TO: BOARD OF DIRECTORS

FROM: MICHAEL S. LEBRUN MSL
GENERAL MANAGER

DATE: JUNE 21, 2013

AGENDA ITEM C
JUNE 26, 2013

PRESENTATIONS AND REPORTS

The following presentations and reports are scheduled:

C-1) DIRECTOR OF ENGINEERING AND OPERATIONS
RE: Summary of recent activities.

C-2) DIRECTORS' ANNOUNCEMENTS OF DISTRICT & COMMUNITY INTEREST AND REPORTS ON ATTENDANCE AT PUBLIC MEETINGS, TRAINING PROGRAMS, CONFERENCES, AND SEMINARS.
Receive Announcements and Reports from Directors

C-3) RECEIVE PUBLIC COMMENT ON PRESENTATIONS AND REPORTS PRESENTED UNDER ITEM C AND BY MOTION RECEIVE AND FILE PRESENTATIONS AND REPORTS

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TO: BOARD OF DIRECTORS

FROM: MICHAEL S. LEBRUN MSL
GENERAL MANAGER

DATE: June 21, 2013

AGENDA ITEM
C-1
JUNE 26, 2013

DISTRICT DIRECTOR OF ENGINEERING AND OPERATIONS SUMMARY OF ACTIVITIES

ITEM

Report on recent engineering and operations activities [NO ACTION REQUESTED].

BACKGROUND

Director of Engineering and Operations, Peter V. Sevcik, will review the attached written update.

RECOMMENDATION

Staff recommends that your Honorable Board receive the update and ask questions.

ATTACHMENT

A. Engineering and Operations Update

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JUNE 26, 2013

ITEM C-1

ATTACHMENT A

NIPOMO COMMUNITY SERVICES DISTRICT

148 SOUTH WILSON STREET
POST OFFICE BOX 326
NIPOMO, CA 93444 - 0326
(805) 929-1133 FAX (805) 929-1932
Web site address www.ncsd.ca.gov

MEMORANDUM

TO: MICHAEL S. LEBRUN, P.E., GENERAL MANAGER

FROM: PETER V. SEVCIK, P.E., DIRECTOR OF ENGINEERING & OPERATIONS P.V.S.

DATE: JUNE 21, 2013

RE: ENGINEERING AND OPERATIONS UPDATE FOR MAY 2013

PROJECTS IN CONSTRUCTION

- **Southland WWTF Phase 1 Improvement Project**
  - SCOPE OF WORK - Phase 1 improvements to the treatment plant include an influent metering station, influent pump station, influent screening system, grit removal system, Biolac® extended-aeration system and two final clarifiers as well as gravity belt thickener and lined drying beds for biosolids handling.
  - STATUS
    - Construction in progress
    - Scheduled Contract Completion – May 6, 2014
    - Time Elapsed to Date – 47%
    - Work Completed to Date – 46%

Construction Contract Cost Summary	
Contract Amount – Cushman	$10,224,900.00
Change Orders	$36,226.00
Revised Contract Amount	$10,261,126.00
Completed to Date	**$4,746,028.61**
Project Cost Summary	
Description	Contract Amount
Design – AECOM	$1,631,038
Construction Management – MNS	$1,276,560
Authorized Construction Management Contingency Remaining	$65,000
Subtotal	**$2,972,598**
Revised Construction Contract – Cushman	$10,261,126
SCADA Integration – Tesco	$198,435
Authorized Construction Contingency Remaining	$265,339
Subtotal	**$10,724,900**
EIR and Permitting	$115,370
Estimated Total Project Cost	**$13,812,868**

- **Supplemental Water Project Phase 1 Bid Package 1 – Santa Maria River Crossing**
    - SCOPE OF WORK – 2,600 lineal feet 24-inch inside diameter HDD bore under Santa Maria River
    - STATUS
        - Bid Awarded

