## **ADDENDUM NO.2**

### **PROJECT:** Carey Station Urban Water Reuse Facility 0.5 MGD to 1.0 MGD Expansion For Piedmont Water Company GMC PROJECT NO. CAUG230002

### 1. <u>Questions</u>

- 1.1 **Need to clarify thickness of HDPE liner.** Answer: 60 Mil HDPE liner.
- 1.2 **Drawing E-316 references Note 5 and there are only three notes on the page.** Answer: Please disregard the note reference shown next to DS-M4300 and DS-P4310. The disconnect switches description is provided on the one line diagram E-102 (480V, 30A, 3P, NFDS, NEMA 4X SS).
- 1.3 Drawing E-318 indicates a float switch is to be installed in the pond. Please provide installation details and conduit routing method. Answer: The contractor shall install the float switch by securing to a corrosion-resistant post at the shore of the pond. The cable shall be laid along the sloped side of the pond, following the natural shape of the slope. Weights shall be added along the cable to keep the float switch in place and prevent movement caused by water currents. The float switch height shall be set to the required level, and its operation tested to make sure it turns on and off as expected.
- 1.4 Sheet E-317show that the Level indication equipment and DO readings are to be routed to LCP-2. LCP-2 is located in the new electrical room outside of the plant building. Can these signals be routed to LCP-1 in the control room inside the building. This would be easier to facilitate then getting them to the new electrical building. Answer: The design intent is for the dissolved oxygen (DO) and level sensors to be connected to LCP-2, as these instruments are directly related to the operation of the digester blowers, which are controlled by LCP-2. The Engineer's preference is to maintain the instrumentation connections to the plant SCADA panels as originally designed.
- 1.5 We need some information on connecting to the existing forcemain. How long can the flow be interrupted? Is there sufficient storage in the existing wetwell to drain the contents of the FM back before cutting the line? If not please provide the length and size of the existing FM. Also please provide a suggested tie-in / startup sequence for the new headworks and IPS. We are uncertain how the flow currently enters the plant in terms of the two force mains shown on the piping plan and what they service. Answer: The connection will need to be done in an expeditious manner but Piedmont Water Company should be able to give the contractor a couple of hours. There will be about 5500 ft of 12" and 8" line that will drain. (The 8" force main connects to the 12" just outside the fence).



6 The schematic on G-005 shows two lines to the new reject pond, one un-valved and the other with a valve. C-201 and C-301, seem to only show the un-valved line. Please determine if changes need to be made.

Answer: There is no line with a valve out of new reject pond. C-201 and C-301 are correct.

- 1.7 C-301 shows connection the #4 Wye & #7 Tee connections tying into the existing force main. Connection 4 can easily be done while the new EQ Basin is filling up, but connection 7 would require the force main to be shut down, drained, and bypassed depending upon the operational needs of this line. How long can this line be taken out of service? Where is the nearest point west of the connection point to intercept the force main? Would a 12"x12" clamp on taping saddle be acceptable to allow a live tap of this line? Another idea to eliminate the need for bypass is to mirror the headworks structure so that the #7 connection is after the existing valve that bypasses the plant. Answer: #7 connection can be applied after the existing valves.
- 1.8 C-301 shows cutting into the plant effluent line to connect the new CCT to the effluent line. We assume that if the new Influent EQ basin is on-line that a few hour shutdown of the plant and this line will be achievable without the need for bypass piping and pumping. Please confirm.

Answer: Yes, if the new influent EQ basin is on-line, a couple of hours shutdown of the plant will be okay without need for bypass piping and pumping.

