

**Los Osos Wastewater Project  
Project Status Update  
June 18, 2013**

**Collection System Summary and Issues**

Contract status and schedule summary

Contractors for the collection system began work in September 2012, with work planned to continue through February 2015, when the pump station contract is to be completed. Currently, the work is approximately 25% complete, with more than 12 miles of pipeline installed. Construction is being completed under three separate contracts: Area "A&D", Area "B&C", and Pump Stations. The pipelines, and related facilities, are being constructed under the Area "A&D" and Area "B&C" contracts. This work has been ongoing since last September. The Pump Stations contract is officially in progress, however the contractor has scheduled their work to be completed within the last year of their 30 month contract. They are currently completing submittals and equipment procurement in preparation for beginning site work in 2014. At this point in the project, all three contractors are on schedule for on-time or early completion of their work.

Work in Area "D", the southern portion of Baywood Park, is nearing completion, with final pavement restoration having been completed on many blocks. As crews complete Area "D", they will be progressing through Area "A", generally north of Pismo Avenue, in a continuous manner. The contractor has already completed work on most of Santa Ysabel, the major street at the north end of Los Osos, in order to facilitate traffic flow in and out of Area "A".

Work in Area "C", south of Los Osos Valley Road, is nearing completion, and crews will soon begin progressing through Area "B", which includes the Cuesta by the Sea and Sunset Terrace neighborhoods. Construction crews also plan to resume work on Los Osos Valley Road through the summer, laying sewer and recycled pipelines to the water recycling facility. Coordinating traffic control and maintaining access to businesses will be a priority for the construction management team.

Regular monthly construction progress updates are prepared and posted on the project website. The updates provide a discussion of recent progress, photos of the work and budget update information. As an example, the April 2013 update is attached to this Project Status Update Summary.

Lateral change requests

**Issue:** The location and depth of each of the 4,800 sewer laterals at the property line of each residence was originally design for the Los Osos Community Services District's 2005 project, with considerable input from property owners on their preferred location of the lateral. The current project utilized the prior design from the 2005 project as much

as possible, while reviewing the design to ensure that the laterals would function properly and making changes required for complying with new permit conditions or other constraints. The Public Works Dept. also conducted a significant amount of public outreach related to on-lot lateral connections during the project development, but homeowner preferences were not revisited. After the start of construction, the project team began receiving an overwhelming volume of requests from property owners to confirm or relocate the lateral connect point. Relocation requests are being made for a variety of reasons, from technical necessity to personal preference. To date, there have been almost 600 requests to relocate laterals and it is estimated that more than 1,000 may be relocated by the completion of construction. The project team has worked to accommodate almost all of the requests, since this is the single interface that exists between the project and most properties. Processing the design changes prior to the contractor's work has required considerable effort, especially in the cases where resident request a change after the construction staking is set or when the contractor has begun work at their home.

**Approach:** The volume of requests has recently decreased significantly and the project team has taken steps to mitigate the impacts of requests. Two direct mail brochures have been sent to all property owners in recent months to educate them on the lateral process and discourage untimely requests. Construction staking is now several months ahead of the actual work, which helps make property owners aware that construction is pending and shows where the lateral is planned. Lateral change requests are no longer accepted within 72 hours of the planned work and others are accepted for technical necessity only. The document management approach has also been revised to reduce the number of associated design changes. Overall, being responsive to property owner requested lateral relocations is expected to be an ongoing effort, but at a reduced level.

### Unforeseen Utility Conflicts

**Issue:** Conflicts with underground utilities was identified as a project risk prior to bidding and an allowance for costs associated with conflicts was included in the contract bid prices. The location of existing underground utilities, such as water lines, natural gas lines, and fiber optic cables, are provided by each utilities company and shown on the project plans. While the physical location some of these utilities was confirmed by exploratory excavations (potholing) during the design phase, it was not feasible to physically locate the vast majority of these lines prior to construction, due to cost and schedule constraints. The construction contracts utilize a standard industry approach of requiring the contractors to pothole all utility crossings prior to laying new sewer pipelines. However, in some cases, the contractor encounters, and may damage, utilities while excavating the pipeline trenches because their location was unknown to the utility owners.

**Approach:** The contractors are required to pothole all utility main crossings prior to excavating the pipeline trenches. This approach allows time for any necessary redesign to avoid conflicts and increased contractor costs. Unforeseen utilities that were unknown to the utilities companies and are encountered while excavating the pipeline trenches

account for 1% - 2% of the total number of utility lines that the contractor must cross and protect. Overall, the unforeseen utility allowance in the contract bid price is expected to be sufficient to address the potential contractor costs.

