



**TO BE PRESENTED AT APRIL 28, 2011
BOARD OF DIRECTOR'S MEETING**

- 7B. UPDATE ON ROLLOUT OF NEW COLLECTION SERVICES EFFECTIVE 1/1/11**
- 7C. UPDATE ON SOUTH BAY RECYCLING START-UP OF SHOREWAY FACILITY OPERATIONS EFFECTIVE 1/1/11**



STAFF UPDATE

To: SBWMA Board Members
From: Hilary Gans, Facility Operations Contracts Manager
Date: April 28, 2011 Board of Director's Meeting
Subject: Shoreway Financial and Construction Update

Financial Update - Summary

This is an informational item and no Board action is required.

This section has been added to the regular construction update to provide the Board a high-level update on the Master Plan finances. With the Master Plan project in its final stages of construction (the MRF building construction is complete, the Single Stream equipment manufacture and installation is complete, and the transfer station construction is roughly 75% complete) it is possible now to more accurately forecast expected total spent dollars for the project completion.

On July 23, 2009 the Board approved the sale of Bonds for the Shoreway Master Plan Project in a total dollar amount of \$56.50 million of which \$46.97 million was dedicated to actual physical improvements. Through the end of March 2011 \$40,327,900 has been spent, leaving a fund balance of \$6,644,000 (The SEC Master Plan Budget table on page 5 of this report shows the Master Plan expenditures by category through March 31, 2011). Of the total remaining Master Plan funds \$515,000 remains out of the original Board approved \$728,000 for supplemental Transfer Station improvements; these funds came from adding back to the project \$728,000 from the Transfer Station bid deduct alternate. Staff will come back to the Board with options for how to spend these funds or not.

In forecasting the expenditures through the balance of the Master Plan construction effort (estimated at fall of 2011) the following expenses were taken into consideration:

- 1) Lag in processing payment to vendors,
- 2) Final payment of contract retentions to contractors,
- 3) Planned future construction expenses through the remainder of Phase II construction,
- 4) Settlement of any known disputed items with contractors,
- 5) Other projects that have yet to be started or are just now starting (e.g., the education center in the MRF building) but are part of the Master Plan project.

At this time, it is forecasted that there are sufficient funds to cover the project expenditures through the completion of the Master Plan project without tapping the transfer station bid deduct funds of \$515,000 or the projected remaining unallocated project contingency of \$211,000.

As has been presented in the monthly updates, SJ Amoroso's construction costs have overspent the Phase II construction budget line item and additional funds have been approved by the Board to supplement the Phase II contingency budget. It is anticipated that additional funds will be needed to complete the Phase II construction work, but there are sufficient savings in other categories of the Master Plan budget that should cover all of the Phase II construction costs. The Board will continue to be updated on a monthly basis as projects are closed-out and payments are made to contractors. After the completion of the contract work by SJ Amoroso (June 2011),

Staff will present an update of the Master Plan fund balance and request that the Board provide direction on the use of the Transfer Station bid deduct alternative funds remaining.

Construction Project Update

This project update summarizes the status of the construction of the Shoreway Master Plan Phase II improvements which include the construction of a new Materials Recovery Facility (MRF) building, modifications to the Transfer Station (TS), and various site work; and Phase III improvements which are comprised solely of the purchase and installation of the single stream processing equipment. A contract in the amount of \$16,209,000 was awarded to SJ Amoroso on July 23, 2009 for Phase II of the Master Plan construction work. On October 7, 2009 the Board approved a contract with BHS for \$15,713,180, exclusive of sales tax, for the Phase III work. This report includes a discussion of completed and upcoming construction activities, updates to the construction schedule, and a summary of the project budget.

Construction and Other Project Activities

The following construction activities occurred over the past month:

MRF Building

- Fire system tested occupancy permit issued
- **SBR moved in to the Administrative portion of the MRF building**
- Public Recycling Center and reverse vending machines fully operational

Transfer Station (TS)

- Erection of TS building structural steel frame
- Concrete precast walls delivered and installed
- TS roof installation

Equipment Installation and Other Project Activities

- **Single stream equipment started operation 4/4/2011**
- Video camera system installation

The following construction activities are expected to occur during the next reporting period:

MRF Building

- Punch list item correction

Transfer Station

- Installation of siding on new TS construction
- Installation of translucent siding on north wall of TS
- Complete punch list items on TS interior offices
- Construction of restroom area of TS
- TS interior lighting replacement in old area

Equipment Installation and Other Project Activities

- System punch list items
- System Acceptance Testing

Issues of Concern

- The March construction schedule from SJ Amoroso shows that the transfer station final completion will be delayed from the Contractual Final Completion date of June 6th until July 14th 2011. SJ Amoroso is in the process of working with subcontractors on the construction sequencing and scheduling to try and improve

on the March forecast. SJ Amoroso will update Staff on May 1st with the progress of the scheduling effort and the April construction update will re-forecast the transfer station completion date.

Construction Schedule

Construction Notice to Proceed (NTP) was issued to SJ Amoroso effective September 14, 2009. The established contract duration for Final Completion is 630 calendar days which corresponds to a completion date of June 6, 2011. A summary of the schedule's major milestones is shown below:

<u>Activity</u>	<u>Contract Baseline Schedule</u>	<u>Schedule Update</u>
Notice to Proceed (NTP)	Sept. 14, 2009	Sept. 14, 2009
MRF Milestone A (MRF process area ready for equipment install)	July 11, 2010	August 21, 2010
MRF Equipment Installation Start Date	June 10, 2010	August 23, 2010
MRF Equipment Start-up	Jan 31, 2011	April 4, 2011
Final Contract Completion	June 6, 2011	June 6, 2011

Fiscal Impact

- **Construction Budget (S.J. Amoroso)**
 - Monthly progress payments to SJ Amoroso for the month of March 2011 total \$379,705.
 - Cumulative progress payments made to Amoroso through the end of March 2011 total \$14,660,311 on a total contract amount of \$16,209,000 (Amoroso has been paid 90% of their budget for Construction).
 - Construction change order (CCO) numbers 170- 181 were approved in March 2011 for a total of \$48,887. The sum total of all CCO approved through March 2011 is \$2,472,394 (See construction Change Order Summary for details on all approved change orders).
 - A summary of approved CCOs sorted by the attributable reason for the change are presented in the table below. Attached at the end of this report (see Phase II - Preliminary Construction Change Order) is a complete list of all approved construction change orders.

