Columbia County NFMIP WWTP

Progress Meeting

Date: 08/07/2023
Time: 9:00AM
Place: WS Jobsite Trailer Microsoft Teams

Name:	Company:	Email:	In Attendance?
Travis Cassella: Project Manager	WSI	tcassella@whartonsmith.com	✓✆
Jeff Rocek: Project Superintendent	WSI	jrocek@whartonsmith.com	
Jose Romero: Project Engineer	WSI	jromero@whartonsmith.com	✓✆
Hayden Wilhelm: PE Tech	WSI	hwilhem@whartonsmith.com	
Sloan Hagerty: Senior PM	WSI	shagerty@whartonsmith.com	✓✆
Stacy Cowart	Columbia County	scowart@columbiacountyfla.com	✓✆
Ken Sweet	Columbia County	ksweet@columbiacountyfla.com	✓✆
Mike Null	Columbia County	bccpurchasing@columbiacountyfla.com	✓✆
Erica Jones	Columbia County	ejones@columbiacountyfla.com	✓✆
Daniel Inkell	Jones Edmunds	dinkell@jonesedmunds.com	✓✆
Joey Duncan	Dewberry	Jduncan@dewberry.com	✓✆
Jose Pereira	Dewberry	jpereira@dewberry.com	
Harlan Wiggins	Dewberry	hwiggins@dewberry.com	✓✆
Amy Tracy	Dewberry	atracy@dewberry.com	

✓✆ ✓ X

1.0 - SAFETY

1.1	• No accidents, no incidents. - Changing weather conditions. - Overhead awareness around crane at CCT.

2.0 – PERMITS AND CONTRACT

2.1	• Building Permit: - Building permit was issued 6/22/2023 - Permit #: 47527 • Potable water and force main tapping applications – Not approved CC to purchase water and force mains. • GMP-3 Status – Board review last week of July. Approved. Formal contract amendment sent 7/31/2023. • Deductive Change Order Status Approved.

3.0 - REVIEW OF WORK IN PROGRESS

3.1	• Management: o Continued work on procurement, submittals, and RFIs.
3.2	• Field: o Wharton-Smith worked on:

	▪ F/R/P CCT effluent slab ▪ Formed and reinforced walls for first lift ▪ Installed gravity sewer structures and piping. ▪ Installed 20" HDPE into Reject Pond. o Cogburn ▪ Completed FPL Conduit run from Hwy90 to XFMR ▪ Installed communications conduits from Hwy90 to plant. o Tim-Prep worked on: ▪ Continued excavation of stormwater pond ▪ Constructing site road ▪ Continued building reject pond. ▪ Built-up BNR & XFMR pads.

4.0 - UPCOMING WORK

4.1	• Management: o GMP-3 procurement, submittals, and RFI's. • Field: o Wharton-Smith ▪ Pour CCT effluent walls (1st lift) ▪ Plug/Patch/Leak Test/Backfill CCT walls ▪ Continue gravity sewer pipe install o Tim-Prep ▪ Finish building up plant loop road and installing rock ▪ Dig stormwater pond deeper to generate more fill. ▪ Finish building Reject Pond o Cogburn ▪ Finish telecommunication conduits ▪ Begin In/Under rough in of electrical building (pending layout confirmation RFI) ▪ CCT In/Under o Comanco (Mobilizing first week of September) ▪ Install reject pond liner o GeoTek (Mobilizing 9/5) ▪ Ground Improvement/Rigid Inclusions o FPL ▪ Transformer to be set and energized 9/25/2023

5.0 – SUBMITTALS, RFI, COORDINATION

5.1	• Submittals - High Priority 1. Ground Improvements – Rigid Inclusions - See attached submittal log.
5.2	• RFIs - 44 RFI's submitted to date, 3 open/Unresolved RFI's 1. RFI#015 - Spray Field Monitoring Wells 2. RFI#043 – EQ Pump Motor Service Factor 3. RFI#044 – Electrical Building Coordinates - See attached Open RFI Log.
5.3	• Coordination Items - **BNR Slab Updated Drawings**: Draft design was provided, waiting on updated drawings. WS is moving forward with the draft and has had rebar drawings updated which will be submitted for review this week.

	- **Electrical/IC Coordination:** Wharton-Smith has requested a set of Design Clarification drawings which detail changes to Electrical and Instrumentation. These changes include reducing from two PLC's to a single and utilizing fiber/ethernet communications in lieu of hardwired. - **Evoqua BNR Layout Coordination:** Last week a coordination meeting has been conducted to resolve layout concerns. The BNR platform will need to be modified to remove cross braces under the platform to allow for access from the site road to the West side of the tanks. Additionally – the stairway is being redesigned with a switchback to resolve the conflict with the 75hp blower. Evoqua has advised that these changes will have a cost impact. Associated costs will be submitted for approval as a Contingency/Allowance Usage Order (CAUO).

6.0 – CONTINGENCY/ALLOWANCE USAGE ORDERS (CAUO)

6.1	• CAUO's to be submitted for approval - funded from contingency. o Thickened BNR Slab o CCT Drains (adding drains back to the project) o Additional Hydrants o Geotechnical Peer Review o Influent Manhole Future FM o Addition of Metal Building Walls and Galvanizing o Electrical Gear Additional Cost for Increased Motor Sizes o Evoqua Stair and Platform Modifications

7.0 - SCHEDULE

7.1	• Baseline Schedule updated on 08/04/23 o Critical Path is currently being driven by the Packaged Plants – Upcoming critical activities are listed below: ▪ BNR Packaged Plant submittal approval and release. ▪ Tank slab redesign, this will be required for new rebar shop drawings, submittals, and approvals ▪ Rigid Inclusions contract execution and submittals. o See attached CPM Schedule.

8.0 – PREVIOUS DISCUSSION

8.1 **06/01/23**	• Mr. Null expressed gratitude towards the team for achieving the DEO expenditure goal on time. • Mr. Duncan suggested weekly meetings could be held to increase RFI/Submittal turnaround times.