Bid Package 1 Construction Contract Cost Summary	
Contract Amount – ARB, Inc.	$5,847,090.00
Change Orders	$0.00
Revised Contract Amount	$5,847,090.00
Completed to Date	**$0.00**
Authorized Contingency Remaining	$580,000.00

- **Supplemental Water Project Phase 1 Bid Package 3 – Blosser Road Waterline**
    - SCOPE OF WORK – 5700 lineal feet of 24-inch diameter waterline, 300 lineal feet levee crossing jack and bore, flow meter and flow control station with instrumentation
    - STATUS
        - Bid Awarded

Bid Package 3 Construction Contract Cost Summary	
Contract Amount – Specialty Construction Inc.	$3,007,897.00
Change Orders	$0.00
Revised Contract Amount	$3,007,897.00
Completed to Date	**$0.00**
Authorized Contingency Remaining	$300,000.00

- **Supplemental Water Project Phase 1 Bid Package 4 – Joshua Road Pump Station**
    - SCOPE OF WORK – 1930 lineal feet of 24-inch diameter waterline, 400 gpm pump station with back-up power, controls, and instrumentation systems, a pressure reducing station and chloramination systems at 4 existing District wells
    - STATUS
        - Bid Awarded

Bid Package 4 Construction Contract Cost Summary	
Contract Amount – Spiess Construction Co. Inc.	$4,364,030.00
Change Orders	$0.00
Revised Contract Amount	$4,364,030.00
Completed to Date	**$0.00**
Authorized Contingency Remaining	$430,000.00

- **Blacklake Well #4 Pump Replacement Project**

  - SCOPE OF WORK - Replacement of existing well pump, motor, column pipe and discharge piping assembly, downhole well video survey, installation of a new pump control valve, pressure relief and surge anticipating valve, gate valves, check valve, flow meter, air release valve, sounding tube, chlorination tube, transducer tube, service saddles, blowoff piping, and electrical system upgrade.

  - STATUS

    - Submittal review completed
    - Start date pending pump delivery

Construction Contract Cost Summary	
Contract Amount – Sansone	$202,086.25
Change Orders	$0.00
Revised Contract Amount	$202,086.25
Completed to Date	**$0.00**
Project Cost Summary	
Description	Contract Amount
Construction Management – Cannon	$38,860.00
Authorized Construction Management Contingency Remaining	$5,000.00
Subtotal	**$43,860.00**
Revised Construction Contract – Sansone	$202,086.25
Authorized Construction Contingency Remaining	$10,000.00
Subtotal	**$212,086.25**
Estimated Total Project Cost	**$255,946.25**

OPERATIONS

- **Southland Wastewater Treatment Facility and Collection System – May 2013**

TOTAL EFFLUENT TREATED	AVERAGE DAILY FLOW TREATED
19.9 Million Gallons	0.643 Million Gallons Per Day
61.2 Acre Feet	1.97 Acre Feet Per Day

  - Effluent suspended solids in compliance
  - Effluent biochemical oxygen demand (BOD) requirement for monthly average of 60mg/L exceeded (100 mg/l) and daily maximum 100mg/L requirement exceeded on 10 occasions
  - No sewer system overflows

- **Blacklake Wastewater Reclamation Facility and Collection System – May 2013**

TOTAL EFFLUENT TREATED	AVERAGE DAILY FLOW TREATED
1.35 Million Gallons	.044 Million Gallons Per Day
4.14 Acre Feet	.14 Acre Feet Per Day

  - Effluent water quality in compliance
  - No sewer system overflows

- **Wells and Water Distribution System – May 2013**

TOTAL MONTHLY PRODUCTION	AVERAGE DAILY PRODUCTION
86.7 Million Gallons	2.8 Million Gallons
266 Acre Feet	8.6 Acre Feet

  - Via Concha Well pump replacement in progress
  - Sundale Well motor/VFD issue resolved

- **Maintenance Program – May 2013**

Maintenance Measure	Goal	May Totals	Annual Totals
Water meter replacement	35 per month; 420/yr or 10% of total	33 meters replaced	176/420=42%

