HOMES AT DEER HILL LANDSCAPE OPERATION & MAINTENANCE MANUAL

V1.2016.02.17

Prepared for: Homes at Deer Hill
Prepared by: Gates and Associates

February 2016

TABLE OF CONTENTS

The Landscape Maintenance Guidelines is intended to provide direction for general site maintenance requirements for Homes at Deer Hill landscape areas to ensure that the design goals from the Skyline CIP2 Design Build Project are maintained in the long term.

A. GENERAL INTENT

1. It is the intent of this document to ensure that the landscape, irrigation system, and site be maintained in a first-class, healthy and well-groomed state at all times. Methods and procedures should consider and include the most recently recommended, recognized and/or registered for the industry.
2. All landscape areas within the campus site, including walks, pavements, curbs and gutters immediately adjacent to, or within, the boundaries of the landscape area should be maintained.
3. The maintenance of the Homes at Deer Hill landscape areas should preserve the landscape design theme as stated and graphically delineated in the Planting and Irrigation Design Manual of this document.
4. The central controller system utilizes weather station data like temperature and wind speed to gauge evapotranspiration rates of the plants. The amount and frequency of irrigation will be precisely adjusted based on this data to minimize water wastage and improve plant health. The central controller system can accomodate multiple zone programming depending on plant types and water needs. The system will also promptly notify the Maintenance Staff of damaged equipment or unexpected flows.
5. Refer to the Appendix for general scheduling templates and maintenance logs, etc. for use and modification by staff.

B. LICENSES

1. Licenses
   a. Pesticides should be applied by a licensed California Pest Control Operator, who should apply only pesticides approved for use by the Director of Agriculture for the State of California and the District.
   b. The Maintenance Staff should retain a licensed arborist to provide annual reports regarding tree health and pruning requirements.

C. REPORTS, SERVICE AND INSPECTION LOGS

1. The Maintenance Staff should maintain and keep records of all ongoing, seasonal, and additional work and maintenance performed on a daily basis by the Staff's personnel.

D. SAFETY / TRAFFIC CONTROL

1. The Maintenance Staff should perform all work outlined in these specifications in such a manner as to meet all accepted standards for safe practices during the maintenance operation, and to safely maintain equipment, machines, and materials or other hazards consequential or related to the work, and meet all local, County, State or other legal requirements including compliance with the terms of the applicable O.S.H.A. and CAL O.S.H.A..
   Employees performing work adjacent to Roadway areas should wear an approved safety vest as an outer garment at all times.
2. When performing work, the Maintenance Staff should make every effort to keep sidewalks, vehicle travel lanes and driveways open at all times.
3. Staff should inspect, and identify, any condition(s) that renders any portion of the areas under maintenance unsafe, as well as any unsafe practices occurring thereon. Staff should make minor corrections to protect members of the public and others from injury.

E. INCLEMENT WEATHER

1. During periods of storms, the Maintenance Staff will provide supervisory inspection of the campus during regular hours to prevent or minimize possible damage from inclement weather.

F. PROTECTION OF EXISTING FACILITIES AND STRUCTURES

1. The Maintenance Staff should exercise due care during the performance of work to protect from damage all existing facilities, structures, and utilities both above surface and underground on campus property.

G. SOIL ANALYSIS AND PLANT TISSUE TESTING

1. General
   a. Fertilization programs should be based upon recommendations from soil Agricultural Suitability Analyses. An Agricultural Suitability Analysis (soil fertility analysis A-502) should be performed before any fertilization.
   Refer to Appendix A for sample Fertilization Schedules.
   b. Testing Facility Soil and Plant Laboratory, Inc. 352 Mathew Street, Santa Clara, California 95050. Tel. (408) 727-0330); or other approved facility.

2. Schedule of Testing
   a. It is recommended that an Annual Agricultural Suitability Analyses be performed by the Maintenance Staff in February before fertilization. At least four samples should be taken representing turf, shrubs and groundcover areas. These tests should be used to develop a current fertilization schedule.

3. Nutrient or Horticultural Deficiencies
   a. The Maintenance Staff may take additional samples of soil or plant tissue for analysis purposes. These tests should be used to determine specific causes of plant failure and/or fertility levels.

H. TREE MAINTENANCE

1. General
   a. All trees should be maintained in a healthy, vigorous growing condition. Unless specifically excepted, all trees should be allowed to grow in and to their natural genetic form and size. Special attention should be given to the trees of this project. The aesthetic value of the trees in this high profile area of the campus makes it essential that the Maintenance Staff use sound horticultural practices.
   b. Trees should be maintained and pruned to enhance their natural form and structure as they grow, and as potential damage occurs.

2. Tree stakes
   a. Maintain necessary staking until trees are able to stand upright without support. Remove all stakes, guys and ties completely from the plant not required for support as soon as possible.

3. Fertilization
   a. Trees will normally receive sufficient nutrients during turf and shrub fertilization. Trees that require additional fertilization to achieve a healthy vigorous appearance must be fertilized by deep root injection or as recommended by arborist.

4. Pruning
   a. General
      Tree pruning should occur as part of regular maintenance. All trees should be pruned annually using U.C. Guidelines for trees. Publication 2574.
      i. If financially feasible, all tree pruning should be supervised by a certified arborist as accredited by the International Society of Arboriculture.
      ii. Tree pruning should have two basic objectives (1) to promote structural strength; and (2) to accentuate the trees' natural form and features.
      iii. All trees should be pruned on a regular basis to achieve a well-balanced crown. No more than 25% of the live wood may be removed from the tree during each pruning.
      iv. Side branch removal should be accomplished by cutting side branches at the main trunk just beyond the branch bark ridges.
      v. Branches larger than 4 inches in diameter should be undercut first approximately 1 to 2 feet from the main trunk. Make the second cut 1 to 3 inches further up the limb and from the top. The limb should be split cleanly between the two cuts without tearing the bark. The third cut is made at the main trunk with less chance of the bark tearing and leaving a bad cut.
   b. Pruning Procedures
      i. Trees with a clear central leader generally need little or no pruning. As a general rule, the single central leader should never be radically topped or cut back resulting in an unnatural multi-leader form with an abundance of weak vegetative growth.
      ii. Trees should be free from all suckers, water sprouts, crisscrossing, dead, diseased, broken, and heavily laden side branches.
      iii. Trees with multi-leaders or branched main trunk system should be pruned to select and develop permanent scaffold branches. Scaffolding branches will be smaller in diameter than the trunk or branch to which they are attached. Vertical spacing should be approximately 18 to 24 inches and radial orientation. Scaffolding branches should not overlay one another. Prune to eliminate diseased or damaged growth; to narrow v-shaped branch forks that lack strength; to reduce toppling and wind damage by thinning out of crowns; to maintain growth with space limitations and to maintain a natural appearance.
      iv. Under no circumstances should stripping of lower branches ("raising up ") of young trees be permitted. Lower branches should be retained in a "tipped back" or pinched condition with as much foliage as possible to promote caliper trunk growth (tapered trunk). Lower branches can be cut off at the trunk only after the tree is able to stand erect without staking or other support.
      v. Evergreen trees should be thinned out and shaped when necessary to prevent wind and storm damage. The primary pruning of deciduous trees should be done during the dormant season. Damaged trees, or those that constitute health or safety hazards, should be pruned at any time of the year as required.

5. Insect and Disease Control
   a. Trees should be maintained in a vigorous and healthy condition. Disease and insect problems are much less severe than trees in poor health.
   b. Control the pest and disease with the proper treatments.

6. Soil Moisture Conditions
   a. One tree per irrigation zone should be probed with a soil sampling probe to a depth of 24", at least quarterly, to ascertain the subsoil moisture condition and root health conditions.

7. Tree Wells
   a. Mulched tree wells should be maintained around all trees in lawn areas. A diameter of 24" beyond the trunk of the tree should be maintained free of grass, weeds, groundcovers, etc.

I. SHRUB, VINE AND GROUNDCOVER MAINTENANCE

1. General
   a. Shrubs, vines, and groundcover should be maintained in a healthy, vigorous growing condition at all times. Unless specifically excepted, all these plantings should be allowed to grow in and to their natural genetic form and size.

2. Fertilization
   a. Apply specific recommended fertilizer at the times and rates specified in the soils reports. Be aware and apply all necessary special fertilizer/amendment requirements as a part of the maintenance process.
   b. Schedule the application of fertilizer and or sod amendment based on Agricultural Suitability Analysis. as often as required, but no less than twice per year, to promote optimum growth and healthy appearance to all shrubs, vines and groundcover.

3. Pruning
   a. General
      The objectives of pruning shrubs are to maintain growth within space limitations as defined by this Maintenance and Operations Manual, to eliminate diseased of damaged growth, and to select and develop permanent branches.
      i. Shrubs should not be clipped into balled, boxed or standard forms unless specified in this Maintenance and Operations Manual. All pruning cuts should be made to lateral branches or buds, or flush with the trunk or main stem.
      ii. Shrubs should be pruned as required to ensure clear vehicular and pedestrian visibility and clearance.
      iii. Vines at the Stadium Track are used to visually soften and emphasize a natural effect. These vines should be continuously trained on walls and columns.

4. Weed Control
   a. Weeds should be removed by hand. Mulch all shrub and groundcover areas to reduce weed growth. If herbicides are used, they must be applied in strict accordance to label procedures; otherwise, their effectiveness is drastically reduced. Some herbicides will damage turf grasses; use caution in application in shrub and vine areas adjacent to lawn areas.

5. Insect and Disease Control
   a. Healthy shrubs and vines will be able to withstand minor insect and disease damage without controls. Routine insecticide or fungicide applications should not be permitted as this destroys natural predator/prey relationships in the landscape. Where unusually high infestations or infections occur, chemical pesticides should be used to control the problem.
   b. The base of shrub areas should be visually inspected, at least quarterly, to quickly identify infestations. These areas should be kept dry and open to air flow to prevent damage from soil borne fungi.
   c. Soil probes should be taken in each shrub area, at least quarterly, to monitor irrigation levels and keep soil moisture at optimum levels.

6. Mulch
   a. Cobble mulch areas should be kept weed free with a minimum 3” depth.
   b. Chipped mulch areas should be kept weed free with a minimum 3” depth of recycled weed free mulch with natural color.

7. Failed Plant Material
   a. The Maintenance Staff should restore or replace any lawn area, groundcover, perennial or annual plants, trees, shrubs, or other plant materials requiring restoration or replacement.

J. TURF MAINTENANCE

1. General
   a. All turf and lawn should be maintained in a healthy, vigorous growing condition at all times. Unless specifically excepted, all turf and lawn should be mowed to the specific heights required, and maintained within the specific edge or border as shown.
   b. Turf should be free of damaged and/or bare spots.

2. Mowing
   a. The lawn areas at Theater Quad, Building 4 Meadow and portions of Upper Quad should be maintained at a medium high cut of 2-2 ½” in height.
   b. No-mow grass should be mown once yearly to 50% height with flail or weed cater type mower.
   c. The lawns should be mowed 7-14 days depending on growth and climate, following the natural contours or general shape of the lawn area.
   d. Mowing patterns should be changed each mowing to avoid creating ruts and compaction from wheel tracks.
   e. Lawn should be kept free of clippings. Clippings should be continually either caught or vacuumed from the lawn and removed.
   f. Mower blades should be sharp to reduce tearing of grass by dull mower blades. All mowers should be adjusted to the same height and scalping of high spots, mounds, or knolls will not be permitted. All mowing equipment should be cleaned before entering premise of the project to prevent importation of disease from other areas. Heavy equipment should avoid low wet areas. If necessary wet areas should be mowed with a hand mower.
   g. De-thatching, aeration, or any other special procedures required for a healthy lawn should be performed as needed.
   h. All trees, shrubs, or irrigation heads located in turf areas should be avoided by mowing equipment to prevent damage.
   i. Trees in lawn areas should have a 24” diameter circle cleared around the trunk.

3. Edging
   a. All lawn edges, both along the sidewalk and shrub border areas, should be kept with clean edges.
   b Edging around sprinklers should not be allowed. Sprinklers should be properly set in the ground to pop up clear of the turf grass when operating.
   c. Catch basin grates should be edged at same intervals as paving. Care is to be taken so as not to damage grates with edging equipment.

4. Aeration
   a. This auxiliary management practice of plugging holes should be utilized annually during the 1st 2 weeks of October to increase water and air penetration into the soil. Holes should be plugged with a piston type aerator with the plugs removed, picked up and disposed of properly.

5. Fertilization
   a. Fertilization programs should be based upon recommendations from current soil fertility analysis. An Agricultural Suitability Analysis should be performed before fertilization.
   b. No mow and native preservation should be fertilized twice yearly with one application after the yearly cutting.

6. Weed Control
   a. Lawns should be maintained in a weed free manner. Before any chemical herbicides are applied to the lawn, the weeds must be identified and their habits and characteristics known.
   b. Chemical herbicides should be used as little as possible. When necessary, herbicides should be used as a management tool to provide a means of manipulating the weed/grass competition in favor of the turf grasses.

7. Insect Control
   a. When insect damage is suspected, an accurate identification of the insect in the lawn must be made prior to any application of insecticides or IPM practices.
   b. Reference material available includes: Publication 2540 Insect and Mite Control on Lawns, Manual 41, Turf grass Pests, and Leaflet 209, Guide to Turf grass Pest Control published by the University of California, Agricultural Publications, Berkeley, California 94720, Pyrethrin Test, as outlined in University of California Publication, Manual 41as a guide to insect control.

8. Disease Control
   a. A properly maintained turf generally is less severely damaged by diseases and is able to make a quicker recovery than one that is weakened by poor maintenance. Turf should be kept free of fungus, fungi, and disease.
   b. When disease control cannot be contained by cultural practices, i.e., proper mowings, fertilizations, irrigations, aerifications, etc., fungicides should be required to inhibit the disease so that the lawn grasses may recover.
   c. Before fungicides should be used, the fungus or fungi should be identified. Fungicides should not be applied unless there is a fungus disease problem known to exist. Repeated use of fungicides will inhibit non-parasitic fungi in the thatch and soil responsible for the normal breakdown of thatch and other organic matter in the turf and soil,
   d. When a known disease condition exists a fungicide should be applied prior to serious infection. Continued applications throughout the active season should be required for control. Applications of the fungicide should be limited to areas of visual fungus infestation and terminated when environmental conditions, such as summer heat, are no longer favoring the disease.
   e. To prevent diseases, fungi, or noxious weeds from infecting the lawns, all mowers and equipment should be thoroughly cleaned with a water wash prior to mowing any lawn at the campus.

K. RODENT CONTROL

1. All areas of the campus should be kept free of rodents. If rodent damage has occurred to landscape or irrigation it should be immediately repaired.

L. IRRIGATION SYSTEM

1. General

The Toro Sentinal central controller system utilizes weather station data like temperature and wind speed to gauge evapotranspiration rates of the plants. The amount and frequency of irrigation will be precisely adjusted based on this data to minimize water wastage and improve plant health. The central controller system can accomodate multiple zone programming depending on plant types and water needs. The system will also promptly notify the Maintenance Staff of damaged equipment or unexpected flows.

   a. The central controller watering schedule should be adjusted based on seasonal precipitation levels and growth rates. Water applications should be regulated to best meet the needs of each planting type. This will require regular monitoring with the use of a tensiometer, to determine soil moisture levels.
   b. The Maintenance Staff should provide efficient use of water at all times. The controllers should be programmed and monitored to maintain adequate moisture optimal for growth and appearance, while eliminating excessive runoff. Adequate soil moisture should be determined by visual observation, plant resiliency, turgidity, examining cores removed by soil probe, moisture sensoring devices and programming irrigation controllers accordingly. Considerations must be given to soil texture, structure, porosity, water holding capacity, drainage, compaction precipitation rate, runoff, infiltration rate, percolation rate, evapotranspiration, seasonal temperatures, prevailing wind condition, time of day or night, type of plant and root structure.
   c. General requirements for watering and irrigation practices for trees, shrubs, vines, groundcover and lawns should be as follows
      1. Irrigation duration and frequency should be dictated by the plants' need for water.
      2. A soil probe should be used monthly to determine the depth and adequacy of the irrigation program. These checks should guide in scheduling irrigation applications.

3. Maintenance Staff should take into consideration the variety of shrubs located in the same areas. Irrigation duration and frequency is a function of the shallowest rooted plants in the area.

2. Irrigation Management

The irrigation system at Homes at Deer Hill utilizes the Toro Intellisense system with features such as computer control, weather station and flow sensors. As the numerous site controllers can be programmed and controlled from a central location, the system can also be accessed remotely via the internet. As the controllers are programmed with information for all valves including soil type, plant type, watering requirements, etc, any deviations in day to day irrigation such as a broken water line or stuck valve will be indicated by the flow sensor and the system master valve shut down.. Upon shut down maintenance staff will be notified via email of the problem in order for corrective maintenance to take place. The weather station within the irrigation system will also track weather patterns, wind, rain, and automatically adjust irrigation run times based on plant water requirements set within the computer control system. The weather station is hard wired to an adjacent controller with all controllers controlled via a cell phone system tied to the master computer within the FMC building.

a. The Maintenance Staff should operate the irrigation system and apply water in accordance with plant requirements avoiding waste due to runoff and/or broken or leaking equipment. The irrigation program should be reasonably adjusted to conform to plant requirements, soil and slope conditions, weather and changes of season.
b. Watering schedules should be arranged so as not to interfere with the use of the facility, normally at night or early morning.
c. As appropriate, a trained individual must be completely responsible for operating the irrigation system with the duties of adjusting controllers, observing the effectiveness of the irrigation system, and making minor adjustments to the system.
d. To appropriately maintain the irrigation system, staff must understand all phases of landscape irrigation systems operation, maintenance, adjustment, and repair. This includes diagnosis and repair of controllers, valve wires, control valves, lateral lines, gate valves, main lines, strainers, pressure regulators, backflow devices, flow sensors, master valves and electric pedestals.
e. As backup data, a chart should be maintained to record current irrigation programs, including days, time and length of watering for each station and program for each controller.
f. In areas where severe wind creates problems of spraying water onto pavement or windows, the controllers should be set to operate during periods of the least wind velocity.

3. Trees

a. All trees must be encouraged through irrigation practices to develop deep roots through deep, infrequent irrigation. Therefore, soil conditions must be monitored closely for both under and over water conditions. A saturated condition is an indication of drainage problems or excessive irrigation applications.

4. Turf

a. Water demand should vary seasonally. Higher temperatures during the summer will increase the water demand as a result of extreme evaporation and transpiration.
b. The following are general seasonal water demands for Tall Fescue turf:
   i. December to February - Rainfall may exceed water demand
   ii. March to April - 1/2 inch per week
   iii. May to September - 1 1/4 inches per week
   iv. October to November - 1/2 inch per week
c. The lawn should be irrigated at such a frequency as weather conditions require, to replenish soil moisture to below the root zone, approximately, 6 inches to 8 inches.
d. Automatic irrigation controllers should be reprogrammed every three months for all turf zones. A soil probe should be used monthly to determine the depth and adequacy of the irrigation program. Also, irrigation on the same day prior to mowing should be discouraged, as wet soil conditions promote disease and soil compaction.
e. Short intermittent applications during the irrigation period should be used to increase penetration into turf and avoid runoff.

5. Shrubs

a. Water demand should vary seasonally. Higher temperatures during the summer will increase the water demand as a result of extreme evaporation and transpiration.
b. Shrubs should be irrigated at such a frequency as weather conditions require, to replenish soil moisture to below the root zone, approximately, 6 inches to 8 inches.
c. Automatic irrigation controllers should be reprogrammed every three months for all shrub zones. A soil probe should be used monthly to determine the depth and adequacy of the irrigation program.

6. Irrigation Maintenance

a. All landscaped areas are watered by an automatic irrigation system. However, periodic adjustments, repair and cleaning are required to maintain desirable soil moisture levels.
b. Irrigation spray heads should always maintain ‘head-to-head’ coverage in the proper orientation, 90° perpendicular to grade and not tilted.
c. Irrigation system should be adjusted and/or retrofitted as necessary according to the maturity of plant material.
d. All irrigation systems should be inspected and adjusted on a weekly basis or more frequently as required, considering the water requirements of each remote control valve.
e. All defective piping, valves, head nozzles, screens and other system components should be replaced if broken or damaged.
f. All systems should operate at manufacturer’s recommended operating pressure. This should be accompanied by valve throttling pressure gauging. The valves should be throttled so as to prevent sprinkler heads from fogging, allowing droplets for effective watering. Periodic coverage tests are essential to evaluate proper settings, timing, usage, or maintenance of system.

g. All sprinkler heads and valves should be adjusted for proper coverage; and clean the entire system including valves, lateral lines and especially all sprinkler and bubbler heads for optimum performance.
h. The system should be cleared of silt and debris by flushing through lifted end heads or flush valves, and valve screens.
i. Irrigation valve box lids and other irrigation device enclosures should be secure.
j. The Maintenance Staff should continually maintain the irrigation system for optimum performance. This includes adjusting all sprinkler heads and valves for proper coverage; and cleaning the entire system including valves, lateral line and especially all sprinkler and bubbler heads for optimum performance.
k. Heads and Bubblers should be regularly inspected including sprinklers, drip/emitter, and bubbler irrigation systems in operation.
    i. Visual inspection for dry areas during routine maintenance;
    ii. Weekly inspection during summer months (April through October);
    iii. Twice-a-month inspections during November through March to detect any malfunctioning of the system.
l. All malfunctioning equipment should be repaired prior to the next scheduled irrigation.
m. Irrigation backflow preventors shall be leak free and tested yearly

7. Irrigation Record Drawings
    a. The Maintenance Staff should provide, and keep up to date, a complete irrigation “as built” digital record which should show every equipment change from the original drawings and specifications and the exact “as built” locations of any new or relocated devices, and sizes and kinds of irrigation equipment.
    b. The Maintenance Staff is responsible for incorporation and revision to the “as built” record set at the completion of all irrigation modification or equipment change.

