



This meeting is not subject to Brown Act noticing requirements. The agenda is subject to change.

**Water Demand Committee Members:**  
*Alvin Edwards, Chair*  
*Jeanne Byrne*  
*Molly Evans*

**Alternate:**  
*David Potter*

**Staff Contact**  
*Stephanie Locke*  
*Arlene Tavani*

*After staff reports have been distributed, if additional documents are produced by the District and provided to the Committee regarding any item on the agenda, they will be made available at 5 Harris Court, Building G, Monterey, CA during normal business hours. In addition, such documents may be posted on the District website at [www.mpwmd.net](http://www.mpwmd.net). Documents distributed at the meeting will be made available in the same manner.*

**AGENDA**  
**Water Demand Committee**  
**Of the Monterey Peninsula Water Management District**  
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Tuesday, April 23, 2019, 4:00 PM  
District Conference Room, 5 Harris Court, Building G, Monterey, CA

**Call to Order**

**Comments from Public** - *The public may comment on any item within the District's jurisdiction. Please limit your comments to three minutes in length.*

**Action Items** -- *Public comment will be received.*

1. Consider Adoption of September 18 and November 6, 2018 Committee Meeting Minutes
2. Consider Lawn Removal Rebate Request from Monterey Peninsula Unified School District for the International School of Monterey
3. Consider Adoption of 2019 Committee Meeting Schedule

**Discussion Items** – *Public comment will be received.*

4. Discuss Water Factor for Pint Urinals in a Residential Bathroom
5. Discuss Appropriate High Efficiency Appliance Credit for Flushing Residential Toilets With Rainwater and/or Greywater System
6. Discuss Amendment to Rule 24, Table 2: Non-Residential Water Use Factor for Hotel Rooms

**Set Next Meeting Date**

**Adjournment**

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## **WATER DEMAND COMMITTEE**

### **ITEM: ACTION ITEM**

#### **1. CONSIDER ADOPTION OF SEPTEMBER 18 AND NOVEMBER 6, 2018 COMMITTEE MEETING MINUTES**

**Meeting Date:** April 23, 2019                      **Budgeted:** N/A

**From:** David J. Stoldt,                      **Program/**  
General Manager                      **Line Item No.:** N/A

**Prepared By:** Arlene Tavani                      **Cost Estimate:** N/A

**General Counsel Review:** N/A

**Committee Recommendation:** N/A

**CEQA Compliance:** This action does not constitute a project as defined by the California Environmental Quality Act Guidelines section 15301

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**SUMMARY:** Attached as **Exhibits 1-A and 1-B**, respectively, are draft minutes of the September 18 and November 6, 2018 committee meeting minutes.

**RECOMMENDATION:** The Water Demand Committee should review the minutes and approve them by motion.

#### **EXHIBITS**

**1-A** Draft minutes of September 18, 2018 committee meeting

**1-B** Draft minutes of November 6, 2018 committee meeting



**EXHIBIT 1-A**

**DRAFT MINUTES**  
**Water Demand Committee of the**  
**Monterey Peninsula Water Management District**  
*September 18, 2018*

**Call to Order**

The meeting was called to order at 3:30 pm in the MPWMD conference room.

**Committee members present:** Andy Clarke, Chair  
Jeanne Byrne  
Molly Evans

**Committee members absent:** None

**Staff members present:** David Stoldt, General Manager  
Stephanie Locke, Water Demand Division Manager  
Stephanie Kister Campbell, Conservation Analyst  
Arlene Tavani, Executive Assistant