  - Daily maintenance and operations of wells, lift stations and wastewater facilities
  - Tesco replaced deteriorated antenna cables at 10 sites

- **Compliance**

  - Monthly Distribution System Coliform Monitoring Summary to California Department of Public Health (CDPH)
  - Monthly Wastewater Monitoring Report for the Blacklake Wastewater Reclamation Facility to California Regional Water Quality Control Board (CRWQCB)
  - Monthly Wastewater Monitoring Report for the Southland Wastewater Treatment Facility to California Regional Water Quality Control Board (CRWQCB)
  - Completed Monthly 'No-Spill' Certification for California Integrated Water Quality System (CIWQS) for both Southland and Blacklake Sewer Collection Systems

- **Training**

  - Two staff that participated in Grade II Wastewater Treatment Certification Exam 4/6 received notification in My that they passed exam

- **Personnel**

  - Wastewater Supervisor recruitment pending
  - Utility Operator recruitment pending
  - Customer service worker recruitment pending

PROJECTS IN DESIGN AND PLANNING STAGES

- **Water and Sewer Master Plan Implementation**

  - Standpipe Tank Inlet Modification and Interior Rehabilitation

    - Design in progress

- **Blacklake Wastewater Master Plan**
    - Technical evaluation in progress

OTHER PROJECTS AND PROGRAMS

- **Safety Program**
    - 5/3 - Crane safety training for all operations employees
    - 5/9 - Quarterly all-hands safety meeting
    - Operations Weekly Tailgate Safety training
    - Continued to coordinate on-line safety training for all District Employees
- **Development Oversight**
    - New Service Request – JOM Park, APN 090-142-007
        - Intent-to-Serve application
    - New Service Request - Mallagh, APN 090-136-005
        - Intent-to-Serve application
        - 6 new residential units

MEETINGS

- 5/2 – Southland WWTF Phase 1 Improvement Project construction progress
- 5/6 – AECOM, Supplemental Water Project Bid Package 1 bid review
- 5/7 – Cannon, Standpipe Rehabilitation Project design review
- 5/9 – Southland WWTF Phase 1 Improvement Project construction progress
- 5/10 – AECOM, Supplemental Water Project Bid Package 3 bid review
- 5/14 – General Manager Coordination
- 5/15 – AECOM, Project team transition
- 5/15 – Blacklake Sewer Master Plan Progress meeting
- 5/15 – Blacklake WWTF Operator workshop
- 5/16 – Southland WWTF Phase 1 Improvement Project construction progress
- 5/17 – CSDA SLO Chapter
- 5/23 – Cabinet Meeting
- 5/28 – NMMA
- 5/30 – Southland WWTF Phase 1 Improvement Project construction progress

ATTACHMENT

- May 2013 Southland WWTF Improvements Phase 1 Project Monthly Construction Progress Report

Nipomo Community Services District

Southland WWTF Improvements Phase 1 Project

Monthly Progress Report

Prepared By:
MNS Engineers, Inc.

May 2013

Schedule and Budget Summary

Schedule Summary

Notice to Proceed	July 30, 2012
Original Contract Days	645
Contract Days Added	0
Revised Contract Days	645
Elapsed Time (Days)	(302)
Remaining Time (Days)	343
Contract Completion Date	May 6, 2014
Time Elapsed to Date	47%
Work Completed to Date	46%
Approved Change Orders (Days)	0 days

Budget Summary

Original Contract Amount	$10,224,900.00
Approved Change Orders (Cost)	$36,226.00
Revised Contract Amount	$10,261,126.00
Previous Payments	$3,747,272.42
Current Month Pay Request	$998,756.19
Total Work Completed	$4,746,028.61
Work Remaining	$5,515,097.39

Progress Summary

General Site Work – Piping and Electrical

Summary of Work:

Cushman installed **several hundred feet of 24" SE2 piping**, including crossing the DWR state waterline easement. They successfully completed pressure testing of the pipe and testing for deflection with a mandrel. Bergelectric completed installation of the majority of electrical underground duct bank, and PG&E primary feed conduit, then set the transformer pad and junction box for the PG&E primary feed.

