



**SAN LUIS OBISPO COUNTY
SAN LUIS OBISPO, CALIFORNIA
LOS OSOS WATER RECYCLING FACILITY
CONTRACT NO. 300448.08.02**

Appendix G – Clean Water State Revolving Funds Laws and Regulations

CLEAN WATER STATE REVOLVING FUNDS LAWS AND REGULATIONS

Environmental Authorities:

1. Archeological and Historical Preservation Act of 1974, Pub, L. 86-523, as amended, Pub, L. 93-29116 USC § 469a-1;
2. Clean Air Act, Pub, L. 84-159, as amended;
3. Coastal Barrier Resources Act, Pub, L. 97-~8, 96 Stat. 1653; 16 USC § 3501 et seq.;
4. Coastal Zone Management Act, Pub, L. 92-583, as amended; 16 USC § 1451 et seq.;
5. Endangered Species Act, Pub, L. 93-205, as amended; 16 USC § 1531 et seq.;
6. Environmental Justice, Executive Order 12898;
7. Floodplain Management, Executive Order, 11988 as amended by Executive Order 12148;
8. Protection of Wetlands, Executive Order 11990, as amended by Executive Order No. 12608;
9. Farmland Protection Policy Act, Pub, L. 97-98; 7 USC § 4201 et seq.;
10. Fish and Wildlife Coordination Act, Pub. L. 85-624, as amended;
11. National Historic Preservation Act of 1966, Pub. L. 89-665, as amended, 80 Stat. 917 (1966) 16 USC § 470 et seq.;
12. Safe Drinking Water Act, Pub. L. 93-523, as amended; 42 USC § 300f et seq.;
13. Wild and Scenic Rivers Act, Pub. L. 90-542, as amended, 82 Stat. 913; 16 USC § 1271 et seq.;
14. Essential Fish Habitat Consultation, Pub, L. 94-265, as amended, 16 USC § 1801 et seq.;
15. Recycled Materials, Executive Order 13101; Section 6002 Resource Conservation and Recovery Act - 42 USC § 6962.

Economic and Miscellaneous Authorities:

1. Demonstration Cities and Metropolitan Development Act of 1966, Pub, L. 89-7 54, as amended, Executive Order 12372/42 USC § 3331 et seq.;
2. Procurement Prohibitions under Section 306 of the Clean Air Act and Section 508 of the Clean Water Act, including Executive Order 11738, Administration of the Clean Air Act and the Federal Water Pollution Control Act with Respect to Federal Contracts, Grants, or Loans; 42 USC § 7606; 33 USC § 1368; 40 CFR Part 31;
3. Uniform Relocation and Real Property Acquisition Policies Act, Pub. L. 91-646, as amended; 42 USC §§4601-4655;
4. Contractors, Subcontractors, Debarment and Suspension, Executive Order 12549; 2 CFR Part 180; 2 CFR Part 1532. The Excluded Parties List System can be found at <http://lepls.gov> . The Recipient represents and warrants that it has included a term or conditions requiring compliance with this provision in all of its contracts and subcontracts. The Recipient acknowledges that failing to disclose the information as required at 2 CFR 180.335 may result in the termination, delay or negation of this Agreement;
5. Preservation of Open Competition and Government Neutrality Towards Government Contractors' Labor Relations on Federal and Federally Funded Construction Projects, EO 13202, as amended by EO 13208.;

6. Hotel and Motel Fire Safety Act of 1990 (PL 101-391, as amended). Recipients may search <http://www.usfa.dhs.gov/applications/hotel/>;
7. Records and financial reporting. 40 CFR Part 31;
8. Copyright. 40 CFR Part 31.

Social Policy Authorities:

1. Age Discrimination Act of 1975, Pub. L. 94-135; 42 USC § 6102.
2. Race Discrimination. Title VI of the Civil Rights Act of 1964, Pub. L. 88-352.1; 42 USC § 2000d; 40 CFR Part 7.
3. Sex Discrimination. Section 13 of the Federal Water Pollution Control Act Amendments of 1972, Pub. L. 92-500 (the Clean Water Act); 33 USC § 1251 ; 40 CFR Part 7.
4. Disability Discrimination. Section 504 of the Rehabilitation Act of 1973, Pub. L. 93-112 (including Executive Orders 11914 and 11250); 29 USC § 794; 40 CFR Part 7.
5. Equal Employment Opportunity, Executive Order 11246.
6. Women's and Minority Business Enterprise, Executive Orders 11625, 12138, and 12432; 40 CFR Part 31 .
7. Section 129 of the Small Business Administration Reauthorization and Amendment Act of 1988, Pub. L. 100-590.
8. Anti-Lobbying Provisions (40 CFR Part 34). Borrower agrees to submit certification and disclosure forms as requested by the State Water Resources Control Board or the USEPA. In accordance with the Byrd Anti-Lobbying Amendment, any Recipient who makes a prohibited expenditure under 40 CFR Part 34 or fails to file the required certification or lobbying forms shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such expenditure. The Recipient shall ensure that no Project Funds provided by the State Water Board under this assistance agreement are used to engage in lobbying of the federal government or in litigation against the United States unless authorized under existing law, The Recipient shall abide by its respective 2 CFR 200, 225, or 230, which prohibits the use of federal grant funds for litigation against the United States or for lobbying or other political activities.
9. Anti-Litigation Provisions (2 CFR 220, 225, or 230).
10. Trafficking Victims Protection Act of 2000.
11. ACORN Prohibition. None of the Project Funds used in this Agreement may be used for contracts or subcontracts to ACORN.



**SAN LUIS OBISPO COUNTY
SAN LUIS OBISPO, CALIFORNIA
LOS OSOS WATER RECYCLING FACILITY
CONTRACT NO. 300448.08.02**

Appendix H – Pre-Negotiated Proposals from Sole-Sourced Suppliers



**SAN LUIS OBISPO COUNTY
SAN LUIS OBISPO, CALIFORNIA
LOS OSOS WATER RECYCLING FACILITY
CONTRACT NO. 300448.08.02**

Appendix H.1 – Pre-Negotiated Proposal for Diaphragm-Type Metering Pumps Specification Section 11242

Since 1932



CHARLES P.

CROWLEY COMPANY

Manufacturers' Representatives • Systems Integrators

15861 Business Center Drive Phone: (626) 856-5656

Irwindale, California 91706 USA Fax: (626) 856-5658

E-mail: wendell.smith@cpcrowley.com Website: www.cpcrowley.com

QUOTATION NUMBER 11966B-CMS

Date: 8/19/13	Page 1 of 5
From:	Wendell Smith
To:	Carollo
Attention:	Han Kang
Phone :	(714) 593-5100
FAX:	
Subject:	County of San Luis Obispo – Los Osos WRF
	Pulsafeeder HypoPump Offering

The CHARLES P. CROWLEY COMPANY (hereinafter "CPC Co.") is pleased to offer our quotation for the following section(s) of equipment for the above project. This quotation and any purchase order, contract, requisition or purchasing directives given to CPC Co. based on this quotation is subject to CPC Co.'s Sales Agreement and Standard Terms and Conditions which is attached.

SECTION 11242: DIAPHRAGM-TYPE METERING PUMPS

(3) **Charles P. Crowley Company** Integrated Chemical Feed Systems for 12.5% NaOCl at 12.2 GPH and 140 PSIG in full compliance with all specified provisions including the following items (each):

- (1) **Pulsafeeder Pulsar** Series Hypo Pump, Model 25HJ, high performance hydraulically balanced disc diaphragm metering pump featuring a free flowing process fluid path without the obstruction of a contour plate. Pump includes:
 - PVDF Reagent Head with Viton O-Rings
 - Pump Integrated Timed and Pressurized Auto Degassing / Self Priming System
 - 13 mm plunger for 12.2 GPH @ 115 SPM maximum discharge @ 150 PSIG (max)
 - 1/2" 150# ANSI flanged suction and discharge connections
 - Manual 10:1 stroke length adjustment
 - NEMA 4X Pump Integrated MPC Control System, 115 VAC:
 - On-board VFD with programmable microprocessor and Inverter Duty Motor
 - 4-20 mA analog input and output signals
 - Three configurable discrete output signals (run status, remote status, common failure)
 - Two configurable digital input signals (remote start, auto disable)
 - Remote mountable HMI with membrane touch keypad and two line LCD display
- (1) 1" Hayward CPVC Y-Strainer, model YS200100S
- (1) Griffco 1000 ml Calibration Column, Model CC1000S
- (1) Blacoh 10 Cubic Inch CPVC/Hypalon Suction Accumulator, model RC-10X-H50-SW
- (1) Blacoh 10 Cubic Inch CPVC/Hypalon Pulsation Dampener, model RC-10X-H50-SW
- (1) Griffco 1/2" 3-port true-union CPVC Pressure Relief Valve, model PRM-050-U-CP
- (1) Plast-O-Matic Double wall sight indicator with indicator, model GY050-PV-S
- (1) Griffco 1/2" 2-port true-union CPVC Back Pressure Valve, model BPM-050-U-CP
- (1) Pulsafeeder KOP-Kit, Spare Parts Kit for HypoPump plus 1 liter extra hydraulic oil
- (1) Lot: factory hydraulic testing with reports
- (4) Man-Days Field Start-up and Training Services (total for three systems)
- (1) Lot: Bound Engineering Submittals and Project Specific Operation & Maintenance Manuals
- (1) Lot: Freight to Jobsite

Pricing:

- Equipment Total: \$44,995.00
- Validity thru 9/30/14: \$ 2,250.00
- Freight: \$ 500.00
- Submittals & O&M's: \$ 600.00
- Field Services: \$ 6,816.00
- Sales Tax: \$ 3,779.60

Overall Total: \$58,940.60

GENERAL TERMS/EXCLUSIONS:

- This quotation is valid until September 30, 2014 and is limited to items specifically listed herein. Orders received after this date are subject to any/all cost escalations.
- Submittals: 8 weeks After Receipt of Order; responses to submittal review comments 5 weeks after receipt.
- Delivery: 10-12 weeks After Release to Fabricate.
- Installation labor, common piping and valves, instrumentation, relocation of existing equipment are expressly excluded. Common pipe, gauges, valves, anchoring mechanisms, electrical controls beyond those specifically mentioned above, and any other non-mentioned items are not included.
- Field Service will be provided by **CSI** (CSLB # 947472) under separate purchase order for the amount quoted above
- Payments are due ninety percent (90%) net forty five (45) days with allowance for 5% performance retention (due 120 days after invoice) and 5% retention for O&M manual provision due net 45 days after provision. Overdue payments are subject to 1.5% per month (18% per year). Terms of Section 00700 (General Conditions), Article 14- "Payment to Contractor and Completion" are not considered or relevant to terms between Contractor and Supplier (Charles P. Crowley Co.)
- Finance charge: Collection activities subject to attorney's fees provision as stated in CPC Co.'s Terms and Conditions.
- Consequential and Liquidated Damages: It is understood that time is of the essence on this project. Late charges / liquidated damages of \$100/day with a 5% of order value cap, will be accepted for failure to meet the above identified milestones. Retentions beyond those specifically stated above or bonding requirements are not acceptable or allowed.
- CPC Co.'s Limited Warranty shall apply.

Thank you for your consideration of this proposal. If you have any questions, please do not hesitate to call our office.

Yours truly,

Charles P Crowley Company

Wendell Smith, Estimator

Representatives for: ***Pulsafeeder, Griffco Valve, Blacoh Fluid Control***,
Attachments: CPC Co. T&Cs (3 pgs)

**PRE-NEGOTIATED SOLE-SOURCED PROPOSAL
COMPLIANCE ACKNOWLEDGMENT FORM**

Subject: San Luis Obispo County
Los Osos Water Recycling Facility (LOWRF)
Water Reclamation Facility Project
Diaphragm-Type Metering Pumps (Section 11242)

By signing this Compliance Acknowledgment Form below, Charles P. Crowley Company (hereinafter "SUPPLIER") acknowledges that they have received all relevant Drawings and Specifications (hereinafter "Project Documents") relative to the services and equipment they are to supply for the subject project from Carollo Engineers (hereinafter "ENGINEER") via a transmittal dated July 31, 2013.

SUPPLIER hereby agrees to fulfill a purchase order from the CONTRACTOR in accordance with the scope of supply, services, conditions, and requirements set forth in the Project Documents and in accordance with the acknowledgments and exceptions herein. Unless specifically listed as an exception herein, SUPPLIER agrees to accept and fulfill such purchase order from the CONTRACTOR without modification of any requirement of the Project Documents, including scope of supply, services, schedule requirements and liquidated damages.

Additionally, SUPPLIER hereby acknowledges that, based on their thorough review of the Project Documents, SUPPLIER understands the scope of the services and equipment they are required to provide and liquidated damages to which SUPPLIER will be held upon failure to meet the schedule milestones listed below.

SCHEDULE MILESTONES AND LIQUIDATED DAMAGES:

- Deliver Shop Drawings 6 to 8 weeks following issuance of purchase order by CONTRACTOR.
- Deliver equipment to site 18 to 20 weeks following receipt of approved Shop Drawings.
- Liquidated damages of \$100 per day will be imposed by the General Construction Contractor for failure to meet the schedule milestones listed above.

SUPPLIER further acknowledges that their attached proposal fully delineates the services and equipment they are required to provide and that their proposal is in full conformance with the Project Documents, except as listed below.

EXCEPTIONS:

- Exception 1 - *(to be inserted by SUPPLIER if exceptions are taken; else, leave blank)*
- Exception 2 - *(to be inserted by SUPPLIER if exceptions are taken; else, leave blank)*
- Exception 3 - *(to be inserted by SUPPLIER if exceptions are taken; else, leave blank)*
- Exception 4 - *(to be inserted by SUPPLIER if exceptions are taken; else, leave blank)*

ENGINEER shall notify SUPPLIER, in writing or via e-mail, of any change in or deviation from the Project Documents, as transmitted on July 31, 2013, that result in a change in the SUPPLIER's scope of services and/or equipment supply. SUPPLIER shall not be responsible for any such changes in or deviations to the Project Documents that SUPPLIER was not notified of. In the event SUPPLIER is not notified of such changes or deviations, SUPPLIER may be compensated accordingly by the Contractor during construction.

SUPPLIER hereby acknowledges that they will be held responsible for any and all discrepancies between the Project Documents and their proposal, except for those exceptions listed above, regardless of exceptions or deviations that may be indicated in SUPPLIER's proposal, unless such discrepancies arise from changes in or deviations to the Project Documents that they were not notified of.

July 31, 2013

pw://Carollo/Documents/Client/CA/SLO County/8930A11/Correspondence/Compliance Acknowledgment Form - Sodium Hypo Pumps.doc

Page 1 of 2

pw://Carollo/Documents/Client/CA/SLO County/8930A11/Specifications/Appendix_H1.pdf (FS)

**PRE-NEGOTIATED SOLE-SOURCED PROPOSAL
COMPLIANCE ACKNOWLEDGMENT FORM**

SUPPLIER hereby acknowledges that in case of conflict between Project Documents and SUPPLIER's Standard Terms and Conditions of Sale, the requirements of the Project Documents shall govern.

IN WITNESS WHEREOF, a duly authorized representative of SUPPLIER has signed below acknowledging their acceptance of and conformance with the terms delineated in this Compliance Acknowledgment Form as of the date listed below.



By: Wendell Smith, Charles P. Crowley Company

15861 Business Center Drive

Address

Irwindale CA 91706

City State Zip

Date: 8/8/13

Phone: (626) 856-5656

Fax: (626) 856-5658

E-mail: wendell.smith@cpcrowley.com



**SAN LUIS OBISPO COUNTY
SAN LUIS OBISPO, CALIFORNIA
LOS OSOS WATER RECYCLING FACILITY
CONTRACT NO. 300448.08.02**

Appendix H.2 – Pre-Negotiated Proposal for Cloth Disk Filters Specification Section 11366A



September 10, 2013

Correspondence ID#: AAL-29563

CAROLLO ENGINEERS

Attn: Susanna Leung

1218 3rd Ave., Suite 1600

Seattle, Washington 98101

USA

Ph# 206/684-6532

Fax# 206/903-0419

Email: sleung@carollo.com

Project: LOS OSOS WRF CA

RE: Specification Section 11366A - Cloth Disk Filters
Aqua-Aerobic Systems' Proposal #132907 dated 8-23-2013 revised 9/10/13
Correspondence ID# AAL-29563 dated 8/23/13 revised 9/10/13
Project ID# 112293

Ms. Susanna Leung:

Enclosed please find our proposal for the AquaDisk® Cloth Media Filter equipment, freight and supervision services for the above referenced project. Our offering, unless otherwise noted, is in accordance with the contract documents. Please take a moment to review our proposal notes for Aqua-Aerobic Systems' equipment terminations and items not included in Aqua-Aerobic Systems' scope of supply which are to be provided by the Owner/ Owner's Installing Contractor.

The previous price provided was \$953,707 (without tax) on March 14, 2013. Since this price was provided the following changes to the scope of supply have occurred:

- Updated pricing to reflect the current cost of materials
- Updated pricing to reflect the proposal validity and time of completion requirements
- Added space heaters for the backwash pumps
- Upgraded the control panel by changing the PLC, Operator Interface and spare parts to Allen-Bradley Components, upgraded the control panel enclosure from 304 SS to 316 SS, added a fiber optic patch panel, included the Factory Talk and RSLogix software, added lights and switches for all of the valves, added conduit for the raised control panel and additional programming as required by the specifications.

Based on these changes the updated price for the AquaDisk Cloth Media Filters is \$1,023,421 without taxes. Associated sales tax for shipment of goods to a San Luis

Obispo County location would be \$72,809 based upon the current prevailing tax rate. Therefore, the total updated sell price, including tax at the prevailing San Luis Obispo County rate is \$1,096,230.

We appreciate the opportunity to submit our proposal for this project and look forward to discussing it with you in detail. In the meantime, please feel free to contact our representative, listed below, or me, if you have any questions regarding our proposal.

Sincerely,



Eric Roundy
Project Applications Engineer

CC: Goble Sampson Associates, Inc / ph#: 425/392-0491 / fx#: 425/392-9615
John Simon / jsimon@goblesampson.com
Gierlich-Mitchell, Inc. / ph#: 714/236-6070 Ext 1003 / fx#: 714/236-6080
Dave Giersch / dgiersch@gierlich-mitchell.com
Aqua-Aerobic Systems, Inc.
William Moore / wmoore@aqua-aerobic.com

Subject: San Luis Obispo County
Los Osos Water Recycling Facility (LOWRF)
Water Reclamation Facility Project
Cloth Disk Filters (Section 11366A)

By signing this Compliance Acknowledgment Form below, AQUA-AEROBIC SYSTEMS, INC. (hereinafter "SUPPLIER") acknowledges that they have received all relevant Drawings and Specifications (hereinafter "Project Documents") relative to the services and equipment they are to supply for the subject project from Carollo Engineers (hereinafter "ENGINEER") via a transmittal dated August 20, 2013.

SUPPLIER hereby agrees to fulfill a purchase order from the CONTRACTOR in accordance with the scope of supply, services, conditions, and requirements set forth in the Project Documents and in accordance with the acknowledgments and exceptions herein. Unless specifically listed as an exception herein, SUPPLIER agrees to accept and fulfill such purchase order from the CONTRACTOR without modification of any requirement of the Project Documents, including scope of supply, services, schedule requirements, and liquidated damages.

Additionally, SUPPLIER hereby acknowledges that, based on their thorough review of the Project Documents, SUPPLIER understands the scope of the services and equipment they are required to provide and liquidated damages to which SUPPLIER will be held upon failure to meet the schedule milestones listed below.

SCHEDULE MILESTONES AND LIQUIDATED DAMAGES:

- Deliver Shop Drawings 6 to 8 weeks following issuance of purchase order by CONTRACTOR.
- Deliver equipment to site 18 weeks following receipt of approved Shop Drawings.
- Liquidated damages of \$500 per day will be imposed by the General Construction Contractor for failure to meet the schedule milestones listed above.

SUPPLIER further acknowledges that their attached proposal fully delineates the services and equipment they are required to provide and that their proposal is in full conformance with the Project Documents, except as listed below.

EXCEPTIONS:

- Refer to Aqua-Aerobic Systems' Exceptions/Clarification document dated September 10, 2013 and Proposal No. 132907 dated September 10, 2013.

ENGINEER shall notify SUPPLIER, in writing or via e-mail, of any change in or deviation from the Project Documents, as transmitted on August 20, 2013, that result in a change in the SUPPLIER's scope of services and/or equipment supply. SUPPLIER shall not be responsible for any such changes in or deviations to the Project Documents that SUPPLIER was not notified of. In the event SUPPLIER is not notified of such changes or deviations, SUPPLIER may be compensated accordingly by the Contractor during construction.

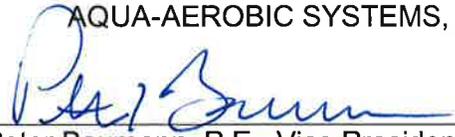
SUPPLIER hereby acknowledges that they will be held responsible for any and all discrepancies between the Project Documents and their proposal, except for those exceptions listed above, regardless of exceptions or deviations that may be indicated in SUPPLIER's proposal, unless such discrepancies arise from changes in or deviations to the Project Documents that they were not notified of.

**PRE-NEGOTIATED SOLE-SOURCED PROPOSAL
COMPLIANCE ACKNOWLEDGMENT FORM**

SUPPLIER hereby acknowledges that in case of conflict between Project Documents and SUPPLIER's Standard Terms and Conditions of Sale, the requirements of the Project Documents shall govern.

IN WITNESS WHEREOF, a duly authorized representative of SUPPLIER has signed below acknowledging their acceptance of and conformance with the terms delineated in this Compliance Acknowledgment Form as of the date listed below.

AQUA-AEROBIC SYSTEMS, INC.

By: 
Peter Baumann, P.E., Vice President & General
Manager – Process Group

6303 N. Alpine Rd.
Address

Loves Park	IL	61111-7655
City	State	Zip

Date: August 23, 2013 Revised 9/10/13

Phone:	(815) 654-2501
Fax:	(815) 654-2508
E-mail:	PBaumann@aqua-aerobic.com



TO: All Bidding Contractors

PROJECT: LOS OSOS WRF CA

ATN: Cost Estimator

PROPOSAL DATE: September 10, 2013

CC: Goble Sampson Associates, Inc / ph#: 425/392-0491 / fx#: 425/392-9615
John Simon

Gierlich-Mitchell, Inc. / ph#: 714/236-6070 Ext 1003 / fx#: 714/236-6080
Dave Giersch

Aqua-Aerobic Systems - Regional Manager / ph#: 815/639-4458 / fx#: 815/654-8258
Bill Moore

The following Notes apply to Aqua-Aerobic Systems' proposal:

- We are pleased to quote, for acceptance by September 30, 2014, prices and terms on equipment listed below.
- Equipment will be furnished by Aqua-Aerobic Systems, Inc. with unloading of goods, civil work, and installation by the CONTRACTOR.
- Reference: Specification Section 11366A - Cloth Disk Filters
- The equipment/goods furnished by Aqua-Aerobic Systems will be as described in this proposal, including Aqua-Aerobic Systems' Exceptions/Clarifications document dated September 10, 2013.