- 1.9 Also this same line, on D-601 the new line approaching the CCT is shown at elevation 504.0 while the line exiting the CCT is shown at elevation 500.58. We would not expect the existing line to vary in elevation this much in this distance of piping. Is the elevation of the piping entering the reuse pond known? Should the inlet piping be installed flat from the existing line and then the vertical piece extended to match the elevation change or should the new piping be slope to make this elevation change? Answer: The elevation of the piping entering the reuse pond is unknown. The new piping shall be sloped to make this elevation change as required.
- 1.10 C-301 shows the installation of a new 10" line. Key Notes 31 35. We assume that this is connected to the discharge piping of the Reuse Pump Station however no new work is shown on the schematic provided on G-005. From field observations the existing 90 degree bend is above grade, and then combines to an existing buried single line. Should this new line connect to the single line under ground? Please confirm this and confirm that the reuse pump station can be taken out of service long enough to remove the 90 elbow and install the Tee and the valve, such that temporary piping/pumping will not be required for this connection.

Answer: Yes, the new 10" line connect to the single line underground. The reuse pump station can be taken out of service for a couple of hours to remove the 90 elbow and install the Tee and the valve.

1.11 C-301 shows the new 6" drains from the chemical containment and CCT connecting to an existing manhole but does not provide elevation or slopes of the piping. Drawing D-601 calls out the drain to be at invert 497.31 as it leaves the CCT, Drawing D-801 does not call it out but we approximate the invert to be 505.84 as it leaves the chemical containment. The drain line from the chemical containment seems like it will be able to be above the Effluent Line which is called out to be at IE 504.0 on D-601. The drain line from the CCT will be below the Effluent Line. Do we know the invert at the existing

manhole? Does this need to be drop manhole or can the manhole be simply cored and the piping brought into the manhole. Do we know the elevation of the reject line? Answer: Existing Manhole, RIM 503.64, invert in 496.29, invert out 496.18. The existing manhole can be simply cored and the new drain piping brought into the manhole. Elevation of the reject line was unknown.

1.12 Speaking of Reject Line, what make the determination that the flow in the Filter Effluent Box needs to be rejected or if it can be sent to the CCT. Previously this determination was made after the UV disinfection. Does the determination now need to be made post CCT?

Answer: The determination is based on the turbidity after the filter, not related to UV disinfection or Chlorine disinfection.

1.13 C-301 shows the bypass line being rerouted around the new clarifier but then turns back towards the building before the end of the new building. Perhaps this line should be reroute beyond the end of the new eastern end of the building in case another building expansion is needed.

Answer: Yes, reroute beyond the end of the new eastern end of the building in case another building expansion is needed.

- 1.14 C-301 Key Note 22 seems to the discharge of the reject pond pump station which combines with the Influent Pump Station Discharge Line. Is there a concern that these pumps might fight to both produce into the same line? If so, perhaps instead of cutting and capping Key Note 16, this line could be connected to the 8" Digester drain line to be able to send the Reject to the Influent EQ Basin. Answer: Keep the current design.
- 1.15 A-812 shows that the door height is only 7'-4", the door schedule on A-814 calls for a 7'-1" door, is the frame head to be 3" tall? The detail calls for it to 4" tall. We recommend a taller door to be able to easily remove and replace the electrical equipment in this room in the future without needing to "lay it down". Answer: Door height 7'-0", frame head to be 4" tall. Total height 7'-4".
- 1.16 S-102 shows the concrete infill surrounding the grit equipment. Should this be omitted in the future grit basin? Answer: Yes, this shall be omitted in the future grit basin.
- 1.17 S-402 shows 1" expansion joints where the new clarifier meets the existing structure. How will the head shaft for the clarifier account for this possible movement of the opposite sides of the tank? Answer: This possible movement will be accounted for within the clarifier equipment.
- 1.18 D-003 Elevation C shows discharge lines coming out of each of the digesters, D-701 shows them as 8" valves with downward facing 90 degree elbows. What is the purpose of these? Are these the agricultural reuse line(s) shown on G-005?



Answer: These are digested sludge discharge line. Yes, these are the agricultural reuse line(s) shown on G-005.

1.19 D-101 calls out a 1.5" water line to be run exposed and heat traced. The table on G-008 calls out this line to be galvanized steel, stainless steel, or copper. Is this our choice? Also where is the source for this line it is not shown on C-301? Does this line need a backflow preventer and/or PRV?

