

Proposal and Pricing for Primary Clarifier No. 1 Rehabilitation and Control Box replacement Project.

Prepared By:
ClearStream Environmental, Inc.

Summary

ClearStream is proposing to demo and install a new 30' clarifier mechanism in the existing Primary Clarifier tank. We have been on site and evaluated the existing unit and understand the constraints and job scope. We propose working with a local construction firm North Coast Fabrication out of Arcata, California to perform the onsite tear out and installation along with a ClearStream representative who will be on site the entire time the mechanism is being installed.

Project Understanding

ClearStream has worked with the District through the last year to help develop the scope of supply plus come on site and visited with the District to ascertain constructability and costs.

Attachments:

- Proposal
- Reference List
- Project Organization and Key Personnel
- Insurance Certifications



PROPOSAL NO. 19-048 C

PROPOSAL Rev C

PROJECT NAME: Scotia
SPECIFICATION NO: Primary Clarifier No. 1 Rehabilitation and Control Box Replacement Project
PROPOSAL DATE: October 9, 2019
BID DATE: October 10, 2019
REVISION DATE: October 17, 2019
EQUIPMENT: Supply and Install of:
One (1) 30' Diameter Shaft Drive Clarifier

ClearStream Environmental
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Sandy, UT 84070

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ClearStream Representative:

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MECHANICAL DESCRIPTION

One (1) 30' diameter x 6'-6" side water depth (with 1'-1" free board) Clarifier mechanism for installation in an existing Concrete Tank. The mechanism shall consist of the following equipment:

- One bridge mounted precision bearing shaft drive mechanism to drive the rake arms.
 - Rake drive, Model S25-A is a low-speed, high-torque, totally enclosed gear drive with positive overload protection. The drive consist of a 1/2 HP, 3 phase, 220 Volt, 60 Hertz, motor, electric mechanical speed reducer, and precision main bearing designed for a continuous torque of 12,000 ft-lbs. The main bearing carries a ten-year warranty.
 - NOTE: The torque is twice the Specification amount due to the potential of grit accumulation in the clarifier (as had happened before).
- ClearStream will provide SS mounting hardware and install the District Supplied Control Panel to the walkway handrail (or other designated location) and wire up from the Junction box at the end of the walkway through conduit mounted to the walkway to the panel and to the Drive unit.
- One (1) Support/Access Bridge and Center Platform. Access walkway shall be 3' wide with aluminum grating, and aluminum 2-rail handrail. The center platform shall provide 24" clearance around the drive.
- One structural steel torque and influent shaft, sch. 40, 12" diameter with bottom seal bearing/influent connection.
- Two structural steel rake arm triangular trusses, with stainless steel squeegees.
- Feed well, 6'-0" diameter x 3'-6" deep, plated with 3/16" steel panels.
- One (1) Skimmer assembly to include scum deflector blade, and 3'-0" wide hinged skimmer w/ neoprene wipers.
- One (1) 3'-0" wide scum box with wall supports, Fernco coupling, and scum flushing valve.
- 304 SS Anchor Bolts.
- 304 SS Fasteners.
- Coating:
 - Surface Preparation:
 - Non-Immersion Service: SSPC-SP6 (commercial blast)
 - Immersion Service: SSPC-SP10 (near white blast)
 - Coating:
 - Non-Immersion Service: High Build Epoxy Primer, and Urethane Finish Coat.
 - Immersion Service: High Build Epoxy Primer, Polyamide Epoxy Finish Coat.

FIELD SERVICE:

- Field Service will consist of a minimum of 2 trip to take tank measurements for as-builts, installation and check out of the mechanism, start up and training. ClearStream will be on site during the time that the mechanism is being installed by the North Coast Fabrication.

POTENTIAL ADDER:

- One set FRP Baffles. Baffles shall be 12" deep x 1/4" thick, with supports plus installation.

LIMITS AND EXCEPTIONS:

Proposal and pricing does not include:

- Electrical Interconnection Diagrams or Electrical Control Panel, unless called out in the proposal.
- Civil work including excavation, foundations, sidewalks, roads, curb and gutters or gravel surrounding the mechanism, platforms or buildings.

FIELD DEMOLITION AND ERECTION OF CLARIFIER MECHANISMS:

ClearStream is proposing to work with North Coast Fabrication located in Arcata, California to mobilize on site, demolition the existing mechanisms and install the newly supplied clarifier mechanisms as described below:

- Customer will supply an empty and clean tank and existing electrical disconnected prior to ClearStream mobilization.
- Demolition of one (1) 30' diameter Clarifier. We will provide dumpsters near the clarifier to load existing materials into the dumpsters to be hauled away.
- Demolition consists of Existing Bridge, Handrail, Grating, Drive Unit, Skimmer, Scum Box, Feedwell, Rake Arms, and Drive Shaft.
- Existing anchor bolts will be examined and a determination of whether the existing bolts can be re-utilized or if new epoxy type anchor bolts are required.
- Existing Weirs and baffles to remain in place (Optional Price for a new baffle is offered).
- Installation of new walkway.
- **Mount the** new drive unit to walkway. **Install** grating and handrails.
- Installation of new center drive shaft.
- Installation of new Feedwell and supports.
- Installation of new rake arms, skimmer supports and skimmer.
- OPTIONAL: Installation of new baffles.
- Installation of new scum box.
- Electrician shall install and connect wiring to the drive unit and control panel.
- ClearStream will level the drive unit and make final adjustments for placing the unit back in service.
- ClearStream to touch up paint scratches made during shipping and / or installation.
- ClearStream to supply necessary oil to fill the drive unit.
- ClearStream will make any final adjustments to mechanism after filling.

INSTALLATION CONTRACTOR

North Coast Fabrication, a WBE company:
California Contractor License: 883082
Business License: 1000029831

LIMITS AND EXCEPTIONS FOR FIELD WORK:

- Owner shall remove any obstruction to allow a crane reasonable access to the site. Currently an overhead power cable to a yard light and cable is above the working area will need to be removed.
- All materials to be painted A-36 carbon steel unless specifically indicated in the mechanism portion of this proposal
- ClearStream/NCF will supply its own crane. The operator will be a qualified member of the installation crew.
- The Hole Watch / Fire Watch / QA / Safety Person will be the working foreman on site.
- ClearStream will utilize standard tie off procedures for field erection.
- Scaffolding, if required by ClearStream, will be supplied by ClearStream. Ladders and Tank builder type scaffolding will be utilized on site.
- The mechanism parts will be supplied finish coated and ClearStream will make every effort to minimize coating damage to the material however, normal handling and installation procedures will require some field touch up prior to placing the mechanism back in service.
- ClearStream has many years' experience installing these types of mechanisms and will have a full time field representative on site during the installation.
- Price is based on free and easy access to and around the tank foundations and shall be no less than 10 hours / day for 7 days / week. It is anticipated that ClearStream will work Monday – Friday depending on final schedule but will utilize the other days to make up rain delays if needed.
- While all care will be taken while on site, ClearStream cannot be held accountable for any damage to concrete floors, tanks, driveways, or lawns due to normal construction activities.
- Price is based on one (1) mobilization and de-mobilization to site. If additional move-in / move-out is required for reasons other than required by ClearStream, any cost will be passed along to the owner.
- Any standby cost for delays outside of ClearStream's control will be passed along to the owner. An example would be the tank is not empty and cleaned on the start day.
- Demolition and Erection is based on Non-Union jobsite with free and easy access to and around tank foundations.
- Prevailing wages are included.
- Any Welding if needed to be performed with E6010 and E7024 welding rods.
- Pricing includes a 1-million dollar general liability policy and a 2-million dollar umbrella. If higher limits are required all costs will be passed on at our cost.
- Estimated time of on-site construction: 5 to 8 days
- Taxes and / or Permits: Local, State or Federal by Owner.

PRICING

Pricing for the described equipment is as follows. The prices quoted do not include sales, excise, or other similar taxes. .

One (1) 30' Diameter Shaft Drive Clarifier Supply, Demolition and Installation
\$ 168,185

Supply and install New FRP Baffle **\$9,690**

Shipping is quoted as ex-works with full freight allowed to the job site. It is the responsibility of the contractor to check all components at receiving and issue all claims for damage or missing parts due to transport within 48 hours of receipt of equipment.

