

Zone 6

**Report to the Zone Commissioners  
Design and Construction Projects  
for Calendar Year 2011**

By Dusty Williams, General Manager-Chief Engineer  
January 2012

**GENERAL:**

Throughout the District (all Zones) during Calendar Year 2011, the Design and Construction Division Issued Notices of Completion for four capital projects and three repair projects with a combined value of \$10 million. Surprisingly, despite the downturn in development activity, the District issued Notices of Completion for 20 developer-built projects with a total value of almost \$36 million during Calendar Year 2011. Many of these projects were "almost" finished at the end of the boom in 2008/2009 and are now being accepted as final punch-lists are finally completed. Two large projects in Zone 4, Paloma Wash in Menifee and the large storm drain associated with the "Sketchers" distribution facility in Moreno Valley accounted for nearly \$20 million of the \$36 million total.

With many project plan sets nearing completion at press time we expect to see a significant uptick in both the number of in-house CIP projects under construction and the total value to be constructed compared to Calendar Year 2011. We also have several other drainage projects being managed by individual cities with the District participating in funding.

Again, during this last year, bids for District construction projects have shown that general contractors are still making very competitive bids. The District will continue to try to leverage this dip in construction costs by pushing hard to complete designs and advertise projects while prices are low.

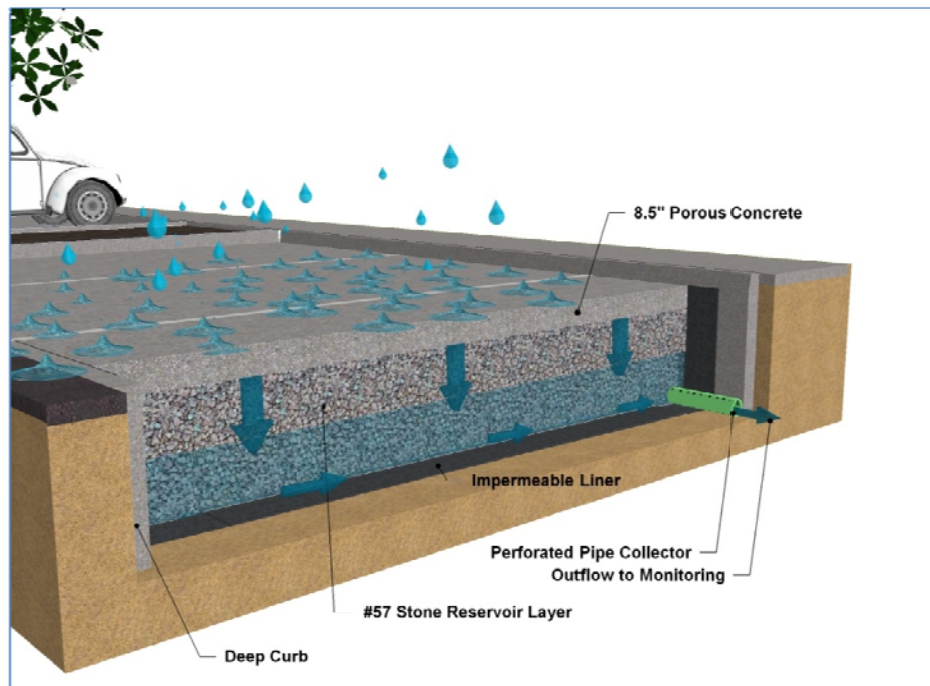
Additionally, we are also underway with a number of repair projects that require engineered drawings due to the severity of the damage or potential damage to our facilities. Deficiencies range from exposed and rusting rebar to undermined slope paving. Most of these projects were designed by outside consulting engineers. At press time for this report three separate projects along Palm Canyon Wash and Murrieta Line F repairs have been completed. The Arlington and La Sierra channel repairs are underway. Montgomery and Cabazon channel repairs are out to bid and another repair in the south Corona area will be out to bid in January. An additional project along the San Jacinto River Levee adjacent to the Soboba Tribe's holdings will follow early this year.

Calendar Year 2011 saw completion of significant changes at the District's office site. The completed Low Impact Development (LID) Retrofit Project consists of three parts converting the District's Market Street campus into a regional example of green development concepts. The upgraded facility will be used as a regional "green" training center for municipal employees, developers, engineers, and contractors throughout the Inland Empire and Orange County.