Pictures:

Installing 24" SE2 pipe at north end near existing Pond #4.

Thrust block installed on 24" SE2 pipe.

Cushman installing 24" SE2 pipe going east along the south end of Pond #4. Pipe riser is for pressure cleanout.

Pressure testing the 24" SE2 pipe.

Mandrel used for testing the 24" SE2 pipe.

Removing mandrel from 24" SE2 pipe after deflection testing.

Laying out 24" SE2 pipe toward DWR easement crossing.

Installing the 24" SE2 pipe and casing across the DWR easement.

Process 40 & 80 Aeration & Emergency Basins

Summary of Work:

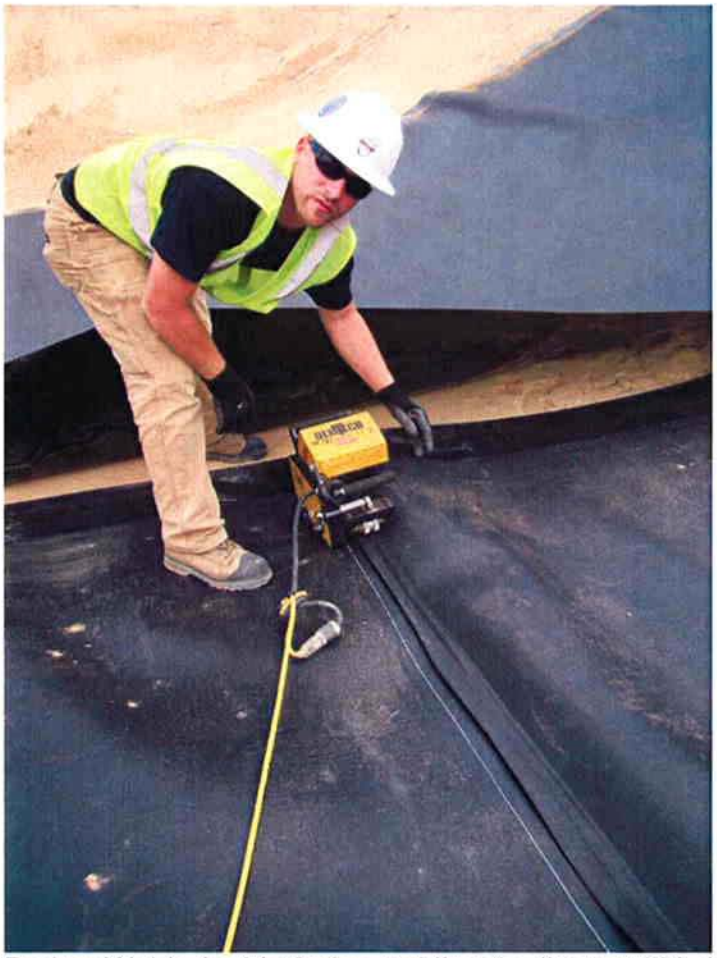
Cushman's subcontractor Barber-Webb completed installation of the liners for both the Aeration Basin #1 and the Emergency Holding Basin. Field testing and lab testing was performed on the double fusion welds and field testing was performed on the extrusion welds. Cushman compacted material for the lining anchor at the top of the basins and completed installation of the above ground portion of air piping risers for Aeration Basin #1.

Pictures:

Felt pad installed over concrete at inlet pipe to protect liner from rubbing and wear.

Subcontractor Barber-Webb pulling the liner sheets into place across the Emergency Holding Basin.

Barber-Webb clearing the liner in preparation for double fusion welding.



Barber-Webb double fusion welding the liner at 800 degrees.

Field testing and inspection of destructive double fusion weld samples.

Air testing double fusion welds as liner is installed.

Liner installation and testing at Aeration Basin #1.

Installing the baton and boot at the inlet pipe penetration in Aeration Basin #1.