Additional Field Service for start-up and training is billed at \$1,500 per day plus customary expenses. Travel days are billed at ½ rate. Two-week advance notice is required or the increased flight cost will be added to the contract price

Schedule:

Submittal Drawing Schedule:	6 weeks after receipt of PO
Owner Review	2 to 4 weeks
Standard Deliver	18 to 24 weeks after receipt of Approved Submittals

Payment Terms and Conditions:

10%	Upon Submittal
30%	Upon Material Order
55%	Upon shipment of mechanisms
5%	Upon Checkout or 120 days from shipment, whichever occurs first

Terms are net 30 from billing. Late payment penalty is applied at 1.5% per month plus a monthly \$50 billing fee.

Items that are not specifically stated in the above proposal are not included.

STANDARD TERMS AND CONDITIONS

PRICE CONDITIONS: The price quoted herein shall remain in effect for a period of thirty (30) days of proposal date.

CANCELLATION: Any contract resulting from this quotation may be cancelled by the Purchaser only upon payment of reasonable cancellation charges, which shall take into account the expenses already incurred and commitments made.

DELIVERY: Delivery of the equipment quoted hereunder shall be made F.O.B. factory with full freight allowed unless noted otherwise. Shipping dates are approximate and are based upon receipt of all necessary information. ClearStream shall not be liable for damages caused by delays due to strikes, riot, warfare, act of God, accidents or other contingences beyond reasonable control of ClearStream. Our pricing is based on the schedule listed above. Should the project be delayed beyond that listed, ClearStream reserves the right to adjust our schedule and/or pricing to reflect current economic conditions.

DAMAGES: ClearStream Environmental shall in no event be liable for anticipated profits or consequential damages on the part of the owner/purchaser.

BACKCHARGES:

No back charge will be accepted unless first discussed and approved by ClearStream before work commences. A back charge Approval Form with scope of work and costs must be signed by an authorized ClearStream representative before work shall begin

TERMS OF PAYMENT: ClearStream Environmental shall invoice as stated in the Payment section of this proposal. Payment is due, unless otherwise stated, net thirty (30) days.

TAXES: The price quoted does not include sales, excise, or other similar taxes. All associated taxes shall be paid by the Purchaser or, in lieu thereof, provide ClearStream Environmental with a tax exemption certificate acceptable to the taxing authorities. ClearStream Environmental does not process local or state taxes unless legally required to do so. If ClearStream must process taxes via the equipment contract, Purchaser is responsible to correctly calculate the amount. Taxes then will be billed as a separate line item on the final invoice with a 10% service fee.

WARRANTY: ClearStream Environmental shall warrant the equipment for one (1) year against defects in workmanship or material and reserve the right to repair or replace the defective parts. Equipment not manufactured by ClearStream Environmental shall carry the warranty of the manufacture thereof. ClearStream Environmental makes no warranties, expressed or implied, other than as herein expressed.

TITLE: Title to the equipment sold hereunder shall remain in the possession of ClearStream Environmental until the purchase price is paid in full. The purchaser shall do all acts necessary to protect and maintain the equipment until title is exchanged.

Northern California Plant Contact List

Complete Installation List



Northern California Contact Installation List

<u>PO Year</u>	<u>Job Name/Location/Equipment type</u>
2012	Dry Creek WWTP, Roseville, CA (4) 85' dia. Suction Header Clarifiers Engineer: WATER Works, Engineers Scott Buecker (916) 780-2888 Contractor: Auburn Constructors Andrew Granner (916) 924-0344
2012	Sacramento Regional WWTP (1) 130' dia. Suction Header Clarifier Retrofit Engineer: SAC Regional Guillermo Robles, P.E. (916) 875-9217
2013	Pyrite Canyon Mine (2) 22' Diameter Solids Contact Clarifiers and Tanks Engineer: Tetra Tech Contact: Steve Allmer, C.W. Roen (925)837-5501, Ext. 117 sallmer@cwroen.com
2015	Gualala, CA (1) 24' dia. Shaft Drive Clarifier Plant: Chris Troyan, General Manager Gualala Community Service District 707-785-2331
2015	Hayward, CA (1) 80' Diameter Circular Primary Clarifier Contractor: Howard Reese, Mountain Cascade (925)525-2596 Plant: Ray Busch (510)293-5212 Susan England (510)293-5098



Northern California Contact Installation List

<u>PO Year</u>	<u>Job Name/Location/Equipment type</u>
2016	Dublin San Ramon, CA (2) 19'6" Square Shaft Drive Clarifiers Engineer: Kruger/Veolia Water Technologies Greg Smith (919)653-4552
2016	Del Valle WTP (1) 24' Diameter Solids Contact Clarifier Contact: Shane Maynard (916)533-6833
2017	Bass Lake WWTP, CA (2) 28' Diameter Suction Header Clarifiers Contact: Chad Brown 559-675-7811 Engineer: Carollo (559) 436-6616
2017	Cement Hill, CA (1) 72' Diameter Solids Contact Clarifier Plant Contact: Uriel Romero (707)455-4045



Installation List

<u>PO Year</u>	<u>Job Name/Location/Equipment type</u>
2003	City of Appleton, Wisconsin (2) 45' dia. Thickeners. OEM Account
2004	Zapotlanejo, Mexico 74' dia. Secondary Clarifier Design Only
2004	BP Chemical – Decatur, Alabama (1) 26' stainless steel clarifier with lift, elevated tank and erection Engineer: BP AVC Technology
2005	Millersburg, Ohio (1) 48' diameter Spiral Blade Clarifier Engineer: ATS Engineers
2005	Duke Energy, South Carolina (1) 40' thickener with lift OEM Account
2005	BP Chemical – Decatur, Alabama (2) 26' diameter stainless steel clarifiers with lift, elevated tank and erection Engineer: BP AVC Technology
2005	Pleasant Prairie, Wisconsin (1) 17' diameter clarifier with lift OEM Account
2005	BP Chemical, Unit 1 – Cooper River, South Carolina (1) 32' diameter stainless steel clarifier with lift, elevated tank and erection
2005	Wooster, Ohio (3) 60' Primary Clarifiers (1) 40' FOG Clarifier (Dissolved Air Flotation Clarifier) Engineer: ATS Engineers
2005	Kissimmee, FL (1) 18.5' clarifier (316 stainless steel) OEM Account
2005	Salisbury, MD (1) 110' diameter secondary clarifier, 4 walkway replacements. Engineer: O'Brien & Gere



Installation List

<u>PO Year</u>	<u>Job Name/Location/Equipment type</u>
2005	Camuy, Puerto Rico (6) 50' Clarifiers Engineer: Roe and Associates
2005	Mak Engineering, China (1) 80' diameter Solids Contact Clarifier
2005	Belews Creek, Duke Energy (2) 50' Cage Drive Solid Contact Clarifiers
2006	Wichita, Kansas (1) 17'-6" diameter clarifier (304 stainless steel) OEM Account
2006	Somersworth, NH (2) 13'-3" Clarifiers OEM Account
2006	BP Chemical, Unit 2 – Cooper River, South Carolina (1) 26' diameter stainless steel clarifier with lift, elevated tank and erection.
2006	Talpa, Mexico (2) 14 M Secondary Clarifiers
2006	Saltillo Principal, Mexico (5) 30 M Primary Flocculating Clarifiers (5) 38.8 M Secondary Clarifiers – Spiral Blade
2006	La Morino, Mexico (2) 30 M Secondary Clarifiers
2006	Saltillo – Gran Bosque, Mexico (2) 15.2 M Secondary Clarifiers
2006	Tijuana – Los Olivos, Mexico (2) 46.5 M Secondary Clarifiers – Spiral Blade
2006	Oaxaca, Mexico (3) 42.3 M Secondary Clarifiers – Spiral Blade
2006	Anasco, Puerto Rico (1) 25' Thickener