Currently, there are limited locations and opportunities to demonstrate the proper application of LID BMPs. This facility is uniquely designed to accomplish both demonstration and monitoring of the effectiveness of LID practices. This project is intended to facilitate the support and implementation of LID BMPs by municipalities and developers. The cost of this project was partially subsidized by a \$475,000 State Proposition 13 grant administered by SAWPA.



**Centralized Monitoring Point for Low Impact Demonstration Project**



**Pervious Portland Cement Concrete**

Following is a status summary of the capital improvement projects for Zone 6:

**Current Year Capital Projects (Budgeted FY 2011/2012)**

- **East Cathedral Canyon Channel, Left Bank Levee Toe Extension (6-8-00010-00)** - In 2006 it was discovered that the scour protection for the existing levee would not meet FEMA criteria. This project is necessary to protect the existing developed area in the Cove. To minimize the total project cost, remedial work needed to be constructed prior to the installation of a golf course in the channel. Construction began in August 2008 and was completed by December. The original contract cost was \$1,179,150. District inspection staff monitored the project during construction. When the existing levee lining was exposed, minor cracking and other deficiencies were revealed and were remedied as a part of this project. The extra work is expected to increase costs somewhat above the original bid. A reimbursement agreement between the District and Cathedral City has been finalized and is awaiting execution. Final figure is \$1,462,593.39.
- **Palm Canyon Wash Levee Rehabilitation and Channel Restoration (6-8-00040-00)** - The Palm Canyon Wash Levee Rehabilitation and Channel Restoration project involved the rehabilitation of the existing left and right bank levees to meet current FEMA levee freeboard criteria and removal of excess material from Palm Canyon Wash Channel to restore the channel flow line to the original design flow line. The project location is the existing Palm Canyon Wash within the city of Palm Springs from 600 feet downstream of Gene Autry Trail to approximately 1,000 feet upstream of East Palm Canyon Drive. The project consisted of approximately 7,100 lineal feet of soil cement and 3,600 lineal feet of reinforced cast-in-place concrete floodwall. Floodwalls vary in height from 1.83 to 6 feet tall. The construction of this project is complete and the Notice of Completion was filed in April 2011.
- **Palm Canyon Wash/Cherly Creek Levee Restoration (6-8-00040-90)** - The proposed project is located within the city of Palm Springs, upstream of South Palm Canyon Drive and south of Murray Canyon Drive. The north bank of the existing channel is considered a Provisionally Accredited Levee (PAL) that has an unstable slope. The current levee cannot be certified without improvements. It is believed that the adjacent alluvial fan runoff splits out and is tributary to Cherly Creek. Cherly Creek Channel is proposed to be enlarged to accommodate the additional flow. The north bank is proposed to be a soil cement revetment with adequate freeboard to satisfy FEMA's levee requirements. This year the soils report and pot-holing of utilities was completed.

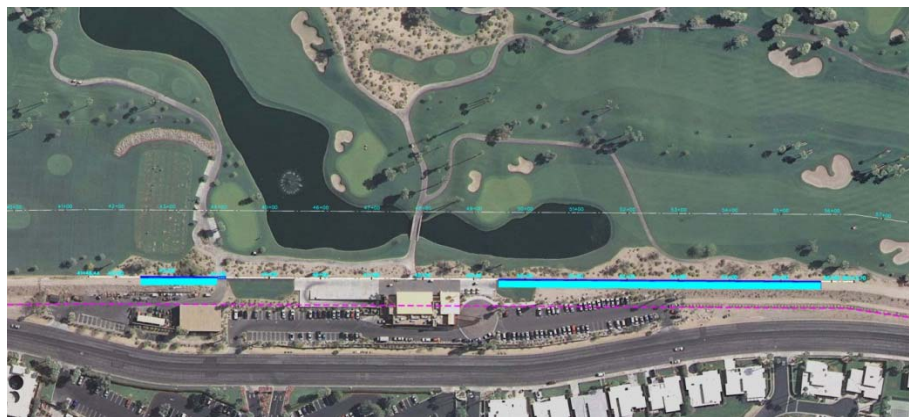


Geotechnical review and coordination is required for levee certification. The CEQA and environmental permits (404 and 401) are anticipated to be received in March 2012. Once received, completion of the plans and specifications will take one man-month. We anticipate construction in the latter part of the summer 2012. FEMA processing for levee certification will be necessary once construction is completed.

