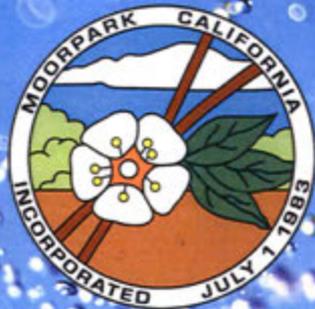


# CITY OF MOORPARK DROUGHT ACTION PLAN

adopted  
JULY 1, 2015



Prepared by:  
Parks, Recreation and  
Community Services Department

## DROUGHT ACTION PLAN

### A. WATER EFFICIENCY IN CITY FACILITIES, PARKS AND LANDSCAPE AREAS

#### 1. USE WATER EFFICIENTLY

**Enacting procedures to assess, maintain, repair, and retrofit existing plumbing fixtures, pipes, and irrigation systems in all City buildings, parks and facilities is critical to efficient water use.**

##### **Drought Action Items:**

##### a. Retrofit Existing Facilities with Low Water Use Appliances and Fixtures.

Evaluate all City facility restrooms and kitchens and retrofit with low water use toilets, waterless urinals, hands free faucets and/or flow restrictors, and water efficient appliances such as dishwashers, where applicable.

Estimated Cost: \$59,000

##### b. Retrofit Park Restroom Facilities with Low Water Use Fixtures.

Evaluate all park restroom facilities and retrofit with low water use toilets, waterless urinals, hands free faucets and/or flow restrictors, where applicable.

Estimated Cost: TBD

##### c. Install Weather Based Irrigation Controllers and Drip Irrigation.

Install weather based irrigation controllers and retrofit irrigation systems with either drip irrigation components or spray nozzles with low precipitation rates in all landscaped areas at all City facilities, parks, and landscape maintenance districts.

Estimated Cost Weather Based irrigation controllers:\$275,000

Estimated Cost Irrigation System Modification: TBD

##### d. Reduce Operating Hours of City-maintained fountains.

Reduce the operating hours of city owned and maintained fountains to six hours per day to reduce water use due to water evaporation and refilling the fountains, while minimizing long term maintenance costs.

#### 2. REDUCE IRRIGATED LANDSCAPING

**Outdoor water use accounts for between 30% and 50% of water use, depending upon the type of material being irrigated. Enacting programs and procedures to reduce the amount and type of irrigated landscaping is critical to reducing overall water use.**

## DROUGHT ACTION PLAN

### Drought Action Items:

a. Implement Turf Conversion Projects at all City Parks.

Evaluate all parks to identify areas for turf conversion. Emphasis will be placed on removal of turf that has very limited or no recreational value. Care will also be taken to maintain the health of the urban forest during turf conversion activities. When turf conversion and irrigation modification take place, drip irrigation will be used around trees to ensure their water needs are met. Turf conversion will generally encompass two phases.

Phase 1: Identify areas for conversion, turn off the water, remove or modify the irrigation, and use bark mulch in the area to be converted. (See Exhibit A, Turf Conversion Diagrams)

Estimated Cost: \$141,645

Phase 2: Evaluate converted areas to determine whether they can be used for additional recreational opportunities or amenities such as trails, sport courts, playgrounds etc. or whether the area should be planted with native or low water use plants.

Estimated Cost: Varies, TBD

b. Renovate Planters and Turf Areas in Landscape Maintenance Districts (LMD's) and at City Facilities with California Native Plants or other Low Water Use Landscaping.

Evaluate planters and turf areas at City facilities and in the LMD's for re-design with California native plants or other low water use landscaping. The LMD's generally consist of median islands and streetscapes within the public right-of-way and other designated areas maintained by the City. Maintenance of the urban forest is important during these activities. Drip irrigation is to be placed around all trees to ensure their water needs are met. Renovation activities will encompass two phases:

Phase 1: Remove high water use plantings and turf areas, modify irrigation to maintain tree health, and cover with bark mulch.

Estimated Cost: \$1,981,205

Phase 2: Hire a landscape architect to re-design the designated areas with a drought tolerant or low water use plant palette.

Estimated Cost: Varies, TBD

## DROUGHT ACTION PLAN

### 3. RECYCLED WATER USE

**Use of recycled water reduces demand for potable water. Under State Water Code Section 13550 et. seq., the use of potable water for non-potable uses is a waste or unreasonable use of water if recycled water is available. Water used in parks or landscape areas is identified as a wasteful or unreasonable use of potable water. Enact programs and procedures that work to increase use of recycled water in areas that currently use potable water and are identified as a wasteful or unreasonable area to use potable water.**

#### **Drought Action Items:**

- a. Work with Ventura County Waterworks District on Provision of Recycled Water to City Parks and Landscape Maintenance Districts.

Currently, all available recycled water allocation provided by the Ventura County Waterworks District is being utilized. Staff will work with the District on plans for increasing recycled water amounts and how the City can access the increased allocation.

Estimated Cost: Staff effort

- b. Recycled Water Infrastructure for Parks and Landscape Maintenance Districts.