### Road Restoration

**Issue:** The total contract price is based on estimated quantities of various bid items, including road base and asphalt for restoring pipeline trenches. To date, the actual repair widths of trenches required to install the pipelines has been approximately 25% - 50% greater than anticipated. In limited locations, the poor or thin condition of existing pavement has resulted in the need for repaving the full road width. As a result, the total cost for road restoration associated with the pipeline construction is expected to exceed the estimates in the original contract price.

**Approach:** The project team is coordinating with the Traffic, Roads, and Development Services Division of the Public Works Department to track costs and the most cost effective approach to restoration on each individual road segment. Coordination with the other divisions allows Public Works to evaluate, on a case by case basis, the restoration requirements under the County's development standards and identify cost sharing opportunities between the project and the Roads fund. Multiple approaches are being applied to complete the pavement restoration, including reduced thickness of base and asphalt, negotiated unit cost reductions, utilization of County Roads forces to complete some repairs, and cost sharing from the Roads fund for restoration that provides additional road benefits beyond what is required to restore trenches.

### Engineering amendments

**Issue:** The scope of work for both the Construction Manager and Designer is required to continue throughout the duration of the construction contracts. The planned schedule in each engineering agreement is significantly shorter than the actual construction schedule in the approved contracts for the collection system. Additionally, both the Construction Manager and Designer are incurring additional costs, beyond the scope in the agreement, due to the large number of lateral change requests and unforeseen utilities.

**Approach:** The agreement amendment with CDM, which is included in this Board agenda item, will address the issue for the Designer. The level of effort for the Construction Manager, HDR, is within the planned amount in the original agreement. However, an additional amendment with HDR will be necessary to address the additional costs for the longer construction schedule in order to continue their work through the end of the collection system construction.

## Water Recycling Facility Summary and Issues

### Design status and schedule summary

The Water Recycling Facility is in the final design phase, with completed plans and specifications schedule for August. Upon completion of the contract documents, the project will be scheduled for a Board hearing to authorize the bidding process and subsequently for contract award. Contract award is scheduled for late this year. Site work is expected to begin in early 2014 and continue for approximately two years.

The scope, or design, of the facility is dictated by the project Coastal Development Permit. It will be located on approximately 12 acres, north of the intersection of Los Osos Valley and Clark Valley Roads. The facility will produce tertiary recycled water for 100% reuse and include administration and maintenance buildings, plus storage ponds for approximately 30 acre feet of recycled water. The storage ponds will facilitate the use of recycled water for irrigation reuse.

### Recycled Water Storage Ponds

**Issue:** Planning level concepts for the treatment plant site included ponds with 50 acre-feet of recycled water storage, which was included in the project Coastal permit application. The final permit conditions have constrained the plant and storage pond footprint to a relatively small and sloping area. The preliminary 20% design identified that a much greater amount of earthwork will be required to construct ponds with 50 acre-feet of capacity at a cost of several million dollars more than anticipated.

**Approach:** The water recycling facility design team has completed the 60% design of the facility and is developing a technical memo to document the actual volume of storage ponds required, which is expected to be approximately 30 acre-feet. The reduced volume of the ponds will be less costly than the 50 acre-foot alternative, however the earthwork volumes and costs will still be a significant factor in the overall facility construction. The 90% level design and revised cost estimate is planned for submittal in late June and will include the reduced storage volume.

### Water Recycling Facility Cost Estimates

**Issue:** Planning level estimates for a treatment facility were developed in 2007 and updated for the May 2011 budget approval. The estimated cost of construction in the approved budget is \$31.6 million. The current designer's estimate of probable construction costs, based on the 60% design level, is \$41.1 million.

**Approach:** The construction cost estimate at 60% design is preliminary and conservative, and project contingencies are available to complete the water recycling facility within the overall project budget, even based on the \$41.1 million estimate. However, at almost \$10 million greater than the budget estimates, it is a potentially significant issue. There are a number of potential factors that may be sources for the

higher cost estimates, including 1) the 60% design level estimate is appropriately conservative and includes a 15% contingency factor, 2) a 5% inflation escalation is assumed through a mid-point of construction in late-2014, and 3) estimates for earthwork and recycled water storage ponds increased due to site constraints established in the Coastal Development Permit. In anticipation of the 90% design and cost estimate and final engineer's estimate, the project team will be working with the designer and construction manager to complete a constructability review to identify potential cost savings and refine the construction cost estimates. The water recycling facility is the final major cost component of the overall project, and the actual cost will be established by the low bid contract cost, planned for late-2013. Once this cost is established the overall project costs will be relatively certain and final contingencies or unallocated amounts will be known.