**District Council present:** No

**Comments from the Public:** No comments.

**Action Items**

- 1. Consider Adoption of July 10, 2018 Committee Meeting Minutes**  
On a motion by Director Byrne and second of Director Evans, minutes of the July 18, 2018 committee meeting were adopted unanimously on a vote of 3 – 0 by Byrne, Clarke and Evans.
- 2. Consider Request for Phase Two Project Funding: Broadway Water Conservation Garden at Martin Luther King Jr. Elementary School, 1713 Broadway Ave., Seaside**  
On a motion by Director Byrne and second of Director Evans, the committee recommended that the Board of Directors approve an expenditure of \$30,000 to fund Phase Two of the project. The motion was approved on a unanimous vote of 3 – 0 by Byrne, Evans and Clarke.
- 3. Consider Lawn Removal Rebate Request from Monterey Peninsula Unified School District for the International School of Monterey**  
Director Evans offered a motion that was seconded by Director Byrne, to approve the staff recommendation to postpone action on this request until it is known if

money will be available in the Rebate account to fund the project following completion of the HEART Project. The motion was approved on a unanimous vote of 3 – 0 by Evans, Byrne and Clarke.

**Discussion Items**

**4. Discuss Potential Water Conservation Demonstration Projects at Rancho Cañada Park**

Stephanie Kister Campbell summarized this issue and responded to questions. The committee expressed support for use of facilities at Palo Corona Regional Park for demonstration classes, and for the concept of a water conservation demonstration project at the facility. Staff will bring this item back to the committee with a more definitive plan for use of the site.

**5. Discuss Rules and Regulations Clean Up Ordinance**

No discussion. The item was deferred to a future meeting at the request of staff.

**Set Next Meeting Date:** No future meeting date was scheduled.

**Adjournment:** The meeting was adjourned at 4:20 pm.

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**EXHIBIT 1-B**

**DRAFT MINUTES**  
**Water Demand Committee of the**  
**Monterey Peninsula Water Management District**  
*November 6, 2018*

**Call to Order**

The meeting was called to order at 3:35 pm in the MPWMD conference room.

**Committee members present:** Andy Clarke, Chair  
Jeanne Byrne  
Molly Evans

**Committee members absent:** None

**Staff members present:** David Stoldt, General Manager  
Stephanie Locke, Water Demand Division Manager  
Stephanie Kister Campbell, Conservation Analyst  
Gabriela Ayala, Conservation Analyst  
Arlene Tavani, Executive Assistant

**District Council present:** No

**Comments from the Public:** No comments.

**Action Items**

- 1. Provide Direction to Staff on Development of Ordinance No. 180 to Address Shortcomings and Clarifications Needed in the Rules and Regulations**  
Stephanie Locke reviewed the discussion points listed in Exhibit 1-A of the staff note. The committee commented as follows on the Water Permits section. Policy Question (PQ) 1: a separate water meter for landscaping should not be required. PQ 2: for condominiums that are served by a master meter, submeters could be installed. The association must maintain records of the water use and provide those records to the District upon request. PQ 3: a variance from the metering requirement should not be needed for affordable housing projects. No variance for market rate housing. PQ 4: submeters would be allowed on an entitlement that is subject to a moratorium, but when the water permit moratorium has ended they must be replaced with California-American (Cal-Am) meters. PQ 9: will not be included in the ordinance. Comments on the Water Credit section follow. PQ 1: agreed that removal of a high efficiency clothes washer (HECW) will not be documented as an abandonment of use until a deed restriction is recorded on the HECW. PQ 3: agreed that water credit for an outdoor clothes washer will be applied if it is the only clothes washer on the property. Comments on the Water

Conservation section follow. PQ 5: agreed that the rebate for high efficiency toilets should be deleted. PQ 7: agreed that new installation of dipper wells should be water efficient models. Staff will confirm that the Monterey County Health Department approves of water efficient models. PQ 10: staff will take no action at this time on banning the use of dual flush toilets.

**Discussion Items**

**2. Discuss Definitions for Commercial Water Use Factors**

Ms. Locke distributed two handouts titled Discussion Draft Table 2: Non-Residential Water Use Factors and Attachment 1 to MPWMD Resolution No. 2017-16. The committee reviewed Draft Table 2 and expressed agreement with the proposal. It was suggested that a Bar might be moved to a Group II use. In that case, further thought should be given to the concept that the square footage of a bar would be based on the ABC license diagram area.