Installation List

PO Year	Job Name/Location/Equipment type
2006	Lares, Puerto Rico (2) 32' Primary Shaft Drive Clarifiers (2) 50' Secondary Shaft Drive Clarifiers.
2006	Dorado, PR (1) 55' Diameter Clarifier
2006	Tijuana – La Gloria (2) 32 M Secondary Clarifiers – Spiral Blade
2006	Tijuana – La Morita (2) 32 M Secondary Clarifiers – Spiral Blade
2006	Rabigh Refinery, Saudi Arabia (1) 25 M Segmented Blade Clarifier (1) 35 M Segmented Blade Clarifier Engineer: TSK Co., LTD.
2006	Allen Steam Station, SC (2) 40' Diameter Cage Drive Solids Contact Clarifiers OEM Account
2006	Monroe Steam Station, MI (2) 55' Diameter Cage Drive Solids Contact Clarifiers OEM Account
2006	Reliant Power (2) 25' diameter Solids Contact Clarifiers OEM Account
2007	Geneva, NY (1) 21' Shaft Drive Clarifier OEM Account
2007	Patillas, PR (1) 35' Thickener Engineer: Luis Hernandez Y Asociados, CSP.
2007	City of St. Joseph, MO (2) 120' Primary Clarifiers - Spiral Blade Engineer: The City of St. Joseph



Installation List

<u>PO Year</u>	<u>Job Name/Location/Equipment type</u>
2007	Las Marias, PR (2) 16' Diameter Shaft Drive Clarifiers OEM Account
2007	Gilbert, AZ (2) 21'-3" Shaft Drive Clarifiers OEM Account
2007	Papillion, NY (1) 19' Shaft Drive Clarifier OEM Account
2007	Hindman, KY (2) 11'-2" Diameter Shaft Drive Clarifiers OEM Account
2007	Samsung (1) 28' Solids Contact Clarifier OEM Account
2007	Fairfield, Ca (2) 28' Diameter Shaft Drive Clarifiers. OEM Account
2007	Hatfield Ferry, Mason, PA (2) 45' Solids Contact Clarifiers OEM Account
2007	Manchester, NH (3) 145' Clarifiers – Spiral Blade Engineer: Metcalf & Eddy/AECOM
2007	Mirant Chalk Point Station (1) 23' Solids Contact Clarifier
2007	Mirant Morgantown Station (1) 30' Solids Contact Clarifier
2007	Reliant Keystone Station (2) 35' Solids Contact Clarifiers



Installation List

<u>PO Year</u>	<u>Job Name/Location/Equipment type</u>
2007	Mirant Dickerson (1) 23' Solids Contact Clarifier
2007	Upper Blackstone, MA (8) 140' Diameter Suction Pipe Clarifiers Engineer: CDM
2008	Tampa Bay, FL (2) 32.8' Shaft Drive Clarifiers OEM Account
2008	Brandon Shores (2) 33' Flocculating Clarifiers (2) 30' Solids Contact Clarifiers OEM Account
2008	Port Angeles, WA (2) 15'-6" Shaft Drive Clarifier OEM Account
2008	Sunnymede, AR (1) 22' Diameter Clarifier OEM Account
2008	Fort Thomas, KY (1) 30' Shaft Drive Thickener
2008	Pemex, MX (2) 130' Secondary Clarifiers
2008	Concordia, KS (1) 55' Secondary Clarifier
2008	Freemont Hills (2) 27' Shaft Drive Secondary Clarifiers
2008	AMDRI (2) 20.7' Settling Tank Scraper Assemblies OEM Account
2008	Thyssen Krupp (2) 45' Shaft Drive Thickener (2) 60' Suction Header Clarifiers



Installation List

<u>PO Year</u>	<u>Job Name/Location/Equipment type</u>
2008	Duke - Cliffside (1) 30' Shaft Drive Clarifier w/ lift OEM Account
2008	Sandy Creek Power Plant (2) 80' Solids Contact Clarifiers (1) 50' Thickener OEM Account
2008	Deer Valley WWTP (4) 31.5' Clarifiers
2008	Washington Aqueduct, MA (4) 105' Thickeners Engineer: Army Corps of Engineers
2008	Parker, CO (2) 13.3' Square Shaft Drive Clarifier (1) 29.5' Square Shaft Drive Clarifier OEM Account
2009	BPCM Malaysia (1) 26' Shaft Drive Clarifier OEM Account
2009	Indianapolis - TW Moses (2) 25' Square Shaft Drive Clarifiers OEM Account
2009	Guthrie, OK (2) 14' Square Shaft Drive Clarifiers
2009	Webster, MA (1) 17' Square Shaft Drive Clarifier OEM Account
2009	St. Joseph, MO (1) 120' Primary Clarifiers – Spiral Blade Engineer: The City of St. Joseph
2009	Pemex, MX (2) 105' Secondary Clarifiers – Spiral Blade



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<u>PO Year</u>	<u>Job Name/Location/Equipment type</u>
2009	Newark, OH (2) 17' Square Shaft Drive Clarifiers OEM Account
2009	Pesqueria, MX (2) 70' Suction Header Clarifiers
2009	Norte, MX (5) 190' Secondary Clarifiers – Spiral Blade
2009	Blackwell, OK (1) 60' Primary Clarifier
2009	Seminole City, FL (2) 17.5' Square Shaft Drive Clarifiers OEM Account
2009	Fields Point, RI (4) 120' Primary Clarifiers – Spiral Blade (6) 125' Secondary Clarifiers – Suction Pipe (3) 65' Thickeners Engineer: CH2M Hill/SEA Contractor: Daniel O' Connel & Sons
2009	Wichita, KS (1) 160' Steel Launder System
2009	Westborough, MA (2) 26' Square Shaft Drive Clarifiers OEM Account
2009	Vera Cruz, MX (2) 140' Secondary Clarifiers – Spiral Blade
2009	Merrimack Station (2) 14' Solids Contact Clarifiers OEM Account
2009	Fort Peck, MT (2) 20' Square Shaft Drive Clarifiers OEM Account



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<u>PO Year</u>	<u>Job Name/Location/Equipment type</u>
2009	Jaffrey, NH (2) 11' Square Shaft Drive Clarifiers OEM Account
2009	Las Marias, PR (1) 70' Thickener
2010	Plymouth, NH (1) 35' Gravity Thickener Engineer: Wright – Pierce
2010	Amalgamated Clarifier Mod (1) Retrofit Feedwell and EDI
2010	Rockton, IL (1) 30' Shaft Drive Clarifier
2010	Niagara Falls, NY (1) 70' Cage Drive Thickener
2010	Longview, WA (1) FRP Weirs & Baffles
2010	New Milford, CT (4) 45' Secondary Clarifiers Engineer: CDM
2010	Rattlesnake, OH (1) 33' Spiral Blade Clarifier
2010	Irvine Ranch, CA (1) 28' Square Shaft Drive Clarifiers OEM Account
2010	Pemex, Monterrey, MX (1) 105' Primary Clarifier – Spiral Blade
2010	Arkansas, KS (1) 50' Primary Clarifier



Installation List

<u>PO Year</u>	<u>Job Name/Location/Equipment type</u>
2010	Langley Gulch LHPS (1) 96" dia. Coagulation Tank (1) 94" radius Flocculation Tank (1) 240" dia. Sedimentation Tank OEM Account
2010	Cadereyta, MX (2) 70' Suction Header Clarifier
2010	St. Joseph, MO (2) 160' Secondary Clarifiers – Suction Pipe Engineer: The City of St. Joseph
2010	Russky Island Clarifier (2) 56' Primary Clarifiers
2010	Blue Springs, MO (2) 125' Suction Header Clarifiers Engineer: HDR Archer
2010	Wilson Creek, TX (1) 31.22' Square Shaft Drive Clarifier OEM Account
2010	Leominster, MA (2) 20' Square Shaft Drive Clarifiers OEM Account
2010	Heber Valley, UT (1) 55' Primary Clarifier – Spiral Blade (2) 60' Secondary Clarifiers – Spiral Blade Engineer: AQUA Engineering
2011	High Sierra Water Services, CO (3) 20' Solids Contact Clarifiers OEM Account
2011	Gelena, MO (1) 29' Shaft Drive Secondary Clarifier Engineer: Great River Engineering