Final liner installation with extrusion weld around the pipe inlet of Aeration Basin #1.

Installing liner around catch basin at the bottom of Aeration Basin #1.

Patch made with extrusion weld at destructive double fusion weld test location.

Vacuum testing extrusion welds at destructive double fusion weld test location.

Backfilling liner anchor at the top of Aeration Basin #1.

Lining installation completed in Aeration Basin #1 and Cushman compacting lining anchor with backhoe.

Above ground AR pipe risers and motorized butterfly valves being installed.

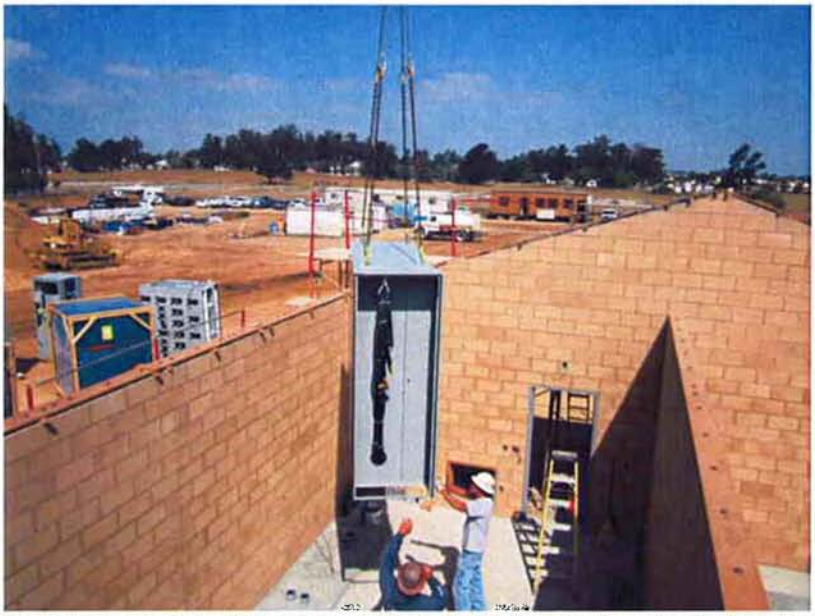
Process 45 Electrical/Blower Building

Summary of Work:

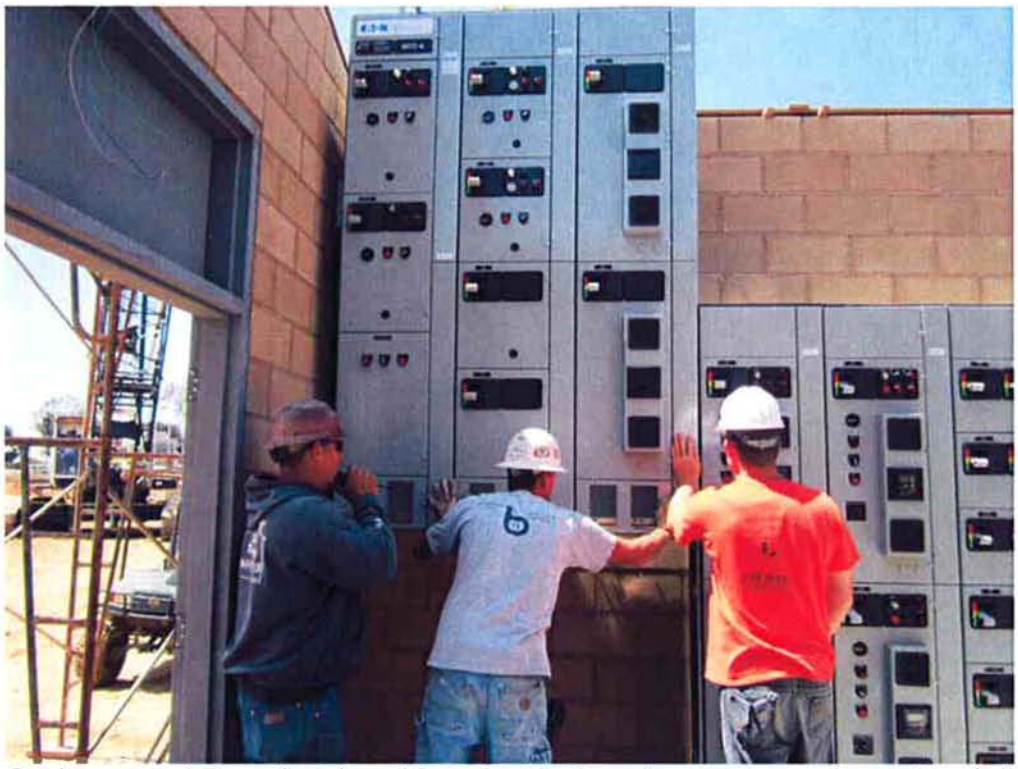
Masonry work on the Electric/Blower Building was completed and the electrical and blower equipment (MCC, ICP, Main Panel, Blower VFD, and Blowers) was installed by crane through the roof openings before the roof was constructed. Then the weld plates, metal truss system and steel roof deck were installed, along with the plywood sheeting and moisture barrier. PG&E installed the meter and third party testing was performed by Emerson's Electrical Reliability Services. Bergelectric installed wall mounted panels 45 and 45A and junction boxes and rigid conduit for lighting and fire alarm system.