**Set Next Meeting Date:** No future meeting date was scheduled.

**Adjournment:** The meeting was adjourned at 4:40 pm.

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## WATER DEMAND COMMITTEE

### ITEM: ACTION ITEM

#### 2. CONSIDER LAWN REMOVAL REBATE REQUEST FROM MONTEREY PENINSULA UNIFIED SCHOOL DISTRICT FOR THE INTERNATIONAL SCHOOL OF MONTEREY

**Meeting Date:** April 23, 2019                      **Budgeted:** Yes

**From:** David J. Stoldt,                      **Program/** 4-2-4-C  
            General Manager                      **Line Item No.:**

**Prepared By:** Stephanie Kister                      **Cost Estimate:** \$25,067

**General Counsel Review:** N/A

**Committee Recommendation:** N/A

**CEQA Compliance:** This action does not constitute a project as defined by the California Environmental Quality Act Guidelines section 15301

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**SUMMARY:** District Rule 141, Water Conservation Rebates, allows a lawn removal rebate at a public facility to exceed the square-footage limitation of 2,500 square-feet (sf<sup>2</sup>), subject to Board approval. Monterey Peninsula Unified School District (MPUSD) has requested \$25,067 for the removal of 25,067 sf<sup>2</sup> of turf located at the International School of Monterey (ISM), 1720 Yosemite Avenue in Seaside (**Exhibit 2-A**).

Currently, ISM's lower field has 46,799 sf<sup>2</sup> of irrigated play grass, and there is 4,053 sf<sup>2</sup> of non-essential turf in front of the school. The current 50,852 sf<sup>2</sup> of turf uses approximately 1,593,005 gallons of water annually. The new proposal would abandon the current irrigation and focus the irrigation to an area of play. This area's size will be decreased, and irrigation efficiency improved. The new field area of 25,785 sf<sup>2</sup> will use 575,521 gallons. This proposal will reduce water use by 1,017,481 gallons (3.1 AFA), a 63 percent reduction in water use annually. The field irrigation would also have a flow sensor and master valve reducing water waste caused by irrigation breaks.

As the school is served by the Seaside Municipal Water System, rebates are funded by the MPWMD Rebate account. There is approximately \$40,000 available in this account for fiscal year 2018-19. Estimated water savings for this project is 1,017,481 gallons/year (3.1 AFA).

**BACKGROUND:** The Water Demand Committee heard this item in September 2018 and, based on staff recommendation, decided to postpone action on this request until after the completion of the HEART Project. The HEART Project is utilizing the MPWMD Rebate account to provide water efficient toilets, clothes washers and dishwashers in the Disadvantage Communities (DAC) in Seaside. Use of the MPWMD Rebate account for MPUSD's turf removal project could have potentially prevent DAC residents from receiving important water-saving retrofits that will save money on their water and power bills and result in far more significant water savings. The HEART Project was completed and rebate funds are available for this request.

**RECOMMENDATION:** Staff recommends the Committee approve the request and recommend to the Board that the requested Lawn removal rebate be granted for the MPUSD project.

**EXHIBIT**

**2-A** MPUSD Proposal

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**EXHIBIT 2-A**



**Monterey Peninsula Water Management District  
GRANT PROPOSAL  
For  
Monterey Peninsula Unified School District**

**Turf removal**

Name of Applicant: Monterey Peninsula Unified School District

Invoicing & Contract Name & Contact Information: Brett McFadden, Associate Superintendent of Business Services  
(831) 645-1269 [raltmeyer@mpusd.k12.ca.us](mailto:raltmeyer@mpusd.k12.ca.us)  
700 Pacific St, Monterey, CA 93940 or PO BOX 1031 Monterey CA 93942

Project Manager Name & Contact Information: David Chandler, Coordinator of Renewable Energy and Conservation  
(831) 901-7376 [dchandler@mpusd.k12.ca.us](mailto:dchandler@mpusd.k12.ca.us)

Project Site Addresses: 1.. International School of Monterey  
1720 Yosemite Ave, Seaside, CA 93955

Account: City of Seaside Water: 03-7580-00

Proposed turf removal: **Turf removal 25,067 square feet  
Requesting \$1 per square foot Turf removal incentive.  
\$25,067**

Proposed Projects: MPUSD's water conservation program is dedicated to improving schools landscape and Athletic Fields. This project will take the existing irrigated play field of 50,852 sq. ft. and convert it into a walking track, and multi-play area sized for pinto league baseball, grass volleyball or a U10 soccer. The play area project will remove 21,014 square feet of turf. 4053 square feet in the front of the school will be converted into drought tolerant landscape.