9.0 – DISCUSSION

9.1 **06/01/23**	• WS send out progress photos • Columbia County finalizing JE CEI contract • Revisit RFI#041 Drainage Inlet Modification

10.0 - PREVIOUS ACTION ITEMS

10.1 **07/10/23**	• Jones Edmunds provide response to RFI#032 ASAP. Complete

11.0 – NEW ACTION ITEMS

11.1 **08/07/23**	• Wharton-Smith to send monthly aerial progress photos • Jones Edmunds to revisit RFI#041

Next Meeting Time and Date:

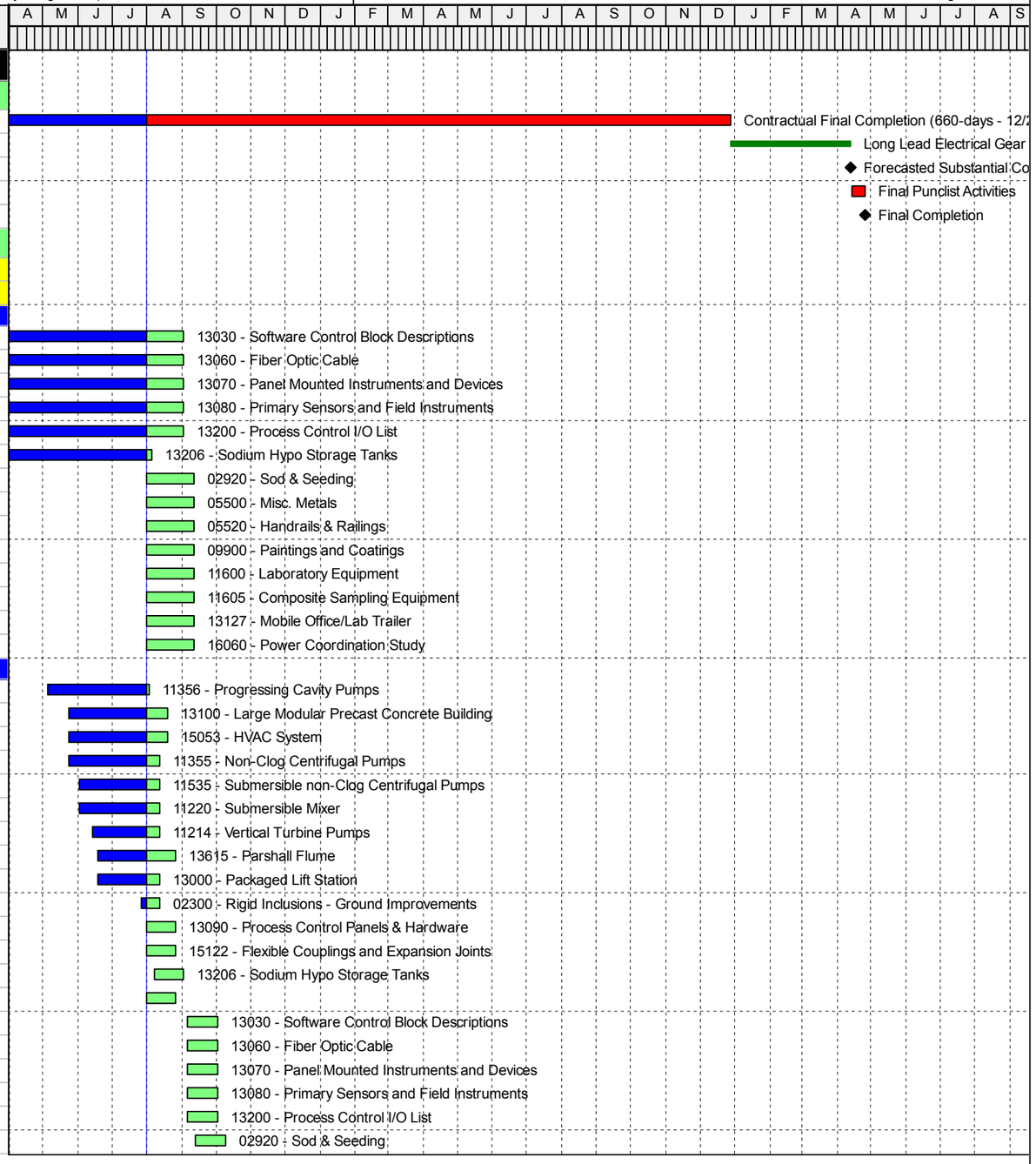
TIME: 09:00 AM
LOCATION: On Site
DAY/DATE: 9/11/2023

The above statements represent this writer's understanding of discussions, decisions, clarifications, and actions taken from this meeting. Unless advised otherwise in writing within five (5) days of receipt of these minutes, the above statements shall be considered true and correct and work shall proceed on this basis.