<u>Reason Category for Construction Change Order</u>	<u>Abbreviation</u>	<u>Total Change Order Cost by Category</u>
Design Revision/Clarification	DR/DC	\$436,420
Differing site conditions	DSC	\$673,969
Equipment required changes	Equipment	\$606,915
Various reasons for the Change	Multiple	\$291,061
Owner requested changes	Owner	\$209,819
Permitting agency changes	Permit	\$251,590

- **Construction Management Budget (Covello)**
 - Payments to Covello for the month of March 2011 total \$63,607 on a monthly forecasted amount of \$73,570.
 - Cumulative progress payments made to Covello through March 2011 total \$1,555,001 on a budget of \$1,826,050.
- **Design Support Services (JRMA)**
 - Payments to JRMA for the month of March 2011 total \$4,468 on monthly forecasted amounts of \$6,500.
 - Cumulative progress payment made to JRMA for Design Support Services through the end of March 2011 total \$472,452 on a project budget amount of \$597,000 (JRMA has been paid 79% of their budgeted amount for Design Support Services).
- **MRF Processing Equipment and Installation (BHS)**
 - Progress payments to Bulk Handling Systems (BHS) for March 2011 total \$246,236.
 - Cumulative progress payments made to BHS for both equipment manufacture and system installation through the end of March 2011 total \$15,880,216 on a budget of \$16,901,400 (BHS has been paid 93% of the budgeted amount for equipment and installation).
- **Master Plan Project - Bond Funds Status**
 - A summary of the Master Plan budget and expenses through March 2011 is presented in the SEC Master Plan Budget table on the next page. Through the end of March 2011, \$40,327,900 has been spent on a total project budget amount of \$46,971,900 with a project balance of \$6,644,000.

SHOREWAY ENVIRONMENTAL CENTER MASTER PLAN BUDGET

THROUGH MARCH 2011

(000's)

	Vendor	Original Project Budget Amount	Allocated Contingency	Revised Project Total	Spent Amount as of 3/31/11	Remaining Amount as of 3/31/11
PROJECT COST SUMMARY						
<u>Preliminary Costs</u>						
Planning, Design & Engineering	Various	2,404.0	28.5	2,432.5	(2,432.5)	-
Bond Issuance Costs		90.5	(7.4)	83.1	(83.1)	-
<u>Phase I</u>						
Construction	Rodan	2,405.0	31.3	2,436.3	(2,436.3)	-
Construction Management	Covello	444.3	15.9	460.2	(460.2)	-
<u>Phase II</u>						
Construction	Amoroso	16,209.0	-	16,209.0	(14,123.9)	2,085.1
Construction Contingency (10%)	Amoroso		3,053.9	3,053.9	(2,193.6)	860.3
Permit, CM, & Design Support Services	Covello/JRMA	2,259.0	714.0	2,973.0	(2,449.4)	523.6
Construction Soft Costs	Various	786.7	-	786.7	(164.5)	622.2
<u>Phase III</u>						
Equipment Installation	BHS	2,432.4	30.0	2,462.4	(2,105.3)	357.1
Contingency (10%)	BHS		246.2	246.2	-	246.2
Camera System, elec.		85.0	-	85.0	-	85.0
Supplemental Fire Suppression		75.0	-	75.0	-	75.0
Equipment	BHS	14,273.2	81.2	14,354.4	(13,775.4)	579.0
Contingency	BHS		492.8	492.8	(97.7)	395.1
Construction Management and Soft Costs	Various	95.0	-	95.0	(6.0)	89.0
<u>Project Total</u>		41,559.1	4,686.4	46,245.5	(40,327.9)	5,917.6
<u>Other Project Dollars</u>						
Unallocated Contingency (Balance of Funds)		4,684.8		4,684.8	(4,473.4)	211.4
Transfer Station Public Area (SJA Bid Deduction)		728.0		728.0	(213.0)	515.0
<u>Project Subtotal</u>		46,971.9				6,644.0