Evaluate logistics and costs to provide recycled water infrastructure to City parks and landscape maintenance districts

Estimated Cost: Staff effort

### 4. COMMUNITY REPORTING

**Enlisting the public's help to report broken sprinklers and pipes in Landscape Maintenance Districts, City facilities and parks adds to the City's monitoring and response capacity and saves water that otherwise would be wasted. Creating and maintaining community reporting systems will assist the City's efforts in monitoring our own water use.**

#### **Drought Action Items:**

- a. Irrigation Problem Reporting System.

Work with Information Systems staff to implement and publicize a broken pipe reporting system. Evaluate setting up a dedicated phone line for residents to report broken water systems and publicize the use of the "Report" program available on the City's website.

Estimated Cost: Staff effort

## **B. WATER CONSERVATION IN THE COMMUNITY**

### **1. ENCOURAGE LOW WATER USE LANDSCAPE RENOVATIONS**

**An important aspect of water conservation in the community is adopting City procedures and programs that encourage conversion of landscaping to native and low water use landscaping.**

#### **Drought Action Items:**

a. Homeowner's Association (HOA) Outreach.

Schedule a meeting with the Homeowner's Associations and representatives to discuss the City's views on drought tolerant landscape renovations and to educate them on the renovation approval process. Encourage the HOA's to adopt procedures and processes that support individual homeowner's in renovating their landscape to native and low water use landscaping.

Estimated Cost: Staff effort

b. Fast-Track Landscape Renovation Approvals.

Implement a fast-track landscape renovation approval process that encourages landscape renovations. Prepare a submittal checklist to be provided to the applicant that would assist the applicant with preparing plans that meet the City's goals of water conservation and aesthetic value. The Community Development Director would be authorized to review and approve landscape renovation plans that are converting high water use landscapes to native and low water use landscapes. Under the process, a deposit of \$1,000 would be taken. The City would provide three hours of staff time and one inspection, at no charge. Any additional hours or inspections would be charged at the applicable billing rates and charged against the deposit. The applicant will have 120 days to complete the work or forfeit any remaining portion of their deposit. This fast track process would apply to all landscape renovation projects that are required to adhere to the City's adopted Landscape Design Guidelines and Standards, as amended and updated.

Estimated Cost: \$35,000

### **2. LANDSCAPE DESIGN GUIDELINES**

**Landscape Design Standards and Guidelines (Guidelines) assist in the preparation of landscape plans while incorporating water conservation design aesthetics and landscape consistency throughout the City. Maintaining up-to-date landscape design guidelines is important to incorporate the latest trends in water efficient landscape and the most current standards of the State's Model Water Efficient Landscape Guidelines. In 2009, the City adopted Landscape**

## DROUGHT ACTION PLAN

**Design Standards and guidelines. The City's Guidelines were last updated in 2012 to include Artificial Turf as an allowable landscape material.**

### **Drought Action Items:**

a. Modifications to Landscape Design Guidelines.

Modify the Guidelines to remove turf as an acceptable landscape material in non-recreational landscape areas within new residential, commercial and industrial developments and include the requirements of the Emergency Regulation of the State Water Resources Control Board, as it relates to the Landscape Design Guidelines.

Estimated Cost: Staff effort

b. Reduce Runoff and Promote Groundwater Recharge.

Include design criteria in development projects that use natural systems to minimize water waste in parking lots, playfields, parks, residential, and commercial and residential projects. Criteria should encourage the use of permeable hardscapes, bio-swales, and other natural features to promote groundwater recharge.

Estimated Cost: Staff effort

### **3. COMMUNITY OUTREACH**

**Community outreach is an important component to reaching the water conservation standard. In addition, changing the landscape design aesthetic of the City requires an effective campaign to inform residents about the status and implementation of water conservation projects and prepare them for the "new look" of landscape design around the City.**

### **Drought Action Items:**

a. Community Outreach Campaign, "Brown is the new Green".

Design and implement a community outreach campaign, including branding. This campaign will be designed to keep residents up-to-date on the City's turf conversion activities and educate them on the benefits of modifying ornamental landscape areas to native and drought tolerant plantings, and provide them with information on how they can reduce their water use. A component of the campaign should be partnering with the Waterworks district to assist with the community meeting the 32% conservation standard set by the State Water Resources Control board.

Cost Estimate: \$2,000 for brand design and printed materials

# EXHIBIT A

## TURF REMOVAL DIAGRAMS

### CITY PARKS



# CAMPUS CANYON PARK

## PROPOSED TURF CONVERSION PLAN



PHASE I TURF CONVERSION  $\approx$  10,000 S.F. ( $\pm$ 0.2 ACRES)  
(COMPLETED MAY, 2015)



PHASE II TURF CONVERSION  $\approx$  40,200 S.F. ( $\pm$ 0.9 ACRES)

TOTAL TURF CONVERSION  $\approx$  50,200 S.F. ( $\pm$ 1.2 ACRES)  
(24% REDUCTION)

(EXISTING TURF AREA  $\approx$  205,500 S.F. (4.7 ACRES))

NORTH



SCALE

N.T.S.

