



TOWN OF GREENWICH

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March 29, 2016

**** ADDENDUM 5****

TOWN OF GREENWICH, CT

REQUEST FOR BID #7206 DEADLINE: 4/5/16 AT 3:00 PM

BYRAM PARK POOL REPLACEMENT PROJECT

Revisions to Drawings and Specifications

- A. Replace Cover Sheet with new Cover Sheet dated 3/24/2016, attached.
- B. Replace Index Plan, ID1.00 with new drawing ID1.00 dated 3/24/2016, attached
- C. Replace Drawing M10.4, revision dated 3/24/2016, attached.
- D. Add Drawing M10.5 dated 3/7/2016, attached.
- E. Add Drawing M10.6 dated 3/7/2016, attached.
- F. Add Drawing M10.7 dated 3/7/2016, attached.
- G. Add Drawing M10.8 dated 3/7/2016, attached.
- H. Add Specification Section 09900, Pumping Station Painting.
- I. Edit Specification Section 11304, Submersible Wastewater Pumping Equipment:
 - a.) Paragraph 2.14.E: Replace "chain" with "wire rope" and add after the last sentence "the wire rope construction shall be 7 x 9 type 304 stainless steel cables. The end shall be equipped with a swage ball. Swage balls shall be type 304 stainless steel. Provide wire rope hook assemblies for each pump assembly and wire rope hanging brackets to mount pump cables to structure. Brackets shall be 316 stainless steel. Coordinate length and swage ball type with Portable Davit Crane System manufacturer.
- J. Edit Specification Section 15109, Portable Davit Crane System:
 - a.) Paragraph 2.05, Wire Rope: Delete paragraph in its entirety.

Question 1: I see details for both sand bedding and concrete encasement of conduits on drawing E2.01 but I do not see any locations where these details apply. Are all conduits backfilled with sand?

Answer #1: All utility conduits as well as all conduits run under roadways shall be concrete encased. All other conduits shall be direct buried.

Question 2: Wall Hydrants are identified in specifications; no locations are shown on buildings

Answer 2: Wall hydrants, hose bibs are not required.

Question 3: Seismic Restraints, Section 15400-19-30. A Very detailed design requirements and insurance for design. Section 15400-22 requires EE&O insurance of 500k on seismic design. Please confirm.

Answer 3: The seismic requirement is part of the design.

Question 4: Is the makeup air unit gas? If it is there is, no riser to it on the gas drawing. Please advise.

Answer 4: The unit has no heat.

Question 5: Drawing E4.00 shows only transformers t3, t3a, and t4 being used. Where are transformers t1, t2, t5, t6?

Answer 5: This is a standard transformer schedule and is not intended to indicate that all sizes are utilized.

Question 6: What are the specifications regarding the backed bench shown on Detail 4, Sheet L4.02.

Answer 6: Manufacturer: Victor Stanley, Inc., Type: Production Series PRS 127 – 6' Length, Color: Green. Finish: Steel shot blasted, etches, phosphatized, preheated, and electrostatically powder coated with T.G.I.C. polyester powder coated. It is not recommended to located anchor bolts until bench is in place. Product must be permanently affixed to the ground. Consult the local codes for regulations. Anchor bolts not provided by manufacturer. Place anchor bolts through ½" dia. hole drill into paving using a carbide bit. Fasten anchor snug against site furniture. Installation to be completed in accordance with manufacturers specifications.

Question 7: Print E3.03 shows 4 vfd - 3hp ,3hp,15hp,and 7.5hp while the line diagram shows 15hp and 7.5 HP VFD and they are not on the panel PPH-1 for breakers.

Answer 7: The 7.5 and 17 HP pumps are 480 volt. The two 3 HP pumps are 240v and wired to the PPL panel and therefore do not show on the power line diagram.

Question 8: Drawing E3.03 (uv system note) A 2-1/4" conduit runs from each panel to respective uv field device which goes to which panel and power cable and control cable we provide. Need info for these cables and connectors.

Answer 8: The conductor is a multi-conductor cable furnished with the UV system. The cable should fit into a 1 1/4" conduit without a problem. The note was intended to ensure coordination of conduit size prior to conduit installation.

Question 9: Line drawing on E4.00 shows only 2 VFD's whereas E3.03 shows 4? There are no breakers or other forms of disconnect for the VFD or motors.

Answer 9: Breakers are located in the feeding panel boards protecting the circuit. The VFD's are specified in section 15495 as part of the pump equipment package. These units are specified to include factory installed disconnects meets the disconnecting requirement.

Question 10: Primary power, secondary, telephone, conduits conflicting notes on Details, drawing E2.01 called out as schedule 80 PVC (typical direct buried conduit details) Section "A-A" calls for primary and secondary conduits to be 4" rigid galvanized steel.

Answer 10: PVC Schedule 80 shall be used throughout the site for both concrete and sand encased conduit runs.

Question 11: Is wiring method for the Filter Room to be PVC conduit or rigid metallic conduit?

Answer 11: PVC conduit will be acceptable. Contractor shall transition to rigid conduit were required for connection to equipment.

All other terms and conditions remain unchanged.

James Giarraputo Latham, CPPB
Senior Buyer

JGL:am

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Indicates specification was added/revised per Addendum #1 and #5

END OF SECTION

SECTION 09900

PUMPING STATION PAINTING

PART 1 - GENERAL

1.01 WORK INCLUDED:

- A. This Section covers field painting and coating of surfaces, complete. Shop painting of metal items is specified under the applicable item.
- B. A schedule listing the various types of surfaces to be painted and the types of paints to be applied is included herein.
- C. Unless otherwise indicated, the following items shall not be painted:
 - 1. Labels on equipment, such as Underwriters' Laboratories and Factory Mutual, equipment identification, performance rating, and name or nomenclature plates.
 - 2. Moving parts of operating units, exposed bolt threads, mechanical and electrical parts, such as valve and damper operators, linkages, sensing devices, motor and fan shafts.
 - 3. Electrical conduit unless mounted on painted or finished surfaces or exposed in a finished room.
 - 4. Structural steel not exposed to view, and other parts of buildings also not exposed to view.
 - 5. Stainless steel.
 - 6. Concrete.
 - 7. Plumbing fixtures.
 - 8. Fiberglass and polyethylene storage tanks.
 - 9. Uninsulated PVC piping (to be banded only)
 - * 10. Factory prefinished architectural components.
 - * 11. Electrical panels and cabinets factory finish painted.

* Except for touch-up painting when required

1.02 SYSTEM DESCRIPTION:

- A. The term "paint" as used herein includes emulsions, enamels, paints, stains, varnishes, sealers, and other coatings, organic or inorganic, whether used as prime, intermediate, or finish coats.
- B. The Contractor shall do a complete painting job throughout the work in accordance with generally approved modern practices for work of high quality. Unless otherwise specified, all materials and surfaces customarily painted shall be given not less than one shop coat and two field coats or one prime coat and two finish coats, regardless of whether or not the surface to be painted is specifically mentioned.
- C. Paints containing lead shall not be used.
- D. To ensure a satisfactory painting job it is essential that the paints applied in the shop and in the field be mutually compatible. The Contractor shall determine what shop paints have been used and shall verify that field applied paints are compatible therewith.
- E. The colors of finish coatings shall be selected by the Engineer from color chips submitted by the Contractor for review. The color selection shall be in the form of a schedule indicating the colors to be used on the various surfaces. The colors used in the final work shall be in accordance with the color schedule and shall match the selected color chips.
- F. All coating systems used for potable water applications shall be previously approved by the National Sanitation Foundation (N.S.F.) in accordance with Standard 61. Evidence of such approval shall be an approval letter from N.S.F. listing the submitted materials.
- G. Paints submitted shall meet all Federal and State E.P.A. regulations pertaining to volatile organic compounds (VOC) compliance.

1.03 REFERENCES:

- A. The following standards form a part of these specifications, and indicate the minimum standards required:

American Society for Testing and Materials (ASTM)

ASTM F1869 Moisture Vapor Emission Rate Using Anhydrous Calcium Chloride

1.04 SUBMITTALS: IN ACCORDANCE WITH REQUIREMENTS OF GENERAL CONDITIONS, SUBMIT THE FOLLOWING:

- A. Six (6) sets of manufacturer's literature of proposed paints shall be submitted to the Engineer for review.