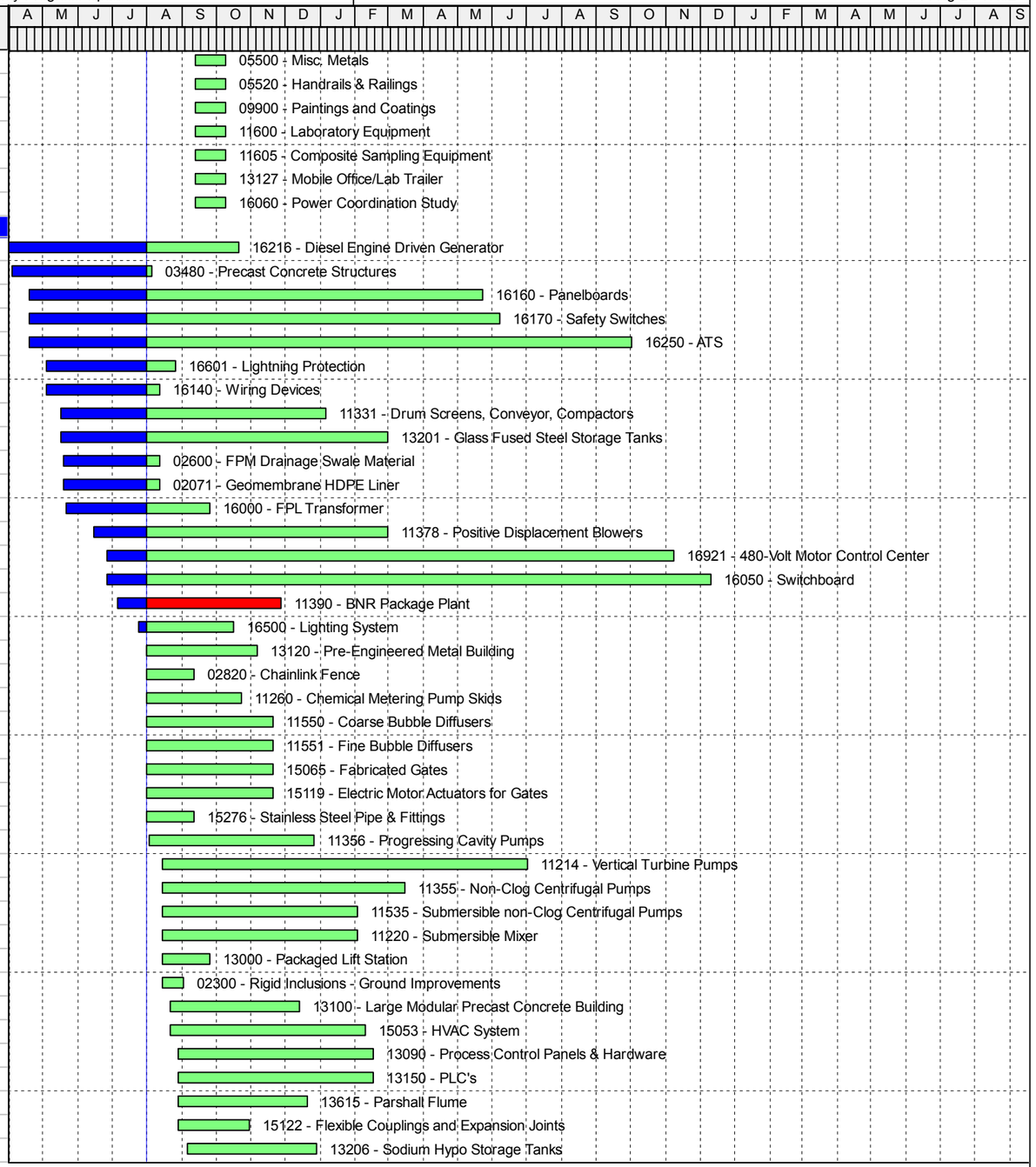
Notes

Item	Date	Action By	Date Due

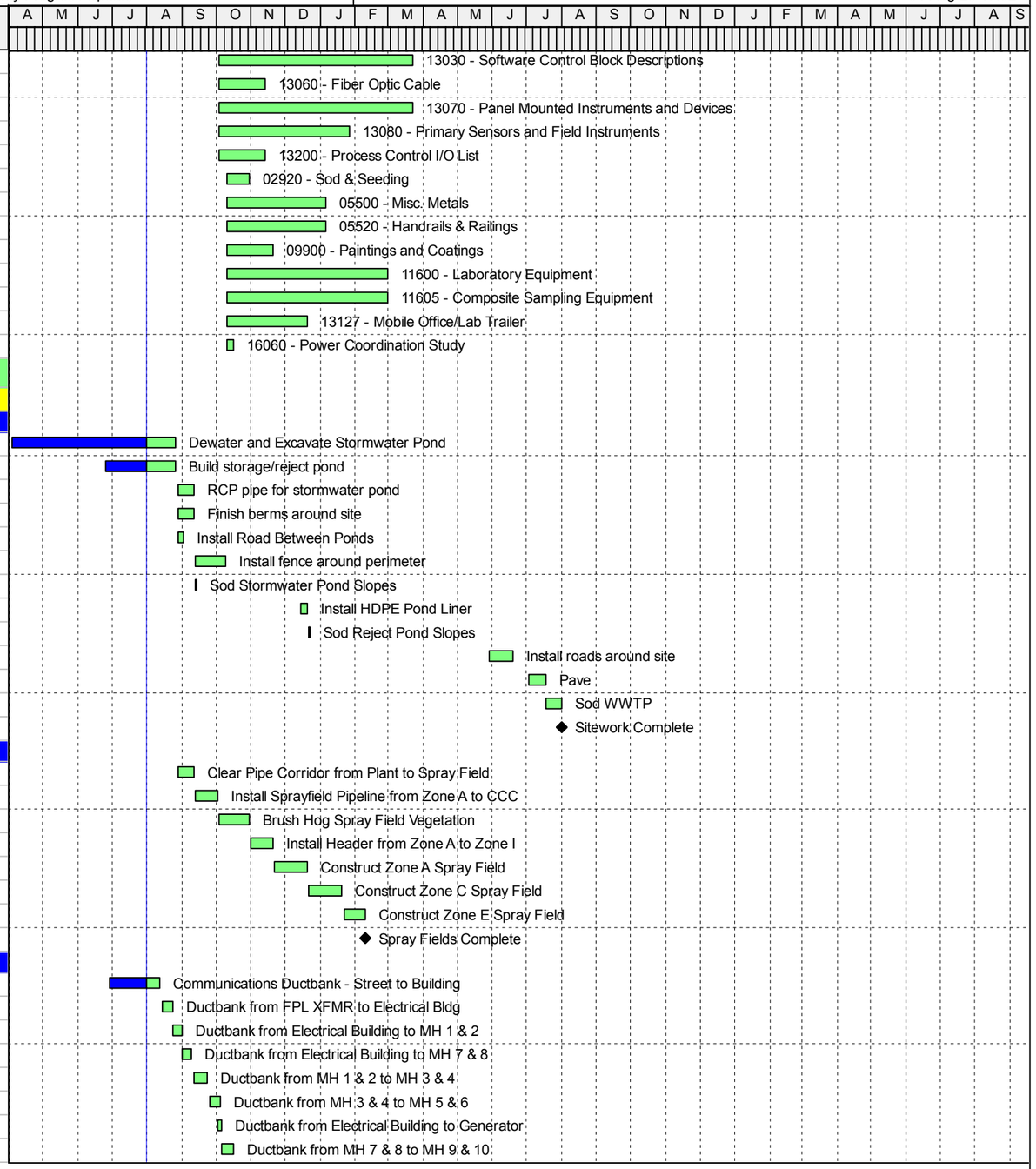
Activity ID	Activity Name	Original Duration	Total Float	Start	Finish
Columbia County NFMIP WWTP - PU4_230731		544	0	08-Mar-23 A	25-Apr-25
Executive Summary		544	0	08-Mar-23 A	25-Apr-25
ES1010	Contractual Final Completion (660-days - 12/27/2	660	0	08-Mar-23 A	27-Dec-24*
ES1020	Long Lead Electrical Gear Impact	107	0	28-Dec-24	13-Apr-25
ES1050	Forecasted Substantial Completion (05/16/25)	0	0		13-Apr-25*
ES1060	Final Punclist Activities	10	0	14-Apr-25	25-Apr-25
ES1070	Final Completion	0	0		25-Apr-25*
Preconstruction		427	79	08-Mar-23 A	10-Dec-24
Permitting		0	0		
Procurement		427	79	08-Mar-23 A	10-Dec-24
Submittals Procure/Submit		93	358	14-Mar-23 A	11-Sep-23
PS1280	13030 - Software Control Block Descriptions	80	211	14-Mar-23 A	01-Sep-23
PS1290	13060 - Fiber Optic Cable	80	301	14-Mar-23 A	01-Sep-23
PS1300	13070 - Panel Mounted Instruments and Devices	80	211	14-Mar-23 A	01-Sep-23
PS1310	13080 - Primary Sensors and Field Instruments	80	221	14-Mar-23 A	01-Sep-23
PS1370	13200 - Process Control I/O List	60	301	14-Mar-23 A	01-Sep-23
PS1390	13206 - Sodium Hypo Storage Tanks	30	255	31-Mar-23 A	04-Aug-23
PS1070	02920 - Sod & Seeding	30	358	31-Jul-23	11-Sep-23
PS1130	05500 - Misc. Metals	30	241	31-Jul-23	11-Sep-23
PS1140	05520 - Handrails & Railings	30	241	31-Jul-23	11-Sep-23
PS1150	09900 - Paintings and Coatings	30	224	31-Jul-23	11-Sep-23
PS1260	11600 - Laboratory Equipment	30	228	31-Jul-23	11-Sep-23
PS1270	11605 - Composite Sampling Equipment	30	228	31-Jul-23	11-Sep-23