DATE

MAY 19, 2015



City of Moorpark  
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# CAMPUS PARK

## PROPOSED TURF CONVERSION PLAN



TURF CONVERSION  $\approx$  45,000 S.F. ( $\pm$ 1.03 ACRE)  
(35% REDUCTION)

(EXISTING TURF AREA  $\approx$  127,000 S.F. ( $\pm$  2.9 ACRES))

NORTH



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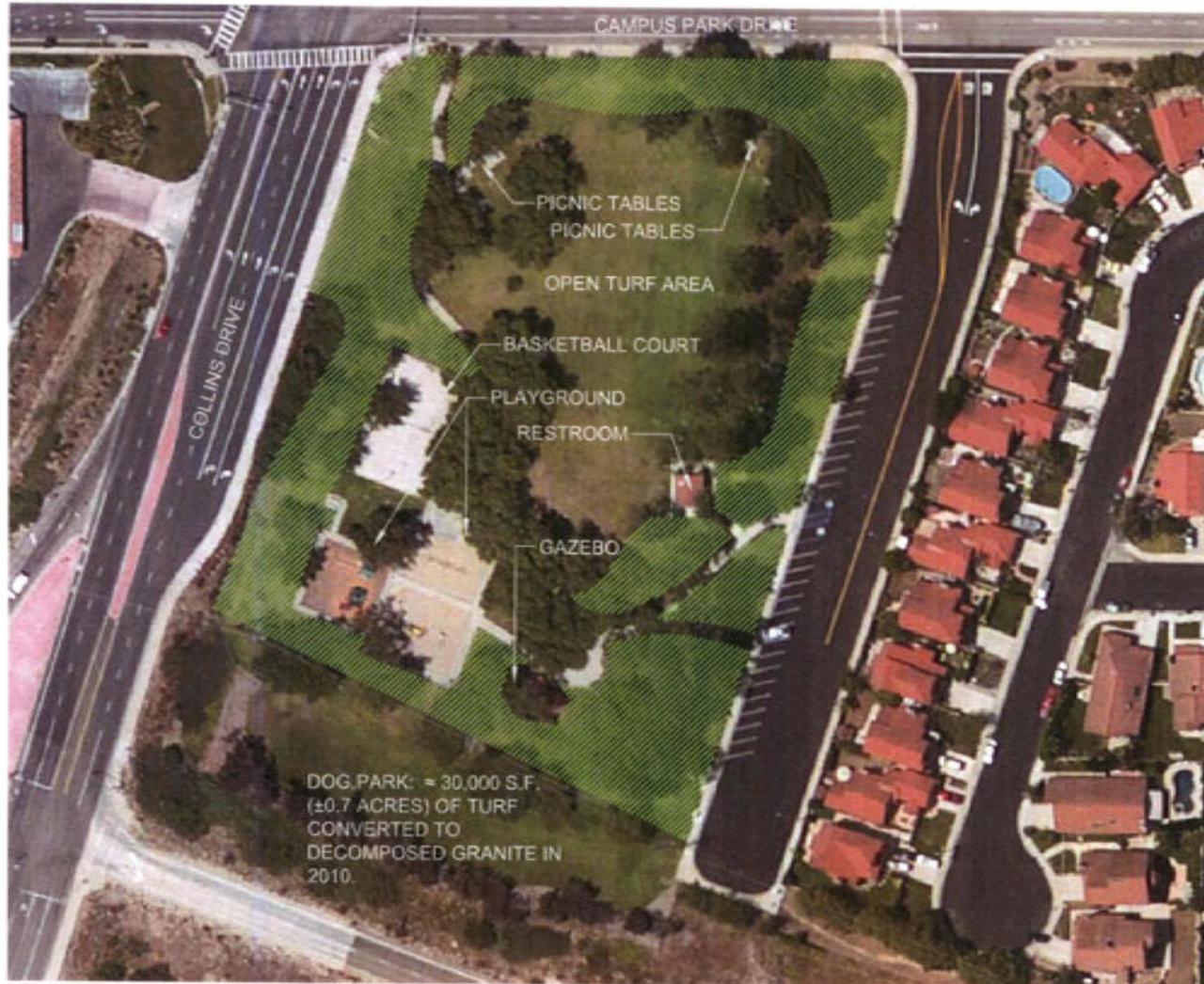
MAY 19, 2015