M. SITE MAINTENANCE REQUIREMENT

1. Paving
    a. All site paving should be kept clear of debris and objectionable materials, weed growth, grass clippings, glass, food, animal waste, etc.
    b. Paving should be maintained or replaced if any grade difference over ½” creates a trip hazard.
    c. Root prune any tree surface roots, which intrude under paving areas as they are noticed.
    d. Wash paving as necessary to remove objectionable debris, which cannot be blown or swept off.

2. Concrete Walls
    a. All walls should be free of debris, weeds and leaves, food, animal waste, etc. Clean and wash walls as necessary.
    b. All walls shorter than 36” shall have metal skateboard protection in place. Any missing or damaged skateboard protection should be replaced promptly.
    c. Root prune any tree surface roots, which intrude under walls as they are noticed.

3. Site Furnishings and Apparatus
    a. Drinking fountains, bike racks, benches and tables, etc., should be kept clean of all debris, including but not limited to, bird droppings, foods, etc.
    b. Trash receptacles shall be kept clean of all debris, including, but not limited to food, bird droppings etc. Receptacles should be inspected for capacity regularly and emptied as required.

4. Bus Shelter and Other Site Structures
    a. Bus shelters and structures should be kept clean of all debris, including but not limited to bird droppings, food, gum, spider webs, leaves, water stains and graffiti.

5. Water Features
The granite water fountain is located between the Upper Quad and Theater Quad. It is a visual and spatial focus with granite columns representing ‘pillars of knowledge’. This fountain offers a seating node as well as soothing waterfall sounds at this busy hub. For detailed maintenance requirements, refer to The CIP2 Design-Build Fountain Operations & Maintenance Manual by Pacific water Art, Inc., November 23, 2010.
    a. Water fountains should kept free of debris, mineral buildup, water stains, algae, etc.
    b. Water should be chemically treated to maintain acceptable sanitary level.

6. Seating
    a. Benches, seatwall and seatpads should be kept free of all debris, including but not limited to bird droppings, food, gum, spider webs, leaves, water stains and graffiti.
    b. Repair all damaged seating promptly.

7. Granite
    a. Fountain fins and accent trims should be kept free of all debris, including but not limited to bird droppings, food, gum, spider webs, leaves, water stains and graffiti.

8. Roadway and Parking Lots
    a. Parking lots and gutters should be kept clear of all litter and debris.

9. Fencing
    a. All fencing should be kept free of rust, sharp edges, securely fastened, and in an upright manner perpendicular to grade.

10. Signs
    a. All signs and letterings should be kept clean, clearly visible and free of obstuctions like tree branches and plant material.
    b. Any monument signs located at grade should be kept edged and clear of weeds.
    c. Signage should be kept in a clean manner, free of residue, water marks, rust or any other imperfections which may detract from its appearance. Refer to the signage manual for future details needed for procurement. Contact Arrow Sign for vinyl replacement.

11. Handrails
    a. All handrails should be kept free from rust, imperfections, dents, and sharp points.
    b. Clean rust immediately to prevent pitting.
    Stainless steel handrails may be cleaned with the use of mild household cream cleaning agents, vinegar and water mixture, a 10%-15% solution of phosphoric acid, alcohol based products, methylated spirits and acetone. Scouring products should not be used. Solvents should be cleaned off with de-ionized water and dried.
    c. Products such as Chloride-containing cleaning agents, hydrochloric acid, hypochlorite bleaches, and silver cleaning solutions should not be used on stainless steel handrails
    d. Stainless steel handrails may be waxed to prolong maintenance intervals.
    See www.recreonics.com/fyi/stainless_steel_maintenance.htm
    e. Additional information for stainless steel cleaning may be found at www.euro-inox.org and www.LSS.com

12. Storm Drainage System
    a. No standing water should be present onsite which may create a safety hazard, nuisance, or vector control issue.
    b. Catch basins should be cleaned as necessary or as required to provide proper drainage, keeping basins free of debris and grass.
    c. The Maintenance Staff should continually maintain the drainage systems for optimum performance.
    d. Regular inspection of the drainage should include Visual inspection for wet areas during routine maintenance

13. Bioswales
    a. Bioswales should be kept free of leaves and debris.
    b. Maintain cobble area in weed free condition. Add additional cobble as required.

14. Utility Boxes and Vaults
    a. All electrical utility boxes and vaults should be kept clear of debris and be clearly visible, with lids intact and securely fastened. They should be regularly inspected for any damage, and promptly followed by repairs or replacements as needed.

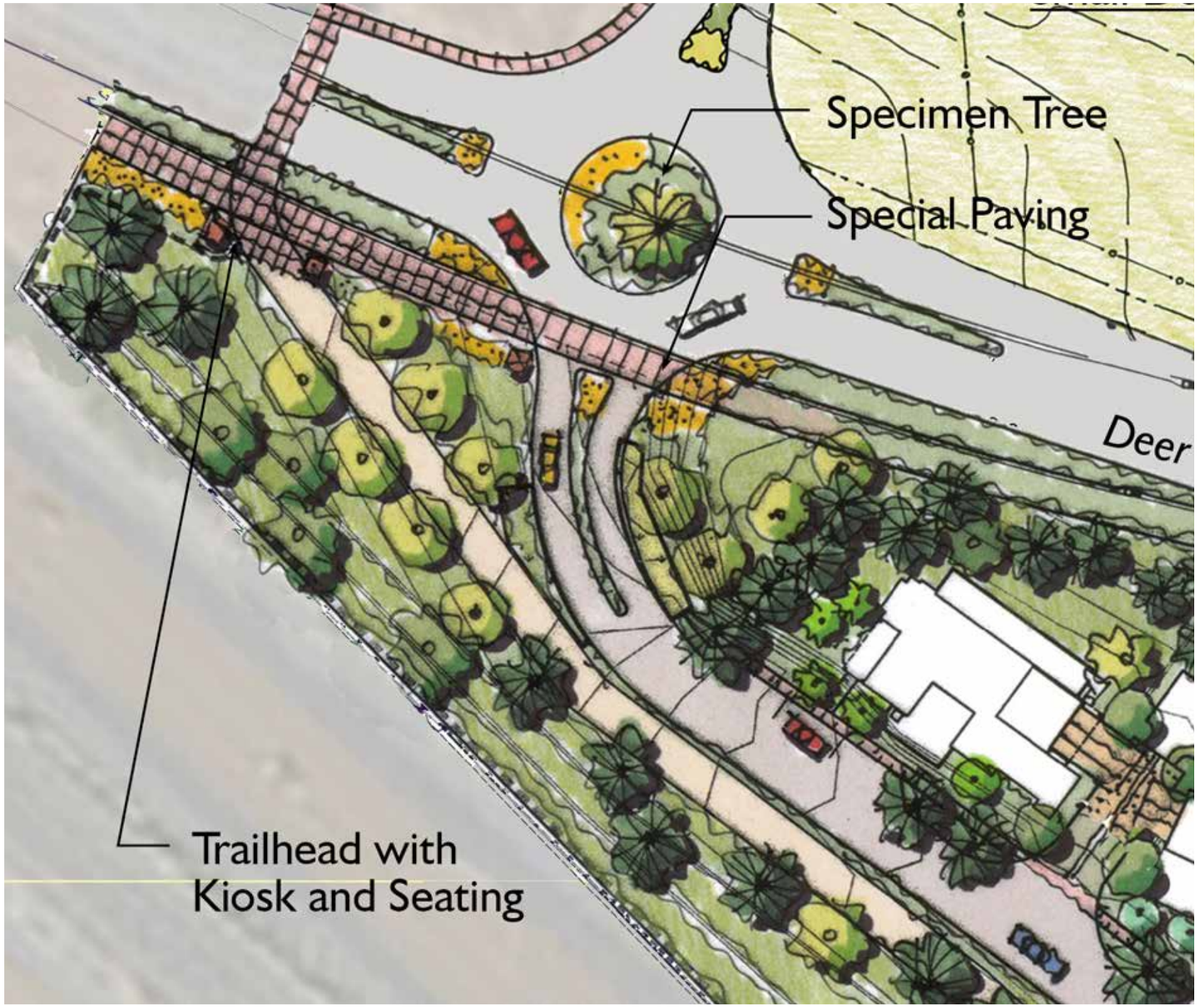
15. Exterior Lighting
    a. Exterior lighting on campus is switched on and off by the Building Management System administered by the Facilities engineers. If landscaping staff notice any lights which seem to be malfunctioning, or other maintenance needs, they should report it.

16. Surveillance Cameras
    a. Fixed surveillance cameras are installed at various locations to record exterior activity so that events can be reconstructed later. There are also license plate capture cameras at the Skyline and Sharp Park entrances. The cameras are operated by Public Safety. If landscaping staff notice any damage to the cameras or poles, they should report it.

How to proceed:

- Locate the relevant maintenance area on this map.
- Refer to the page number that is associated with the area.
  This will lead to the planting and irrigation information of the area.
- Refer to Plant List and Materials on Page XX for the individual plant information and photos.
- Refer to Landscape Maintenance Guidelines on Page X for general directions.
- See Appendix on Page XX for maintenance forms and tables.

This page has been intentionally left blank.

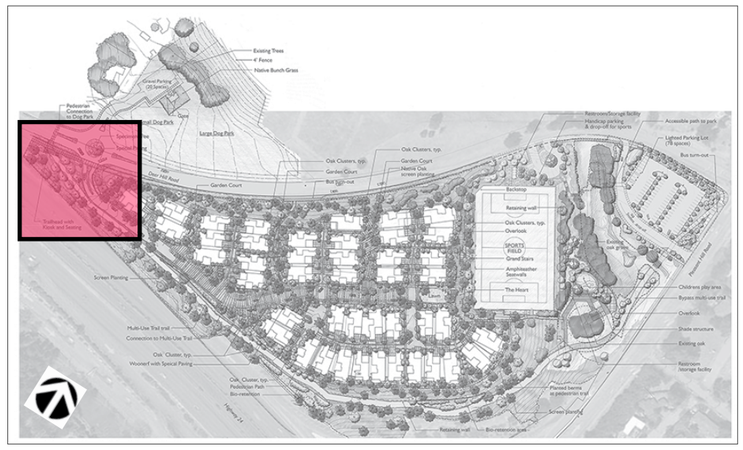


Intent:

General:

Trees:
-
-

Shrubs and Groundcover:
-
-
-
-



TREE, SHRUB AND GROUNDCOVER PLAN

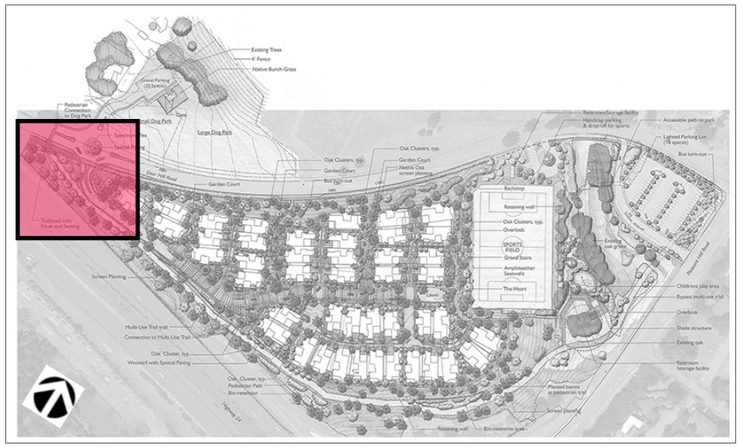
Entry at Deer Hill Road

PLANTING PLAN

TREES			
	Symbol	Botanical Name	Common Name
SHRUBS			
	Symbol	Botanical Name	Common Name
GROUNDCOVERS			
	Symbol	Botanical Name	Common Name

0 15 30 60ft

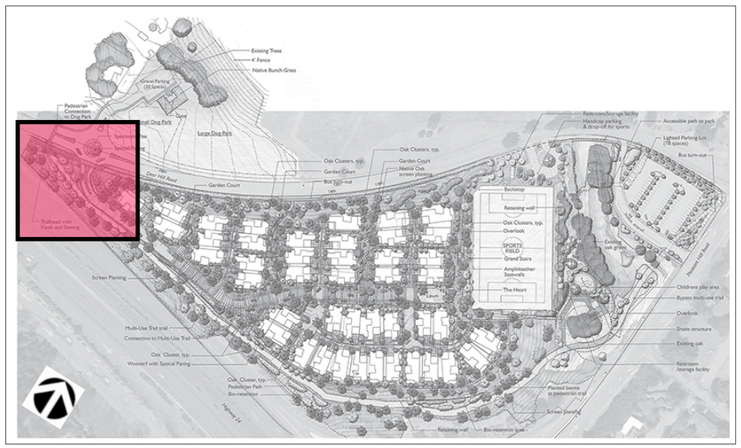
See page XX for more details on plant maintenance and plant images.



IRRIGATION PLAN

0 15 30 60ft

IRRIGATION LEGEND



The Heart: A

Intent:

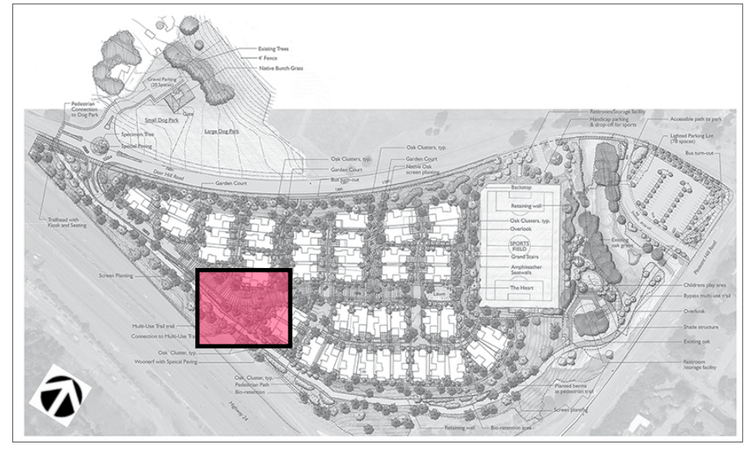
General:

Trees:

-
-

Shrubs and Groundcover:

-
-
-
-

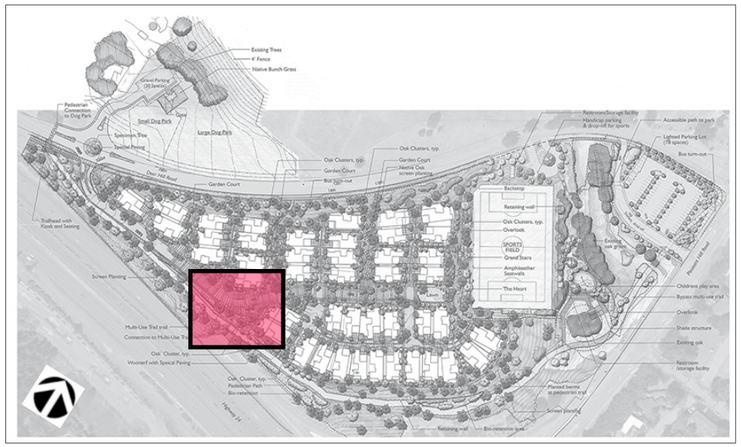


The Heart: A

PLANTING PLAN

0 15 30 60ft

TREES			
	Symbol	Botanical Name	Common Name
SHRUBS			
	Symbol	Botanical Name	Common Name
GROUNDCOVERS			
	Symbol	Botanical Name	Common Name

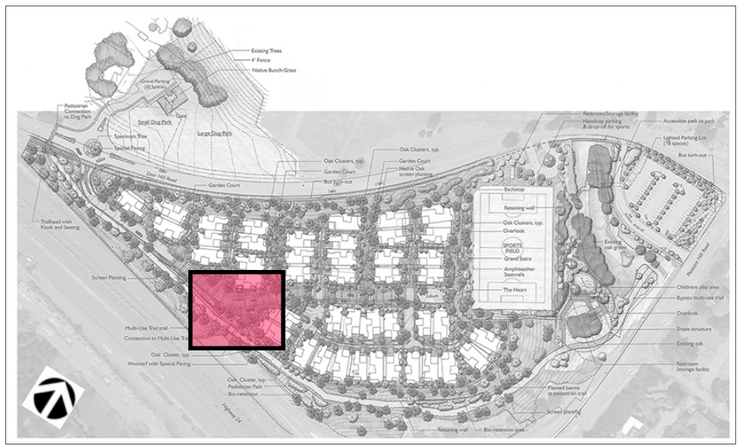


See page XX for more details on plant maintenance and plant images.

IRRIGATION PLAN

0 15 30 60ft

IRRIGATION LEGEND

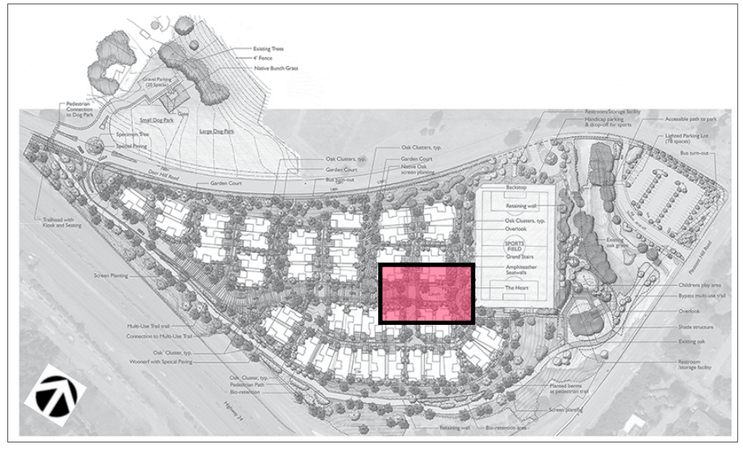


Intent:

General:

Trees:
-
-

Shrubs and Groundcover:
-
-
-
-



TREE, SHRUB AND GROUNDCOVER PLAN

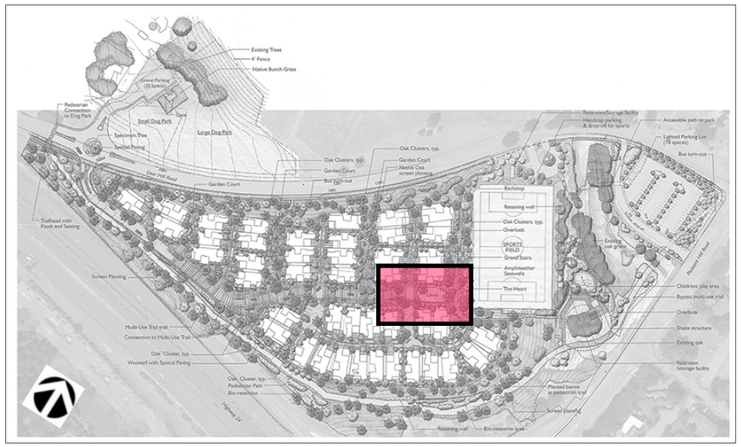
The Heart: B

PLANTING PLAN

TREES			
	Symbol	Botanical Name	Common Name
SHRUBS			
	Symbol	Botanical Name	Common Name
GROUNDCOVERS			
	Symbol	Botanical Name	Common Name

0 15 30 60ft

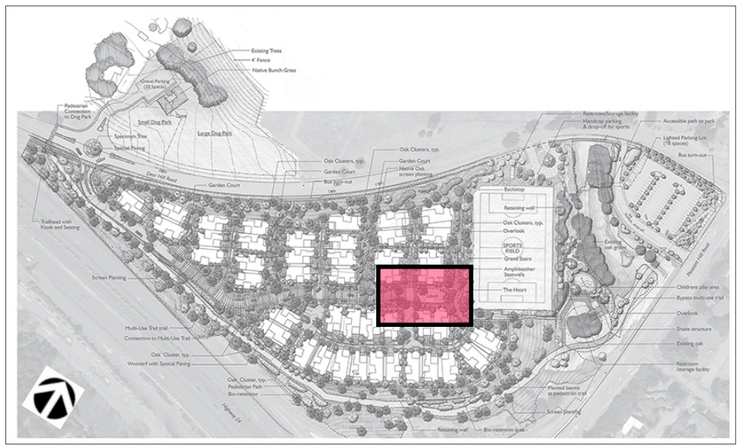
See page XX for more details on plant maintenance and plant images.