Answer: The 1.5" water line shall be galvanized steel, PVC (not stainless steel), or copper. The source for this line is the existing water line which was shown only a small portion in the C-301 based on survey. This line needs a backflow preventer, and PRVs (in sheet D-921 valve schedule CV1012 and CV1016).

- 1.20 D-101 and S-101show the floor sloping to the drain under the dumpster however there does not seem to be piping for this drain shown. A clean out to the left of dumpster containment might be a good idea. Also mud valves and drains in each of the three screen channels might be a good idea too. Answer: Add 6" drain piping below the dumpster area, and connect with the drain from washer using 11.25° bend, tee instead of 90, and 90° bend – all MJ.
- 1.21 D-103 Key Note #4 shows a dumpster. Is this furnished by the Contractor or will the refuse removal company provide this? Answer: The contractor shall provide the dumpster.
- 1.22 D-105 shows the future grit and fluidizing lines going to the right of the page. Would it be better enlarge the grit pump area and route this piping to the left so that both grit pumps can be on the roadway side? Answer: Keep the current design.
- 1.23 D-101 to D-105 does not show a section cut through the grit washer compactor. Can this be provided?

Answer: See Appendix A with section views.

- 1.24 D-201 and D-202 seem to show a HDPE liner like the existing onsite ponds however the 312000 spec only refers to a bentonite liner and there does not seem to be a specification for a HDPE liner. Assuming that it is a HDPE liner, what is the size of the anchor curb at the upper perimeter? does it have reinforcing? Seems odd that the bottom of the pond would not be sloped slightly to the sump, please confirm. Do you want the mooring cable supports to be within the HDPE liner as shown or just outside and anchor ring curb? What type of material is the ¼" x2" batten? Is this continuous? Answer: See addendum No. 1
- 1.25 D-211, the future pump does not show the installation of guide rails by the omission of Key Note #13. Please confirm. If no guide rails are needed, does the interior Key Note #6 Elbow need to be installed for the future pump? What about the riser, reducer and base elbow?



Answer: Other than the future pump, guide rails, elbow, riser, reducer and base elbow shall all be installed.

- 1.26 **D-212, section A seems to show a tide flex valve on the end of the drain line from the meter vault, please confirm if this is needed by adding to the key note list.** Answer: Yes, this shall be a tide flex duckbill check valve.
- 1.27 D-301, Key Note #1. Is this meant to be a poured concrete wall? Dowels at what centers? What is the existing starting elevation? Sequencing wise, when will this be completed? (one tank at a time?) Answer: Yes, this means to be a poured concrete wall, dowels at center @ 12". The existing starting elevation is 527.58. After VLR tank No. 3, Clarifier splitter box and Clarifier No. 3 all be complete, this wall can be built.
- 1.28 **D-301, Key Note #3. Depth of channel? Dowel reinforcement?** Answer: Depth of channel is 3'-8". Yes, add dowel reinforcement.
- 1.29 D-302 shows the new air piping rising up the wall and we assume penetrating the wall into the blower room. We find no continuation of this piping on the other side. Should something be shown on D-304 Answer: This air pipe connected with the existing air pipe which penetrating the wall from the blower room to the VLR basin No. 3.
- 1.30 D-303 shows the piping demo and reworking for the WAS/RAS but does not mention what if anything is to be done with the existing screen and manual bypass screen. E-101 calls for the demolition of the electrical control panel and feed for the screen Answer: Demolish and salvage the existing screen and manual bypass screen.
- 1.31 D-304 shows removal and replacement of the blowers with new reducers going to a box. What is this box, is that the existing header? Answer: Yes, it is the existing header.
- 1.32D-401, Key Note #7. Depth of channel? Dowel reinforcement? We believe these are the<br/>same as shown on D-301, please confirm.<br/>Answer: Yes, it is the same as shown on D-301.
- 1.33 D-501 shows the 16" SE line being run along the upper portion of the page in bold from the Key Note 1 Tee to the Wall. We believe that it penetrates the wall and has a 90 degree elbow heading upward on the page. This is shown in the section view on the lower portion of this page. Elevation D on D-003 shows the piping but does not call out the piping size or process. Please confirm. Answer: In D-501, 16" SE line penetrates the wall (from clarifier No. 3) and run along the

Answer: In D-501, 16" SE line penetrates the wall (from clarifier No. 3) and run along the upper portion of the page. It is the same pipe on D-003 section D upper pipe.