Installation List

<u>PO Year</u>	<u>Job Name/Location/Equipment type</u>
2011	Hill Air Force Base (1) 46' Shaft Drive Clarifier/Tank/Erection Engineer: CH2M Hill
2011	Bustamante WWTP, Mexico (1) 30' Suction Header Clarifier
2011	Pemex, Mexico (2) 24.5 M Secondary Clarifiers – Spiral Blade
2011	Acapantzingo Cuernavaca, Mexico (4) 21 M Cage Drive Primary Clarifiers (2) 38 M Secondary Clarifiers – Spiral Blade (1) 21 M Cage Drive Thickener
2011	Barrick Cortez (1) 35' Clarifier/Elevated Tank/Sludge Handling Design/Erection
2011	PXP, California (1) 35' Thickener OEM Account
2011	Tulsa, OK (2) 155' Primary Clarifiers Engineer: City of Tulsa
2011	Celeya, MX (2) 157' Secondary Clarifiers - Spiral Blade
2011	Tulsa Northside, OK (2) 50' Thickeners Engineer: City of Tulsa
2011	Anacortes, WA (2) 36.25' Square Clarifiers OEM Account
2011	KCMO Birmingham, MO (2) 113' Secondary Clarifiers Engineer: Tetra Tech



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<u>PO Year</u>	<u>Job Name/Location/Equipment type</u>
2011	Middle Big Creek, MO (2) 75' Suction Header Clarifiers Engineer: HDR Engineering
2011	Manchester, CT (2) 20' Mechanisms OEM Account
2011	Sembcorp, Singapore (2) 27 M Clarifiers
2012	Rhodia, Inc., Vernon, TX (1) 65' diameter Clarifier upgrade Direct Bid to Client
2012	Homer City (1) 28' Diameter Gravity Thickener OEM Account
2012	Pohnpei STP, Micronesia (2) 16 M Clarifiers Engineer: Laurie Curran Water PTY, Ltd.
2012	Consol Energy, WV (1) 70' Thickener Engineer: Chester Engineers
2012	Fishing River, MO (2) 65' Secondary Clarifiers Engineer: Burns & McDonnell
2012	Stamford, CT (2) 130' Diameter Spiral Blade Secondary Clarifiers (3) 50' Diameter Gravity Thickeners Engineer: City of Stamford
2012	Berlin, NH (2) 65' Diameter Primary Clarifiers (3) 70' Diameter Secondary Clarifiers (2) 20' Diameter Gravity Thickeners Engineer: Wright – Pierce



Installation List

<u>PO Year</u>	<u>Job Name/Location/Equipment type</u>
2012	Midori Removables (1) Clarifier – Pilot skid
2012	First Energy (1) 75' Diameter Flocculating Clarifier (Replacement and upgrade) Direct Bid to First Energy
2012	Rock Creek (2) 20'-5" Clarifiers OEM Client
2012	Moore's Bridges WTP (2) 65' Diameter Gravity Thickeners Engineer: Whitman, ReQuardt, & Associates
2012	Tulsa WPC 12-3 (2) 155' Diameter Primary Clarifiers Engineer: City of Tulsa
2012	Smithfield, RI (2) 14' Diameter Shaft Drive Clarifiers OEM Client
2012	Niagara Falls, NY (1) 70' diameter Thickener retrofit Engineer: CRA Infrastructure & Engineering
2012	Burley, ID (1) 80' diameter Suction Pipe Clarifier Engineer: Forsgren Associates, Inc.
2012	Dry Creek WWTP, Roseville, CA (4) 85' diameter Suction Header Clarifiers Engineer: WaterWorks Engineers
2012	Sacramento Regional WWTP (1) 130' diameter Suction Header Clarifier Retrofit Engineer: Sacramento Regional
2012	Carrolton, MO (1) 45' diameter Suction Header Clarifier Engineer: HDR Engineering, Inc.



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<u>PO Year</u>	<u>Job Name/Location/Equipment type</u>
2012	Spring River WTP, Columbus, Kansas (2) 42' diameter Solids Contact Clarifiers
2012	Independence, MO (8) 65' Suction Header Clarifiers Engineer: HDR Engineering Contractor: Whiting-Turner Contracting
2012	Al-Jubail, Saudi Arabia (1) 11.5 M diameter Shaft Drive Clarifier and Tank Client: Moritani America – Sadara MFC Tsukishima Kankyo Engineering, Ltd,
2012	Southern Power - Plant Daniels (2) 20' Diameter Solids Contact Clarifiers (2) 20' diameter FRP tanks (4) 10' diameter FRP Tanks, Mixers and Supports (2) 8' diameter FRP Tanks, Mixers and Supports (1) 14' diameter FRP Sludge Mix Tank, Mixer and Supports On-site Erection of SCC Tanks and Mechanisms Engineer: Aquatech International
2013	Atlatec DAF, Monterrey, Mexico (1) 1 M diameter DAF skid OEM Client
2013	Ambatovy Mining, Madagascar 80M Thickener Upgrades OEM Client
2013	Rhodia (Solvay), Baton Rouge, LA (2) 60' Suction Pipe Clarifiers Owner Installed
2013	Paw Paw Lake Area WWTP, Michigan (1) 30' Thickener Engineer: Jones and Henry Engineers Contractor: DHE Plumbing and Mechanical
2013	Gonvick WWTF, MN (1) 18' Shaft Drive Clarifier Engineer: Wench Associates Contractor: KHC Construction Inc.



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<u>PO Year</u>	<u>Job Name/Location/Equipment type</u>
2013	Hot Springs Village WTP Expansion (2) 45' Diameter SCC Shaft and rake Rehab OEM Client Engineer: Crist Engineers
2013	Shenango, Inc., Pittsburg, PA (1) 16' DAF Mechanism, Pressure System, Elevated Steel Tank, Installation Engineer: JNE Consulting
2013	Macon, GA (2) 70' diameter Suction Pipe Clarifiers Engineer: City of Macon Water Authority
2013	Mt. Pleasant WWTP, MI (2) 85' Spiral Blade Final Clarifiers Engineer: Jones and Henry Engineers, LTD Contractor: Gerace Construction Company, Inc.
2013	Jack Link's, Alpena Plant, Alpena, SD (1) 17' Segmented Blade Clarifier Engineer: Banner Engineers
2013	Great Falls WWTP, Great Fall, Montana (1) 104' Square Suction Pipe Clarifier Engineer: HDR Engineering Contractor: Swank Enterprises
2013	Ethydco, Egypt (1) 10M Solids Contact Clarifier (1) 8M Thickener Engineer: Aquatech International
2013	Denmark, Australia (1) 12M Suction Header Clarifier Engineer: Water Corporation
2013	Clinton WWTP, Clinton, OK (1) 55' Suction Header Clarifier Engineer: City of Clinton Contractor: Wynn Construction Co., Oklahoma City, OK



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<u>PO Year</u>	<u>Job Name/Location/Equipment type</u>
2013	Clark County WWTP, Medway, Ohio (1) 60' Spiral Blade Clarifier Engineer: O'Brien & Gere Contractor: Peterson Construction Co.
2013	Seminole, OK (2) 75' Suction Pipe Clarifiers Contractor: Sharp Iron group – BW Fabricators, Wichita Falls, TX
2013	Barstow, CA (1) 22' Gravity Thickener Engineer: Carollo Engineers Contractor: Kana Engineering Group, Inc., Rancho Cucamonga, CA
2013	Lake Oswego, OR AFS (2) 24'-9" Shaft Drive Clarifiers OEM Client
2013	Richmond County, Rockingham, NC (1) 58' Thickener Engineer: Municipal Engineering Services Contractor: Eberhart Construction, Inc, Willow Spring, NC
2013	New Haven, CT (8) 100' Square Suction Pipe Clarifiers (2) 60' Thickeners Engineer: CH2M Hill Contractor: Nickerson General Contractors, Torrington, Connecticut
2013	Dublin Road WTP – City of Columbus, OH (4) 105' Clarifiers w/ Corner Sweep Mechanism Engineer: CDM Smith Contractor: Kokosing Construction Co., Columbus, Ohio
2013	Pyrite Canyon Treatment Facility (2) 22' Flocculating Clarifiers w/ Elevated Tank Contractor: CW Roen Construction Company Engineer: Tetra Tech
2013	HVUD, TN (1) 39' Shaft Drive Clarifier OEM Client



