

# Nipomo Community Services District



## Southland WWTF Improvements Phase 1 Project Monthly Progress Report



Prepared By:  
MNS Engineers, Inc.

**October 2013**

# Schedule and Budget Summary

## Schedule Summary

Notice to Proceed	July 30, 2012
Original Contract Days	645
Contract Days Added	60
Revised Contract Days	705
Elapsed Time (Days)	(455)
Remaining Time (Days)	250
Contract Completion Date	July 5, 2014
Time Elapsed to Date	65%
Work Completed to Date	78%
Approved Change Orders (Days)	60 days

## Budget Summary

Original Contract Amount	\$10,224,900.00
Approved Change Orders (Cost)	\$985,533.08
Revised Contract Amount	\$11,210,433.08
Previous Payments	\$8,067,492.60
Current Month Pay Request	\$691,357.30
Total Work Completed	\$8,758,849.90
Work Remaining	\$2,451,583.18

# Progress Summary

## General Site Work – Piping and Electrical

### Summary of Work:

Cushman completed installation and testing of the 6-inch non-potable water (NPW) piping from the Influent Pump Station to the Sludge Thickening Building. Bergelectric installed Pull Box 02 and completed installation of Duct Banks 02, and 11 thru 15.

### Pictures:



Cushman installing 6-inch NPW line from Influent Pump Station toward Sludge Thickening Building.



Bergelectric installing conduit for DB 02.



Installing more conduit for DB 02.



Bergelectric placing red slurry over DB 02.



Bergelectric pouring red slurry over DB 11 and DB 12.

## **Process 10 Influent Pump Station**

### **Summary of Work:**

Cushman installed bolts for the access ladder inside the Influent Pump Station and KNK Coatings prepared the inside for application of the Carboline coating by sandblasting and applying a non-shrink grout.

### **Pictures:**



Cushman installing epoxy bolts for access ladder inside the Influent Pump Station.



KNK Coating applying non-shrink grout to the inside of the Influent Pump Station in preparation for applying the Carboline coating.

# **Process 20 & 30 Headworks Screening System & Grit Removal System**

## **Summary of Work:**

Cushman excavated and installed 4-inch and 6-inch drain lines as wells as the 12-inch RAS piping leaving the Headworks. They formed and poured the stair landings, the trash enclosure slab and the Grit Classifier slab, then set the Grit Removal System equipment. KNK Coatings started preparation for the Carboline coating inside the Headworks channels.

## **Pictures:**



Installing 12-inch RAS piping from the Headworks.



Cushman installing 12-inch RAS piping from the Headworks.



Forms and reinforcement for one of the stair landings at the Headworks.





Slab poured for stair landing at the Headworks.



Installing 6-inch DR along Grit Classifier.



Cushman excavating for Grit Classifier slab foundation.



Cushman compacting base underneath foundation for Grit Classifier slab.



Cushman preparing for pour of Grit Classifier slab.



Installing forms and reinforcing for the Grit Classifier slab.



Reinforcing and forms installed for the Grit Classifier slab.



Cushman pouring the Grit Classifier slab.



Cushman installing forms for curb at Grit Classifier slab.



Cushman setting the Grit Classifier on the slab.



Installing Grit Classifier motor.



Cushman compacting base under future foundation for the trash enclosure slab.