1.34 D-501 does not show the RAS line work in bold but calls out Key Note 3 to replace the existing 90 with a Tee. We believe the new piping then also penetrates the wall and also has a 90 degree bent heading toward the top of the page. It is not shown in Section A on this page. Elevation D on D-003 shows this piping but does not call out the piping size or

process. It shows these lines entering the filter room staggered but we believe this line to be directly below the SE line. Please confirm.

Answer: The lower pipe on D-003 section D is the sludge pipe, which penetrates the wall and flow into the existing clarifier sludge channel (not into filter room). Key note in D-501 shall be deleted, this 90-degree reducing bend will be kept without any change.

1.35 D-501 calls for the installation of a new Filter Effluent line starting with the 12x8 Tee to the concrete box. Review of the existing conditions show that there is a valve and plug on the concrete wall. Are we to connect to this? The drawing also does not show the existing UV units on the other two lines. Are these to be removed and replaced with straight piping? E-101 calls for the electrical demolition of these units. Should this line be shown on G-005?

Answer: No need to install the new filter effluent line. Demolish and salvage two (2) existing UV units. Replace UV with straight piping. No work needs to be done on the center line (existing gap between 2 blind flanges).

- 1.36 D-602 calls out a scale of 1" =200' this is clearly wrong when the reject pond is 222'x144' and takes up a majority of the page. Also again, the liner questions from D-201& D-202. Key note 1 states to connect the piping the reject pond, but C-301 has it connected to the existing piping, please confirm C-301 is correct. Answer: the scale shall be 1" = 200". Liner shall follow Addendum No. 1 item 2.2. C-301 is correct.
- 1.37 D-701 Section C shows a drop pipe to the diffusers that we believe should not be shown in this section, it would be behind the section line near the separating wall. Please confirm.

Answer: D-701 Section C shows a drop pipe to the diffusers; this drop pipe would be behind the section line near the separating wall. Your statement above is correct.

1.38 D-710 and D-711 call out the air piping as SSTL piping for both the exposed and the buried portions. The table on G-008 calls for buried air piping to DIP. Please confirm which is correct.

Answer: G-008 is correct. Buried air piping shall be DIP.

- 1.39 D-801and D-802 show and emergency shower, but there is no a water line shown to connect to it on these drawings nor C-301. Answer: Find the existing water line and extend to the emergency shower.
- 1.40 D 802 shows the 2" HOCL coming out of the Containment wall, dropping down underground and then turning up into the slab of the building. Are there intended to be any valves before it connects to the pump skid? What about on the discharge side which is not shown?

Answer: No valves before it connects to the pump skid. No valves on the discharge side, other than valves included in the pump skid.

1.41 Specification 09 96 00 Part 3.6 states to refer to the plans for a paint schedule. We do not find this in the plans.

Answer: See attached schedule in Appendix C.

- 1.42 6.01 EJCDC Lists warranty terms to be 2 years from substantial completion. 016000 1.07.D.1 lists warranty 1 year from acceptance of work. 46 23 23 lists 1 year from substantial completion. Which warranty terms should we base our pricing on? If it is acceptance of work when will that likely fall with respect to substantial completion? Answer: Grit removal equipment warranty see specification 46 23 23, which is 1 year from substantial completion.
- 1.43 Sections 26 05 03, 46 05 13, and 46 05 53 are referenced in section 46 23 23, but they do not appear to be included for our review. Are these specification sections available for review?