## **Other Project Related Items**

### Project Funding Summary

Project funding for the total \$173 million budget is provided by a combination of low interest loans and grants from the US Department of Agriculture (USDA) and State Water Board. The grant component is approximately \$18 million, plus a pending application for an additional \$4 million in recycled water program grants from the State Water Board. Currently, the USDA is funding all project soft costs (engineering, right of way, and administration) and the collection system construction costs. The State Water Board will fund the water recycling facility construction and assume the funding responsibility for all aspects of the project after the USDA funding amount of \$87 million is exhausted. This funding approach was developed to utilize the entire amount of USDA funding, which includes better financial terms, and any project cost savings realized or additional grant funds will reduce the State Water Board loan amount.

### Water Conservation Program Summary

The water conservation program began in October 2012 with the Board approval of the Implementation Plan. Since that time, the project team has completed initial public outreach with a direct mail brochure to all eligible property owners and also reached out to local plumbers who are doing the majority of the retrofit work. The table below, summarizes the program status through May 2013, for both budget and work efforts. Overall, there have been almost 800 toilets replaced with ultra low-flow fixtures and almost 1,000 residences are confirmed in compliance with the project's Coastal Development Permit requirements for water conservation.

**Updated Schedule and Budget for Water Conservation Implementation  
of Recommended Program Measures (as of May 2013)**

Measure Number	Measure	Number of Activities	Rebates	Staff Costs	ODC	Total Cost to Date	Total Budget
<b>Category 1 - Residential Programs</b>							
1A	Subsidize Partial Community Retrofit, Residential Toilets	779	\$189,409	\$35,260	\$10,929	\$235,598	<b>\$2,061,375</b>
	Subsidize Partial Community Retrofit, Residential Showerheads	742	\$29,039	\$5,111	n/a	\$34,150	<b>\$368,575</b>
	Subsidize Partial Community Retrofit, Residential Faucet Aerators	1065	\$5,277	\$929	n/a	\$6,206	<b>\$100,769</b>
1B	Residential Clothes Washer Rebate	8	\$1,200	\$211	n/a	\$1,411	<b>\$385,000</b>
1C	Alternatives for Fully Retrofitted Residences	0	0	\$0	n/a	\$0	<b>\$199,525</b>
	<b>Total Costs</b>		<b>\$224,926</b>	<b>\$41,510</b>	<b>\$10,929</b>	<b>\$277,365</b>	<b>\$3,115,244</b>
<b>Category 2 - Commercial and Institutional</b>							
2A	Subsidize Partial Community Retrofit, Commercial	0	0	0	n/a	0	\$192,223
2B	Replace Restaurant Spray Nozzles	0	\$0	\$0	n/a	\$0	\$3,649
2C	Institutional Building Retrofit	0	\$0	\$0	n/a	\$0	\$38,588
2D	Commercial High Efficiency Clothes Washer Rebate	0	\$0	\$0	n/a	\$0	\$14,280
	<b>Total Costs</b>		<b>\$0</b>	<b>\$0</b>		<b>\$0</b>	<b>\$248,739</b>
<b>Category 3 - Education and Outreach Program</b>							
3A	Residential Water Surveys	250	n/a	\$17,675	\$1,154	\$18,829	<b>\$824,250</b>
3B	Commercial, Industrial and Institutional Surveys	4	n/a	\$450	\$0	\$450	<b>\$35,102</b>
3C	Public Information Program	1	n/a	\$9,347	\$4,855	\$14,202	<b>\$220,500</b>
3D	Media Campaign	\$0	n/a	\$0	\$0	\$0	<b>\$178,500</b>
	<b>Total Costs</b>		<b>\$0</b>	<b>\$27,472</b>	<b>\$6,009</b>	<b>\$33,481</b>	<b>\$1,258,352</b>
<b>Contingency for Additional Measures in Years 4-10</b>							<b>\$327,600</b>
<b>Plan Development Cost to Date</b>							<b>\$50,000</b>
<b>Total Program Costs</b>			<b>\$224,926</b>	<b>\$68,650.00</b>	<b>\$16,938</b>	<b>\$310,846</b>	<b>\$4,999,934</b>