- B. Six (6) sets of the painting schedule shall be submitted to the Engineer for review.
- C. Three (3) sets of color chips shall be submitted to the Engineer for selection of colors.

1.05 DELIVERY AND STORAGE:

- A. Paint shall be delivered to the site in the manufacturer's sealed containers. Each container shall bear the manufacturer's label, listing the brand name, type and color of paint, and instructions for thinning. Thinning shall be done only in accordance with directions of the manufacturer. Job mixing or job tinting may be done when approved by the Engineer and for preparing sample colors.
- B. Painting materials shall be stored and mixed in a single location designated by the Engineer for this purpose. The Contractor shall not use any plumbing fixture or pipe for mixing or for disposal of any refuse. He shall carry all necessary water to his mixing room, and shall dispose of all waste outside of the building in a suitable receptacle. The Contractor will be held responsible for any damage done due to failure to observe these precautions.
- C. The paint storage area shall be kept clean at all times, and any damage thereto or to its surroundings shall be repaired. Any oily rags, waste, etc., shall be removed from the building every night, and every precaution shall be taken to avoid danger of fire.
- D. Heat must be provided in the storage area if paints are to be stored during winter months. The temperature shall be maintained above 40 degrees F. at all times.

PART 2 - PRODUCTS

2.01 MATERIALS:

A. PAINT SCHEDULE:

Except as otherwise indicated, all paint used shall be of the type listed in the schedule below, by Tnemec Company, Inc., or equivalent paints by Sherwin-Williams Company, International Paints, or other approved paint fully equal to paint manufactured by the above named companies. No brand other than those named will be considered for approval unless the brand and type of paint proposed for each item in the following painting schedule are submitted in writing to the Engineer, along with sufficient data supported by certified tests.

PAINT SCHEDULE

<u>Key</u>		<u>Tnemec</u>	<u>Note 1</u>
AGE	Acryli Gloss Enamel	1029 Enduratone	3.5
APE	Acrylic Polyurethane	73 Endura-Shield Enamel	3.0
ABF	Cementitious Block Filler	130 Envirofill	80-100 s.f./gal
BO	Bleaching Oil	Note 5	
CEE	Catalyzed Epoxy	L69F Epoxoline II	4.0
CEM	Catalyzed Epoxy Mastic	27 WB Typoxy	Note 3
CEP	Catalyzed Epoxy Primer	L69F Epoxoline	3.0
EMC	Epoxy Modified Cement	218 Mortar-Clad	Fill/Surface
EP	Epoxy-Polyamide (thinned 30% #4 thinner)	FC 22 Pota-pox	25-30
EPW	Water-based Epoxy Primer	151 Elasto-Grip	1.0-1.5
HGV	High Gloss Varnish		Note 2
HSE	High Solids Epoxy (Minimum 69%)	L69 Epoxy	6.0
MA	Modified Acrylic	115 Uni-bond	3.0
MAE	Modified Acrylic Elastomer	156 Envirocrete	6.0-8.0
MCU	Moisture Cured Urethane	Series 1 - Omnithane	2.5-3.0
MPE	Modified Polyamine Epoxy	Series 435 - Permaglaze	15-20 mils
NE	Novolac Epoxy	282 Tneme-Glaze	7.5
PEF	Polyamine Epoxy Finish	280 Tneme-Glaze	6.0-8.0
PEP	Polyamine Epoxy Primer	201 Epoxoprime	6.0-8.0
PVA	PVA Sealer	151 Elasto Grip	0.75-1.5
PWC	Potable Water Coating	Series FC 22 Pota Pox	25-30
SA	Silicone Aluminum	39-1261 (Note 4)	1.5
VB	Vapor Barrier	262 Elasto Shield	50-100
WP	Wood Primer	151 Elasto-Grip	1.0-1.5

<u>Key</u>		<u>Tnemec</u>	<u>Note 1</u>
WS	Wood Sealer	Note 2	-
Z	Zinc-Rich Primer	90G-1K97 Tneme-Zinc	2.5

- Notes
- 1: Minimum Dry Film Thickness/Coat (mils)
 - 2: Furnished by reputable manufacturer and acceptable to the Engineer.
 - 3: Shall be used as a tie-coat between incompatible paints @ 3.0-4.0 mils.
 - 4: This paint is suitable for temperatures up to 1200°F and must be final cured at 400°F for one hour.
 - 5: Bleaching oil is a translucent gray paint stain with a chemical additive to enhance the natural bleaching tendencies of cedar shingles.

B. PAINTING SCHEDULE:

Paint shall be applied in accordance with the paint key listed on the following schedule and defined in the preceding Paint Schedule:

<u>Item</u>	<u>Field Coats</u>		
	1st	2nd	3 rd
<u>Walls:</u>			
Interior concrete masonry units	ABF	HSE	HSE
Interior concrete designated to be painted, to include top and outside of all concrete containment curbs	HSE	HSE	--
Interior chemical containment curbs on the chemical storage side	PEP	NE	NE
Exterior concrete masonry units (if sprayed, backroll first coat)***	MAE	MAE	--
Exterior wood shingles	BO	BO	--
Plaster & gypsum wallboard	PVA	HSE	HSE
<u>Floors:</u>			
Concrete floors designated to be painted	PEP	PEF	PEF
Concrete floor slab in chemical containment areas including tank pads	PEP	NE	NE
Concrete floor and pads in chemical feed and fluoride rooms	PEP	NE	NE
<u>Ceilings and Walls:</u>			
Exposed galvanized metal deck/bar joists, dry spaces^	MA	--	--
Exposed galvanized metal deck/bar joists, wet spaces^	CEE		

<u>Item</u>	<u>Field Coats</u>		
	1st	2nd	3 rd
Exposed galvanized wall panel	CEE	CEE	--
Plaster & gypsum wallboard	PVA	CEE	CEE
<u>Equipment Items:</u>			
With shop prime coat, including machinery	*CEP	CEE	--
Interior	*CEP	APE	
and pumps (non-submerged)	Exterior MPE	MPE	
(submerged)	Exterior		
With shop finish coat (when designated to	*CEM	CEE	--
Interior be painted)	Exterior *CEM	APE	
<u>Tanks:</u>			
Steel tanks (interior)	*MCU	CEE	CEE
Steel tanks (exterior)	*MCU	CEE	APE
Exterior of potassium permanganate (KMnO ₄) tanks (steel only)(with CEP shop coat)	HSE	HSE	--
Interior of potassium permanganate tanks	NE	NE	
<u>Potable Water Coatings (immersion service):</u>			
Concrete Tanks (when designated to be brush blasted and painted)	EMC	PWC	
Steel Tanks (SSPC-SP#10 prep. required)	PWC	PWC	--
<u>Metals:</u>			
Exposed interior structural steel including monorails and supports	*Z	CEE	CEE
Exposed exterior structural steel including monorails and supports	*Z	CEE	APE
Interior miscellaneous galvanized and non-ferrous metals and piping	CEE	CEE	--
Exterior miscellaneous galvanized and non ferrous metals and piping (SP7 required)	CEE	APE	--
Miscellaneous interior ferrous piping, metalwork, ferrous parts or operating devices, valve handles, levers, pumps, and ferrous hangers and supports (exterior exposure)	CEP	CEE	--
	CEP	CEE	APE
Exposed electrical conduit, conduit fittings, outlet boxes	Same as adjacent wall or ceiling		

<u>Item</u>	<u>Field Coats</u>		
	1st	2nd	3 rd
Hot ferrous metal surface	SA	SA	--
<u>Wood and Carpentry Items:</u>			
Wood trim (natural finish)	WS	HG V	HGV
Wood trim (unprimed)	WP	AGE	AGE
<u>Doors and Frames:</u>			
Interior hollow metal doors, frames and panels	AGE	AGE	--
Exterior hollow metal doors	AGE	AGE	--
Interior wood doors (painted)	WP	AGE	AGE
Interior wood doors (natural)	HGV	HG V	--
<u>Piping:</u>			
PVC Piping designated to be painted (SP7 or hand sand)	CEE	CEE	--
Pipe insulation (plastic or metal sheathed paint as scheduled for plastic or metal surface)	PVA	CEE	CEE
Other piping (see metals)			

* Spot Prime

***For existing, painted masonry walls, use EPW primer, followed by two coats of MAE.

^ If galvanized metal is provided with a light top coat sealer, light brush blast surface preparation is required prior to first field coat

B. SPARE PAINT:

1. Furnish to the Owner one unopened gallon of each type and color of paint used on the work.
2. Furnish both components for each type and color of epoxy paints used on the work.