## EXHIBIT 2-A

Monterey Peninsula Unified School District  
Monterey Peninsula Water Management District  
Water Conservation Grant Proposal

### **Preliminary to proposed project**

In spring 2014 MPUSD received a grant from MPWMD to install Hydro-point weather trak ET Pro controllers at the Cal Am serviced sites. The grant proposal was met and exceeded by installing all the controllers, as well as eliminating manual and battery operated zones.

In 2014 MPWMD funded a field retrofit and master water conservation Plan for Ord Terrace Elementary. This project has inspired MPUSD to commit to water conservation

landscapes. Ord terrace eliminated 100% of the ornamental turf and replaced it with drought tolerant landscape. Water use has been reduced at Ord Terrace by 63%.

In summer of 2015 MPUSD funded and installed 27 Hydro-point weather trak ET controllers at the City of Seaside and Marina Coast water serviced sites. Making the districts irrigation fully controlled by Smart weather based irrigation controllers

In summer of 2015 MPUSD administration and board approved the use of water utility savings to be used to retrofit our fields irrigation, implement a turf removal plan and set up a turf maintenance program. The MPUSD Energy Program in collaboration with the facilities department has created a six year field retrofit plan and a six year Ornamental Turf removal plan.

In the 2015-16 school year MPUSD is implementing a 5<sup>th</sup> grade Eco- Ambassador program. Throughout the school year all 5<sup>th</sup> grade students will take classes from Return of the Native, Pacific Grove Museum and Monterey Art Council. Part of the goal of this program is to educate the students about water conservation and to create a Native garden with passive and active storm water catchment. The designs for these gardens are inspired by the professional designs funded by the Ord Terrace grant.

In 2016 City of Seaside and MPWMD funded \$20,000 turf removal incentive for the 87,000 square feet of turf eliminated in the King Sports Complex field retrofit project.

As the Coordinator of Renewable Energy and Conservation. I am working diligently to conserve water across the whole school district. The momentum of the MPUSD water conservation plan is growing. MPUSD is committed to reduce the need for water across the district. By 2021 we have the goal of reducing ornamental turf by 65% and to retrofit every field with efficient irrigation systems including flow sensors and master valves. MPUSD has been asked to speak at a state level as a leader in school districts water conservation. MPUSD has reduced its water use by 58% compared to the base year of 2013.

In 2016 MPUSD was awarded a Drought Response Outreach Program for Schools Grant to implement Storm water LID projects and education at 4 Seaside Schools.

In 2017-18 MPUSD partnered with MPWMD to remove 13,424 sq. ft. of turf and create a partnership water conservation demonstration garden on Broadway Ave.

**EXHIBIT 2-A**

Monterey Peninsula Unified School District  
Monterey Peninsula Water Management District  
Water Conservation Grant Proposal

In 2017-18 MPUSD received \$10,540 for turf removal incentive to make Martin Luther King a site with zero non-essential turf.

In 2018-19 MPUSD is requesting a second year of funding for the Partnership with MPWMD water conservation demonstration garden on Broadway Ave.

I look forward to working with MPWMD for many years.