**Confirmed Homes in Compliance: 988**

Attachment: Project Construction Update – April 2013



# Los Osos Wastewater Project Project Construction Update Month of April 2013

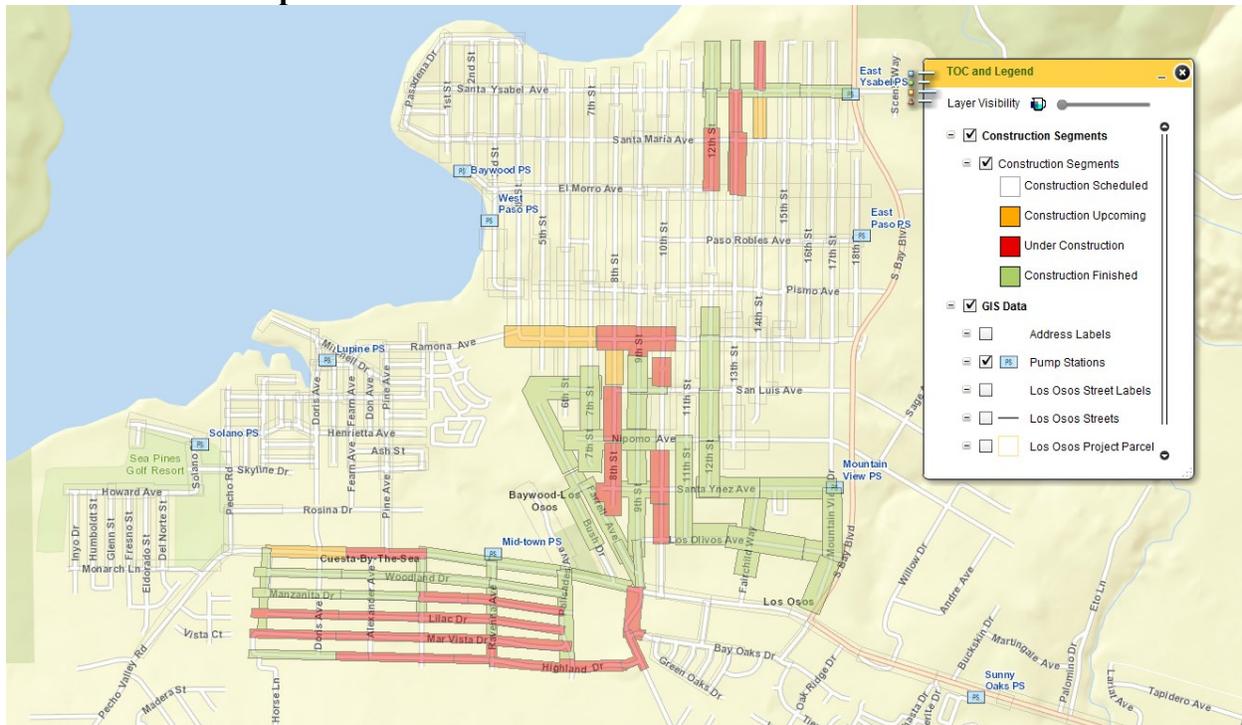


Prepared by: John Waddell, PE  
Los Osos Wastewater Project Manager

**Update Summary:** Pipeline construction continued at increased rates of production on both contracts. Up to 6 mainline pipe installation crews, plus pump station, leachfield, lateral, and paving crews worked on the project in April. Major work areas include side streets near Santa Ysabel, areas south of Ramona, Redfield Woods tract south of Los Osos Valley Road and the Broderson leachfields.

**Notable News/Milestones:** The Area “B&C” contractor, W.A. Rasic, completed mainline pipe installation in the Redfield Woods tract, final laterals and pavement restoration is ongoing, and moved on to Bayview Heights and Los Osos Valley Road by the end of April. Work also began on the construction of the Broderson leachfields. The Area “A&D” contractor, ARB, is nearing completion of work on 9<sup>th</sup> Street and progressing to Ramona Ave between 9<sup>th</sup> and 4<sup>th</sup> Streets. Work on each contract was approximately 25% complete by the end of April.