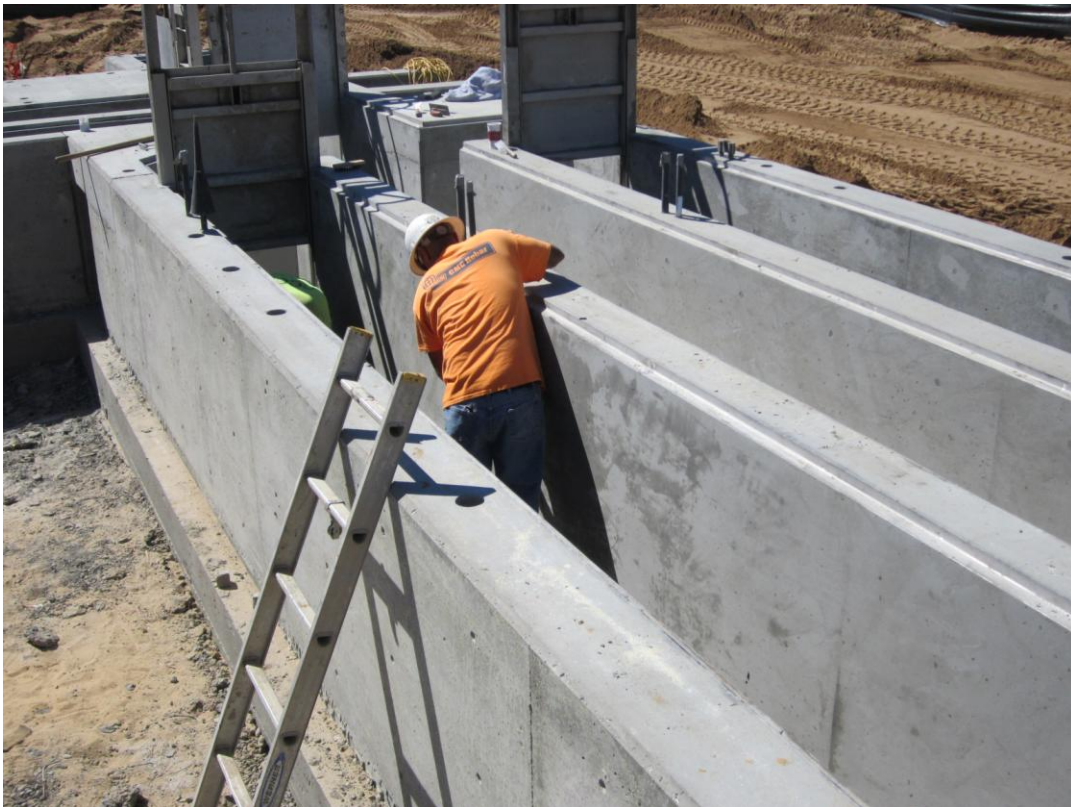
Cushman forming the trash enclosure slab at the Headworks.



Reinforcing and forms being installed for the trash enclosure slab at the Headworks.



Cushman forming the curb at the trash enclosure slab and locating the screw screens at the Headworks before removing them to allow KNK Coatings to coat the channels with Carboline.



Cushman finishing patching the concrete at the Headworks channels.





KNK Coating applying non-shrink grout to the Headworks channels in preparation for the Carboline coating.

## **Process 40 Aeration Basin**

### **Summary of Work:**

KNK Coatings performed concrete surface prep in Distribution Box # 1 and Cushman started filling the Aeration Basin with water to conduct testing of the Biolac System scheduled for next month. They also completed installation of the AR pipe supports.

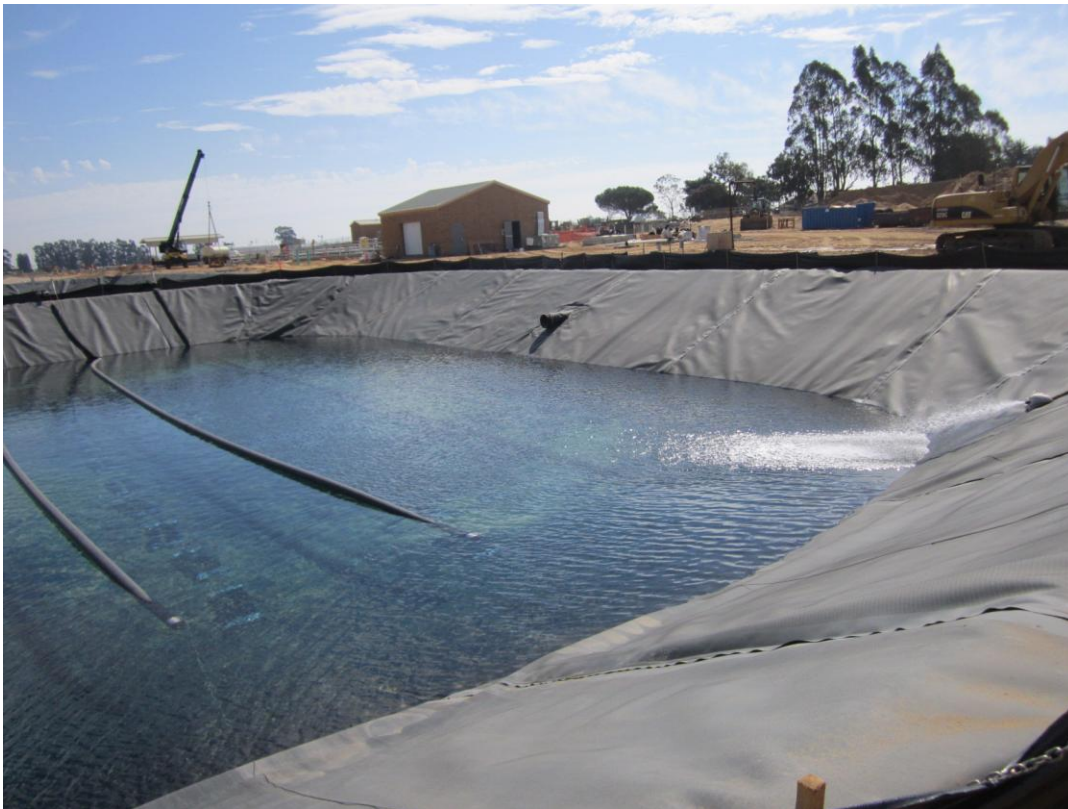
### **Pictures:**



KNK Coatings sandblasting the inside of Distribution Box #1 in preparation for concrete coating application.