SEC Phase 2 Preliminary Change Order Summary
 Updated through 3/30/11

Date	CCO	Approved Change Orders	Amount	Reason	Description
1/22/2009	1	CCO 1 (Thick Pavement Removal)	\$8,939	DSC	Areas demolished at Entrance Driveway 1 contained A/C paving that was thicker than shown on the drawings.
1/25/10	2	CCO 2 (MRF Lime Treatment)	\$89,200	DSC	Negotiated agreement to stabilize the MRF building pad for pile driving activities.
2/26/10	3	CCO 3 (Unforeseen Tanks at MRF)	\$7,175	DSC	Tanks of unknown origin discovered during demolition that required special handling and assistance for environmental remediation.
2/26/10	4	CCO 4 (FO 2 - Unforeseen Conditions at Entrance 1)	\$9,735	DSC	Over-excavation & stabilization at Entrance 1 as directed by the soils engineer.
3/29/10	5	CCO 5 (Delta 4 Operator Revisions - Relocate Elec. Svc.)	\$161,791	EQUIPMENT	Resize electrical service from 2000A to 2500A for MRF Equipment. Relocate electrical service to accommodate underground secondary feed into the building. Includes
3/29/10	6	CCO 6 (Delta 6 - Revise Elec. Feed to BHS Equipment)	\$74,007	EQUIPMENT	Furnish and install reinforced concrete ductbank from MRF Electrical room to MRF Sort System MCC.
3/29/10	7	CCO 7 (Furnish and Install Additional Piles at MRF)	\$13,950	EQUIPMENT	89 additional piles required by equipment supplier and pile modification.
3/29/10	8	CCO 8 (Furnish and Install Drain for Fire Sprinkler)	\$2,256	PERMIT	Furnish & install drain for relocated fire riser to MRF per Belmont San Carlos Fire Department.
3/29/10	9	CCO 9 (Furnish and Install Roof Support for T/S Equipment)	\$1,835	OTHER	Furnish and install roof support for roof-mounted Transfer Station mechanical units.
3/29/10	10	CCO 10 (Relocate PEMB Bracing on Grid Line D)	\$1,601	EQUIPMENT	Relocate PEMB bracing to accommodate equipment & planned operations in MRF.
3/29/10	11	CCO 11 (Verify Invert of Existing Storm Drain Manhole 104)	\$785	OTHER	Furnish invert elevation and as built information to facilitate response to City Review comments.
4/30/10	12	CCO 12 (FO 4 Temp Paving Entrance 1, CPE 42)	\$34,365	DSC	Provide a temporary A/C paved roadway at Entrance 1 to the existing South Access Road for vehicular traffic from Shoreway Road to the new Scale House
4/30/10	13	CCO 13 (Change Wall at Entrance 1)	\$1,900	PERMIT	Additional revision at MRF Education Building foundation per City Building Permit review comments.
4/30/10	14	CCO 14 (FO 5 (MRF Backfill @ DSC))	\$7,051	DSC	Fill the void left by the concrete removal at the east of the MRF building pad adjacent to the scale house at the former "Recycling Area" and use imported quarry fine ma
5/10/10	15	CCO 15 (Milestone A Revisions)	\$0	MULTIPLE	Revise Milestone A and establish new completion date for Milestone A, 15 August 20, 2010.
4/30/10	16	CCO 16 (Delta 6 Revised Conveyor Pits: Excavation, Slabs & Walls)	\$70,467	EQUIPMENT	Revise plan location & configuration of Conveyor Pits per Delta 6 Equipment Modifications - Excavation, concrete placement for walls and slabs ONLY.
4/30/10	17	CCO 17 (Dropped Grade Beam at MRF Truck Dock Ramp (RFQ10))	\$73,699	DR/DSC	Revise (lower) grade beam configuration at the MRF Truck Dock Ramp, add concrete stem wall with precast cladding and concrete pedestals.
4/30/10	18	CCO 18 (Furnish Wide Flange Beams for Baler Equipment)	\$4,153	EQUIPMENT	Furnish and install wide flange beams to be installed by others for the Baler Equipment modification.
4/30/10	19	CCO 19 (Relocate Floor Drain for Baler Equipment)	\$2,296	EQUIPMENT	Relocate MRF Building process area floor drain so that it is adjacent to the HRB Centurian Baler.
4/30/10	20	CCO 20 (Demolish Existing Materials Recycling Facility Conveyor Pits)	\$43,187	DSC	Remove & dispose of concrete and reinforcing for the unforeseen condition of the conveyor pit walls and slab at the existing MRF.
4/30/10	21	CCO 21 (FO 3 (Backfill Existing Materials Recycling Facility Conveyor & Other Pits))	\$48,744	DSC	Backfill the unforeseen condition of the conveyor and other sump pits at the existing MRF with drain rock and onsite fill.
4/30/10	22	CCO 22 (Mix and Re-Use Wet Soil from MRF Excavations)	\$20,970	DSC	Wet soil was encountered at the excavations required for the pits and sumps at the existing MRF during demolition, which was determined to be an unforeseen conditio
4/30/10	23	CCO 23 (MRF Slab Demolition and Removal)	\$20,364	DSC	The existing MRF Building slab was found to have an average thickness of 2 - 4" (average) over what was shown in the Contract Drawings.
5/28/10	24	CCO 24 (Change Wall to Add Vapor Barriers)	\$66,216	DSC	Re-eval wall types 9, 13, 23, 24 MRF & TS to include vapor barrier for conditioned spaces.
5/28/10	25	CCO 25 (Elevator Structural Steel)	\$3,382	DR/DSC	Add and relocate structural steel members required per elevator manufacturer shop drawings.
5/28/10	26	CCO 26 (Truck Dock Bumpers and Levelers)	\$4,912	MULTIPLE	Contractor cost proposal to increase the depth and carrying capacity of the levelers in accordance with the supplier's & manufacturer's recommendations. Includes the
6/30/10	27	CCO 27 (Str. Revisions to MRF Fin Wall)	\$5,275	DR/DSC	Clarify the interaction of the canopies and wing wall on Line A.4 at 12.8 in the MRF Administration Building North elevation. Add structural steel.
6/30/10	28	CCO 28 (Anchors for Stud Wall Support)	\$1,551	DR/DSC	Add angles for stud wall support in accordance with new detail 3/A12 10 per Drawing Change Notice 18 (DCN 18).
5/28/10	29	CCO 29 (Canopy at West Elevation)	\$1,324	DR/DSC	Revise canopy dimensions on west side of MRF admin building (increase in size).
5/28/10	30	CCO 30 (Corner Guard Attachment Revisions)	\$846	DR/DSC	Revise installation requirements per shop drawing review comments.
5/28/10	31	CCO 31 (Shower Stall Modifications)	\$10,077	DR/DSC	Revise finish schedule requirement from tile to pre-fabricated shower stalls.
5/28/10	32	CCO 32 (Metal Panel Attachment Modifications)	\$7,048	PERMIT	Furnish and install metal backing for the attachment of the metal wall panel in accordance with Drawing Change Notice 93 and 94.
5/28/10	33	CCO 33 (Roof Equipment Structural Steel)	\$2,835	DR/DSC	Contractor cost proposal to add wide flange beams for support of new TS roof-mounted equipment.
5/28/10	34	CCO 34 (Grid Line A.0 Bracing Relocation)	\$246	EQUIPMENT	Relocate PEMB bracing to accommodate future equipment conveyor in MRF.