## Areas of work for April 2013:

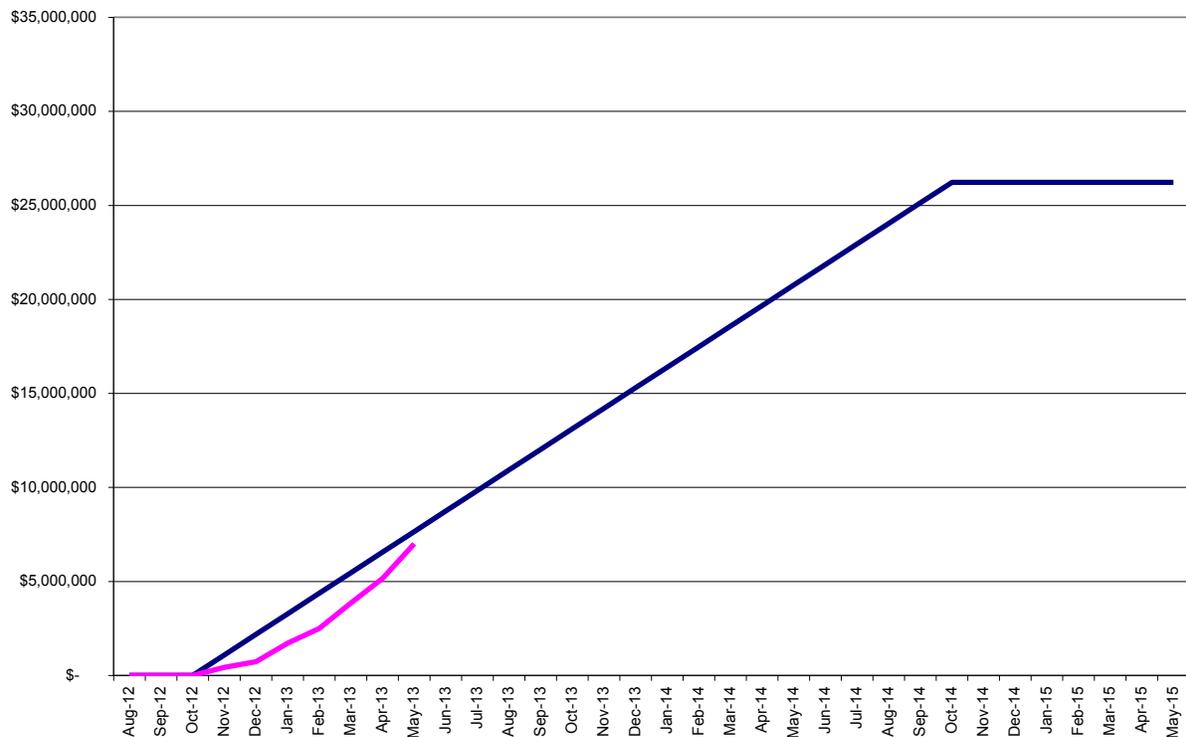


**Collection System Area “A&D” Contract  
Contract No. 300448.08.01.AD**

<b>Contract Summary</b>			
Contractor	ARB Inc.	Notice to Proceed Date	8/13/2012
Contract Value	\$26,223,855	Original Contract Days	694
Approved Cost Changes	\$0	Approved Extra Days	0
Adjusted Contract Value	\$26,223,855	Planned Substantial Completion Date	7/8/2014
Approved Payment to Date	\$6,993,620	% complete	28%

<b>Summary of Work</b>	<b>Last Month</b>	<b>Total To Date</b>
Blocks/Segments completed	5	30
Total feet of pipe laid	9,800	38,200
Number of laterals installed	157	566

**Collection System Area A&D**



**In the last month, ARB worked in the following areas:**

- Installing sewer mains and laterals in the general areas from 6<sup>th</sup> to 12<sup>th</sup> and Santa Ynez to Ramona.
- Installing sewer mains and laterals on side streets off Santa Ysabel from 12<sup>th</sup> to 18<sup>th</sup>.
- Installing pump station wet wells at Mountain View and 9<sup>th</sup> Street.
- Completing lateral installation and pavement restoration behind sewer main installation.

**In the current month, ARB plans to proceed with the following work:**

- Continuing pipeline installation progress northward through Area “D”.
- Installing gravity sewer and force main on Ramona Ave. between 9<sup>th</sup> and 4<sup>th</sup> Streets.
- Completing additional pump station wet well installations.
- Restoring pavement in completed areas, including 9<sup>th</sup> street.

**Contract Schedule Review:** ARB has increased production by adding a fifth pipeline installation crew, plus a dedicated pump station crew. Based on the current schedule status they are anticipated to meet the substantial completion date of 7/8/2014.