PS1350	13127 - Mobile Office/Lab Trailer	30	276	31-Jul-23	11-Sep-23
PS1540	16060 - Power Coordination Study	30	333	31-Jul-23	11-Sep-23
Engineer Review/Approve		65	358	05-May-23 A	09-Oct-23
RA1190	11356 - Progressing Cavity Pumps	20	253	05-May-23 A	02-Aug-23
RA1320	13100 - Large Modular Precast Concrete Buildinç	20	227	23-May-23 A	18-Aug-23
RA1420	15053 - HVAC System	20	256	23-May-23 A	18-Aug-23
RA1180	11355 - Non-Clog Centrifugal Pumps	20	176	24-May-23 A	11-Aug-23
RA1220	11535 - Submersible non-Clog Centrifugal Pumps	20	197	02-Jun-23 A	11-Aug-23
RA1155	11220 - Submersible Mixer	20	229	02-Jun-23 A	11-Aug-23
RA1150	11214 - Vertical Turbine Pumps	20	84	14-Jun-23 A	11-Aug-23
RA1410	13615 - Parshall Flume	20	232	19-Jun-23 A	25-Aug-23
RA1690	13000 - Packaged Lift Station	10	355	19-Jun-23 A	11-Aug-23
RA1700	02300 - Rigid Inclusions - Ground Improvements	20	3	27-Jul-23 A	11-Aug-23
RA1310	13090 - Process Control Panels & Hardware	20	236	31-Jul-23	25-Aug-23
RA1480	15122 - Flexible Couplings and Expansion Joints	20	271	31-Jul-23	25-Aug-23
RA1380	13206 - Sodium Hypo Storage Tanks	20	255	07-Aug-23	01-Sep-23
RA1350	13150 - PLC's	20	234	27-Aug-23 A	25-Aug-23
RA1270	13030 - Software Control Block Descriptions	20	211	05-Sep-23	02-Oct-23
RA1280	13060 - Fiber Optic Cable	20	301	05-Sep-23	02-Oct-23
RA1290	13070 - Panel Mounted Instruments and Devices	20	211	05-Sep-23	02-Oct-23
RA1300	13080 - Primary Sensors and Field Instruments	20	221	05-Sep-23	02-Oct-23
RA1360	13200 - Process Control I/O List	20	301	05-Sep-23	02-Oct-23
RA1060	02920 - Sod & Seeding	20	358	12-Sep-23	09-Oct-23