Cloth Media Filters

AquaDisk Tanks/Basins

2 AquaDisk Model # ADFSP-54x10E-PC ("mirror" units) Package Filter 304 Stainless Steel Tank(s) consisting of:

- 10 disk tank(s) will be stainless steel, estimated dry weight is 12,000 lbs., and estimated operating weight is 54,000 lbs. Each tank will include an integral solids waste collection manifold.

The tank finish will be:

Interior: commercial sandblast (SSPC-SP6), painted with Devthane 379 Aliphatic Urethane Enamel (color "clear") 1 coats 2-3 mils DFT on the top 2 foot only.

Exterior: commercial sandblast (SSPC-SP6), painted with Devthane 379 Aliphatic Urethane Enamel (color "clear") 1 coats 2-3 mils DFT over the entire exterior.

- 3" threaded brass ball valve(s).

AquaDisk Centertube Assemblies

2 Centertube(s) consisting of:

- 304 stainless steel centertube weldment(s).
- U.H.M.W. polyethylene multi segment driven sprocket(s).
- Dual wheel assembly(ies).
- Rider wheel bracket assembly(ies).
- 304 stainless steel effluent seal plate(s).
- Centertube bearing kit(s).
- Viton V-ring effluent port\centertube seal(s).
- Pile cloth media and non-corrosive support frame assemblies.
- Cloth will be OptiFiber PES-13® Cloth Filtration Media.
- Disk segment 304 stainless steel support rods.

- Neoprene media sealing gaskets.

AquaDisk Drive Assemblies

2 Drive System(s) consisting of:

- AGMA I gearbox(es) with three phase .75 HP drive motor(s) rated for 50 deg C.
- Single phase motor winding heater and temperature switch.
- Nylon drive sprocket(s).
- Acetal drive chain(s) with 304 stainless steel link pins.
- Stationary drive bracket weldment(s).
- Adjustable drive bracket weldment(s).
- Chain guard weldment(s).
- Warning label(s).

AquaDisk Backwash/Sludge Assemblies

2 Backwash System(s) consisting of:

- 304 stainless steel backwash shoe weldments.
- UHMW polyethylene backwash shoe nozzle plates
- 304 stainless steel backwash shoe support weldment(s).
- 1 1/2" flexible hose.
- Stainless steel backwash shoe springs.
- Stainless steel hose clamps.

2 Backwash/Solids Waste Pump(s) consisting of:

- Gorman Rupp model 12B20-B, 2HP, premium efficient, 3 phase externally mounted centrifugal backwash/waste pump(s).
- Motor will be rated for 50 deg C.
- Single phase motor winding heater and temperature switch.
- 316 stainless steel anchors.
- 0 to 30 psi pressure gauge(s) with diaphragm seal(s).
- 0 to 30 inches mercury vacuum gauge(s) and vacuum transmitter(s) with diaphragm seal(s) .
- Bronze throttling gate valve(s).
- 3" threaded brass ball valve(s).

AquaDisk Instrumentation

2 Pressure Transmitter(s) consisting of:

- Level transmitter(s).

2 Float Switch(es) consisting of:

- Float switch(es).
- 304 stainless steel float switch support bracket(s).

2 Vacuum Transmitter(s) consisting of:

- Vacuum transmitter(s).

AquaDisk Valves

2 Influent Valve(s) consisting of:

- 18" butterfly valves with electric actuators BY OTHERS.

2 Set(s) of Backwash Valves consisting of:

- 2" full port, three piece, ASTM A351 Grade CF8M stainless steel body ball valve(s), grooved end connections with single phase electric actuator(s). Valve / actuator combination shall be manufactured by TCI / RCI (RCI, a division of Rotork), Nibco, or equal.
- 2" flexible hose.
- 2" painted cast iron victaulic end couplers.

2 Solids Waste Valve(s) consisting of:

- 2" full port, three piece, ASTM A351 Grade CF8M stainless steel body ball valve(s), grooved end connections with single phase electric actuator(s). Valve / actuator combination shall be manufactured by TCI / RCI (RCI, a division of Rotork), Nibco, or equal.
- 2" flexible hose.
- 2" painted cast iron victaulic end couplers.

AquaDisk Misc/Spare Parts

1 Lot of Recommended Spare Parts consisting of:

- (30) Pile cloth media and non-corrosive support frame assemblies.
- (1) Viton V-ring effluent port\centertube seal.
- (2) 2" ball valves with electric actuators.
- (1) Float switch.
- (1) Gorman Rupp model 12B20-B, 2HP, premium efficient, 3 phase externally mounted centrifugal backwash/waste pump.
- (1) Gearbox with three phase 3/4 HP drive motor.
- (1) Allen Bradley Compactlogix integral programmable controller.
- (3) Input card(s)
- (3) Output module(s).
- (3) Analog output(s).
- (2) Power supply(s).
- (2) End cap(s).

AquaDisk Controls wo/Starters

2 Conduit Installation(s) consisting of:

- PVC coated steel conduit and fittings.

2 Control Panel(s) consisting of:

- 316 stainless steel NEMA 4X enclosure(s).
- Circuit breaker with handle.
- Air conditioner(s).
- Panel heater.
- Fuses and fuse blocks.
- Single phase circuit breaker(s).
- Line filter(s).
- GFI convenience outlet(s).
- Control relay(s).
- Selector switch(es).
- Indicating pilot light(s).
- Allen Bradley 1769-L35E Compactlogix integral programmable controller.
- Power supply(s).
- End cap(s).
- Input card(s)
- Output module(s).
- Analog input(s).
- Panelview Plus 1000 color touchscreen display.
- Operator interface sun shield(s).
- Power supply(ies).
- Terminal blocks.
- UL label(s).
- Digital surge arrestors.
- Uninterrupted power supply.
- Ethernet/Fiber switch(es).
- Fiber optic patch panel(s).

- Internal control panel light(s).
- Surge protector and transient eliminator TE/500.
- Software.

AquaDisk Engineering

- Documentation for the AquaDisk will be provided as described:

- Engineer's Approval Data (English language) in electronic format.

- Documentation for the AquaDisk will be provided as described:

- Operation & Maintenance Manuals (English language) in electronic format and (2) hard copies.

AquaDisk Supervision/Freight Domestic

1 Supervision Services and Freight Package(s) for the AquaDisk will be provided as follows:

- 9 Day(s) On Site for INSTALLATION ASSISTANCE, START-UP AND TRAINING
- 3 Trip(s) for INSTALLATION ASSISTANCE, START-UP AND TRAINING
- FREIGHT TO JOBSITE

The Following Notes apply to Aqua-Aerobic Systems' Proposal:

- SCHEDULE:

SUBMITTALS: Reference 11366A, 1.02.C.1.a: Engineer's shop drawing submittals will be completed and in transit to you within 8* weeks after receipt of firm purchase order with acceptable terms and conditions and guarantee of payment.

RESUBMITTAL: Reference 11366A, 1.02.C.1.b: AASI shall re-submit shop drawings within 4 weeks of receiving comments on first submittal. The second submittal shall fully address all review comments. AASI may schedule a meeting prior to resubmittal to resolve all outstanding issues.

SHIPMENT: Reference 11366A, 1.02.C.1.c: Delivery of the goods to the jobsite will be 18* weeks from our receipt of approved engineer's submittal data and release for manufacture.

DRAFT O&M Manuals: Reference 11366A, 1.02.C.1.d: Delivery of draft O&M manuals will be 14 weeks following receipt of approved shop drawings.

* Weeks quoted are actual working weeks. Aqua-Aerobic Systems closes for the Christmas Holidays beginning approximately December 24, through approximately January 2nd each year.

Liquidated Damages: AASI has agreed to the following liquidated damages:

- a. \$500.00 per day for delays of shop drawings as outlined for the first and second submittals in the schedule above.
- b. \$500.00 per day for delays of equipment delivery as outlined in the schedule above.
- c. \$500.00 per day for delays of O&M manuals as outlined in the schedule above.
- d. The sum of all liquidated damages shall be capped at 10 percent of the total price for the purchase order.

- AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009: Aqua-Aerobic Systems, Inc. manufactured goods described in the subsequent documents are in compliance with the domestic preference ("Buy American") provisions of Section 1605 of the American Recovery and Reinvestment Act of 2009 and any guidance issued for this Section as posted in the Federal Register as of the date of this proposal.

- Materials and Services not specifically described/itemized in this proposal are not included in the quoted total price, and are to be supplied by the installing contractor/purchaser.
- Equipment storage and handling according to Aqua-Aerobic Systems' recommendations shall be provided by the installing contractor/purchaser.
- Valve and line sizes are to be verified by the engineer based on actual line losses.
- All valve couplings of the backwash \ sludge installations shall be Victaulic grooved end type connections.
- All piping, supports, gaskets, and hardware beyond Aqua-Aerobic Systems' equipment terminations are to be supplied by the installing contractor/purchaser.

- Two backwash pumps, two gate valves, and two ball valves per filter ship loose. Interconnecting piping, wiring, and installation is to be supplied by the installing contractor/purchaser.
- All flanges or unions in the piping to service the equipment, are not included and are to be provided by the installing contractor/purchaser.
- Electrical wiring and supply power is to be supplied by the installing contractor/purchaser.
- The stainless steel components and enclosure panels will be cleaned, pickled, and passivated.
- Installation and field wiring of the control panel is to be supplied by the installing contractor/purchaser.
- CONTROLS NON-DISCLOSURE / CONFIDENTIALITY AGREEMENT: If applicable, Aqua-Aerobic Systems will provide information relating to software documentation to control the treatment system supplied using Aqua-Aerobic Systems' proprietary and/or trade secret information subject to execution of an Aqua-Aerobic "Controls Non-Disclosure / Confidentiality Agreement".
- Freeze protection may be required for outdoor installation in cold weather climates. All such protection, including but not limited to, heat tracing and insulation of pumps and piping, as well as protection against internal tank freezing, shall be provided and installed by the installing contractor.
- Filter gravity flow hydraulics and plant's capability to handle the backwash wastewater at 130 gpm per pump while not exceeding maximum of 12 feet of water pump discharge pressure is to be confirmed by the purchaser/Purchaser's Consulting Engineer.
- Aqua-Aerobic System's proposal is based upon supply of equipment models noted in this proposal. If equipment shipment date is critical, models may be revised to meet the required shipping date.
- Supervision services included in Aqua-Aerobic Systems' proposal are based upon supply of the quantity of trips and days stated. Additional supervision services can be provided for an additional charge of \$1100/day plus travel and living expenses.
- Single phase motors will be 115 volt.
- Three phase motors will be 460 volt.

The Following Notes apply to Aqua-Aerobic Systems' Proposal:

- PRICE ESCALATION INDEX: Aqua-Aerobic Systems, Inc. reserves the right to re-evaluate the pricing quoted prior to order acceptance if; 1) a purchase order is received after the validity date stated in this proposal.
- WARRANTY AMENDMENT: Aqua-Aerobic Systems, Inc. warrants the goods provided by Aqua-Aerobic Systems, Inc. in accordance with the "Warranty; Limitation Of Liability; And Disclaimer" as amended herein:
 1. In accordance with Specification Section 11366A - Cloth Disk Filter, 1.08.A; Warranty period shall be for two (2) yeas from date of start-up.
- F.O.B. JOBSITE; TITLE AND RISK OF LOSS: All prices and all shipments of goods are F.O.B. Jobsite City Location. It is the responsibility of the Buyer to unload shipments and utilizing the packing list and bill of lading provided with the shipment notate shortages/damages upon receipt of the shipments and notify Aqua-Aerobic in writing within 7 days of the shortages/damages to facilitate filing of a freight claim. Delivery of the goods sold hereunder by the carrier shall be deemed delivery to Buyer, and upon such delivery, title to such goods and risk of loss or damage shall be upon Buyer.
- PAYMENT TERMS: Subject to credit approval/surety of payment, within 30 days of Engineer's receipt of a proper Application for Payment per Article 14 of the General Conditions (00700), progress payment(s) of 95% of cost of materials and equipment not incorporated in the Work with the 5% balance being retainage per Section 00500 ARTICLE 6 - PAYMENT PROCEDURES. Within 60 days of Substantial Completion of all Work under the Contract Documents, Owner shall pay an amount sufficient to reduce the retainage withheld on Work properly performed to 0% of the Work completed, less such amounts as Engineer shall determine in accordance with Paragraph 14.02.B.5 of the General Conditions and less 150% of Engineer's estimate of the value of Work to be completed or corrected per list of items attached to the certificate of Substantial Completion. Final payment upon final completion and acceptance of the Work in accordance with Paragraph 14.07 of the General Conditions.
- SCOPE OF SUPPLY NOTE: Aqua-Aerobic Systems' scope of supply and pricing is as described in this proposal including the listed Integral Documents, terms and conditions of sale, and is based upon the relevant project specifications and drawings for the San Luis Obispo County, Los Osos Water Recycling Facility (LOWRF), Water Reclamation Facility Project, Cloth Disk Filters (Section 11366A) provided by Susanna M. Leung, P.E. of Carollo Engineers on August 20, 2013 for AASI's use in providing this proposal. Our proposal, unless otherwise stated the

"Pre-Negotiated Sole-Sourced Proposal Compliance Acknowledgement Form" dated August 23, 2014. Please refer to the proposal notes for equipment terminations and items not included in the proposal which are to be provided by the CONTRACTOR.

- INTEGRAL DOCUMENTS: The following documents are an integral part of Aqua-Aerobic Systems' proposal:
 1. Aqua-Aerobics' Design # 132907 and Design Notes dated 8-22-2013.
 2. Pre-Negotiated Sole-Sourced Proposal Compliance Acknowledgement Form" dated August 23, 2014 including the AASI attachment document entitled Exceptions/Clarifications Document dated 8/23/13.
 3. Aqua-Aerobic Systems' notated contract drawing numbers 30M01, 30M02, and 30E02. Clouded items represent Aqua-Aerobic Systems' scope of supply.

- AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009: Aqua-Aerobic Systems, Inc. manufactured goods described in the subsequent documents are in compliance with the domestic preference ("Buy American") provisions of Section 1605 of the American Recovery and Reinvestment Act of 2009 and any guidance issued for this Section as posted in the Federal Register as of the date of this proposal.

- TRADEMARKS: Aqua-Aerobic, AquaSBR, Aqua-Jet, Aqua-Jet II, AquaDDM, Endura Series, Aqua EnduraDisc, Aqua EnduraTube, Aqua CB-24, AquaCAM-D, AquaEnsure, IntelliPro, AquaExcel, Aqua MixAir, AquaPASS, Aqua MSBR, AquaMB Process, Aqua-Aerobic MBR, Aqua UltraFiltration™, Aqua MultiBore™, OxyMix, Aqua BioMax™, AquaDisk, AquaDiamond, Aqua MegaDisk™, AquaDrum, Aqua MiniDisk, OptiFiber, OptiFiber PES-13, OptiFiber PA2-13, OptiFiber ACR-13, OptiFiber PES-14, AquaABF, Turbilite, and the Aqua-Aerobic logo are registered trademarks of Aqua-Aerobic Systems, Inc. The items marked with ™ above are Trademarked and are in the process of being Registered. All other products and services mentioned are trademarks of their respective owners.

PRICING SUMMARY:

\$ 970,789.00 - Equipment
 \$ 72,809.18 - 7.5% San Luis Obispo County, CA Sales Tax (Equipment only, See TAXES note, below)
 \$ 52,632.00 - Freight and Start-up Services

 \$1,096,230.18 - Total Price

- TAXES: 7.5% San Luis Obispo County, CA sales tax has been provided as a separate line item in the pricing. Sales tax rate is subject to change based upon the rate applicable to the actual ship to zip code location and the rates prevailing at time of purchase order receipt and at time of shipment/invoicing.

GOODS QUOTED ABOVE WILL BE SOLD SUBJECT ONLY TO THE TERMS AND CONDITIONS OF SALE SET FORTH HEREIN. ANY DIFFERENT OR ADDITIONAL TERMS ARE HEREBY OBJECTED TO.

Total Price:

TERMS AND CONDITIONS OF AQUA-AEROBIC SYSTEMS, INC.**Page 1 of 2**

This offer and all of the goods and sales of Aqua-Aerobic Systems, Inc. are subject only to the following terms and conditions. The acceptance of any order resulting from this proposal is based on the express condition that the Buyer agrees to all the terms and conditions herein contained. Any terms and conditions in any order, which are in addition to or inconsistent with the following, shall not be binding upon Aqua-Aerobic Systems, Inc. This proposal and any contract resulting therefrom, shall be governed by and construed in accordance with the laws of the State of Illinois, without regard to conflicts of laws principles.

PAYMENT

Unless specifically stated otherwise, quoted terms are Net 30 Days from shipping date. Past-due charges are 1.5% per month and will apply only on any past-due balance. Aqua-Aerobic Systems, Inc. does not allow retainage of any invoice amount, unless authorized in writing by an authorized representative of our Loves Park, Illinois office.

DURATION OF QUOTATION

This proposal of Aqua-Aerobic Systems, Inc. shall in no event be effective more than 30 days from date thereof, unless specifically stated otherwise, and is subject to change at any time prior to acceptance.

SHIPMENT

Shipping dates are not a guarantee of a particular day of shipment and are approximate, being based upon present production information, and are subject to change per the production schedules existing at time of receipt of purchase order. Aqua-Aerobic Systems, Inc. shall not be responsible for any delay in shipment for causes beyond its control including, but not limited to, war, riots, strikes, labor trouble causing interruption of work, fires, other casualties, transportation delays, modification of order, any act of governmental authorities or acts of God. Quoted shipment dates in this proposal are approximate dates goods will be shipped and, unless agreed to in writing by Aqua-Aerobic Systems, Inc., Buyer may not postpone or delay the dates of shipment of goods from our plant or from our supplier's plants beyond the dates set forth in this proposal.

TITLE AND RISK OF LOSS

All prices and all shipments of goods are F.O.B. Aqua-Aerobic Systems, Inc.'s plant at Loves Park, Illinois unless specifically stated otherwise. Delivery of the goods sold hereunder to the carrier shall be deemed delivery to the Buyer, and upon such delivery, title to such goods and risk of loss or damage shall be upon Buyer.

TAXES

Prices quoted do not include any taxes, customs duties, or import fees. Buyer shall pay any and all use, sales, privilege or other tax or customs duties or import fees levied by any governmental authority with respect to the sale or transportation of any goods covered hereby. If Aqua-Aerobic Systems, Inc. is required by any taxing authority to collect or to pay any such tax, duty or fee, the Buyer shall be separately billed at such time for the amounts Aqua-Aerobic Systems, Inc. is required to pay.

INSURANCE

Unless the goods are sold on a CIF basis, the Buyer shall provide marine insurance for all risks, including war and general coverage.

SECURITY

If at any time the financial responsibility of the Buyer becomes unsatisfactory to Aqua-Aerobic Systems, Inc., or Aqua-Aerobic Systems, Inc. otherwise deems itself insecure as to receipt of full payment of the purchase price from Buyer hereunder, Aqua-Aerobic Systems, Inc. reserves the right to require payment in advance or security or guarantee satisfactory to Aqua-Aerobic Systems, Inc. of payment in full of the purchase price.

LIMITATION OF ACTION

No action shall be brought against Aqua-Aerobic Systems, Inc. for any breach of its contract of sale more than two years after the accrual of the cause of action thereof, and, in no event, unless the Buyer shall first have given written notice to Aqua-Aerobic Systems, Inc., of any claim of breach of contract within 30 days after the discovery thereof.

CANCELLATION CLAUSE

No acceptance of this proposal, by purchase order or otherwise, may be modified except by written consent of Aqua-Aerobic Systems, Inc. nor may it be cancelled except by prior payment to Aqua-Aerobic Systems, Inc. the following sums as liquidated damages therefore: 1) If cancellation is prior to commencement of production and prior to the assumption of any obligations by Aqua-Aerobic Systems, Inc. for any materials or component parts, a sum equal to 15% of the total purchase price; 2) If cancellation is after the commencement of production or after the assumption of any obligations by Aqua-Aerobic Systems, Inc. for any materials or component parts, a sum equal to the total of the direct, out-of-pocket expenses incurred to the date of cancellation for labor, machine time, materials and any charges made to us by suppliers for cancellation, plus 30% of the total purchase price. All charges and expenses shall be as determined by Aqua-Aerobic Systems, Inc. In the event any items are used by Aqua-Aerobic Systems, Inc. to fill a subsequent order, then upon receipt of payment for such order, Aqua-Aerobic Systems, Inc. shall pay the Buyer a sum equal to the direct out-of-pocket expenses previously charged and received from Buyer.

PROPRIETARY INFORMATION

This proposal, including all descriptive data, drawings, material, information and know-how disclosed by Aqua-Aerobic Systems, Inc. to Buyer in relation hereto is confidential information intended solely for the confidential use of Buyer, shall remain the property of Aqua-Aerobic Systems, Inc. and shall not be disclosed or otherwise used to the disadvantage or detriment of Aqua-Aerobic Systems, Inc. in any manner.



TERMS AND CONDITIONS OF AQUA-AEROBIC SYSTEMS, INC.

Page 2 of 2

QUALIFIED ACCEPTANCE AND INDEMNITY

In the event the acceptance of this proposal by Buyer either is contingent upon or subject to the approval by any third party such as, but not limited to, a consulting engineer, with respect to goods, parts, materials, descriptive data, drawings, calculations, or any other matter, then upon such approval by any third party, Aqua-Aerobic Systems, Inc. shall have no liability to Buyer or to any third party so long as the goods sold and delivered by Aqua-Aerobic Systems, Inc. conform to this proposal.

Buyer agrees to indemnify and save harmless Aqua-Aerobic Systems, Inc. from and against all costs and expenses and liability of any kind whatsoever arising out of or in connection with claims by third parties so long as the goods sold hereunder conform to the requirements of this proposal as approved by any third party.

WARRANTY; LIMITATION OF LIABILITY; AND DISCLAIMER

In return for purchase and full payment for Aqua-Aerobic Systems, Inc. goods, we warrant new goods provided by us to be free from defects in materials and workmanship under normal conditions and use for a period of one year from the date the goods are put into service, or eighteen months from date of shipment (whichever first occurs).

OUR OBLIGATION UNDER THIS WARRANTY IS EXPRESSLY AND EXCLUSIVELY LIMITED to replacing or repairing (at our factory at Loves Park, Illinois) any part or parts returned to our factory with transportation charges prepaid, and which our examination shall show to have been defective. Prior to return of any goods or its parts to our factory, Buyer shall notify Aqua-Aerobic Systems, Inc. of claimed defect, and Aqua-Aerobic Systems, Inc. shall have the privilege of examining the goods at Buyer's place of business at or where the goods have otherwise been placed in service.

THE FOREGOING WARRANTY IS MADE IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, AND OF ALL OTHER LIABILITIES AND OBLIGATIONS ON OUR PART, INCLUDING ANY LIABILITY FOR NEGLIGENCE, STRICT LIABILITY, OR OTHERWISE; AND ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE IS EXPRESSLY DISCLAIMED; AND WE EXPRESSLY DENY THE RIGHT OF ANY OTHER PERSON TO INCUR OR ASSUME FOR US ANY OTHER LIABILITY IN CONNECTION WITH THE SALE OF ANY GOODS PROVIDED BY US.