**Pictures**



Pump Station valve vault



Trench shoring for sewer main installation



Heavy equipment for sewer main installation



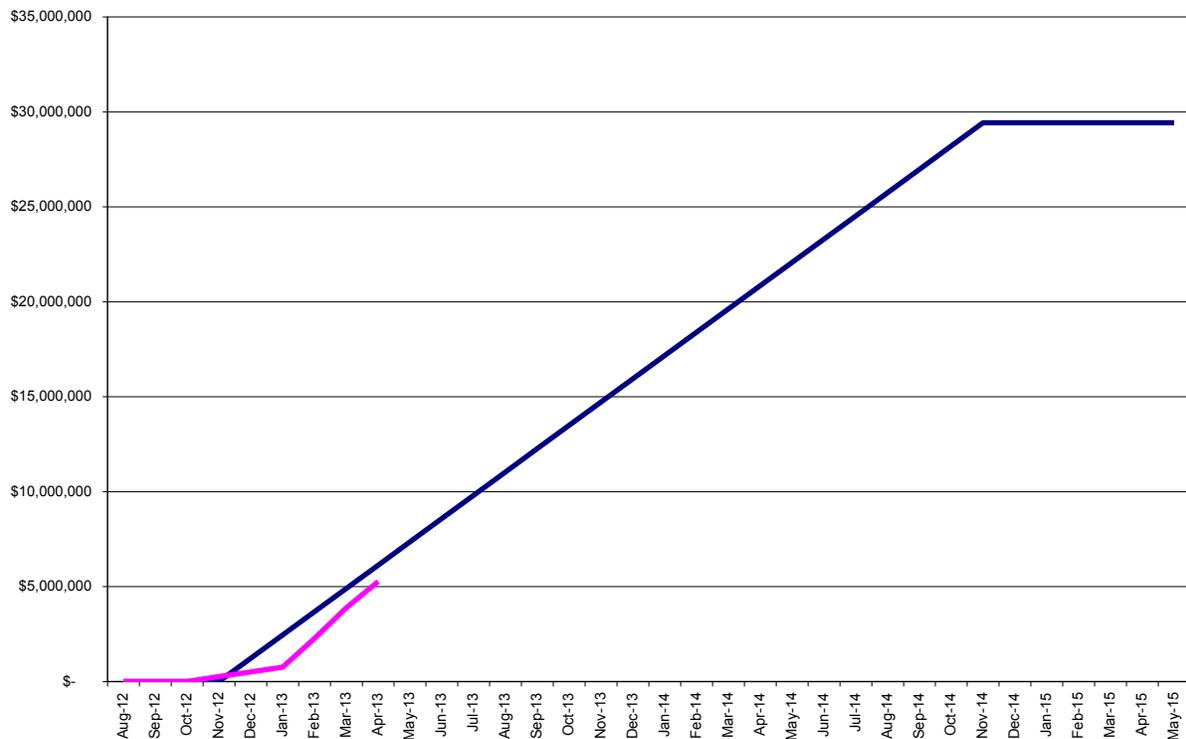
Ongoing pavement restoration

**Collection System Area “B&C” Contract  
Contract No. 300448.08.01.BC**

<b>Contract Summary</b>			
Contractor	W.A. Rasic	Notice to Proceed Date	9/4/2012
Contract Value	\$29,425,000	Original Contract Days	665
Approved Cost Changes	\$0	Approved Extra Days	0
Adjusted Contract Value	\$29,425,000	Planned Substantial Completion Date	7/1/2014
Approved Payment to Date	\$5,266,593	% complete	19%

<b>Summary of Work</b>	<b>Last Month</b>	<b>Total To Date</b>
Blocks/Segments completed	4	18
Total feet of pipe laid	9,800	25,819
Number of laterals installed	81	183

Collection System Area B&C



**In the last month, W.A. Rasic worked in the following areas:**

- Installing sewer mains and laterals in the area south of LOVR (Redfield Woods tract), including Ravenna, Woodland, Manzanita, and Lilac.
- Completing pavement restoration behind the completed pipeline areas.
- Installing leachfields at the Broderson site.

**In the current month, W.A. Rasic plans to proceed with the following work:**

- Complete laterals and pavement restoration throughout the Redfield Woods tract.
- Installing gravity sewer mains and lateral in the Bayview Heights area.
- Installing gravity sewer and force mains on LOVR, west of Pine Ave.
- Continuing installation of the Broderson leachfields.

**Contract Schedule Review:** W.A. Rasic's current pipeline installation work is proceeding ahead of planned production rates, with two pipeline installation crews averaging more than 400 feet of main pipeline per day, and a third crew working on the Broderson leachfields. Based on current schedule status they are anticipated to meet the substantial completion date of 7/1/2014.