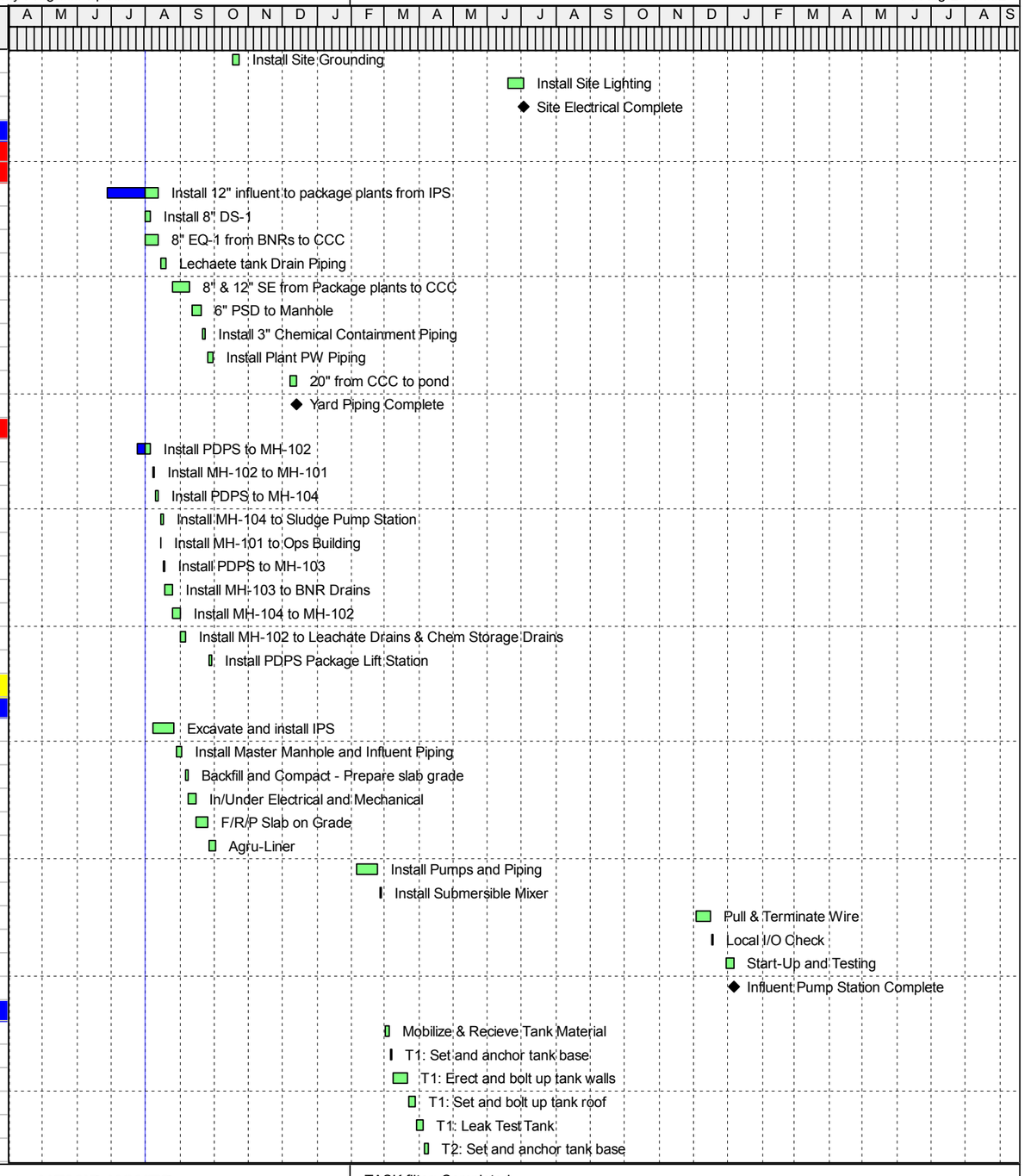
Activity ID	Activity Name	Original Duration	Total Float	Start	Finish
RA1120	05500 - Misc. Metals	20	241	12-Sep-23	09-Oct-23
RA1130	05520 - Handrails & Railings	20	241	12-Sep-23	09-Oct-23
RA1140	09900 - Paintings and Coatings	20	224	12-Sep-23	09-Oct-23
RA1250	11600 - Laboratory Equipment	20	228	12-Sep-23	09-Oct-23
RA1260	11605 - Composite Sampling Equipment	20	228	12-Sep-23	09-Oct-23
RA1340	13127 - Mobile Office/Lab Trailer	20	276	12-Sep-23	09-Oct-23
RA1530	16060 - Power Coordination Study	20	333	12-Sep-23	09-Oct-23
Fab and Deliver		407	79	08-Mar-23 A	10-Dec-24
FD1620	16216 - Diesel Engine Driven Generator	160	350	08-Mar-23 A	20-Oct-23
FD1110	03480 - Precast Concrete Structures	40	314	04-Apr-23 A	04-Aug-23
FD1600	16160 - Panelboards	280	166	19-Apr-23 A	23-May-24
FD1610	16170 - Safety Switches	290	160	19-Apr-23 A	07-Jun-24
FD1630	16250 - ATS	370	70	19-Apr-23 A	01-Oct-24
FD1670	16601 - Lightning Protection	60	376	04-May-23 A	25-Aug-23
FD1580	16140 - Wiring Devices	10	356	04-May-23 A	11-Aug-23
FD1180	11331 - Drum Screens, Conveyor, Compactors	110	223	17-May-23 A	05-Jan-24
FD1380	13201 - Glass Fused Steel Storage Tanks	200	145	17-May-23 A	29-Feb-24
FD1050	02600 - FPM Drainage Swale Material	30	348	19-May-23 A	11-Aug-23
FD1010	02071 - Geomembrane HDPE Liner	30	416	19-May-23 A	11-Aug-23
FD1700	16000 - FPL Transformer	160	329	22-May-23 A	25-Sep-23
FD1210	11378 - Positive Displacement Blowers	180	212	15-Jun-23 A	29-Feb-24
FD1680	16921 - 480-Volt Motor Control Center	350	10	27-Jun-23 A	08-Nov-24
FD1690	16050 - Switchboard	370	27	27-Jun-23 A	10-Dec-24
FD1220	11390 - BNR Package Plant	100	0	06-Jul-23 A	27-Nov-23
FD1660	16500 - Lighting System	60	348	24-Jul-23 A	16-Oct-23
FD1340	13120 - Pre-Engineered Metal Building	70	292	31-Jul-23 A	06-Nov-23
FD1060	02820 - Chainlink Fence	30	338	31-Jul-23	11-Sep-23
FD1170	11260 - Chemical Metering Pump Skids	60	317	31-Jul-23	23-Oct-23
FD1240	11550 - Coarse Bubble Diffusers	80	296	31-Jul-23	20-Nov-23
FD1250	11551 - Fine Bubble Diffusers	80	296	31-Jul-23	20-Nov-23
FD1440	15065 - Fabricated Gates	80	252	31-Jul-23	20-Nov-23
FD1470	15119 - Electric Motor Actuators for Gates	80	252	31-Jul-23	20-Nov-23
FD1530	15276 - Stainless Steel Pipe & Fittings	30	341	31-Jul-23	11-Sep-23
FD1200	11356 - Progressing Cavity Pumps	100	253	03-Aug-23	26-Dec-23
FD1160	11214 - Vertical Turbine Pumps	225	84	14-Aug-23	01-Jul-24
FD1190	11355 - Non-Clog Centrifugal Pumps	150	176	14-Aug-23	15-Mar-24
FD1230	11535 - Submersible non-Clog Centrifugal Pumps	120	197	14-Aug-23	02-Feb-24
FD1165	11220 - Submersible Mixer	120	229	14-Aug-23	02-Feb-24
FD1400	13000 - Packaged Lift Station	30	355	14-Aug-23	25-Sep-23
FD1710	02300 - Rigid Inclusions - Ground Improvements	15	3	14-Aug-23	01-Sep-23
FD1330	13100 - Large Modular Precast Concrete Building	80	227	21-Aug-23	13-Dec-23
FD1430	15053 - HVAC System	120	256	21-Aug-23	09-Feb-24
FD1320	13090 - Process Control Panels & Hardware	120	236	28-Aug-23	16-Feb-24
FD1360	13150 - PLC's	120	234	28-Aug-23	16-Feb-24
FD1420	13615 - Parshall Flume	80	232	28-Aug-23	20-Dec-23
FD1490	15122 - Flexible Couplings and Expansion Joints	45	271	28-Aug-23	30-Oct-23
FD1390	13206 - Sodium Hypo Storage Tanks	80	255	05-Sep-23	28-Dec-23