Installation List

<u>PO Year</u>	<u>Job Name/Location/Equipment type</u>
2013	Gladstone WWTP Nassau, Bahamas (2) 57' Suction Header Clarifiers Contractor: NID / Emerene Co., LTD Joint Venture, Nassau, Bahamas
2013	Ethydco, Egypt (1) 7.2 M Shaft Drive Secondary Clarifier (1) Rectangular DAF, 3.2 M x 2.2 M Engineer: Aquatech Engineering
2013	Cox Creek WRF (2) 42' Thickeners OEM Client
2013	Cox Creek, WWTP (1) 20'-7" Square Shaft Drive Clarifier OEM Client
2013	Parkway WWTP, Laurel, Maryland (2) 40' Gravity Thickeners Engineer: CH2M Hill Contractor: CPP Construction
2014	Spencer, MA (1) 60' dia. Suction Pipe Clarifier Engineer: Wright – Pierce
2014	Chevron Phillips Baytown (1) 32' dia. Shaft Drive Clarifier
2014	Ballarat South, Australia (1) 42M Suction Header Clarifier Engineer: MWH
2014	Westville, IN (2) 35' dia. Suction Header Clarifiers Engineer: McMahon Engineers
2014	Sacramento Regional WWTP (5) 130' diameter Suction Header Clarifier Retrofits Engineer: Sacramento Regional Contractor: Auburn Construction



Installation List

<u>PO Year</u>	<u>Job Name/Location/Equipment type</u>
2014	Fremont, OH (3) 90' dia. Suction Header Clarifiers Contractor: MWH Constructors
2014	Ste. Agathe (2) 19.5 M Suction Header Clarifiers Engineer: Genivar/Dessua
2014	Cranston, RI (2) 24' Square x 18' Scraper Clarifier Mechanism OEM Client
2014	Rock Creek, OR (4) 51' dia. Gravity Thickeners Engineer: Carollo
2014	Iowa Fertilizer Co. – Nonprocess OSBL Facility (3) 70' Solids Contact Clarifiers w/ Steel Tanks (2) 60' Gravity Thickeners w/ Tanks (1) 26' Storage Tank Engineer: Aquatech International
2014	St. Joseph, MO (1) 160' dia. Suction Pipe Clarifier Engineer: HDR
2014	Westville, IN (2) 35' dia. Suction Header Clarifiers Engineer: McMAHON
2014	Forrest, IL (1) 33'-6" dia. Shaft Drive Clarifier Engineer: Farnsworth Group
2014	Mukhazina, Oman (1) 82' Solids Contact Clarifier Engineer: Aquatech International
2014	Palo Alto, CA (1) 120' dia. Suction Pipe Clarifier Engineer: City of Palo Alto



Installation List

<u>PO Year</u>	<u>Job Name/Location/Equipment type</u>
2014	Rockville, MD (1) 57' dia. Gravity Thickener Engineer: Hazen & Sawyer
2014	Delta Diablo WWTP, CA (3) 70' Diameter, Scum Removal Equipment
2014	City of Tulsa, OK (3) 16' x 76' Rectangular DAF's Engineer: Black & Veatch
2014	Warwick, RI (2) 17.33' Square X 16.9' SWD Mechanisms OEM Client
2014	West Warwick, RI (2) 17.33' x 17.33' Scraper Mechanisms OEM Client
2014	Clinton, AR (1) 15'-10" x 15'-10" Scraper Mechanisms OEM Client
2014	West Warwick, RI (2) 17.33' x 17.33' Scraper Mechanisms OEM Client
2014	Loudoun Water WTP (2) 45' Gravity Thickeners Engineer: CDM Smith Contractor: PC Construction
2014	Hyperion, CA Sixteen (16) 150' Dia. x 12' Side Water Depth Clarifier Mechanism Components Designed for Installation in Existing Concrete Tanks. Engineer: City of Los Angeles Dept. of Public Works
2014	Blue Plains (3) 34'-3" dia. Square Shaft Drive Clarifiers OEM Client



Installation List

<u>PO Year</u>	<u>Job Name/Location/Equipment type</u>
2015	Terre Haute, IN (1) 17' Square x 17' SWD Mechanisms OEM Client
2015	James Hardie McCarran, NV (1) 30' dia. Clarifier/Fluidizer
2015	Timber Lake, OR (1) 16' dia. Shaft Drive Clarifier
2015	Duke Energy Carolinas (1) 30' dia. Gravity Thickener Engineer: Veolia
2015	Weno Chuuk (1) 40'-6" dia. Clarifier Engineer: Laurie Curran Water Pty, Ltd.
2015	Gualala, CA (1) 24' dia. Shaft Drive Clarifier
2015	Woonsocket, RI (3) 110' dia. Suction Pipe Clarifiers Engineer: CH2M Hill
2015	Northern Kentucky Water District (2) 89'-5" Square Clarifier Mechanisms Engineer: HDR, Inc. Contractor: Building Crafts
2015	Lawrence, KS (2) 110' Suction Pipe Clarifiers Engineer: Black and Veatch
2015	New Orleans – West Bank Plant (1) 120' dia. Primary Clarifier Contractor: Cole Construction Company Inc.
2015	Paw Paw Lake WWTP (1) 80' dia. Spiral Blade Primary Clarifier Engineer: Jones & Henry Engineers, Ltd. Contractor: Gerace Construction Company, Inc.



Installation List

<u>PO Year</u>	<u>Job Name/Location/Equipment type</u>
2015	Iowa Fertilizer Co. – Nonprocess OSBL Facility (3) 70' dia. Aluminum Covers for Solids Contact Clarifiers w/ Steel Tanks (2) 60' dia. Aluminum Covers for Gravity Thickeners w/ Tanks Engineer: Aquatech International
2015	City of Titusville – Mourning Dove WTP (1) 34' dia. Gravity Thickener (1) 53.5' dia. Solids Contact Clarifier Engineer: Reiss Engineering
2015	City of Hayward, CA – WPCF Improvements (1) 80' dia. Primary Clarifier Engineer: Brown and Caldwell
2015	City of Lakewood, Ohio (2) 75' dia. Suction Header Clarifier Headers Engineer: City of Lakewood, Ohio
2015	Union County, AR (1) 24' Square Shaft Drive Clarifier Engineer: OEM Client
2015	Washington Aqueduct (1) FRP Replacement Feedwell Contractor: Fasting Enterprises, Inc.
2015	Fire Camp 8 (1) 14' dia. Primary Clarifier (1) 10' dia. Secondary Clarifier Engineer: PACE Water Contractor: Integrated Water Services, Inc.
2015	Timet Henderson, NV (1) 12' dia. Solids Contact Clarifier Engineer: Veolia
2015	Tallulah, LA (1) 70' Diameter Clarifier Engineer: Denmon Engineering
2016	Frontier Water (1) 10' Diameter Solids Contact Clarifier



Installation List

<u>PO Year</u>	<u>Job Name/Location/Equipment type</u>
2016	Timet, NV (1) 16' Diameter Clarifier mechanism with Solids Contact/Flash Mix tank Engineer: Carollo
2016	Timet, NV (1) 16' Diameter Clarifier mechanism with Solids Contact/Flash Mix tank Engineer: Carollo
2016	City of Martinsville WWTP, Ridgeway, VA (2) 40' Diameter Chlorine Contact Clarifier
2016	Junction City, KS (2) 70' Diameter Primary Clarifiers Engineer: HDR Engineering
2016	Zuazua, MX (2) 20M Diameter Spiral Blade Clarifiers
2016	Planta Norte, MX (1) 67.06M (220'-0") Diameter Suction Header Clarifier
2016	Fields Point, RI (16) 150' Diameter Clarifiers Engineer: LA DWP Engineering
2016	Cranston (1) 38' Diameter Gravity Thickener Platform Engineer: Veolia
2016	Pinole, CA (3) 45' Diameter Primary Clarifiers (2) 65' Diameter Suction Header Clarifiers (1) 40' Diameter Gravity Thickener Engineer: HDR
2016	Shell Franklin (1) 52' Diameter Raw Water Gravity Thickener Engineer: Veolia
2016	Johnson City, TN (1) 80' Diameter Suction Pipe Clarifier Client: Jeff Corder