UNDER NO CIRCUMSTANCES, INCLUDING ANY CLAIM OF NEGLIGENCE, STRICT LIABILITY, OR OTHERWISE, SHALL AQUA-AEROBIC SYSTEMS, INC. BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES, COSTS OF CONNECTING, DISCONNECTING, OR ANY LOSS OR DAMAGE RESULTING FROM A DEFECT IN THE GOODS. LIMIT OF LIABILITY: AQUA-AEROBIC SYSTEMS, INC.'S TOTAL LIABILITY UNDER THE ABOVE WARRANTY IS LIMITED TO THE REPAIR OR REPLACEMENT OF ANY DEFECTIVE PART.

Final acceptance of this proposal must be given to Aqua-Aerobic Systems, Inc. at their office in Loves Park, Illinois. Please acknowledge acceptance by signing the proposal and returning it to Aqua-Aerobic Systems, Inc.

Accepted by: _____
Company: _____

Offer Respectfully Submitted,
Peter Baumann
Peter Baumann, P.E., V.P. & General Manager, Process Group
Aqua-Aerobic Systems, Inc.

By: _____ Date: _____

pw:\Carollo\Documents\Client\CA\SLO County\8930A11\Specifications\Appendix H2.pdf (FS)

Aqua-Aerobic Systems, Inc.

Exceptions / Clarifications Document: 9/10/13

Project: LOS OSOS WRF CA

The following Exceptions and Clarifications are an integral part of Aqua-Aerobic Systems' offer.

1) Reference: Related Specifications and Plans

Aqua's Exception/Clarification

The Aqua-Aerobic Systems, Inc. (AASI) equipment offering is based upon the following Specification Section and Plans transmitted under Carollo Engineers' August 20, 2013 letter, unless otherwise stated on AASI's Exceptions/Clarifications document dated September 10, 2013. All of the following documents are dated August 2013, except as noted otherwise.

Specification Section 11366A - Cloth Disk Filters.
Section 00700 - General Conditions.
Section 01140 - Work Restrictions.
Section 01330 - Submittal Procedures.
Section 01410 - Code Requirements.
Section 01610 - Project Design Criteria.
Section 01612 - Seismic Design Criteria.
Section 01614 - Wind Design Criteria.
Section 01660 - Testing, Training, and Commissioning.
Section 01770 - Closeout Procedures.
Section 01782 - Operation and Maintenance Data.
Section 05120 - Structural Steel.
Section 05500 - Metal Fabrications.
Section 09960 - High-Performance Coatings.
Section 10400 - Signage.
Section 15050 - Common Work Results for Mechanical Equipment.
Section 15075 - Equipment Identification.
Section 15958 - Mechanical Equipment Testing.
Section 16050 - Common Work Results for Electrical.
Section 16075 - Electrical Identification.
Section 16125 - Fiber Optic Cable and Appurtenances.
Section 16134 - Boxes.
Section 16222 - Low Voltage Motors up to 500 hp.
Section 16412 - Low Voltage Molded Case Circuit Breakers.
Section 16422 - Motor Starters.
Section 17050 - Common Work Results for Process Control and Instrumentation Systems.
Section 17100 - Control Strategies.
Section 17101-30 - Specific Control Strategies - Tertiary Filters.
Section 17720 - Control Systems - Programmable Logic Controllers Hardware.
Section 17721 - Human Machine Interface Hardware.
Section 17733 - Network Materials and Equipment.
Section 17761 - PLC Programming Software.
Section 17765 - Human Machine Interface Software.
Section 17950 - Testing, Calibration, and Commissioning.
Structural Drawings - 30S01, 30S02, 30S03.
Mechanical Drawings - 30M01, 30M02.
Electrical Drawings - 30E01, 30E02, 30E03.
P&IDs - 30N01, 30N02, 30N03.

- NOTE: AASI Reserves the right to revise its offering and price should any other Specification Sections or Contract Drawings apply to AASI's scope of supply or these Specification Sections or

Aqua-Aerobic Systems, Inc.

Exceptions / Clarifications Document: 9/10/13

Project: LOS OSOS WRF CA

Contract Drawings change.

2) Reference: Referenced Specifications and Plans

Specification Sections 00440, 00800, 01010, 01292, 01294, 01312, 01322, 01324A, 01329, 01450, 01455, 01500, 01571, 01600, 01710, 01722, 01756, 02084, 02318, 03055, 03200, 03600, 03925, 04055, 05120, 07190, 09910, 15052, 15061, 15062, 15082, 15956, 16051, 16052, 16070, 16123, 16130, 16210, 16232, 16305, 16444, 16950, 16990, 17710, 17712, 17730, 17762, Any other Division 1, 11, 15, 16, 17 sections not provided, and Plans 00G06, 00G10, 00G11

Aqua's Exception/Clarification

The above listed Specification Sections and Plans are referred in the provided Sections and Drawings from Carollo Engineers dated August 2013, but have not been included for review.

PROCESS DESIGN REPORT



**AQUA-AEROBIC
SYSTEMS, INC.**

LOS OSOS WRF CA

Design#: 132907

Option: Bid Design

Designed By: Eric Roundy on Tuesday, September 10, 2013

The enclosed information is based on preliminary data which we have received from you. There may be factors unknown to us which would alter the enclosed recommendation. These recommendations are based on models and assumptions widely used in the industry. While we attempt to keep these current, Aqua-Aerobic Systems, Inc. assumes no responsibility for their validity or any risks associated with their use. Also, because of the various factors stated above, Aqua-Aerobic Systems, Inc. assumes no responsibility for any liability resulting from any use made by you of the enclosed recommendations.

Copyright 2013, Aqua-Aerobic Systems, Inc

Design Notes

Filtration

- The cloth media filter recommendation is based upon the following conditions (as shown on the design sheet): 10 mg/l average daily influent TSS, 20 mg/l peak influent TSS, 5 mg/l daily effluent TSS, and an acceptable upstream process such as an oxidation ditch with SRT of 20 days.

- The anticipated filtered effluent quality is based on the filter influent conditions as shown under "Design Parameters" of this Process Design Report. In addition, the filter influent should be free of algae and other colloidal solids that are not filterable through a nominal 10 micron pore size media. Provisions to treat algae and condition the solids to be filterable are the responsibility of others.

- For this application, pile filter cloth is recommended.

- The cloth media filter recommendation has been designed to handle the peak hour design flow while maintaining one unit out of service.

- The following filter recommendation has been designed in accordance with the State of California Title 22 Code of Regulations related to recycled water.

A. The cloth media filters shall:

1. Provide a 24-hour average filtered effluent of 2 NTU or less.
2. Provide a filtered effluent not to exceed 5 NTU for more than 5% of the time within a 24-hour period.
3. Provide a filtered effluent not to exceed 10 NTU at any time.

B. Filter influent turbidity is continuously measured, and shall not exceed 5 NTU for more than 15 minutes and never shall exceed 10 NTU, and that there is the capability to automatically activate chemical addition or divert the wastewater should the filter effluent turbidity exceed 2 NTU for more than 15 minutes.

Equipment

- Aqua-Aerobic Systems, Inc. (AASI) is familiar with the Buy American provision of the American Recovery and Reinvestment Act of 2009 as well as other Buy American provisions (i.e. FAR 52.225, EXIM Bank, USAid, etc.). AASI can provide a system that is in full compliance with Buy American provisions.

AquaDISK Tertiary Filtration - Design Summary

DESIGN INFLUENT CONDITIONS

Pre-Filter Treatment: Oxidation Ditch

Avg. Annual Design Flow = 1.2 MGD = 833.33 gpm
 Max. Month Design Flow = 2.0 MGD = 1388.89 gpm
 Peak Day Design Flow = 2.7 MGD = 1875.00 gpm
 Peak Hour Design Flow = 4.032 MGD = 2800.00 gpm

<u>DESIGN PARAMETERS</u>	Influent	mg/l	Effluent			
			Required	<= mg/l	Anticipated	<= mg/l
Avg. Total Suspended Solids:	TSSa	10	TSSa	5	TSSa	5
Max. Total Suspended Solids:	TSSm	20	--	--	--	--
*Turbidity:	NTU	5	NTU	2	NTU	2

*Note: Turbidity represented in Nephelometric Turbidity Units (NTU's) in lieu of mg/l.

AquaDISK FILTER RECOMMENDATION

Qty Of Filter Units Recommended = 2
 Number Of Disks Per Unit = 10
 Total Number Of Disks Recommended = 20
 Total Filter Area Provided = 1076.0 ft² = (99.96 m²)
 Filter Model Recommended = AquaDisk Package: Model ADFSP-54 x 10E-PC
 Filter Media Cloth Type = OptiFiber PES-13

AquaDISK FILTER CALCULATIONS

Filter Type:

Vertically Mounted Cloth Media Disks featuring automatically operated vacuum backwash . Tank shall include a rounded bottom and solids removal system.

Peak Day Flow Conditions:

Peak Day Hydraulic Loading = Peak Day Design Flow (gpm) / Recommended Filter Area (ft²)
 = 1875 / 1076 ft²
 = 1.74 gpm/ft² (1.18 l/s/m²) at Peak Day Flow

Peak Hour Flow Conditions:

Peak Hour Hydraulic Loading = Peak Hour Design Flow (gpm) / Recommended Filter Area (ft²)
 = 2800 / 1076 ft²
 = 2.60 gpm/ft² (1.77 l/s/m²) at Peak Hour Flow

Solids Loading:

Solids Loading Rate = (lbs TSS/day at Peak Hour flow and max TSS loading) / Recommended Filter Area (ft²)
 = 673.9 lbs/day / 1076 ft²
 = 0.63 lbs. TSS /day/ft² (3.05 kg. TSS/day/m²)

The above recommendation is based upon the provision to maintain a satisfactory hydraulic surface loading with (1) unit out of service. The resultant hydraulic loading rate at the Peak Hour Design Flow is: 5.2 gpm / ft² = (3.5 L/s / m²)

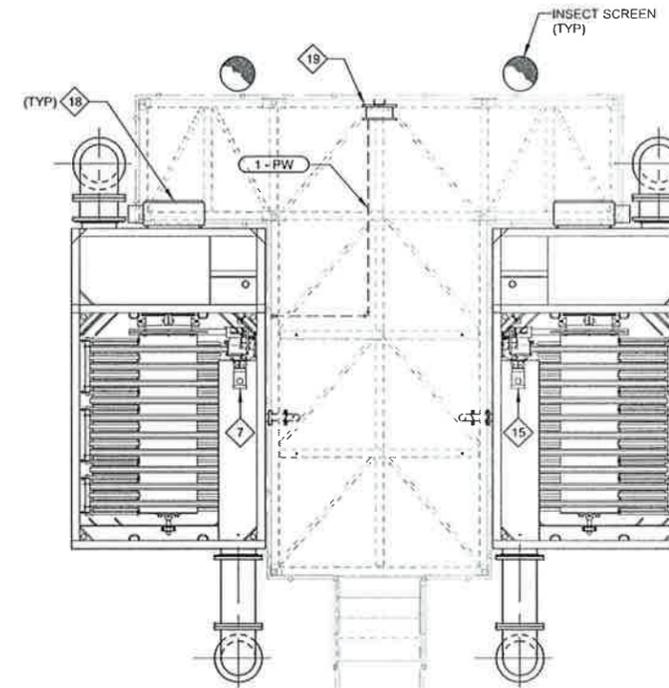
 = Aqua-Aerobic Supply

GENERAL NOTES

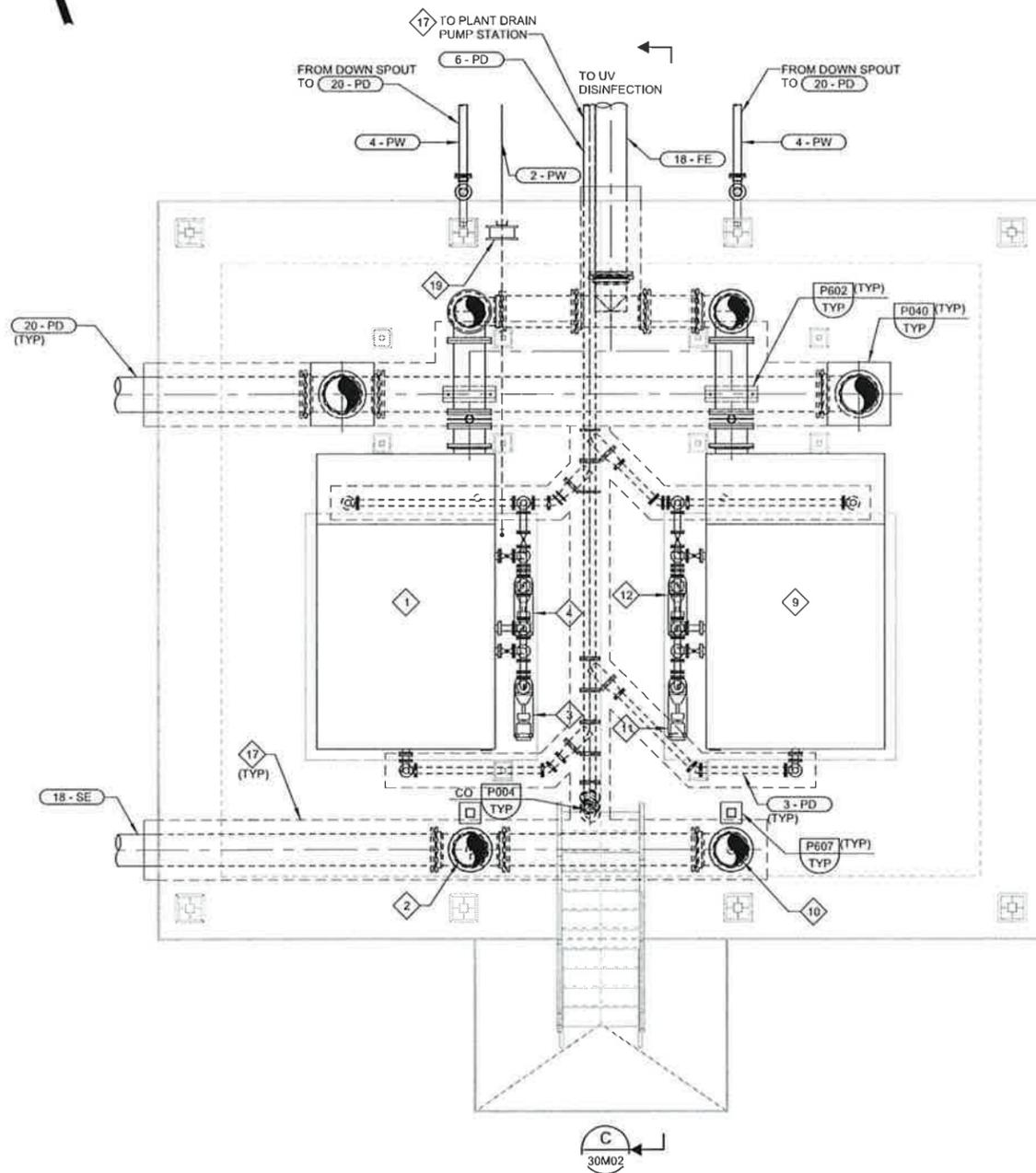
- REFER TO DRAWING 00G06 FOR MECHANICAL SYMBOLS AND NOTES.
- REFER TO YARD PIPING DRAWINGS FOR YARD PIPING CONTINUATION IN THIS AREA.
- CONTRACTOR SHALL COORDINATE FILTER EQUIPMENT WITH MANUFACTURER.
- ALL INTERCONNECTING PIPING AND WIRING LOCATED OUTSIDE THE FILTER TANK SHALL BE FURNISHED AND INSTALLED BY CONTRACTOR.

KEY NOTES

- TERTIARY FILTER NO. 1
- TERTIARY FILTER NO. 1 INLET VALVE, 30-EDM-211
- TERTIARY FILTER NO. 1 SOLIDS/BACKWASH PUMP NO. 1, 30-PMP-214
- TERTIARY FILTER NO. 1 SOLIDS/BACKWASH PUMP NO. 2, 30-PMP-215
- TERTIARY FILTER NO. 1 SOLIDS VALVE, 30-VAL-212, NOT SHOWN; LOCATED OUTSIDE THE TANK.
- TERTIARY FILTER NO. 1 BACKWASH VALVE NO. 1 THRU 5, 30-VAL-213A, 213B, 213C, 213D, AND 213E, NOT SHOWN; LOCATED OUTSIDE THE TANK.
- TERTIARY FILTER NO. 1 DRIVE MOTOR, 30-MTR-210
- TERTIARY FILTER NO. 1 LEVEL INSTRUMENT, 30-LE/LIT-210, NOT SHOWN; LOCATED INSIDE THE TANK.
- TERTIARY FILTER NO. 2
- TERTIARY FILTER NO. 2 INLET VALVE, 30-EDM-221
- TERTIARY FILTER NO. 2 SOLIDS/BACKWASH PUMP NO. 1, 30-PMP-224
- TERTIARY FILTER NO. 2 SOLIDS/BACKWASH PUMP NO. 2, 30-PMP-225
- TERTIARY FILTER NO. 2 SOLIDS VALVE, 30-VAL-222, NOT SHOWN; LOCATED INSIDE THE TANK.
- TERTIARY FILTER NO. 2 BACKWASH VALVE NO. 1 THRU 5, 30-VAL-223A, 223B, 223C, 223D, AND 223E, NOT SHOWN; LOCATED INSIDE THE TANK.
- TERTIARY FILTER NO. 2 DRIVE MOTOR, 30-MTR-220
- TERTIARY FILTER NO. 2 LEVEL INSTRUMENT, 30-LE/LIT-220, NOT SHOWN; LOCATED INSIDE THE TANK.
- ENCASE ALL PIPING LOCATED UNDER THE SLAB PER TYPICAL DETAIL P040.
- CONTROL PANEL MOUNTED DIRECTLY TO TANK AND SUPPLIED BY TERTIARY FILTER SYSTEM MANUFACTURER. REFER TO SPECIFICATION 11366A FOR COMPLETE SCOPE.
- PROVIDE PLANT UTILITY WATER STATION ON UPPER/LOWER LEVELS A MINIMUM OF 3 FEET AWAY FROM CONTROL PANEL PER TYPICAL DETAILS M276 AND M280.



B TOP PLAN
SCALE: 1/4" = 1'-0"
FILE: FILE



A FLOOR PLAN
SCALE: 1/4" = 1'-0"
FILE: FILE

Plot Date: 15-AUG-2013 2:55:27 PM
 User: deniquez
 Model: Layout1 ColorTable: gshade.ctb DesignScript: Carollo_Sm_Pan_v0905.ppt PlotScale: 2:1
 LAST SAVED BY: renequez

Progress to Final Submittal		
DESIGNED	SML	
DRAWN	DE	
CHECKED	KB	
DATE	SEPT 2013	
REV	DATE	BY
1		
2		
3		
4		
5		

DESIGNED	SML	
DRAWN	DE	
CHECKED	KB	
DATE	SEPT 2013	

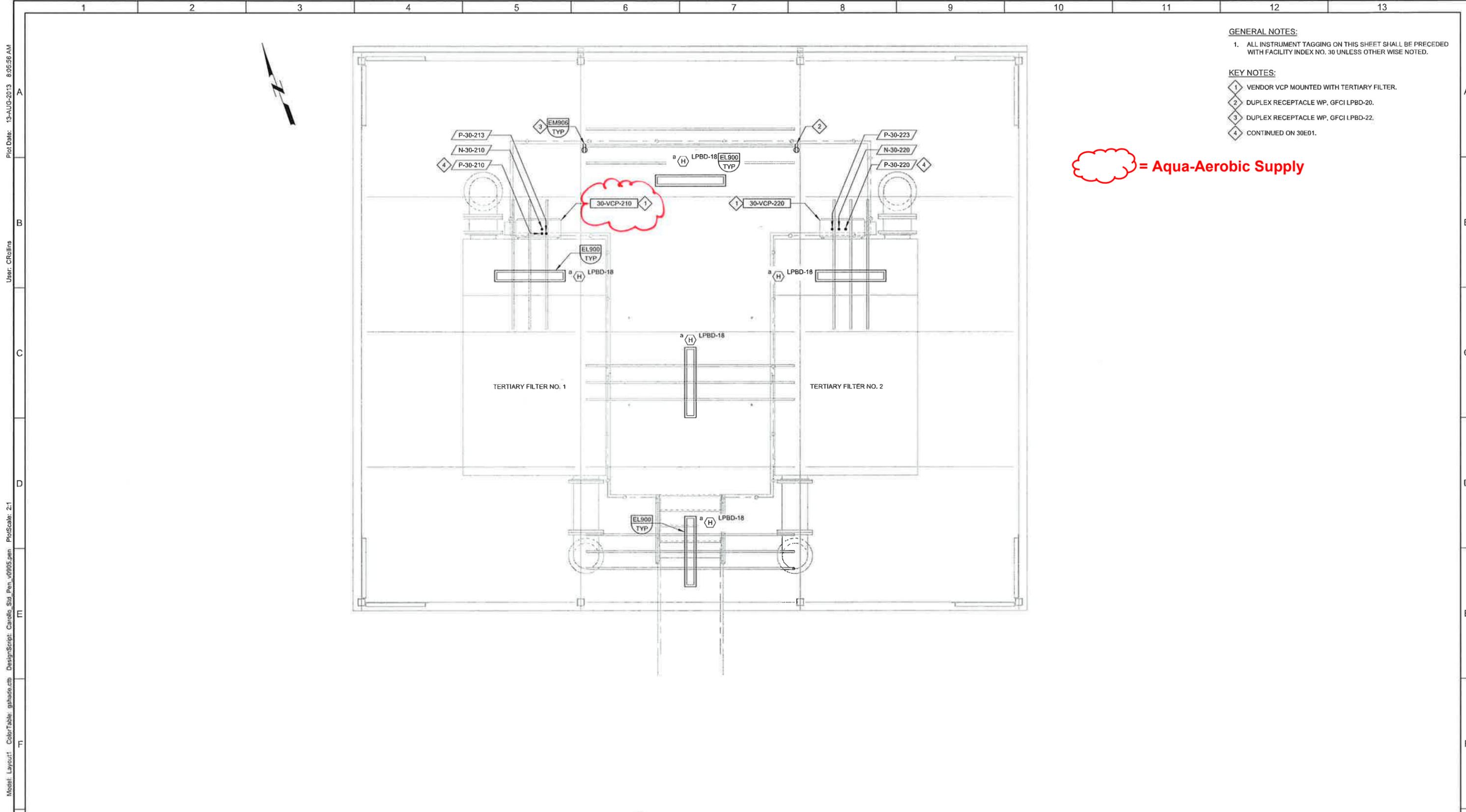


SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY
 LOS OSOS WATER RECYCLING FACILITY PROJECT
 MECHANICAL
TERTIARY FILTERS PLAN

VERIFY SCALES	JOB NO. 8930A.11
BAR IS ONE INCH ON ORIGINAL DRAWING	DRAWING NO. 30M01
0 1"	SHEET NO. OF XX
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY	

P:\Carollo\Documents\Client\CASLO County\8930A11\Specifications\Appendix H2.pdf (FS)
 Plot Date: 13-AUG-2013 8:05:56 AM
 User: CRollins
 Model: Layout1 ColorTable: gshado.ctb DesignScript: Carollo_Sht_Pen_v0905.pen PlotScale: 2:1
 LAST SAVED BY: rollins



- GENERAL NOTES:**
- ALL INSTRUMENT TAGGING ON THIS SHEET SHALL BE PRECEDED WITH FACILITY INDEX NO. 30 UNLESS OTHERWISE NOTED.
- KEY NOTES:**
- VENDOR VCP MOUNTED WITH TERTIARY FILTER.
 - DUPLEX RECEPTACLE WP, GFCI LPBD-20.
 - DUPLEX RECEPTACLE WP, GFCI LPBD-22.
 - CONTINUED ON 30E01.