- **Palm Canyon Wash/Stage 4 Levee Restoration (6-8-00040-91)** - This project includes raising a freeboard deficient FEMA levee. The 2,100 feet reach of grass lined levee is located within the Tahquitz Creek Golf Resort upstream of Golf Club Drive. Additional dirt and grass will cap the existing levee to provide adequate freeboard and FEMA certification. Geotechnical review and coordination is required for levee certification. We coordinated with the City of Palm Springs and the Golf Course owners for an agreement to work within the easement and were able to acquire additional easements where necessary. Categorical Exemption was filed when the project was approved; no environmental permits were necessary. The construction was completed in December 2011. FEMA processing for levee certification has begun now that construction is completed.



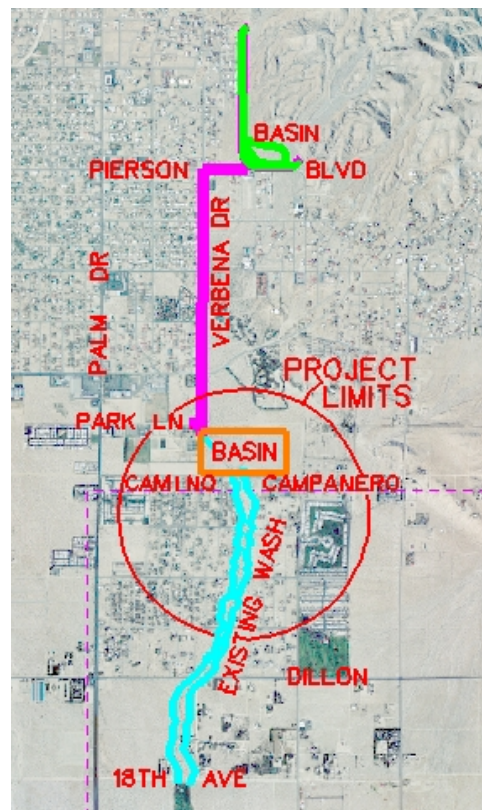
- **Palm Canyon Wash/Arenas Levee Restoration (6-8-00040-92)** - This project includes raising a freeboard deficient FEMA levee by 0.5 feet. The levee deficiency is located upstream and downstream of Indian Canyon Golf Course club house. A concrete curb will be added to the top of the existing concrete levee. Geotechnical review and coordination is required for levee certification. We coordinated with the City of Palm Springs and Golf Course owners



for an agreement to work within the easement. Categorical Exemption was filed when the project was approved; no environmental permits were necessary. Construction was

completed in December 2011, however, final payment and retention have not been sent. FEMA processing for levee certification has begun now that the construction is completed.

- **Verbena Channel, Stage 1 (6-8-00150-01)** - Verbena Channel, as shown on the District's Desert Hot Springs Master Drainage Plan, is an open channel extending from just south of Two Bunch Palms Trail north approximately 7,000 feet to Pierson Boulevard. In early meetings on the project, it was recognized that an adequate outlet beyond that shown on the master plan would be required. Therefore, the design limit for the first stage was set from Dillon Road north to Two Bunch Palms Trail. Given the age of the master plan and the numerous challenges presented, a pre-design study was initiated to choose the best overall concept. The study resulted in significant changes from the master planned facility. The Verbena system as now envisioned comprises a detention basin at Pierson Boulevard connected by an underground storm drain in Verbena Drive to a detention basin at Camino Campanero. Flows exiting the basin at Camino Campanero will enter an existing wash extending downstream to 18<sup>th</sup> Street. Verbena Channel, Stage 1 will include the basin at Camino Campanero along with inlet and outlet works and a drainage easement over the existing downstream wash.



In October 2009 the developer of the "Desert Rose" project at the northwest corner of Park Lane and Verbena Drive confirmed that there is no interest in allowing interim inlet works to be constructed on the property. The District has developed a conceptual alternate design that will not require the acquisition of right of way on that property.

