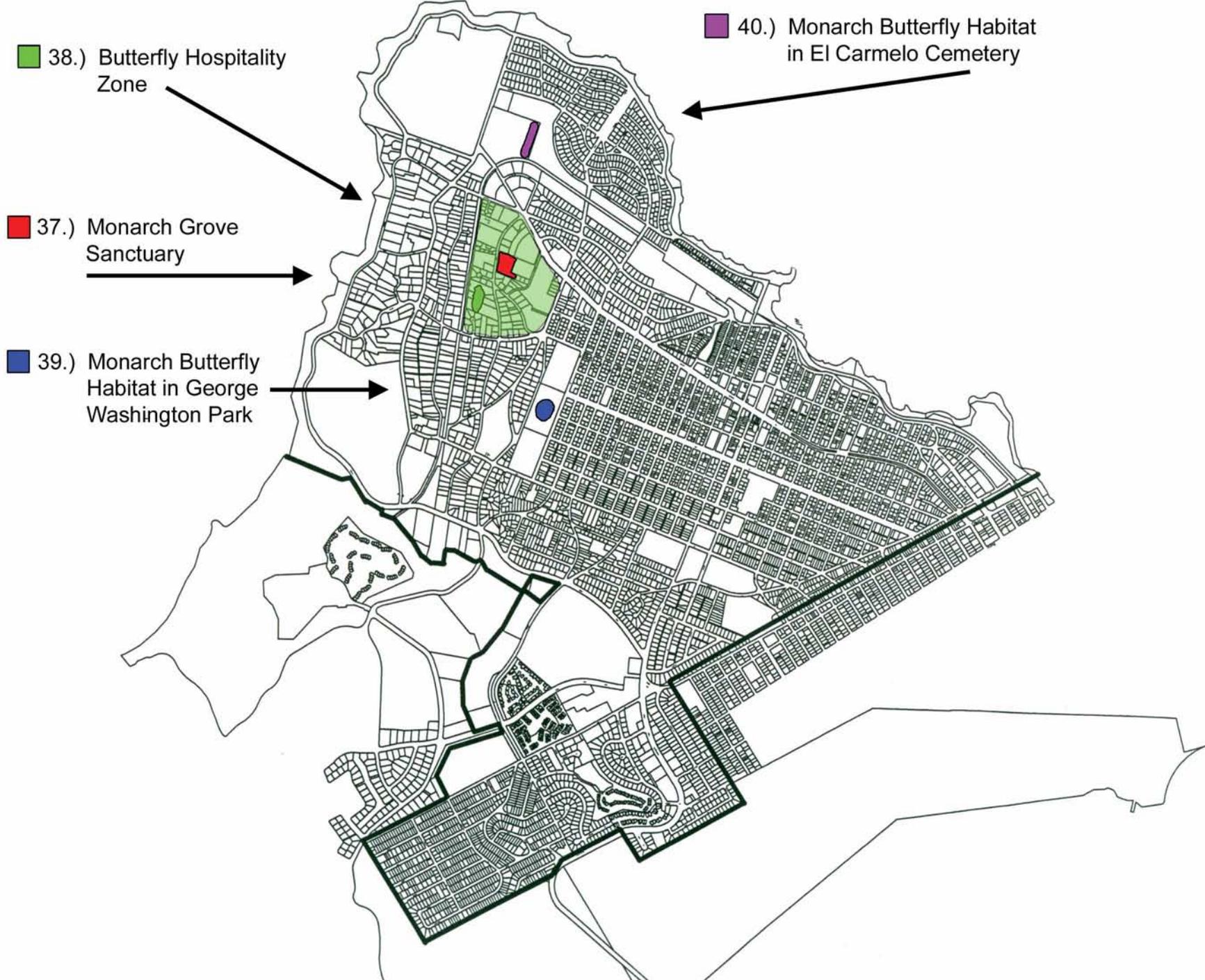


- 32.) Monterey Cypresses at Piont Pinos Maintenance Yard
- 33.) Monterey Cypresses East of Crespi Pond
- 34.) Monterey Cypresses in El Carmelo Cemetery
- 35.) Monterey Cypresses in Esplanade Park