Pictures:

Conduit and epoxy dowels set for pouring electrical equipment pad.

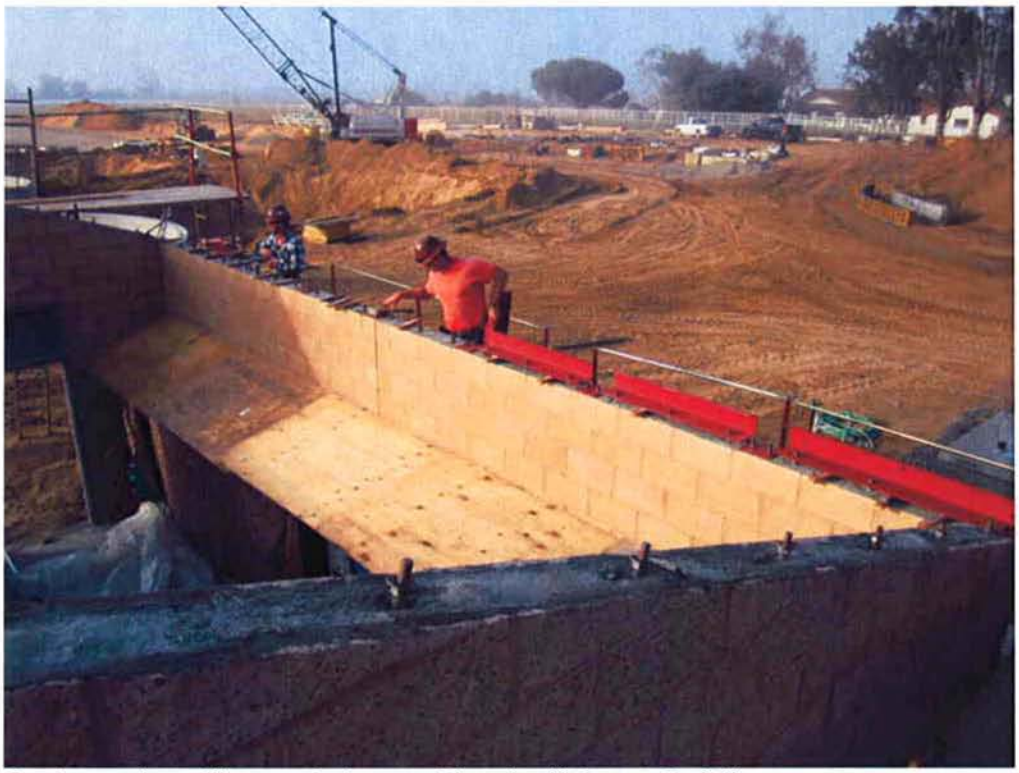


Hoisting electrical equipment into building before installing the roof.