PART 3 - EXECUTION

3.01 SURFACE PREPARATION:

- A. Before any surface is painted, it shall be cleaned carefully of all dust, dirt, grease, loose rust, mill scale, old weathered paint, efflorescence, etc. All necessary special

preparatory treatment shall then be applied. Where required, imperfections and holes in surfaces to be painted shall be filled in an approved manner.

- B. Cleaning and painting shall be so programmed that dust and other contaminants from the cleaning process will not fall on wet, newly painted surfaces.
- C. Surfaces which have been cleaned, pretreated, or otherwise prepared for painting, shall be painted with the first field coat as soon as practicable after such preparation has been completed, but in any event prior to any deterioration of the prepared surface.
- D. Wood shall be sanded to a smooth and even surface and then dusted off. Before priming wood that is to be painted, shellac shall be applied to all knots, pitch and sapwood. After priming or stain coat has been applied, nail holes and cracks shall be thoroughly filled with plastic wood or putty. For natural finish work, putty shall be colored to be imperceptible in the finished work.
- E. Exposed nails and other ferrous metal or surfaces to be painted with water-thinned paint shall be spot primed with aluminum.
- F. Cracks and holes in masonry and concrete surfaces to be painted shall be filled with patching material recommended by the coatings manufacturer. Surfaces shall be clean and dry before painting. All efflorescence, grease, oil, etc., shall be removed before painting, and all loose, crumbling material shall be removed by vigorous wire brushing over entire surface, followed by removal of all dust. All high areas on masonry and concrete surfaces such as mortar daubs, mortar ridges at joints, and ridges at form joints in concrete shall be removed.
- G. All holes in plaster shall be filled with plaster of paris and all cracks shall be cut out and filled. No sandpaper shall be used on plastered surfaces. Prior to painting, surfaces shall be tested with a moisture detecting device, such as Kaydel Plaster Tester, Type CP-48, as manufactured by Hard Moisture Gauges, Inc. No sealer or paint shall be applied when the moisture content of the plaster exceeds 8 percent, as determined by the test. Testing shall be done in the presence of the Engineer's representative, and in as many locations as directed. Plaster shall be thoroughly dry-brushed before painting or sealing.
- H. All nonferrous metal surfaces to be painted shall be cleaned of all dirt, grease, oil and other foreign substances uniformly profiled per SSPC SP 7.
- I. - All galvanized surfaces to be painted shall be brush blasted to create a uniform surface profile per SSPC SP7.
- J. Before application of the first full field coat, abraded areas of all non-galvanized ferrous metal items having shop coats shall be touched up with paint of the type indicated on the Painting Schedule.

- K. All items of equipment such as motors, pumps, instrumentation panels, electrical switchgear, and similar items, that have been given shop coats, paint filler, enamel or other treatment customary with the manufacturer, shall have, after installation, all scratches and blemishes touch up prior to application of the first field coat. Factory prefinished items not to be field painted shall be touched up with matching paint to repair any areas damaged during installation.
- L. All submerged concrete surfaces that are to receive an epoxy coating shall be brush blasted to remove surface laitance and provide a uniform surface profile, reference SSPC SP #13. Surface preparation may commence one week after the concrete has been pronounced cured. The curing period is defined as that length of time during which the concrete is fully hydrated (28 day cure). Patch holes and voids with specified modified epoxy cement prior to coating.
- M. Concrete floors that are to receive epoxy coating shall be brush blasted or shot blasted per SSPC SP #13 and ICRI Surface Profile requirements per the coating manufacturer (Blastrack). Check for excessive moisture migration per ASTM F1869, Moisture Vapor Emission Rate Using Anhydrous Calcium Chloride. Test results not to exceed 3 lbs per 1,000 square feet in one 24-hour period.
- N. Hardware accessories, machine surfaces, plates, lighting fixtures, and similar items in place prior to cleaning and painting, and not intended to be painted, shall be removed during painting operations and repositioned upon completion of each area or shall otherwise be protected.
- O. All PVC pipe to be painted shall be brush blasted per SSPC SP7 or shall be sanded to provide a uniform surface profile.

3.02 APPLICATION:

- A. Paint shall be used and applied as recommended by the manufacturer without being extended or modified, and with particular attention to the correct preparation and condition of surfaces to be painted.
- B. Paint shall be applied only within the temperature range recommended by the manufacturer. Painting of surfaces when they are exposed to the sun shall be avoided.
- C. Paint shall not be applied to wet or damp surfaces and shall not be applied in rain, snow, fog, or mist, or when the relative humidity exceeds 85 percent.
- D. No paint shall be applied when it is expected that the relative humidity will exceed 85 percent or that the air temperature will drop below 40°F within 18 hours after the application of paint. Dew or moisture condensation should be anticipated and if such conditions are prevalent, painting shall be delayed until midmorning to be certain that the surfaces are dry. Further, the days painting should be completed well in advance of

the probable time of day when condensation will occur, in order to permit the film an appreciable drying time prior to the formation of moisture.

- E. All paint shall be applied under favorable conditions by skilled painters and shall be brushed out carefully to a smooth, even coating without run or sags. Enamel shall be applied evenly and smoothly. Each coat of paint shall be allowed to dry thoroughly, not only on the surface but also throughout the thickness of the paint film before the next coat is applied. Finish surfaces shall be uniform in finish and color, and free from flash spots and brush marks. In all cases, the paint film produced shall be satisfactory in all respects to the Engineer.
- F. Exposed nails and other ferrous metal or surfaces to be painted with water-thinned paints shall be spot primed with aluminum paints.
- G. In order to provide contrast between successive coats, each coat shall be of such tint as will distinguish it from preceding coats.
- H. The Contractor shall not only protect his work at all times, but shall also protect all adjacent work and materials by the use of sufficient drop cloths during the progress of his work. Upon completion of the work, he shall clean up all paint, spots, oil, and stains from floors, glass, hardware, and similar finished items.
- I. Paint shall be applied so as to obtain coverage per gallon and the dry film thickness recommended by the manufacturer. Dry film thickness readings shall be taken to insure that required thicknesses have been achieved. The Contractor shall record in a manner satisfactory to the Engineer, the quantities of paint used for successive coats on the various parts of the work.
- J. Spraying with adequate apparatus may be substituted for brush application of those paints and in those locations for which spraying is suitable.
- K. If paints are thinned for spraying, the film thickness after application shall be the same as though the unthinned paint were applied by brush. That is, the addition of a thinner shall not be used as a means of extending the coverage of the paint, but the area covered shall be no greater than the area that would have been covered with the same quantity of unthinned paint.
- L. Blast cleaned metal surfaces shall be coated immediately after cleaning, before any rusting or other deterioration or contamination of the surface occurs. Blast cleaned surfaces shall be coated not later than 8 hours after cleaning under ideal conditions or sooner if conditions are not ideal.
- M. The use of carbon dioxide or carbon monoxide emitting heaters is not permitted during the painting operation. Only indirect hot-air systems shall be permitted.

3.03 PIPING COLOR CODE:

The following Tnemec colors shall be utilized to facilitate identification of piping. Only insulation is to be painted on chemical feed lines.