Thank you

David Chandler

Coordinator of Renewable Energy and Conservation

**APPLICATION ATTACHMENTS**

**1- SITE photos ..... 4**  
**2- PROPOSED PLAN ..... 5**  
**3- ESTIMATED BUDGET ..... 5**  
**4- PROJECT TIMELINE..... 5**  
**5- MAINTENANCE PLAN ..... 6**  
**6- WATER SAVINGS..... 6**  
**7- CURRENT LANDSCAPING INFORMATION ..... 6**

**EXHIBIT 2-A**

Monterey Peninsula Unified School District  
Monterey Peninsula Water Management District  
Water Conservation Grant Proposal

**ATTACHMENT 1**

**SITE Photo**



**EXHIBIT 2-A**

Monterey Peninsula Unified School District  
Monterey Peninsula Water Management District  
Water Conservation Grant Proposal

**ATTACHMENT 2**

**PROPOSED PLAN**

<u>Site</u>	<u>Project</u>	
1. International School of Monterey	Turf removal	Retrofit field to have an efficient irrigation with head to head coverage, fractional stations and flow sensors and master valve. Focused irrigation to play area. Turf removal by creating a 20 perimeter walking track 100 ft diameter baseball infield and a drought tolerant landscape.

**ATTACHMENT 3**

**BUDGET**

<p><b>Monterey Peninsula Water Management District LANDSCAPE GRANT PROPOSAL MONTEREY PENINSULA UNIFIED SCHOOL DISTRICT BUDGET \$55,127 total field retrofit project</b></p> <p><b>Turf removal: 25,067 square feet</b></p> <p><b>Turf removal funds: \$1 per square foot: \$25,067</b></p>
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**ATTACHMENT 4**

**PROJECT TIMELINE**

Upon MPWMD award of proposal MPUSD and the other funding approval project planning and design will start. The turf removal will be complete by June 30<sup>th</sup>, 2019.

**EXHIBIT 2-A**

Monterey Peninsula Unified School District  
Monterey Peninsula Water Management District  
Water Conservation Grant Proposal

**ATTACHMENT 5**

**MAINTENANCE PLAN**

The MPUSD maintenance department will maintain the area. This maintenance will be scheduled Weekly.

David Chandler, the MPUSD Coordinator of Renewable Energy and Conservation, will oversee implementation of proposed project.

**ATTACHMENT 6**

**WATER SAVINGS**

Currently International School of Monterey lower field has 46,799 square feet of irrigated play grass and 4053 square feet on non-essential turf. The current field of 50,852 sq ft of turf would use 1,593,005 gallons of water annually. The new proposal would abandon the current irrigation and focus the irrigation to an area of play. This areas size will be decreased and irrigation efficiency improved. The new field area of 25,785 square feet use 575,521 gallons, This proposal will reduce water use 1,017,481 gallons, a 63% reduction in water need annually. The field irrigation would also have a flow sensor and master valve reducing water waste caused by irrigation breaks.