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# COLLEGE VIEW PARK PROPOSED TURF CONVERSION PLAN



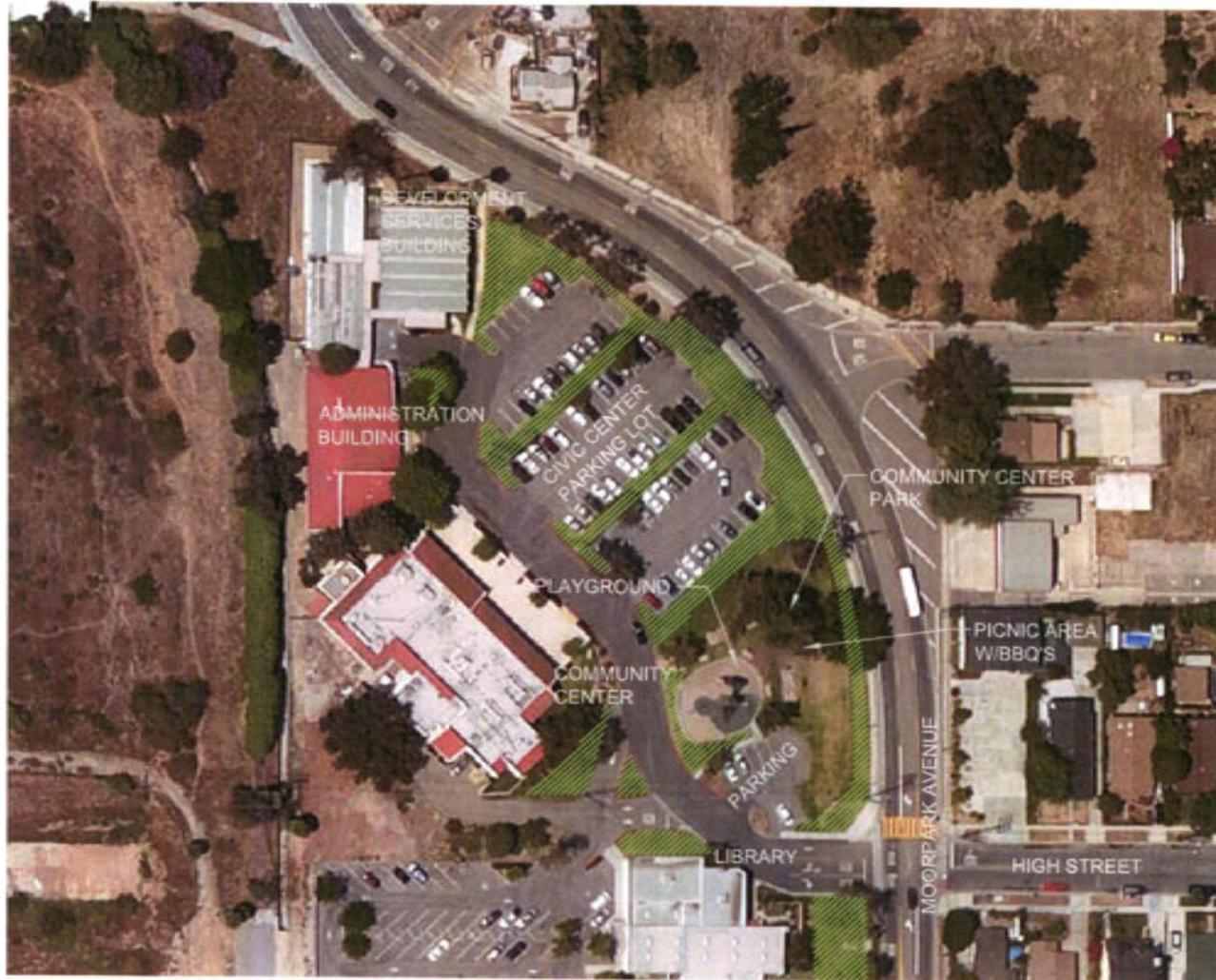
 TURF CONVERSION  $\approx$  70,600 S.F. ( $\pm$ 1.6 ACRE)  
(52% REDUCTION)

(EXISTING TURF AREA  $\approx$  135,900 S.F. ( $\pm$  3.1 ACRES))

**NORTH**   
**SCALE** N.T.S.  
**DATE** MAY 19, 2015



# CIVIC CENTER & COMMUNITY CENTER PARK PROPOSED TURF CONVERSION PLAN



TURF CONVERSION  $\approx$  21,600 S.F. ( $\pm$ 0.5 ACRE)  
(38% REDUCTION)

(EXISTING TURF AREA  $\approx$  57,500 S.F. ( $\pm$  1.3 ACRES))

NORTH



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N.T.S.