1. Water Lines

Raw	Olive Green	110GN
Settled or Clarified	Aqua	10GN
Finished or Potable	Dark Blue	11SF

2. Wastewater or Potable Waste Lines

Sewer (sanitary or drain)	Dark Gray	34GR
Backwash Waste	Light Brown	68BR
Sludge	Dark Brown	84BR
Sewage Plant Effluent	Clay	07RD

3. Chemical Lines

Alum or Primary Coagulant	Orange	04SF
Ammonia	White	11WH
Carbon Dioxide (Gas, Liquid and Solution)	Light Red	26RD
Carbon Slurry	Black	35GR
Caustic Compounds (NaOH Or KOH)	Yellow with Green Band	02SF/09SF
Chlorine (Gas and Solution)	Yellow	02SF
Chlorine Dioxide	Yellow with Violet Band	02SF/14SF
Ferric Chloride	Orange	04SF
Fluoride Compounds	Light Blue with Red Band	25BL/06SF
Lime Slurry	Light Green	08GN
Ozone	Yellow with Orange Band	02SF/04SF
Phosphate Compounds	Light Green with Red Band	08GN/06SF
Polymers or Coagulant Aids	Orange with Green Band	04SF/09SF
Potassium Permanganate	Violet	14SF
Soda Ash	Light Green with Orange Band	08GN/04SF
Sulfuric Acid	Yellow with Red Band	02SF/06SF
Sulfur Dioxide	Light Green with Yellow Band	08GN/02SF

4. Other

Compressed Air	Dark Green	91GN
Gas or Oil	Red	28RD
Other Lines	Light Gray	32GR

- B. In situations where two colors do not have sufficient contrast to easily differentiate between them, a 6-inch band of contrasting color shall be painted on one of the pipes at approximately 30-inch intervals.
- C. Piping which is not painted shall be color coded with bands placed at each change in direction and no more than 5 feet apart on straight runs.

3.04 PIPING IDENTIFICATION:

- A. After painting, piping shall be identified by stenciling using the same specified paint as used on the pipes. Stenciling shall be of wording and color selected by the Engineer and sized as follows:

<u>Outside Diameter of Pipe or Covering</u>	<u>Size of Legend Letters</u>
3/4-inch to 1-1/4-inch	2-inch
1-1/2-inch to 2-inch	3/4-inch
2-1/2-inch to 6-inch	1-1/4-inch
8-inch to 10-inch	2-1/2-inch
Over 10-inch	3-1/2-inch

- B. Arrows shall indicate direction of flows. Where "a" is equal to 3/4 of outside diameter of pipe or covering, the arrow shaft shall be 2 "a" long by 3/8 "a" wide. The arrow head shall be an equilateral triangle with sides equal to "a." Maximum "a" dimension shall be 6-inches.
- C. Where pipe passes through a wall, use pipe markers and directional arrows on each side of the wall.
- D. Use pipe markers and directional arrows every 50 feet along continuous pipe lines.
- E. Use a pipe marker and directional arrow at each rise and "T" joint.
- F. When using directional arrows, point arrowhead away from pipe markers and in direction of flow. If flow can be in both directions, use a double-headed directional arrow.
- G. The Engineer will assist in determining pipe content and direction of flows.

3.05 PARKING LOT LINE PAINTING:

- A. Paint for parking lot lines shall conform to Federal Specification TT-P-115-E Type I. Paint shall be 11-3 PPG Industries, Pittsburgh, PA, Series 6 Tneme-Cryl, Tnemec, St. Louis, MO, or approved equal.
- B. Contractor shall prepare the pavement surface according to the recommendations of the paint manufacturer.
- C. Applied markings shall have clean-cut edges, true and smooth alignment and uniform film thickness of 15 mils, \pm 1.0.
- D. The Contractor shall be responsible for removing, to the satisfaction of the Engineer, tracing marks, and spilled paint applied in an authorized area.

3.06 CLEANUP:

- A. The Contractor shall at all times keep the premises free from accumulation of waste material and rubbish caused by his employees or work. At the completion of the painting, he shall remove all of his tools, scaffolding, surplus materials, and all of his rubbish from and about the buildings and shall leave his work "broom clean" unless more exactly specified.
- B. The Contractor shall also, upon completion, remove all paint where it has been spilled, splashed, or splattered on all surfaces, including floors, fixtures, equipment, furniture, glass, hardware, etc., leaving the work ready for inspection.

END OF SECTION

**TOWN OF GREENWICH
DEPARTMENT OF PUBLIC WORKS**



BYRAM PARK POOL REPLACEMENT

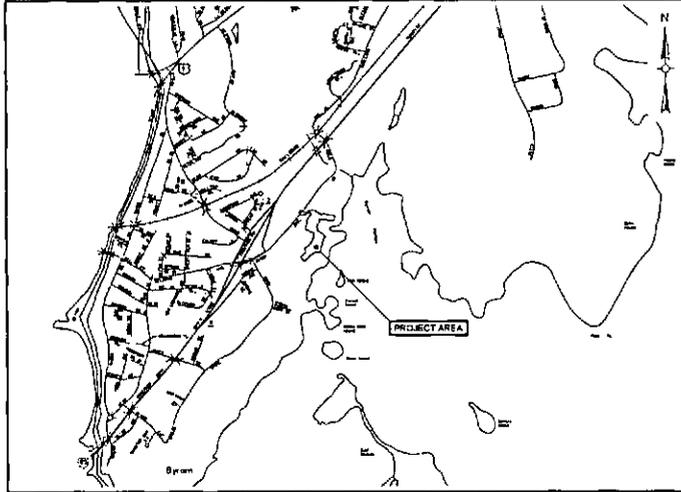
**RITCH AVENUE WEST
GREENWICH, CONNECTICUT**

(Revised 03/03/16 per Addendum #1)
(Revised 03/24/16 per Addendum #5)

CONSTRUCTION DOCUMENTS
12/11/15

Weston & Sampson

273 Dividend Road, Rocky Hill, Connecticut 06067



LOCATION MAP
SCALE: 1"=1000'

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C1.01	DEMOLITION PLAN
C2.00	OVERALL SITE PLAN
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CONSTRUCTION DOCUMENTS
12/11/15

Weston & Sampson
210 Deane Road, Westport, CT 06897
860.333.1415
www.westonandsampson.com

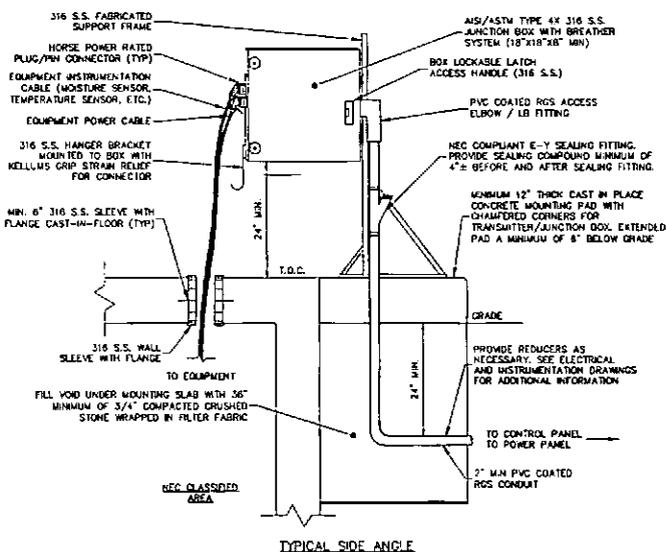
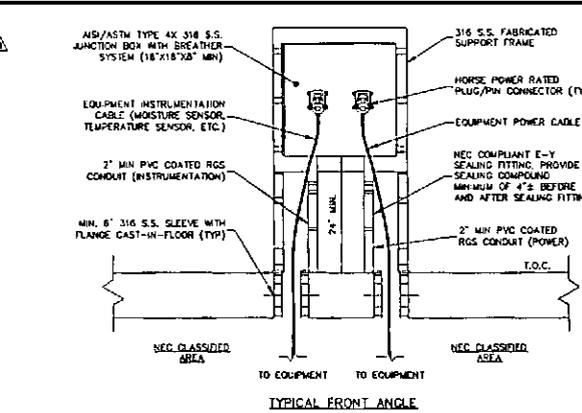
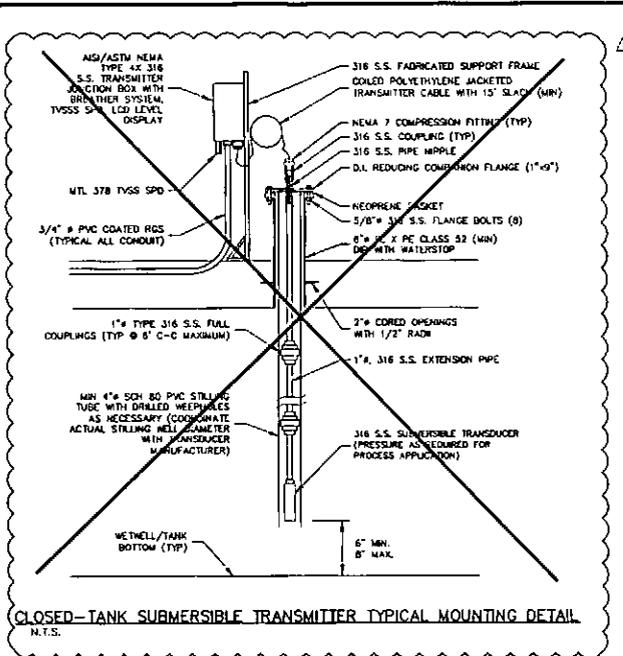
TOWN OF GREENWICH, DEPARTMENT OF PUBLIC WORKS
PROJECT: BRUSH PARK POOL REPLACEMENT