Cushman cleaning sand from out of the Aeration Basin in preparation for filling.



Filling the Aeration Basin.



Cushman pouring pipe support pads for AR piping at the Aeration Basin.



Installing AR pipe supports.



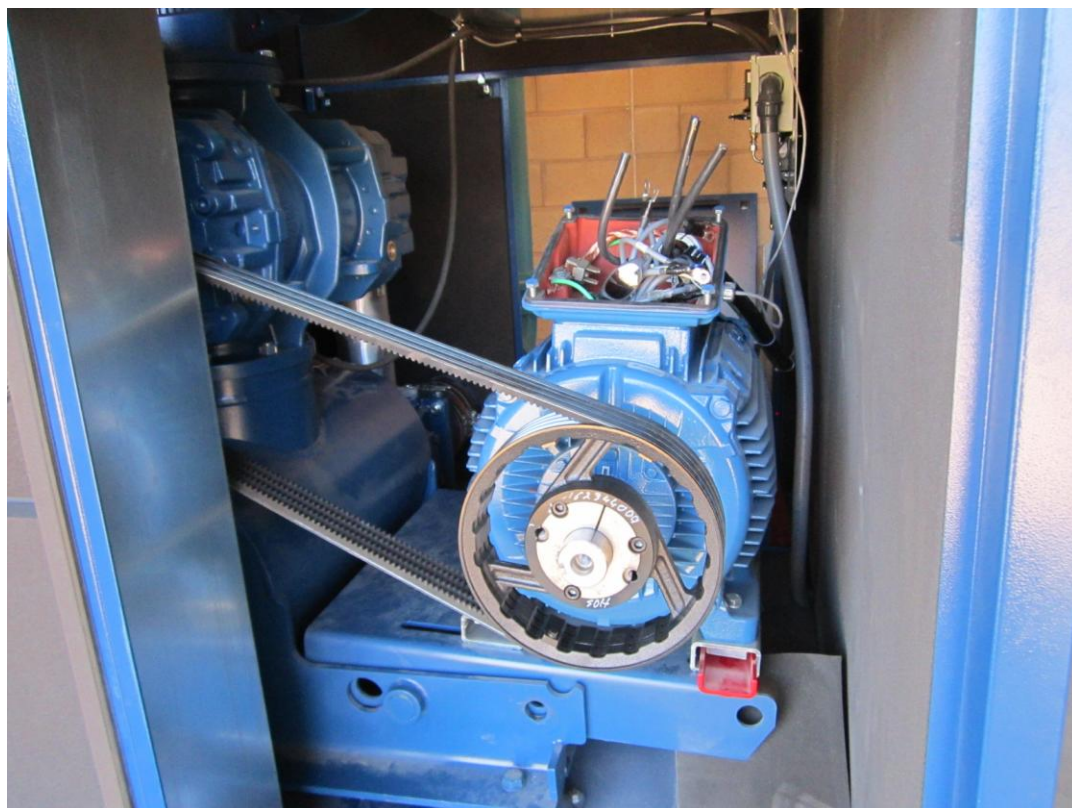
Bergelectric installing junction box and aluminum stand at AR piping.

## **Process 45 Electrical/Blower Building**

### **Summary of Work:**

Bergelectric has terminated both power and control wiring in ICP, MCC, VFD panels and at the blowers along with the fire alarm system, lighting and receptacles. PG&E was on site to verify installation of meter and termination of primary and secondary feed cables. Hamon Overhead Doors installed the roll-up door to the blower room and Longs Construction installed the HVAC system to the MCC room. KNK Coating also finished painting the ceilings.

### **Pictures:**



Adjusting blower motor to align belts.



Hamon Overhead Doors installing roll-up door to blower room.



Roll-up door to blower room installed by Hamon Overhead Doors.



Cushman finishing the concrete slab for the air conditioning unit to the MCC room.



Cushman subcontractor Longs Construction installing the AC unit and ducts to the MCC room.



Longs Construction assembling the AC duct inside the MCC room.



KNK Coating finishing painting of the ceiling in the blower room.