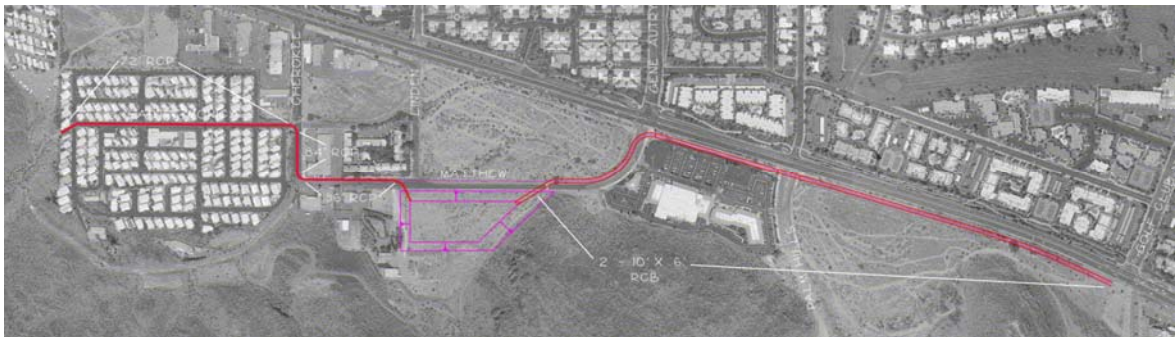
The terms of the cooperative agreement between the District, City and Developer regarding a right of way swap that will produce the basin site were mostly finalized in 2008. However, the agreement was not executed because the Developer seemed to have put the project on hold. This year, the Developer declared bankruptcy and the property is currently owned by the bank. Currently, the City has taken the lead in acquiring the needed right of way for the basin site as well as future Verbena Drive which also serves as the Line B right of way.

District has acquired all the rights of way needed downstream of Camino Campanero, including a parcel owned by the Palm Springs Unified School District acquired this year.

The District completed the biological surveys required by CEQA in 2007. A Mitigated Negative Declaration for the project was adopted in late 2009. Additional cultural surveys downstream of Camino Campanero were completed this year.

In a parallel route to the City's effort in resolving the apparent stalemate of right of way acquisition from the bank, the District is undertaking a feasibility study examining possible staged implementation of an alternate Master Drainage Plan Line B (reducing or eliminating the needed basin), and potentially alleviating more immediate flooding in the Desert Hot Springs area. This study is focused on the Line B system, including Pierson Basin.

- **Palm Springs Line 41, Stage 3 (6-8-00160-03)** - This project extends from existing Stage 2 at Golf Club Drive westerly along East Palm Canyon Drive to Gene Autry Trail. It also includes Lateral 41C, aligned in Gene Autry Trail (Matthew Drive). Design mapping was completed in the spring of 1999 and at that time the District conducted an alternative study in response to a request by the City of Palm Springs to consider a different alignment in place of the Master Plan's open channel adjacent to East Palm Canyon Drive west of Gene Autry Trail. When presentation of the study reminded City staff of the fact that the existing stages of the Line 41 facility were not designed to remove the FEMA floodplain, presently mapped as Zone A, the City requested the District come up with a solution to remove the floodplain. In 2005 the District met with the City of Palm Springs and the City of Cathedral City to discuss alternative studies prepared by the District and make a determination on design requirements. While Stage 3 of Line 41 is not physically in the City of Cathedral City, its design does affect the existing floodplain in the City. After much discussion, both Cities requested that the FEMA floodplain be removed and for the District to proceed with the project shown below. The project incorporates a large retention basin and is a significant departure from the master planned facility.



Line 41, Stage 3 – Underground Storm Drain with Detention Basin

Our total project cost (estimated September 2008) is approximately \$15 million. This figure is comprised of \$7 million for construction and \$8 million for right of way. It had been determined that the maximum reasonable expenditure by the District within the five-year capital improvement plan timeframe is approximately \$9 million. Despite the City of Palm Springs' pledged contribution of roughly \$1 million, we are left with a \$5 million shortfall. This gap must be funded by the local benefiting owner/developers. However, the lull in development pressure appears to have de-motivated property owners downstream of

Palm Hills Drive. These beneficiaries/stakeholders may be less able/willing to contribute to the project shortfall.

During 2009, the District secured the basin right of way through eminent domain. A new appraisal at the "date of value" set a figure for escrow at \$2.6M. All of those funds have been withdrawn by the bank and owner. A judge set September 20, 2010 as the "date of process" which is when the jury trial would begin (to determine the amount District has to pay the property owner). On a parallel course, a mandatory settlement conference (for the basin) with another judge had been set for July 20, 2010. However, both jury trial and mandatory settlement conference were reset by the court to March and January 2011, respectively. In July 2011, the property owner settled with the District for \$4M. The acquisition of the right of way for the storm drains is pending until funds become available.