Cushman and Bergelectric setting electrical equipment on equipment pads before installing the roof.

Cushman and Bergelectric setting blowers on equipment pads before installing the roof.



Cushman installing roof plate at Electrical/Blower Building.

Cushman installing metal roof trusses.

Metal roof trusses installed.

Cushman welding roof trusses to roof plate.

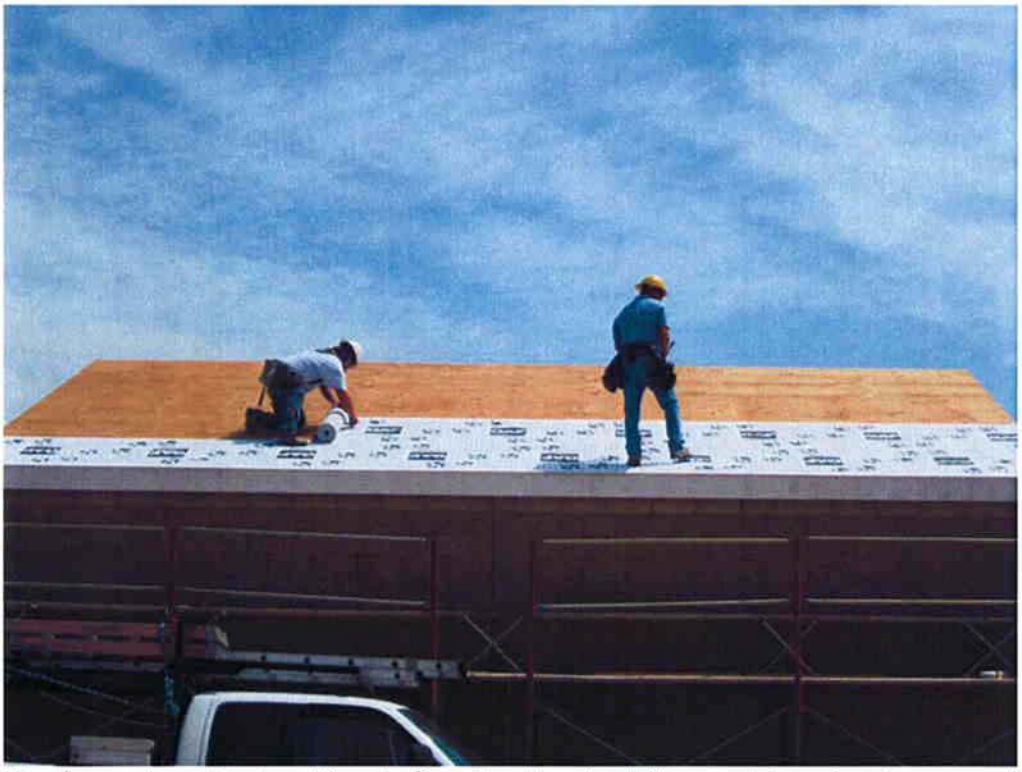
Cushman installing metal decking on truss system.

Metal decking installed before crimping.

Cushman crimping metal decking with pneumatic crimper followed by puddle welding.

Cushman dry packing space between masonry and roof plate.

Cushman installing plywood sheeting over metal decking.



Roofing subcontractor, Dueck Construction installing moisture barrier over plywood.

Motor control center equipment installed.

Instrument control panels and variable frequency drives installed.

Process 50 – Secondary Clarifier No. 1 and 2.