5/28/10	35	CCO 35 (Concrete and A/C Removal)	\$12,924	DSC	Demolish/remove A/C thicker than shown on plans and demolish/remove concrete paving not shown on plans.
5/28/10	36	CCO 36 (Floor Beams for Equipment Support)	\$5,271	EQUIPMENT	Install W8x21 beams per BHS requirements on Force Account.
9/30/10	37	CCO 37 (Reserved for Delta 4 "Operator Revisions")	\$53,117	EQUIPMENT	Resize MRF utility feed from 2000 amps to 2500 amps per equipment supplier. Relocate & resize MRF secondary utility feed and Architectural plan lay out to office spa
5/28/10	38	CCO 38 (MRF Parapet Revisions)	\$37,104	PERMIT	Add structural support to MRF Admin parapet walls per City of San Carlos Building Permit review comments.
6/30/10	39	CCO 39 (Dropped Grade Beams)	\$21,574	DR/DSC	Extend dropped grade beam east of Line 6 along Grid A.
5/28/10	40	CCO 40 (Delta 6 Reinforcing Steel)	\$28,448	EQUIPMENT	Relocate reinforcing steel on conveyor pits per Equipment supplier requirements - Furnish and Install Rebar only per CCO 40.
5/28/10	41	CCO 41 (Reinforcing Steel Additional Cost)	\$70,117	DSC	Additional cost for rebar at TS & MRF.
6/30/10	42	CCO 42 (Add Swale for Equipment and Maintenance Drain)	\$1,334	EQUIPMENT	LAYOUT, form & finish the drainage swale in the MRF process area per Equipment Supplier & Owner recommendation.
6/30/10	43	CCO 43 (Stabilize Rock Backfill of Existing Pits at MRF)	\$11,392	DSC	Provide labor, equipment and materials on Force Account to stabilize excavation through granular material used as backfill via Field Order 3.
6/30/10	44	CCO 44 (Gravel, Sand and Oil Separator Size Revision)	\$3,009	DR/DSC	Increase the working capacity of three (3) Gravel, Sand & Oil separators to 1,200 gallons per the Engineer's requirements.
6/30/10	45	CCO 45 (Furnish & Install Support at MRF Roll Up Doors)	\$895	DR/DSC	Lengthen eight (8) door posts and add four (4) milled channels at Truck Dock roll up door cannisters for support.
7/30/10	46	CCO 46 (MRF File Tendon Splying)	\$12,794	MULTIPLE	Install individual prestressing tendon strands at MRF grade beams on T&M.
7/30/10	47	CCO 47 (Housekeeping Pads in MRF Electrical Rooms)	\$3,081	EQUIPMENT	Furnish & install concrete housekeeping pads for electrical equipment.
7/30/10	48	CCO 48 (Precast Panel Forms)	\$14,454	MULTIPLE	Provide additional precast forming beds to reduce procurement time.
7/30/10	49	CCO 49 (Furnish & Install Additional Skylight Panels at TS)	\$51,376	PERMIT	Furnish & install 2,400 sf of additional translucent skylight panels at TS.
7/30/10	50	CCO 50 (Delta 6 - Modifications to Equipment Pits)	\$62,799	EQUIPMENT	Revise pit layout to coordinate with Owner-furnished equipment.
7/30/10	51	CCO 51 (Modifications to MRF Building at Wing Wall Line E)	\$15,855	DR/DSC	Contractor cost proposal to add horizontal structural members to MRF wing wall at west elevation added via DCN.
7/30/10	52	CCO 52 (Elevator Pit Waterproofing)	\$1,924	DR/DSC	Reinforce elevator pit waterproofing to meet local application.
7/30/10	53	CCO 53 (Contaminated Water and Stabilization at Pit 3)	\$8,408	DSC	Furnish poly tank rental for the containment of potentially contaminated water infiltrating Pit 3. Tank to be emptied and cleaned by Iris Environmental. Also construct "ra
7/30/10	54	CCO 54 (Metal Decking Storage)	\$2,303	DSC	Material price increase was mitigated by purchasing decking material. Storage fees only.
9/10/10	55	CCO 55 (Furnish Seismic Calculations for Wetting Agent Tanks)	\$2,797	PERMIT	Licensed subcontractor shall furnish seismic anchorage calculations for revised wetting agent tanks.
9/10/10	56	CCO 56 (Add MRF Downspout Filters and Roof Drain with Downspout)	\$17,498	PERMIT	Furnish & install Bio Kleen downspout filters.
9/10/10	57	CCO 57 (Concrete Foundation & Wall Revisions at Existing Scale Pit Transfer Station South Elevation)	\$12,875	DR/DSC	Additional cost for concrete foundation & wall rework to accommodate precast installation details at TS Scale Pit.
9/10/10	58	CCO 58 (Furnish & Install Precast Support at MRF Administration Building)	\$8,875	DR/DSC	Furnish & install 12 braces for precast panel supports at MRF Admin Building.
9/10/10	59	CCO 59 (Delete Overhead Door 54 & 56, Furnish & Install Framing and Liner Panel)	\$0	EQUIPMENT	Delete overhead doors 54 & 56. In their place, furnish & install framing & morlin panels.
9/10/10	60	CCO 60 (Increase Size of Window W & XX)	\$1,571	DR/DSC	Increase size of MRF storefront windows to resolve discrepancy between elevation & section.
9/10/10	61	CCO 61 (Coordinate HVAC Duct with MRF Equipment)	(\$9,231)	EQUIPMENT	Modify HVAC duct layout so as to coordinate with Owner-Furnished equipment.
9/30/10	62	CCO 62 (SBSA Monitoring Vault)	\$4,838	PERMIT	Add precast structure & "tee" for SBSA testing station.
9/30/10	63	CCO 63 (Site Utilities)	\$107,899	MULTIPLE	Site wet utility revisions required by City of San Carlos Building Permit and Belmont San Carlos Fire Department review/approval. Includes C3 requirements for filtering
10/25/10	64	CCO 64 (Trench, Bed & Backfill MRF Gas Service)	\$3,508	PERMIT	Contractor authorization to perform utility trenching and backfill per PG&E requirements on Force Account (Field Order 13).
10/25/10	65	CCO 65 (Deployment of Shade Screen for TS Roof Replacement)	\$5,720	PERMIT	LEA requirement to screen openings in TS Roof during replacement performed on Force Account (Field Order 18).
10/25/10	66	CCO 66 (Modify Ceiling Framing at Linear Diffuser)	\$5,142	DR/DSC	Contractor authorization to furnish & install longitudinal light gauge framing & hangers for support of linear diffusers on Force Account (Field Order 22).
10/25/10	67	CCO 67 (MRF Office Area Parapet)	\$16,371	PERMIT	Contractor authorization to furnish & install light gauge infill for support of MRF roof parapet liner. Required as a direct result of City Permit review comments. Work pe
10/25/10	68	CCO 68 (TS & MRF Fire Service Revisions)	\$22,403	PERMIT	Revise chemical wetting agent concentration, storage vessel & delivery system at the Transfer Station Expansion and new Material Recovery Facility fire riser, all in acc
10/25/10	69	CCO 69 (Add Door 88 to MRF Education Room 411)	\$4,970	OWNER	Add Door 88 to Material Recovery Facility Education Room 411. Relocate and resize Window NN to accommodate new door (excludes raceway per Field Order 42).