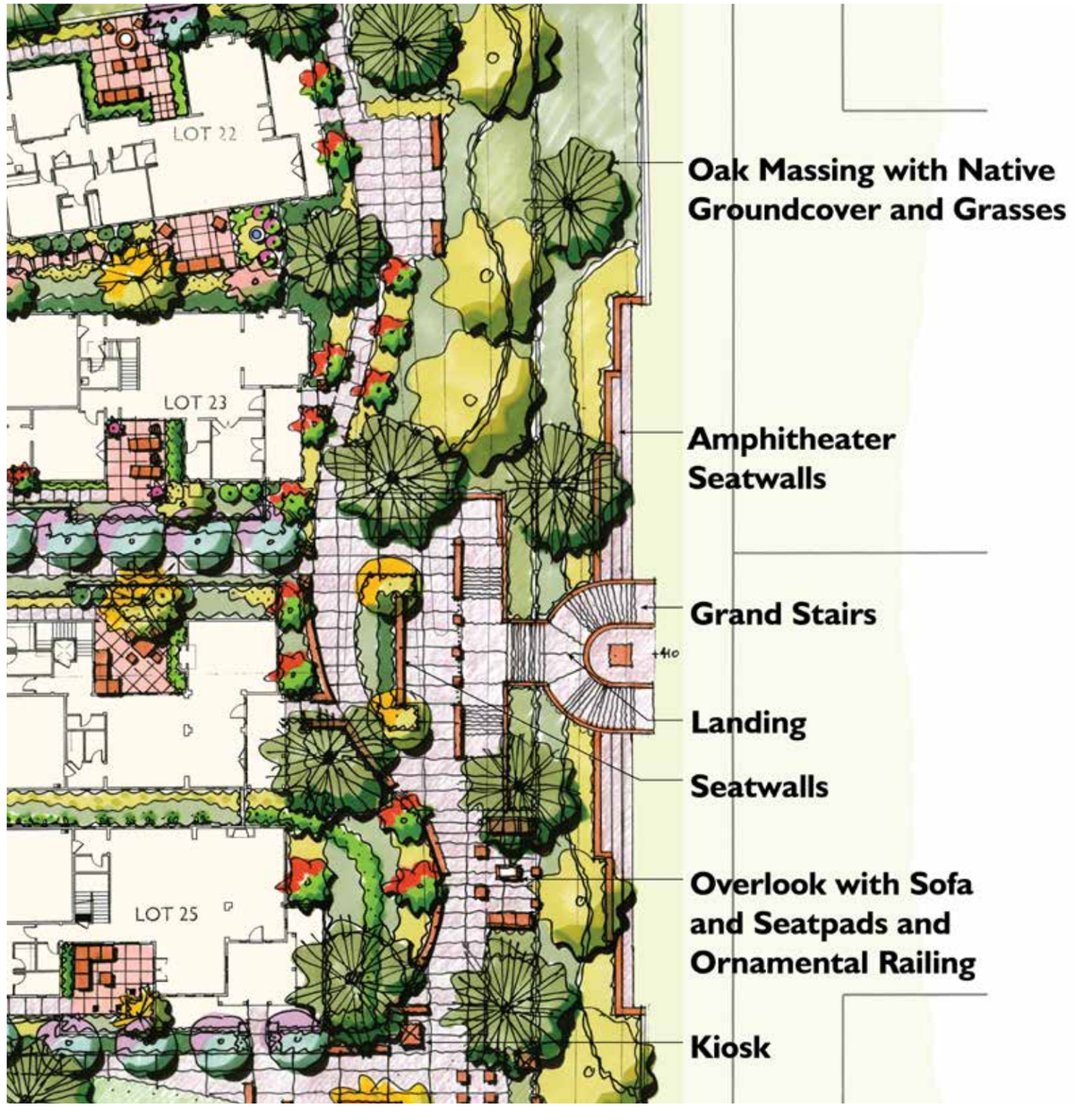


IRRIGATION PLAN

0 15 30 60ft

IRRIGATION LEGEND



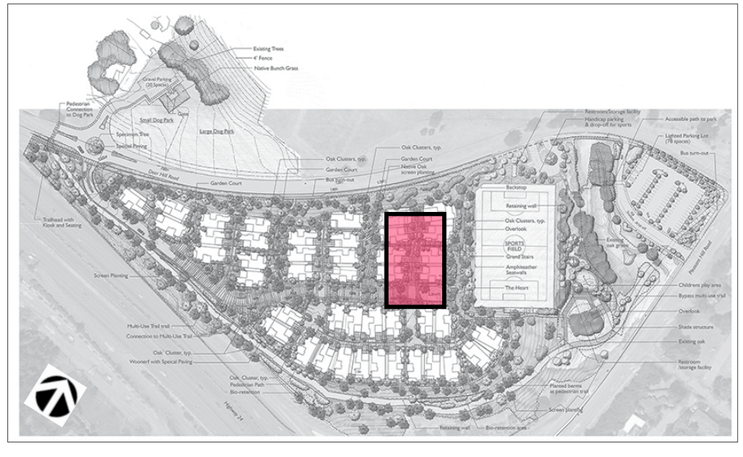


Intent:

General:

Trees:
-
-

Shrubs and Groundcover:
-
-
-
-



TREE, SHRUB AND GROUNDCOVER PLAN

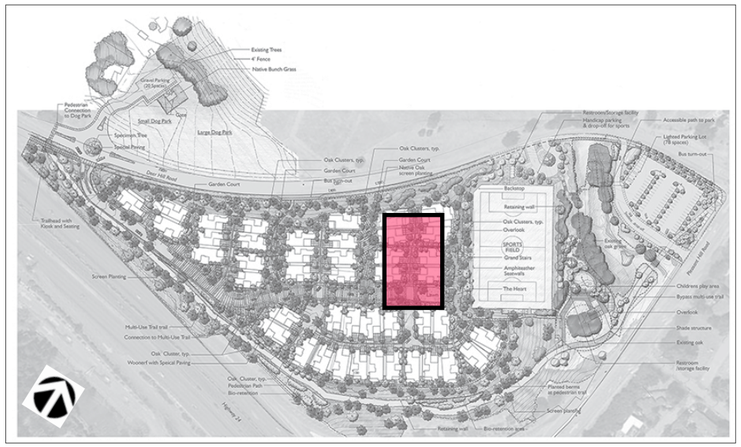
The Heart: C

PLANTING PLAN

TREES			
	Symbol	Botanical Name	Common Name
SHRUBS			
	Symbol	Botanical Name	Common Name
GROUNDCOVERS			
	Symbol	Botanical Name	Common Name

0 15 30 60ft

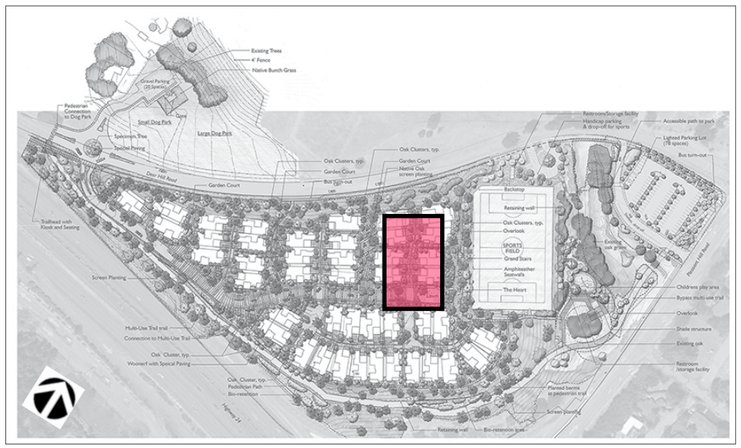
See page XX for more details on plant maintenance and plant images.



IRRIGATION PLAN

0 15 30 60ft

IRRIGATION LEGEND

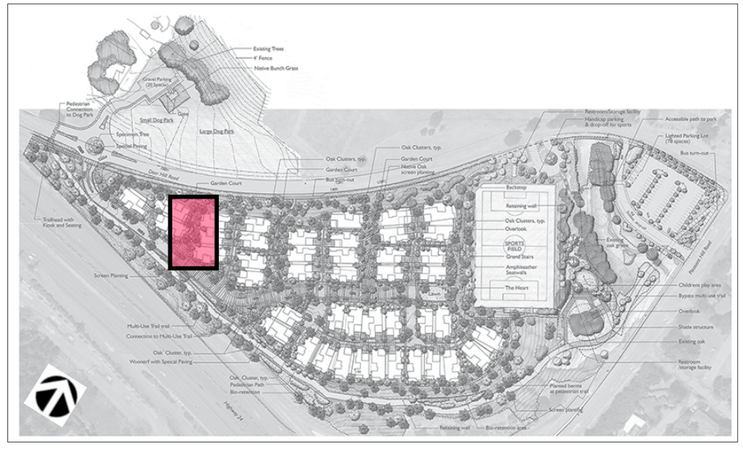


Intent:

General:

Trees:
-
-

Shrubs and Groundcover:
-
-
-
-



TREE, SHRUB AND GROUNDCOVER PLAN

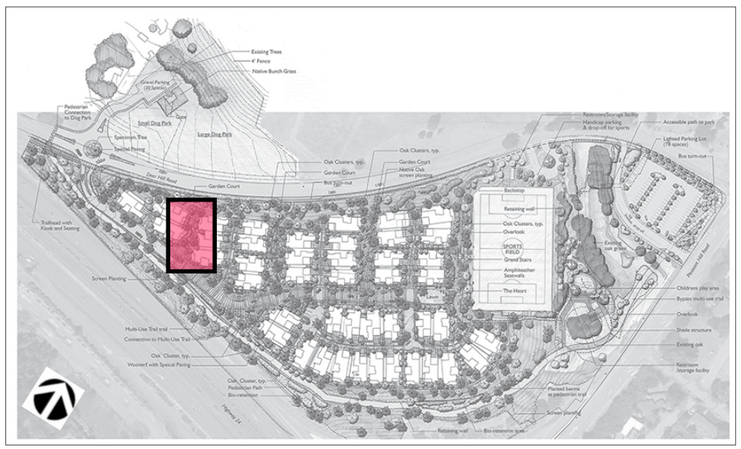
Courtyard: A

PLANTING PLAN

TREES			
	Symbol	Botanical Name	Common Name
SHRUBS			
	Symbol	Botanical Name	Common Name
GROUNDCOVERS			
	Symbol	Botanical Name	Common Name

0 15 30 60ft

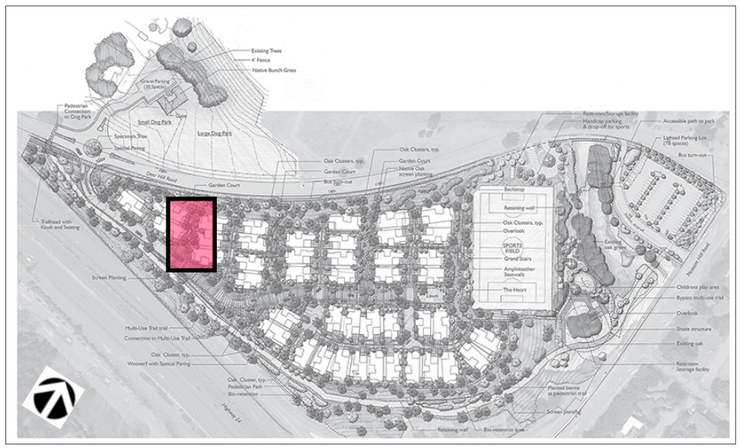
See page XX for more details on plant maintenance and plant images.



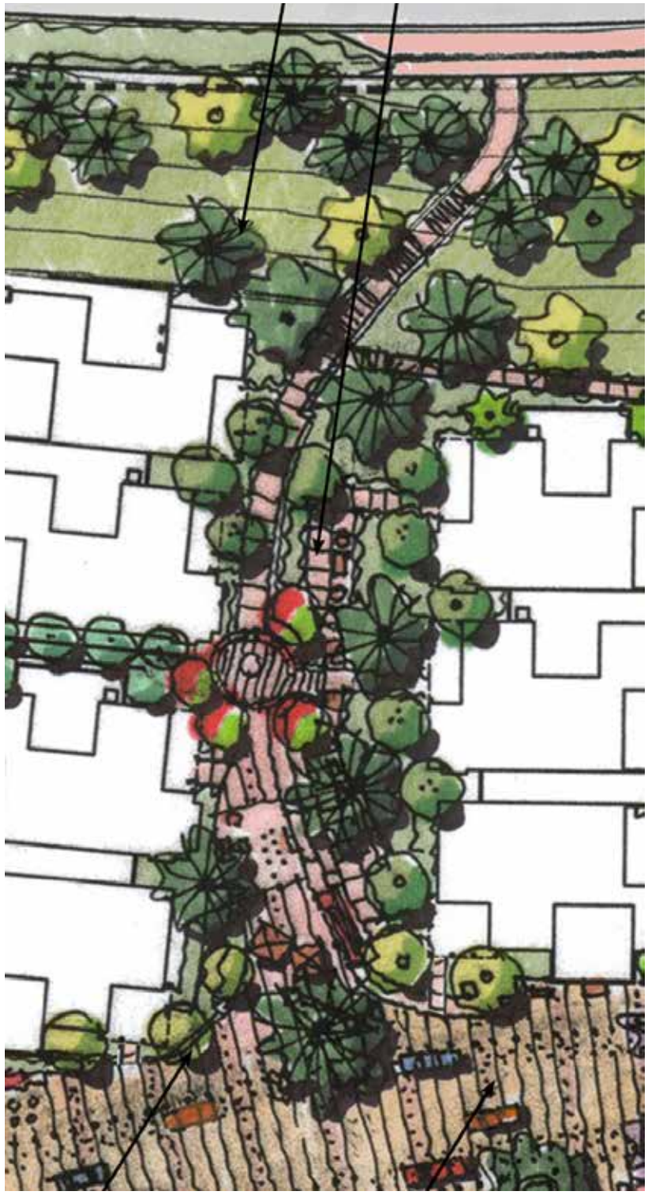
IRRIGATION PLAN

0 15 30 60ft

IRRIGATION LEGEND



Courtyard: B



Intent:

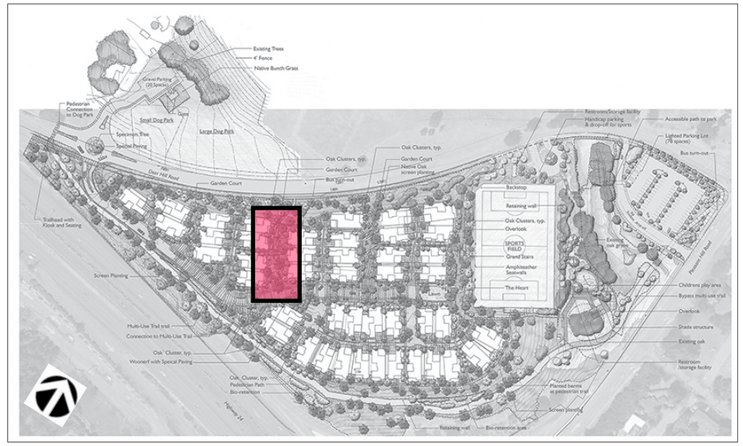
General:

Trees:

-
-

Shrubs and Groundcover:

-
-
-
-



TREE, SHRUB AND GROUNDCOVER PLAN

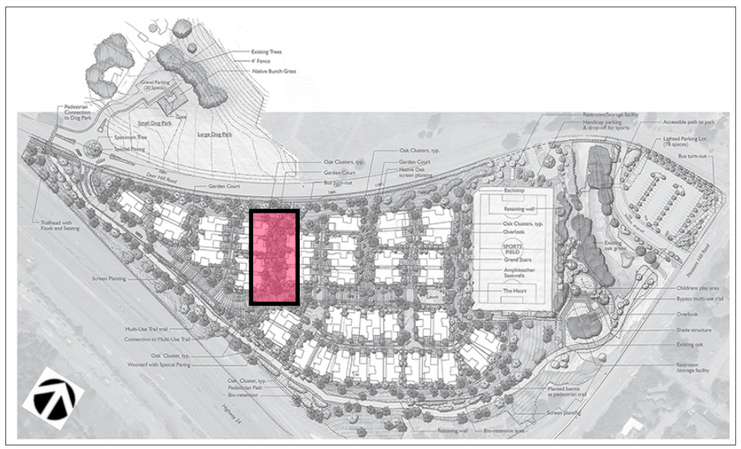
Courtyard: B

PLANTING PLAN

TREES			
	Symbol	Botanical Name	Common Name
SHRUBS			
	Symbol	Botanical Name	Common Name
GROUNDCOVERS			
	Symbol	Botanical Name	Common Name

0 15 30 60ft

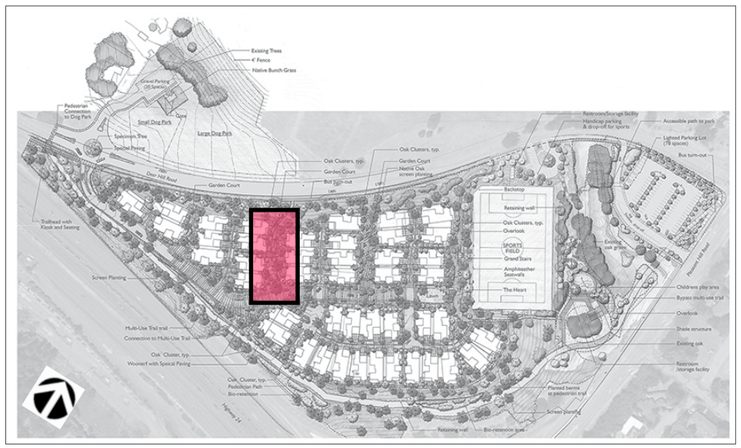
See page XX for more details on plant maintenance and plant images.



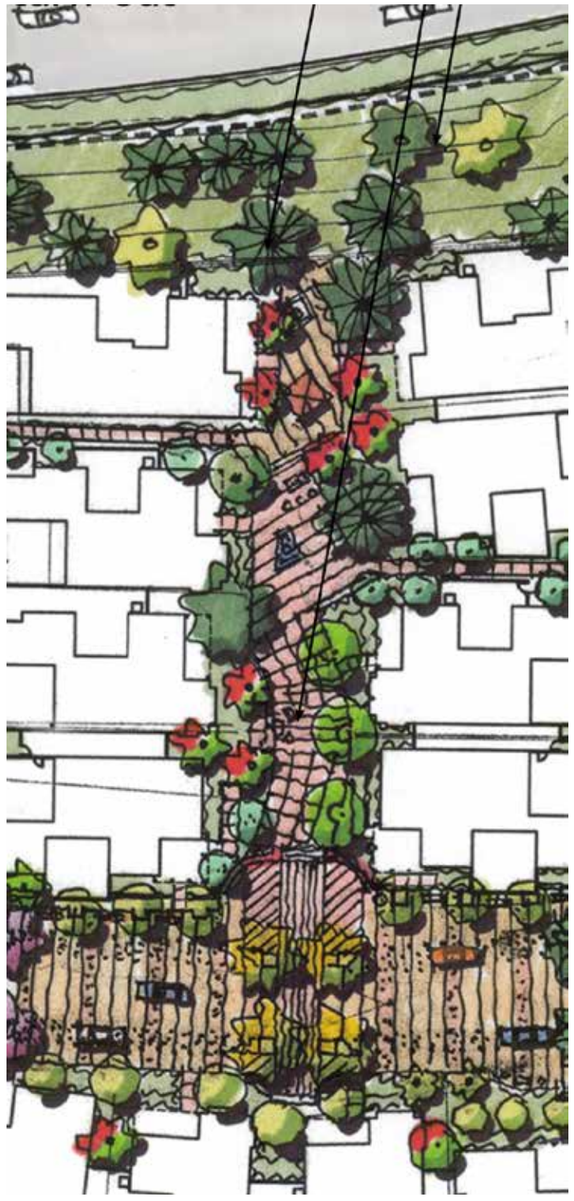
IRRIGATION PLAN

0 15 30 60ft

IRRIGATION LEGEND



Courtyard: C

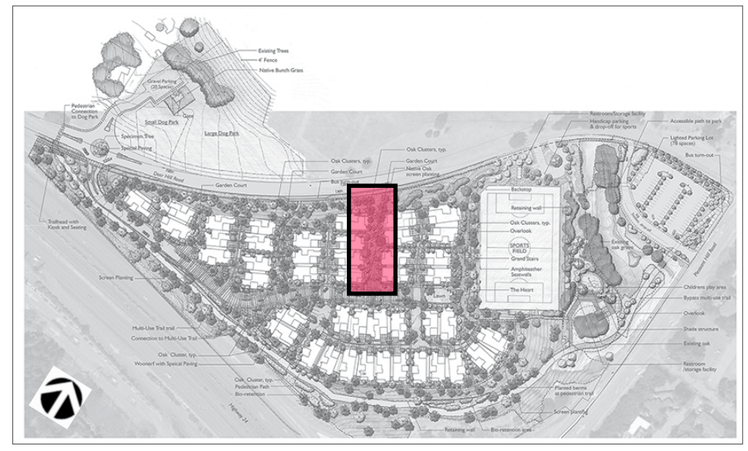


Intent:

General:

Trees:
-
-

Shrubs and Groundcover:
-
-
-
-



TREE, SHRUB AND GROUNDCOVER PLAN

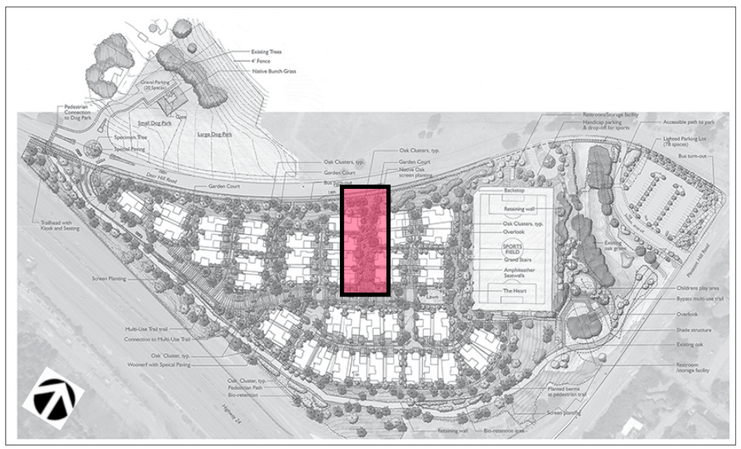
Courtyard: C

PLANTING PLAN

TREES			
	Symbol	Botanical Name	Common Name
SHRUBS			
	Symbol	Botanical Name	Common Name
GROUNDCOVERS			
	Symbol	Botanical Name	Common Name

0 15 30 60ft

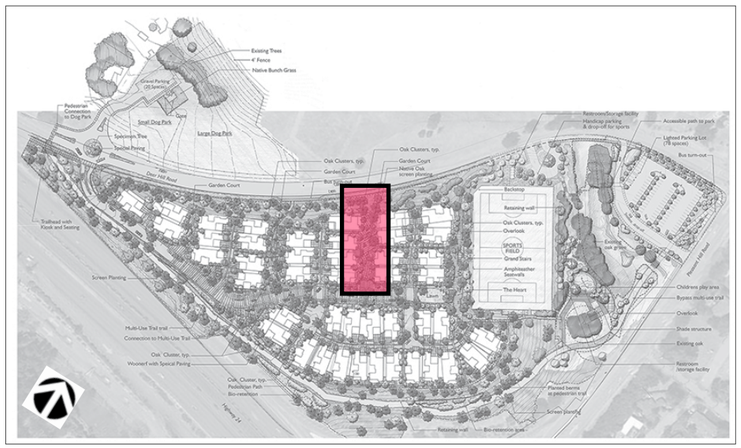
See page XX for more details on plant maintenance and plant images.