36.) Vegetation along Union Pacific Railroad Right of Way





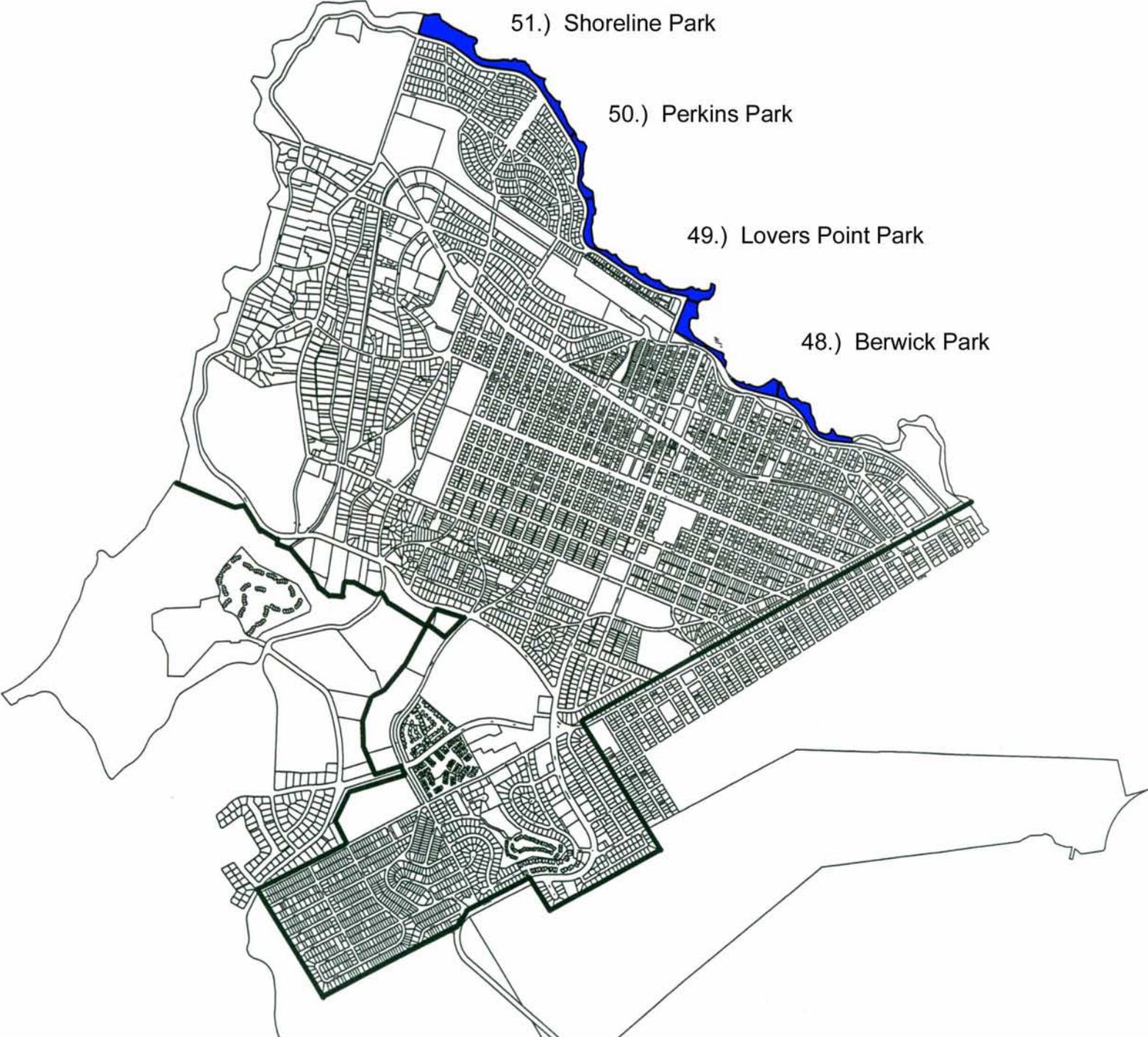
38.) Butterfly Hospitality Zone

37.) Monarch Grove Sanctuary

39.) Monarch Butterfly Habitat in George Washington Park