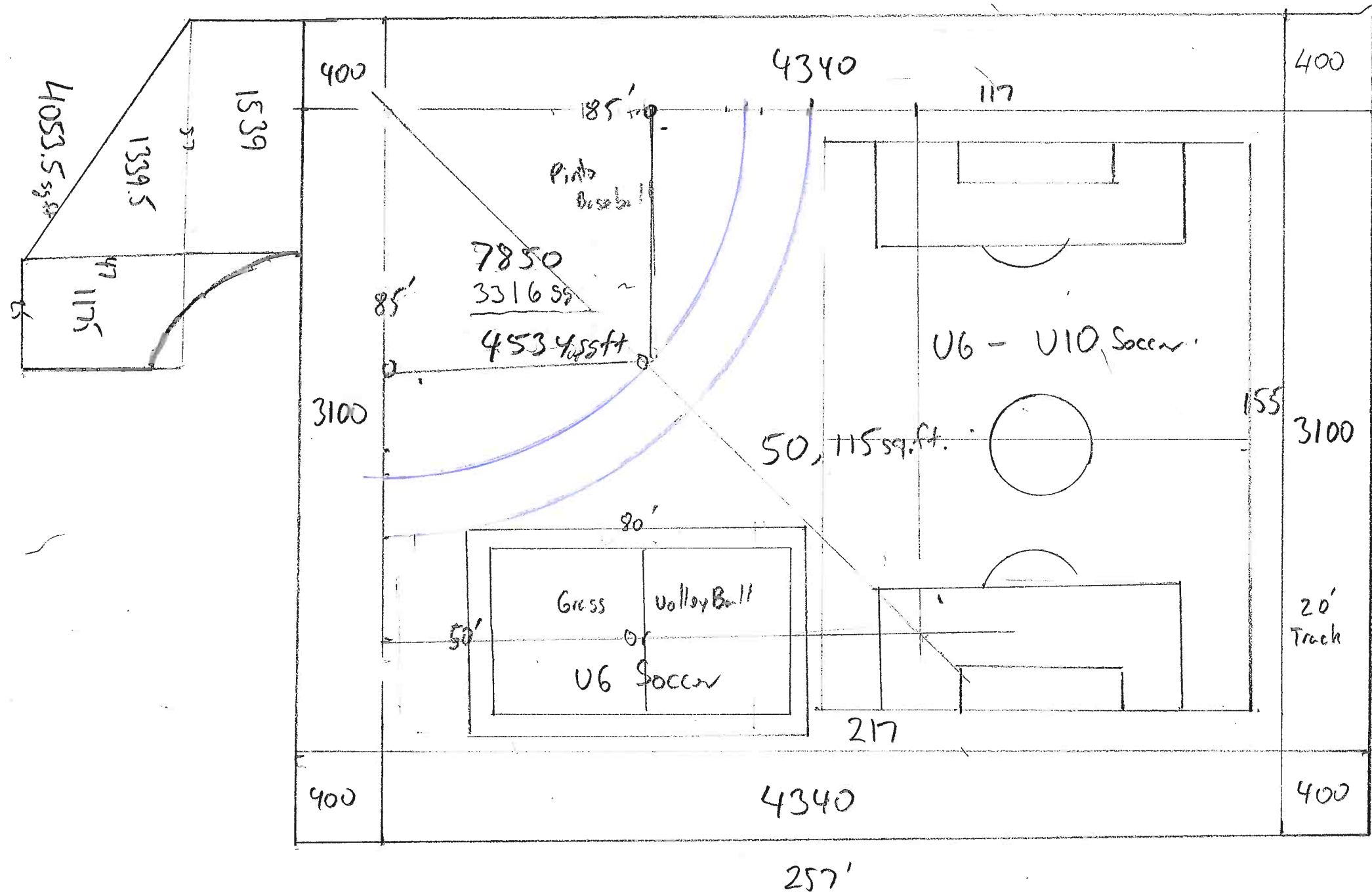
**ATTACHMENT 7**

**CURRENT LANDSCAPING INFORMATION**

	<u>H2O Requirement</u>	<u>Current Irrigation</u>
Field	Turf (High) 50,852 sqft	Hunter I core , poor mapping approx..57% efficiency

EXHIBIT 2-A

Existing field 50,115 sqft with 3316 D6 infield + 4053 sqft Ornamental. = 50,852 sqft  
 New field. 33635 sqft with 7850 D6 infield = 25785  
25067  
 Turf Removal.



16,480  
 + 4053  
20,533 sqft  
 + 4534 sqft  
25067 sqft

**WATER DEMAND COMMITTEE**

**ITEM: ACTION ITEM**

**3. ADOPT 2019 COMMITTEE MEETING SCHEDULE**

**Meeting Date: April 23, 2019 Budgeted: N/A**

**From: David J. Stoldt, General Manager Program/  
Line Item No.: N/A**

**Prepared By: Arlene Tavani Cost Estimate: N/A**

**General Counsel Review: N/A**

**Committee Recommendation: N/A**

**CEQA Compliance: This action does not constitute a project as defined by the California Environmental Quality Act Guidelines section 15301**

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**SUMMARY:** See below a proposed meeting schedule for the remainder of 2019.