= Aqua-Aerobic Supply

A FLOOR PLAN
 SCALE: 3/8" = 1'-0"
 FILE: 8930A1130E100.2dm

DESIGNED AMS			DESIGNED AMS DRAWN VCP CHECKED DATE JUNE 2013
DRAWN VCP			
CHECKED			
REV	DATE	BY	DESCRIPTION

Progress to Final Submittal DESIGNED AMS DRAWN VCP CHECKED DATE JUNE 2013	

**SAN LUIS
OBISPO
COUNTY**

SAN LUIS OBISPO COUNTY
 LOS OSOS WATER RECYCLING FACILITY PROJECT
 ELECTRICAL
**TERTIARY FILTERS
UPPER PLAN**

VERIFY SCALES BAR IS ONE INCH ON ORIGINAL DRAWING IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY	JOB NO. 8930A.11 DRAWING NO. 30E02 SHEET NO. OF XX
--	--



**SAN LUIS OBISPO COUNTY
SAN LUIS OBISPO, CALIFORNIA
LOS OSOS WATER RECYCLING FACILITY
CONTRACT NO. 300448.08.02**

Appendix I – Wage Determinations

General Decision Number: CA130019 09/20/2013 CA19

Superseded General Decision Number: CA20120019

State: California

Construction Types: Building, Heavy (Heavy and Dredging) and Highway

County: San Luis Obispo County in California.

BUILDING, DREDGING (does not include hopper dredge work), HEAVY (does not include water well drilling, AND HIGHWAY CONSTRUCTION PROJECTS

Modification Number	Publication Date
0	01/04/2013
1	01/11/2013
2	02/08/2013
3	03/01/2013
4	03/08/2013
5	04/12/2013
6	05/10/2013
7	05/31/2013
8	06/07/2013
9	07/05/2013
10	07/19/2013
11	08/09/2013
12	08/30/2013
13	09/06/2013
14	09/13/2013
15	09/20/2013

ASBE0005-002 07/01/2013

	Rates	Fringes
Asbestos Workers/Insulator (Includes the application of all insulating materials, protective coverings, coatings, and finishes to all types of mechanical systems).....	\$ 34.51	18.55
Fire Stop Technician (Application of Firestopping Materials for wall openings and penetrations in walls, floors, ceilings and curtain walls).....	\$ 24.34	16.09

ASBE0005-004 06/24/2013

	Rates	Fringes
Asbestos Removal worker/hazardous material handler (Includes preparation, wetting, stripping, removal, scrapping, vacuuming, bagging and disposing of all insulation materials from		

mechanical systems, whether they contain asbestos or not)....\$ 16.95 10.23

BOIL0092-004 10/01/2012

Area within a 25 mile radius of City of Santa Maria

	Rates	Fringes
BOILERMAKER.....	\$ 41.17	28.27

BOIL0549-007 01/01/2013

Remainder of County outside a 25 mile radius of City of Santa Maria

	Rates	Fringes
BOILERMAKER.....	\$ 38.37	31.32

* BRCA0004-006 05/01/2013

	Rates	Fringes
BRICKLAYER; MARBLE SETTER.....	\$ 36.05	12.71

*The wage scale for prevailing wage projects performed in Blythe, China lake, Death Valley, Fort Irwin, Twenty-Nine Palms, Needles and 1-15 corridor (Barstow to the Nevada State Line) will be Three Dollars (\$3.00) above the standard San Bernardino/Riverside County hourly wage rate

BRCA0018-008 06/01/2012

	Rates	Fringes
MARBLE FINISHER.....	\$ 27.04	10.66
TILE FINISHER.....	\$ 22.37	9.19

BRCA0018-011 06/01/2012

	Rates	Fringes
TILE LAYER.....	\$ 33.55	13.55

CARP0409-001 07/01/2010

	Rates	Fringes
CARPENTER		
(1) Carpenter, Cabinet Installer, Insulation Installer, Hardwood Floor Worker and acoustical installer.....	\$ 37.35	11.08
(2) Millwright.....	\$ 37.85	11.08
(3) Piledriver/Derrick Bargeman, Bridge or Dock Carpenter, Heavy Frammer, Rock Bargeman or Scowman, Rockslinger, Shingler (Commercial).....	\$ 37.48	10.58
(3) Piledrivermen/Derrick		

Bargeman, Bridge or Dock Carpenter, Heavy Frammer, Rock Bargeman or Scowman, Rockslinger, Shingler (Commercial).....	\$ 37.48	11.08
(4) Pneumatic Nailer, Power Stapler.....	\$ 37.60	11.08
(5) Sawfiler.....	\$ 37.44	11.08
(6) Scaffold Builder.....	\$ 28.55	11.08
(7) Table Power Saw Operator.....	\$ 37.45	11.08

FOOTNOTE: Work of forming in the construction of open cut sewers or storm drains, on operations in which horizontal lagging is used in conjunction with steel H-Beams driven or placed in pre- drilled holes, for that portion of a lagged trench against which concrete is poured, namely, as a substitute for back forms (which work is performed by piledrivers): \$0.13 per hour additional.

 CARP0409-005 07/01/2010

	Rates	Fringes
Drywall		
DRYWALL INSTALLER/LATHER....	\$ 37.35	11.08
STOCKER/SCRAPPER.....	\$ 10.00	6.67

 CARP0409-008 08/01/2010

	Rates	Fringes
Modular Furniture Installer.....	\$ 17.00	7.41

 ELEC0011-002 11/26/2012

COMMUNICATIONS AND SYSTEMS WORK

	Rates	Fringes
Communications System		
Installer.....	\$ 27.25	12.25
Technician.....	\$ 29.05	12.30

SCOPE OF WORK:

Installation, testing, service and maintenance of systems utilizing the transmission and/or transference of voice, sound, vision and digital for commercial, educational, security and entertainment purposes for the following: TV monitoring and surveillance, background-foreground music, intercom and telephone interconnect, inventory control systems, microwave transmission, multi-media, multiplex, nurse call systems, radio page, school intercom and sound, burglar alarms, fire alarm (see last paragraph below) and low voltage master clock systems in commercial buildings. Communication Systems that transmit or receive information and/or control systems that are intrinsic to the above listed systems; inclusion or exclusion of terminations and testings of conductors determined by their function; excluding all other data systems or multiple systems which include control function or power supply; excluding installation of raceway systems, conduit systems, line voltage work, and energy management systems. Does not cover work performed at China Lake Naval Ordnance Test

Station. Fire alarm work shall be performed at the current inside wireman total cost package.

ELEC0639-001 01/01/2013

	Rates	Fringes
Electricians		
Wireman/Technician.....	\$ 37.20	17.95

FOOTNOTES:

CABLE SPLICER: 10% additional per hour above Wireman/Technician basic hourly rate.

Work from trusses, swinging scaffolds, open ladders, scaffolds, bosun chairs, stacks or towers, where subject to a direct fall from the ground floor or support structure from a distance of fifty (50) feet to ninety (90) feet: to be paid time and one-half. Work from trusses, swinging scaffolds, open ladders, scaffolds, bosun chairs, stacks or towers, where subject to a direct fall from the ground floor or support structure from a distance over ninety (90) feet: to be paid double the regular straight time rate of pay. Where workers are required to work under compressed air or in areas where injurious gases, dust or fumes are present in amounts necessitating the use of gas masks or self-contained breathing apparatus (particle masks are not considered self-contained breathing apparatus) or where workers work on poles at a distance of seventy-five (75) feet or more from the ground: to be paid a bonus of straight time pay. This shall be at a minimum of one hour, and thereafter, each succeeding hour or fraction thereof shall constitute an hour at the bonus rate. Tunnel work: to be paid at the time and one-quarter hourly rate.

All employers may request workmen to report direct to a job within a free zone to include everything west of ten (10) miles east of Highway 101, as the crow flies, and then (10) miles north and south of Highway 46, as the crow flies, to the junction of Highway 41 and Highway 46. Everything outside of this area shall be paid at full subsistence provide said job is of five (5) days duration or more and provide there is storage on the job for the Employee's tools. The Employer will be responsible for loss of tools under such circumstances. (Road: The most direct route on a surfaced road).

On all jobs or projects outside the free zone, as stated above, Employees may be required to report to the job site in their own transportation at the regular starting time and remain on the job site until the regular quitting time and these shall be paid at thirty-eight dollars (\$38.00) per day or thirty-eight cents (\$0.38) per mile for each road mile from shop to job and job to shop (round trip). (Day worked shall mean at least four (4) hours on the job unless sent home on account of weather, emergency, sickness, or injury).

ELEC1245-001 06/01/2012

	Rates	Fringes
--	-------	---------

LINE CONSTRUCTION

(1) Lineman; Cable splicer..\$ 48.95	14.05
(2) Equipment specialist (operates crawler tractors, commercial motor vehicles, backhoes, trenchers, cranes (50 tons and below), overhead & underground distribution line equipment).....\$ 39.09	12.97
(3) Groundman.....\$ 29.91	12.70
(4) Powderman.....\$ 43.71	13.15

HOLIDAYS: New Year's Day, M.L. King Day, Memorial Day,
Independence Day, Labor Day, Veterans Day, Thanksgiving Day
and day after Thanksgiving, Christmas Day

ELEV0008-003 01/01/2013

	Rates	Fringes
ELEVATOR MECHANIC.....\$ 58.07		25.185

FOOTNOTE:

PAID VACATION: Employer contributes 8% of regular hourly
rate as vacation pay credit for employees with more than 5
years of service, and 6% for 6 months to 5 years of service.
PAID HOLIDAYS: New Years Day, Memorial Day, Independence Day,
Labor Day, Veterans Day, Thanksgiving Day, Friday after
Thanksgiving, and Christmas Day.

* ENGI0012-003 08/05/2013

	Rates	Fringes
OPERATOR: Power Equipment (All Other Work)		
GROUP 1.....\$ 38.20		21.90
GROUP 2.....\$ 38.98		21.90
GROUP 3.....\$ 39.27		21.90
GROUP 4.....\$ 40.76		21.90
GROUP 5.....\$ 41.86		21.90
GROUP 6.....\$ 40.98		21.90
GROUP 8.....\$ 41.09		21.90
GROUP 9.....\$ 42.19		21.90
GROUP 10.....\$ 41.21		21.90
GROUP 11.....\$ 42.31		21.90
GROUP 12.....\$ 41.38		21.90
GROUP 13.....\$ 41.48		21.90
GROUP 14.....\$ 41.51		21.90
GROUP 15.....\$ 41.59		21.90
GROUP 16.....\$ 41.71		21.90
GROUP 17.....\$ 41.88		21.90
GROUP 18.....\$ 41.98		21.90
GROUP 19.....\$ 42.09		21.90
GROUP 20.....\$ 42.21		21.90
GROUP 21.....\$ 42.38		21.90
GROUP 22.....\$ 42.48		21.90
GROUP 23.....\$ 42.59		21.90
GROUP 24.....\$ 42.71		21.90
GROUP 25.....\$ 42.88		21.90

OPERATOR: Power Equipment
(Cranes, Piledriving &

Hoisting)

GROUP 1.....	\$ 39.55	21.90
GROUP 2.....	\$ 40.33	21.90
GROUP 3.....	\$ 40.62	21.90
GROUP 4.....	\$ 40.76	21.90
GROUP 5.....	\$ 40.98	21.90
GROUP 6.....	\$ 41.09	21.90
GROUP 7.....	\$ 41.21	21.90
GROUP 8.....	\$ 41.38	21.90
GROUP 9.....	\$ 41.55	21.90
GROUP 10.....	\$ 42.55	21.90
GROUP 11.....	\$ 43.55	21.90
GROUP 12.....	\$ 44.55	21.90
GROUP 13.....	\$ 45.55	21.90

OPERATOR: Power Equipment
(Tunnel Work)

GROUP 1.....	\$ 40.05	21.90
GROUP 2.....	\$ 40.83	21.90
GROUP 3.....	\$ 41.12	21.90
GROUP 4.....	\$ 41.26	21.90
GROUP 5.....	\$ 41.48	21.90
GROUP 6.....	\$ 41.59	21.90
GROUP 7.....	\$ 41.71	21.90

PREMIUM PAY:

\$3.75 per hour shall be paid on all Power Equipment Operator work on the following Military Bases: China Lake Naval Reserve, Vandenberg AFB, Point Arguello, Seely Naval Base, Fort Irwin, Nebo Annex Marine Base, Marine Corp Logistics Base Yermo, Edwards AFB, 29 Palms Marine Base and Camp Pendleton

Workers required to suit up and work in a hazardous material environment: \$2.00 per hour additional. Combination mixer and compressor operator on gunite work shall be classified as a concrete mobile mixer operator.

SEE ZONE DEFINITIONS AFTER CLASSIFICATIONS

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: Bargeman; Brakeman; Compressor operator; Ditch Witch, with seat or similar type equipment; Elevator operator-inside; Engineer Oiler; Forklift operator (includes loed, lull or similar types under 5 tons; Generator operator; Generator, pump or compressor plant operator; Pump operator; Signalman; Switchman

GROUP 2: Asphalt-rubber plant operator (nurse tank operator); Concrete mixer operator-skip type; Conveyor operator; Fireman; Forklift operator (includes loed, lull or similar types over 5 tons; Hydrostatic pump operator; oiler crusher (asphalt or concrete plant); Petromat laydown machine; PJU side dum jack; Screening and conveyor machine operator (or similar types); Skiploader (wheel type up to 3/4 yd. without attachment); Tar pot fireman; Temporary heating plant operator; Trenching machine oiler

GROUP 3: Asphalt-rubber blend operator; Bobcat or similar type (Skid steer); Equipment greaser (rack); Ford Ferguson (with dragtype attachments); Helicopter radioman (ground); Stationary pipe wrapping and cleaning machine operator

GROUP 4: Asphalt plant fireman; Backhoe operator (mini-max or similar type); Boring machine operator; Boxman or mixerman

(asphalt or concrete); Chip spreading machine operator; Concrete cleaning decontamination machine operator; Concrete Pump Operator (small portable); Drilling machine operator, small auger types (Texoma super economatic or similar types - Hughes 100 or 200 or similar types - drilling depth of 30' maximum); Equipment greaser (grease truck); Guard rail post driver operator; Highline cableway signalman; Hydra-hammer-aero stomper; Micro Tunneling (above ground tunnel); Power concrete curing machine operator; Power concrete saw operator; Power-driven jumbo form setter operator; Power sweeper operator; Rock Wheel Saw/Trencher; Roller operator (compacting); Screed operator (asphalt or concrete); Trenching machine operator (up to 6 ft.); Vacuum or much truck

GROUP 5: Equipment Greaser (Grease Truck/Multi Shift).

GROUP 6: Articulating material hauler; Asphalt plant engineer; Batch plant operator; Bit sharpener; Concrete joint machine operator (canal and similar type); Concrete planer operator; Dandy digger; Deck engine operator; Derrickman (oilfield type); Drilling machine operator, bucket or auger types (Calweld 100 bucket or similar types - Watson 1000 auger or similar types - Texoma 330, 500 or 600 auger or similar types - drilling depth of 45' maximum); Drilling machine operator; Hydrographic seeder machine operator (straw, pulp or seed), Jackson track maintainer, or similar type; Kalamazoo Switch tamper, or similar type; Machine tool operator; Maginnis internal full slab vibrator, Mechanical berm, curb or gutter (concrete or asphalt); Mechanical finisher operator (concrete, Clary-Johnson-Bidwell or similar); Micro tunnel system (below ground); Pavement breaker operator (truck mounted); Road oil mixing machine operator; Roller operator (asphalt or finish), rubber-tired earth moving equipment (single engine, up to and including 25 yds. struck); Self-propelled tar pipelining machine operator; Skiploader operator (crawler and wheel type, over 3/4 yd. and up to and including 1-1/2 yds.); Slip form pump operator (power driven hydraulic lifting device for concrete forms); Tractor operator-bulldozer, tamper-scraper (single engine, up to 100 h.p. flywheel and similar types, up to and including D-5 and similar types); Tugger hoist operator (1 drum); Ultra high pressure waterjet cutting tool system operator; Vacuum blasting machine operator

GROUP 8: Asphalt or concrete spreading operator (tamping or finishing); Asphalt paving machine operator (Barber Greene or similar type); Asphalt-rubber distribution operator; Backhoe operator (up to and including 3/4 yd.), small ford, Case or similar; Cast-in-place pipe laying machine operator; Combination mixer and compressor operator (gunite work); Compactor operator (self-propelled); Concrete mixer operator (paving); Crushing plant operator; Drill Doctor; Drilling machine operator, Bucket or auger types (Calweld 150 bucket or similar types - Watson 1500, 2000 2500 auger or similar types - Texoma 700, 800 auger or similar types - drilling depth of 60' maximum); Elevating grader operator; Grade checker; Gradall operator; Grouting machine operator; Heavy-duty repairman; Heavy equipment robotics operator; Kalamazoo balliste regulator or similar type; Kolman belt loader and similar type; Le Tourneau blob compactor or similar type; Loader operator (Athey, Euclid, Sierra and similar types); Mobark Chipper or similar; Ozzie padder or similar types; P.C. slot saw; Pneumatic concrete placing

machine operator (Hackley-Presswell or similar type); Pumpcrete gun operator; Rock Drill or similar types; Rotary drill operator (excluding caisson type); Rubber-tired earth-moving equipment operator (single engine, caterpillar, Euclid, Athey Wagon and similar types with any and all attachments over 25 yds. up to and including 50 cu. yds. struck); Rubber-tired earth-moving equipment operator (multiple engine up to and including 25 yds. struck); Rubber-tired scraper operator (self-loading paddle wheel type-John Deere, 1040 and similar single unit); Self-propelled curb and gutter machine operator; Shuttle buggy; Skiploader operator (crawler and wheel type over 1-1/2 yds. up to and including 6-1/2 yds.); Soil remediation plant operator; Surface heaters and planer operator; Tractor compressor drill combination operator; Tractor operator (any type larger than D-5 - 100 flywheel h.p. and over, or similar-bulldozer, tamper, scraper and push tractor single engine); Tractor operator (boom attachments), Traveling pipe wrapping, cleaning and bending machine operator; Trenching machine operator (over 6 ft. depth capacity, manufacturer's rating); trenching Machine with Road Miner attachment (over 6 ft depth capacity): Ultra high pressure waterjet cutting tool system mechanic; Water pull (compaction) operator

GROUP 9: Heavy Duty Repairman

GROUP 10: Drilling machine operator, Bucket or auger types (Calweld 200 B bucket or similar types-Watson 3000 or 5000 auger or similar types-Texoma 900 auger or similar types-drilling depth of 105' maximum); Dual drum mixer, dynamic compactor LDC350 (or similar types); Monorail locomotive operator (diesel, gas or electric); Motor patrol-blade operator (single engine); Multiple engine tractor operator (Euclid and similar type-except Quad 9 cat.); Rubber-tired earth-moving equipment operator (single engine, over 50 yds. struck); Pneumatic pipe ramming tool and similar types; Prestressed wrapping machine operator; Rubber-tired earth-moving equipment operator (single engine, over 50 yds. struck); Rubber tired earth moving equipment operator (multiple engine, Euclid, caterpillar and similar over 25 yds. and up to 50 yds. struck), Tower crane repairman; Tractor loader operator (crawler and wheel type over 6-1/2 yds.); Woods mixer operator (and similar Pugmill equipment)

GROUP 11: Heavy Duty Repairman - Welder Combination, Welder - Certified.

GROUP 12: Auto grader operator; Automatic slip form operator; Drilling machine operator, bucket or auger types (Calweld, auger 200 CA or similar types - Watson, auger 6000 or similar types - Hughes Super Duty, auger 200 or similar types - drilling depth of 175' maximum); Hoe ram or similar with compressor; Mass excavator operator less tha 750 cu. yards; Mechanical finishing machine operator; Mobile form traveler operator; Motor patrol operator (multi-engine); Pipe mobile machine operator; Rubber-tired earth- moving equipment operator (multiple engine, Euclid, Caterpillar and similar type, over 50 cu. yds. struck); Rubber-tired self- loading scraper operator (paddle-wheel-auger type self-loading - two (2) or more units)

GROUP 13: Rubber-tired earth-moving equipment operator operating equipment with push-pull system (single engine,

up to and including 25 yds. struck)

GROUP 14: Canal liner operator; Canal trimmer operator;
Remote- control earth-moving equipment operator (operating
a second piece of equipment: \$1.00 per hour additional);
Wheel excavator operator (over 750 cu. yds.)