SHEET INDEX

SCALE: NONE
DATE: 12/11/15
DRAWN BY: J.S.P.
CHECKED BY: L.C.B.W.
PROJECT NO.: 2130336
SHEET NO.: 101

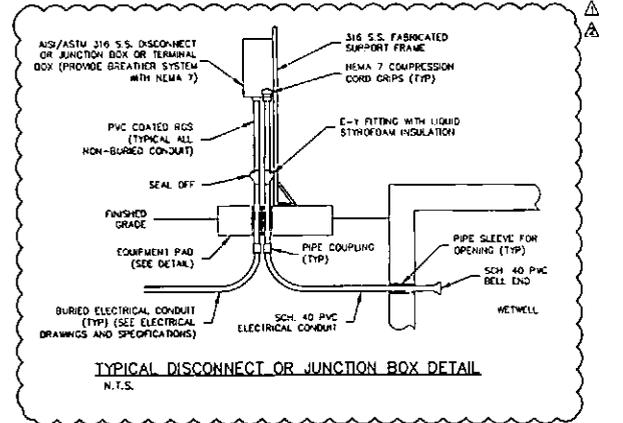
D1.00

SHEET - OF -



- NOTES:
1. THE CONTRACTOR SHALL PROVIDE A MINIMUM OF TWO PLUG/PIN CONNECTORS PER MOTOR ASSEMBLY. ONE DEDICATED PLUG/PIN CONNECTOR SHALL BE PROVIDED FOR THE EQUIPMENT POWER AND ONE FOR THE INSTRUMENTATION CABLES. POWER PLUG/PINS SHALL BE NEMA 4X AND HORSEPOWER RATED. ADDITIONAL HORSEPOWER RATED PLUG/PINS SHALL BE PROVIDED AT NO ADDITIONAL COST BASED ON THE ACTUAL MOTOR LOADS AND HORSEPOWER RATING REQUIREMENTS. THE CONTRACTOR SHALL COORDINATE THESE REQUIREMENTS WITH THE EQUIPMENT MANUFACTURER. PLUG/PIN CONNECTORS SHALL BE AS MANUFACTURED BY CROUSE-HINDS OR MELTRIC CORPORATION.
 2. PLUG/PIN CONNECTORS ARE SHOWN MOUNTED TO THE FRONT OF THE JUNCTION BOX/TRANSMITTER ENCLOSURE FOR CLARITY OF THE DETAIL. THE PLUG/PIN CONNECTORS SHALL BE INSTALLED ON THE BOTTOM OF THE JUNCTION BOX/TRANSMITTER ENCLOSURE SUCH THAT THE ENCLOSURE PROVIDES A DRIP EDGE/ MEANS OF WEATHER PROTECTION FOR THE PLUG/PIN CONNECTORS.
 3. ALL COMPONENTS OF THE PLUG/PIN CONNECTORS SHALL BE NON-FUSED.
 4. ALL EQUIPMENT UTILIZING PLUG/PIN CONNECTIONS SHALL BE PROVIDED WITH (LOCKOUT/TAGOUT) PROVISIONS ON THE SYSTEM CONTROL PANEL/STARTER REGARDLESS OF WHETHER OR NOT THE LOCKOUT/TAGOUT PROVISIONS ARE SPECIFIED.
 5. THE CONTRACTOR SHALL COORDINATE THE EQUIPMENT CABLE AND CABLE PIN QUANTITY REQUIREMENTS WITH THE APPROVED EQUIPMENT. THE CONTRACTOR SHALL PROVIDE PLUGS/PINS WITH ADDITIONAL PINS AS NECESSARY AND AT NO ADDITIONAL COST TO THE OWNER BASED ON THE QUANTITY OF PINS REQUIRED BY THE EQUIPMENT MANUFACTURER.
 6. FOR SUBMERSIBLE PUMPING APPLICATIONS THE CONTRACTOR SHALL PROVIDE ONE JUNCTION BOX/TRANSMITTER WITH ALL OF THE PLUG/PIN RECEPTACLES PROVIDED ON THE BOX. THE CONTRACTOR SHALL UPSIZE THE MINIMUM JUNCTION BOX/TRANSMITTER SIZE AS REQUIRED AND AT NO ADDITIONAL COST.

PLUG/PIN STYLE CONNECTOR TRANSMITTER AND JUNCTION BOX MOUNTING DETAIL
N.T.S.



CONSTRUCTION DOCUMENTS
12/11/15

Weston & Sampson, Inc.
271 Dundas Road, Suite 101, Etobicoke, ON M9B 1K7
(416) 531-1171
www.westonandsampson.com

PROJECT NO.	DATE	SCALE	REVISION #
1	12/11/15	AS SHOWN	1
2			
3			
4			
5			
6			
7			
8			
9			
10			

DESIGNED BY: *[Signature]*
CHECKED BY: *[Signature]*
REGISTERED PROFESSIONAL ENGINEER

DATE: 02-07-15

MECHANICAL DETAILS

TOWN OF GREENWICH, DEPARTMENT OF PUBLIC WORKS
1000 GERRARD ST. E. GREENWICH, ONTARIO
STREAM PARK POOL REPLACEMENT

SCALE: NONE
CONTRACT: 2730336
JOB NO.: 2730336
JOB BY: J.S.P.
DATE BY: C.B.W.
JOB NO.: 2730336
JOB BY: J.S.P.
DATE BY: C.B.W.

M10.4

SHEET - 09 - 1

POWER PANELBOARD

DESIGNATION: PP-1
 VOLTS: 277Y/480V
 PHASES: 3
 WIRES: 4
 NEUTRAL: SOLID
 PANEL POLES: 12

MAIN CIRCUIT BREAKER: 100AF/100AT
 MAIN BUS: 100A
 SHORT CIRCUIT RATING: 22KAC
 MOUNTING: SURFACE
 ENCLOSURE: NEMA 12
 GROUND BUS: YES

NO.	CIRCUIT DESCRIPTION	FPM	TRIP	POLE	WVA	NOTES
1	MAIN CIRCUIT BREAKER	100	100	3		
2	TVSS PANEL	100	40	3		TVSS SPD
3	PUMP CONTROL PANEL CP-1	100	50	3		
4	SPARE	100	20	3		
5	TRANSFORMER TX-1	100	25	3	EX	
6	SPARE	100	20	3		
7	SPARE	100	20	3		
8	SPARE	100	20	3		
9	SPARE	100	20	3		
10	SPARE	100	20	3		
11	SPARE	100	20	3		
12	SPARE	100	20	3		