**RECOMMENDATION:** The Water Demand Committee should review the meeting schedule and amend or approve it by motion.

<b>Proposed 2019 Meeting Schedule</b>		
<b>Day of Week</b>	<b>Date</b>	<b>Time</b>
Tuesday	June 4	4 pm
Thursday	July 11	4 pm
Wednesday	August 7	4 pm
Tuesday	September 10	4 pm
Tuesday	October 1	4 pm
Wednesday	November 6	4 pm
Tuesday	December 17	4 pm



**WATER DEMAND COMMITTEE**

**ITEM: DISCUSSION ITEM**

**4. DISCUSS WATER FACTOR FOR PINT URINALS IN A RESIDENTIAL BATHROOM**

**Meeting Date:** April 23, 2019                      **Budgeted:** N/A  
**From:** David J. Stoldt,                      **Program/** N/A  
            General Manager                      **Line Item No.:**  
**Prepared By:** Stephanie Locke                      **Cost Estimate:** N/A

**General Counsel Review:** N/A  
**Committee Recommendation:** N/A

**CEQA Compliance:** This action does not constitute a project as defined by the California Environmental Quality Act Guidelines Section 15378.

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**SUMMARY:** The committee should discuss whether a reduced fixture unit value should be assigned when both a Urinal and a toilet are installed in a residential Bathroom.

**RECOMMENDATION:** The Committee should discuss the matter and provide direction to staff.

**EXHIBIT**  
None

**WATER DEMAND COMMITTEE**

**ITEM: DISCUSSION ITEM**

**5. DISCUSS APPROPRIATE HIGH EFFICIENCY APPLIANCE CREDIT FOR FLUSHING RESIDENTIAL TOILETS WITH RAINWATER AND/OR GREYWATER SYSTEM**

**Meeting Date:** April 23, 2019 **Budgeted:** N/A  
**From:** David J. Stoldt, General Manager **Program/ Line Item No.:** N/A  
**Prepared By:** Stephanie Kister **Cost Estimate:** N/A

**General Counsel Review:** N/A  
**Committee Recommendation:** N/A  
**CEQA Compliance:** This action does not constitute a project as defined by the California Environmental Quality Act Guidelines section 15301

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**SUMMARY:** The 2013 California Plumbing Code allowed for the reuse of treated rainwater and greywater for flushing toilets and clothes washing. New construction of hotels and apartment complexes are best able to incorporate this technology in the building design to reduce their water demand. The Monterey County Health Department requires a backup water supply from a reliable source to augment the rainwater/greywater system. This can be done by installing dual plumbing to the water fixtures or by adding an auto fill valve to the storage tank.

The District has received a request to reduce the Estimated Annual Water Use Capacity for installation of a greywater system to flush toilets in two proposed Multi-Family Dwellings in Monterey. Staff estimates that between 10 and 15 gallons of treated greywater (depending on the flush volume of the toilet) would be needed to meet the toilet demands of an apartment with an average of 2.3 persons per household. This demand would be easily offset with greywater generated from bathing (e.g., one ten minute shower). Design of the system would need to have adequate storage to meet demand for two to three days to ensure that the Potable water backup would not be used. A similar requirement would apply to a rainwater flushing system, which would require significantly more storage to meet demands during the dry months.

Staff is requesting direction from the Water Demand Committee regarding amendment to Rule 24, Table 4: High Efficiency Appliance Credits for greywater (and rainwater) systems for toilet flushing. This table can be amended by Resolution of the Board of Directors. The Committee should discuss whether a complete offset of the toilet fixture count should be available, or whether the fixture count should be reduced for these systems.

In granting a credit for a greywater (or rainwater) toilet flushing system, the District would require metering on both the greywater and the Potable backup to the system and annual reporting. The requirements would be recorded as a permanent requirement on the property title. In addition, the

Monterey County Health Department would also permit the system. Roger Van-Horn from the Health Department will be available to respond to questions at the meeting.