10/25/10	70	CCO 70 (Stockpile Offhaul Saturday, April 17, 2010 - Field Order 8)	\$10,433	DSC	Contract Change Order specifically covers the fee to open Tri-Cities facility in Fremont, CA and the premium on labor for the actual hours worked on Saturday, April 17,
10/25/10	71	CCO 71 (Premium Time Compensation, April 30, 2010 through May 8, 2010 - Field Order 10)	\$39,036	MULTIPLE	The Contractor shall extend working hours to ten (10) per day beginning April 30, 2010 through May 8, 2010. This authorization includes standard work hours on Saturd
10/25/10	72	CCO 72 (May 11, 2010 through May 22, 2010 Extended Working Hours - Field Order 12)	\$2,856	MULTIPLE	The Contractor shall extend working hours to ten (10) per day beginning May 11, 2010 through May 22, 2010. This authorization includes standard work hours on Saturd
10/29/10	73	CCO 73 (Finish Pave Entrance 1 - Field Order 24)	\$22,674	MULTIPLE	The Contractor shall delete concrete pavement at Entrance 1 and in its place, furnish and install asphalt concrete pavement to grade to the limits identified in Field Order
10/29/10	74	CCO 74 (Utilize High Early Mix Design at South Access Road - Field Order 24)	\$5,780	PERMIT	The Contractor shall utilize the approved high early concrete mix design on the South Access Rd. to the extents shown in Field Order 24. Work performed on FORC/E
11/30/10	75	CCO 75 (Furnish & Install 2" Domestic RP Backflow Device)	\$6,648	PERMIT	Furnish and install 2" reduced pressure backflow device as required by California Water Service Company regulations.
11/30/10	76	CCO 76 (Site and Building Signage Revisions)	\$7,714	OWNER	Changes to the project logo, color changes, new sign types and general revisions S1 and S2 - Monument Signs S6, S16, S19-22, S23, S24 - Wall Mounted Aluminum F
11/10/10	77	CCO 77 (Precast Panel Vertical Joint Sealant)	\$10,142	DR/DSC	Furnish and install Dow Corning 790 Sealant - Color Gray, at each vertical interior and exterior joint of the Precast Panels of the MRF facility.
11/10/10	78	CCO 78 (Revise MRF Carpet Color)	\$5,800	OWNER	Revised the MRF second floor carpet color from product Mohawk X-Factor to product Mohawk Bioglow Thru-Insulative Green-8621
11/10/10	79	CCO 79 (Revise MRF PEMB Downspouts)	\$3,546	DR/DSC	Add 90 degree elbows and support for MRF downspouts to terminate at grade along the South Access Rd.
11/10/10	80	CCO 80 (Excavate MRF Truck Dock)	\$4,768	DSC	Excavation of MRF Truck Dock structure performed out of sequence to mitigate potential delay related to contaminated soil off-haul.
11/10/10	81	CCO 81 (Revisions to Site Grading & Paving - ADA)	\$11,525	PERMIT	Revise ramp grades and furnish & install truncated domes to accommodate ADA requirements outlined by the City of San Carlos.
11/10/10	82	CCO 82 (Construct MRF Buy Back Pits)	\$19,088	EQUIPMENT	Construct two (2) pits on the west side of the MRF for Buy Back conveyor installation.
11/10/10	83	CCO 83 (Construct TS Housekeeping Pads)	\$7,268	DR/DSC	Construct and anchor housekeeping pads for the Transfer Station Electric Room equipment.
11/30/10	84	CCO 84 (Resequencing)	\$0	OTHER	Resequencing of the nine (9) project stages as defined in Specification Section 01010 and described in Attachment No. 1 to this contract change order.
11/30/10	85	CCO 85 (MRF Education Center Roof Warranty)	\$6,408	DR/DSC	Install the single ply membrane roof at the MRF with termination methods and crickets at mechanical units to meet the Manufacturer's warranty requirements for a per
11/30/10	86	CCO 86 (Construct Soffit at Room 406 and Room 309 (Stair 6))	\$5,301	DR/DSC	Furnish and install framing and drywall to construct an additional two (2) feet of soffit to bottom of storefront in Room 406 and Room 309.
11/30/10	87	CCO 87 (Construct Soffit at Room 411)	\$3,759	DR/DSC	Furnish and install framing and drywall to construct an additional two (2) feet of soffit to bottom of storefront in Room 411.
11/30/10	88	CCO 88 (Additional Header Framing MRF Storefront)	\$3,329	DR/DSC	Additional Header framing along MRF north wall to accommodate an increase in window size identified in Delta 4 changes.
11/30/10	89	CCO 89 (Additional Truck Dock Canopy Framing)	\$3,173	DR/DSC	Additional canopy framing at the MRF truck dock.
11/30/10	90	CCO 90 (Offhaul Footings and Mat Slab Construction Joint Revisions)	\$1,358	EQUIPMENT	Revisions to accommodate underground changes in Delta 4 and Delta 6, requiring re-layout of footing and rebar detailing to accommodate electric
11/30/10	91	CCO 91 (Stockpile Offhaul Premium Time April 9, 15, 18, 2010)	\$5,454	DSC	Premium time compensation for the offhaul of stockpiled class 2 contaminated material.
11/30/10	92	CCO 92 (Flexible Misting System Hose Assembly)	\$4,958	DR/DSC	Provide flexible hose assembly between misting room and processing area.
11/30/10	93	CCO 93 (Buy Back Bullet Proof Glass)	\$1,900	EQUIPMENT	Provide Bullet Proof glass at the MRF Buy Back transaction window.
11/30/10	94	CCO 94 (BHS Access at Hatcher Press)	\$1,270	MULTIPLE	Provide BHS access through Hatcher Press for machinery deliveries.
11/30/10	95	CCO 95 (Butler Design Review of BHS Equipment Loading)	\$7,797	MULTIPLE	Provide Butler Design review of BHS equipment loading of MRF PEMB structure.
11/30/10	96	CCO 96 (Additional PEMB Column in TS Restroom)	\$1,276	DR/DSC	Furnish and install one (1) additional PEMB column at line A in the Transfer Station Restroom.
11/30/10	97	CCO 97 (Relocate TS PEMB X-Bracing)	\$1,164	EQUIPMENT	Relocate the X-Bracing on the Transfer Station column line 15/E & G to line 15/E & F in order to accommodate the installation of future residue conveyor (by others).
11/30/10	98	CCO 98 (South Access Road Construction)	\$54,015	MULTIPLE	Changes to the sequence of construction for the South Access Road work, requiring additional effort in the removals, excavation and subgrade roadway work in prepar
11/30/10	99	CCO 99 (South Access Road Contaminated Soil Off Haul)	\$51,277	DSC	Transportation and disposal costs for Class II hazardous material, which has been excavated from the South Access Road, in preparation for placement of the new PC
11/30/10	100	CCO 100 (Utilize High Early Mix at MRF NE Quadrant - FO 28)	\$5,476	OWNER	Utilize the approved high early concrete mix design at the MRF Northeast quadrant paving.