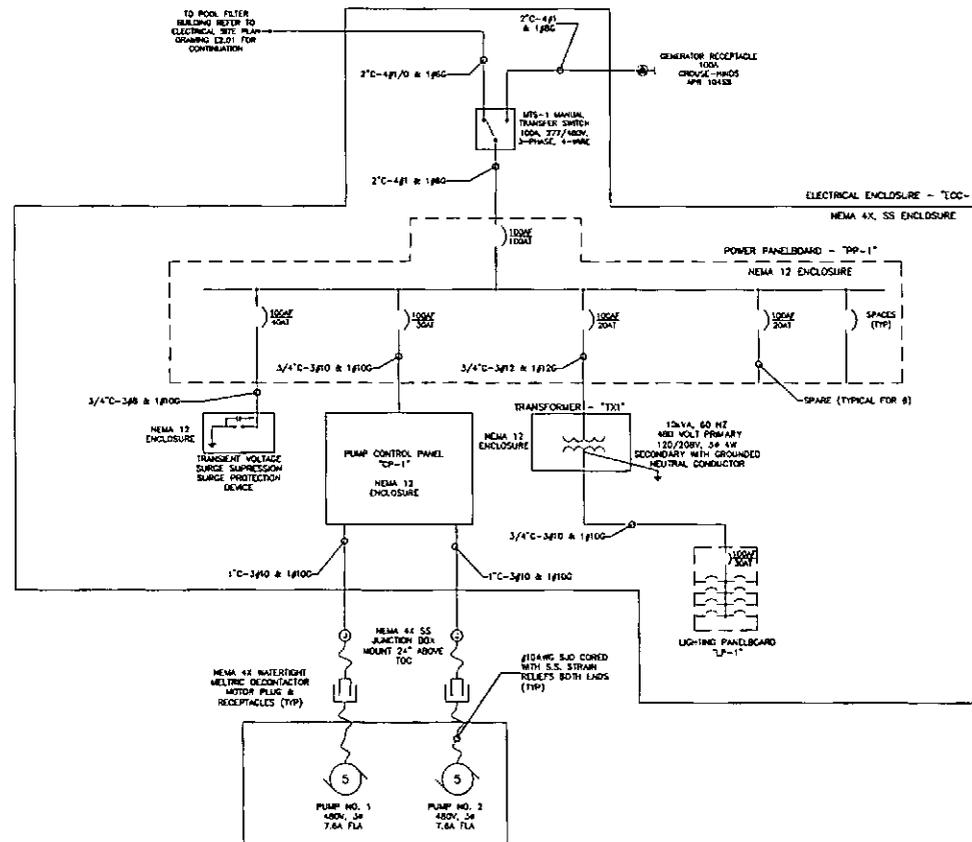
LIGHTING PANELBOARD

DESIGNATION: LP-1
 VOLTS: 120Y/208V
 PHASES: 3
 WIRES: 4
 NEUTRAL: SOLID
 PANEL POLES: 24

MAIN CIRCUIT BREAKER: NLD
 MAIN BUS: 100A
 SHORT CIRCUIT RATING: 22KAC
 MOUNTING: SURFACE
 ENCLOSURE: NEMA 12
 GROUND BUS: YES

NO.	CIRCUIT DESCRIPTION	FPM	TRIP	POLE	WVA	NOTES
1	ENCLOSURE LIGHTS	100	20	1		
2	ENCLOSURE HEATERS	100	20	1		
3	ENCLOSURE FANS	100	20	1		
4	ENCLOSURE RECEPTACLE	100	20	1		GFCI BREAKER
5	ENCLOSURE RECEPTACLE	100	20	1		GFCI BREAKER
6	SPARE	100	20	1		
7	SPARE	100	20	1		
8	SPARE	100	20	1		
9	SPARE	100	20	1		
10	SPARE	100	20	1		
11	SPARE	100	20	1		
12	SPARE	100	20	1		
13	SPARE	100	20	1		
14-24	SPACES	100	20	1		

NOTES:
 1. SEE SHEET E100 FOR GENERAL NOTES, LEGENDS AND SYMBOLS.
 2. ALL NEMA 12 ENCLOSURES TO BE GASKETED AND CUSTOM PAINTED CARBON STEEL.



ONE LINE DIAGRAM
 N.T.S.

AREA CLASSIFICATION TABLE				
AREA	DESIGNATION	NEMA RATINGS	NEC CLASSIFICATION	W.L. LISTING
WETWELL INTERIOR AND EXTERIOR WITHIN 5 FEET OF HATCH OR VENT	WET, CORROSIVE, HAZARDOUS	4X, 7	CLASS I, DIV. 1 GROUP C & D	WATER TIGHT
WETWELL EXTERIOR WITHIN 5 FEET OF HATCH OR VENT	WET, CORROSIVE, HAZARDOUS	4X, 7	CLASS I, DIV. 2 GROUP C & D	WATER TIGHT
VALVE VAULT (PUMP CHAMBER) INTERIOR	WET, CORROSIVE	4X, 7		WATER TIGHT
EXTERIOR	WET, CORROSIVE	4X		WATER TIGHT

CONSTRUCTION DOCUMENTS
 12/11/15

Weston Sampson
 770 Diamond Road, Napa, CA 94558
 (707) 253-1113
 www.westonsampson.com

PROJECT: PUMPING STATION
 SHEET: E100
 DATE: 12/11/15
 DRAWN BY: [Signature]
 CHECKED BY: [Signature]
 DESIGNED BY: [Signature]
 PROJECT ENGINEER: [Signature]

TOWN OF GREENWICH - DEPARTMENT OF PUBLIC WORKS
 81501 AVENUE WEST, GREENWICH, CONNECTICUT
 PUMPING STATION
 ELECTRICAL ONE LINE DIAGRAM
 SCALE: NONE
 CONTRACT: 21303336
 L.E.C. L.E.C. J.S.P. C.B.W.
 TOWN OF GREENWICH

M10.5

SHEET - 0 - 1

NOTES:

1. CONTRACTOR SHALL DEVELOP AND SUBMIT DETAILED SCALED DRAWINGS WITH DIMENSIONS SHOWING ALL PROPOSED EQUIPMENT LOCATED AS PROPOSED IN THE ELECTRICAL/INSTRUMENTATION CABINET.
2. MOTOR BRANCH WIRING IS SHOWN ON SINGLE LINE DIAGRAM, RUN ALL OTHER POWER AND LIGHTING CIRCUITS WITH SEPARATE NEUTRALS IN SEPARATE CIRCUIT FROM MOTOR POWER CIRCUITS.
3. PROVIDE A WARNING NAMEPLATE ON THE MAIN CIRCUIT BREAKER ENCLOSURE MARKED "CAUTION - TO COMPLETELY DISCONNECT SYSTEM, TURN OFF GENERATOR AND OPEN THIS BREAKER".

FREE-STANDING EXTERIOR ELECTRICAL ENCLOSURES

- A. FREE-STANDING EXTERIOR ELECTRICAL OUTER ENCLOSURES SHALL BE FURNISHED AND INSTALLED WHERE INDICATED ON THE DRAWINGS.
- B. ENCLOSURE SHALL BE FREE STANDING WITH NEMA 3R RATING, SINGLE OR DOUBLE DOOR OR QUAD-DOOR AS INDICATED. FOR THE HOUSING OF THE ELECTRICAL SERVICE EQUIPMENT, TRANSFER SWITCH, PUMPING STATION CONTROL PANEL, ENCLOSURE ACCESSORIES, AND OTHER ANCILLARY EQUIPMENT, ETC., AS SHOWN ON THE DRAWINGS.
- C. ENCLOSURES SHALL BE FABRICATED OF 1/8" THICK (MINIMUM) 3002 SERIES PAINTED ALUMINUM WITH CONTINUOUSLY WELDED SEAMS. ENCLOSURES SHALL HAVE A SLANTED ROOF AND COMBINATION OVERHANG/DROP-EDGE OVER THE DOOR(S).
- D. ENCLOSURE DOOR(S) SHALL HAVE A HEAVY-GAUGE CONTINUOUS HINGE WITH 1/4" DIAMETER (MINIMUM) STAINLESS STEEL HINGE PIN. ENCLOSURE DOOR SHALL BE EQUIPPED WITH HEAVY-DUTY THREE-POINT ROLLER-TYPE LATCHING HARDWARE WITH 3/4" DIAMETER STAINLESS STEEL DOOR HANDLE WITH PROVISIONS FOR PADLOCKING. SCREW CLAMPS SHALL NOT BE ALLOWED.
- E. ENCLOSURES SHALL BE PRIMED AND PAINTED WITH A MINIMUM OF TWO COATS OF HUNTER GREEN (HUNNESSY PRODUCTS T-10) POLYESTER POWDER COATING.
- F. ENCLOSURE SHALL BE MOUNTED AS INDICATED ON DRAWINGS. ENCLOSURES SHALL BE FASTENED TO THE FOUNDATION WITH 1/2" INCH MINIMUM DIAMETER HOOK-TYPE STAINLESS STEEL ANCHOR BOLTS.