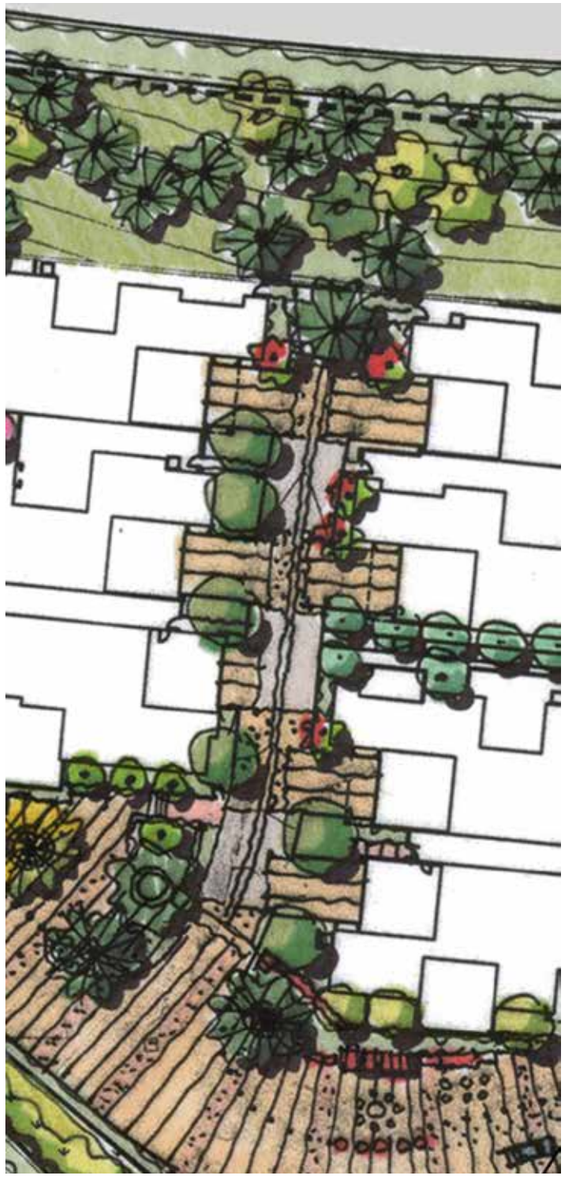
IRRIGATION PLAN

0 15 30 60ft

IRRIGATION LEGEND



Car Court: A

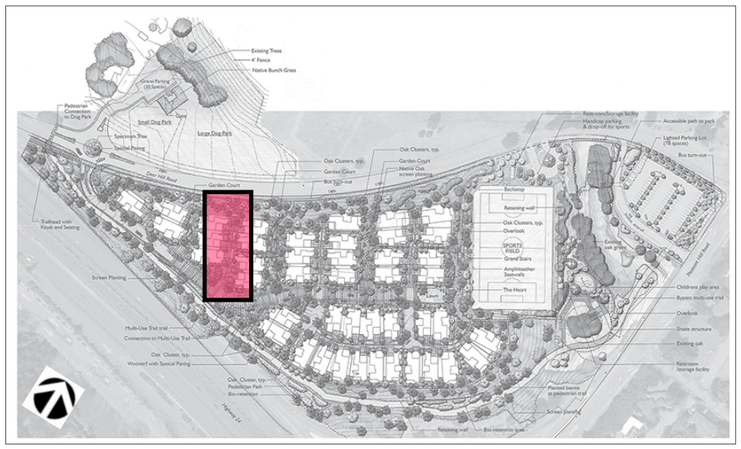


Intent:

General:

Trees:
-
-

Shrubs and Groundcover:
-
-
-
-



TREE, SHRUB AND GROUNDCOVER PLAN

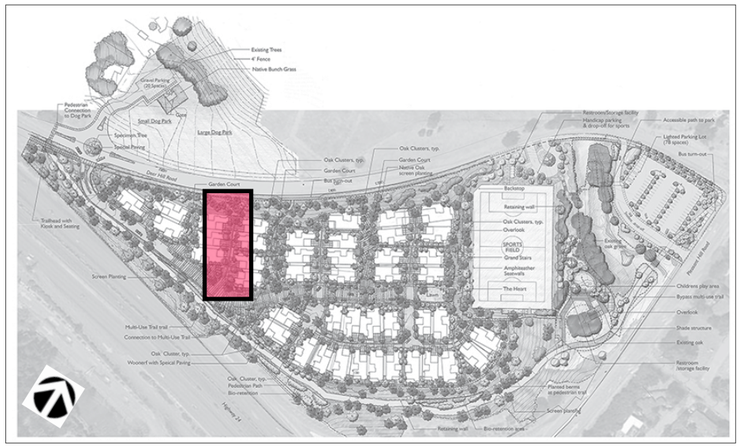
Car Court: A

PLANTING PLAN

TREES			
	Symbol	Botanical Name	Common Name
SHRUBS			
	Symbol	Botanical Name	Common Name
GROUNDCOVERS			
	Symbol	Botanical Name	Common Name

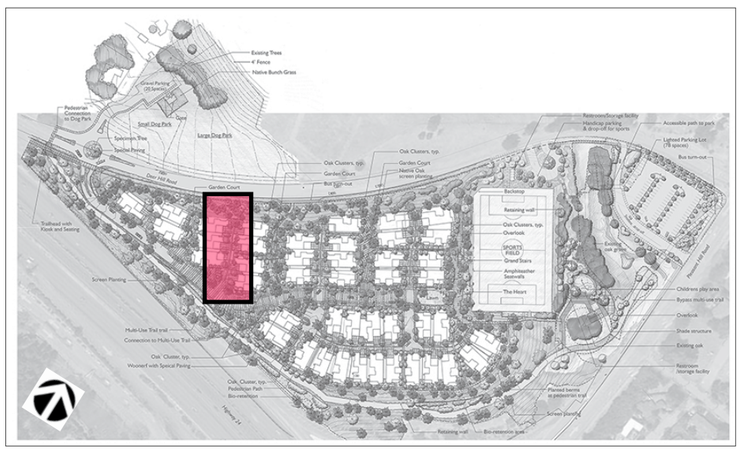
0 15 30 60ft

See page XX for more details on plant maintenance and plant images.



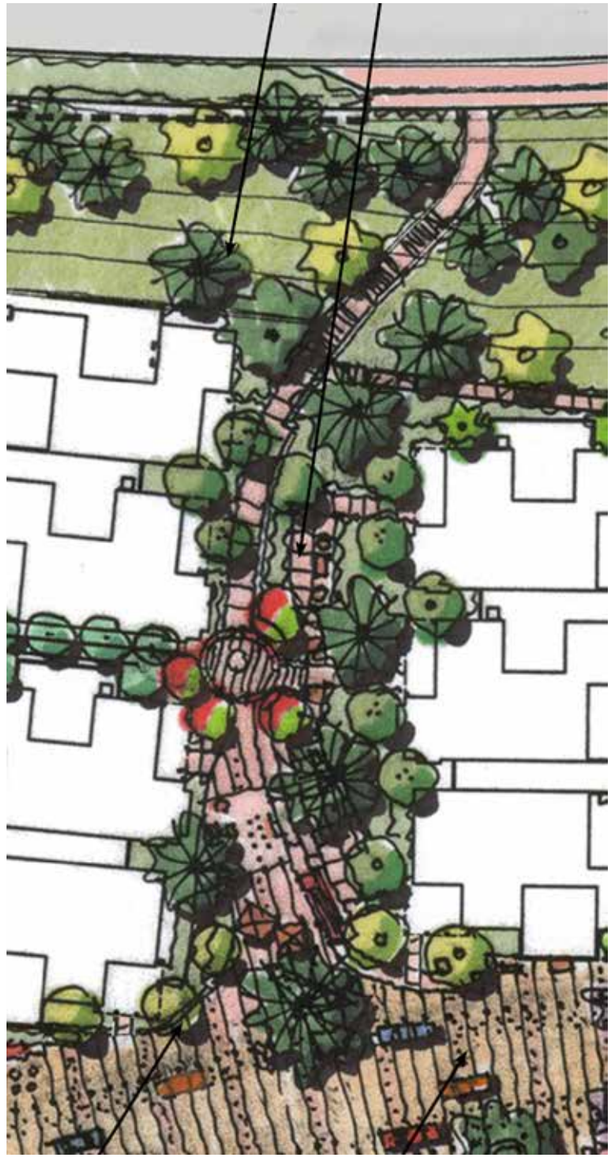
IRRIGATION PLAN

IRRIGATION LEGEND



0 15 30 60ft

Car Court: B

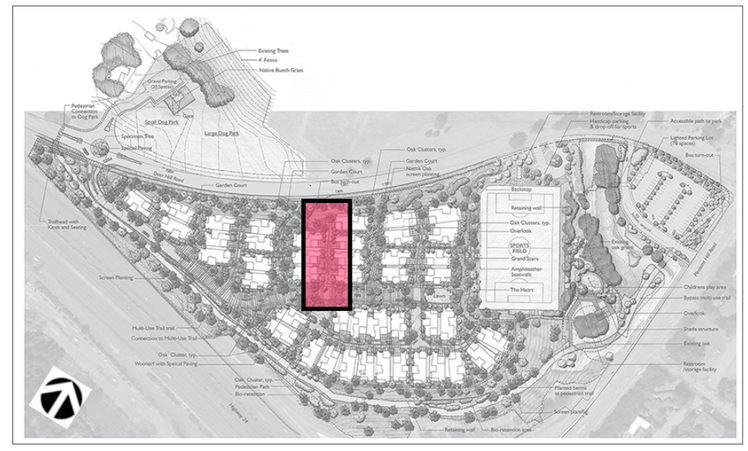


Intent:

General:

Trees:
-
-

Shrubs and Groundcover:
-
-
-
-



TREE, SHRUB AND GROUNDCOVER PLAN

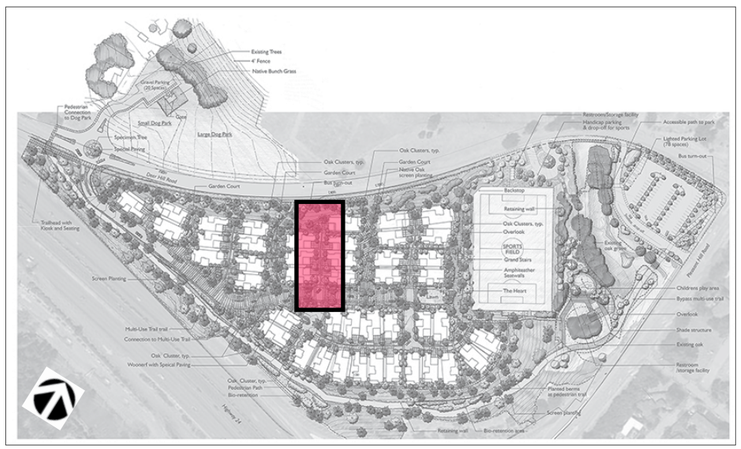
Car Court: B

PLANTING PLAN

TREES			
	Symbol	Botanical Name	Common Name
SHRUBS			
	Symbol	Botanical Name	Common Name
GROUNDCOVERS			
	Symbol	Botanical Name	Common Name

0 15 30 60ft

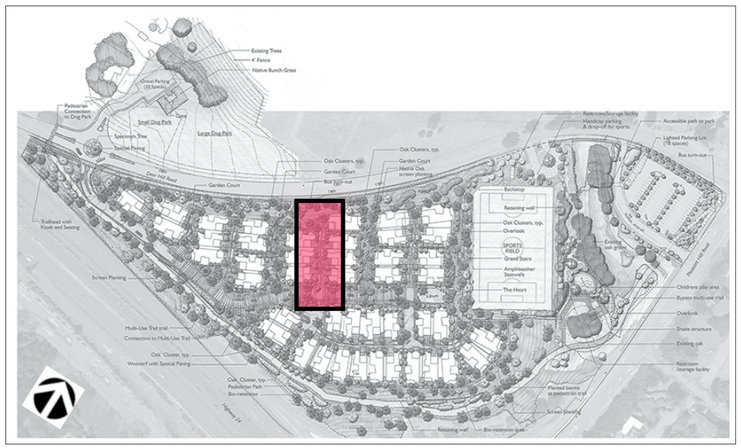
See page XX for more details on plant maintenance and plant images.



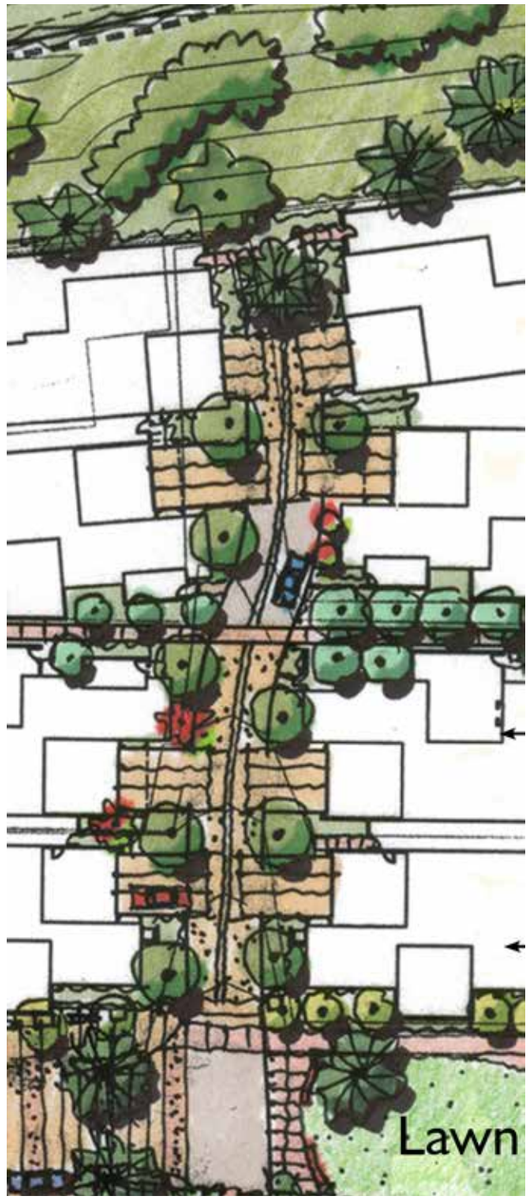
IRRIGATION PLAN

0 15 30 60ft

IRRIGATION LEGEND



Car Court: C

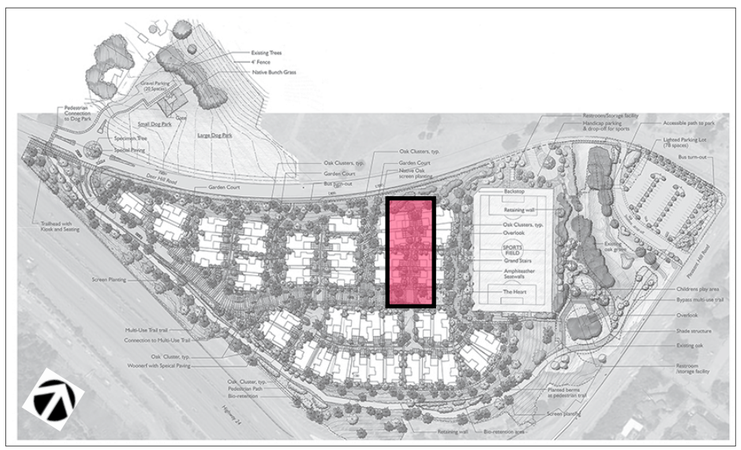


Intent:

General:

Trees:
-
-

Shrubs and Groundcover:
-
-
-
-



TREE, SHRUB AND GROUNDCOVER PLAN

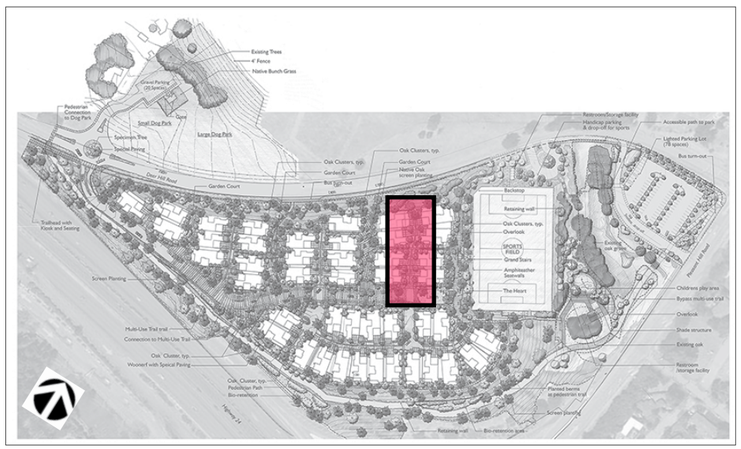
Car Court: C

PLANTING PLAN

TREES			
	Symbol	Botanical Name	Common Name
SHRUBS			
	Symbol	Botanical Name	Common Name
GROUNDCOVERS			
	Symbol	Botanical Name	Common Name

0 15 30 60ft

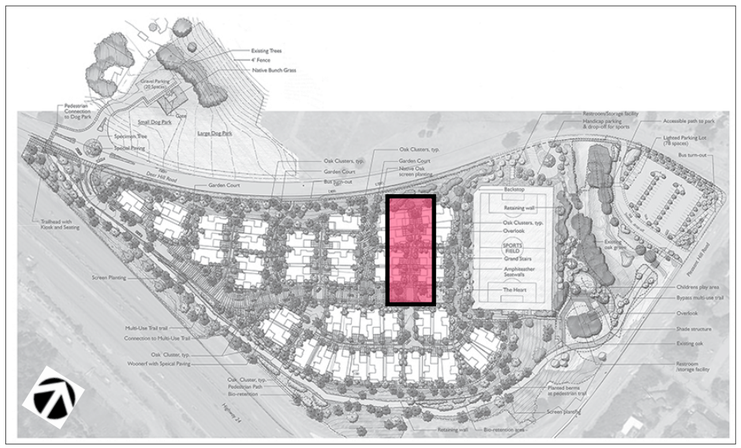
See page XX for more details on plant maintenance and plant images.