GROUP 15: Rubber-tired earth-moving equipment operator,
operating equipment with push-pull system (single engine,
Caterpillar, Euclid, Athey Wagon and similar types with any
and all attachments over 25 yds. and up to and including 50
yds. struck); Rubber-tired earth-moving equipment operator,
operating equipment with push-pull system (multiple
engine-up to and including 25 yds. struck)

GROUP 16: Rubber-tired earth-moving equipment operator,
operating equipment with push-pull system (single engine,
over 50 yds. struck); Rubber-tired earth-moving equipment
operator, operating equipment with push-pull system
(multiple engine, Euclid, Caterpillar and similar, over 25
yds. and up to 50 yds. struck)

GROUP 17: Rubber-tired earth-moving equipment operator,
operating equipment with push-pull system (multiple engine,
Euclid, Caterpillar and similar, over 50 cu. yds. struck);
Tandem tractor operator (operating crawler type tractors in
tandem - Quad 9 and similar type)

GROUP 18: Rubber-tired earth-moving equipment operator,
operating in tandem (scrapers, belly dumps and similar
types in any combination, excluding compaction units -
single engine, up to and including 25 yds. struck)

GROUP 19: Rotex concrete belt operator (or similar types);
Rubber-tired earth-moving equipment operator, operating in
tandem (scrapers, belly dumps and similar types in any
combination, excluding compaction units - single engine,
Caterpillar, Euclid, Athey Wagon and similar types with any
and all attachments over 25 yds. and up to and including 50
cu. yds. struck); Rubber-tired earth-moving equipment
operator, operating in tandem (scrapers, belly dumps and
similar types in any combination, excluding compaction
units - multiple engine, up to and including 25 yds. struck)

GROUP 20: Rubber-tired earth-moving equipment operator,
operating in tandem (scrapers, belly dumps and similar
types in any combination, excluding compaction units -
single engine, over 50 yds. struck); Rubber-tired
earth-moving equipment operator, operating in tandem
(scrapers, belly dumps, and similar types in any
combination, excluding compaction units - multiple engine,
Euclid, Caterpillar and similar, over 25 yds. and up to 50
yds. struck)

GROUP 21: Rubber-tired earth-moving equipment operator,
operating in tandem (scrapers, belly dumps and similar
types in any combination, excluding compaction units -
multiple engine, Euclid, Caterpillar and similar type, over
50 cu. yds. struck)

GROUP 22: Rubber-tired earth-moving equipment operator,
operating equipment with the tandem push-pull system
(single engine, up to and including 25 yds. struck)

GROUP 23: Rubber-tired earth-moving equipment operator,

operating equipment with the tandem push-pull system (single engine, Caterpillar, Euclid, Athey Wagon and similar types with any and all attachments over 25 yds. and up to and including 50 yds. struck); Rubber-tired earth-moving equipment operator, operating with the tandem push-pull system (multiple engine, up to and including 25 yds. struck)

GROUP 24: Rubber-tired earth-moving equipment operator, operating equipment with the tandem push-pull system (single engine, over 50 yds. struck); Rubber-tired earth-moving equipment operator, operating equipment with the tandem push-pull system (multiple engine, Euclid, Caterpillar and similar, over 25 yds. and up to 50 yds. struck)

GROUP 25: Concrete pump operator-truck mounted; Rubber-tired earth-moving equipment operator, operating equipment with the tandem push-pull system (multiple engine, Euclid, Caterpillar and similar type, over 50 cu. yds. struck)

CRANES, PILEDIVING AND HOISTING EQUIPMENT CLASSIFICATIONS

GROUP 1: Engineer oiler; Fork lift operator (includes loed, lull or similar types)

GROUP 2: Truck crane oiler

GROUP 3: A-frame or winch truck operator; Ross carrier operator (jobsite)

GROUP 4: Bridge-type unloader and turntable operator; Helicopter hoist operator

GROUP 5: Hydraulic boom truck; Stinger crane (Austin-Western or similar type); Tugger hoist operator (1 drum)

GROUP 6: Bridge crane operator; Cretor crane operator; Hoist operator (Chicago boom and similar type); Lift mobile operator; Lift slab machine operator (Vagtborg and similar types); Material hoist and/or manlift operator; Polar gantry crane operator; Self Climbing scaffold (or similar type); Shovel, backhoe, dragline, clamshell operator (over 3/4 yd. and up to 5 cu. yds. mrc); Tugger hoist operator

GROUP 7: Pedestal crane operator; Shovel, backhoe, dragline, clamshell operator (over 5 cu. yds. mrc); Tower crane repair; Tugger hoist operator (3 drum)

GROUP 8: Crane operator (up to and including 25 ton capacity); Crawler transporter operator; Derrick barge operator (up to and including 25 ton capacity); Hoist operator, stiff legs, Guy derrick or similar type (up to and including 25 ton capacity); Shovel, backhoe, dragline, clamshell operator (over 7 cu. yds., M.R.C.)

GROUP 9: Crane operator (over 25 tons and up to and including 50 tons mrc); Derrick barge operator (over 25 tons up to and including 50 tons mrc); Highline cableway operator; Hoist operator, stiff legs, Guy derrick or similar type (over 25 tons up to and including 50 tons mrc); K-crane operator; Polar crane operator; Self erecting tower crane operator maximum lifting capacity ten tons

GROUP 10: Crane operator (over 50 tons and up to and

including 100 tons mrc); Derrick barge operator (over 50 tons up to and including 100 tons mrc); Hoist operator, stiff legs, Guy derrick or similar type (over 50 tons up to and including 100 tons mrc), Mobile tower crane operator (over 50 tons, up to and including 100 tons M.R.C.); Tower crane operator and tower gantry

GROUP 11: Crane operator (over 100 tons and up to and including 200 tons mrc); Derrick barge operator (over 100 tons up to and including 200 tons mrc); Hoist operator, stiff legs, Guy derrick or similar type (over 100 tons up to and including 200 tons mrc); Mobile tower crane operator (over 100 tons up to and including 200 tons mrc)

GROUP 12: Crane operator (over 200 tons up to and including 300 tons mrc); Derrick barge operator (over 200 tons up to and including 300 tons mrc); Hoist operator, stiff legs, Guy derrick or similar type (over 200 tons, up to and including 300 tons mrc); Mobile tower crane operator (over 200 tons, up to and including 300 tons mrc)

GROUP 13: Crane operator (over 300 tons); Derrick barge operator (over 300 tons); Helicopter pilot; Hoist operator, stiff legs, Guy derrick or similar type (over 300 tons); Mobile tower crane operator (over 300 tons)

TUNNEL CLASSIFICATIONS

GROUP 1: Skiploader (wheel type up to 3/4 yd. without attachment)

GROUP 2: Power-driven jumbo form setter operator

GROUP 3: Dinkey locomotive or motorperson (up to and including 10 tons)

GROUP 4: Bit sharpener; Equipment greaser (grease truck); Slip form pump operator (power-driven hydraulic lifting device for concrete forms); Tugger hoist operator (1 drum); Tunnel locomotive operator (over 10 and up to and including 30 tons)

GROUP 5: Backhoe operator (up to and including 3/4 yd.); Small Ford, Case or similar; Drill doctor; Grouting machine operator; Heading shield operator; Heavy-duty repairperson; Loader operator (Athey, Euclid, Sierra and similar types); Mucking machine operator (1/4 yd., rubber-tired, rail or track type); Pneumatic concrete placing machine operator (Hackley-Presswell or similar type); Pneumatic heading shield (tunnel); Pumpcrete gun operator; Tractor compressor drill combination operator; Tugger hoist operator (2 drum); Tunnel locomotive operator (over 30 tons)

GROUP 6: Heavy Duty Repairman

GROUP 7: Tunnel mole boring machine operator

ENGINEERS ZONES

\$1.00 additional per hour for all of IMPERIAL County and the portions of KERN, RIVERSIDE & SAN BERNARDINO Counties as defined below:

That area within the following Boundary: Begin in San Bernardino County, approximately 3 miles NE of the intersection

of I-15 and the California State line at that point which is the NW corner of Section 1, T17N, R14E, San Bernardino Meridian. Continue W in a straight line to that point which is the SW corner of the northwest quarter of Section 6, T27S, R42E, Mt. Diablo Meridian. Continue North to the intersection with the Inyo County Boundary at that point which is the NE corner of the western half of the northern quarter of Section 6, T25S, R42E, MDM. Continue W along the Inyo and San Bernardino County boundary until the intersection with Kern County, as that point which is the SE corner of Section 34, T24S, R40E, MDM. Continue W along the Inyo and Kern County boundary until the intersection with Tulare County, at that point which is the SW corner of the SE quarter of Section 32, T24S, R37E, MDM. Continue W along the Kern and Tulare County boundary, until that point which is the NW corner of T25S, R32E, MDM. Continue S following R32E lines to the NW corner of T31S, R32E, MDM. Continue W to the NW corner of T31S, R31E, MDM. Continue S to the SW corner of T32S, R31E, MDM. Continue W to SW corner of SE quarter of Section 34, T32S, R30E, MDM. Continue S to SW corner of T11N, R17W, SBM. Continue E along south boundary of T11N, SBM to SW corner of T11N, R7W, SBM. Continue S to SW corner of T9N, R7W, SBM. Continue E along south boundary of T9N, SBM to SW corner of T9N, R1E, SBM. Continue S along west boundary of R1E, SMB to Riverside County line at the SW corner of T1S, R1E, SBM. Continue E along south boundary of T1S, SBM (Riverside County Line) to SW corner of T1S, R10E, SBM. Continue S along west boundary of R10E, SBM to Imperial County line at the SW corner of T8S, R10E, SBM. Continue W along Imperial and Riverside county line to NW corner of T9S, R9E, SBM. Continue S along the boundary between Imperial and San Diego Counties, along the west edge of R9E, SBM to the south boundary of Imperial County/California state line. Follow the California state line west to Arizona state line, then north to Nevada state line, then continuing NW back to start at the point which is the NW corner of Section 1, T17N, R14E, SBM

\$1.00 additional per hour for portions of SAN LUIS OBISPO, KERN, SANTA BARBARA & VENTURA as defined below:

That area within the following Boundary: Begin approximately 5 miles north of the community of Cholame, on the Monterey County and San Luis Obispo County boundary at the NW corner of T25S, R16E, Mt. Diablo Meridian. Continue south along the west side of R16E to the SW corner of T30S, R16E, MDM. Continue E to SW corner of T30S, R17E, MDM. Continue S to SW corner of T31S, R17E, MDM. Continue E to SW corner of T31S, R18E, MDM. Continue S along West side of R18E, MDM as it crosses into San Bernardino Meridian numbering area and becomes R30W. Follow the west side of R30W, SBM to the SW corner of T9N, R30W, SBM. Continue E along the south edge of T9N, SBM to the Santa Barbara County and Ventura County boundary at that point which is the SW corner of Section 34. T9N, R24W, SBM, continue S along the Ventura County line to that point which is the SW corner of the SE quarter of Section 32, T7N, R24W, SBM. Continue E along the south edge of T7N, SBM to the SE corner to T7N, R21W, SBM. Continue N along East side of R21W, SBM to Ventura County and Kern County boundary at the NE corner of T8N, R21W. Continue W along the Ventura County and Kern County boundary to the SE corner of T9N, R21W. Continue North along the East edge of R21W, SBM to the NE corner of T12N, R21W, SBM. Continue West along the north edge of T12N, SBM to the SE corner of T32S, R21E, MDM. [T12N SBM is a think strip between T11N SBM and T32S MDM]. Continue North along the East side of R21E, MDM to the Kings County and Kern County border at the NE corner of

T25S, R21E, MDM, continue West along the Kings County and Kern County Boundary until the intersection of San Luis Obispo County. Continue west along the Kings County and San Luis Obispo County boundary until the intersection with Monterey County. Continue West along the Monterey County and San Luis Obispo County boundary to the beginning point at the NW corner of T25S, R16E, MDM.

\$2.00 additional per hour for INYO and MONO Counties and the Northern portion of SAN BERNARDINO County as defined below:

That area within the following Boundary: Begin at the intersection of the northern boundary of Mono County and the California state line at the point which is the center of Section 17, T10N, R22E, Mt. Diablo Meridian. Continue S then SE along the entire western boundary of Mono County, until it reaches Inyo County at the point which is the NE corner of the Western half of the NW quarter of Section 2, T8S, R29E, MDM. Continue SSE along the entire western boundary of Inyo County, until the intersection with Kern County at the point which is the SW corner of the SE 1/4 of Section 32, T24S, R37E, MDM. Continue E along the Inyo and Kern County boundary until the intersection with San Bernardino County at that point which is the SE corner of section 34, T24S, R40E, MDM. Continue E along the Inyo and San Bernardino County boundary until the point which is the NE corner of the Western half of the NW quarter of Section 6, T25S, R42E, MDM. Continue S to that point which is the SW corner of the NW quarter of Section 6, T27S, R42E, MDM. Continue E in a straight line to the California and Nevada state border at the point which is the NW corner of Section 1, T17N, R14E, San Bernardino Meridian. Then continue NW along the state line to the starting point, which is the center of Section 18, T10N, R22E, MDM.

REMAINING AREA NOT DEFINED ABOVE RECIEVES BASE RATE

ENGI0012-004 08/01/2012

	Rates	Fringes
OPERATOR: Power Equipment		
(DREDGING)		
(1) Leverman.....	\$ 45.40	20.00
(2) Dredge dozer.....	\$ 40.93	20.00
(3) Deckmate.....	\$ 40.82	20.00
(4) Winch operator (stern winch on dredge).....	\$ 40.27	20.00
(5) Fireman-Oiler, Deckhand, Bargeman, Leveehand.....	\$ 39.73	20.00
(6) Barge Mate.....	\$ 40.34	20.00

IRON0377-002 07/01/2013

	Rates	Fringes
Ironworkers:		
Fence Erector.....	\$ 26.58	17.74
Ornamental, Reinforcing and Structural.....	\$ 33.00	26.30

PREMIUM PAY:

\$6.00 additional per hour at the following locations:

China Lake Naval Test Station, Chocolate Mountains Naval Reserve-Niland, Edwards AFB, Fort Irwin Military Station, Fort Irwin Training Center-Goldstone, San Clemente Island, San Nicholas Island, Susanville Federal Prison, 29 Palms - Marine Corps, U.S. Marine Base - Barstow, U.S. Naval Air Facility - Sealey, Vandenberg AFB

\$4.00 additional per hour at the following locations:

Army Defense Language Institute - Monterey, Fallon Air Base, Naval Post Graduate School - Monterey, Yermo Marine Corps Logistics Center

\$2.00 additional per hour at the following locations:

Port Hueneme, Port Mugu, U.S. Coast Guard Station - Two Rock

LABO0220-001 07/01/2013

	Rates	Fringes
LABORER (TUNNEL)		
GROUP 1.....	\$ 34.84	16.02
GROUP 2.....	\$ 35.16	16.02
GROUP 3.....	\$ 35.62	16.02
GROUP 4.....	\$ 36.31	16.02
LABORER		
GROUP 1.....	\$ 28.99	16.02
GROUP 2.....	\$ 29.54	16.02
GROUP 3.....	\$ 30.09	16.02
GROUP 4.....	\$ 31.64	16.02
GROUP 5.....	\$ 31.99	16.02

LABORER CLASSIFICATIONS

GROUP 1: Cleaning and handling of panel forms; Concrete screeding for rough strike-off; Concrete, water curing; Demolition laborer, the cleaning of brick if performed by a worker performing any other phase of demolition work, and the cleaning of lumber; Fire watcher, limber, brush loader, piler and debris handler; Flag person; Gas, oil and/or water pipeline laborer; Laborer, asphalt-rubber material loader; Laborer, general or construction; Laborer, general clean-up; Laborer, landscaping; Laborer, jetting; Laborer, temporary water and air lines; Material hose operator (walls, slabs, floors and decks); Plugging, filling of shee bolt holes; Dry packing of concrete; Railroad maintenance, repair track person and road beds; Streetcar and railroad construction track laborers; Rigging and signaling; Scaler; Slip form raiser; Tar and mortar; Tool crib or tool house laborer; Traffic control by any method; Window cleaner; Wire mesh pulling - all concrete pouring operations

GROUP 2: Asphalt shoveler; Cement dumper (on 1 yd. or larger mixer and handling bulk cement); Cesspool digger and installer; Chucktender; Chute handler, pouring concrete, the handling of the chute from readymix trucks, such as walls, slabs, decks, floors, foundation, footings, curbs, gutters and sidewalks; Concrete curer, impervious membrane and form oiler; Cutting torch operator (demolition); Fine

grader, highways and street paving, airport, runways and similar type heavy construction; Gas, oil and/or water pipeline wrapper - pot tender and form person; Guinea chaser; Headerboard person - asphalt; Laborer, packing rod steel and pans; Membrane vapor barrier installer; Power broom sweeper (small); Riprap stonepaver, placing stone or wet sacked concrete; Roto scraper and tiller; Sandblaster (pot tender); Septic tank digger and installer(lead); Tank scaler and cleaner; Tree climber, faller, chain saw operator, Pittsburgh chipper and similar type brush shredder; Underground laborer, including caisson bellower

GROUP 3: Buggymobile person; Concrete cutting torch; Concrete pile cutter; Driller, jackhammer, 2-1/2 ft. drill steel or longer; Dri-pak-it machine; Gas, oil and/or water pipeline wrapper, 6-in. pipe and over, by any method, inside and out; High scaler (including drilling of same); Hydro seeder and similar type; Impact wrench multi-plate; Kettle person, pot person and workers applying asphalt, lay-kold, creosote, lime caustic and similar type materials ("applying" means applying, dipping, brushing or handling of such materials for pipe wrapping and waterproofing); Operator of pneumatic, gas, electric tools, vibrating machine, pavement breaker, air blasting, come-alongs, and similar mechanical tools not separately classified herein; Pipelayer's backup person, coating, grouting, making of joints, sealing, caulking, diapering and including rubber gasket joints, pointing and any and all other services; Rock slinger; Rotary scarifier or multiple head concrete chipping scarifier; Steel headerboard and guideline setter; Tamper, Barko, Wacker and similar type; Trenching machine, hand-propelled

GROUP 4: Asphalt raker, lute person, ironer, asphalt dump person, and asphalt spreader boxes (all types); Concrete core cutter (walls, floors or ceilings), grinder or sander; Concrete saw person, cutting walls or flat work, scoring old or new concrete; Cribber, shorer, lagging, sheeting and trench bracing, hand-guided lagging hammer; Head rock slinger; Laborer, asphalt- rubber distributor boot person; Laser beam in connection with laborers' work; Oversize concrete vibrator operator, 70 lbs. and over; Pipelayer performing all services in the laying and installation of pipe from the point of receiving pipe in the ditch until completion of operation, including any and all forms of tubular material, whether pipe, metallic or non-metallic, conduit and any other stationary type of tubular device used for the conveying of any substance or element, whether water, sewage, solid gas, air, or other product whatsoever and without regard to the nature of material from which the tubular material is fabricated; No-joint pipe and stripping of same; Prefabricated manhole installer; Sandblaster (nozzle person), water blasting, Porta Shot-Blast

GROUP 5: Blaster powder, all work of loading holes, placing and blasting of all powder and explosives of whatever type, regardless of method used for such loading and placing; Driller: All power drills, excluding jackhammer, whether core, diamond, wagon, track, multiple unit, and any and all other types of mechanical drills without regard to the form of motive power; Toxic waste removal

TUNNEL LABORER CLASSIFICATIONS

GROUP 1: Batch plant laborer; Bull gang mucker, track person;

Changehouse person; Concrete crew, including rodder and spreader; Dump person; Dump person (outside); Swamper (brake person and switch person on tunnel work); Tunnel materials handling person

GROUP 2: Chucktender, cabetender; Loading and unloading agitator cars; Nipper; Pot tender, using mastic or other materials (for example, but not by way of limitation, shotcrete, etc.); Vibrator person, jack hammer, pneumatic tools (except driller)

GROUP 3: Blaster, driller, powder person; Chemical grout jet person; Cherry picker person; Grout gun person; Grout mixer person; Grout pump person; Jackleg miner; Jumbo person; Kemper and other pneumatic concrete placer operator; Miner, tunnel (hand or machine); Nozzle person; Operating of troweling and/or grouting machines; Powder person (primer house); Primer person; Sandblaster; Shotcrete person; Steel form raiser and setter; Timber person, retimber person, wood or steel; Tunnel Concrete finisher

GROUP 4: Diamond driller; Sandblaster; Shaft and raise work

LABO0220-004 07/01/2013

	Rates	Fringes
Brick Tender.....	\$ 28.37	15.78

LABO0300-005 01/01/2013

	Rates	Fringes
Asbestos Removal Laborer.....	\$ 27.35	14.95

SCOPE OF WORK: Includes site mobilization, initial site cleanup, site preparation, removal of asbestos-containing material and toxic waste, encapsulation, enclosure and disposal of asbestos- containing materials and toxic waste by hand or with equipment or machinery; scaffolding, fabrication of temporary wooden barriers and assembly of decontamination stations.

LABO0345-001 07/01/2013

	Rates	Fringes
LABORER (GUNITE)		
GROUP 1.....	\$ 33.04	17.86
GROUP 2.....	\$ 32.09	17.86
GROUP 3.....	\$ 28.55	17.86

FOOTNOTE: GUNITE PREMIUM PAY: Workers working from a Bosn'n's Chair or suspended from a rope or cable shall receive 40 cents per hour above the foregoing applicable classification rates. Workers doing gunite and/or shotcrete work in a tunnel shall receive 35 cents per hour above the foregoing applicable classification rates, paid on a portal-to-portal basis. Any work performed on, in or above any smoke stack, silo, storage elevator or similar type of structure, when such structure is in excess of 75'-0" above base level and which work must be performed in whole or in part more than 75'-0" above base level, that

work performed above the 75'-0" level shall be compensated for at 35 cents per hour above the applicable classification wage rate.

GUNITE LABORER CLASSIFICATIONS

GROUP 1: Rodmen, Nozzlemen

GROUP 2: Gunmen

GROUP 3: Reboundmen

LABO1184-001 07/01/2013

	Rates	Fringes
Laborers: (HORIZONTAL DIRECTIONAL DRILLING)		
(1) Drilling Crew Laborer...	\$ 30.11	11.83
(2) Vehicle Operator/Hauler.	\$ 30.28	11.83
(3) Horizontal Directional Drill Operator.....	\$ 32.13	11.83
(4) Electronic Tracking Locator.....	\$ 34.13	11.83
Laborers: (STRIPING/SLURRY SEAL)		
GROUP 1.....	\$ 31.06	14.53
GROUP 2.....	\$ 32.36	14.53
GROUP 3.....	\$ 34.37	14.53
GROUP 4.....	\$ 36.11	14.53

LABORERS - STRIPING CLASSIFICATIONS

GROUP 1: Protective coating, pavement sealing, including repair and filling of cracks by any method on any surface in parking lots, game courts and playgrounds; carstops; operation of all related machinery and equipment; equipment repair technician

GROUP 2: Traffic surface abrasive blaster; pot tender - removal of all traffic lines and markings by any method (sandblasting, waterblasting, grinding, etc.) and preparation of surface for coatings. Traffic control person: controlling and directing traffic through both conventional and moving lane closures; operation of all related machinery and equipment

GROUP 3: Traffic delineating device applicator: Layout and application of pavement markers, delineating signs, rumble and traffic bars, adhesives, guide markers, other traffic delineating devices including traffic control. This category includes all traffic related surface preparation (sandblasting, waterblasting, grinding) as part of the application process. Traffic protective delineating system installer: removes, relocates, installs, permanently affixed roadside and parking delineation barricades, fencing, cable anchor, guard rail, reference signs, monument markers; operation of all related machinery and equipment; power broom sweeper

GROUP 4: Striper: layout and application of traffic stripes and markings; hot thermo plastic; tape traffic stripes and markings, including traffic control; operation of all related machinery and equipment

* LAB01414-001 08/07/2013

	Rates	Fringes
LABORER		
PLASTER CLEAN-UP LABORER.....	\$ 27.45	16.36
PLASTER TENDER.....	\$ 30.00	16.36

Work on a swing stage scaffold: \$1.00 per hour additional.

PAIN0036-007 07/01/2013

	Rates	Fringes
Painters:		
(1) Repaint Including Lead Abatement.....	\$ 23.49	11.73
(2) High Iron & Steel.....	\$ 29.86	11.73
(3) Journeyman Painter including Lead Abatement....	\$ 27.86	11.73
(4) Industrial.....	\$ 29.86	11.73
(5) All other work.....	\$ 27.86	11.73

REPAINT of any previously painted structure. Exceptions: work involving the aerospace industry, breweries, commercial recreational facilities, hotels which operate commercial establishments as part of hotel service, and sports facilities.