**Pictures**



Manhole base installation



Broderson leachfield infiltration chambers stacked on pallets after delivery

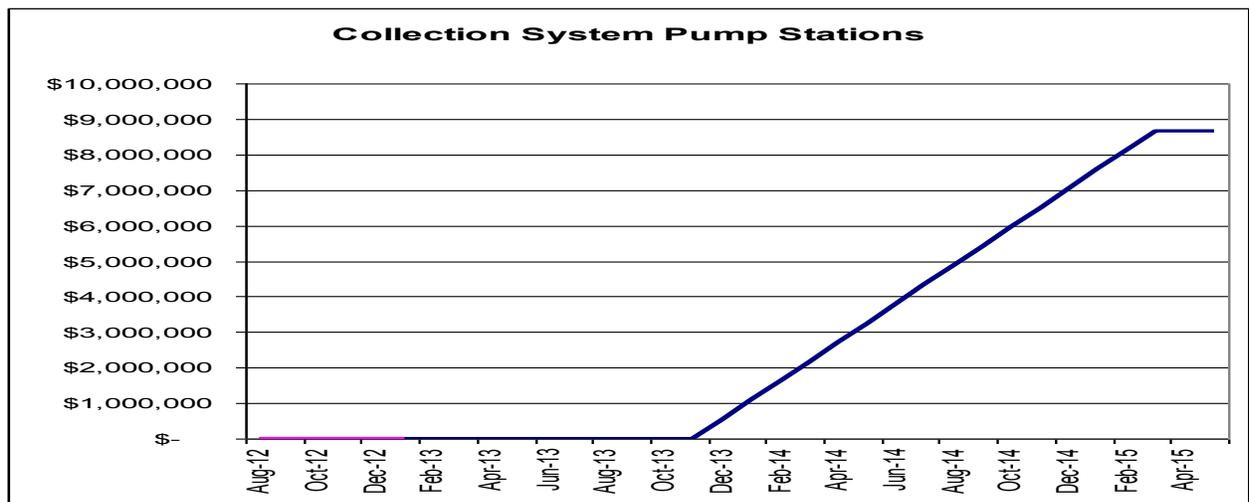


Excavation for leachfield chambers

**Collection System Pump Stations Contract  
Contract No. 300448.08.01.PS**

<b>Contract Summary</b>			
Contractor	Mtn. Cascade	Notice to Proceed Date	10/11/2012
Contract Value	\$8,676,850	Original Contract Days	860
Approved Cost Changes	\$0	Approved Extra Days	0
Adjusted Contract Value	\$8,676,850	Planned Substantial Completion Date	2/18/2015
Approved Payment to Date	0	% complete	0

<b>Summary of Work</b>	<b>Last Month</b>	<b>Total To Date</b>
Major equipment installed		0
Generator buildings completed		0
Pump stations completed		0



The Pump Stations Contract allows for 30 months of construction in order to allow for final installations after the pipeline area contracts are completed. Mountain Cascade is currently developing their construction schedule and submittals, and anticipates that less than 12 months of actual construction will be required to complete the scope of work. As a result, they plan to use 2013 to complete the material submittal and procurement process and mobilize for construction in early 2014 in order to meet the substantial completion date of 2/18/2015.

## Collection System Engineering Services during Construction

<b>Design Services Agreement Summary</b>			
Engineer	CDM Smith		
Fee Estimate	\$4,574,470	Agreement Approval Date	5/17/2011
Approved Additional Services	\$258,258	Original Planned Design and Construction Phase	30 months
Adjusted Fee	\$4,832,728	Actual Planned Design and Construction Phase	46 months
Billed to Date	\$4,464,430	% complete	81%

<b>Construction Management Agreement Summary</b>			
Engineer	HDR, Inc.		
Fee Estimate	\$6,891,632	Agreement Approval Date	12/13/2011
Approved Additional Services	\$0	Original Planned Construction Phase	18 months
Adjusted Fee	\$6,891,632	Actual Planned Construction Phase	30 months
Billed to Date	\$2,968,126	% complete	24%

<b>Services Summary</b>	<b>Last Month</b>	<b>Total To Date</b>
Memos/Letters	28	281
RFI's	11	164
Submittals	19	271
Survey Requests	61	386
Lateral change requests	112	575
Pending change orders	2	4

<b>Public Outreach Summary</b>	<b>Last Month</b>	<b>Total To Date</b>
Twitter Followers	3	66
Website Visitors	2,184	13,719
Website Unique Visitors	1,127	6,823
e-newsletter signup	8	227
24/7 DigLine Calls	159	856
Phone Calls/Responses	485	1,935
Email Responses	74	403
Office Hour Sessions	13	59
House Calls	81	331
Other Public Contact	20	92

## Water Recycling Facility

<b>Design Services Agreement Summary</b>			
Engineer	Carollo Engineers		
Fee Estimate	\$3,221,432	Agreement Approval Date	11/6/2012
Approved Additional Services	\$0	Planned Final Design Phase Completion	August 2013
Adjusted Fee	\$3,221,432	Planned Bidding Phase Completion	November 2013
Billed to Date	\$1,129,970	% complete	35%

## Water Conservation Program

<b>Water Conservation Program Summary</b>	<b>Last Month</b>	<b>Total To Date</b>
Toilets replaced	253	700
Showerheads replaced	237	684
Faucet aerators replaced	304	1,060
Clothes washers replaced	4	8
Value of rebates issued	\$72,817	\$204,513

## Budget Issues Summary

The following is a summary of budget issues or risks related to the project that are being addressed by the project team. See the attached Budget Status Report for cost through the end of last month.