G. ENCLOSURE LIGHTING FIXTURES SHALL BE HOFFMAN MODEL A-1FOAZ REMOTE DOOR ACTIVATED LIGHTING PACKAGES, OR EQUIVALENT WITH 24" LONG, 20-WATT FLUORESCENT BULBS AND NON-YELLOWING THERMOPLASTIC LENS. ONE FIXTURE SHALL BE PROVIDED OVER EACH DOOR OPENING AND A MINIMUM OF TWO SPARE BULBS SHALL BE PROVIDED FOR EACH FIXTURE.

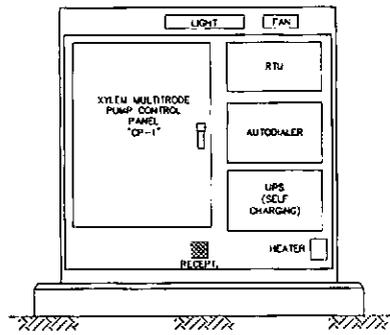
H. ENCLOSURES SHALL BE PROVIDED WITH A MINIMUM OF FOUR CORROSION INHIBITORS, HOFFMAN MODEL A-1HCT-100 INDUSTRIAL CORROSION INHIBITORS, OR EQUIVALENT.

I. ENCLOSURE SHALL BE PROVIDED WITH AUTOMATICALLY ENGAGING DOOR RESTRAINT BARS.

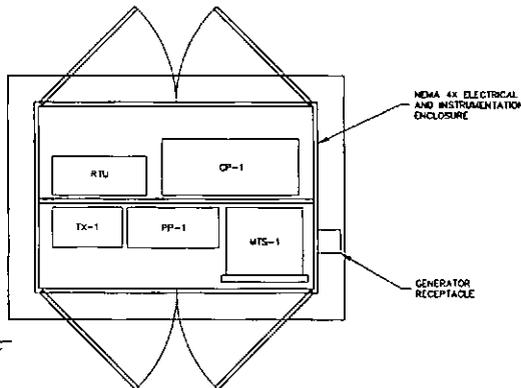
J. ENCLOSURE SHALL HAVE A THERMOSTATICALLY CONTROLLED FAN DRIVEN ELECTRICAL RESISTANCE SPACE HEATERS. SPACE HEATERS FOR ENCLOSURES SHALL BE HOFFMAN CATALOG A-2AH-4001FT 400W-120V OR EQUIVALENT. A MINIMUM OF ONE HEATER SHALL BE PROVIDED AND INSTALLED FOR EACH DOOR ON THE ENCLOSURE. E.G. A QUAD-DOOR ENCLOSURE SHALL HAVE A MINIMUM OF FOUR HEATERS. STRIP HEATERS SHALL NOT BE ACCEPTABLE.

K. ENCLOSURE SHALL HAVE INTAKE LOUVERS WITH REMOVABLE AIR FILTER AND THERMOSTATICALLY CONTROLLED 100 CFM EXHAUST FAN WITH SCREENED 48" EXHAUST. ONE EXHAUST FAN SHALL BE PROVIDED FOR EVERY TWO ENCLOSURE DOORS, E.G., A QUAD-DOOR ENCLOSURE SHALL HAVE A MINIMUM OF TWO FANS.

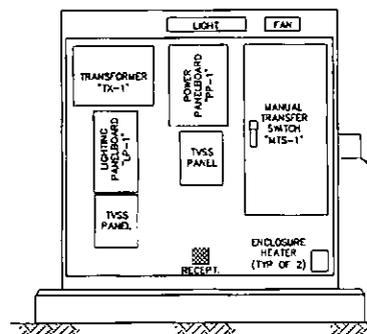
L. ENCLOSURES SHALL BE MANUFACTURED BY APX TECHNOLOGIES, INC., MERCERSBURG, PA. EQUIVALENT BY ERPEL DESIGN CORPORATION, TELFORD, PA. OR EQUIVALENT. ENCLOSURES SHALL BE SPECIALLY DESIGNED, UL LISTED, OUTDOOR ENCLOSURES. INTERIOR TYPE ENCLOSURES MODIFIED FOR EXTERIOR USE SHALL NOT BE ACCEPTABLE.



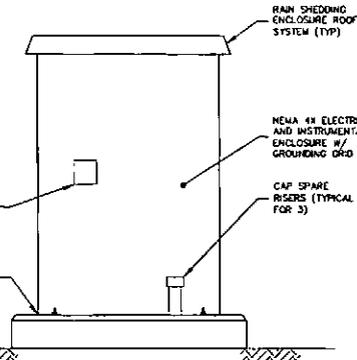
INSTRUMENTATION / CONTROL SIDE



METER SIDE ELEVATION

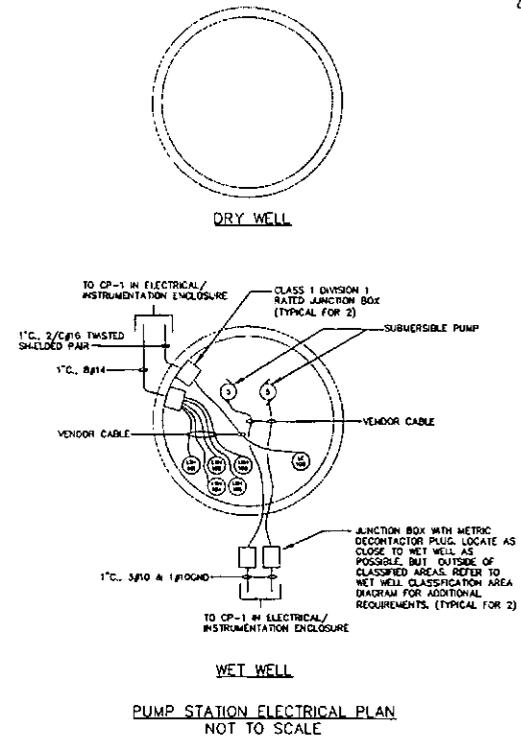


POWER SIDE

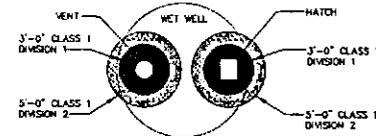


ELECTRICAL & INSTRUMENTATION ENCLOSURE BASE DETAIL NOT TO SCALE

ELECTRICAL & INSTRUMENTATION ENCLOSURE (ECC-1) PLAN SECTION & ELEVATION NOT TO SCALE



PUMP STATION ELECTRICAL PLAN NOT TO SCALE



WET WELL CLASSIFICATION AREA DIAGRAM NOT TO SCALE

CONSTRUCTION DOCUMENTS 12/11/15

Weston & Sampson
 270 Chestnut Road, Newark, CT 06850
 (860) 743-1113
 www.westonandsampson.com

DATE	02-11-15	DATE	
BY		BY	
CHECKED BY		CHECKED BY	
DESIGNED BY		DESIGNED BY	
DRAWN BY		DRAWN BY	
SCALE		SCALE	
TITLE		TITLE	
PROJECT		PROJECT	
CITY		CITY	
STATE		STATE	
COUNTY		COUNTY	
REGISTERED PROFESSIONAL ENGINEER		REGISTERED PROFESSIONAL ENGINEER	



TOWN OF GREENWICH - DEPARTMENT OF PUBLIC WORKS
 1000 AVENUE WEST, GREENWICH, CONNECTICUT
 STROM PARK POOL REPLACEMENT
PUMPING STATION ELECTRICAL PLAN
 SCALE: AS NOTED
 PROJECT: 2130336
 SHEET: E.C. J.S.P. C.B.W.
 DATE: 12/11/15

M10.6
 SHEET - 9 -

PANEL SCHEDULE

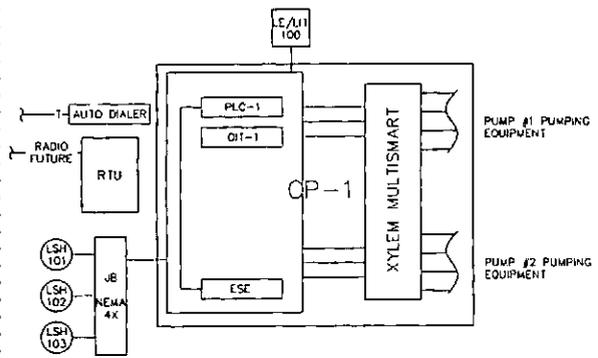
ID	NAME	LOCATION	SPEC.	ENCLOSURE
CP-1	SCADA CONTROL PANEL (CP-1, PLC-1)	ELEC ENCL INTERIOR	13421	NEMA 12