Installation List

<u>PO Year</u>	<u>Job Name/Location/Equipment type</u>
2016	Bellows Falls, VT (2) 40' Diameter Primary Clarifiers (2) 40' Diameter Secondary Clarifiers Engineer: Aldrich & Elliott
2016	Frontier Water Systems, CA (1) 10' Diameter Solids Contact Clarifier Client: Frontier Water Systems
2016	Avon Lake, OH (3) 70' Diameter Spiral Blade Secondary Clarifiers (1) 76' Diameter Spiral Blade Final Clarifier (1) 80' Alum Gravity Thickener Engineer: CDM Smith
2016	New Orleans – East Bank (1) 164' Suction Pipe Clarifier Client: NOLA
2016	Muswellbrook, AU (1) 17.37M Diameter Solids Contact Clarifier Engineer: GHD
2016	City of Manchester, NH (3) 130' Diameter Primary Clarifiers (3) 50' Diameter Gravity Thickeners
2016	South Lake Tahoe (1) 100' Diameter Primary Clarifier Engineer: HDR
2016	Muswellbrook, AU (1) 17.37M Diameter Solids Contact Clarifier Engineer: GHD
2016	Rantoul, KS (1) 45' Diameter Solids Contact Clarifier Design Build: Garney Construction
2016	Mesa, AZ (2) 22' Sq. Shaft Clarifier Engineer: Kruger



Installation List

<u>PO Year</u>	<u>Job Name/Location/Equipment type</u>
2017	City of Peshtigo (1) 40' Diameter Gravity Thickener Engineer: Robert E Lee & Associates
2017	UOSA, VA (3) 125' Diameter Primary Clarifiers (3) 40' Diameter Gravity Thickeners (1) 75' Diameter Gravity Thickener Engineer: CH2M Hill
2017	Western Treatment Plant – Melbourne, AU (4) 45M Diameter Spiral Blade Secondary Clarifiers Engineer: JACOBS
2017	Village of Layfayette, OH (2) 20' Shaft Drive Clarifiers Engineer: Poggemeyer Design Group, Inc.
2017	Town of Newmarket, NH (2) 35' Diameter Primary Clarifiers Engineer: Wright - Pierce
2017	Bass Lake WWTP, CA (2) 28' Diameter Suction Header Clarifiers (2) Knock Down Tanks (2) Sets Tank Partitions Engineer: Carollo
2017	Frito Lay WWTP, MD (1) 33.77' Diameter Spiral Blade Clarifier Engineer: Pharmer Engineering
2017	Duke Energy Plant Rogers, Mooresboro, NC (2) 45' Diameter Thickeners Engineer: Burns & McDonnell
2017	Struthers WWTP, Struthers, OH (2) 62' Diameter Primary Clarifiers Engineer: MS Consultants, Inc.
2017	City of Concordia, KS (1) 55' Diameter Secondary Clarifier Engineer: Professional Engineering Consultants, P.A.



Installation List

<u>PO Year</u>	<u>Job Name/Location/Equipment type</u>
2017	City of Potterville WWTF, Potterville, MI One (1) 85' Diameter Primary Clarifier One (1) Set FRP Weirs, Troughs, and Scum Baffles Engineer: Williams & Works
2017	City of Branson, MO (2) 80' Diameter Suction Header Clarifiers Engineer: Black & Veatch
2017	Melbourne Water Nutrient Removal Plant, Australia (4) 45M Diameter Spiral Blade Secondary Clarifiers Engineer: CPB / UGL / Jacobs
2017	Edmonton WWTP, Alberta Canada (1) 30M Diameter Rim Drive Spiral Clarifier Engineer: Jacobs Group
2017	Priest River WRRF, Priest River, ID (2) 30' Diameter Spiral Blade Clarifiers Engineer: Mountain Waterworks
2017	James Hardie Building Products, Tacoma, WA (1) 30' Diameter Clarifier Engineer: None
2017	James Hardie Building Products, Mission Viejo, CA (1) 30' Diameter Clarifier Engineer: None
2017	City of Gulf Shores, Gulf Shores, AL (2) 75' Diameter Suction Header Clarifiers Engineer: McMillan Engineering Services
2017	Milford, MA (2) 28' Diameter Gravity Thickeners Engineer: Tata & Howard
2017	Village of Denmark, WI - DBS (2) 30' Diameter Clarifiers Engineer: None



Installation List

<u>PO Year</u>	<u>Job Name/Location/Equipment type</u>
2017	Clear Lake Oaks WWTP, CA (1) 65' Diameter Spiral Blade Secondary Clarifier Engineer: MC-Engineering
2017	Kubota Financial Center (1) 28' Package Plant Engineer: MindWater, Inc.
2017	Tin Can Hollow WTP, Jefferson, PA (2) Suction Troughs Sludge Removal Equipment Engineer: Rice Water Services
2017	City of Palo Alto, CA. (1) 120' Square Suction Pipe Clarifier (1) 120' Diameter Suction Header Clarifier Engineer: Jenks & Adamson
2017	Southern Company Plant Bowen: Cartersville, GA (2) 38' Diameter Solids Contact Clarifiers Engineer: Veolia
2017	Hickory Run Energy Station, North Beaver Township, PA (1) 50' Diameter Thickener Mechanism Engineer: Veolia
2017	Domtar Paper Company LLC. Rothschild, WI (1) 120' Clarifier Study Engineer: None
2017	Seminole WWTP, Seminole, OK (1) 75" Suction Pipe Clarifier Engineer: ABT
2017	Suisun-Solano Water Authority, Vacaville, CA Cement Hill Water Treatment Plant (1) 72' Diameter Solids Contact Clarifier Engineer: Direct Bid
2017	Southeastern Berrien County Landfill WWTP, Niles, MI (1) ClearFlo Sequencing Batch Reactor Complete Systems Engineer: Gosling Czubak Engineering Services, Inc.



Installation List

<u>PO Year</u>	<u>Job Name/Location/Equipment type</u>
2017	Shire of East Pilbara Newman WWTP, Australia (1) 18.3M Diameter Rim Drive Suction Header Clarifier Engineer: None
2018	Struthers Ohio WTP Struthers OH (3) 37.5' Diameter Solids Contact Clarifiers Engineer: AQUA
2018	Lenoir WTP, Granite Falls, NC (2) 17'-6" Square Thickener Mechanisms Engineer: Kruger
2018	Paw Paw Lake Regional Joint Sewage Disposal Board (2) 60' Diameter Spiral Blade Clarifiers Engineer: Jones & Henry Engineers, Ltd.
2018	Marine Harvest, Kyleakin Scotland (1) 6.5M Diameter Secondary Clarifier Engineer: Wastewater Technologies, LLC
2018	Domtar Paper Company, LLC. Roghschild, WI (1) 120' Primary Scraper Blade Clarifier Engineer: None
2018	Village of New Lexington WWTP; New Lexington, OH (2) 46' Spiral Blade Clarifiers Engineer: Poggemeyer Design Group, Inc.
2018	St. Charles, LA (1) 20.7' Diameter Thickener Engineer: Veolia
2018	Cooper Creek WWTF; Branson, MO (2) 80' Suction Header Clarifier Engineer: Burns & McDonnell
2018	Advance Disposal Landfill; Newburg, PA (1) 36'-4 3/8" Diameter Thickener Mechanism (1) lot Field Installation
2018	Haikey Creek WWTP; Broken Arrow, OK (2) 60' Diameter Thickener Mechanisms Engineer: None



Installation List

<u>PO Year</u>	<u>Job Name/Location/Equipment type</u>
2018	Little Rock Adams Field WRF, Little Rock, AR (3) 145' Diameter Spiral Blade Secondary Clarifiers Engineer: Black & Veatch and Hawkins Weir Joint Project
2018	Effluent Treatment Plant; New Glasgow Canada (1) 56M Diameter Primary Scraper Clarifier (2) 56M Diameter Secondary Suction Header Clarifiers Engineer: Veolia
2018	East Bank WWTP Clarifier #8; New Orleans, LA. (1) 164' Diameter Secondary Suction Pipe Clarifier Engineer: None
2018	Pequannock Newark NJ (1) 40' Diameter Shaft Drive Thickener (1) 40' Diameter Steel Knock Down Tank Engineer: Hatch Mott MacDonald
2018	JamesHardie JH Building Products Sparks, NV (1) Clarifier Rake Mechanism Engineer: None
2018	FRC / JWC Environmental, LLC. Jamaica (1) 34' Diameter Shaft Drive Clarifier Mechanism Engineer: None, OEM Account
2018	Gardner, MA. WWTF (2) 25' Diameter Shaft Drive Gravity Thickeners Engineer: Wright-Pierce
2018	Rialto WWTP, Rialto, CA. (1) 95' Primary Spiral Blade Clarifier (1) 100' Secondary Spiral Blade Clarifier Engineer: AECOM / W.M. Lyles Co. Joint Venture
2018	Northern Adelaide Irrigation Systems, Adelaide, Australia (1) 9M Diameter Thickener Mechanism (1) 11M Mixer Support Walkway and Access Platform Engineer: Liquitek Pty, Ltd.
2018	JamesHardie JH Building Products Prattville, AL Plant (1) 30' Diameter Cone Rake Thickener Engineer: None, OEM Account