### 1. Issue: Lateral Change Requests

The County has received a large number of requests to change the location of the sewer lateral at the property line of homes and businesses. These locations for 4,800 individual connections were determined prior to 2005 by the LOCSD, with considerable public outreach. With construction now underway, many property owners are checking their location and requesting changes. The changes are for multiple reasons, ranging from technical necessity to changes in personal preference.

**Approach (updated from prior month):** To date, the project team has accommodated almost all change requests and made the design change before it affects the contractor's work. There have been 575 requests, more than 10% of all laterals. This has required considerable resources of County staff and the Construction Manager and Designer. A public brochure on laterals was released in December 2012 and a "last call" for change request was mailed to property owners in March 2013. The project team received hundreds of additional calls in response to this mailing, and processed many more requests. By late April, the volume of calls had significantly decreased and the project team has begun to accept lateral change requests for technical necessity only.

### 2. Issue: Unforeseen Utilities

Utility conflicts are a challenge on any underground project. The plans indicate the horizontal alignment of utilities, but depths are commonly not known until construction and the contractor is required to verify the location and depth of each utility crossing. There are also underground utilities that were not identified by the utility owners or are not marked in the field in accordance with USA requirement. Contractors may have delays and additional costs related to encountering unforeseen utilities.

**Approach (no change from prior month):** To date, unforeseen utilities account for less than 10% of the underground utilities that contractors are required to protect. Contract requirements for the contractor to "pothole" to locate known utilities has resulted in the Construction Manager and Designer making multiple changes to avoid conflicts. Contractors have also provided notice of cost and time impacts for some unforeseen utilities that have been encountered. The contract includes an allowance item for eligible contractor costs related to unforeseen utilities. This item is ongoing and resolution is not time sensitive.

### 3. Issue: Construction Manager and Designer engineering agreement amendments

The scope of work for both the Construction Manager and Designer is required to continue throughout the duration of the construction contracts. The planned schedule in each engineering agreement is significantly shorter than the actual construction schedule in the approved contracts for the collection system. Additionally, both the Construction Manager and Designer are incurring additional costs, beyond the scope in the agreement, due to the large number of lateral change requests and unforeseen utilities.

**Approach (no change from prior month):** Agreement amendments will be required for both the Construction Manager and Designer to address the additional costs for the increased effort and longer construction schedule in order to continue their work through the end of the collection system construction. Agreement amendment are planned to be processed for Board approval within the next couple months.

**4. Issue: Trench restoration paving**

The total contract price is based on estimated quantities of various bid items, including road base and asphalt for restoring pipeline trenches. To date, the actual repair widths of trenches required to install the pipelines has been approximately 50% greater than anticipated. In limited locations, the poor or thin condition of existing pavement has resulted in the need for repaving the full road width. The repairs are paid for at contract unit prices for base and asphalt. However, the total amount for these bid items will likely exceed the estimates in the original contract price.

**Approach (no change from prior month):** Multiple approaches are being developed to track and address this issue, which include reduces thickness of base and asphalt, negotiated unit cost reductions, utilization of County Roads forces to complete some repairs, and cost sharing from the Roads fund for restoration that provides additional road benefits beyond what is required to restore trenches. This item is ongoing and resolution is not time sensitive.

**5. Issue: Water Recycling Facility storage ponds**

Planning level concepts for the treatment plant site included ponds with 50 acre-feet of recycled water storage, which was included in the project Coastal permit application. The final permit conditions have constrained the plant and storage pond footprint to a relatively small and sloping area. The preliminary 20% design identified that a much greater amount of earthwork will be required to construct ponds with 50 acre-feet of capacity at a cost of several million dollars more than anticipated.

**Approach (no change from prior month):** The water recycling facility design team has completed the 60% design of the facility and is developing a technical memo to document the actual volume of storage ponds required, which is expected to approximately 30 acre-feet. The reduced volume of the ponds will be less costly than the 50 acre-foot alternative, however the earthwork volumes and costs will still be a significant factor in the overall facility construction. The overall construction cost estimates for the water recycling facility, based on the 60% design, are \$41 million. The 90% level design and revised cost estimate is planned for submittal in late June.