11/30/10	101	CCO 101 (Stain Wood Doors to Match Formica Amber Maple)	\$661	OWNER	Revise wood door color and stain to match "Formica, Amber Maple 7012-58"
11/30/10	102	CCO 102 (Add Data Port & Receptacle - TS Vestibule)	\$1,437	OWNER	Add one (1) data port and one (1) receptacle in Transfer Station Vestibule Room 116.
11/30/10	103	CCO 103 (Bead Blast Existing Floor - TS Room 110 and 112)	\$3,761	DSC	Bead blast existing concrete floor in Transfer Station rooms 110 and 112 in preparation for installation of new flooring.
12/30/10	104	CCO 104 (Encroachment (City of San Carlos) & BAAQMD Permits)	\$2,140	PERMIT	City of San Carlos Encroachment Permit and the Bay Area Air Quality Management (BAAQMD) permit fees for the demolition plan and the standby diesel generator
12/30/10	105	CCO 105 (Addition of Addressable Smoke Detector at FACF)	\$1,144	PERMIT	Add one (1) addressable smoke detection device at the new location of Fire Alarm Control Panel (FACP) per City of Belmont Fire Marshall.
12/30/10	106	CCO 106 (Add Supports for Condensing Unit (H-101 at TS)	\$1,578	DR/DC	Furnish and install additional structural supports for the roof top condensing unit (H-101) at the Transfer Station
12/30/10	107	CCO 107 (Canopy Revisions at the MRF Admin BLDG)	\$4,040	DR/DC	Various canopy revisions at the MRF Admin Building
12/30/10	108	CCO 108 (Push Wall Deletion from Grid Line 3 to 7.0 at TS)	(\$18,273)	OWNER	Deletion of the work associated with the push wall located between gridline 3.0 to 7.0 in the transfer station.
12/30/10	112	CCO 112 (Addition of Four Knox Boxes for Fire Dept Access to Site)	\$3,006	PERMIT	Cost to add four (4) knox boxes and credit for one (1) knox box included per contract but not installed. The quantity and location of boxes were determined by the Fire D
12/30/10	113	CCO 113 (Addition of two cast iron downspouts, Roof & overflow drains - TS)	\$4,777	DR/DC	Furnish and install two cast iron downspouts, one roof drain and one overflow drain with the associated piping for tie-in at the storm drain system east of the restroom at
12/30/10	114	CCO 114 (Doors & Hardware and Finish Drywall Ceiling in Elec. Rm No. 317)	\$4,435	EQUIPMENT	Change includes cost to replace openings to accommodate larger 40" door at MRF Electrical Room 317.
12/30/10	115	CCO 115 (Relocate & Replace Type W3 Light Fixtures at MRF Bldg)	\$1,417	DR/DC	Change includes cost to relocate and relocate the Type W3 light fixture at MRF Bldg above main entrance and below the canopy.
1/1/11	116	CCO 116 Elevator Shaft Power Receptacle	\$4,769	PERMIT	
12/30/10	117	CCO 117 (Frame Two Openings for Mechanical Louvers at MRF Bldg)	\$2,510	DR/DC	Change include cost to layout and install metal framing & trim for two (2) mechanical louver openings at the MRF Bldg.
12/30/10	118	CCO 118 (Repair Work for Damaged Fiber Baler PVC Coated Conduits)	\$1,297	EQUIPMENT	Change includes cost of repair work for two 3-inch PVC coated conduits damaged during the installation work of Owner's Equipment. Repair work includes cutting PVC
12/30/10	119	CCO 119 (Addition of Two Data Ports & Conduit Routing at Storage Rm TS)	\$1,391	OWNER	Furnish and install two (2) additional data ports for CAT-6 data communication in Storage Room No. 206 of the Transfer Building per direction provided in Field Order N
12/30/10	120	CCO 120 (Procurement of Temp Gen & Conns Work for TSSB1 Shutdown)	\$5,420	OWNER	Cost for rental of standby generator during the planned shutdown of the TSSB1 for Maintenance Building. Cost also includes labor for the temporarily connection/discon
12/30/10	121	CCO 121 (Energize Bay Lighting with Temp. Power from Scale House)	\$3,812	OWNER	Cost for labor & material to temporarily energize the permanent MRF light fixtures with power from the Scale House.
12/30/10	122	CCO 122 Install Framing for Exterior Paneling & Vertical Shades at TS	\$35,491	DR/DC	Furnish and install girt framing for translucent and Century panel locations on the east, west and north sides of the existing Transfer Station.
12/30/10	123	CCO 123 (Delta 8 Transfer Station PEMB Structural Changes & Foundation Mods)	\$178,335	OWNER	Delta 8 changes to the new Transfer Station PEMB, increasing both size of PEMB structure and enhanced structural capabilities of PEMB and foundation to support fut
12/30/10	124	CCO 124 (Contaminated Dirt Off Haul MRF Building Site)	\$154,595	DSC	Trucking and disposal costs only for class II classified contaminated material generated at the MRF building site. This material is comprised of both excavated planned
12/30/10	126	CCO 126 (Lateral Bracing for Light Gauge Framing at Elevated Lobby Walls)	\$5,228	DR/DC	Cost to furnish and install lateral bracing supports in elevated light gauge wall in the lobby of the MRF Bldg.
12/30/10	127	CCO 127 (Modify HSS Beam for Canopy Support at Stair #5 Landing)	\$4,991	DR/DC	Modification to HSS12X6 structural member at MRF stair #5 landing in order to accommodate the stair stringer and wall framing at landing.
12/30/10	128	CCO 128 (Installation of Water Line for Misting Equipment at MRF Bldg)	\$2,096	DR/DC	Furnish and install 1-1/4 inch copper branch line from the 3-inch main line and routed into the MRF Misting Room.
12/30/10	129	CCO 129 (Modifications to Subgrade Material at Entrance 2 Driveway)	\$3,043	DSC	Modifications to correct unforeseen conditions encountered during the installation of the Fill/Subgrade preparation layer and Subbase Fill material at entrance 2 driveway