- NOTES:
- ALL PANELS SHALL HAVE ENGRAVED PLASTIC NAME PLATES (WHITE ON BLACK) MINIMUM 3" LETTER HEIGHT INDICATING THE PANEL NAME.
 - PROVIDE DETAILED INTERIOR AND EXTERIOR PANEL LAYOUT DRAWINGS DURING SHOP DRAWING REVIEW.
 - PROVIDE ETHERNET PORT FOR PORTABLE LAPTOP CONNECTION TO THE INTERNET AT EACH PLC PANEL (EXCLUDING EQUIPMENT PLC CONTROL PANELS).
 - ALL PANELS SHALL BE EQUIPPED WITH STAINLESS STEEL LOCKING ENCLOSURES, HANDLE LATCH, KEYS ALIKE.
 - ALL PANELS SHALL INCLUDE:
 - RELAYS
 - TERMINAL STRIP, FIELD WIRING
 - WIRE MANAGEMENT DUCTS
 - CIRCUIT BREAKERS
 - 24 VOLT POWER SUPPLY AS NEEDED WITH CBS
 - SURGE SUPPRESSOR

WIRING TABLE

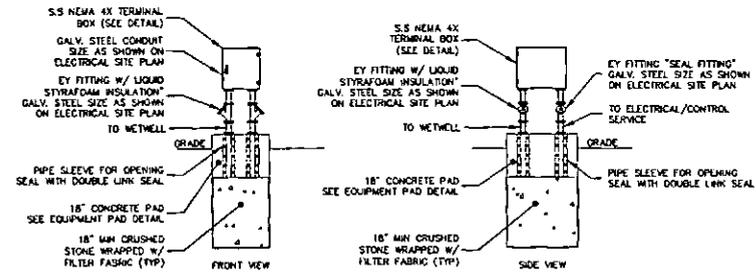
INSTRUMENT TAG	TO PANEL TAG	CONDUIT SIZE	WIRE SIZE	GROUND WIRE SIZE
FI1 100	CP-1	1-1/2"	2/C #16 TSP	
LI1 100	CP-1	1-1/2"	2/C #16 TSP	
PUMP #1	CP-1	1"	10 #14	
PUMP #2	CP-1	1"	10 #14	
LSH 101-103	JB	1"	8 #14	
TELEPHONE	CP-1	2"		

- NOTES:
- COORDINATE WITH EQUIPMENT VENDOR / PACKAGED SYSTEMS PROVIDER FOR WIRING REQUIREMENTS.
 - INSTRUMENT CABLES SHALL BE PROVIDED WITH THE INSTRUMENTS BY THE INSTRUMENT MANUFACTURER. SUFFICIENT LENGTH OF CABLE SHALL BE REQUESTED DURING PURCHASE.
 - WHEREVER POSSIBLE COORDINATE THE LOCATION OF THE ELECTRICAL AND INSTRUMENTATION CONDUITS TO RUN IN THE SAME TRUNK.

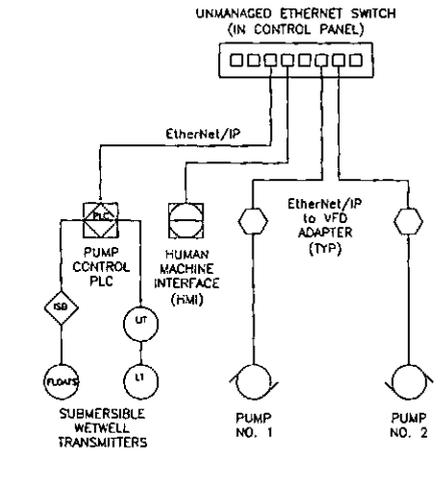


CONTROL / INSTRUMENTATION PID DIAGRAM
N.T.S.

- NOTES:
- SEE WIRING TABLE FOR MINIMUM CONDUIT AND WIRE SIZE AND QUANTITY.
 - COORDINATE INSTRUMENTATION WIRING TO RUN WITH ELECTRICAL CONDUITS WHEREVER POSSIBLE. INSTRUMENTATION CONDUITS SHALL BE PVC COATED RIGID GALVANIZED OR PVC W/ 3/8" SPACING TO PREVENT INTERFERENCE.
 - INSTRUMENTATION WIRE SHALL BE AS SPECIFIED IN DIVISION 16.
 - PRIOR TO INSTALLATION, COORDINATE THE ELECTRICAL, MECHANICAL AND INSTRUMENTATION DRAWINGS. REPORT ANY DISCREPANCIES TO THE ENGINEER IMMEDIATELY.
 - PROVIDE SPARE 20 AMP SINGLE POLE BREAKER INSIDE THE CONTROL PANEL. MINIMUM OF 2.



TYPICAL TERMINAL BOX CONNECTION DETAIL
SCALE: NTS



WASTEWATER PUMPING STATION
INSTRUMENTATION AND CONTROL NETWORK DIAGRAM
SCALE: NTS

INSTRUMENTATION SYSTEM GENERAL NOTES:

- DETAILED I&C SYSTEM ENGINEERING AND COORDINATION SHALL BE DEVELOPED BY THE SYSTEM SUPPLIER. THE SYSTEM SUPPLIER SHALL DEVELOP PLC I/O TABULATIONS, INSTRUMENT LOOP DIAGRAMS (ILD), ELEMENTARY WIRING DIAGRAMS (EWD), CUSTOM INSTRUMENT MOUNTING DETAILS (MID), DETAILED POINT-TO-POINT INTERCONNECTION DIAGRAMS, ETC. AS PART OF THE DETAILED ENGINEERING AND COORDINATION SUBMITTAL.
- THE SYSTEM SUPPLIER'S DETAILED ENGINEERING AND COORDINATION RESPONSIBILITIES EXTEND TO, AND INCLUDE, ALL PROCESS, ELECTRICAL, AND INSTRUMENTATION EQUIPMENT, ETC. ON THE PROJECT.
- INSTRUMENTATION AND CONTROL CONDUIT AND CONDUCTORS SHALL BE INSTALLED BY THE ELECTRICAL TRADE. INSTALLATION SUPERVISION, INSPECTION, TESTING, AND ALL TERMINATIONS SHALL BE PERFORMED BY THE SYSTEM SUPPLIER.
- THE SYSTEM SUPPLIER SHALL BE RESPONSIBLE FOR FURNISHING ALL EQUIPMENT AND INCIDENTALS NECESSARY FOR A COMPLETE AND FUNCTIONAL SYSTEM AS SHOWN HEREIN AND SPECIFIED.
- ALL EQUIPMENT PROVIDED BY THE SYSTEM SUPPLIER SHALL BE INSTALLED BY THE GENERAL CONTRACTOR.

PUMPING STATION CONTROL PANEL

LOCATION: BYRAM PARK PUMPING STATION
 PROVIDED BY: SYSTEM SUPPLIER
 LOCATED: ON-SITE ELECTRICAL/INSTRUMENTATION ENCLOSURE
 - POWER SUPPLY CONDITIONING
 EQUIPMENT MONITORED/CONTROLLED:
 - PUMP NUMBER 1
 - PUMP NUMBER 2
 - WETWELL LEVEL INDICATION
 ALARMS:
 - WASTEWATER PUMP ALARMS - SEE EQUIPMENT SPECIFICATION
 - WASTEWATER PUMP - MANUAL MODE

CONSTRUCTION DOCUMENTS
12/11/15

Weston & Sampson, Inc.
 371 Shady Road, Suite 101, CT 06422
 (860) 325-1177
 www.westonsampson.com

TOWN OF GREENWICH - DEPARTMENT OF PUBLIC WORKS
 8750A AVENUE WEST, GREENWICH, CONNECTICUT
 BYRAM PARK POOL REPLACEMENT
 INSTRUMENTATION PID LAYOUT AND TABLES
 SCALE: NONE
 DATE: 12/11/15
 SHEET: 10.8