HIGH IRON & STEEL:

Aerial towers, towers, radio towers, smoke stacks, flag poles (any flag poles that can be finished from the ground with a ladder excluded), elevated water towers, steeples and domes in their entirety and any other extremely high and hazardous work, cooning steel, bos'n chair, or other similar devices, painting in other high hazardous work shall be classified as high iron & steel

PAIN0036-008 01/01/2013

	Rates	Fringes
DRYWALL FINISHER/TAPER.....	\$ 33.22	14.81

PAIN0169-002 01/01/2013

	Rates	Fringes
GLAZIER.....	\$ 32.48	18.20

* PAIN1247-002 09/01/2013

	Rates	Fringes
SOFT FLOOR LAYER.....	\$ 30.85	10.49

PLAS0200-001 08/01/2011

	Rates	Fringes
PLASTERER.....	\$ 35.29	12.05

PLAS0500-002 07/01/2013

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER...	\$ 30.85	21.00

PLUM0016-001 07/01/2013

	Rates	Fringes
PLUMBER/PIPEFITTER		
Plumber and Pipefitter		
All other work except		
work on new additions and		
remodeling of bars,		
restaurant, stores and		
commercial buildings not		
to exceed 5,000 sq. ft.		
of floor space and work		
on strip malls, light		
commercial, tenant		
improvement and remodel		
work.....	\$ 43.60	20.16
Work ONLY on new additions		
and remodeling of bars,		
restaurant, stores and		
commercial buildings not		
to exceed 5,000 sq. ft. of		
floor space.....	\$ 42.26	19.18
Work ONLY on strip malls,		
light commercial, tenant		
improvement and remodel		
work.....	\$ 34.11	17.51

PLUM0345-001 07/01/2013

	Rates	Fringes
PLUMBER		
Landscape/Irrigation Fitter.	\$ 27.85	18.81
Sewer & Storm Drain Work....	\$ 32.50	16.93

ROOF0036-002 08/01/2012

	Rates	Fringes
ROOFER.....	\$ 34.65	11.38

FOOTNOTE: Pitch premium: Work on which employees are exposed to pitch fumes or required to handle pitch, pitch base or pitch impregnated products, or any material containing coal tar pitch, the entire roofing crew shall receive \$1.75 per hour "pitch premium" pay.

SFCA0669-014 07/01/2013

	Rates	Fringes
SPRINKLER FITTER.....	\$ 32.98	19.35

SHEE0273-002 08/01/2013

Rates Fringes

SHEET METAL WORKER.....\$ 40.50 22.54

HOLIDAYS: New Year's Day, Martin Luther King Day, President's Day, Good Friday, Memorial Day, Independence Day, Labor Day, Veterans Day, Thanksgiving Day & Friday after, Christmas Day

TEAM0011-002 07/01/2013

	Rates	Fringes
TRUCK DRIVER		
GROUP 1.....	\$ 27.59	22.69
GROUP 2.....	\$ 27.74	22.69
GROUP 3.....	\$ 27.87	22.69
GROUP 4.....	\$ 28.06	22.69
GROUP 5.....	\$ 28.09	22.69
GROUP 6.....	\$ 28.12	22.69
GROUP 7.....	\$ 28.37	22.69
GROUP 8.....	\$ 28.62	22.69
GROUP 9.....	\$ 28.82	22.69
GROUP 10.....	\$ 29.12	22.69
GROUP 11.....	\$ 29.62	22.69
GROUP 12.....	\$ 30.05	22.69

WORK ON ALL MILITARY BASES:
PREMIUM PAY: \$3.00 per hour additional.
[29 palms Marine Base, Camp Roberts, China Lake, Edwards AFB, El Centro Naval Facility, Fort Irwin, Marine Corps Logistics Base at Nebo & Yermo, Mountain Warfare Training Center, Bridgeport, Point Arguello, Point Conception, Vandenberg AFB]

TRUCK DRIVERS CLASSIFICATIONS

GROUP 1: Truck driver

GROUP 2: Driver of vehicle or combination of vehicles - 2 axles; Traffic control pilot car excluding moving heavy equipment permit load; Truck mounted broom

GROUP 3: Driver of vehicle or combination of vehicles - 3 axles; Boot person; Cement mason distribution truck; Fuel truck driver; Water truck - 2 axle; Dump truck, less than 16 yds. water level; Erosion control driver

GROUP 4: Driver of transit mix truck, under 3 yds.; Dumpcrete truck, less than 6-1/2 yds. water level

GROUP 5: Water truck, 3 or more axles; Truck greaser and tire person (\$0.50 additional for tire person); Pipeline and utility working truck driver, including winch truck and plastic fusion, limited to pipeline and utility work; Slurry truck driver

GROUP 6: Transit mix truck, 3 yds. or more; Dumpcrete truck, 6-1/2 yds. water level and over; Vehicle or combination of vehicles - 4 or more axles; Oil spreader truck; Dump truck, 16 yds. to 25 yds. water level

GROUP 7: A Frame, Swedish crane or similar; Forklift driver; Ross carrier driver

GROUP 8: Dump truck, 25 yds. to 49 yds. water level; Truck repair person; Water pull - single engine; Welder

GROUP 9: Truck repair person/welder; Low bed driver, 9 axles or over

GROUP 10: Dump truck - 50 yds. or more water level; Water pull - single engine with attachment

GROUP 11: Water pull - twin engine; Water pull - twin engine with attachments; Winch truck driver - \$1.25 additional when operating winch or similar special attachments

GROUP 12: Boom Truck 17K and above

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

=====
Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is union or non-union.

Union Identifiers

An identifier enclosed in dotted lines beginning with characters other than "SU" denotes that the union classification and rate have found to be prevailing for that classification. Example: PLUM0198-005 07/01/2011. The first four letters , PLUM, indicate the international union and the four-digit number, 0198, that follows indicates the local union number or district council number where applicable , i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. The date, 07/01/2011, following these characters is the effective date of the most current negotiated rate/collective bargaining agreement which would be July 1, 2011 in the above example.

Union prevailing wage rates will be updated to reflect any changes in the collective bargaining agreements governing the rates.

0000/9999: weighted union wage rates will be published annually each January.

Non-Union Identifiers

Classifications listed under an "SU" identifier were derived from survey data by computing average rates and are not union rates; however, the data used in computing these rates may include both union and non-union data. Example: SULA2004-007 5/13/2010. SU indicates the rates are not union majority rates, LA indicates the State of Louisiana; 2004 is the year of the survey; and 007 is an internal number used in producing the wage determination. A 1993 or later date, 5/13/2010, indicates the classifications and rates under that identifier were issued as a General Wage Determination on that date.

Survey wage rates will remain in effect and will not change until a new survey is conducted.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an

interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

=====

END OF GENERAL DECISION



**SAN LUIS OBISPO COUNTY
SAN LUIS OBISPO, CALIFORNIA
LOS OSOS WATER RECYCLING FACILITY
CONTRACT NO. 300448.08.02**

Appendix J – Standard for Data and Voice Cabling



County of San Luis Obispo Standard for Data and Voice Cabling

Version 3.0
December, 2012

**Information Technology Infrastructure
General Services Agency - Information Technology**

TABLE OF CONTENTS

PURPOSE OF THE STANDARD	4
RESPONSIBILITIES	4
DETAILS OF CABLING STANDARD	4
General Standards.....	4
Horizontal Cabling	5
Telecommunication Closet (IDF/MDF).....	5
Telecommunications Cabling Rack Layout.....	8
Data & Voice Wall Outlets	10
Voice Backbone Cable and Termination.....	10
Fiber Optic Building Backbone Cable	11
Underground and Aerial Fiber Installation	11
Fiber Optic Terminations	13
LABELING AND LOCATING	13
Labeling and Identification	13
Optical Fiber Labeling and Locating	14
TESTING OF CABLING	15
Fiber Optic Cables	15
Data Horizontal Cabling System (Category 6a)	15
Voice Building Backbone Cables	16

1. PURPOSE OF THE STANDARD

The purpose of this document is to define standards for the structured communications cabling systems that enable the transmission of voice and data at County of San Luis Obispo facilities. The intent of this cabling standard is to provide a document to be used with all voice and data cabling, either new projects, upgrades, or cabling maintenance, undertaken by the County of San Luis Obispo to ensure that the County is provided with a cabling solution that will maximize productivity and value by minimizing down time and maintenance requirements, while still providing for a future migration path to evolving technologies.

2. RESPONSIBILITIES

General Services Agency – Information Technology (GSA-IT) has the primary responsibility for the maintenance and management of all data and voice communication cabling at each County owned and leased facility. This responsibility includes:

- Management of the County's information cable plant
- Coordination of all cable installation, maintenance, and plant records
- Ensure compliance for new cable installations at County owned and leased facilities

GSA-IT will work with the project manager to ensure appropriate data and voice cabling for each new project, upgrade or maintenance effort.

3. DETAILS OF CABLING STANDARD

3.1. General Standards

3.1.1. All materials will be new.

3.1.2. All parts will be those listed or approved equivalents.

3.1.3. Materials and equipment shall be installed and tested as specified in the applicable publications, standards, rulings and determination of the following

3.1.3.1. ANSI - American national Standards Institute

- ANSI/TIA/EIA-568-B.1-10, B.2-10, B.3-10 - Commercial Building Telecommunications Cabling Standard
- ANSI/TIA/EIA-569-A - Commercial Building Standard for Telecommunications Pathways and Spaces
- ANSI/TIA/EIA-606-A - Administration Standards for the Telecommunications Infrastructure of Commercial Building
- ANSI/TIA/EIA-607 - Commercial Building Grounding and Bonding Requirements for Telecommunications

3.1.3.2. EIA – Electronic Industries Alliance

- EIA RS-359 – Standard codes for Color Identification and Coding
- EIA-455 – Standard Fiber Optic Test Procedures

3.1.3.3. BICSI – Building Industry Consulting Services International

- BICSI – Outside Plant Design

3.1.3.4. FCC – Federal Communications Commission

- 3.1.3.5. IEEE – Institute of Electrical and Electronic Engineers
- 3.1.3.6. NEMA – National Electrical Manufacturers Association
- 3.1.3.7. UL – Underwriters Laboratories.

- 3.1.4. All work shall be continuously coordinated with the County's General Services project coordinator, Maintenance staff, and or Information Technology staff.

3.2. Horizontal Cabling

- 3.2.1. The horizontal cable used for the distribution of data and voice shall be 4 pair, 24 AWG, Category 6a, plenum rated, LanMark 10-G2 Berk-Tek P/N 10130484 (Blue) or approved equivalent.
- 3.2.2. Where horizontal pathways are not noted as plenum space, riser rated (CM) cable may be utilized. LanMark 10-G2 Berk-Tek P/N 10137700 (Blue) or approved equivalent.
- 3.2.3. All cable runs must be 90m or less.
- 3.2.4. Horizontal cabling will be run in ceiling space.
- 3.2.5. Cabling must be appropriately supported along the entire path, using J-hooks, cable trays, or conduit and must not be attached to any other building wiring or conduit; and installed with sufficient bending radius so as not to kink, shear, or damage the cable.
- 3.2.6. Cable management straps shall be D-Ring style, velcro closure.
- 3.2.7. Horizontal Cabling Standard Parts
 - (OR-70700107) – Ortronics Velcro closure D-ring straps
 - (10130484) – Berk-Tek LanMark 10-G2 plenum rated cat. 6A cable
 - (10137700) – Berk-Tek LanMark 10-G2 riser rated cat. 6A cable

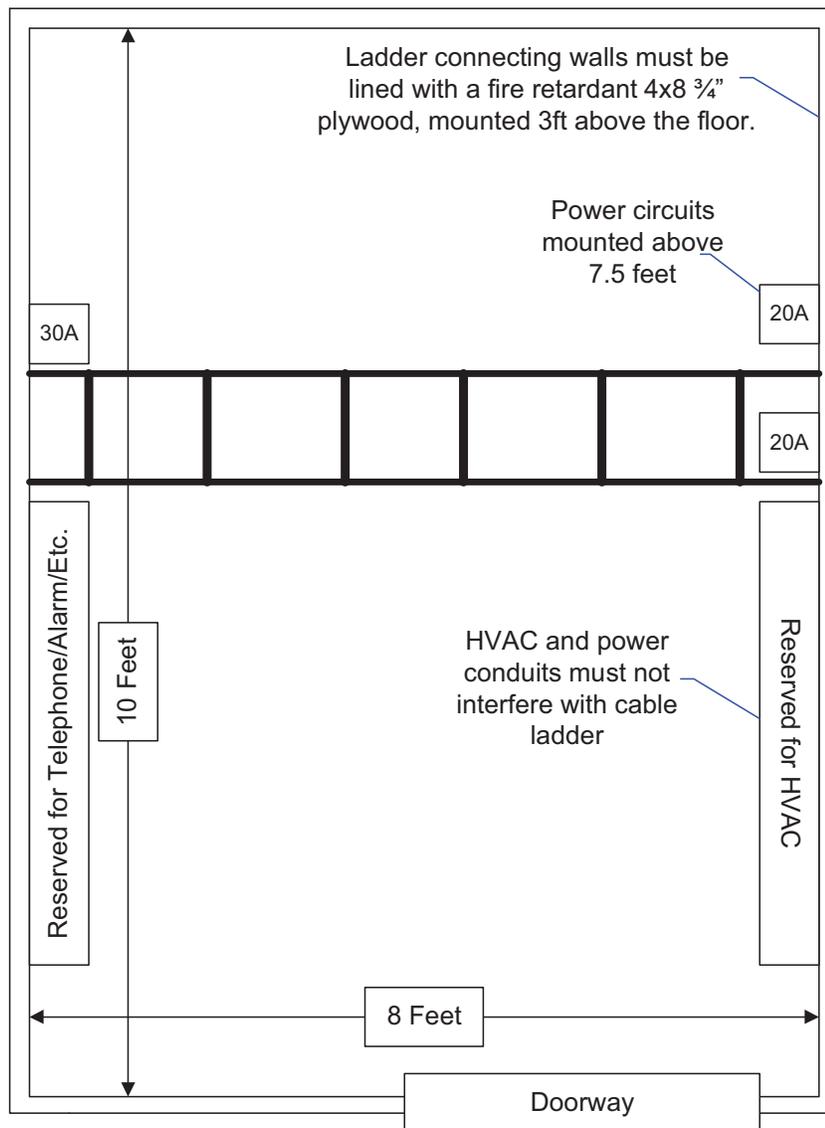
3.3. Telecommunication Closet (IDF/MDF)

The telecommunication closet, sometimes referred as the Intermediate Distribution Facility (IDF), aggregates data/voice cabling from wall outlets to a single location. Additionally, in larger buildings, multiple IDFs are connected to a Main Distribution Facility (MDF) using fiber optic cabling. For smaller, single floor buildings there may be only one telecommunications closet making it the MDF. Telecommunication closets are not designed to house or support server/computer equipment. A standard IDF/MDF is shown in Figure 1.

- 3.3.1. For new construction the IDF and/or MDF must be a minimum of 8' X 10' and 8' in height. For a building being remodeled the IDF/MDF should be 8' x 10' but existing building constraints may not make that possible, so GSA-IT will work with the appropriate staff to find an acceptable solution.
- 3.3.2. IDF walls must be covered with fire resistant $\frac{3}{4}$ " plywood as appropriate to accommodate mounting of equipment, racks, ladders, power, etc. A minimum of two 4' x 8' backboards will be installed in each IDF.

- 3.3.3. Must have minimum two (2) 20A 120V, on opposite sides of the IDF, and one (1) 30A 120V electrical circuits.
- 3.3.4. Power circuits must be wall mounted 7.5 feet above the flooring.
- 3.3.5. Wall mounted power conduit and HVAC must not interfere with cable ladder wall mounting.
- 3.3.6. Racks must be anchored to the overhead cable ladder and the floor.

Figure 1: Standard SLO County IDF Design

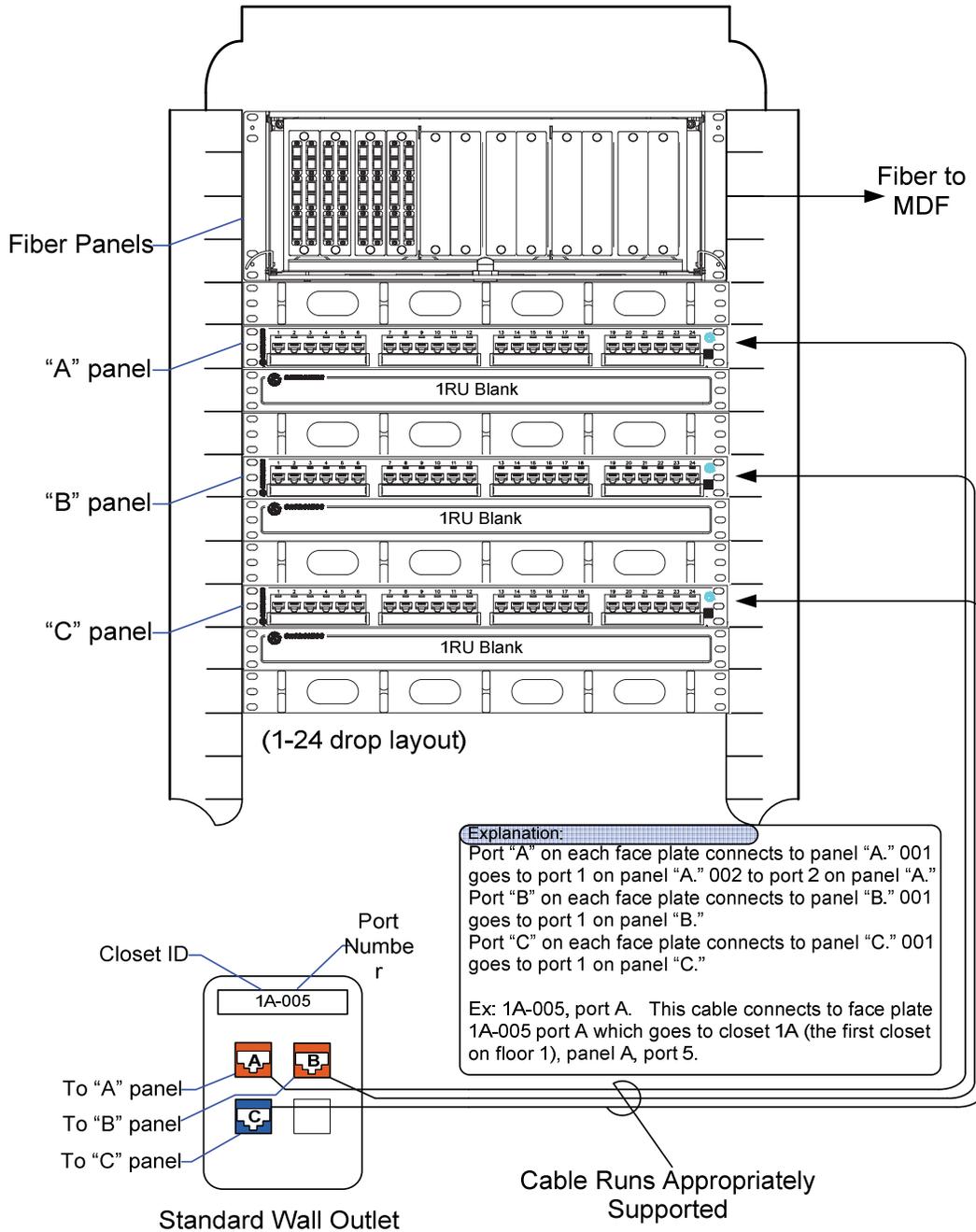


- 3.3.7. The overhead cable ladder will have a minimum of two points of attachment to the walls.
- 3.3.8. Wood or concrete flooring must be painted or covered.
- 3.3.9. Ceilings shall be "hard" with appropriate access hatches.
- 3.3.10. All racks shall be properly grounded, conforming to ANSI/TIA/EIA 607, NEC and all related grounding standards and codes.
- 3.3.11. All racks shall be installed side by side
- 3.3.12. Maximum of 288 copper cable terminations (96 drops for three cables each) per rack, additional cabling will require a second rack.
- 3.3.13. A suitable telecommunications ground for equipment as required per ANSI/TIA/EIA-607 (telecommunications grounding), IEEE Emerald Green book and NEC requirements will be provided in each IDF. All cable tray, ladders, equipment racks IDF/MDF shall be appropriately grounded/bonded to the telecommunications grounding.
- 3.3.14. IDF Standard Hardware. Parts other than those listed in this section shall not be used without prior County approval.
 - 3.3.14.1. Telecommunications Rack
 - (OR-MM6706) – Ortronics Mighty Mo cable management rack.
 - (OR-MM107SVR – Ortronics Mighty Mo server rack (four-post).
 - (OR-MM6CRB06) – Ortronics cable runway mounting bracket.
 - (40604-001) – Chatsworth concrete floor anchor kit
 - (40607-001) – Chatsworth wood floor anchor kit
 - 3.3.14.2. Cable Management
 - (OR-60400129) – Ortronics feed-through management panels
 - (OR-60400017) – Ortronics cable management rings
 - 3.3.14.3. Patch Panel
 - (OR-PHD610U24) – Ortronics clarity 24-port T568B.2-10.
Depending on the nature of the cabling, higher density patch panels may used with prior approval.
 - 3.3.14.4. Blanks
 - (OR-401004788) – Ortronics 1RU blank filler panel
 - (OR-401004789) – Ortronics 2RU blank filler panel
 - (OR-401004791) – Ortronics 4RU blank filler panel
 - 3.3.14.5. Cable Runway
 - (10250-712) – Chatsworth black universal 12"
 - (11308-001) – Chatsworth runway j-bolt Kit
 - (11420-701) – Chatsworth runway wall mount
 - (11301-701) – Chatsworth runway splice kit
 - (10488-701) – Chatsworth runway junction kit

3.4. Telecommunications Cabling Rack Layout

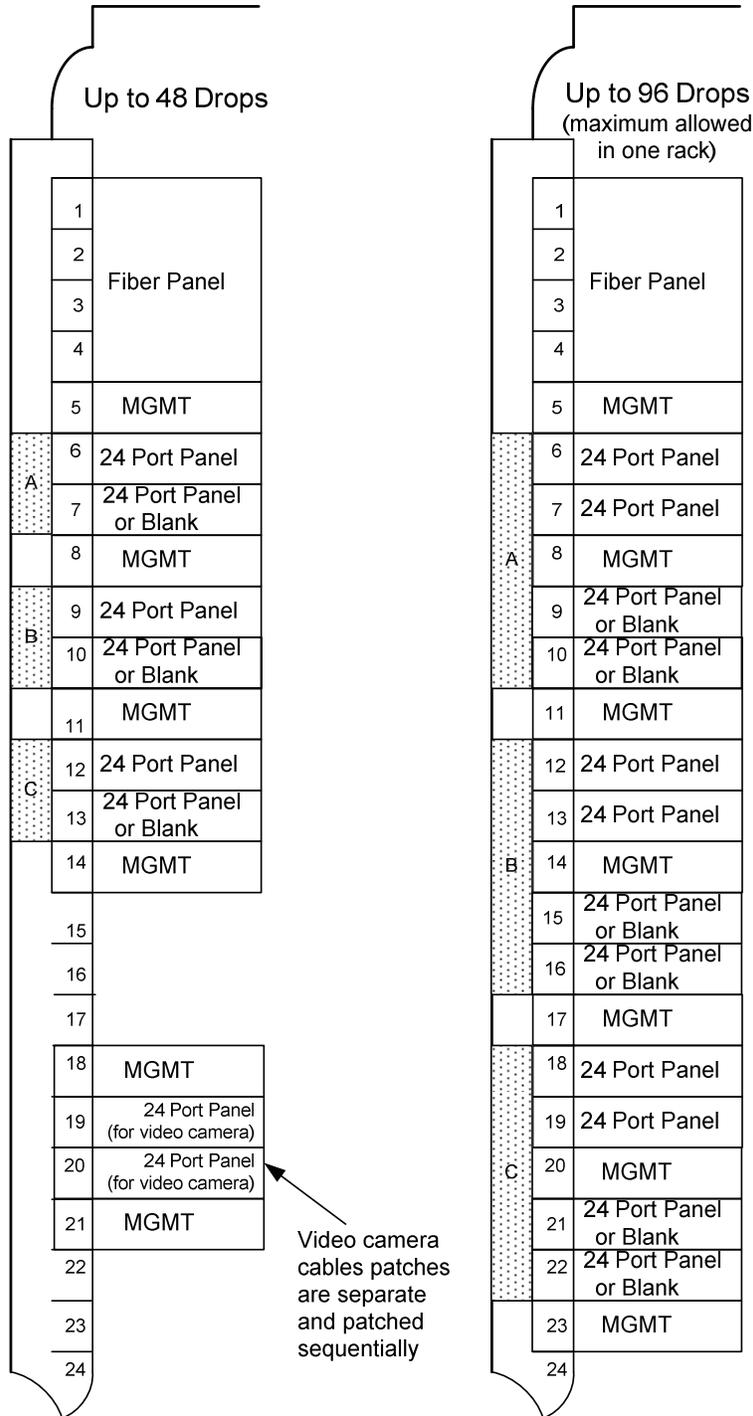
3.4.1. The typical data cabling rack layout is shown in Figure 2.