DATE

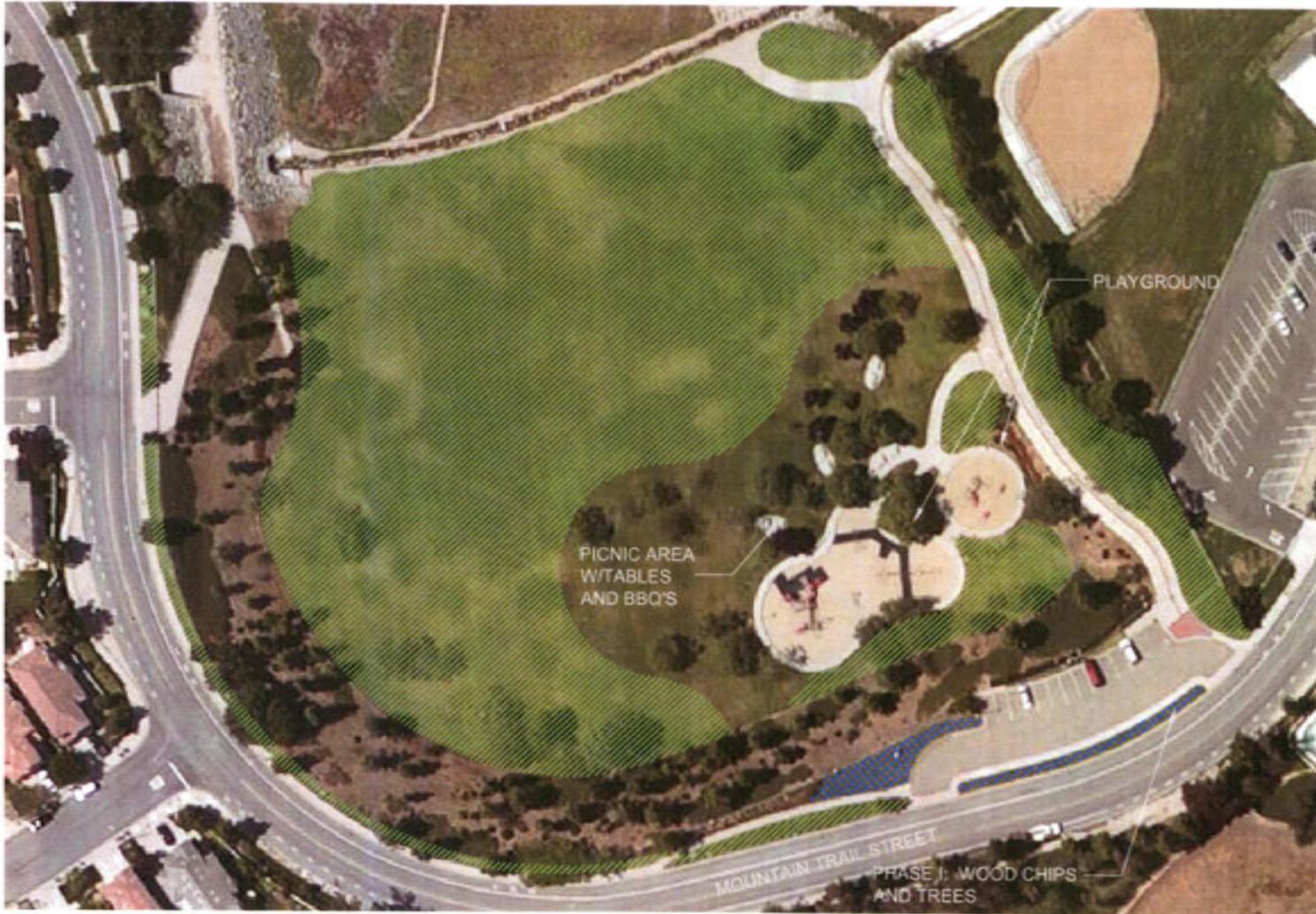
MAY 19, 2015



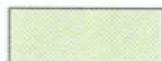
City of Moorpark  
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# COUNTRY TRAIL PARK PROPOSED TURF CONVERSION PLAN



PHASE I TURF CONVERSION  $\approx$  2,600 S.F. ( $\pm$ 0.06 ACRES)  
(COMPLETED APRIL, 2015)



PHASE II TURF CONVERSION  $\approx$  147,000 S.F. ( $\pm$ 3.4 ACRE)

TOTAL TURF CONVERSION  $\approx$  149,600 S.F. ( $\pm$ 3.4 ACRES)  
(81% REDUCTION)

(EXISTING TURF AREA  $\approx$  184,000 S.F. ( $\pm$  4.2 ACRES))

**NOTE**   
**SCALE** N.T.S.  
**DATE** MAY 19, 2015



# GLENWOOD PARK PROPOSED TURF CONVERSION PLAN



 PHASE I TURF CONVERSION  $\approx$  42,300 S.F. ( $\pm$ 1.0 ACRES)  
(COMPLETED APRIL, 2015)

 PHASE II TURF CONVERSION  $\approx$  41,100 S.F. ( $\pm$ 0.9 ACRES)

TOTAL TURF CONVERSION  $\approx$  83,400 S.F. ( $\pm$ 1.9 ACRES)  
(46% REDUCTION)

(EXISTING TURF AREA  $\approx$  182,600 S.F. ( $\pm$  4.2 ACRES))

NORTH



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# MAMMOTH HIGHLANDS PARK PROPOSED TURF CONVERSION PLAN



PHASE I TURF CONVERSION  $\approx$  37,800 S.F. ( $\pm$ 0.9 ACRES)  
(COMPLETED APRIL, 2014)



PHASE II TURF CONVERSION  $\approx$  32,000 S.F. ( $\pm$ 0.7 ACRES)

TOTAL TURF CONVERSION  $\approx$  69,800 S.F. ( $\pm$ 1.6 ACRES)  
(37% REDUCTION)

(EXISTING TURF AREA  $\approx$  190,000 S.F. (4.4 ACRES))