Installation List

<u>PO Year</u>	<u>Job Name/Location/Equipment type</u>
2018	City of Albany WWTP Albany, OH (2) 16' Diameter Shaft Drive Clarifiers Engineer: STANTEC
2018	Southern Company Plant Bowen: Cartersville, GA (1) 38' Diameter Solids Contact Clarifiers Engineer: Veolia
2018	Materne North America: Traverse City, MI (1) ClearFlo SBNR Process Plant Engineer: Gosling Czubak Engineering Sciences, Inc.
2018	City of Torrington, CT.: Torrington, CT. (2) 20'-3" Square Thickeners Engineer: Kruger
2018	City of Lakewood WWTP: Lakewood OH. (2) 18'-3" Square Thickeners Engineer: Kruger
2018	City of Lancaster WWTP: Lancaster, OH (2) 25' Diameter Secondary Clarifiers Engineer: Burgess & Niple, Inc.
2018	City of Martinsville WWTP, Ridgeway, VA (2) 40' Diameter Chlorine Contact Clarifier Engineer: City Direct Purchase
2019	Suisun-Solano Water Authority: Cement Hills WTP, Fairfield, CA (2) 55' Diameter Solids Contact Clarifiers Engineer: Kjeldsen, Sinnock, Neudeck, (KSN), Inc.
2019	Pequannock RTF: Gualala, CA (1) 28' Cage Drive Clarifier Direct Purchase
2019	Entergy, Lake Charles, LA (1) 26' Clarifier Mechanism (1) 26' Knock Down Anchor Channel Tank Engineer: Veolia



Installation List

<u>PO Year</u>	<u>Job Name/Location/Equipment type</u>
2019	Spectrum Meats – Nelson Carlson Mechanical, Mount Morris, IL. (1) 30' Suction Header Clarifier Mechanism Engineer: McMahon Associates, Inc.
2019	Yen Xa, Vietnam (24) 24m Diameter Scraper Final Clarifiers Hanoi Department of Construction
2019	Michigan Sugar Company – Croswell, MI. (1) 101.01' Diameter Flume Water Clarifier Mechanism (1) 101.01 Diameter Bolted Tank (1) Concrete Foundation Design (1) lot Field Installation Engineer: Direct Purchase
2019	Kennebec Sanitary Treatment District, Waterville, ME. (2) 30' Dia. Gravity Thickeners Engineer: Wright – Pierce
2019	Kruger (Veolia) French Broad WRF, Ashville, NC (2) 24.5' Square Clarifiers Engineer: CDM Smith
2019	City of Leavenworth, KS Field Repair of Primary Clarifier #3 and Final Clarifier #1 Engineer: None
2019	City of Salina Kansas WTP (2) 40' SC Lime / Soda Ash Softening Clarifiers Engineer: Burns & McDonnell
2019	Hall Street WWTF Primary Clarifier Upgrade, Concord, NH (2) 95'-0" Primary Clarifiers Engineer: Wright-Pierce
2019	Dutchman's Creek WWTP, Mocksville, NC (2) 60'-0" Diameter Scraper Clarifiers Engineer: Willis Engineers
2019	Trumbull County / Mosquito Creek WWTP, Warren, OH. (3) 78'-0" Diameter Suction Header Clarifiers (2) 86'-0" Diameter Spiral Blade Clarifiers (1) 44'-0" Diameter Gravity Sludge Thickeners Engineer: CT Consultants



Installation List

<u>PO Year</u>	<u>Job Name/Location/Equipment type</u>
2019	Oxnard WWTP Emergency Repairs, Oxnard, CA. (2) Replacement Walkways for Clarifiers Engineer: AECOM / KEH & Associates
2019	Terre Haute II, IN. (1) 17' X 17' Square Clarifier (ACTIFLO) Engineer: Kruger (Veolia)
2019	Icon Water Googong WTP Clarifier System Renewal, Williamsdale, ACD, Australia (4) 27m X 27m X 5m Solids Contact Clarifiers Engineer: JACOBS Australia / Liquitek Pty, Ltd.
2019	Clinton WWTP Clarifier Refurbishment, Clinton, OK (1) 80'-0" Diameter Suction Header Clarifier Engineer: City of Clinton
2019	City of Portsmouth PEASE WWTP, Portsmouth, NH. (2) 40'-0" Diameter Primary Clarifiers Engineer: Stantec
2019	Western Sugar Project, Fort Morgan, CO. (1) 72'-0" Segmented Blade Clarifier and Installation Engineer: Veolia Water Technologies
2019	Bateau Bay WWTP Clarifier Number 3, New South Wales, Australia (1) 24m Diameter Rim Drive Spiral Blade Clarifier Engineer: Central Coast Council / Liquitek Pty, Ltd.

Project Organization and Key Personnel

ClearStream Environmental, Inc.

Larry DeBirk, Owner

Brent Petersen, Head of Operations

Mike DeBirk, Senior Project Manager

Insurance Certifications

ClearStream Environmental, Inc.

North Coast Fabrication



CLEAENV-01

JILLW

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

10/9/2019

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Universal Business Insurance, Inc. P.O. Box 709210 Sandy, UT 84070	CONTACT NAME: Jill Wolfslau	
	PHONE (A/C, No, Ext): (801) 984-6064 FAX (A/C, No):	
	E-MAIL ADDRESS: jillw@ubinsurance.com	
	INSURER(S) AFFORDING COVERAGE	NAIC #
	INSURER A : Colony Insurance	
INSURED Clearstream Environmental, Inc 9547 South 500 West Sandy, UT 84070	INSURER B : American Hallmark	43494
	INSURER C : Utah Business Insurance Comp.	12520
	INSURER D :	
	INSURER E :	
	INSURER F :	

COVERAGES

CERTIFICATE NUMBER:

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PROJECT <input type="checkbox"/> LOC OTHER:			PACEM4223172	9/26/2019	9/26/2020	EACH OCCURRENCE \$ 1,000,000
							DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 100,000
							MED EXP (Any one person) \$ 5,000
							PERSONAL & ADV INJURY \$ 1,000,000
	GENERAL AGGREGATE \$ 2,000,000						
	PRODUCTS - COMP/OP AGG \$ 2,000,000						
							\$
B	<input checked="" type="checkbox"/> AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS ONLY <input type="checkbox"/> NON-OWNED AUTOS ONLY			44CL493973	8/25/2019	8/25/2020	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000
							BODILY INJURY (Per person) \$
							BODILY INJURY (Per accident) \$
							PROPERTY DAMAGE (Per accident) \$
							\$
A	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED <input checked="" type="checkbox"/> RETENTION \$ 0			EXC4223173	9/26/2019	9/26/2020	EACH OCCURRENCE \$ 3,000,000
							AGGREGATE \$ 3,000,000
							\$
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? <input type="checkbox"/> Y / N <input checked="" type="checkbox"/> N / A (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below			WC0015302019A	8/25/2019	8/25/2020	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER
							E.L. EACH ACCIDENT \$ 1,000,000
							E.L. DISEASE - EA EMPLOYEE \$ 1,000,000
							E.L. DISEASE - POLICY LIMIT \$ 1,000,000
A	Pollution Liability			PACEM4223172	9/26/2019	9/26/2020	1,000,000
A	Professional Liab			PACEM4223172	9/26/2019	9/26/2020	1,000,000

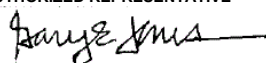
DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Contractors Environmental Liability Coverage
\$1,000,000 Contractors Pollution Liability
\$1,000,000 Transportation Pollution Liability
\$1,000,000 Short-Term Environmental Premises Liability
\$ 5,000 Deductible Each Pollution Condition