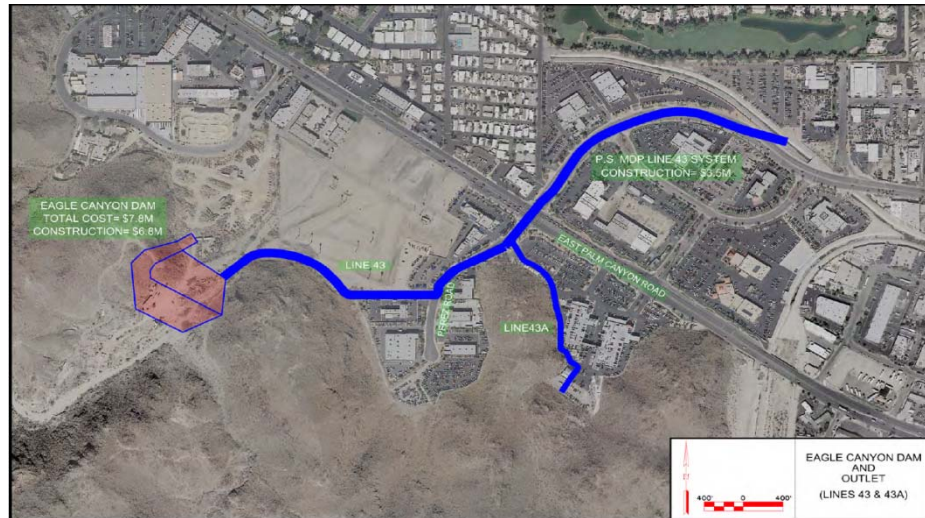
Due to recent listing of the Casey's June Beetle, design effort essentially has been halted while we focus on formulating a plan to address this species that will be affected by the project. Currently, we are looking into mitigating the impacts offsite within the Palm Canyon Wash. In addition, we are exploring options with the local tribe in mitigating the impacts to the Casey's June Beetle through their proposed habitat conservation plan. The costs associated with mitigating impacts to the Casey's June Beetle are unknown but could be significant.

The District did not receive any negative feedback from the Fish and Wildlife Service in an informal conference regarding the District's proposed offsite Beetle mitigation within the Palm Canyon Wash. The District is currently preparing the necessary supporting documents for the regulatory permit application. The District will consult with the Fish and Wildlife Service again prior to the formal submittal anticipated in the next 3 months.

- **Palm Springs Lines 43 and 43A (6-8-00163-01)** - This underground storm drain will start at North Cathedral Canyon Channel and extend southwesterly in Perez Road crossing East Palm Canyon Drive (HWY 111) and westerly along the southerly edge of the City's redevelopment area to the outlet of the future Eagle Canyon Dam. Lateral 43A will extend northwesterly behind the Jessup auto dealership and connect to Line 43 southerly of Highway 111 on Perez Road. This project will work in concert with Line 41 and Eagle Canyon Dam to provide flood protection to property along Highway 111 from Golf Club Drive to Auto Park Road. Design work on this project has been contracted to a consulting engineering firm. The design work is proceeding quickly and is scheduled to be completed by late spring 2012.



- **Eagle Canyon Dam (6-8-00190-01)** - The design of this project located southerly of Canyon Plaza Drive was on hold for many years until some arrangement could be made to clear the site of all illegally dumped materials. The District's position was that the project could not move forward until others funded the construction debris and hazardous material removal and the District was absolved from financial responsibility for any undetected hazardous materials found on the site.



While the design was on hold, the District contracted numerous studies to quantify the volume of dumping and also met with the Cities of Palm Springs and Cathedral City in an effort to facilitate the cleanup. In 2004 the City of Cathedral City began efforts to secure outside grant monies for the cleanup and the District, in an effort to keep the project moving, agreed to begin design. In April 2005 the District's Board approved a \$918,000 engineering services agreement with Genterra Consultants to prepare design drawings, secure the necessary environmental permits and also obtain a permit from the State Division of Safety of Dams. In 2006 Genterra completed an extensive geophysical investigation and also completed the focused biological surveys needed to prepare the necessary environmental documents.

The project design process remains on track. The engineering drawings are essentially complete and will soon be ready for signature. Final approval of the plans and specifications by the California State Department of Safety of Dams (DSOD) is pending. The District has completed the Record-of-Survey maps for the required right of way; the right of way acquisition is progressing with most of the parcels in the process of being purchased.

The progress on the environmental process has been slow. The Environmental Impact Report (EIR) was certified by the Board of Supervisors on April 26, 2011. The 401, 404 and 1602 permits were applied for on August 18, 2011. Our environmental consultant (RBF) is expecting a 9 to 12 month turnaround for the permits which would mean that we could obtain the permits in the summer of 2012. We anticipate constructing this project as soon as permits are available and that the construction would take from 9 months to 1 year.