**NOTE**   
**SCALE** N.T.S.  
**DATE** MAY 19, 2015



# MILLER PARK

## PROPOSED TURF CONVERSION PLAN



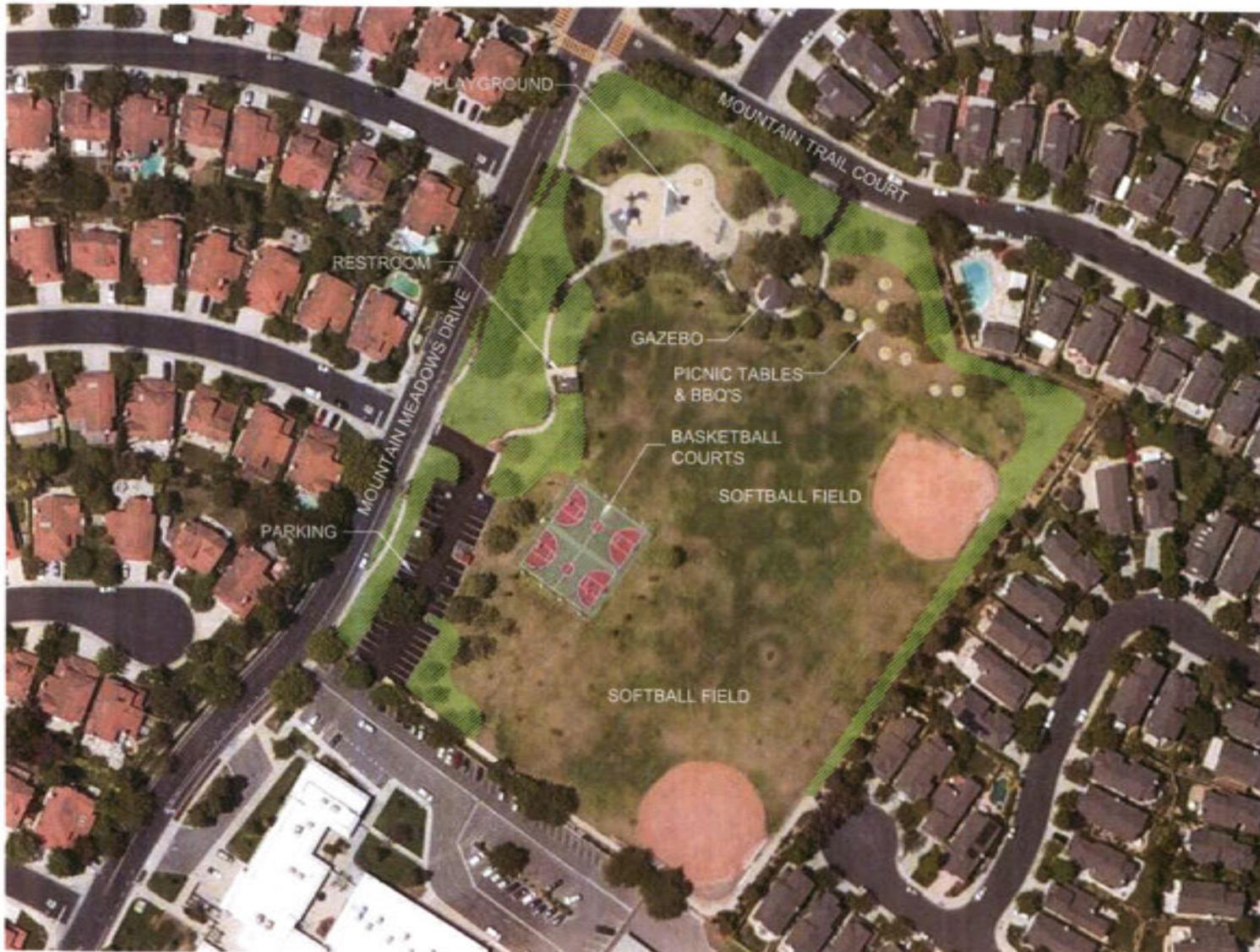
 TURF CONVERSION  $\approx$  47,000 S.F. ( $\pm$ 1.1 ACRE)  
(24% REDUCTION)

(EXISTING TURF AREA  $\approx$  200,000 S.F. ( $\pm$  4.6 ACRES))

**ORIENT**   
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# MOUNTAIN MEADOWS PARK PROPOSED TURF CONVERSION PLAN



TURF CONVERSION  $\approx$  58,600 S.F. ( $\pm$ 1.3 ACRE)  
(23% REDUCTION)

(EXISTING TURF AREA  $\approx$  254,000 S.F. ( $\pm$  5.8 ACRES))