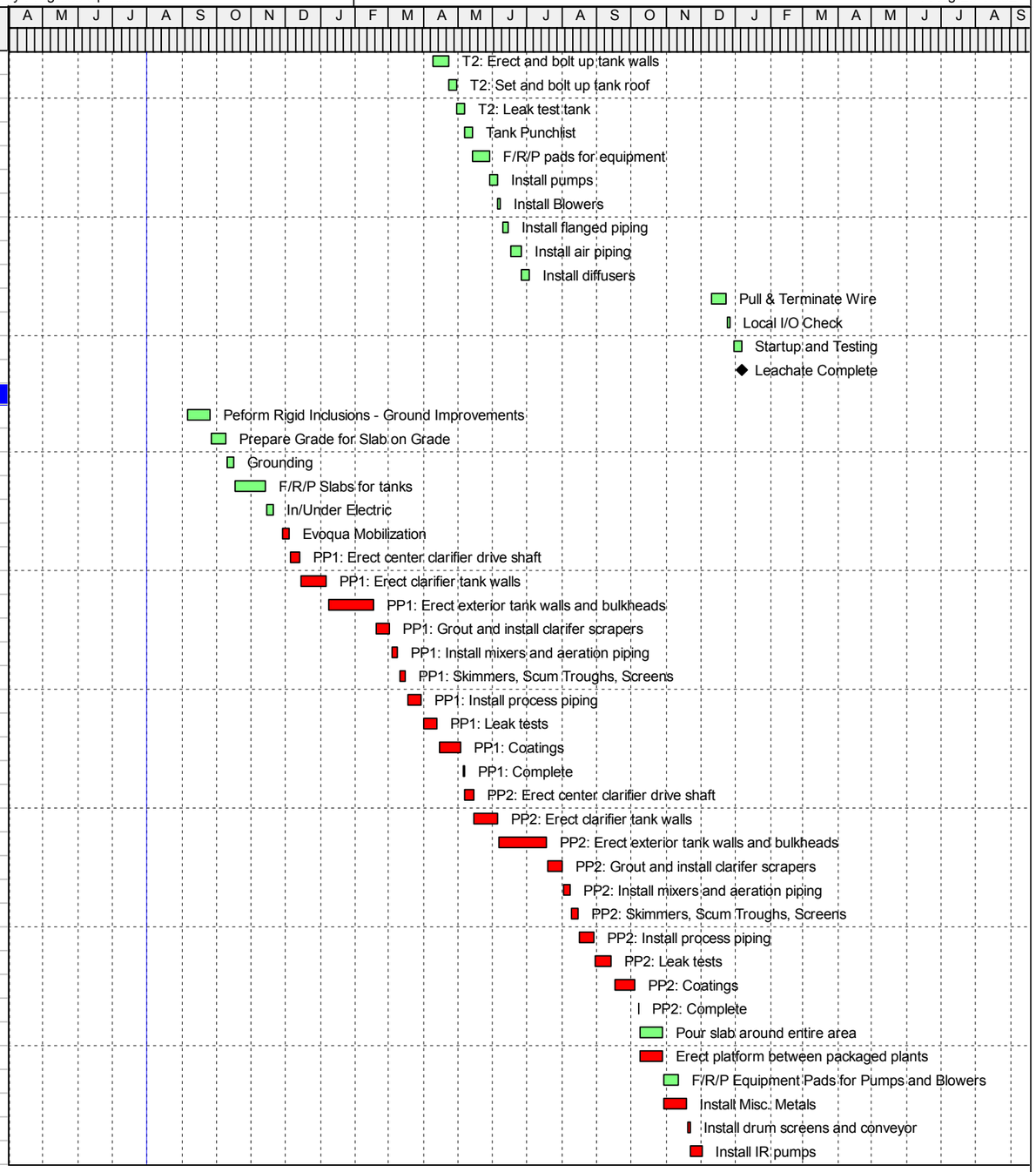
Activity ID	Activity Name	Original Duration	Total Float	Start	Finish
FD1280	13030 - Software Control Block Descriptions	120	211	03-Oct-23	22-Mar-24
FD1290	13060 - Fiber Optic Cable	30	301	03-Oct-23	13-Nov-23
FD1300	13070 - Panel Mounted Instruments and Devices	120	211	03-Oct-23	22-Mar-24
FD1310	13080 - Primary Sensors and Field Instruments	80	221	03-Oct-23	26-Jan-24
FD1370	13200 - Process Control I/O List	30	301	03-Oct-23	13-Nov-23
FD1070	02920 - Sod & Seeding	15	358	10-Oct-23	30-Oct-23
FD1130	05500 - Misc. Metals	60	241	10-Oct-23	05-Jan-24
FD1140	05520 - Handrails & Railings	60	241	10-Oct-23	05-Jan-24
FD1150	09900 - Paintings and Coatings	30	224	10-Oct-23	20-Nov-23
FD1260	11600 - Laboratory Equipment	99	228	10-Oct-23	29-Feb-24
FD1270	11605 - Composite Sampling Equipment	99	228	10-Oct-23	29-Feb-24
FD1350	13127 - Mobile Office/Lab Trailer	50	276	10-Oct-23	20-Dec-23
FD1540	16060 - Power Coordination Study	5	333	10-Oct-23	16-Oct-23
Construction		470	0	03-Apr-23 A	13-Apr-25
Site & Yard		293	177	03-Apr-23 A	31-Jul-24
Sitework		293	177	03-Apr-23 A	31-Jul-24
SW1030	Dewater and Excavate Stormwater Pond	40	43	03-Apr-23 A	25-Aug-23
SW1070	Build storage/reject pond	20	253	26-Jun-23 A	25-Aug-23
SW1060	RCP pipe for stormwater pond	10	401	28-Aug-23	11-Sep-23
SW1080	Finish berms around site	10	338	28-Aug-23	11-Sep-23
SW1540	Install Road Between Ponds	5	406	28-Aug-23	01-Sep-23
SW1090	Install fence around perimeter	20	338	12-Sep-23	09-Oct-23
SW1130	Sod Stormwater Pond Slopes	2	401	12-Sep-23	13-Sep-23
SW1520	Install HDPE Pond Liner	5	331	14-Dec-23	20-Dec-23
SW1530	Sod Reject Pond Slopes	2	331	21-Dec-23	22-Dec-23
SW1100	Install roads around site	15	177	29-May-24	18-Jun-24
SW1110	Pave	10	177	03-Jul-24	17-Jul-24
SW1120	Sod WWTP	10	177	18-Jul-24	31-Jul-24
SW1160	Sitework Complete	0	177		31-Jul-24
Spray Fields		115	253	28-Aug-23	09-Feb-24
SF1000	Clear Pipe Corridor from Plant to Spray Field	10	253	28-Aug-23	11-Sep-23
SF1060	Install Sprayfield Pipeline from Zone A to CCC	15	253	12-Sep-23	02-Oct-23
SF1010	Brush Hog Spray Field Vegetation	20	253	03-Oct-23	30-Oct-23
SF1020	Install Header from Zone A to Zone I	15	253	31-Oct-23	20-Nov-23
SF1030	Construct Zone A Spray Field	20	253	21-Nov-23	20-Dec-23
SF1040	Construct Zone C Spray Field	20	253	21-Dec-23	19-Jan-24
SF1050	Construct Zone E Spray Field	15	253	22-Jan-24	09-Feb-24
SF1070	Spray Fields Complete	0	253		09-Feb-24
Site Electrical		236	197	29-Jun-23 A	02-Jul-24
SE1140	Communications Ductbank - Street to Building	30	268	29-Jun-23 A	11-Aug-23
SE1170	Ductbank from FPL XFMR to Electrical Bldg	8	268	14-Aug-23	23-Aug-23
SE1200	Ductbank from Electrical Building to MH 1 & 2	6	268	24-Aug-23	31-Aug-23
SE1230	Ductbank from Electrical Building to MH 7 & 8	5	268	01-Sep-23	08-Sep-23
SE1210	Ductbank from MH 1 & 2 to MH 3 & 4	10	328	11-Sep-23	22-Sep-23
SE1220	Ductbank from MH 3 & 4 to MH 5 & 6	8	328	25-Sep-23	04-Oct-23
SE1190	Ductbank from Electrical Building to Generator	4	351	02-Oct-23	05-Oct-23
SE1240	Ductbank from MH 7 & 8 to MH 9 & 10	8	328	05-Oct-23	16-Oct-23