Answer: Sections 26 05 03, 46 05 13, and 46 05 53 will not be provided. Delete the reference in section 46 23 23

1.44 Section 46 23 23 does not refer to Div 26. Specification section 26 29 23 outlines VFD requirements such as spare parts (1.8), line reactors, VFD and field surge protection, panel mounted keypad, Ethernet connection, etc. Please advise if these items should be included in the grit system control panel.

Answer: These items should not be included in the grit system control panel.

- 1.45 Plan Sheet G-006: This drawing indicates the headworks is to be designed for a peak of 4.2 mgd. Section 46 23 23 indicates a peak of 4.11 mgd. Which are we to design to? Answer: 4.2 MGD will be the peak flow.
- 1.46 Plan Sheet I-102 P&ID shows E-stop on the grit classifier. This item not listed in 46 23 23, please confirm this will be supplied by Others.
  Answer: Delete E-stop in sheet I-102, E-stop shall be provided for system within panel per specification.
- 1.47 Plan Sheet E-313 / E-602 There is a E-Stop pushbutton (HS1120) shown for the grit system. This is not listed in 46 23 23, please confirm this is supplied by others.
  Answer: Delete E-stop pushbutton in E-313 / E-602. E-stop shall be provided for system within panel per specification.
- 1.48 Plan Sheet E-602 Two pull cord switches are listed as part of the grit system control panel. What are these tied to? They are not addressed in the specs. Answer: Delete Two pull cord switches in sheet E-602.
- 1.49 Note 2 Plan Sheet E-602 requires additional components for the control panel that are not listed in section 46 23 23. Some of the components listed are a folding shelf, panel light, surge protection, lighting arrestors, 480V air conditioner, analog indicators, 24VDC power supply, dead front, etc. Please confirm these items should be included in the grit system control panel.

Answer: Follow specification 46 23 23, delete additional components shown on sheet E-602.

What about the telescoping valve in the existing digester? Do you want it removed?

Answer: Yes, remove the telescoping valve in the existing digester and replace with blind flange.

## 2. <u>Acknowledgement</u>

2.1 Receipt of Addendum No. 2 shall be acknowledged via e-mail to <u>liang.wang@gmcnetwork.com</u> and confirm that the addendum has been received.

### 3. <u>Conclusion</u>

3.1 This is the end of Addendum Number 2, dated February 17, 2025

Liang Wang

Liang Wang, PE

Appendix A

PLAN VIEW



42 3/4 in [1.09 m]									
SCREW GEARMOTOR									
	DATE: 5/16/202 DRAWN BY:	3	SCALE 1:40 ED BY:	APPROVED	) BY				
				LS					
RASNAIL IPACT	24" OPTI SPIRASI	EACUP	МРАСТ						
	Hydro S. International S.								
ILY TO THOSE ITEMS	©202 WEIGHT:	21 HYDRO		ATIONAL					
ACCEPT ANY OR THE R SUPPLIED BY ANY UOUS DEVELOPMENT	3099 Ibmass stock number:								
INTERNATIONAL T, (OR ANY PART DE ANY DESIGN DE THIS DRAWING									
NY PURPOSE OTHER DUCED, IN WHOLE OR NTERNATIONAL.	SHEET SIZE:	SHEET: 1 OF 1			Rev:				
	L				<u> </u>				