40.) Monarch Butterfly Habitat in El Carmelo Cemetery





51.) Shoreline Park

50.) Perkins Park

49.) Lovers Point Park

48.) Berwick Park

56.) Municipal Ball Park



53.) Caledonia Park



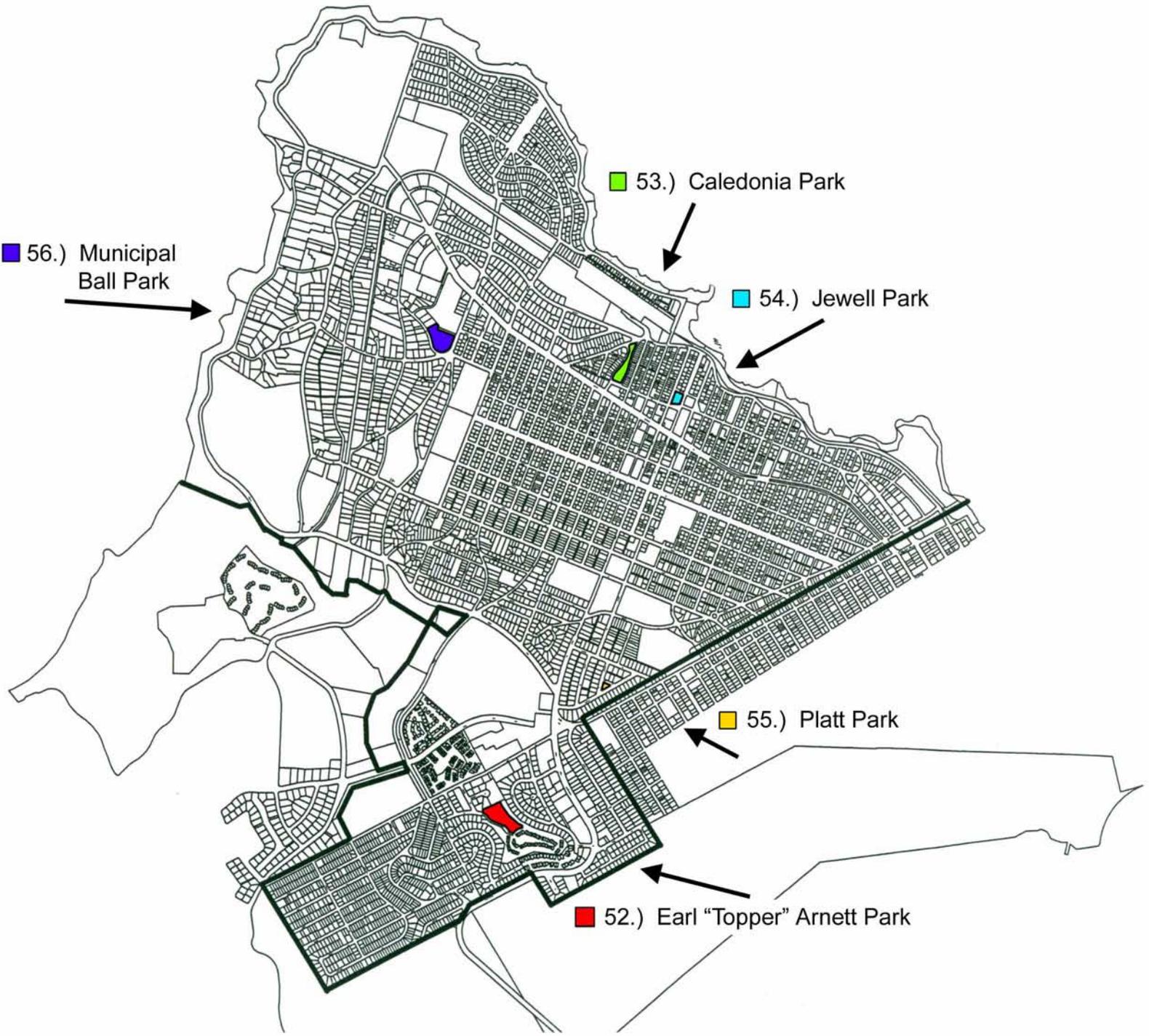