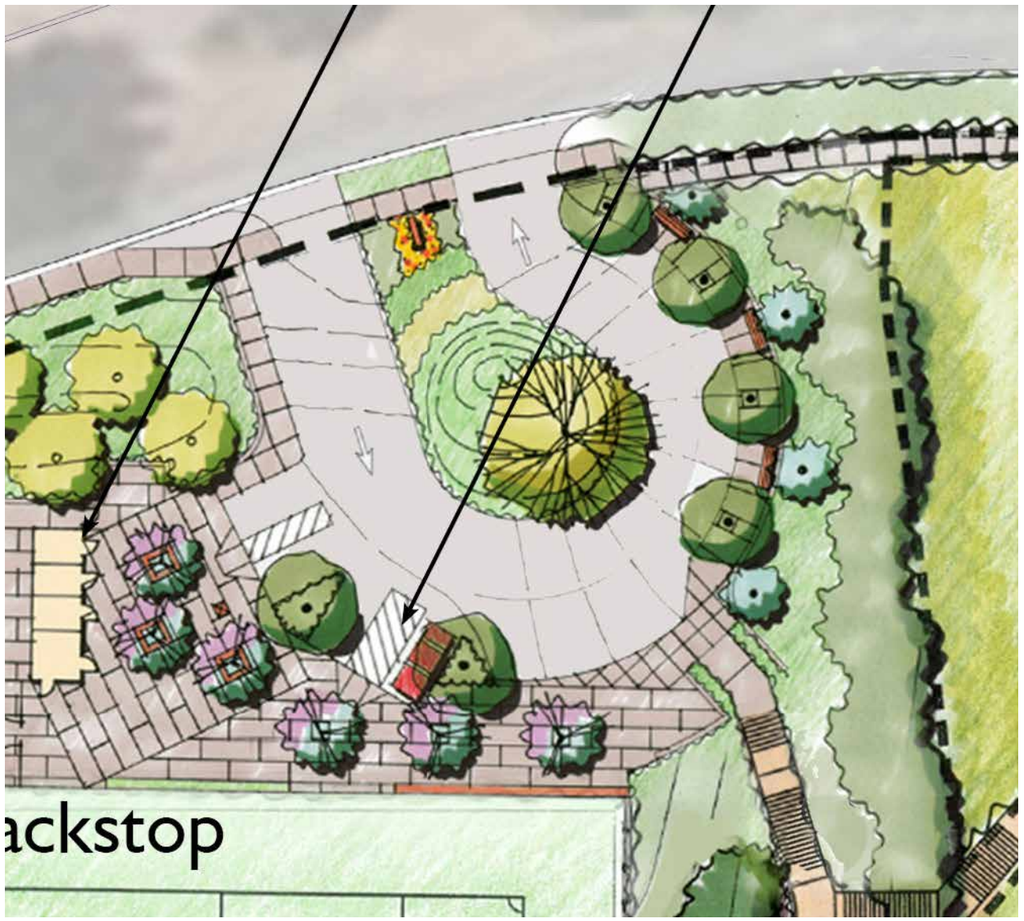


IRRIGATION PLAN

0 15 30 60ft

IRRIGATION LEGEND



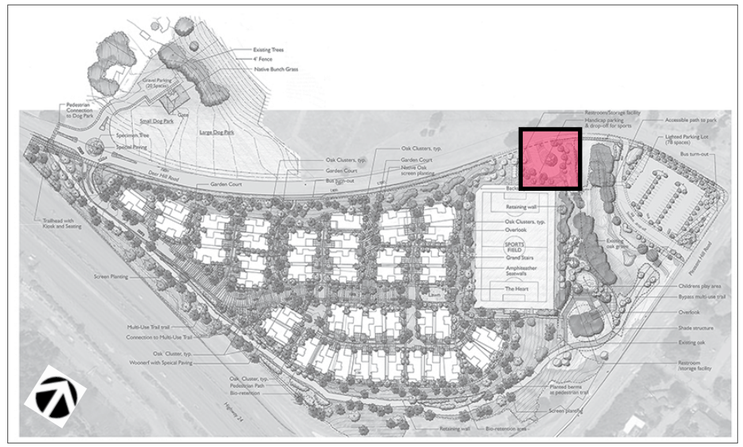


Intent:

General:

Trees:
-
-

Shrubs and Groundcover:
-
-
-
-



TREE, SHRUB AND GROUNDCOVER PLAN

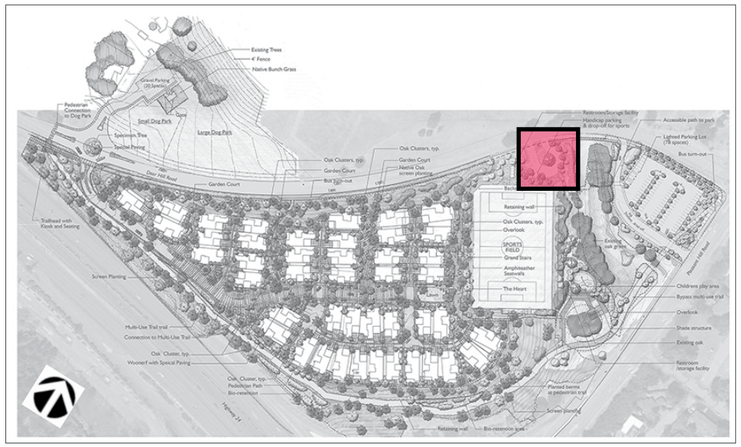
Neighborhood Park: Entry at Roundabout

PLANTING PLAN

TREES			
	Symbol	Botanical Name	Common Name
SHRUBS			
	Symbol	Botanical Name	Common Name
GROUNDCOVERS			
	Symbol	Botanical Name	Common Name

0 15 30 60ft

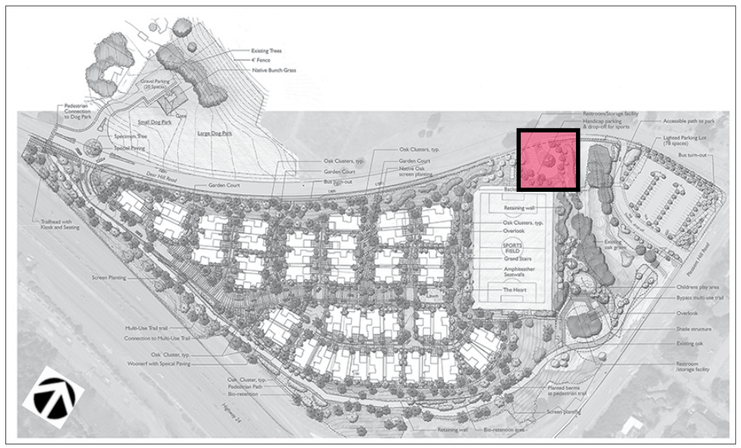
See page XX for more details on plant maintenance and plant images.

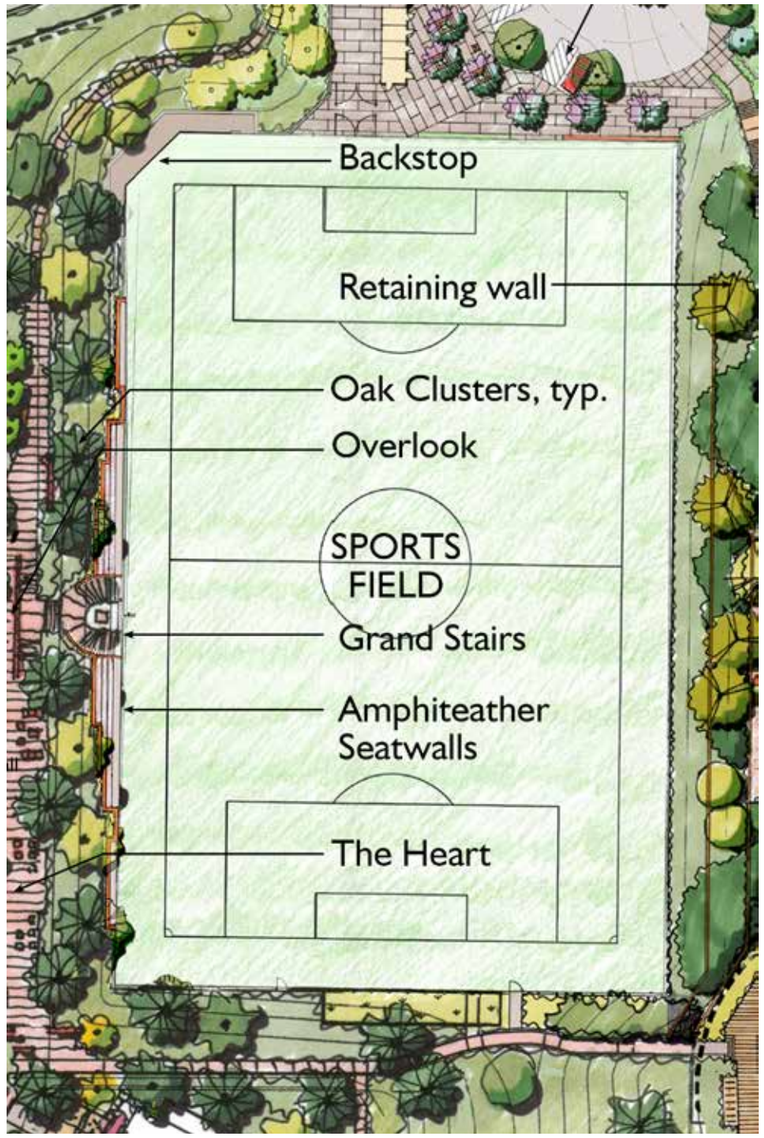


IRRIGATION PLAN

0 15 30 60ft

IRRIGATION LEGEND



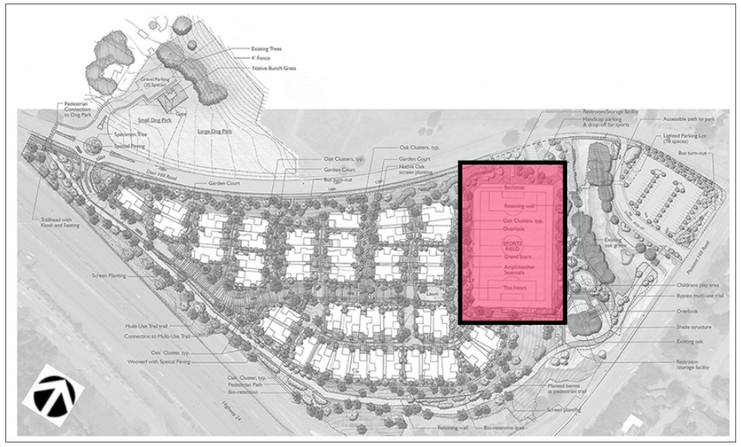


Intent:

General:

Trees:
-
-

Shrubs and Groundcover:
-
-
-
-



TREE, SHRUB AND GROUNDCOVER PLAN

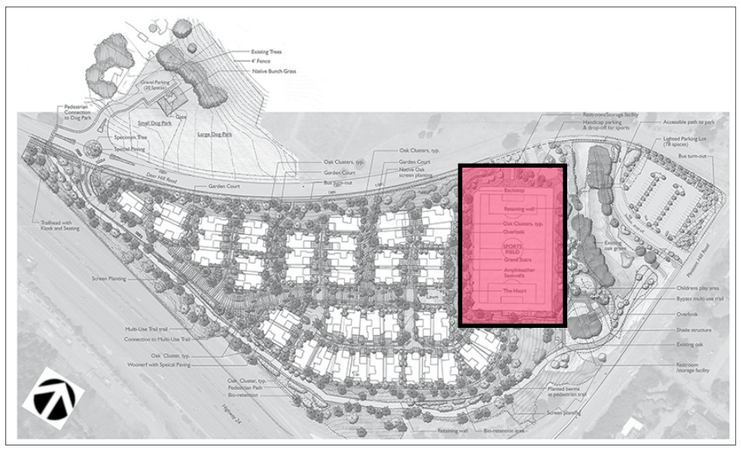
Neighborhood Park: Sports Field

PLANTING PLAN

TREES			
	Symbol	Botanical Name	Common Name
SHRUBS			
	Symbol	Botanical Name	Common Name
GROUNDCOVERS			
	Symbol	Botanical Name	Common Name

0 15 30 60ft

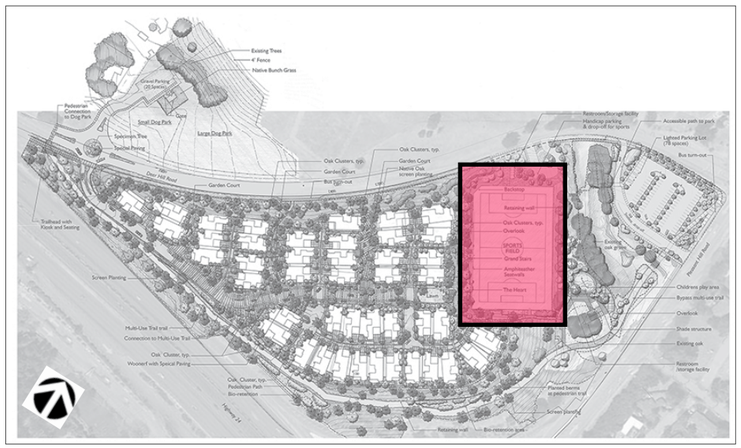
See page XX for more details on plant maintenance and plant images.

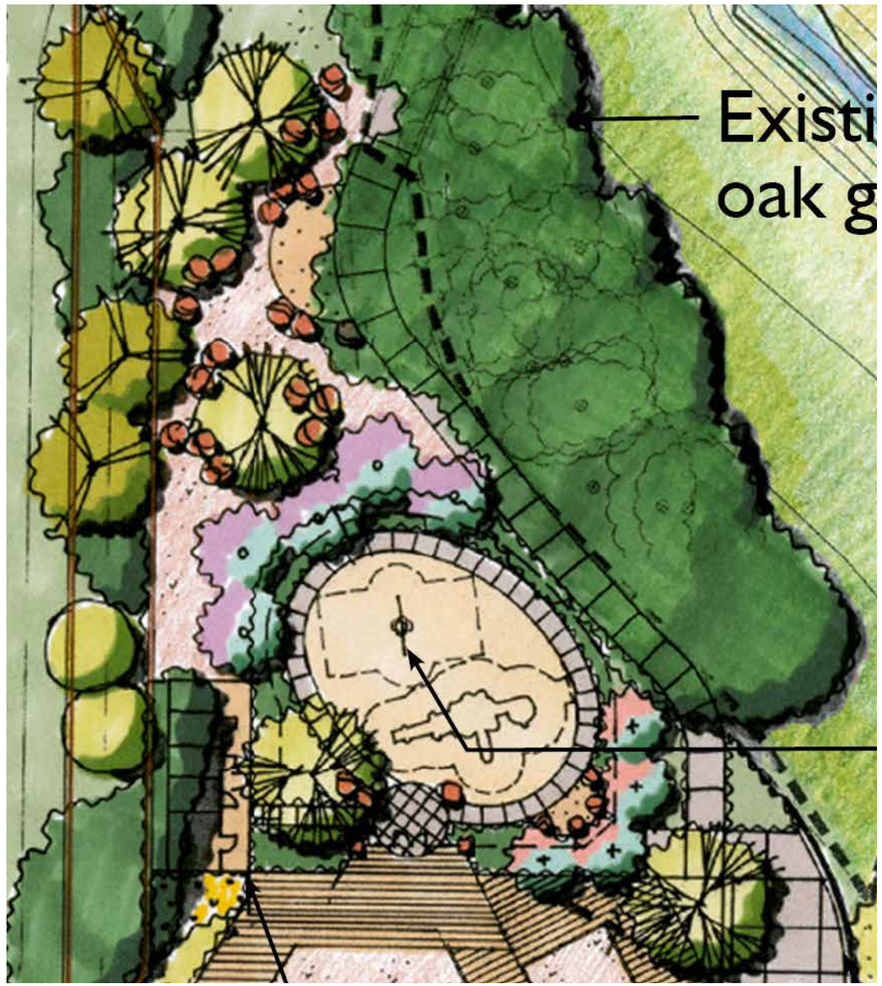


IRRIGATION PLAN

0 15 30 60ft

IRRIGATION LEGEND



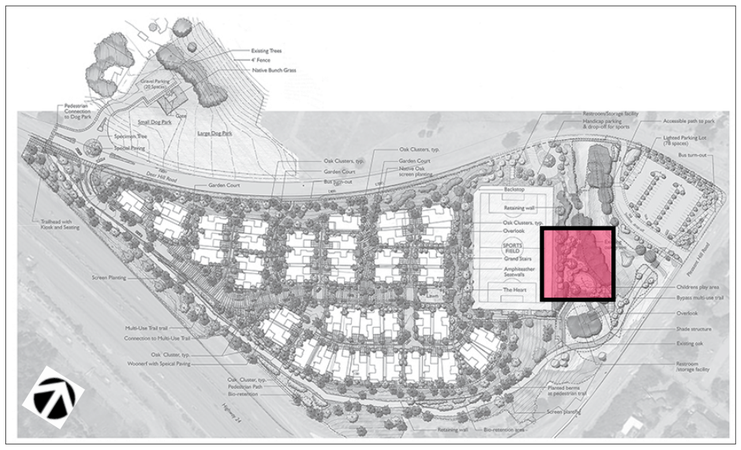


Intent:

General:

Trees:
-
-

Shrubs and Groundcover:
-
-
-
-



TREE, SHRUB AND GROUNDCOVER PLAN

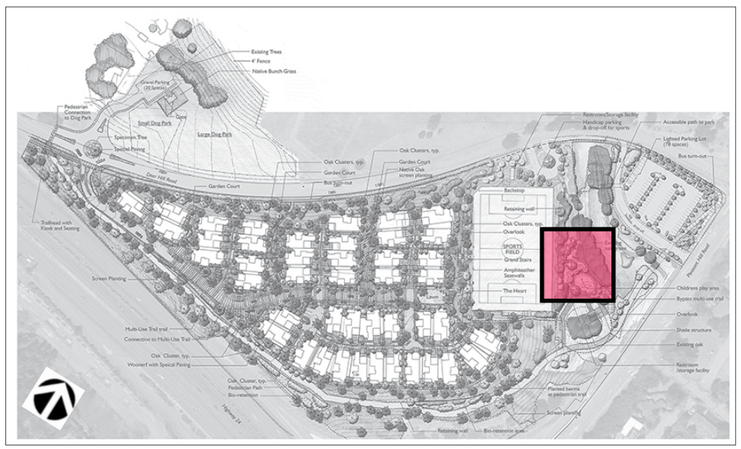
Neighborhood Park: Play Area

PLANTING PLAN

TREES			
	Symbol	Botanical Name	Common Name
SHRUBS			
	Symbol	Botanical Name	Common Name
GROUNDCOVERS			
	Symbol	Botanical Name	Common Name

0 15 30 60ft

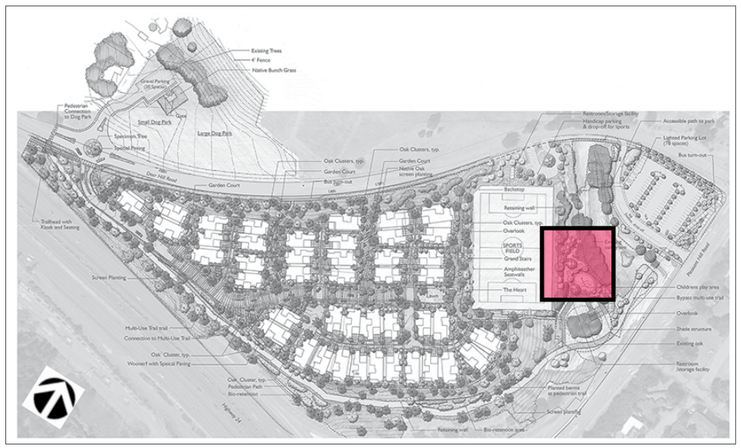
See page XX for more details on plant maintenance and plant images.