Appendix B



Appendix C

Substrate					Coating System										
								First	First Coat	Second	Second	Third Coat Fourt	h Fifth Coat	Total	Total
0	Code		Service	Material	Shop Primed	Surface Preparation	Coating Type	Coat/Prim	Minimum	Coat	Coat	Minimum Coat	Minimum	Minimum I	Minimum
					-		Spot Prime - Modified Polyamidoamine Epoxy	er	Sq. Ft. per	Winimum	Minimum	DFT (mils) Minimu	IM DEI (MIIS)	DFT (mils) S	Sq. Ft. per
	IE1	Interior	Exposed	Previously Painted Non-Submerged Ferrous Metals or	No	SSPC-SP3 (3)	Full Prime - Modified Polyamidoamine Epoxy								
				Ductile Iron			Finish - Aliphatic Acrylic Polyurethane	3.0		2.0		2.0		7.0	
							Primer - Aromatic urethane, Zinc-Rich Primer								
	IE2	Interior	Exposed	Ferrous	Yes	SSPC-SP10 / NACE 2	Intermediate - High-Build Epoxy Coating - Pure Polyamide Epoxy							7.5	
							Finish - Aliphatic Acrylic Polyurethane	2.5		3.0		2.0			
				Non-Submerged Ferrous Metals & Ductile Iron		SSPC-SP10 / NACE 2,	Primer - Polyamidoamine Epoxy								
	IE3	Interior	Exposed		Yes	NAPF 500-03 for Ductile	Intermediate - High-Build Epoxy Coating - Pure Polyamide Epoxy								
						Iron	Finish - Aliphatic Acrylic Polyurethane	6.0		3.0		2.0		11.0	
				ed Concrete Masonry Block and Pre-Cast Concrete			First Coat - Waterborne Cementitious Acrylic								
	IE4	IE4 Interior Ex	Exposed		No	SSPC-SP13 / NACE 6, ICR	<sup>I-</sup> Intermediate - Waterborne Acrylic Epoxy								
						CSP 2-4	Finish - Waterborne Aliphatic Polyurethane	12.0	65.0	40		2.0		18.0	65.0
							First Coat - Modified Polyamine Epoxy								
	IE5	Interior	Fxnosed	Concrete	No	SSPC-SP13/NACE 6, ICRI	Intermediate - Waterborne Acrylic Epoxy								
	125			concrete	NO	CSP 2-4	Finish - Waterborne Aliphatic Polyurethane	2.0		4.0		2.0		0.0	
							First Cost - Waterborne Comentitious Acrulic	3.0		4.0		2.0		9.0	
	IPC1	Interior	Previously Coated	Concrete	No	SSPC-SP13 / NACE 6	Intermediate - Waterborne Acrylic Enoxy								
	01	interior	i i ciliousi, couteu			001 0 01 10 / 10 102 0	Finish - Waterborne Aliphatic Polyurethane	12.0		4.0		2.0		18.0	
							First Coat - Modified Polyamine Epoxy	12.0				2.0		10.0	
	IEX1	Interior	Existing	Concrete	No	SSPC-SP13 / NACE 6	Intermediate - Waterborne Acrylic Epoxy								
							Finish - Waterborne Aliphatic Polyurethane	3.0		4.0		2.0		9.0	
				Factory-Primed Ferrous Metals	Yes	SSPC-SP3 <sub>(1)</sub> , ASTM D6386	First Coat - Phenolic Alkyd								
	EE1	E1 Exterior Exposed	Exposed				Intermediate - Alkyd Coating								
							Finish - Alkyd Coating	2.0		2.0		2.0		6.0	
	EE 2	FF2 Exterior	Exposed	Previously Painted/Primed Non-Submerged Ferrous	No	SSPC-SP3 or NAPF 500-0	3 Spot prime - Modified Polyamidoamine Epoxy								
Wastewater	LLZ	LALEHIOI	Lxposed	Metals & Ductile Iron		for Ductile Iron	Finish - Aliphatic Acrylic Polyurethane	3.0		2.0		2.0		7.0	
	EE3	Exterior	Exposed	Ferrous Metals	Yes	SSPC-SP6 / NACE 3	Primer - Aromatic urethane, Zinc-Rich Primer	2.5		3.0		2.0		7.5	