1/1/11	130	CCO 130 (Rough in Work for Garbage Disposal Power Supply in Breakroom)	\$312	DR/DC	Rough-in work to provide power supply to the Breakroom garbage disposal in Room 407E of MRF Bldg.
1/1/11	131	CCO 131 (Furnish & Install Metal Liner Panel at TS Push Wall Line 7.0 to 8.5)	\$28,214	DR/DC	Furnish and install 24 gauge metal panel liner on the wall of the new TS interior offices along the push, including galvanized framing supports.
1/1/11	132	CCO 132 (Strapping for Liner Panels MRF)	\$2,818	DR/DC	Furnish and install additional wall backing for the interior metal panels at roof parapet of the MRF Bldg. Wall backing consist of installing three (3) rows of 18ga galvaniz
1/1/11	133	CCO 133 (Strapping for Liner Panels TS)	\$1,799	DR/DC	Furnish and install additional wall backing for the interior metal panels in process area of the Transfer Station Bldg. Wall backing consist of installing three (4) rows of 18
1/1/11	134	CCO 134 (MRF Fire Conn: Replace Existing RPPBP w/new 826YD)	\$2,352	PERMIT	Labor and materials to replace the current FEBCO 826YD Reduced Pressure Principal Backflow Preventer (RPPBP) with a new FEBCO 826YD model at the main fire c
1/1/11	135	CCO 135 (Finish Drywall and Elect. At Door 88 of MRF Bldg)	\$3,095	EQUIPMENT	Labor and materials associated with Drywall Finishing and Electrical work at Door 88. The electrical work included routing conductors at card reader locations on both th
1/1/11	136	CCO 136 (Raise Existing Utility & Manholes to Grade at MRF Bldg)	\$2,183	MULTIPLE	Labor and materials associated with raising existing utility and manholes to grade at the northeast quadrant of the MRF Bldg.
1/1/11	137	CCO 137 (Revise Door Hardware (Door 89) per Master Keying Schedule)	\$0	OTHER	Withdrawn
1/1/11	138	CCO 138 (PVC Piping & Concentric Vent Kit for Water Heater MRF)	\$2,492	DR/DC	Labor and materials to furnish and install 3-inch schedule 40 PVC piping and 4-inch concentric vent kit for hot water heater in the MRF Bldg.
1/1/11	139	CCO 139 (Sidewalk Trench System at Entry 2 Sidewalk)	\$1,960	DR/DC	Labor and materials to furnish and install NEENAH R-4999-DX heavy duty trench drain system at the sidewalk adjacent to Entry 2 Gate.
1/1/11	140	CCO 140 (Add Data Port & Relocate Receptacles at the MRF)	\$3,415	OWNER	Labor and materials for the addition & relocation of electrical boxes/receptacles in Data Communication Room (Rm No. 316). Work also included the additional of four c
1/1/11	141	CCO 141 (Add Data Port & Receptacles in Room 410)	\$2,503	OWNER	Labor and materials for the addition of data and electrical receptacle along line B.9 per Field Order No. 032R1 in the Process Area. Work also included the relocation of
1/1/11	142	CCO 142 (Furnish & Install Two-Piece Parapet Cap & Backing MRF)	\$4,577	DR/DC	Furnish and install an additional 24 gauge continuous flashing painted to match parapet cap and ISO board backing at the MRF.
1/1/11	143	CCO 143 (Replace Existing Equipment at TS)	\$15,858	DSC	Furnish and install new control cabinet and signal cabinet with push button controls for the TS misting system and red-green light misting systems.
1/1/11	144	CCO 144 (Remove Sheetrock & Framing at Landing 413)	\$497	DR/DC	Remove the wall and framing to coincide with the limits of the vision glass portions of windows II and JJ.
1/1/11	145	CCO 145 (Deployment of Shade Screen at TS Exterior)	\$1,899	OWNER	Labor to install the bird netting over the east wall of the TS once the existing panel had been removed and prior to installation of the new panel.
1/1/11	146	CCO 146 (Remove Unforeseen Concrete in Conflict with Ductbank)	\$298	DSC	Removal of concrete debris encountered during the installation of communication line no. 6 at the MRF
1/1/11	147	CCO 147 (Add Backing for Seismic Joint Cover at MRF)	\$11,717	DR/DC	Add backing material at the seismic joint between the MRF Admin building and the PEMB.
2/1/11	148	CCO 148 (Add Two Fire Extinguishers at MRF)	\$2,560	PERMIT	Furnish and install two fire extinguishers with recessed cabinets in MRF rooms 316 and 317.
2/1/11	149	CCO 149 Add Condensate Drain Lines to MRF Roof Equipment - Withdrawn CPE 220	\$0	OTHER	Withdrawn
2/1/11	150	CCO 150 (Add Rebar TS Restroom Slab & Screen Wall)	\$1,934	DR/DC	Furnish and install additional rebar in the new Transfer Station Restroom Slab and Screen Wall Footing as identified in the response
2/1/11	151	CCO 151 Raise Existing Manholes to Grade at MRF	\$969	MULTIPLE	labor, equipment and materials associated with raising existing manholes to grade at the northeast quadrant of the Materials Recover Facility Building.
2/1/11	152	CCO 152 (MRF Fire Connection: Furnish New Backflow Preventor to meet Cal Water Requirements)	\$8,155	PERMIT	Furnish and install one (1) new Febco 826YD Reduced Pressure Principle Backflow Preventer (RPPBP) for installation at the fire main connection servicing the MRF Bu
2/1/11	153	CCO 153 TS Force Account Work: Removal of Scale Pit Pedestals	\$2,787	DSC	Labor to perform removal of existing concrete pedestals at TS scale pit.
2/1/11	154	CCO 154 (Connect Water Line to Dust Reduction System)	\$1,118	DR/DC	Furnish and install 1 1/2" backflow preventer and appurtenances in order to complete water line connection to dust reduction system.