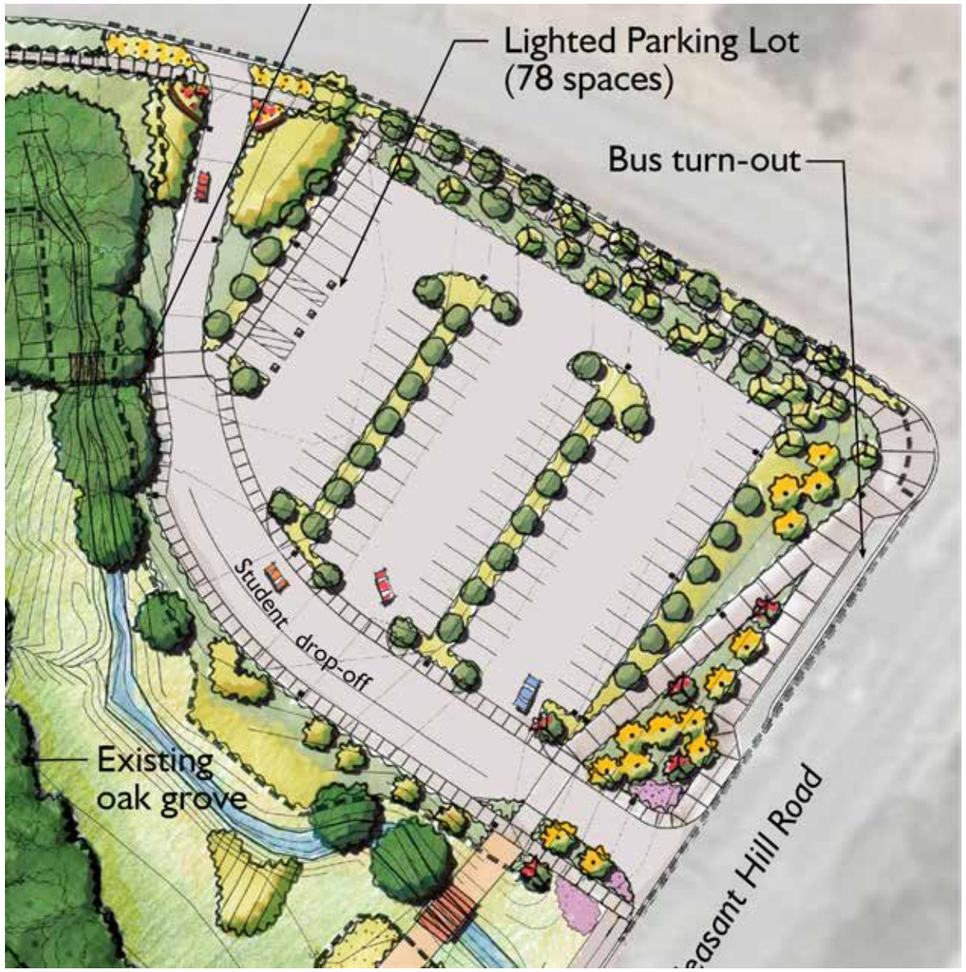


IRRIGATION PLAN

0 15 30 60ft

IRRIGATION LEGEND



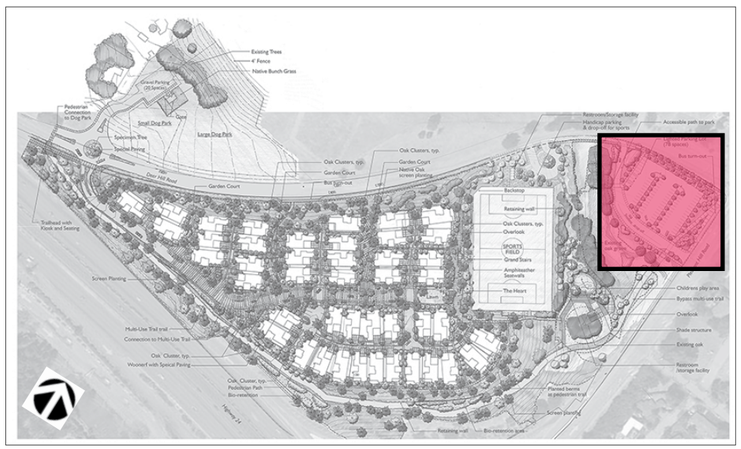


Intent:

General:

Trees:
-
-

Shrubs and Groundcover:
-
-
-
-



TREE, SHRUB AND GROUNDCOVER PLAN

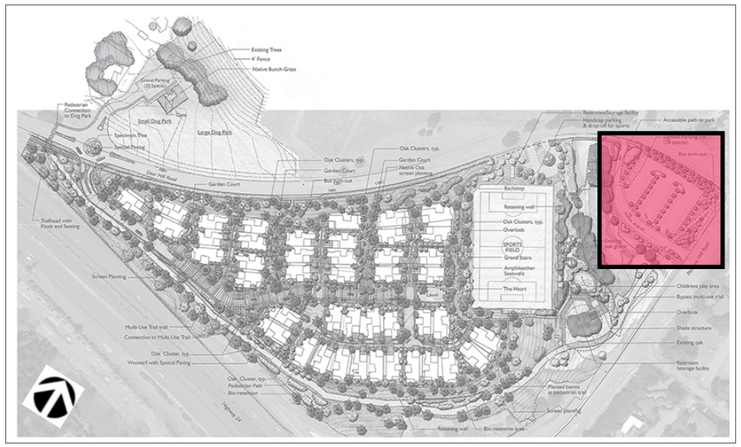
Neighborhood Park: Parking Lot

PLANTING PLAN

TREES			
	Symbol	Botanical Name	Common Name
SHRUBS			
	Symbol	Botanical Name	Common Name
GROUNDCOVERS			
	Symbol	Botanical Name	Common Name

0 15 30 60ft

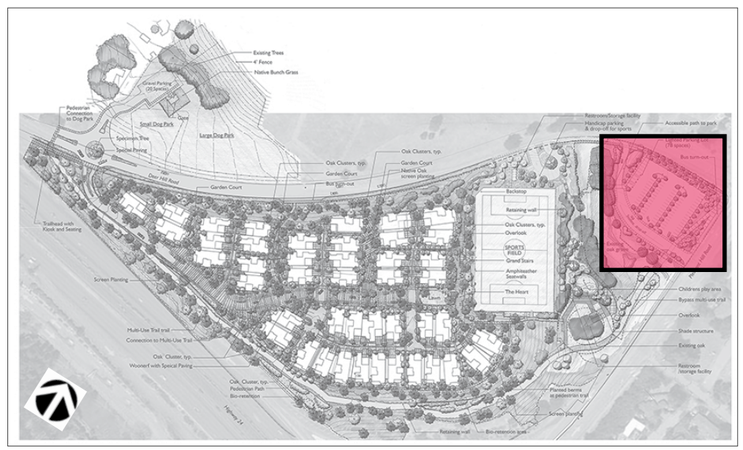
See page XX for more details on plant maintenance and plant images.



IRRIGATION PLAN

IRRIGATION LEGEND

0 15 30 60ft

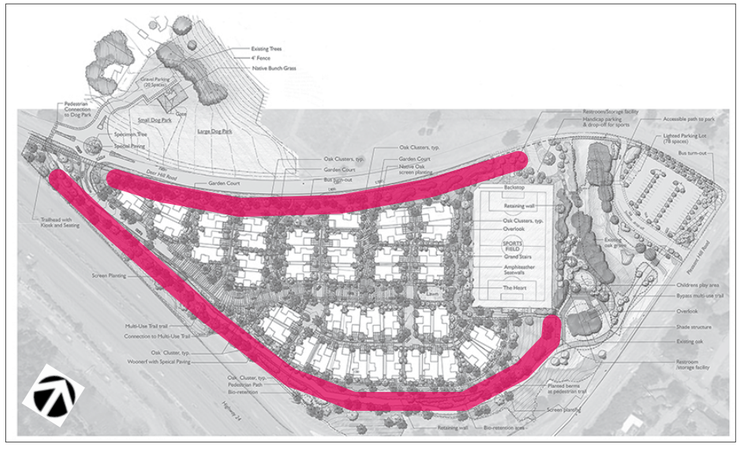


Intent:

General:

Trees:
•
•

Shrubs and Groundcover:
•
•
•
•



TREE, SHRUB AND GROUNDCOVER PLAN

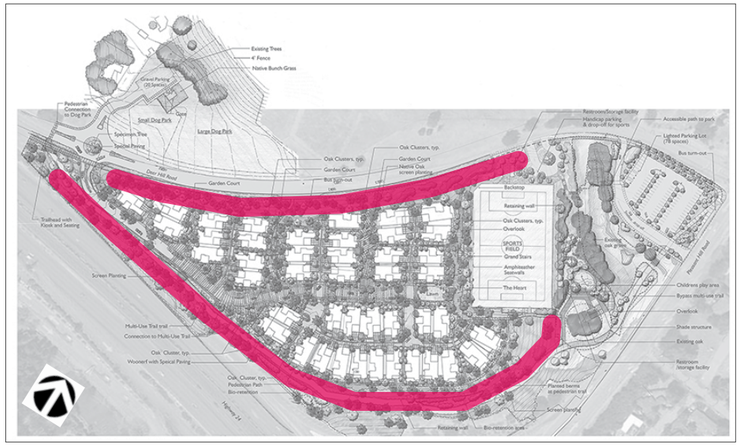
Perimeter Planting

PLANTING PLAN

TREES			
	Symbol	Botanical Name	Common Name
SHRUBS			
	Symbol	Botanical Name	Common Name
GROUNDCOVERS			
	Symbol	Botanical Name	Common Name

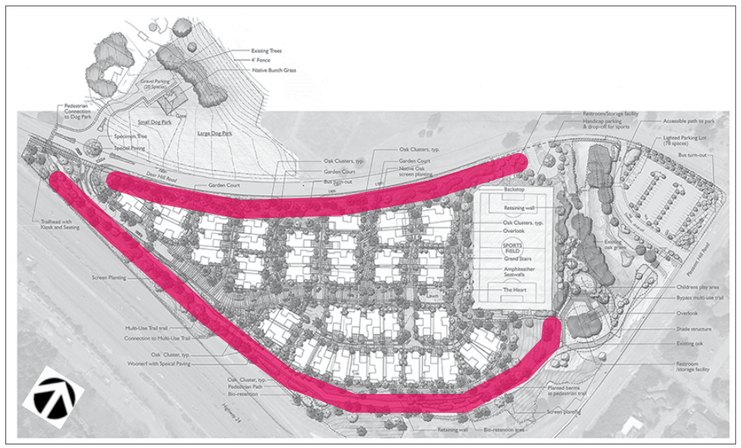
0 15 30 60ft

See page XX for more details on plant maintenance and plant images.

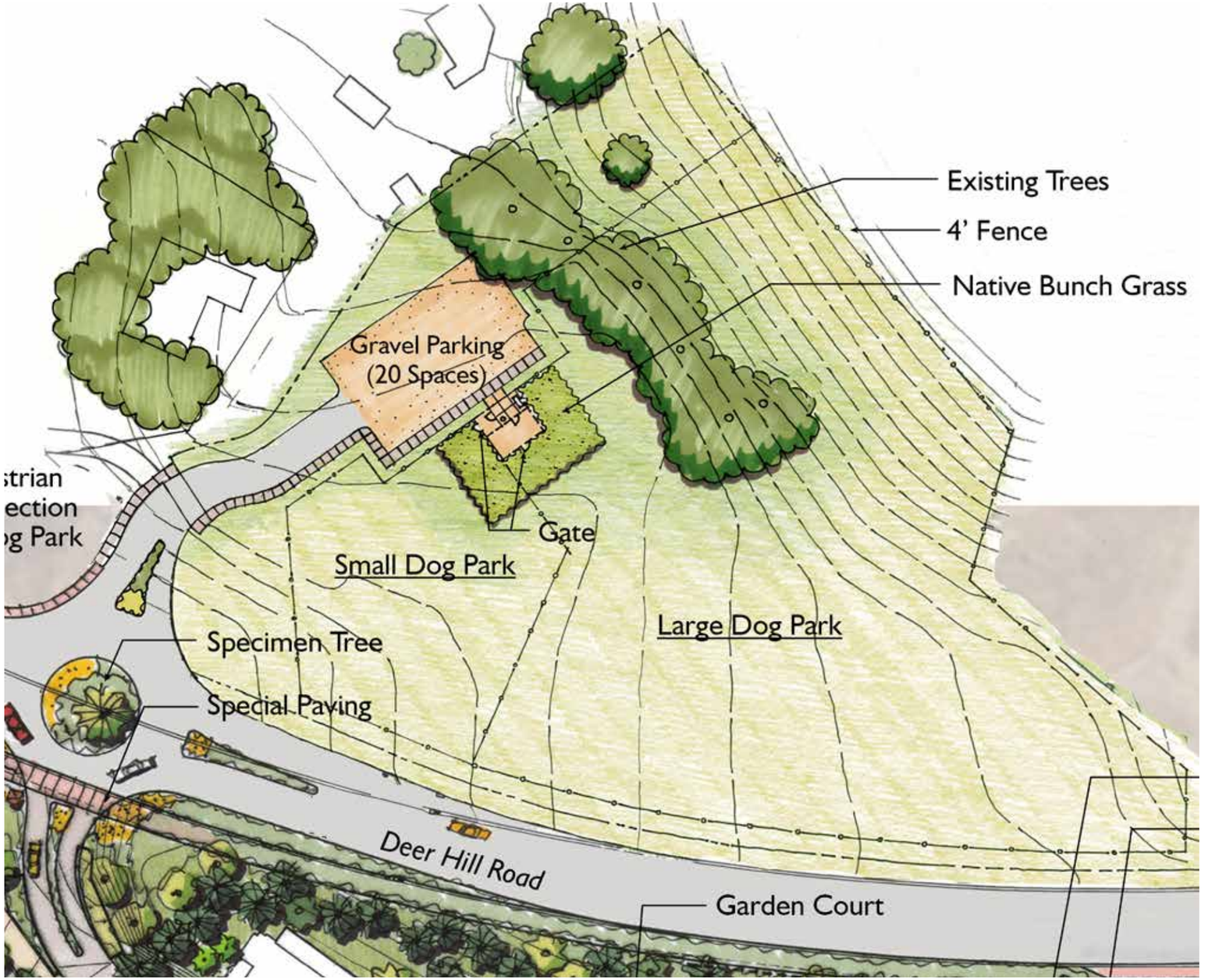


IRRIGATION PLAN

IRRIGATION LEGEND



0 15 30 60ft



Intent:

General:

Trees:
-
-

Shrubs and Groundcover:
-
-
-
-

TREE, SHRUB AND GROUNDCOVER PLAN

Dog Park

PLANTING PLAN

TREES			
	Symbol	Botanical Name	Common Name
SHRUBS			
	Symbol	Botanical Name	Common Name
GROUNDCOVERS			
	Symbol	Botanical Name	Common Name

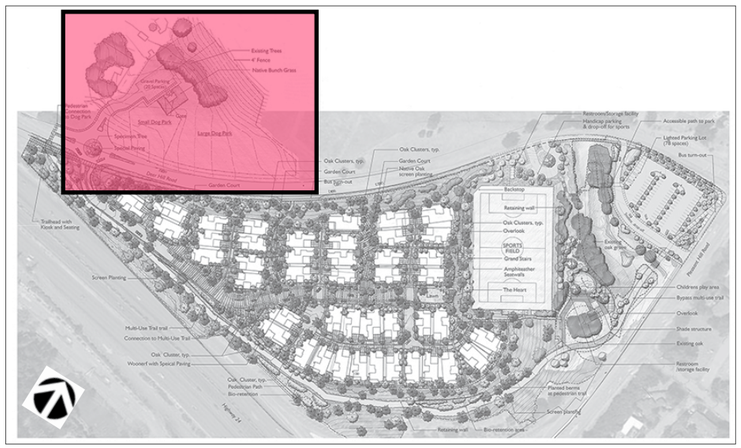
0 15 30 60ft

See page XX for more details on plant maintenance and plant images.

IRRIGATION PLAN

0 15 30 60ft

IRRIGATION LEGEND



TREES			
	Symbol	**Botanical Name**	**Common Name**
	AR	Acer macrophyllum	Big Leaf Maple
	AM	Arbutus 'Marina'	Strawberry Tree
	CM	Cupressus macrocarpa	Monterey Cypress
	KP	Koelreuteria paniculata	Goldenrain Tree
	LS	Leptospermum s. 'Red Ensign'	New Zealand Tea Tree
	MN	Melaleuca nesophila	Pink Melalueca
	MQ	Melaleuca quinquenervia	Paperbark Tree
	ME	Metrosideros excelsus	New Zealand Christmas Tree
	RM	Rhaphiolepis i. 'Majestic Beauty'	Indian Hawthorn
	TL	Tristania l. 'Eleganta'	Brisbane Box

SHRUBS			
	Symbol	**Botanical Name**	**Common Name**
	CV	Callistemon v. 'Little John'	Weeping Bottlebrush
	CO	Coleonema pulchellum 'Sunset Gold'	Pink Breath of Heaven
	DG	Dietes bicolor	Fortnight Lily
	EF	Escallonia 'Fradesii'	Escallonia
	LS	Leptospermum s. 'Red Ensign'	New Zealand Tea Tree
	LJ	Ligustrum japonicum 'Texanum'	Japanese Privet
	LP	Limonium perezii	Sea Lavender
	LC	Loropetalum c. 'Hines Purple'	Loropetalum
	MA	Mahonia aquifolium	Oregon Grape
	MC	Myrica californica	Pacific Wax Myrtle
	PE	Penstemon heterophyllus	Beard Tongue
	PH	Phormium hybrids 'Duet'	New Zealand Flax
	PD	Phormium h. 'Dusky Chief'	New Zealand Flax
	PJ	Phormium t. 'Jack Sprat'	New Zealand Flax
	PY	Phormium h. 'Yellow Wave'	New Zealand Flax
	PL	Prunus laurustinus 'Zabeliana'	Zabel Laurel
	RC	Rhamnus c. 'Eve Case'	Coffeeberry
	RR	Rosa rugosa 'Alba'	Sea Tomato

GROUNDCOVERS			
	Symbol	**Botanical Name**	**Common Name**
	AU	Arctostaphylos u. 'Radiant'	Radiant Bearberry
	BC	Bergenia crassifolia	Winter Blooming Bergenia
	CD	Carex divulsa	Berkeley Sedge
	CA	Carpobrotus edulis	Ice Plant
	CG	Ceanothus g. 'Yankee Point'	Ceanothus
	CL	Cotoneaster d. 'Lowfast'	Bearberry Cotoneaster
	EH	Equisetum hyemale	Horsetail
	HE	Hemerocallis hybrid 'Aztec Chalice'	Daylily
	HF	Hemerocallis h. 'Fuzz Bunny'	Daylily
	HH	Hemerocallis h. 'Bitsy'	Daylily
	ID	Iris douglasiana	Pacific Coast Iris
	JP	Juncus patens	California Gray Rush
	LM	Liriope muscari 'Big Blue'	Big Blue Lily Turf
	LN	Leptospermum scoparium 'Nanum Ruru'	New Zealand Tea Tree
	MP	Myoporum parvifolium 'Putah Creek'	Myoporum
	NT	Nassella tenuissima	Mexican Feather Grass
	RS	Rhamnus californica 'Seaview'	Seaview Coffeeberry
	TA	Trachelospermum asiaticum	Asian Star Jasmine
	TV	Tulbaghia violacea 'Silver Lace'	Society Garlic
	VM	Vinca Minor	Dwarf Periwinkle

VINE			
	Symbol	**Botanical Name**	**Common Name**
	FP	Ficus pumila	Creeping Fig

SOD MIX			
	Symbol	**Name**	
	Mix A	Bolero Sod	
	Mix B	Delta Grassland Mix	
	Mix C	Native Preservation Mix	

TREE LIST

TREES									
Symbol	Botanical Name	Common Name	Height	Spread	D / E	Rate of Growth	Fertilizer	Pests/Diseases	Water
AR	Acer macrophyllum	Big Leaf Maple	30-75'	30-50'	D	Medium	Beginning of Fall	No pests or diseases	Moderate to Regular
AM	Arbutus 'Marina'	Strawberry Tree	20-30'	20-30'	E	Medium	No fertilizer	No pests or diseases	Little to Moderate
CM	Cupressus macrocarpa	Monterey Cypress	40'+	40'	E	Fast	Beginning of Spring / Fall	Aphids / Coryneum Canker Fungus	Little to Moderate
KP	Koelreuteria paniculata	Goldenrain Tree	20-35'	25-40'	D	Moderate	Beginning of Spring / Fall	Aphids	Moderate / Drought tolerant
LS	Leptospermum s. 'Red Ensign'	New Zealand Tea Tree	10'	8'	E	Moderate	Beginning of Spring / Fall	Root rot	Little to None
MN	Melaleuca nesophila	Pink Melalueca	15-20'	15-20'	E	Fast	Little or no fertilizer	Aphids	Little to Regular
MQ	Melaleuca quinquenervia	Paperbark Tree	20-40'	15-25'	E	Fast	Little or no fertilizer	No pests or diseases	Little to Regular
ME	Metrosideros excelsa	New Zealand Christmas Tree	30'+	30'+	E	Moderate	Every 2-3 yrs towards the end of Winter or beginning of Fall	No pests or diseases	Moderate
ML	Myoporum laetum	ncn	30'	20'	E	Fast	Little or no fertilizer	No pests or diseases	Little to Moderate
RM	Rhaphiolepis indica 'Majestic Beauty'	Indian Hawthorn- Standard	12'	6-8'	E	Moderate	Before Spring growth and after flowering	Aphids, fireblight, fungal leaf spot	Little to Moderate
TL	Tristania laurustinus 'Eleganta'	Brisbane Box	30-45'	25'	E	Moderate	Little or no fertilizer	No pests or diseases	Little to Regular

TREES					
Symbol	Botanical Name	Common Name	Pruning	Colors	Other Characteristics
AR	Acer macrophyllum	Big Leaf Maple	Little required. Cut limbs Summer / Early Fall	Fall foliage: yellow	None
AM	Arbutus 'Marina'	Strawberry Tree	Early pruning to shape	Fall flower: pink. Strawberry fruit in Winter.	None
CM	Cupressus macrocarpa	Monterey Cypress	Little required. Let it develop picturesque form.	No flowers. Golf ball size cones.	Narrow, pyramidal form when young.
KP	Koelreuteria paniculata	Goldenrain Tree	Early pruning to shape, occasional suckers	Spring flowers: yellow. Fall foliage: yellow. Fall seed pods.	Red flowers, seed capsules, flowerdrop.
LS	Leptospermum s. 'Red Ensign'	New Zealand Tea Tree	May be thinned. Do not cut into bare wood.	Spring / Summer flowers: deep red.	May be limbed up into small tree at maturity.
MN	Melaleuca nesophila	Pink Melalueca	May be sheared. Maintain natural form.	Summer flowers: yellow. Fruit clusters. Fall foliage: yellow.	None
MQ	Melaleuca quinquenervia	Paperbark Tree	Early pruning to shape.	Summer / Fall flowers: white.	Bark thick and spongy, tan peeling to white, don't allow rootball to dry out.
ME	Metrosideros excelsa	New Zealand Christmas Tree	Prune lower branches to get tree form.	Spring / Summer flowers: red.	Wooly white under leaves.
ML	Myoporum laetum	ncn	Prune lower branches to get tree form.	White insignificant flowers.	Sap is irritant.
RM	Rhaphiolepis indica 'Majestic Beauty'	Indian Hawthorn- Standard	Prune to get tree form.	Fall to Spring flowers: pink. Dark blue berries.	None
TL	Tristania laurustinus 'Eleganta'	Brisbane Box	Early pruning to shape.	Summer flowers: white.	Flaking reddish, brown bark.