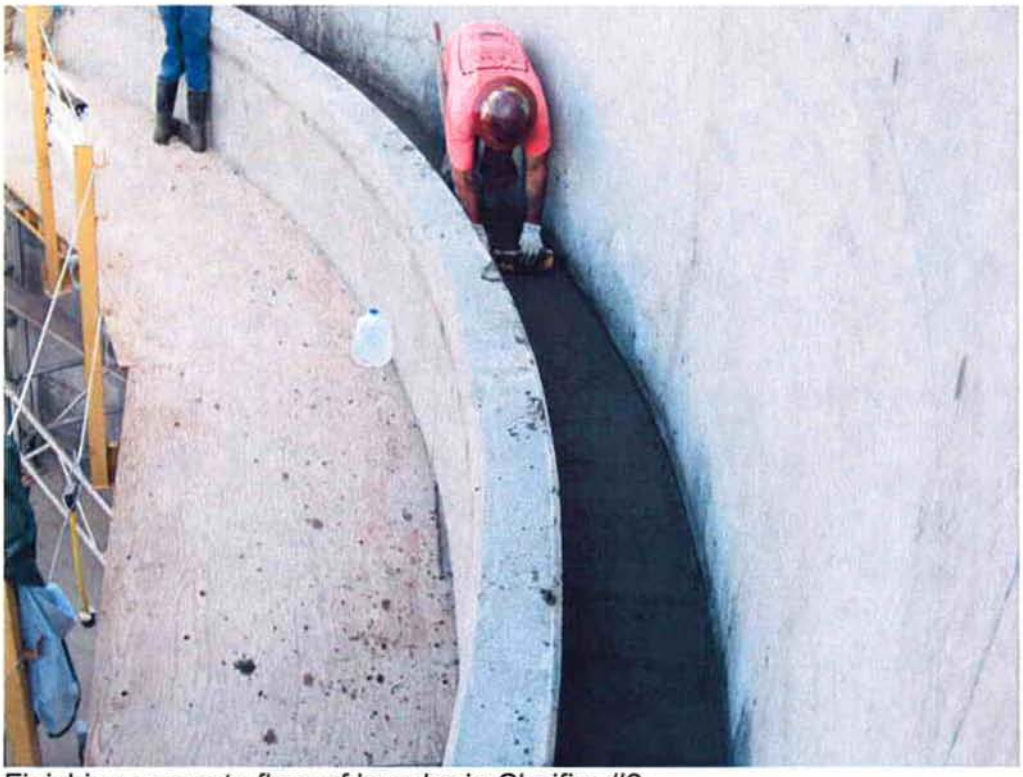
Summary of Work:

Cushman completed installation of the launder in Clarifier #2, forms and shoring were removed and the toothed weir plate and PVC baffles installed. Cushman installed a stairway scaffolding system for access into the clarifier for final surface work. KNK Coatings sandblasted the clarifier surface in preparation for the Xypex coating. Cushman removed forms from Distribution Box #2, and installed and tested the remaining 24" and 18" ML piping. They also excavated for the Processed Water Pump Station and Scum Well, formed and poured their foundations and the walls, and poured the walls for the Process Water Pump Station.

Pictures:

Setting forms in Clarifier #2 for last launder pour.

Cushman pouring concrete for launder floor in Clarifier #2.



Finishing concrete floor of launder in Clarifier #2.

Installing toothed weir plate in Clarifier #2.

Cushman building scaffolding for access into Clarifier #2.

Subcontractor KNK Coating sandblasting the surface of Clarifier #2 in preparation for applying Xypex coating.

Cushman installing 24" ML pipe connection into Distribution Box #2.

18" ML piping being installed out of Distribution Box #2.

Pressure testing the 24" ML pipe at Distribution Box #2.

Cushman pouring foundation of Processed Water Pump Station.

Foundation of Processed Water Pump Station poured and wall forming started.

Subcontractor, CMC Rebar installing rebar for walls of Processed Water Pump Station.

Completing wall forms for Processed Water Pump Station.

Cushman pouring walls of the Processed Water Pump Station.

Pouring foundation of the Scum Well.

Cushman building forms for the circular interior of the Scum Well.

Cushman setting forms for the Scum Well walls.

CMC Rebar installing rebar for Scum Well walls.