## **Process 50 – Secondary Clarifier No. 1 and 2.**

### **Summary of Work:**

Cushman also completed installation and testing of the 6-inch Secondary Clarifier (SC) piping from the Scum Well Pump Station to the Sludge Thickening Building and drying beds. Cushman completed installation of discharge piping, knife gate, pump bases and pumps at RAS/WAS PS # 2 and completed installation of pumps and discharge piping at scum pump station. Cushman completed installation of aluminum handrail around both clarifiers and completed installation of weir gates at distribution box # 2. Clarifier bottom grouting was completed in both clarifiers. Berg installed aluminum stands with pump disconnect switches at both RAS/WAS pump stations with wire terminated.

### **Pictures:**



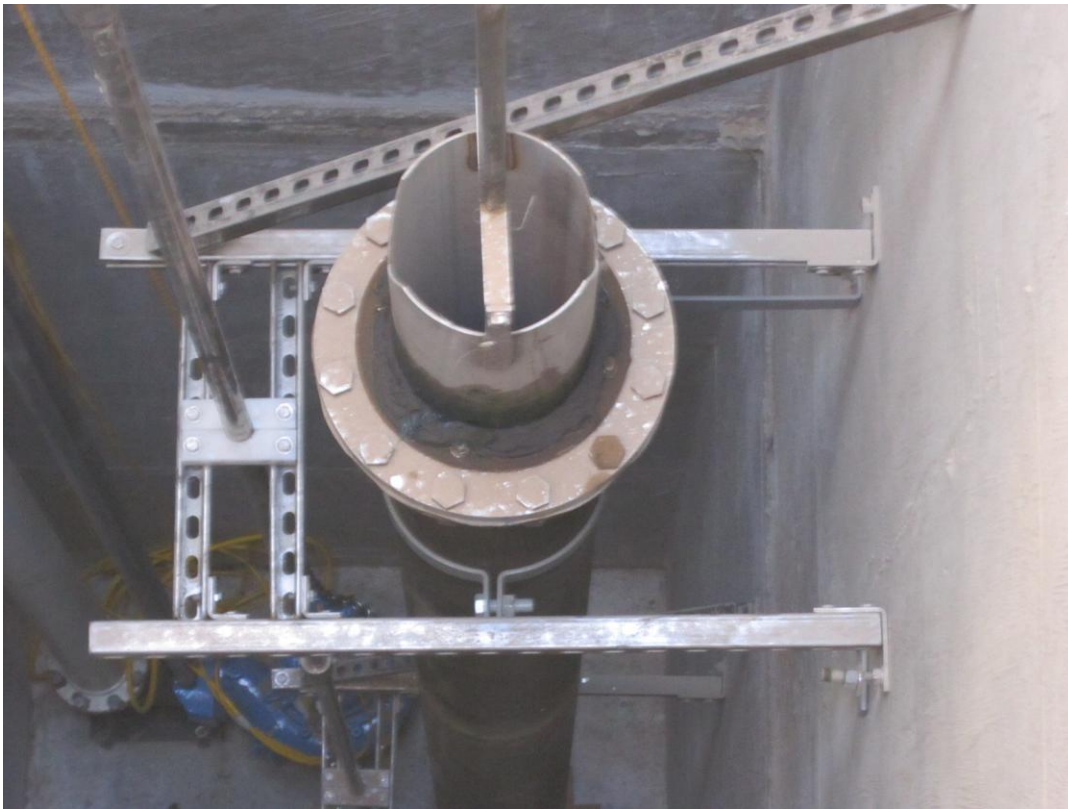
Installing slide gates at Distribution Box #2.



Cushman installing valves and piping at RAS/WAS Pump Station #1.



Piping and valves being installed at RAS/WAS Pump Station #2.



Cushman installing telescoping valve supports inside RAS/WAS Pump Station #2.