SHRUB LIST

SHRUBS									
Symbol	Botanical Name	Common Name	Height	Spread	D / E	Rate of Growth	Fertilizer	Pests/Diseases	Water
CV	Callistemon viminalis 'Little John'	Weeping Bottlebrush	3'	3'	E	Fast	No fertilizer	No pests or diseases	Moderate
CO	Coleonema pulchellum 'Sunset Gold'	Pink Breath Of Heaven	1'-6"	4'	E	Moderate	Before Spring growth and after flowering	No pests or diseases	Moderate
DG	Dietes bicolor	Fortnight Lily	3'	3'	E	Moderate	No fertilizer needed	No pests or diseases	Moderate to Regular
EF	Escallonia 'Fradesii'	Escallonia	5-6'	5-6'	E	Fast	No fertilizer needed	No pests or diseases	Regular
LS	Leptospermum s. 'Red Ensign'	New Zealand Tea Tree	6-8'	6'	E	Moderate	Beginning of Spring / Fall	Root rot	Little to None
LJ	Ligustrum japonicum 'Texanum'	Japanese Privet	10-12'	8'	E	Fast	No fertilizer needed	No pests or diseases	Moderate
LP	Limonium perezii	Sea Lavender	2-3'	3-4'	D	Moderate	No fertilizer needed	No pests or diseases	Moderate
LC	Loropetalum chinense 'Hines Purple'	Loropetalum	6'	6'	E	Moderate	No fertilizer needed	No pests or diseases	Regular
MA	Mahonia aquifolium	Oregon Grape	10-15'	10-15'	E	Moderate	No fertilizer needed	Mahonia looper caterpillar control in May	Moderate
MC	Myrica californica	Pacific Wax Myrtle	4-6'	6-8'	E	Moderate	No fertilizer needed	Red Spider Mites	Little to Regular
PE	Penstemon heterophyllus	Beard Tongue	2'	2-3'	D / E	Fast	No fertilizer needed	No pests or diseases	Little
PH	Phormium tenax 'Duet'	New Zealand Flax	3'	5-6'	E	Fast	No fertilizer needed	No pests or diseases	Little to Regular
PD	Phormium tenax 'Dusky Chief'	New Zealand Flax	2-3'	2-3'					
PJ	Phormium tenax 'Jack Sprat'	New Zealand Flax	6'	6'					
PY	Phormium tenax 'Yellow Wave'	New Zealand Flax	4-5'	5-7'					
PL	Prunus laurocerasus 'Zabeliana'	Zabel Laurel	6'	5'	E	Moderate	No fertilizer needed	No pests or diseases	Little to Regular
RC	Rhamnus californica 'Eve Case'	Coffeeberry	4-6'	4-6'	E	Fast	No fertilizer needed	No pests or diseases	Little to Regular
RR	Rosa rugosa 'Alba'	Sea Tomato	3-6'	3-6'	D	Moderate	Fertilize after bloom	Aphids	Regular

SHRUBS					
Symbol	Botanical Name	Common Name	Pruning	Colors	Other Characteristics
CV	Callistemon viminalis 'Little John'	Weeping Bottlebrush	Remove dead / weak branches after bloom or before Spring growth. Do not cut into bare wood.	Fall to Spring flowers: bright red brushes.	Flowers are followed by woody capsules.
CO	Coleonema pulchellum 'Sunset Gold'	Pink Breath Of Heaven	Cut back hard if necessary to renew old plant.	Winter / Spring flowers: pink .	None
DG	Dietes bicolor	Fortnight Lily	Remove dead leaves. Do not remove flower stalks - they produce flowers for many years.	Spring to Fall flower spikes	None
EF	Escallonia 'Fradesii'	Escallonia	Prune after bloom.	Spring to Fall flowers: pink	None
LS	Leptospermum s. ‘Red Ensign’	New Zealand Tea Tree	May be thinned. Do not cut into bare wood.	Spring / Summer flowers: deep red.	None
LJ	Ligustrum japonicum 'Texanum'	Japanese Privet	Prune after bloom.	Spring / Summer flowers: white. Blue black berries.	Leaves have pale underside.
LP	Limonium perezii	Sea Lavender	Remove flower stems after bloom	Spring / Summer flower stems: purple	None
LC	Loropetalum chinense 'Hines Purple'	Loropetalum	Prune to maintain natural soft form.	Spring / Summer flower stems: purple, deep pink.	Purple foliage.
MA	Mahonia aquifolium	Oregon Grape	Clipped, informal hedge	Late Spring flowers: yellow. Fall berries.	Bronzy new leaves, turns red or purple in Fall.
MC	Myrica californica	Pacific Wax Myrtle	Selective cuts within, do not shear, best unclipped	Inconspicuous flower and fruit.	Aromatic leaves.
PE	Penstemon heterophyllus	Beard Tongue	Remove dried foliage.	Spring / Summer flower stems: purple, blue.	Do not overwater.
PH	Phormium tenax 'Duet'	New Zealand Flax	Remove flower stems after bloom. Remove old leaves close to base. Do not shear top of leaves.	Late Spring / Summer flower stems.	None
PD	Phormium tenax 'Dusky Chief'	New Zealand Flax			None
PJ	Phormium tenax 'Jack Sprat'	New Zealand Flax			None
PY	Phormium tenax 'Yellow Wave'	New Zealand Flax			None
PL	Prunus laurocerasus 'Zabeliana'	Zabel Laurel	Cut old stems all the way to the ground.	Yellow flowers. Blue berries.	None
RC	Rhamnus californica 'Eve Case'	Coffeeberry	Prune to control height.	Berries.	None
RR	Rosa rugosa 'Alba'	Sea Tomato	Prune late winter. Cutback season's growth by 1 /	Fragrant flowers. Fruits.	Prickly stems.

GROUNDCOVER, VINE, SOD LIST

GROUNDCOVERS									
Symbol	Botanical Name	Common Name	Height	Spread	D / E	Rate of Growth	Fertilizer	Pests/Diseases	Water
AU	Arctostaphylos uva-ursi 'Radiant'	Radiant Bearberry	2'	15'	E	Slow	No fertilizer needed	No pests or diseases	Little to Moderate
BC	Bergenia crassifolia	Winter Blooming Bergenia	1-2'	1-2'	E	Moderate	No fertilizer needed	Snails, slugs, deer	Regular
CD	Carex divulsa	Berkeley Sedge	1-2'	1-2'	D / E	Moderate	No fertilizer needed	No pests or diseases	Regular
CA	Carpobrotus edulis	Ice Plant	1'	1-2'	E	Fast	No fertilizer needed	Scales	Little to Moderate
CG	Ceanothus g. 'Yankee Point'	Ceanothus	2-3'	8-10'	E	Fast	No fertilizer needed	Aphids, whiteflies	Little
CL	Cotoneaster dammeri 'Lowfast'	Bearberry Cotoneaster	1'	10'	E	Fast	Little to no fertilizer	No pests or diseases	Little to Moderate
EH	Equisetum hyemale	Horsetail	4'	varies	E	Fast	No fertilizer needed	No pests or diseases	Marshy
HE	Hemerocallis hybrid 'Aztec Chalice'	Daylily	2-3'	2-3'	E	Moderate	No fertilizer needed	No pests or diseases	Regular
HF	Hemerocallis hybrid 'Fuzz Bunny'	Daylily	1-2'	1-2'	E				
HH	Hemerocallis hybrid 'Bitsy'	Daylily	2-3'	2-3'	E				
ID	Iris douglasiana	Pacific Coast Iris	2'	varies	D	Moderate	No fertilizer needed	No pests or diseases	Little to Moderate. No sprinklers
JP	Juncus patens	California Gray Rush	2'	2'	D / E	Moderate	No fertilizer needed	No pests or diseases	Moderate to Regular
LN	Leptospermum s. 'Nanum Ruru'	New Zealand Tea Tree	2'	2'	E	Moderate	No fertilizer needed	Root rot if poorly drained	Little to Moderate
LM	Liriope muscari 'Pee Dee Ingot'	Pee Dee Ingot Lily Turf	1'	1-8"	E	Moderate	No fertilizer needed	Snails, slugs	Regular
MP	Myoporum parvifolium 'Putah Creek'	Myoporum	1'	8'	E	Fast	No fertilizer needed	No pests or diseases	Little to Moderate
NT	Nassella tenuissima	Mexican Feather Grass	2'	2-3'	D	Moderate	No fertilizer needed	No pests or diseases	Little to Moderate
RS	Rhamnus californica 'Seaview'	Seaview Coffeeberry	1.5-2'	6-8'	E	Moderate	No fertilizer needed	No pests or diseases	Moderate
TA	Trachelospermum asiaticum	Asian Star Jasmine	1'	6'	E	Fast	Before spring growth and after flowering	No pests or diseases	Regular
TV	Tulbaghia violacea 'Silver Lace'	Society Garlic	2'	2'	E	Fast	No fertilizer needed	No pests or diseases	Regular
VM	Vinca minor	Dwarf Periwinkle	4-6"	18"	E	Fast	No fertilizer needed	No pests or diseases	Moderate
VINES									
FP	Ficus pumila	Creeping Fig	1-2"	varies	E	Fast	No fertilizer needed	No pests or diseases	Regular
SOD MIX									
MIX A	Bolero Sod	NA	3"	NA	E	Moderate	Based on soil fertiity analysis	No pests or diseases	Moderate
MIX B	Delta Grasslands Mix	NA	18"	NA	E	Moderate	Twice yearly. Once after yearly cutting.	No pests or diseases	Low
MIX C	Native Preservation Mix	NA	20"	NA	E	Moderate		No pests or diseases	Low

GROUNDCOVERS					
Symbol	Botanical Name	Common Name	Pruning	Colors	Other Characteristics
AU	Arctostaphylos uva-ursi 'Radiant'	Radiant Bearberry	None. Slow to establish.	Spring / summer flowers: white, pink. Fall fruit.	Mulch heavily before established to prevent weeds.
BC	Bergenia crassifolia	Winter Blooming Bergenia	Cut back yearly.	Winter / Spring flower stems .	None
CD	Carex divulsa	Berkeley Sedge	Shear flowers when brown.	Winter / Spring flower: greenish.	None
CA	Carpobrotus edulis	Ice Plant	Remove dieback.	Yellow to rose-colored flowers.	None
CG	Ceanothus g. 'Yankee Point'	Ceanothus	Prune after flowers fade. Avoid cutting branches that are more than 1" in diameter.	Winter / Spring flowers: dark blue.	Protect from deer.
CL	Cotoneaster dammeri 'Lowfast'	Bearberry Cotoneaster	Prune to remove dead branches. Do not stub.	Red, orange foliage in Fall. Red fruit in Fall / Winter.	None
EH	Equisetum hyemale	Horsetail	Root prune unwanted shoots to control spread.	No showy flower	Could be Invasive.
HE	Hemerocallis hybrid 'Aztec Chalice'	Daylily	Remove dead leaves / flower spikes in Winter.	Red flowers	None
HF	Hemerocallis hybrid 'Fuzz Bunny'	Daylily		Yellow flowers	None
HH	Hemerocallis hybrid 'Bitsy'	Daylily		Yellow flowers	None
ID	Iris douglasiana	Pacific Coast Iris	Cutback flower stems after bloom. Remove dry leaves.	Spring / Summer flowers: purple.	None
JP	Juncus patens	California Gray Rush	Cut unkempt plant down to ground in late winter for spring regrowth.	No showy flower.	None
LN	Leptospermum s. 'Nanum Ruru'	New Zealand Tea Tree	May be sheared. Do not cut into bare wood - new growth unlikely	Spring / Summer flowers: pink.	None
LM	Liriope muscari 'Pee Dee Ingot'	Pee Dee Ingot Lily Turf	Cutback old foliage after new leaves appear.	Dark violet flower spikes. Black fruits.	None
MP	Myoporum parvifolium 'Putah Creek'	Myoporum	Prune overgrowth to control spread.	Summer flowers: white.	Could be trampled.
NT	Nassella tenuissima	Mexican Feather Grass	Clear dry grasses early Fall before reviving with rain in Winter.	Summer: thin feathery stems, straw colored in Winter.	None
RS	Rhamnus californica 'Seaview'	Seaview Coffeeberry	Remove volunteer seedlings.	Spring / Summer flowers: white, yellow. Berries.	Leaves have pale underside.
TA	Trachelospermum asiaticum	Asian Star Jasmine	Prune to shape.	Spring / Summer flowers: creamy white.	Sap from cut stems.
TV	Tulbaghia violacea 'Silver Lace'	Society Garlic	Remove dead leaves / flower spikes in Winter	Spring / Summer flower spikes: purple.	Odor from crushed leaves / flowers.
VM	Vinca minor	Dwarf Periwinkle	Shear old stems before Spring growth.	Early Spring flowers: blue.	None
VINES					
FP	Ficus pumila	Creeping Fig	Trim to control unwanted coverage	No showy flower.	None
SOD MIX					
MIX A	Bolero Sod	NA	Mow 7-14 days. Maintain at 2 to 2.5" height.	No showy flower.	None
MIX B	Delta Grassland Mix	NA	Mow once a year to 50% height.	No showy flower.	None
MIX C	Native Preservation Mix	NA	Mow once a year to 50% height.	No showy flower.	None

TREES

	Symbol	Botanical Name	Common Name	Height	Spread	D / E	Rate of Growth	Fertilizer	Pests/Diseases	Water	Pruning	Colors	Other Characteristics
+	AR	Acer macrophyllum	Big Leaf Maple	30-75'	30-50'	D	Medium	Beginning of Fall	None known	Moderate to Regular	Little required. Cut limbs Summer / Early Fall	Fall foliage: yellow	None

	Symbol	Botanical Name	Common Name	Height	Spread	D / E	Rate of Growth	Fertilizer	Pests/Diseases	Water	Pruning	Colors	Other Characteristics
■	AM	Arbutus 'Marina'	Strawberry Tree	20-30'	20-30'	E	Medium	No fertilizer	None known	Little to Moderate	Early pruning to shape	Fall flower: pink	Strawberry fruit in Winter

	Symbol	Botanical Name	Common Name	Height	Spread	D / E	Rate of Growth	Fertilizer	Pests/Diseases	Water	Pruning	Colors	Other Characteristics
	CM	Cupressus macrocarpa	Monterey Cypress	40'+	40'	E	Fast	Beginning of Spring / Fall	Aphids / Coryneum Canker Fungus	Little to Moderate	Little required. Let it develop picturesque form.	No flowers. Golf ball size cones.	Narrow, pyramidal form when young.

	Symbol	Botanical Name	Common Name	Height	Spread	D / E	Rate of Growth	Fertilizer	Pests/Diseases	Water	Pruning	Colors	Other Characteristics
	KP	Koelreuteria paniculata	Goldenrain Tree	20-35'	25-40'	D	Moderate	Beginning of Spring / Fall	Aphids	Moderate / Drought tolerant	Early pruning to shape, occasional suckers.	Spring flowers: yellow. Fall Foliage: yellow. Fall seed pods.	Red flowers, seed capsules, flowerdrop.

TREES

	Symbol	Botanical Name	Common Name	Height	Spread	D / E	Rate of Growth	Fertilizer	Pests/Diseases	Water	Pruning	Colors	Other Characteristics
◻	LS	Leptospermum s. ‘Red Ensign’	New Zealand Tea Tree	10’	8’	E	Moderate	Beginning of Spring / Fall	Root rot if poorly drained	Little to None	May be thinned. Do not cut into bare wood.	Spring / Summer flowers: deep red	May be limbed up into small tree at maturity

	Symbol	Botanical Name	Common Name	Height	Spread	D / E	Rate of Growth	Fertilizer	Pests/Diseases	Water	Pruning	Colors	Other Characteristics
▲	MN	Melaleuca nesophila	Pink Melalueca	15-20'	15-20'	E	Fast	Little or no fertilizer	Aphids	Little to Regular	May be sheared. Maintain natural form.	Summer flowers: yellow. Fruit clusters. Fall foliage: yellow	None

	Symbol	Botanical Name	Common Name	Height	Spread	D / E	Rate of Growth	Fertilizer	Pests/Diseases	Water	Pruning	Colors	Other Characteristics
	MQ	Melaleuca quinquenervia	Paperbark Tree	20-40'	15-25'	E	Fast	Little or no fertilizer	None known	Little to Regular	Early pruning to shape	Summer / Fall flowers: white	Bark thick and spongy, tan peeling to white, don't allow rootball to dry out

	Symbol	Botanical Name	Common Name	Height	Spread	D / E	Rate of Growth	Fertilizer	Pests/Diseases	Water	Pruning	Colors	Other Characteristics
	ME	Metrosideros excelsa	New Zealand Christmas Tree	30'+	30'+	E	Moderate	Every 2-3 yrs towards the end of Winter or beginning of Fall	None known	Moderate	Prune lower branches to get tree form	Spring / Summer flowers: red	Wooly white under leaves

TREES

	Symbol	Botanical Name	Common Name	Height	Spread	D / E	Rate of Growth	Fertilizer	Pests/Diseases	Water	Pruning	Colors	Other Characteristics
▲	RM	Rhaphiolepis i. 'Majestic Beauty'	Indian Hawthorn Standard	12'	6-8'	E	Moderate	Before Spring growth and after flowering	Aphids, fireblight, fungal leaf spot	Little to Moderate	Prune to get tree form.	Fall/Spring flowers: pink. Dark blue berries	None

	Symbol	Botanical Name	Common Name	Height	Spread	D / E	Rate of Growth	Fertilizer	Pests/Diseases	Water	Pruning	Colors	Other Characteristics
+	TL	Tristania laurustinus 'Eleganta'	Brisbane box	30-45'	25'	E	Moderate	Little or no fertilizer	None known	Little to Regular	Early pruning to shape	Summer flowers: white	Flaking reddish, brown bark

	Symbol	Botanical Name	Common Name	Height	Spread	D / E	Rate of Growth	Fertilizer	Pests/Diseases	Water	Pruning	Colors	Other Characteristics
⊗	CV	Callistemon viminalis 'Little John'	Weeping Bottlebrush	3'	3'	E	Fast	None	None known	Moderate	Remove dead / weak branches after bloom or before Spring growth. Do not cut into bare wood.	Fall to Spring flowers: bright red brushes	Flowers are followed by woody capsules.

	Symbol	Botanical Name	Common Name	Height	Spread	D / E	Rate of Growth	Fertilizer	Pests/ Diseases	Water	Pruning	Colors	Other Characteristics
⁘	CO	Coleonema pulchellum 'Sunset Gold'	Pink Breath Of Heaven	1'-6”	4'	E	Moderate	Before Spring growth and after flowering	None known	Moderate	Cut back hard if necessary to renew old plant.	Winter / Spring flowers: pink	None

SHRUBS

	Symbol	Botanical Name	Common Name	Height	Spread	D / E	Rate of Growth	Fertilizer	Pests/Diseases	Water	Pruning	Colors	Other Characteristics
▲	DG	Dietes bicolor	Fortnight Lily	3'	3'	E	Moderate	None	None known	Moderate to Regular	Remove dead leaves any time. Do not remove flower stalks - same stalks produce flowers for many years	Spring to Fall flower spikes	None

	Symbol	Botanical Name	Common Name	Height	Spread	D / E	Rate of Growth	Fertilizer	Pests/Diseases	Water	Pruning	Colors	Other Characteristics
⊘	EF	Escallonia 'Fradesii'	Escallonia	5-6'	5-6'	E	Fast	None	None known	Regular	Prune after bloom	Spring to Fall flowers: pink	None

	Symbol	Botanical Name	Common Name	Height	Spread	D / E	Rate of Growth	Fertilizer	Pests/Diseases	Water	Pruning	Colors	Other Characteristics
	LN	Leptospermum s. 'Red Ensign'	New Zealand Tea Tree	6-8'	6'	E	Moderate	Beginning of Spring / Fall	Root rot if poorly drained	Little to None	Do not cut into bare wood - new growth unlikely	Spring / Summer flowers: deep red	None

	Symbol	Botanical Name	Common Name	Height	Spread	D / E	Rate of Growth	Fertilizer	Pests/Diseases	Water	Pruning	Colors	Other Characteristics
	LJ	Ligustrum japonicum 'Texanum'	Japanese Privet	10-12'	8'	E	Fast	None	None known	Moderate	Prune after bloom	Spring / Summer flowers: white Blue black berries.	Leaves have pale underside

	Symbol	Botanical Name	Common Name	Height	Spread	D / E	Rate of Growth	Fertilizer	Pests/Diseases	Water	Pruning	Colors	Other Characteristics
	LP	Limonium perezii	Sea Lavender	2-3'	3-4'	D	Moderate	None	None known	Moderate	Remove flower stems after bloom	Spring / Summer flower stems: purple	None

	Symbol	Botanical Name	Common Name	Height	Spread	D / E	Rate of Growth	Fertilizer	Pests/Diseases	Water	Pruning	Colors	Other Characteristics
	LC	Loropetalum chinense ‘Hines Purple’	Loropetalum	6’	6’	E	Moderate	None	None known	Regular	Prune to maintain natural soft form.	Spring / Summer flower stems: purple, deep pink.	Purple foliage

	Symbol	Botanical Name	Common Name	Height	Spread	D / E	Rate of Growth	Fertilizer	Pests/Diseases	Water	Pruning	Colors	Other Characteristics
●	MA	Mahonia aquifolium	Oregon Grape	10-15'	10-15'	E	Moderate	None	Mahonia looper caterpillar control in May	Moderate	Clipped, informal hedge	Late Spring flowers: yellow. Fall berries.	Bronzy new leaves, turn red or purple in Fall

	Symbol	Botanical Name	Common Name	Height	Spread	D / E	Rate of Growth	Fertilizer	Pests/Diseases	Water	Pruning	Colors	Other Characteristics
●	MC	Myrica californica	Pacific Wax Myrtle	4-6'	6-8'	E	Moderate	None	Red Spider Mites	Little to Regular	Selective cuts within, do not shear, best unclipped.	Inconspicuous flower and fruit	Aromatic leaves