2/1/11	155	CCO 155 MRF Electrical Force Account Work: Temp Power Removal to Lighting	\$4,528	OWNER	Disconnect temporary power to MRF process area high bay lights, which were previously energized to facilitate work in the MRF during morning and evening hours.
2/1/11	156	CCO 156 Furnish & Install Power to MRF Zone Dampers	\$9,913	DR/DC	Furnish and install conduit, wiring and local disconnects to feed power to zone dampers in the MRF.
2/1/11	157	CCO 157 Furnish & Install False Mullions at MRF Offices	\$4,662	DR/DC	Furnish and install false mullions in the MRF Ed Center identified in DCN's 238 & 239
2/1/11	158	CCO 158 Sawcut & Remove Pavement and Excavate/Backfill per PG&E Requirement	\$1,009	PERMIT	Additional work at the MRF gas line service as required by PG&E. Saw cut concrete, excavate and backfill trench.
2/1/11	159	CCO 159 AT&T Requirements at MRF Telephone Backboard	\$931	OWNER	Furnish & install pull tape from MRF telecommunications room to telephone pole and replace stranded grounding wire with solid no. 6.
2/1/11	160	CCO 160 Excavate MRF Bioswale Around Utilities	\$2,938	DSC	Labor and equipment to hand dig bioswale trench at the MRF frontage to avoid existing utilities.
2/1/11	161	CCO 161 Furnish and Install Five New Cast Iron Downspouts at MRF	\$11,731	DR/DC	Furnish and install 5 new 4 inch no-hub cast iron downspouts at the MRF processing area.
2/1/11	162	CCO 162 Slurry Existing Tunnel at Transfer Station	\$3,164	DSC	Fill the unforeseen tunnel at the existing transfer station scale with slurry.
2/1/11	163	CCO 163 Furnish and Install Rebar at Transfer Station Expansion Slab	\$7,478	DR/DC	Furnish and install additional rebar between planned limits of new slab and actual limits of existing TS slab.
2/1/11	164	CCO 164 Furnish and Install Condensate Drain in MRF Electrical Room	\$1,350	EQUIPMENT	Furnish and install copper condensate drain from relocated electrical room in Delta 4 to a termination outside of the building as directed by City Inspector.
2/1/11	165	CCO 165 Add Dowels to Existing Transfer Station Footings	\$772	DR/DC	Drill and epoxy rebar dowels from the new TS slab to the existing footing
2/1/11	166	CCO 166 (Remobilization for MRF Palm Tree Removal)	\$1,129	PERMIT	Removal of the largest of the MRF Palm trees, which was delayed due to questions regarding a tree removal permit for diameters over 12 inches.
2/1/11	167	CCO 167 (California Title 20 Lighting Revisions)	\$14,160	PERMIT	California Title 20 Appliance Energy Regulations required modifications to the specified light fixtures.
2/1/11	168	CCO 168 MRF Overhead Door Modifications	\$9,821	DR/DC	Furnish and install backing support for spring coil and motor mounting pads at MRF sectional doors 52 and 58. Doors at other locations along south access road are to
2/1/11	169	CCO 169 MRF Northeast Curb Modifications	\$13,202	MULTIPLE	Increase the concrete paved area and revise the curbs at the north side of the MRF.
3/16/11	170	CCO 170 TS Push Wall Blockouts for PEMB Columns	\$1,822	DR/DC	Provide blockouts in TS pushwall to accommodate the structural column members of the PEMB.
3/16/11	171	CCO 171 (TS Light Gauge Framing Removal on Line 10)	\$2,015	DSC	Remove existing light gauge framing at TS roof beam on line 10 to allow for installation of new gutter.
3/16/11	172	CCO 172 (Remove Slurry Encountered in Sanitary Sewer Trench)	\$1,324	DSC	Remove and dispose of buried obstruction (slurry) encountered during the installation of SS-2
3/16/11	173	CCO 173 Furnish & Install Light Gauge Framing at TS Vertical Shades	\$10,880	DR/DC	Furnish and install light gauge framing at each of the seven vertical shade features on the existing TS exterior.
3/16/11	174	CCO 174 Furnish & Install Bollards at MRF Transformer	\$8,423	PERMIT	Furnish and install seven bollards, as required by PG&E, at the MRF transformer.
3/16/11	175	CCO 175 (Revise Connection Angle at MRF Wing Wall to Canopy)	\$2,576	DR/DC	Revise the canopy connection to the wing wall at the MRF on Line 12.9. Changes to the connection material after initial fabrication to accommodate wider wing wall.
3/16/11	176	CCO 176 (Revise Work Point for Structural Steel Shop Drawings)	\$697	DR/DC	Revise the MRF bolt layout and steel framing erection plan to accommodate changes to the work points, allowing coordination between PEMB and precast panels.
3/16/11	177	CCO 177 (Modify Column Covers at MRF Process Area)	\$4,142	DR/DC	Modify MRF PEMB column protection covers Line B to accommodate PEMB cross bracing.
3/16/11	178	CCO 178 Deploy Bird Screen at TS - North and West Elevations	\$3,193	PERMIT	Labor to deploy bird screen netting over existing TS exterior, during the cladding replacement.
3/16/11	179	CCO 179 (Raise Ceiling Height TS Electrical Room 205)	\$5,115	DR/DC	Raise ceiling height in the MRF electrical equipment room from 8 feet to 12 feet to accommodate taller electrical equipment.
3/16/11	180	CCO 180 (Furnish & Install Rebar at MRF & TS Column Bases)	\$5,802	DR/DC	Furnish & install rebar at the MRF and TS column basis not identified in the original contract plans.
3/16/11	181	CCO 181 MRF Elevator Shunt Trip Relocation	\$3,088	PERMIT	Relocate the elevator shunt trip located in the MRF elevator control room to the elevator circuit breaker located in the main switchgear.

MRF Single Stream System (IN OPERATION!)



Transfer Station Self haul Area



MRF Public Recycling Center and Reverse Vending Machines