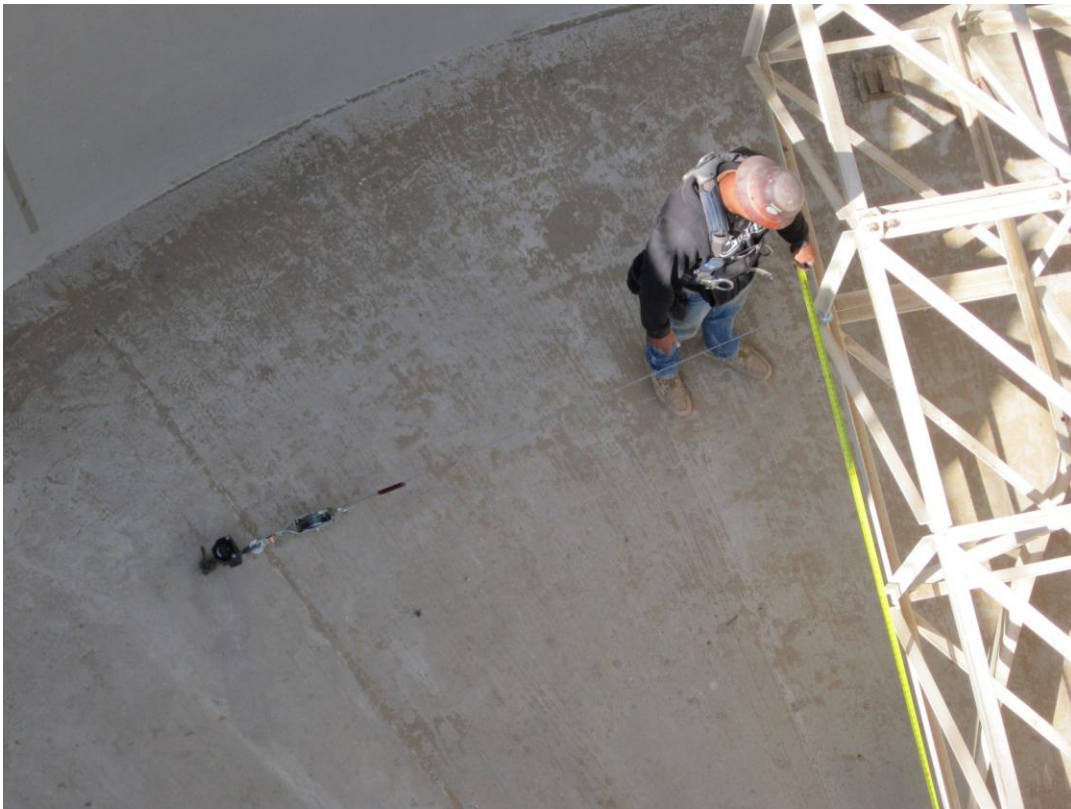
Installing SC piping at the Scum Well Pump Station.



Cushman installing the pump inside the Scum Well.



Pump and guide rails being installed inside the Scum Well.



Cushman performing clarifier mechanism torque test while Westech verifies test results.



Cushman grouting center column of clarifiers.



Cushman installing hand rails around top of clarifiers.



Cushman installing expansion material around Clarifier # 1.



CMC Rebar and Cushman installing reinforcing and forms for sidewalk around Clarifier #1.



Cushman placing concrete for sidewalk around Clarifier #1.



Cushman pouring sidewalk around Clarifier #1.



Cushman spraying curing compound on sidewalk around Clarifier #1.





Cushman pouring concrete sidewalk around Clarifier #2.



Cushman finishing concrete sidewalk around Clarifier #2.



Cushman installing temporary screed to the clarifier mechanism arm for use in spreading grout.



Cushman beginning grouting of Clarifier #1.



Cushman spreading grout in Clarifier #1.



Cushman finishing grout in Clarifier #1.



Finishing grouting in Clarifier #1.



Cushman grouting Clarifier #2.



Cushman finishing grout pour in bottom of Clarifier #2.

## **Process 70 – Process Water Pump Station and Sodium Hypochlorite Storage**

### **Summary of Work:**

Both exhaust fans were installed in the Sodium Hypochlorite Storage building. AIT also completed installation of the drywall on the ceiling, and KNK Coatings completed painting. Cushman installed the 6-inch NPW from the Processed Water Pump Station to the Hydropneumatic Tank along with the exposed 6-inch NPW, a majority of hypochlorite building piping has been installed along with exposed electrical conduit.

### **Pictures:**



AIT completing installation of drywall inside the Sodium Hypochlorite Storage building.



Exhaust fan installed by Long's Construction at Sodium Hypochlorite Storage building.



Cushman assembling NPW pipe from the Process Water Pump Station.

## **Process 90 – Sludge Drying Beds**

### **Summary of Work:**

Cushman continued to form and pour Sludge Drying Bed walls, completing all wall pours.

### **Pictures:**



Cushman sandblasting concrete and reinforcing to prepare for next wall pour at Sludge Drying Beds.



Cushman moving wall forms for next wall pour at Sludge Drying Beds.





Cushman installing wall forms at Sludge Drying Beds for continued pours.



Cushman pouring wall sections at Sludge Drying Beds.



Cushman finishing the top of one of the drying bed walls.



Cushman installing wall forms for ramp walls at Sludge Drying Beds.



Cushman pouring ramp walls at Sludge Drying Beds.



Final wall pour at the Sludge Drying Beds.