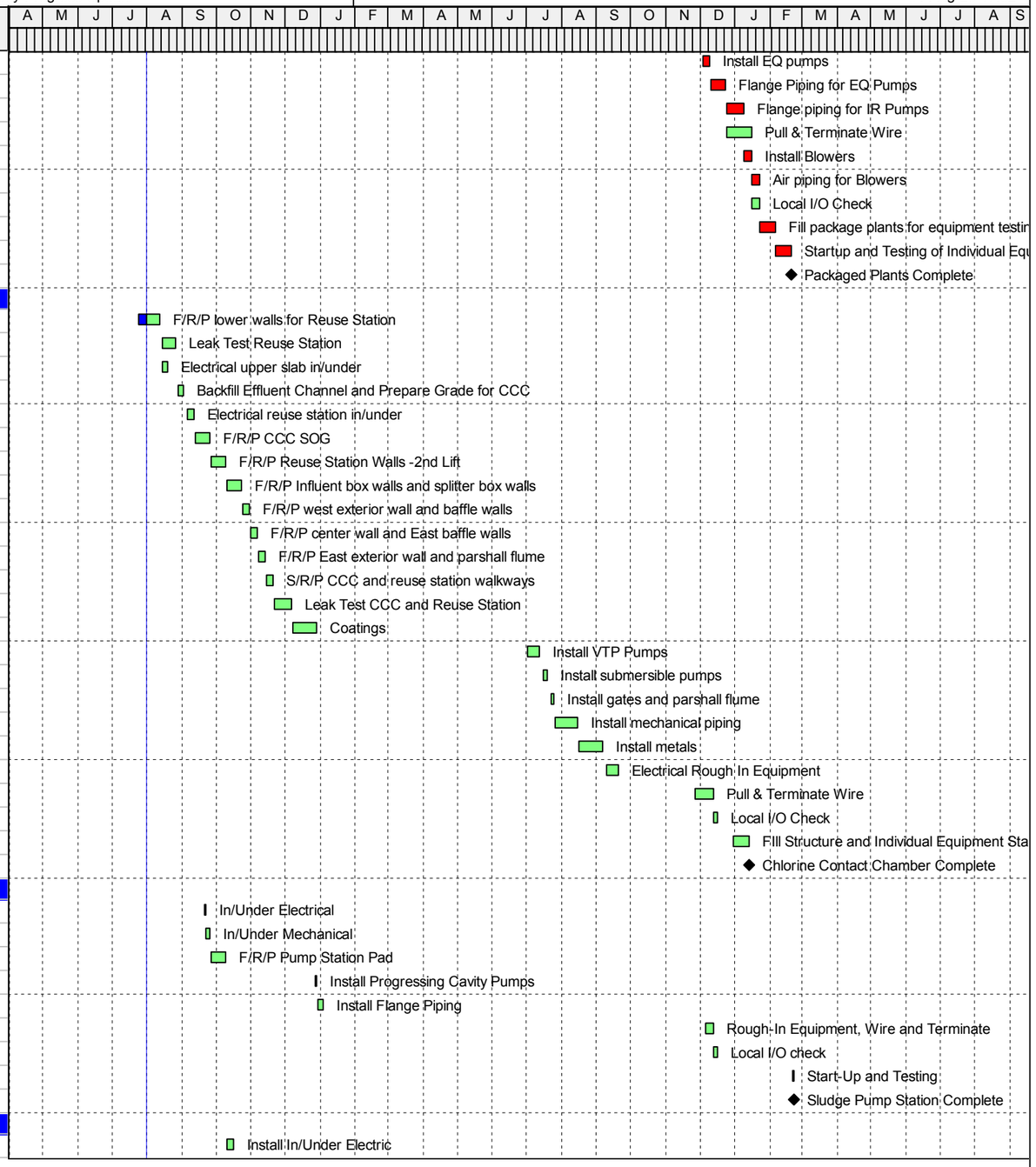
Activity ID	Activity Name	Original Duration	Total Float	Start	Finish
SE1250	Install Site Grounding	5	328	17-Oct-23	23-Oct-23
SE1150	Install Site Lighting	10	177	19-Jun-24	02-Jul-24
SE1260	Site Electrical Complete	0	197		02-Jul-24
Yard piping		115	303	28-Jun-23 A	13-Dec-23
Pipelines		0	0		
Process Pipe		115	303	28-Jun-23 A	13-Dec-23
YP1110	Install 12" influent to package plants from IPS	10	25	28-Jun-23 A	11-Aug-23
YP1220	Install 8" DS-1	5	27	31-Jul-23	04-Aug-23
YP1240	8" EQ-1 from BNRs to CCC	10	22	31-Jul-23	11-Aug-23
YP1170	Lechaete tank Drain Piping	5	323	14-Aug-23	18-Aug-23
YP1140	8" & 12" SE from Package plants to CCC	10	22	25-Aug-23	08-Sep-23
YP1150	6" PSD to Manhole	7	22	11-Sep-23	19-Sep-23
YP1190	Install 3" Chemical Containment Piping	3	286	20-Sep-23	22-Sep-23
YP1200	Install Plant PW Piping	5	286	25-Sep-23	29-Sep-23
YP1130	20" from CCC to pond	5	303	07-Dec-23	13-Dec-23
YP1210	Yard Piping Complete	0	303		13-Dec-23
Sanitary Sewer		43	355	24-Jul-23 A	28-Sep-23
YP1100	Install PDPS to MH-102	5	363	24-Jul-23 A	04-Aug-23
YP1080	Install MH-102 to MH-101	2	363	07-Aug-23	08-Aug-23
YP1020	Install PDPS to MH-104	3	388	09-Aug-23	11-Aug-23
YP1030	Install MH-104 to Sludge Pump Station	3	22	14-Aug-23	16-Aug-23
YP1090	Install MH-101 to Ops Building	1	360	14-Aug-23	14-Aug-23
YP1040	Install PDPS to MH-103	1	22	17-Aug-23	17-Aug-23
YP1050	Install MH-103 to BNR Drains	5	22	18-Aug-23	24-Aug-23
YP1060	Install MH-104 to MH-102	5	314	25-Aug-23	31-Aug-23
YP1070	Install MH-102 to Leachate Drains & Chem Stora	2	314	01-Sep-23	05-Sep-23
YP1010	Install PDPS Package Lift Station	3	355	26-Sep-23	28-Sep-23
WWTP		428	0	24-Jul-23 A	13-Apr-25
Influent Pump Station		359	34	07-Aug-23	06-Jan-25
IP1000	Excavate and install IPS	15	314	07-Aug-23	25-Aug-23
IP1100	Install Master Manhole and Influent Piping	5	314	28-Aug-23	01-Sep-23
IP1120	Backfill and Compact - Prepare slab grade	3	314	05-Sep-23	07-Sep-23
IP1230	In/Under Electrical and Mechanical	5	314	08-Sep-23	14-Sep-23
IP1010	F/R/P Slab on Grade	7	314	15-Sep-23	25-Sep-23
IP1040	Agru-Liner	5	314	26-Sep-23	02-Oct-23
IP1020	Install Pumps and Piping	15	229	05-Feb-24	23-Feb-24
IP1030	Install Submersible Mixer	2	229	26-Feb-24	27-Feb-24
IP1050	Pull & Terminate Wire	10	35	03-Dec-24	16-Dec-24
IP1140	Local I/O Check	2	40	17-Dec-24	18-Dec-24
IP1060	Start-Up and Testing	5	34	30-Dec-24	06-Jan-25
IP1070	Influent Pump Station Complete	0	34		06-Jan-25
Lechaete		215	34	01-Mar-24	06-Jan-25
LT1130	Mobilize & Recieve Tank Material	3	145	01-Mar-24	05-Mar-24
LT1140	T1: Set and anchor tank base	2	145	06-Mar-24	07-Mar-24
LT1150	T1: Erect and bolt up tank walls	10	145	08-Mar-24	21-Mar-24
LT1160	T1: Set and bolt up tank roof	5	145	22-Mar-24	28-Mar-24
LT1170	T1: Leak Test Tank	5	145	29-Mar-24	04-Apr-24
LT1180	T2: Set and anchor tank base	2	145	05-Apr-24	08-Apr-24