NOTE



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MAY 19, 2015

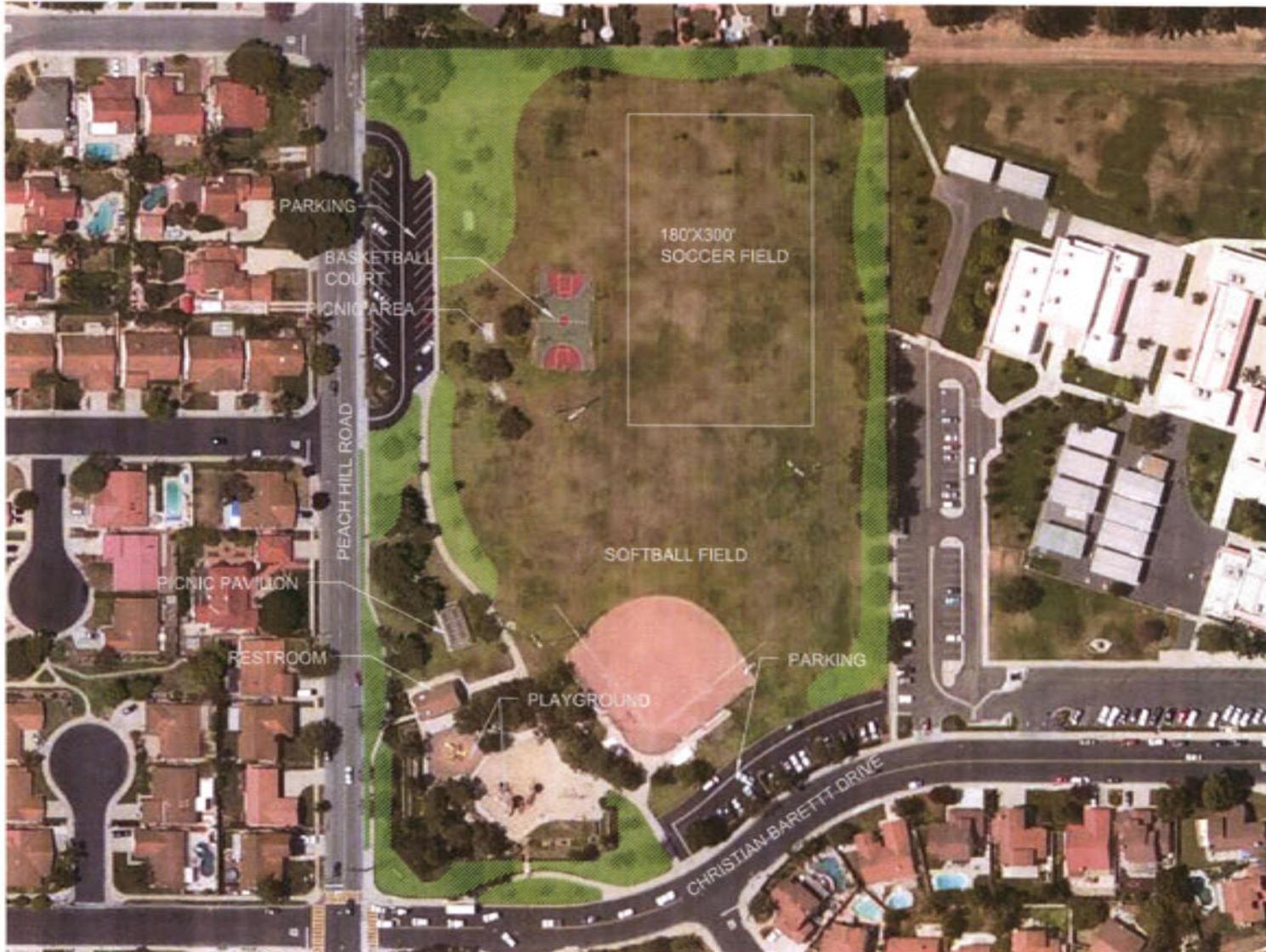


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# PEACH HILL PARK

## PROPOSED TURF CONVERSION PLAN



 TURF CONVERSION  $\approx$  76,100 S.F. ( $\pm$ 1.7 ACRE)  
(25% REDUCTION)

(EXISTING TURF AREA  $\approx$  302,000 S.F. ( $\pm$  6.9 ACRES))