	Symbol	Botanical Name	Common Name	Height	Spread	D / E	Rate of Growth	Fertilizer	Pests/Diseases	Water	Pruning	Colors	Other Characteristics
⊖	PE	Penstemon heterophyllus	Beard Tongue	2'	2-3'	D / E	Fast	None	None known	Little	Remove dried foliage.	Spring / Summer flower stems: purple, blue.	Do not overwater

	Symbol	Botanical Name	Common Name	Height	Spread	D / E	Rate of Growth	Fertilizer	Pests/Diseases	Water	Pruning	Colors	Other Characteristics
▽	PH	Phormium tenax 'Duet'	New Zealand Flax	3'	5-6'	E	Fast	None	None known	Little to Regular	Remove flower stems after bloom. Remove old leaves close to base. Do not shear top of leaves.	Late Spring/Summer flower stems	None

	Symbol	Botanical Name	Common Name	Height	Spread	D / E	Rate of Growth	Fertilizer	Pests/Diseases	Water	Pruning	Colors	Other Characteristics
	PD	Phormium hybrids 'Dusky Chief'	New Zealand Flax	2-3'	2-3'	E	Fast	None	None known	Little to Regular	Remove flower stems after bloom. Remove old leaves close to base. Do not shear top of leaves.	Late Spring/Summer flower stems	None

	Symbol	Botanical Name	Common Name	Height	Spread	D / E	Rate of Growth	Fertilizer	Pests/Diseases	Water	Pruning	Colors	Other Characteristics
	PJ	Phormium tenax 'Jack Sprat'	New Zealand Flax	6'	6'	E	Fast	None	None known	Little to Regular	Remove flower stems after bloom. Remove old leaves close to base. Do not shear top of leaves.	Late Spring/Summer flower stems	None

SHRUBS



	Symbol	Botanical Name	Common Name	Height	Spread	D / E	Rate of Growth	Fertilizer	Pests/Diseases	Water	Pruning	Colors	Other Characteristics
	PY	Phormium tenax 'Yellow Wave'	New Zealand Flax	4-5'	5-7'	E	Fast	None	None known	Little to Regular	Remove flower stems after bloom. Remove old leaves close to base. Do not shear top of leaves.	Late Spring/Summer flower stems	None



	Symbol	Botanical Name	Common Name	Height	Spread	D / E	Rate of Growth	Fertilizer	Pests/Diseases	Water	Pruning	Colors	Other Characteristics
	PL	Prunus laurocerasus 'Zabeliana'	Zabel Laurel	6'	5'	E	Moderate	None	None known	Little to Regular	Cut old stems all the way to the ground.	Yellow flowers. Blue berries	None



	Symbol	Botanical Name	Common Name	Height	Spread	D / E	Rate of Growth	Fertilizer	Pests/Diseases	Water	Pruning	Colors	Other Characteristics
	RC	Rhamnus californica 'Eve Case'	Coffeeberry	4-6'	4-6'	E	Fast	None	None known	Little to Regular	Prune to control height	Berries	None




	Symbol	Botanical Name	Common Name	Height	Spread	D / E	Rate of Growth	Fertilizer	Pests/Diseases	Water	Pruning	Colors	Other Characteristics
	RR	Rosa rugosa 'Alba'	Sea Tomato	3-6'	3-6'	D	Moderate	Fertilize after each blooming cycle.	Aphids	Regular	Prune late winter. Cut back season's growth by a third	Fragrant flowers. Fruits	Prickly stems

GROUNDCOVER

	Symbol	Botanical Name	Common Name	Height	Spread	D / E	Rate of Growth	Fertilizer	Pests/Diseases	Water	Pruning	Colors	Other Characteristics
	AU	Arctostaphylos uva-ursi 'Radiant'	Radiant Bearberry	2'	15'	E	Slow	None	None known	Little to Moderate	None. Slow to establish.	Spring / summer flowers: white, pink. Fall fruit.	Mulch heavily before established to prevent weeds.

	Symbol	Botanical Name	Common Name	Height	Spread	D / E	Rate of Growth	Fertilizer	Pests/Diseases	Water	Pruning	Colors	Other Characteristics
	BC	Bergenia crassifolia	Winter Blooming Bergenia	1-2'	1-2'	E	Moderate	None	Snails, slugs, deer	Regular	Cut back yearly	Winter / Spring flower stems	None

	Symbol	Botanical Name	Common Name	Height	Spread	D / E	Rate of Growth	Fertilizer	Pests/Diseases	Water	Pruning	Colors	Other Characteristics
	CD	Carex divulsa	Berkeley Sedge	1-2'	1-2'	D / E	Moderate	None	None known	Regular	Shear flowers when brown.	Winter / Spring flower: greenish	None

	Symbol	Botanical Name	Common Name	Height	Spread	D / E	Rate of Growth	Fertilizer	Pests/Diseases	Water	Pruning	Colors	Other Characteristics
	CA	Carpobrotus edulis	Ice Plant	1'	1-2’	E	Fast	None	Scales	Little to Moderate	Remove dieback.	Yellow to Rose-colored flowers	None

GROUNDCOVER

	Symbol	Botanical Name	Common Name	Height	Spread	D / E	Rate of Growth	Fertilizer	Pests/Diseases	Water	Pruning	Colors	Other Characteristics
	CG	Ceanothus g. 'Yankee Point'	Ceanothus	2-3'	8-10'	E	Fast	None	Aphids, whiteflies	Little	Prune after flowers fade. Avoid cutting branches that are more than 1" in diameter.	Winter / Spring flowers: dark blue	Protect from deer.

	Symbol	Botanical Name	Common Name	Height	Spread	D / E	Rate of Growth	Fertilizer	Pests/Diseases	Water	Pruning	Colors	Other Characteristics
	CL	Cotoneaster dammeri 'Lowfast'	Bearberry Cotoneaster	1'	10'	E	Fast	Little to none	None known	Little to Moderate	Prune to remove dead branches. Do not stub.	Red, orange foliage in Fall. Red fruit in Fall / Winter.	None

	Symbol	Botanical Name	Common Name	Height	Spread	D / E	Rate of Growth	Fertilizer	Pests/Diseases	Water	Pruning	Colors	Other Characteristics
	EH	Equisetum hyemale	Horsetail	4'	varies	E	Fast	None	None known	Marshy	Root prune unwanted shoots to control spread.	No showy flowers.	Could be invasive.

	Symbol	Botanical Name	Common Name	Height	Spread	D / E	Rate of Growth	Fertilizer	Pests/Diseases	Water	Pruning	Colors	Other Characteristics
	HE	Hemerocallis hybrid 'Aztec Chalice'	Daylily	2-3'	2-3'	E	Moderate	None	None known	Regular	Remove dead leaves / flower spikes in Winter.	Red flowers	None

GROUNDCOVER

	Symbol	Botanical Name	Common Name	Height	Spread	D / E	Rate of Growth	Fertilizer	Pests/Diseases	Water	Pruning	Colors	Other Characteristics
	HF	Hemerocallis hybrid 'Fuzz Bunny'	Daylily	1-2'	1-2'	E	Moderate	None	None known	Regular	Remove dead leaves / flower spikes in Winter.	Yellow flowers	None

	Symbol	Botanical Name	Common Name	Height	Spread	D / E	Rate of Growth	Fertilizer	Pests/Diseases	Water	Pruning	Colors	Other Characteristics
	HH	Hemerocallis hybrid 'Bitsy'	Daylily	2-3'	2-3'	E	Moderate	None	None known	Regular	Remove dead leaves / flower spikes in Winter.	Yellow flowers	None



	Symbol	Botanical Name	Common Name	Height	Spread	D / E	Rate of Growth	Fertilizer	Pests/Diseases	Water	Pruning	Colors	Other Characteristics
	ID	Iris douglasiana	Pacific Coast Iris	2'	varies	D	Moderate	None	None known	Little to Moderate. No sprinklers	Cutback flower stems after bloom. Remove dry leaves.	Spring / Summer flowers: purple	None



	Symbol	Botanical Name	Common Name	Height	Spread	D / E	Rate of Growth	Fertilizer	Pests/Diseases	Water	Pruning	Colors	Other Characteristics
	JP	Juncus patens	California Gray Rush	2'	2'	D / E	Moderate	None	None known	Moderate to Regular	Cut unkempt plant down to ground in late winter for spring regrowth.	No showy flower	None

GROUNDCOVER

	Symbol	Botanical Name	Common Name	Height	Spread	D / E	Rate of Growth	Fertilizer	Pests/Diseases	Water	Pruning	Colors	Other Characteristics
	LN	Leptospermum s. 'Nanum Ruru'	New Zealand Tea Tree	2'	2'	E	Moderate	None	Root rot if poorly drained	Little to Moderate	May be sheared. Do not cut into bare wood - new growth unlikely	Spring / Summer flowers: pink	None

	Symbol	Botanical Name	Common Name	Height	Spread	D / E	Rate of Growth	Fertilizer	Pests/Diseases	Water	Pruning	Colors	Other Characteristics
	LM	Liriope muscari 'Pee Dee Ingot'	Pee Dee Ingot Lily Turf	1'	1'-8"	E	Moderate	None	Snails, slugs	Regular	Cutback old foliage after new leaves appear.	Dark violet flower spikes. Black fruits	None

	Symbol	Botanical Name	Common Name	Height	Spread	D / E	Rate of Growth	Fertilizer	Pests/Diseases	Water	Pruning	Colors	Other Characteristics
	MP	Myoporum parvifolium 'Putah Creek'	Myoporum	1'	8'	E	Fast	None	None known	Little to Moderate	Prune overgrowth to control spread.	Summer flowers: white	Could be trampled.

	Symbol	Botanical Name	Common Name	Height	Spread	D / E	Rate of Growth	Fertilizer	Pests/Diseases	Water	Pruning	Colors	Other Characteristics
	NT	Nassella tenuissima	Mexican Feather Grass	2'	2-3'	D	Moderate	None	None known	Little to Moderate	Clear dry grasses early Fall before reviving with rain in Winter.	Summer: thin feathery stems, straw colored in winter	None

GROUNDCOVER

	Symbol	Botanical Name	Common Name	Height	Spread	D / E	Rate of Growth	Fertilizer	Pests/Diseases	Water	Pruning	Colors	Other Characteristics
	RS	Rhamnus californica 'Seaview'	Seaview Coffeeberry	1.5-2'	6-8'	E	Moderate	None	None known	Moderate	Remove volunteer seedlings.	Spring / Summer flowers: white, yellow	None

	Symbol	Botanical Name	Common Name	Height	Spread	D / E	Rate of Growth	Fertilizer	Pests/Diseases	Water	Pruning	Colors	Other Characteristics
	TA	Trachelospermum asiaticum	Asian Star Jasmine	1'	6'	E	Fast	Before Spring growth and after flowering	None known	Regular	Prune to shape	Spring / Summer flowers: creamy white	Sap from cut stems




	Symbol	Botanical Name	Common Name	Height	Spread	D / E	Rate of Growth	Fertilizer	Pests/Diseases	Water	Pruning	Colors	Other Characteristics
	TV	Tulbaghia violacea 'Silver Lace'	Society Garlic	2'	2'	E	Fast	None	None known	Regular	Remove dead leaves / flower spikes in Winter	Spring / Summer flower spikes: purple.	Odor from crushed leaves / flowers



	Symbol	Botanical Name	Common Name	Height	Spread	D / E	Rate of Growth	Fertilizer	Pests/Diseases	Water	Pruning	Colors	Other Characteristics
	VM	Vinca minor	Dwarf Periwinkle	4-6”	18”	E	Fast	None	None known	Moderate	Shear old stems before Spring growth.	Early Spring flowers: blue.	None

VINE

	Symbol	Botanical Name	Common Name	Height	Spread	D / E	Rate of Growth	Fertilizer	Pests/Diseases	Water	Pruning	Colors	Other Characteristics
▲	FP	Ficus pumila	Creeping Fig	1-2”	varies	E	Fast	None	None known	Regular	Trim to control unwanted coverage.	No showy flower.	None

HOMES AT DEER HILL LANDSCAPE FIELD REPORT

Attention: _____

_____

_____

_____

Date : _____

Job Number: _____

Field Report Number: _____

Date of Report: _____

Weather: _____

Report By / Crew: _____

_____

WORK PERFORMED AND OBSERVATIONS:

APPENDIX

Potential Annual Maintenance Schedule

Homes At Deer Hill Landscape Field Report

	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	COMMENTS
PLANTING													
DRI WATER SYSTEM	□□□□	□□□□	□□□□	■□□□	■□□□	■□□□	■□□□	■□□□	■□□□	■□□□	□□□□	□□□□	
INSECTS AND DISEASE CONTROL	□□□■	□□□□	□□□□	□□□■	□□□□	□□□□	□□□■	□□□□	□□□□	□□□■	□□□□	□□□□	
LAWN EDGING	□□□■	□□□■	□□□■	□□□■	□□□■	□□□■	□□□■	□□□■	□□□■	□□□■	□□□■	□□□■	
MULCH	□□□□	□□□□	□□□□	□■■■	□□□□	□□□□	□□□□	□□■■	□□□□	□□□□	□□□□	□□□□	
NO-MOW MOWING / NATIVE PRESERVATION MOWING	□□□□	□□□□	□□□□	□□■□	□□□□	□□□□	□□□□	□□□□	□□■□	□□□□	□□□□	□□□□	
PLANTING / REPLANTING	□□□□	□□□□	□□□□	■■□□	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□	
SOIL ANALYSIS	□□□□	□□□□	■□□□	□□□□	□□□□	□□□□	■□□□	□□□□	□□□□	□□□□	■□□□	□□□□	
SOIL MOISTURE PROBE	□□□□	□□□□	□□□□	□□□□	□■□□	□■□□	□■□□	□■□□	□■□□	□■□□	□□□□	□□□□	
SOIL SUITABILITY TEST	■□□□	■□□□	■□□□	■□□□	■□□□	■□□□	■□□□	■□□□	■□□□	■□□□	■□□□	■□□□	
SHRUB FERTILIZATION	□□□□	□□□□	□□□■	□□□□	□□□□	□□□■	□□□□	□□□□	□□□□	□□□■	□□□□	□□□□	
SHRUB PRUNING	■■□□	■■□□	■■□□	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□	■■□□	■■□□	
STAKING AND GUYING	■□□□	■□□□	■□□□	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□	As Required
TREE STAKES	■□□□	■□□□	■□□□	■□□□	■□□□	■□□□	■□□□	■□□□	■□□□	■□□□	■□□□	■□□□	
TREE PRUNING	■■□□	■■□□	■■□□	■■□□	■■□□	□□□□	□□□□	■■□□	□□□□	□□□□	■■□□	■■□□	
TURF AERATION	□□□□	□□□□	□□□□	□□■■	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□	
TURF MOWING	□■□□	□■□□	□■□□	□■□□	□■□□	□■□□	□■□□	□■□□	□■□□	□■□□	□■□□	□■□□	
TURF FERTILIZATION	□□□□	□□□□	□□□■	□□□□	□□□□	□□□■	□□□□	□□□□	□□□□	□□□■	□□□□	□□□□	
TURF WEED CONTROL	□□■□	□□■□	□□■□	□□■□	□□■□	□□■□	□□■□	□□■□	□□■□	□□■□	□□■□	□□■□	
TURF INSECT CONTROL	□□□■	□□□□	□□□□	□□□■	□□□□	□□□□	□□□■	□□□□	□□□□	□□□■	□□□□	□□□□	
TURF DISEASE CONTROL	□□□■	□□□□	□□□□	□□□■	□□□□	□□□□	□□□■	□□□□	□□□□	□□□■	□□□□	□□□□	

	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	COMMENTS
IRRIGATION													
ADJUST IRRIGATION CONTROLLER	□□□□	□□□□	□□□□	□□□□	□□■□	□□■□	□□■□	□□■□	□□■□	□□■□	□□■□	□□□□	
IRRIGATION MAINTENANCE	■□□□	■□□□	■□□□	■■■□	■■□□	■□■□	■□■□	■□■□	■□■□	■□□□	■□□□	■□□□	
DRAINAGE SYSTEM													
INSPECT DRAIN	■■■■	■■■■	■■■■	■■■■	■□□□	■□□□	■□□□	■□□□	■□□□	■■■■	■■■■	■■■■	As Required
BIOSWALES	■■■■	■■■■	■■■■	■■■■	■□□□	■□□□	■□□□	■□□□	■□□□	■■■■	■■■■	■■■■	
SITE MAINTENANCE													
SITE FURNITURE	□□□■	□□□■	□□□■	□□□■	□□□■	□□□■	□□□■	□□□■	□□□■	□□□■	□□□■	□□□■	As Required
ROADWAYS, PARKING LOTS, CURBS AND GUTTERS	□□□□	□□□□	□□■□	□□□□	□□□□	□□□□	□□□□	□□□□	□□■□	□□□□	□□□□	□□□□	
FENCING REVIEW	□□□□	□□□□	□□■□	□□□□	□□□□	□□□□	□□□□	□□□□	□□■□	□□□□	□□□□	□□□□	
CLEAN HANDRAILS	■■■■	■■■■	■■■■	■■■■	■■■■	■■■■	■■■■	■■■■	■■■■	■■■■	■■■■	■■■■	
CLEAN BUS SHELTERS	■□□□	■□□□	■□□□	■□□□	■□□□	■□□□	■□□□	■□□□	■□□□	■□□□	■□□□	■□□□	
ASH URNS	□■□■	□■□■	□■□■	□■□■	□■□■	□■□■	□■□■	□■□■	□■□■	□■□■	□■□■	□■□■	
SITE FEATURES	■□□□	■□□□	■□□□	■□□□	■□□□	■□□□	■□□□	■□□□	■□□□	■□□□	■□□□	■□□□	
RODENT REPAIR	□□□■	□□□■	□□□■	□□□■	□□□■	□□□■	□□□■	□□□■	□□□■	□□□■	□□□■	□□□■	
TRASH AND LITTER	■■■■	■■■■	■■■■	■■■■	■■■■	■■■■	■■■■	■■■■	■■■■	■■■■	■■■■	■■■■	

APPENDIX

Annual Maintenance Schedule Form

ANNUAL MAINTENANCE SCHEDULE FORM

Homes At Deer Hill Landscape Field Report

	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	COMMENTS
PLANTING													
TREE STAKES	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	
TREE PRUNING	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	
SOIL MOISTURE PROBE	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	
DRI WATER SYSTEM	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	
SHRUB FERTILIZATION	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	
SHRUB PRUNING	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	
WEED CONTROL	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	
INSECTS AND DISEASE CONTROL	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	
MULCH	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	
TURF MOWING	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	
NO-MOW MOWING / NATIVE PRESERVATION MOWING	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	
LAWN EDGING	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	
TURF AERATION	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	
TURF FERTILIZATION	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	
TURF WEED CONTROL	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	
TURF INSECT CONTROL	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	
TURF DISEASE CONTROL	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	
STAKING AND GUYING	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	
PLANTING / REPLANTING	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	

ANNUAL MAINTENANCE SCHEDULE FORM

Homes At Deer Hill Landscape Field Report

	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	COMMENTS
IRRIGATION													
ADJUST IRRIGATION CONTROLLER	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	
IRRIGATION MAINTENANCE	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	
DRAINAGE SYSTEM													
INSPECT DRAIN	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	
BIOSWALES	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	
SITE MAINTENANCE													
SITE FURNITURE	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	
ROADWAYS, PARKING LOTS, CURBS AND GUTTERS	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	
FENCING REVIEW	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	
CLEAN HANDRAILS	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	
CLEAN BUS SHELTERS	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	
ASH URNS	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	
SITE FEATURES	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	
RODENT REPAIR	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	
SOIL ANALYSIS	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	
TRASH AND LITTER	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐	

APPENDIX

Potential Fertilization Schedule

Homes At Deer Hill Landscape Field Report

	JAN	FEB	MAR	APR	MAY	JUNE	JUL	AUG	SEPT	OCT	NOV	DEC
TURF	7	7	6	6	6			6	6	6	6	8
SHRUBS AND GROUNDCOVER			1		1		1			2		
TREES			5							5		

LEGEND

1	Fertilizer A, 1-2-0
2	Fertilizer B, 10-5-8
3	Fertilizer C, 21-0-0
4	Fertilizer D, 16-6-8-
5	Fertilizer E, 20-20-20
6	Fertilizer F, 1-2-3
7	Fertilizer G, 10-20-30
8	Fertilizer H, 6-9-10

Homes At Deer Hill Landscape Field Report

	JAN	FEB	MAR	APR	MAY	JUNE	JUL	AUG	SEPT	OCT	NOV	DEC
TURF												
SHRUBS AND GROUNDCOVER												
TREES												

LEGEND

1
2
3
4
5
6
7
8

Homes At Deer Hill Landscape Field Report

Date	Controller	Station	Operation Frequency			Soil Moisture	Adjustments / Services Description
			Days Per Week	Times Per Day	Time Per Station		

Homes At Deer Hill Landscape Field Report

Date	Controller	Station	Service Adjustment	Repair (describe and attach itemized cost estimate)

Insect / Disease Inspection Log

Homes At Deer Hill Landscape Field Report

Date	Location	Insect / Disease	Type and Date of Treatment	Remarks