	EE4	Exterior	Exposed	Ferrous Metals; Digester Covers, etc.	Yes	SSPC-SP6 / NACE 3	Intermediate - High-Build Epoxy Coating - Pure Polyamide Epoxy	2.5		3.0		2.0		7.5	
Coating	EE5	Exterior	Exposed	Factory-Primed/Finished Equipment	No	SSPC-SP10	Finish - Aromatic Urethane, Zinc-Rich Primer or Aliphatic Acrylic Polyurethane	2.0		2.0		2.0		6.0	
eeating							Primer - Polyamidoamine Epoxy								
	EE6	Exterior	Exterior Exposed	Non-Submerged Ductile Iron	Yes	NAPF 500-03	Intermediate - Polyamide Epoxy								
							Finish - Aliphatic Acrylic Polyurethane	6.0		3.0		2.0		11.0	
	EB1	Exterior	Buried	Bre-Cast Concrete	Voc	SSPC-SP13 / NACE 6	Primer - Waterborne Modified Polyamine Epoxy Mortar								
	LDI	LALEHIOI	Bulled		165	55FC-5F157 NACL 0	Finish - Modified Polyamine Ceramic Epoxy	6.0		40.0				46.0	
				Concrete	No	SSPC-SP13 / NACE 6	Primer - Waterborne Modified Polyamine Epoxy								
EP	EPC1	Exterior	Previously Coated				Intermediate - Inorganic Hybrid Water-Based Epoxy								
								1.0		3.0		2.0		#REF!	
	EEX1 Exte			Concrete	No	SSPC-SP13 / NACE 6	Primer - Modified Waterborne Acrylate								
EE		Exterior	Existing				Finish - Modified Waterborne Acrylate								
								4.0		4.0		4.0		12.0	
				Ferrous Metals or Ductile Iron Submerged or Intermittently Submerged in Wastewater (Closed Top /	Yes	SSPC-SP10 / NACE 2 / NAPF 500-03 for Ductile	Primer - Polyamide Epoxy								
	IV1	Imme	ersion/Vapor Zone				Intermediate - Modified Polyamide Epoxy								
IV2 IV3 IV4 IV5				etc)		Iron	Finish - Novolac Epoxy	2.5		4.0		10.0		16.5	
				Ferrous Metals or Ductile Iron Submerged or			Primer - Modified Aromatic Polyurethane								
	11/2	IV2 Immersion/Vapor Zone	Intermittently Submerged in Wastewater (Open Top	tently Submerged in Wastewater (Open Top	SSPC-SP10 / NACE 2 /	Intermediate - Polyamide Epoxy									
	IVZ			/No Head Space Exposure in Digesters, Secondary	res	Iron	Finish - Modified Polyamine Epoxy								
			Clarifiers, e	Clarifiers, etc.)				4.0		30.0		20.0		54.0	
			Immersion/Vapor Zone	Concrete Submerged or Intermittently Submerged in Wastewater (Closed Top / Head Space Exposure in Disacteur, Secondary Clarifiers, Life Stations etc.)		SSPC-SP13/NACE 6. ICRI	Primer - Modified Polyamine Epoxy Mortar								
	IV3	Imme			No	CSP 5-6	memeulate - woulden Aliphatic Amine Epoxy Mortar Finish - Modified Polyamine Enovy			4.5 - V					
			Digesters, Secondary Clarifiers, Lift Stations etc.)			Eiller Modified Delvamine Epony	1/16"		125.0		15.0		140.0		
	IV4	Imme	ersion/Vapor Zone	Concrete Subjected to High Levels of H2S	No	SSPC-SP13/NACE 6	Finet - Woullieu Polyannie Epoxy Finich - Aromatic Polyarethane Hybrid								
							rinish vironialier organethane Hybrid	1/8"		125.0				125.0	
				Ductile Iron Pipe Submerged or Intermittently			Primer - Polyamidoamine Epoxy								
	IV5	Immersion/Vapor Zone	ersion/Vapor Zone	Submerged in Wastewater (Open Top /No Head Space Exposure in Digesters, Secondary Clarifiers, etc.)	Yes	NAPF 500-03-04	memediate - Polyamide Epoxy								
							וווואה שטעוווכע רטוצמוווויב בטטגצ	<u> </u>		4.0		10.0		#DEE!	
								6.0		4.0		10.0		#KEF!	