**NOTE**   
**SCALE** N.T.S.  
**DATE** MAY 19, 2015



# POINDEXTER PARK PROPOSED TURF CONVERSION PLAN



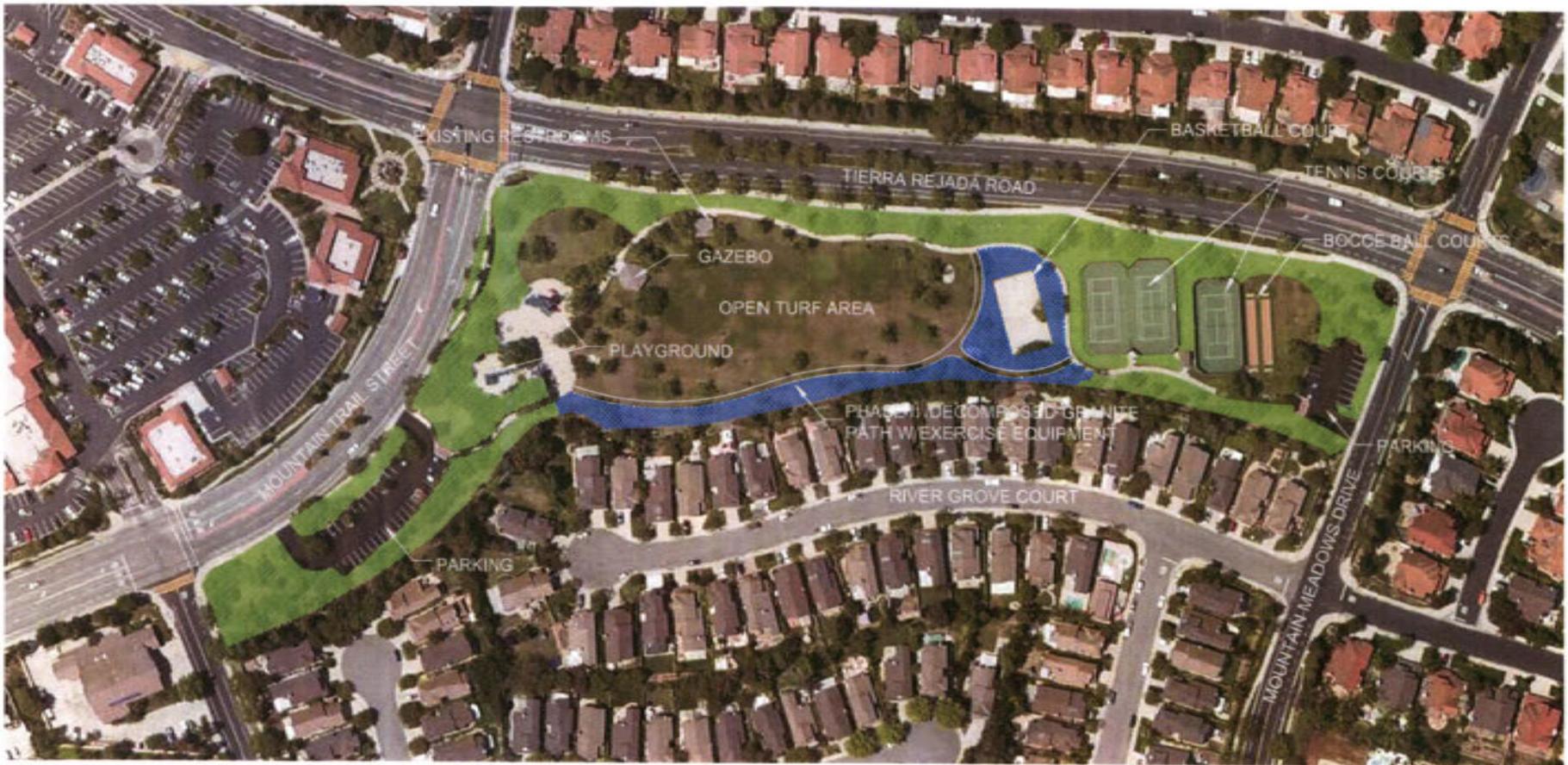
TURF CONVERSION  $\approx$  20,800 S.F. ( $\pm$ 0.5 ACRE)  
(13% REDUCTION)

(EXISTING TURF AREA  $\approx$  163,000 S.F. ( $\pm$  3.7 ACRES))

**NORTH**   
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**DATE** MAY 19, 2015



# TIERRA REJADA PARK PROPOSED TURF CONVERSION PLAN



PHASE I TURF CONVERSION  $\approx$  28,400 S.F. ( $\pm$ 0.7 ACRES)  
(COMPLETED FEBRUARY 2015)



PHASE II TURF CONVERSION  $\approx$  103,521 S.F. ( $\pm$ 2.4 ACRES)

TOTAL TURF CONVERSION  $\approx$  131,921 S.F. ( $\pm$ 3.1 ACRES)  
(56% REDUCTION)

(EXISTING TURF AREA  $\approx$  235,689 S.F. (5.4 ACRES))

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# VETERAN'S MEMORIAL PROPOSED TURF CONVERSION PLAN



 TURF CONVERSION  $\approx$  1,630 S.F. ( $\pm$ 0.03 ACRE)  
(100% REDUCTION)

(EXISTING TURF AREA  $\approx$  1,630 S.F. ( $\pm$ 0.03 ACRES))

NORTH



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DATE

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# VIRGINIA COLONY PARK PROPOSED TURF CONVERSION PLAN



TURF CONVERSION  $\approx$  17,000 S.F. ( $\pm$ 0.4 ACRE)  
(45% REDUCTION)

(EXISTING TURF AREA  $\approx$  38,000 S.F. ( $\pm$ 0.9 ACRES))

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**DATE**

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# SHADYRIDGE ROAD BUFFER ZONE - LMD ZONE 8

## PROPOSED TURF CONVERSION PLAN



TURF CONVERSION  $\approx$  35,600 S.F. ( $\pm$ 0.8 ACRE)  
(84% REDUCTION)

(EXISTING TURF AREA  $\approx$  42,600 S.F. ( $\pm$ 1.0 ACRES))

**NORTH**   
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**DATE** MAY 19, 2015