**RECOMMENDATION:** The Committee should discuss the matter and provide direction to staff.

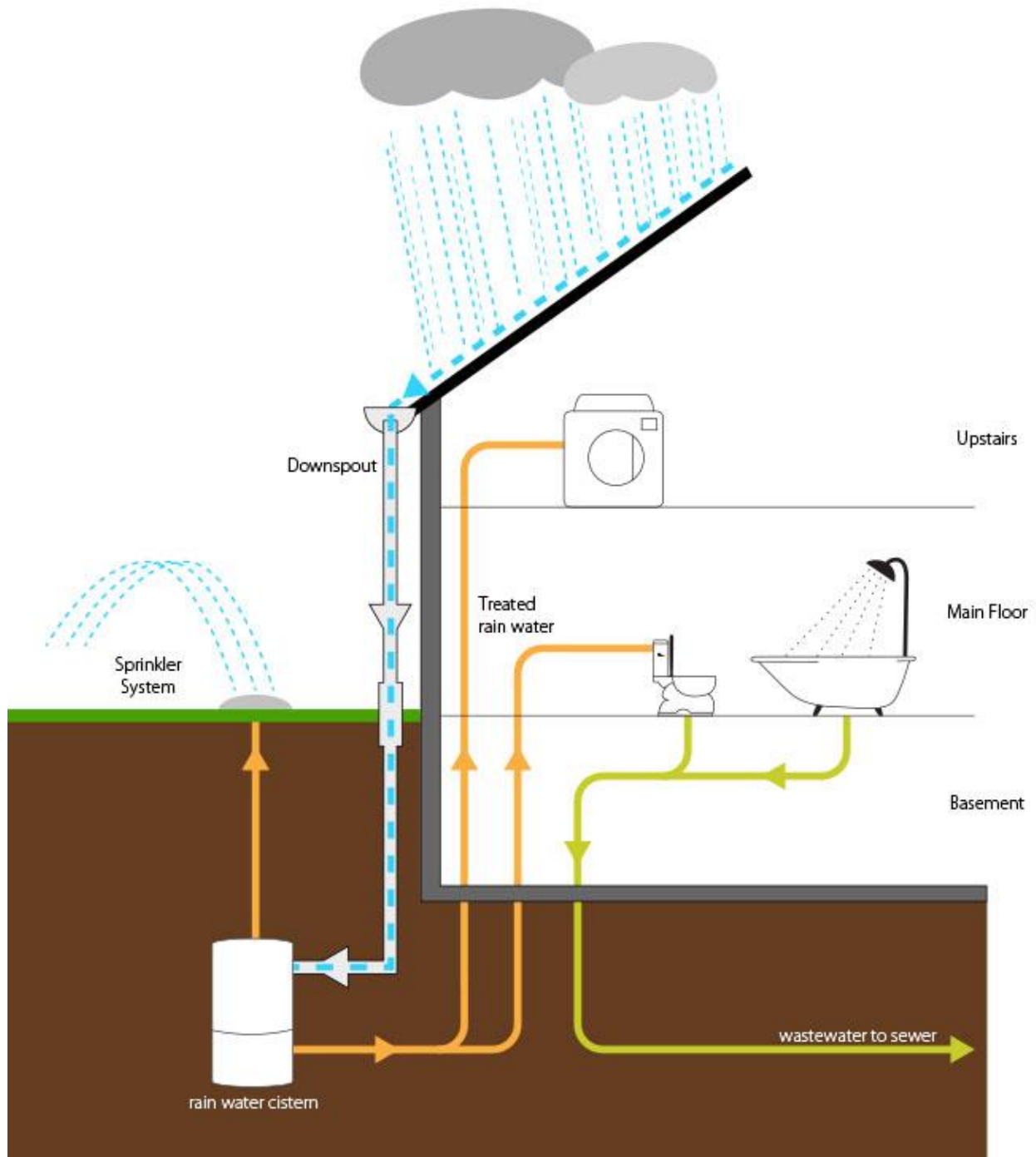
**EXHIBITS**

**5-A** Diagram of Rainwater Reuse

**5-B** Diagram of Greywater Reuse

**EXHIBIT 5-A**

**General layout of rainwater system**



**EXHIBIT 5-B**