Figure 2: SLO County Cabling Rack Layout
 A-B-C System Rack Standard



3.4.2. The number of three (3) cable drops along with the anticipated future expansion determines the cable rack layout as shown in Figure 3.

Figure 3: Typical SLO County Cabling Rack Layout for Different Number of 3 Cable Drops using Standard A-B-C Rack Layout and Sequential Video Cable Layout



3.5. Cabling for IP Based Video Cameras

- 3.5.1. Only one Cat. 6A data cable will be run to each IP based camera instead of the normal three cable drop.
- 3.5.2. Data cables for each IP based camera will run to a patch panels that are separate from the A, B, C system. Instead they are patched on separate patch panels sequentially located below the data cable patch panels (see Figure 3 above).

3.6. Data & Voice Wall Outlets

- 3.6.1. Wall outlets shall be 4 port. A layout is shown in Figure 2 and Figure 4. Data ports #1 and #2 shall be orange and voice port #3 shall be blue. Port #4 shall be a blank.

3.6.2. Wall Outlet Parts

- (OR-40300546) – Ortronics 4 port faceplate or (OR-40400055) Ortronics 4 port surface mount box.
- (OR-TJ610-43) – Ortronics Orange modular insert
- (OR-TJ610-36) – Ortronics Blue modular insert
- (OR-42100002) – Ortronics modular blank (package of ten)

3.7. Voice Backbone Cable and Termination

- 3.7.1. All voice backbone cable between the Main Distribution Facility (MDF) and each Intermediate Distribution Facility (IDF) shall depend on the job specifications but in no case will be less than 50 pairs.
- 3.7.2. Terminate all voice cables on voice building backbone termination blocks mounted on the closet backboard reserved for telephone/alarms. See Figure 1.
- 3.7.3. All voice connections will be cross connected from the termination blocks to Category 5e patch cords. One end is punched down on the termination block and the other is plugged into section C patch panel.
- 3.7.4. Voice Cable and Termination Standards
 - (OR-MC5E15-09) – Ortronics modular patch cords
 - (10032112) – Berk-Tek 50 pair plenum voice backbone cable
 - (10032471) – Berk-Tek 50 pair riser voice backbone cable
 - (OR-110ABC5E050) - 110 voice termination block

3.8. Fiber Optic Building Backbone Cable

- 3.8.1. Fiber optic cabling used to connect IDFs with the MDF will be a hybrid of twelve (12) strands of multi-mode and twelve (12) strands of single-mode cable, black jacket, using Berk-Tek Adventum plenum rated cable or approved equivalent.
- 3.8.2. Where pathways are not noted as plenum space, riser rated cable may be utilized.
- 3.8.3. The multi-mode fiber must be 50/125 micron, riser rated, terminated with LC pigtails.
- 3.8.4. The single-mode fiber must be 8.3/125 micron OFNR terminated with SC pigtails.
- 3.8.5. All fiber optic building backbone cabling will be run inside using plenum rated 1 ¼" orange inner duct with a 900 lb pull tape. Couplings shall not be used to join shorter sections of inner duct in the middle of a run.
- 3.8.6. Fiber termination should be with pigtails that plug into adapter panels within the fiber patch cabinet. All pigtails will be fusion spliced. All splices shall utilize appropriate splice trays and shall use heat shrink sleeves or splice protection covers.
- 3.8.7. Fiber Optic Backbone Cable Standards
 - (custom order) – Berk-Tek hybrid plenum rated cable with 12 strands of MMF (50 micron) and 12 strands of SMF (SMF-28e)
 - (OR-FC02U-C) – Ortronics rack mount (2U) fiber patch and splice cabinets for up to 36 fibers. For use in the IDF.
 - (OR-FC04U-C) – Ortronics rack mount (4U) fiber patch and splice cabinets for up to 144 fibers. For use in the MDF.
 - (OR-OFP-LCD12LC) – Ortronics LC duplex (12-fibers) multimode adapters (aqua)
 - (OR-OFP-SCD12AC) – Ortronics SC duplex (12-fibers) single mode adapters (blue)
 - (OR-P3TF4ZRFZZZ002M) – Ortronics connector pigtail, 12 fiber, 50 micron MMF, 2 meters.
 - (OR-626TC4ZR-RZ002M) – Ortronics connector pigtail, 12 fiber, OFNR SMF, 2 meters.
 - (OR-FST2-F012) – Ortronics fusion splice tray for 12 fibers
 - (OR-20500043) – Ortronics heat shrink sleeves pkg 50

3.9. Underground and Aerial Fiber Installation

This section address fiber optic cables that reside underground in conduit installed by trenching or directional bore, as well as aerial cabling installed on utility poles. Fiber counts to be determined in project scope.

3.9.1. Single Mode Fiber Optic Cable Specifications

- 3.9.1.1. Cable must meet Corning SMF-28 performance specifications or better.
- 3.9.1.2. Cable jacket color shall be black with white print labeling.
- 3.9.1.3. Cable must be pulled by hand with no mechanical assistance. Alternative means of pulling fiber must be approved by the County's project coordinator prior to implementation.
- 3.9.1.4. Underground and Aerial over-lashed cable shall be Corning Altos Loose Tube Gel-Free, p/n xxxEW4-T4100D20.
- 3.9.1.5. Aerial self-supported cable shall be Corning Solo ADSS, p/n xxxEN4-T4S01A20Xxxx

3.9.2. Conduit Specifications

- 3.9.2.1. Conduit shall be minimum 2" HDPE color orange.
- 3.9.2.2. Depth shall be a minimum 24".
- 3.9.2.3. Conduit shall be joined in accordance with Manufacturer's recommendations, and all joints shall be water tight.
- 3.9.2.4. All conduits shall be cleaned and tested prior to installation of cabling.
- 3.9.2.5. Conduits entering pull boxes shall be sealed appropriately after cable installation is complete.
- 3.9.2.6. The conduit shall gradually and smoothly slope up to the elevation of the pull box entrance. Bends if required shall be no more than 25 degrees.

3.9.3. Pull Box Specifications

- 3.9.3.1. Pull boxes will be used to facilitate the pulling of underground cable in duct, as well as splice enclosure and slack storage.
- 3.9.3.2. Boxes shall be installed following Manufacturer recommendations.
- 3.9.3.3. Boxes shall be concrete Old Castle (Christy) P48, p/n N48PBOX with 2 piece concrete lid, p/n N48D2.
- 3.9.3.4. Lid shall be marked "CoSLO Fiber Optic"
- 3.9.3.5. Boxes shall rest on 6" of compacted gravel as a base. An additional 3" of "Drain Rock" must added after the box is set.
- 3.9.3.6. Boxes shall be leveled and flush to grade.
- 3.9.3.7. Maximum distance between pull boxes is 1500'
- 3.9.3.8. All cable slack within any pull box shall be a minimum of 60' of coiled cable.

3.9.4. Splicing and Enclosures

- 3.9.4.1. All fibers shall be fusion spliced.
- 3.9.4.2. Splice enclosures shall be located within pull boxes, installed flush to grade.
- 3.9.4.3. Underground splice locations shall have a minimum of 60' of coiled cable for slack.
- 3.9.4.4. Aerial splice enclosures must be attached appropriately to messenger with a minimum of 100' aerially managed slack.

- 3.9.4.5. Splice enclosures shall be chosen from the following list, enclosure type and trays sized appropriately to project scope.
- Preformed Coyote Runt
 - Preformed Coyote Pup
 - Preformed 6.5" Coyote
 - Preformed 8.5" Coyote

3.9.5. Fiber Optic Terminations

- 3.9.5.1. All fiber optic strands shall be terminated with SC pigtails.
- 3.9.5.2. All fiber optic cables will be landed within a 19" rack mountable fiber splice cabinet. See section 3.8 for details on fiber optic cabling installed within buildings.
- 3.9.5.3. Fiber termination shall be with pigtails that plug into adapter panels within the fiber splice cabinet. All pigtails will be fusion spliced. All splices shall utilize appropriate splice trays and shall use heat shrink sleeves or splice protection covers.
- 3.9.5.4. The following parts and components shall be used for terminations:
- (OR-FC04U-C) – Ortronics rack mount (4RU) fiber patch and splice cabinets for up to 144 fibers.
 - (OR-OFP-SCD12AC) – Ortronics SC duplex (12-fibers) single mode adapters (blue)
 - (OR-626TC4ZR-RZ002M) – Ortronics connector pigtail, 12 fiber, OFNR SMF, 2 meters.
 - (OR-FST2-F012) – Ortronics fusion splice tray for 12 fibers
 - (OR-20500043) – Ortronics heat shrink sleeves pkg 50

4. LABELING AND LOCATING

4.1. Data Cable Labeling and Identification

- 4.1.1. All patch panel and wall outlet (station) designators shall be laser-printed black print on white background, no hand printing. The font shall be approximately 1/8 inches in height, block characters and clearly legible.
- 4.1.2. All labels shall be securely attached to faceplates and patch panels.
- 4.1.3. All copper and fiber optic cables shall be clearly labeled at both ends.
- 4.1.4. All patch panel and wall outlets will be labeled in sequential order as follows:

All IDFs and MDFs within a building shall follow a format of **fs**, where:

f = numeric character(s) identifying the building floor occupied by the IDF or MDF and s = alpha character(s) uniquely identifying the IDF/MDF on floor f,

Example: 1A is the first IDF on the first floor

Example: 3B is the second IDF on the third floor

All wall outlets (station) shall follow a format of **fs-n**, where:

fs = IDF/MDF designation described above; and n = three numeric characters designating the port on the patch panels on which each of the three cables are terminated in the IDF/MDF.

Example: 1A-011 is port 11 on patch panels A, B, C in the first (or A) IDF/MDF on the first floor

Example: 2C-124 is port 124 on patch panels A, B, C in the third (or C) IDF/MDF on the second floor

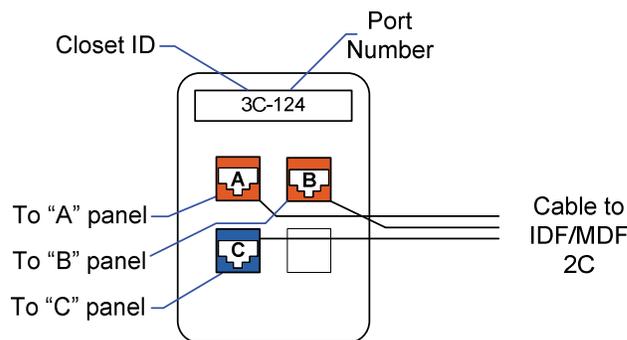


Figure 4: Standard Wall Outlet

4.1.5. Labeling Standard

- (OR-70700408) – Ortronics patch panel designator, white
- (OR-70700411) – Ortronics wall outlet designator, white

4.2. Optical Fiber Labeling and Locating

- 4.2.1. Conduits shall have an appropriately sized pull rope installed with integrated locator wire, such as Neptco Detectable MULETAPE.
- 4.2.2. Where applicable, buried pull boxes shall have an electronic ball locator installed, such as 3M Electronic Marker System, telecommunications orange.
- 4.2.3. Coiled cable in pull boxes and buildings will be tagged "CoSLO Fiber Optic – 805-788-2800".
- 4.2.4. Aerial cable will be tagged at each utility pole attachment "CoSLO Fiber Optic – 805-788-2800".
- 4.2.5. Cable terminations will be labeled with cable number, location, and fiber number.

5. TESTING OF CABLING

5.1. All testing shall be performed after all telecommunication outlets have been secured and all fibers have been terminated in their final position and properly labeled. The building must be operational (i.e. building lighting and power must be energized during testing).

5.2. All original test results will be submitted in soft copy using the test equipment's native file format to the County's project coordinator – see 3.1.4

5.3. Submit one or more binders containing the following documentation and test results for all cables to the County of San Luis Obispo, General Services Agency, Information Technology Department. Binders shall be indexed with tabs denoting Main Distribution Facility (MDF) and Intermediate Distribution Facilities (IDF). All original test results shall have been uploaded directly from the cable test equipment and printed directly. Testing and documentation shall include, but not be limited to:

5.3.1. Fiber Optic Cables

5.3.1.1. Using an Optical Power Meter with memory and adapter measure and record end-to-end insertion loss for all installed cables, including: all connectors, cables and patch cords. All fiber optic insertion loss (attenuation). The total loss shall be measured and reported for each cable at the appropriate operating wave lengths, 850 nm, 1300 nm for multi-mode, and 1310 nm, 1550 nm for single mode fiber. Optical attenuation tests shall be conducted in both directions, end-to-end. The length of each fiber shall also be documented.

5.3.1.2. Using an Optical Time Domain Reflectometer (OTDR), all single mode and multi-mode cables shall be tested and record all fiber optic insertion loss (attenuation) and attenuation coefficient at the appropriate operating wave lengths, 850 nm, 1300 nm for multi-mode, and 1310 nm, 1550 nm for single model. The length of each fiber shall be documented and the distance to all splices and connections.

5.3.2. Data Horizontal Cabling System (Category 6a)

5.3.2.1. All horizontal data (Category 6a) permanent link testing shall be performed using a Level IV accuracy cable tester, updated with the most recent firmware and using the correct link adapters. And record:

- Length
- Line map continuity
- Pass or Fail on a Cat 6A connectivity test

5.3.2.2. Tests shall be performed on finished cables (patch cords, patch panel, horizontal cable, station connectors) end to end.

5.3.3. Voice Building Backbone Cables

5.3.3.1. Tests shall be performed on finished cables end to end and record:

- Continuity
- Shorts
- Opens

5.3.3.2. Tests shall be performed on finished cables end to end.



**SAN LUIS OBISPO COUNTY
SAN LUIS OBISPO, CALIFORNIA
LOS OSOS WATER RECYCLING FACILITY
CONTRACT NO. 300448.08.02**

Appendix K – Legal Description of Setback from Designated Environmentally Sensitive Habitat Area (Northeast Boundary)

Appendix K – Legal Description of Setback from Designated Environmentally Sensitive
Habitat Area (Northeast Boundary)

That portion of Lot 30 per Jas. T. Stratton's Subdivision of Ranchos Canada de Los Osos and La Laguna, a map of said subdivision is on file in Book A of Maps at Page 83 in the office of the County Recorder of the County of San Luis Obispo, State of California, as described in that court decree in the matter of the estate of J. M. Cardozo recorded in Volume 321 at Pages 74-75 of Official Records in the Recorder's office of said County, being more particularly described as follows:

Commencing on the easterly line of said Lot 30 at the southeast corner of the parcel described in said court decree, said corner being described as post L2;

Thence along said easterly line, North $17^{\circ}00'00''$ East to a point that lies South $17^{\circ}00'00''$ West 786.41 feet from post P2 said point being the True Point of Beginning;

Thence leaving said easterly line North $71^{\circ}38'46''$ West a distance of 78.44 feet to the beginning of a curve concave to the northeast with a radius of 140.00 feet;

Thence northwesterly along said curve through a central angle of $87^{\circ}48'40''$ a distance of 214.56 feet;

Thence North $12^{\circ}34'11''$ East a distance of 112.08 feet to the beginning of a curve concave westerly with a radius of 110.00 feet;

Thence northerly along said curve through a central angle of $31^{\circ}27'45''$ a distance of 60.40 feet to a point of reverse curvature;

Thence northerly along a curve concave to the northeast with a radius of 140.00 feet a distance of 59.09 feet through a central angle of $24^{\circ}10'55''$;

Thence North $86^{\circ}53'14''$ West a distance of 282.39 feet to the beginning of a curve concave to the northeast with a radius of 90.00 feet;

Thence northwesterly along said curve through a central angle of $75^{\circ}57'50''$ a distance of 119.32 feet;

Thence North $10^{\circ}55'24''$ West 23.90 feet to the beginning of a curve concave southeasterly with a radius of 90.00 feet;

Thence along said curve through a central angle of $52^{\circ}45'20''$ a distance of 82.87 feet;

Thence North $41^{\circ}49'56''$ East 1.93 feet to the beginning of a curve concave northwesterly with a radius of 160.00 feet;

Thence northerly along said curve through a central angle of $55^{\circ}10'10''$ a distance of 154.06 feet to a point of reverse curvature;

Thence northerly along a curve concave to the east with a radius of 190.00 feet through a central angle of 30°46'00" a distance of 102.03 feet;

Thence North 17°25'46" East a distance of 100.11 feet more or less to a point on the southwesterly line of the tract of land conveyed by Mark Elberg to L. F. Silveira by deed dated October 8, 1908, and recorded in the office of the County Recorder of said County in Book 79 of Deeds at Page 262, et. seq.;

Thence South 73°00'00" East along said line 688.16 feet to corner post P2 as described in said deed;

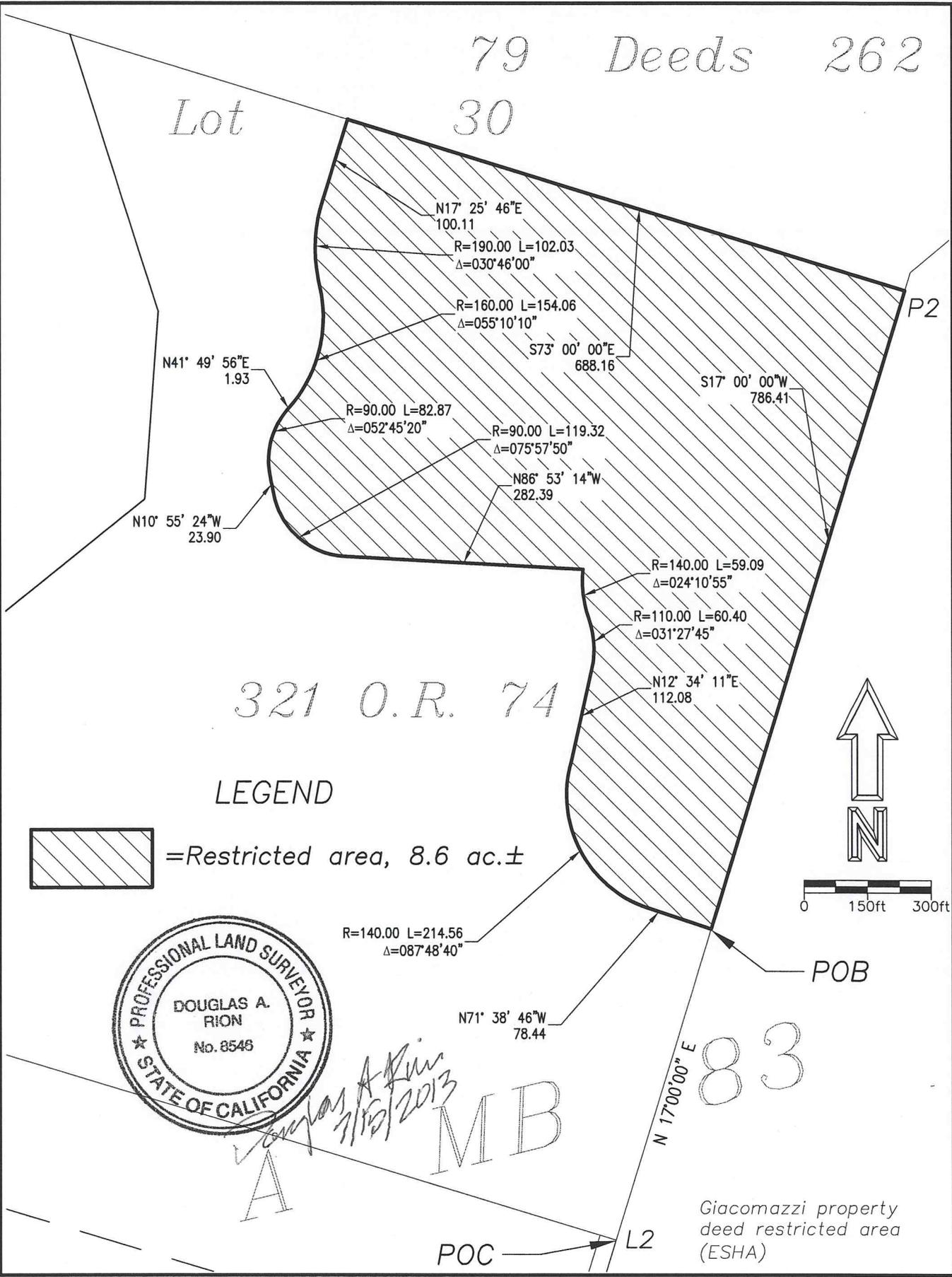
Thence South 17°00'00" West along the easterly line of said deed 786.41 feet to the point of beginning.