54.) Jewell Park



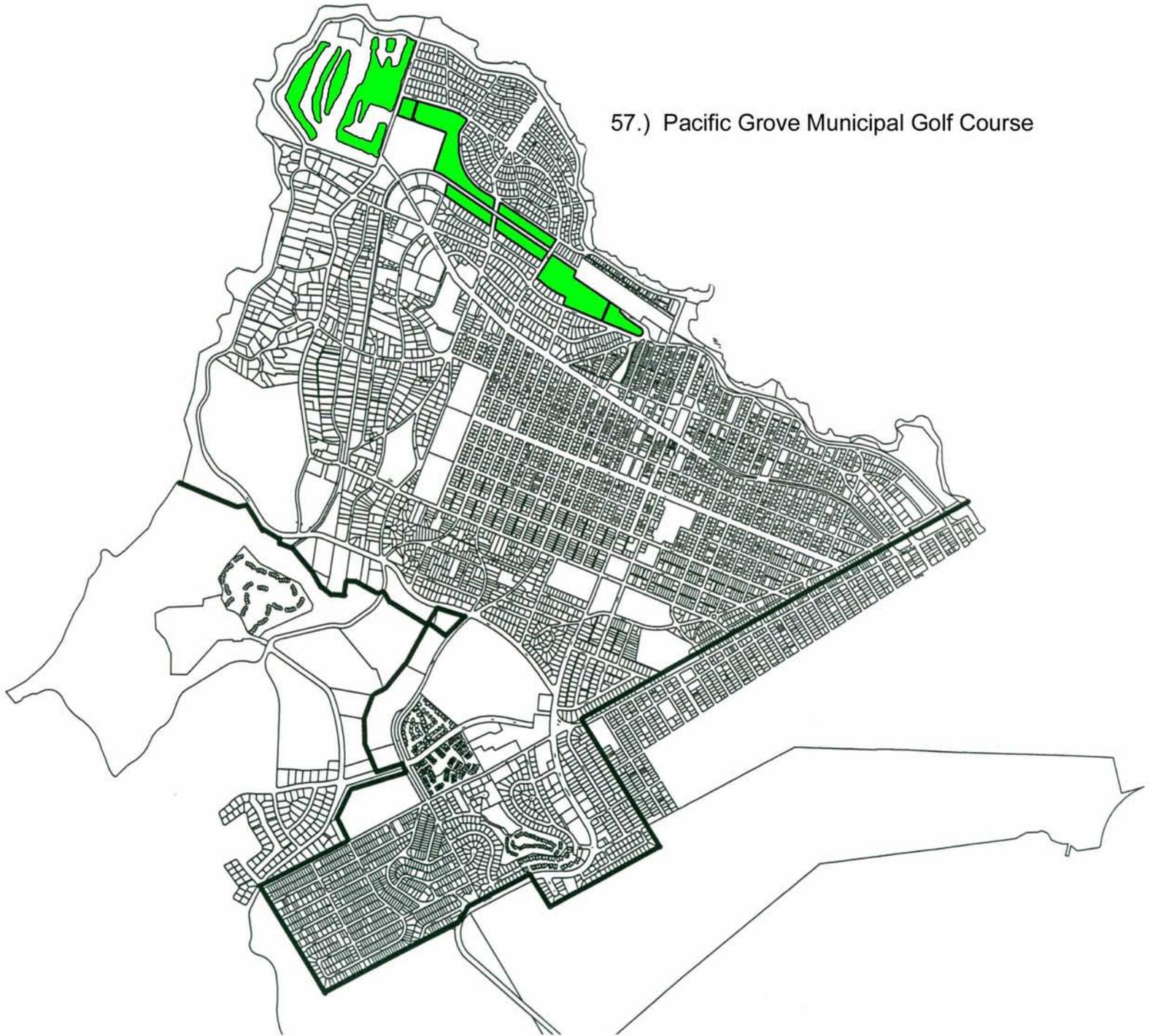
55.) Platt Park



52.) Earl "Topper" Arnett Park



57.) Pacific Grove Municipal Golf Course



58.) Athletic Fields and
Grounds of
Pacific Grove
Unified School District