\$1,000,000 Non-Owned Disposal Site Liability
SEE ATTACHED ACORD 101

CERTIFICATE HOLDER

CANCELLATION

Clearstream Environmental Inc. 9547 S 500 W Sandy, UT 84070	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE 



ADDITIONAL REMARKS SCHEDULE

AGENCY Universal Business Insurance, Inc.		NAMED INSURED Clearstream Environmental, Inc 9547 South 500 West Sandy, UT 84070
POLICY NUMBER SEE PAGE 1		
CARRIER SEE PAGE 1	NAIC CODE SEE P 1	EFFECTIVE DATE: SEE PAGE 1

ADDITIONAL REMARKS

THIS ADDITIONAL REMARKS FORM IS A SCHEDULE TO ACORD FORM,
FORM NUMBER: ACORD 25 FORM TITLE: Certificate of Liability Insurance

Description of Operations/Locations/Vehicles:
\$ 10,000 Deductible Each Pollution Condition
Retroactive Date: 09/26/2015

Professional Services Liability
\$1,000,000 Each Professional Services Wrongful Act
\$ 5,000 Deductible Each Claim
Retoractive Date: 09/25/2009

Products Pollution Liability
\$1,000,000 Each Pollution Condition
\$ 5,000 Deductible Each Pollution Condition



***SUPPLIER CLEARINGHOUSE
CERTIFICATE OF ELIGIBILITY***

CERTIFICATION EXPIRATION DATE: **August 6, 2021**

The Supplier Clearinghouse for the Utility Supplier Diversity Program of the California Public Utilities Commission hereby certifies that it has audited and verified the eligibility of:

***Aquatic Designing, Inc. DBA North Coast Fabricators
Women Business Enterprise (WBE)***

pursuant to Commission General Order 156, and the terms and conditions stipulated in the Verification Application Package. This Certificate shall be valid only with the Clearinghouse seal affixed hereto.

Eligibility must be maintained at all times, and renewed within 30 days of any changes in ownership or control. Failure to comply may result in a denial of eligibility. The Clearinghouse may reconsider certification if it is determined that such status was obtained by false, misleading or incorrect information. Decertification may occur if any verification criterion under which eligibility was awarded later becomes invalid due to Commission ruling. The Clearinghouse may request additional information or conduct on-site visits during the term of verification to verify eligibility.

This certification is valid only for the period that the above firm remains eligible as determined by the Clearinghouse. Utility companies may direct inquiries concerning this Certificate to the Clearinghouse at (800) 359-7998 in Los Angeles.

VON: 9GS00185

DETERMINATION DATE: August 6, 2018

BUSINESS TAX CERTIFICATE

The person, firm or corporation named below is granted this certificate pursuant to the provisions of the City Business Tax Ordinance to engage in, carry on or conduct the business, trade, calling, profession, exhibition or occupation described below. Issuance of certificate is not an endorsement, nor certification of compliance with other ordinances or laws, building codes, public health, county, state or federal governments, nor an assurance that the proposed use is in conformance with the city zoning regulations. This certificate is issued without verification that the taxpayer is subject to or exempt from licensing by the State of California.

BUSINESS NAME: Aquatic Designing Inc

BUSINESS LOCATION: 4801 West End
Arcata, CA 95521

BUSINESS OWNER: Paula Crowley

AQUATIC DESIGNING INC
4801 WEST END RD
ARCATA, CA 95521

CITY OF ARCATA

736 "F" Street
Arcata, California 95521
(707) 822-5951

DESCRIPTION: STEEL FABRICATION

ZONE CODE: J-1

Certificate No.:	0611
Effective Date:	May 23, 2019
Expiration Date:	June 30, 2020

Base Fee:	\$ 364.00
Delinquent Amount:	\$ 0.00
Total Paid:	\$ 364.00

MUST BE POSTED IN A CONSPICUOUS PLACE

NOT TRANSFERABLE OR ASSIGNABLE



NORTCOA-24

LSHEELY

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

8/30/2019

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER George Petersen Insurance Agency, Inc. P.O. Box 1227 Eureka, CA 95502	CONTACT NAME:	
	PHONE (A/C, No, Ext): (707) 442-2971	FAX (A/C, No): (707) 442-7281
INSURED Aquatic Designing, Inc. North Coast Fabricators 4801 West End Road Arcata, CA 95521-0000	E-MAIL ADDRESS: info@gpins.com	
	INSURER(S) AFFORDING COVERAGE	
	INSURER A: Nautilus Insurance Company	
	INSURER B: Great Divide Insurance Company	
	INSURER C: Axis Surplus Insurance Co	
	INSURER D: State Compensation Insurance Fund	
	INSURER E: Nova Casualty Co.	
INSURER F: Markel American Insurance Company		
NAIC #		
17370		
35076		
28932		

COVERAGES

CERTIFICATE NUMBER:

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL SUBR INSD WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> Pollution 1mil GEN'L AGGREGATE LIMIT APPLIES PER: <input checked="" type="checkbox"/> POLICY <input type="checkbox"/> PROJECT <input type="checkbox"/> LOC OTHER:		ECP2019221-13	8/26/2019	8/26/2020	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 100,000 MED EXP (Any one person) \$ 5,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMP/OP AGG \$ 2,000,000 EMPLOYEE BENEFIT \$ 1,000,000
B	AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS ONLY <input type="checkbox"/> NON-OWNED AUTOS ONLY		BAP2019222-13	8/26/2019	8/26/2020	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
C	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED RETENTION \$		P00100021542001	8/26/2019	8/26/2020	EACH OCCURRENCE \$ 4,000,000 AGGREGATE \$ Pr & COs Agg \$ 4,000,000
D	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N Y N/A	1844648-19	4/1/2019	4/1/2020	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000
E	Business Automobile		JCSML1000022402	8/26/2019	8/26/2020	Scheduled Cranes
F	Equipment Floater		MKLM4IM0050406	11/20/2018	11/20/2019	deductible varies

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
Certificate is issued as Proof of Insurance

CERTIFICATE HOLDER

CANCELLATION

Aquatic Designing, Inc.
DBA: North Coast Fabricators
4801 West End Road
Arcata, CA 95521

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE



CONTRACTORS STATE LICENSE BOARD

Pursuant to Chapter 9 of Division 3 of the Business and Professions Code
and the Rules and Regulations of the Contractors State License Board,
the Registrar of Contractors does hereby issue this license to:

AQUATIC DESIGNING INC DBA NORTH COAST FABRICATORS

License Number 883082

to engage in the business or act in the capacity of a contractor in the following classification(s):

ASB - ASBESTOS
C21 - BUILDING MOVING, DEMOLITION

Witness my hand and seal this day,
July 29, 2014

Issued August 22, 2006

Joan M. Hancock

Joan M. Hancock, Board Chair

Stephen P. Sands

Stephen P. Sands, Registrar of Contractors

This license is the property of the Registrar of Contractors,
is not transferable, and shall be returned to the Registrar
upon demand when suspended, revoked, or invalidated
for any reason. It becomes void if not renewed.



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License Number 883082

to engage in the business or act in the capacity of a contractor in the following classification(s):

C51 - STEEL, STRUCTURAL
B - GENERAL BUILDING CONTRACTOR
A - GENERAL ENGINEERING CONTRACTOR
HAZ - HAZARDOUS SUBSTANCES REMOVAL

Witness my hand and seal this day,

July 29, 2014

Issued August 22, 2006

Joan M. Hancock

Joan M. Hancock, Board Chair

Stephen P. Sands

Stephen P. Sands, Registrar of Contractors

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Quotation Review Comments

Reference: 017138	Date: 10/14/2019 1:22 PM
Project: Scotia WWTP Clarifier Repair	
Owner: Scotia Community Services District	
Prime Contractor: Clearstream Environmental Inc.	

Submittal No.: 1
Specification Section/Plans: Quotation

Comments:	
1. Clarify what this means: "installation of new drive unit to walkway..."	Bolt drive to Walkway. See Proposal
2. 2 training trips to be included in Quotation.	Included. See Proposal Rev C
3. Provide stainless-steel control box mounting hardware.	Included
4. Provide References.	Installation List was included. added Northern Cal contacts.
5. Provide insurance certifications.	North Coast Fabrication Certs are added.