Douglas A. Rion
7-15-2013

79 Deeds 262

Lot 30



N17° 25' 46"E
100.11
R=190.00 L=102.03
Δ=030°46'00"

R=160.00 L=154.06
Δ=055°10'10"

N41° 49' 56"E
1.93

S73° 00' 00"E
688.16

S17° 00' 00"W
786.41

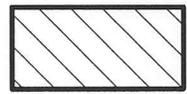
R=90.00 L=82.87
Δ=052°45'20"

R=90.00 L=119.32
Δ=075°57'50"

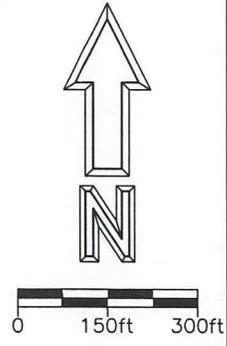
N86° 53' 14"W
282.39

321 O.R. 74

LEGEND



=Restricted area, 8.6 ac.±



Douglas A. Rion
3/15/2013

A MB

R=140.00 L=214.56
Δ=087°48'40"

N71° 38' 46"W
78.44

N 17°00'00" E
83

POB

POC

L2

Giacomazzi property
deed restricted area
(ESHA)



**SAN LUIS OBISPO COUNTY
SAN LUIS OBISPO, CALIFORNIA
LOS OSOS WATER RECYCLING FACILITY
CONTRACT NO. 300448.08.02**

Appendix L – Legal Description of Project Site

EXHIBIT A (Page 1 of 3)

IN FEE SIMPLE ABSOLUTE: All that certain real property, in the County of San Luis Obispo, State of California, described and depicted in the following pages attached hereto and incorporated herein.

EXHIBIT A (Page 2 of 3)

That portion of Lot 30 per Jas. T. Stratton's Subdivision of Ranchos Canada de Los Osos and La Laguna a map of said subdivision is on file in Book A of Maps at Page 83 in the office of the County Recorder of the County of San Luis Obispo, State of California, as described in that court decree in the matter of the estate of J. M. Cardozo recorded in Volume 321 at Page 74-75 of Official Records in the Recorder's office of said County, excepting therefrom that portion lying westerly of the following described line:

Commencing on the easterly line of said Lot 30 at the southeast corner of the parcel described in said court decree, being described as post L2;

Thence along the southerly line of the parcel described in said court decree, North 73°00'00" West a distance of 1000.00 feet to the True Point of Beginning;

Thence leaving said southerly line North 24°54'38" East a distance of 177.17 feet;

Thence North 24°32'38" East a distance of 275.50 feet;

Thence North 51°07'47" East a distance of 272.56 feet;

Thence North 04°08'38" East a distance of 221.52 feet;

Thence North 17°38'12" West 341.91 feet to a point on the southwesterly line of the tract of land conveyed by Mark Elberg to L. F. Silveira by deed dated October 8, 1908, and recorded in the office of the County Recorder of said County in Book 79 of Deeds at Page 262, et. seq., said point bears North 73°00'00" West a distance of 1030.14 feet from the southerly corner of said tract of land, said corner being described as post P2.

Together with rights of ingress and egress upon, over and across that 49.5 foot (75 links) wide roadway, being that portion of said Ranchos between Lots 31 and 35 as shown on said map of Jas T. Stratton's Subdivision of Ranchos Canada de Los Osos and La Laguna on file in Book A of Maps at Page 83, said road declared a public highway by the San Luis Obispo County Board of Supervisors on February 8, 1876 as described in the Book of Road Proceedings at page 188 and Volume A of Road Proceedings at pages 49 and 50 in the office of said County Recorder of the County of San Luis Obispo, State of California.

Together with and subject to that right of way for road purposes as granted in that document recorded in Book 90 of Deeds at Pages 462-463 on file in the office of the County Recorder of the County of San Luis Obispo, State of California.



Langston A. Rion
5-7-2012

EXHIBIT A (Page 3 of 3)

79 Deeds 262

Lot 30

N17° 38' 12"W
341.91

S73° 00' 00"E
1030.14

N04° 08' 38"E
221.52

321

O.R. 74

N51° 07' 47"E
272.56

N24° 32' 38"E
275.50

N24° 54' 38"E
177.17

POB

20' access per 90 Deed 462

1000.00
N73° 00' 00"W

83

Lot 30
Lot 31

A

MB

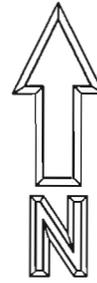
Lot 31

Road 75 links (49.5') per A MB 83
declared a public highway by
the County Board of
Supervisors Feb. 8, 1876 per
Book of Road Proceedings at
page 188 and Vol. A of Road
Proceedings at Pages 49-50

1712 O.R. 1

Lot 35

LOS OSOS VALLEY RD.



Douglas A. Rion
5-7-2012



**SAN LUIS OBISPO COUNTY
SAN LUIS OBISPO, CALIFORNIA
LOS OSOS WATER RECYCLING FACILITY
CONTRACT NO. 300448.08.02**

**Appendix M – “San Luis Obispo County,
Department of Public Works &
Transportation, 2011 Public
Improvement Standards”
Available for download on the following website:**

<http://www.slocounty.ca.gov/PW/DevServ/PublicImprovementStandards.htm>

Appendix M – San Luis Obispo County, Department of Public Works & Transportation,
2011 Public Improvement Standards



**SAN LUIS OBISPO COUNTY
SAN LUIS OBISPO, CALIFORNIA
LOS OSOS WATER RECYCLING FACILITY
CONTRACT NO. 300448.08.02**

Appendix N – County of San Luis Obispo Rules Governing Bid Protests and Other Challenges to Awards of Construction Contracts



COUNTY OF SAN LUIS OBISPO

Rules Governing Bid Protests And Other Challenges to Awards of Construction Contracts

The requirements set forth in these “Rules Governing Bid Protests And Other Challenges to Awards of Construction Contracts” (“Rules”) are mandatory and are a Bidder’s sole and exclusive remedy in the event a Bidder desires to challenge, protest or contest the award of any Construction Contract. A Bidder’s failure to comply with these requirements shall constitute a waiver of any right to challenge, protest or contest the award of a Construction Contract in any subsequent proceeding, including but not limited to, the filing of a court action.

A Bidder may not rely upon another Bidder’s compliance with the requirements of these Rules. Any Bidder that does not independently comply with the requirements set forth herein shall be deemed to have waived any right to challenge, protest or contest the award of a Construction Contract.

Nothing in these Rules affects the right of the County to reject all bids at any time prior to the award of a Construction Contract.

1.1 Definitions

- 1.1.1 Bidder - The contractor submitting a bid in response to a County solicitation for bids on a Construction Contract.
- 1.1.2 Protestor - A Bidder who files a Protest in accordance with the provisions of these Rules.
- 1.1.3 Board – Board of Supervisors of the County of San Luis Obispo (hereinafter, also “County”)
- 1.1.4 Construction Contract - Any Construction Contract which is formally or informally advertised for bids in which the County of San Luis Obispo is, or will be, a party.
- 1.1.5 Protest – Any challenge, objection, or protest to the award of a Construction Contract to any Bidder.
- 1.1.6 Response – Any response to a Protest that is filed by an Interested Party in accordance with the provisions of these Rules.
- 1.1.7 Responsible Department - The County department, agency, or office responsible for the preparation of the bid documents for the Construction Contract and the administration of the Construction Contract.
- 1.1.8 Department Head - The person designated by the Board to be the head of the Responsible Department, or that person designated by the Department

Head to assume the powers, duties, and responsibilities conferred upon the Department Head under these Rules.

- 1.1.9 Initial Determination – A written notice by the Department Head that notifies a Bidder of the reasons why the Department Head believes that a bid is nonresponsive, or that a Bidder is not a responsible Bidder.
- 1.1.10 Interested Parties - For the purpose of these Rules, Interested Parties are defined as:
 - 1.1.10.1 The Responsible Department and/or its Department Head.
 - 1.1.10.2 Any Bidder that filed a Protest or whose bid is the subject of an Initial Determination.
 - 1.1.10.3 Any Bidder whose eligibility for having the Construction Contract awarded to it as a responsible Bidder with the lowest responsive bid would be affected by the outcome of a Protest or Initial Determination.

1.2 Department Head's Independent Authority to Determine Bid Responsiveness and Bidder Responsibility.

- 1.2.1 Regardless of whether a Protest is submitted under these Rules, the Department Head is authorized to determine whether any bid is a responsive bid and whether any Bidder is a responsible Bidder. In the event the Department Head issues an Initial Determination, the Department Head shall provide the Interested Parties with written notice of the Initial Determination at least five (5) business days before the Department Head renders a final decision addressing the grounds stated in the Initial Determination. A final decision of the Department Head under this section 1.2 shall be the final decision of the County with no provision for reconsideration or appeal to the Board.
- 1.2.2 The Department Head need not issue an Initial Determination in order to make a final decision on whether a bid is a responsive bid or a Bidder is a responsible Bidder. A final decision can also be issued by the Department Head through the processing of a Protest pursuant to the procedures set forth in these Rules.
- 1.2.3 The Department Head reserves the right to amend or withdraw an Initial Determination at any time before the Department Head renders a final decision addressing the grounds stated in the Initial Determination. When an Initial Determination is withdrawn, it shall have the same effect as if the Initial Determination had never been made.

1.3 Basis for Protest

- 1.3.1 Grounds for Protest – The grounds for a Protest may include any grounds a Protestor may have for contesting or challenging the award of a Construction Contract to any Bidder, including but not limited to the following grounds:

- 1.3.1.1 A Protestor objects to a Construction Contract being awarded to another Bidder on the grounds that the other Bidder's bid is nonresponsive.
- 1.3.1.2 A Protestor objects to a Construction Contract being awarded to another Bidder on the grounds that the other Bidder is not a responsible Bidder.
- 1.3.1.3 A Protestor objects to a Construction Contract being awarded to the Protestor on the grounds that the Protestor made a mistake in its bid that entitles the Protestor to be relieved of its bid under Public Contract Code Sections 5100 et seq
- 1.3.1.4 A Protestor objects to a Department Head's Initial Determination issued under section 1.2.1 above.
- 1.3.2 Required Form of Protest - All Protests shall be made in writing, containing the information listed below, and shall be filed with the Department Head . Protests shall contain the following information:
 - 1.3.2.1 The name, address, telephone, facsimile numbers, and email address of the Protestor.
 - 1.3.2.2 The signature of the Protestor or its representative.
 - 1.3.2.3 The bid, solicitation and/or contract number.
 - 1.3.2.4 The Protest must contain a complete statement of all grounds for the Protest, and must refer to the specific portion of the bid documents that are the basis of the Protest. The Protest must set forth all supporting facts and documentation. If Protester believes there are some facts relevant to its Protest that Protester cannot adequately present in writing, Protester must describe such facts in its Protest under the heading "Facts Requiring Oral Presentation", and state therein the reasons why the Bid Protester believes it cannot adequately present those facts through documentation.
 - 1.3.2.5 All information establishing that the Protestor is a Bidder for the purpose of filing a Protest.
 - 1.3.2.6 The form of relief requested.

1.4 Protest Requirements and Procedure

- 1.4.1 Standing to Protest - Protests shall be filed only by a Bidder.
- 1.4.2 Time for Filing a Protest
 - 1.4.2.1 Except as provided in sections 1.4.2.2 and 1.4.2.3 below, all Protests must be submitted in writing to the Department Head before 5 p.m. PST of the fifth (5) business day following the date upon which the bids on the Construction Contract were opened.
 - 1.4.2.2 When a Protestor objects to a Construction Contract being awarded to the Protestor on the grounds that the Protestor made a mistake in its bid that entitles the Protestor to be relieved of its bid under Public Contract Code Sections 5100 et seq, the Protest must be submitted in writing to the Department Head before 5 p.m. PST of the fifth (5) business day following the date upon

which the bids on the Construction Contract were opened pursuant to Public Contract Code Section 5103.

- 1.4.2.3 When the Protestor objects to an Initial Determination made by the Department Head under section 1.2.1 above, the Protest must be submitted in writing to the Department Head before 5 p.m. PST of the fifth (5) business day following the date upon which the Initial Determination was first delivered to Protestor (either electronically or otherwise).
- 1.4.3 Written Responses of Interested Parties - If any Interested Party desires to respond to the Protest, the Response must be submitted in writing to the Department Head within five (5) business days of the date the Protest was first delivered to the Interested Party (either electronically or otherwise). If an Interested Party believes there are some facts relevant to its Response that the Interested Party cannot adequately present in writing, the Interested Party must describe such facts in its Response under the heading "Facts Requiring Oral Presentation", and state therein the reasons why the Interested Party believes it cannot adequately present those facts through documentation.
- 1.4.4 Proof of Transmittal - All Protests, Responses, and Replies shall include documentation evidencing that all Interested Parties were concurrently sent a complete copy of the respective Protest, Response or Reply in a manner that would provide all Interested Parties with a complete copy of the respective Protest, Response or Reply no later than one (1) business day after it was sent to the Department Head. The means of transmission chosen must also provide the sending party a means of verifying the date and time the copy was received by each Interested Party. Transmission by email may be an acceptable means of transmittal.
- 1.4.5 No Ex Parte or Unilateral Communications on the Merits of a Protest - No Bidder shall have any written communications regarding the merits of a Protest with the Responsible Department or its Department Head that are not concurrently sent to all of the other Interested Parties. No Bidder shall have any oral communications regarding the merits of a Protest with the Responsible Department or its Department Head other than during an oral presentation properly noticed by the Department Head under these Rules.
- 1.4.6 Suspension of Process for Proposed Rejection of all Bids - At any time during the processing of a Protest, the Department Head may elect to indefinitely suspend any further processing of the Protest by providing written notice to all Interested Parties that the Department Head intends to recommend to the Board that all bids be rejected. All time deadlines provided in these Rules shall be tolled during any such suspension period. If the Board decides to not reject all bids, or if the Department Head otherwise decides to lift the suspension, the requirements of these Rules shall be reactivated upon the Department Head providing all Interested Parties with written notice thereof.

1.5 Summary Dismissal of Protest

The Department Head may summarily dismiss a protest, or specific protest allegations, at any time that the Department Head determines that the Protest is untimely, frivolous, or without merit; is not submitted in the required form of Protest, as set forth above in section 1.3.2., "Required Form of Protest;" or is submitted by a non-Bidder. In such cases, a notice of summary dismissal will be furnished to the Interested Parties. Such a summary dismissal shall be the final decision of the County with no provision for reconsideration or appeal to the Board.

1.6 Decision by the Department Head Based on Written Submissions Only

In reaching a decision on the merits of a Protest, the Department Head may consider relevant documentation submitted by the Protestor and any other Interested Party. If the Department Head wishes to have additional information submitted that was not included in the Protest or in any documentation from other Interested Parties, the Department Head may make a request specifying the information sought and time for submittal. Submissions of additional information that have not been specifically requested by the Department Head may not be considered at the Department Head's sole discretion. If the Department Head does not provide an opportunity for an oral presentation under section 1.7 below, the Department Head will issue a written decision without any oral presentation. . The Department Head's decision shall be the final decision of the County with no provision for reconsideration or appeal to the Board.

1.7 Decision by the Department Head Following Oral Presentation

1.7.1 The Department Head may, at his or her discretion, elect to provide an opportunity for the Protestor and other Interested Parties to make an oral presentation to the Department Head regarding the Protest. In such event, oral presentations shall be conducted in accordance with the following procedure:

1.7.1.1 Notice of Oral Presentation - The Department Head will set a date, time, and place for an oral presentation. Written notice will be sent to Interested Parties not less than five (5) business days in advance of the oral presentation unless it is agreeable to all parties that an earlier date be established. Continuances may be granted by the Department Head for good cause.

1.7.1.2 Guidelines for Oral Presentation - Oral presentations are informal in nature and shall be made by the Protestor or its authorized representative. Technical rules of evidence shall not apply. The Department Head will determine how the oral presentations will be conducted and may set time limits for the presentation. The Department Head may question Interested Parties or provide an opportunity for Interested Parties to make an oral presentation. The Department Head may request additional documentation or information prior to, during or after the oral presentation. Unless

requested by the Department Head, additional documentation or information may not be accepted.

1.7.1.3 Record of Oral Presentation - Any Interested Party may request, and in the Department Head's sole discretion, the Department Head may allow recording of the presentation. If the Department Head allows the presentation to be recorded, the Interested Party requesting that the presentation be recorded must pay the cost of recording, including the costs to make and distribute copies of the recording to the Department Head and other Interested Parties. There shall be no cost to the County.

1.7.1.4 Decisions - The Department Head will issue a written decision within 30 calendar days of the oral presentation; however, the time for issuing the written decision may be extended by the Department Head. A copy of the decision will be furnished to the Interested Parties. The decision shall be the final decision of the County with no provision for reconsideration or appeal to the Board.

1.8 Effect on Contracts

The failure of a County employee or department to comply with the provisions stated in these Rules shall in no way affect the validity of any Construction Contract entered into by the County.

1.9 Department Head Decisions on Protests Seeking Relief from a Bidder's Mistake under Public Contract Code Section 5103.

When a Protestor objects to a Construction Contract being awarded to the Bid Protester on the grounds that the Protestor made a mistake in its bid that entitles the Protestor to be relieved of its bid under Public Contract Code Sections 5100 et seq, a final decision of the Department Head that relieves the Protestor of its bid on the grounds of mistake must be approved by the Board before it can become a final decision of the County. Any other final decision of the Department Head regarding a Protestor's request to be relieved of its bid on the grounds of mistake under Public Contract Code Sections 5100 et seq, shall be the final decision of the County with no provision for reconsideration or appeal to the Board.



**SAN LUIS OBISPO COUNTY
SAN LUIS OBISPO, CALIFORNIA
LOS OSOS WATER RECYCLING FACILITY
CONTRACT NO. 300448.08.02**

Appendix O – Resolution Making findings Pursuant to Public Contract Code Section 3400 Designating Products by Specific Brand or Trade in the Plans and Specifications for the Construction of the Los Osos Wastewater Project, Water Recycling Facility, Los Osos, CA Contract No. 300448.08.02

Appendix O – Resolution Making Findings Pursuant to Public Contract Code Section 3400 Designating Products by Specific Brand or Trade in the Plans and Specifications for the Construction of the Los Osos Wastewater Project, Water Recycling Facility, Los Osos, CA, Contract No. 300448.08.02

IN THE BOARD OF SUPERVISORS

County of San Luis Obispo, State of California

_____ day _____, 20__

PRESENT: Supervisors

ABSENT:

RESOLUTION NO. _____

**RESOLUTION MAKING FINDINGS PURSUANT TO
PUBLIC CONTRACT CODE SECTION 3400
DESIGNATING PRODUCTS BY SPECIFIC BRAND OR TRADE NAME
IN THE PLANS AND SPECIFICATIONS FOR THE CONSTRUCTION
OF THE LOS OSOS WASTEWATER PROJECT,
WATER RECYCLING FACILITY, LOS OSOS, CA,
CONTRACT NO. 300448.08.02**

The following Resolution is now offered and read:

WHEREAS, the Board of Supervisors (“Board”) in accordance with the California State Public Contract Code will consider award of the construction contract for the Los Osos Wastewater Project Los Osos Water Recycling Facility (Contract Nos. 300448.08.02) (hereafter, the “Project”); and

WHEREAS, Public Contract Code Section 3400 provides that local agencies may describe in their invitation for bids that a particular material, product, thing or service is designated by specific brand or trade name if the awarding authority, or designee, finds that the product is designated “in order to match other products in use on a particular public improvement either completed or in the course of completion” or “in order to obtain a necessary item that is only available from on source”; and

WHEREAS, Public Contract Code Section 3400 establishes that an item is available from only one source if there is not an “equal” product, meaning a product that will “function as well, in all essential respects” as the designated product; and

WHEREAS, Carollo Engineers, the County’s engineering design consultant for the Project, has completed the plans and specifications for the Project; and

WHEREAS, the design of the project includes a diaphragm-type metering pump for providing disinfectant into the recycled water to protect public health; and

WHEREAS, the diaphragm-type metering pump is a critical component of the design of the Project and must be reliable; and

WHEREAS, based on the recommendation of Carollo Engineers' licensed professional engineers, as the designers of the Project, it is determined that Pulsafeeder, Inc. is the only manufacturer with a diaphragm-type metering pump capable of meeting the Project needs and requirements for this application; and

WHEREAS, the design of the project includes cloth media disk filter units for filtration of wastewater to meet California Title 22 tertiary recycled water requirements; and

WHEREAS, the cloth media disk filter units are a critical component of the design of the Project and must be reliable; and

WHEREAS, based on the recommendation of Carollo Engineers' licensed professional engineers, as the designers of the Project, it is determined that Aqua-Aerobic Systems, Inc. is the only manufacturer with cloth media disk filter units capable of meeting the Project needs and requirements for this application; and

WHEREAS, the design of the project includes programmable logic controllers for providing automatic process control of many critical components of the treatment process; and

WHEREAS, the programmable logic controllers are a critical component of the design of the Project and must be compatible with those used on the collection system portion of the Los Osos community wastewater system; and

WHEREAS, the collection system portion of the Los Osos community wastewater system is currently in the course of completion; and

WHEREAS, it is determined that programmable logic controllers manufactured by Allen-Bradley are required to match those to be used in the collection system portion of the Los Osos community wastewater system; and

NOW, THEREFORE, BE IT RESOLVED AND ORDERED by the Board of Supervisors of the County of San Luis Obispo, State of California, as follows:

1. All of the recitals herein contained are true and correct.
2. Pulsafeeder, Inc. is the only manufacturer that has produced diaphragm-type metering pumps meeting the County's needs for the Project.
3. The diaphragm-type metering pump is a necessary component of the Project design and is only available from one source.
4. The diaphragm-type metering pump manufactured by Pulsafeeder, Inc. meeting the County's needs for the Project shall be specified by name in the invitation for bids for the Project.
5. Aqua-Aerobic Systems, Inc. is the only manufacturer that has produced cloth media disk filter units meeting the County's needs for the Project.

6. The cloth media disk filter units are a necessary component of the Project design and are only available from one source.
7. The cloth media disk filter units manufactured by Aqua-Aerobic Systems, Inc. meeting the County's needs for the Project shall be specified by name in the invitation for bids for the Project.
8. Allen-Bradley is a manufacturer that has produced programmable logic controllers meeting the County's needs for the Project.
9. The programmable logic controllers are a necessary component of the Project design that must match those of the collection system portion of the Los Osos community wastewater system which is currently in the course of completion.
10. The programmable logic controllers manufactured by Allen-Bradley meeting the County's needs for the Project shall be specified by name in the invitation for bids for the Project.

Upon motion of Supervisor _____, seconded by Supervisor _____, and on the following roll call vote, to wit:

AYES:

NOES:

ABSENT:

ABSTAINING:

the foregoing Resolution is hereby adopted on the ____ day of _____, 20__.

Chairperson of the Board of Supervisors

ATTEST:

Clerk of the Board of Supervisors

[SEAL]

APPROVED AS TO FORM AND LEGAL EFFECT:

RITA L. NEAL
County Counsel

By: 
Deputy County Counsel

Dated: September 26, 2013

STATE OF CALIFORNIA, }
County of San Luis Obispo, ss.

I, _____, County Clerk and ex-officio Clerk of the Board of Supervisors, in and for the County of San Luis Obispo, State of California, do hereby certify the foregoing to be a full, true and correct copy of an order made by the Board of Supervisors, as the same appears spread upon their minute book.

WITNESS my hand and the seal of said Board of Supervisors, affixed this _____ day of _____, 20 _____.

(SEAL)

County Clerk and Ex-Officio Clerk of the Board
of Supervisors

By _____
Deputy Clerk.