Activity ID	Activity Name	Original Duration	Total Float	Start	Finish
LT1190	T2: Erect and bolt up tank walls	10	145	09-Apr-24	22-Apr-24
LT1200	T2: Set and bolt up tank roof	5	145	23-Apr-24	29-Apr-24
LT1210	T2: Leak test tank	5	145	30-Apr-24	06-May-24
LT1220	Tank Punchlist	5	145	07-May-24	13-May-24
LT1040	F/R/P pads for equipment	10	145	14-May-24	28-May-24
LT1050	Install pumps	5	145	29-May-24	04-Jun-24
LT1060	Install Blowers	3	145	05-Jun-24	07-Jun-24
LT1070	Install flanged piping	5	145	10-Jun-24	14-Jun-24
LT1080	Install air piping	7	145	17-Jun-24	25-Jun-24
LT1090	Install diffusers	5	145	26-Jun-24	02-Jul-24
LT1100	Pull & Terminate Wire	10	35	10-Dec-24	23-Dec-24
LT1230	Local I/O Check	2	35	24-Dec-24	26-Dec-24
LT1110	Startup and Testing	5	34	30-Dec-24	06-Jan-25
LT1120	Leachate Complete	0	34		06-Jan-25
Packaged Plants		371	0	05-Sep-23	19-Feb-25
PP1430	Peform Rigid Inclusions - Ground Improvements	15	3	05-Sep-23	25-Sep-23
PP1150	Prepare Grade for Slab on Grade	10	3	26-Sep-23	09-Oct-23
PP1160	Grounding	5	3	10-Oct-23	16-Oct-23
PP1010	F/R/P Slabs for tanks	20	3	17-Oct-23	13-Nov-23
PP1000	In/Under Electric	5	3	14-Nov-23	20-Nov-23
PP1190	Evoqua Mobilization	5	0	28-Nov-23	04-Dec-23
PP1200	PP1: Erect center clarifier drive shaft	7	0	05-Dec-23	13-Dec-23
PP1210	PP1: Erect clarifier tank walls	15	0	14-Dec-23	05-Jan-24
PP1220	PP1: Erect exterior tank walls and bulkheads	30	0	08-Jan-24	16-Feb-24
PP1230	PP1: Grout and install clarifer scrapers	10	0	19-Feb-24	01-Mar-24
PP1240	PP1: Install mixers and aeration piping	5	0	04-Mar-24	08-Mar-24
PP1250	PP1: Skimmers, Scum Troughs, Screens	5	0	11-Mar-24	15-Mar-24
PP1260	PP1: Install process piping	10	0	18-Mar-24	29-Mar-24
PP1270	PP1: Leak tests	10	0	01-Apr-24	12-Apr-24
PP1280	PP1: Coatings	15	0	15-Apr-24	03-May-24
PP1290	PP1: Complete	1	0	06-May-24	06-May-24
PP1300	PP2: Erect center clarifier drive shaft	6	0	07-May-24	14-May-24
PP1310	PP2: Erect clarifier tank walls	15	0	15-May-24	05-Jun-24
PP1320	PP2: Erect exterior tank walls and bulkheads	30	0	06-Jun-24	18-Jul-24
PP1330	PP2: Grout and install clarifer scrapers	10	0	19-Jul-24	01-Aug-24
PP1340	PP2: Install mixers and aeration piping	5	0	02-Aug-24	08-Aug-24
PP1350	PP2: Skimmers, Scum Troughs, Screens	5	0	09-Aug-24	15-Aug-24
PP1360	PP2: Install process piping	10	0	16-Aug-24	29-Aug-24
PP1370	PP2: Leak tests	10	0	30-Aug-24	13-Sep-24
PP1380	PP2: Coatings	15	0	16-Sep-24	04-Oct-24
PP1390	PP2: Complete	1	0	07-Oct-24	07-Oct-24
PP1110	Pour slab around entire area	15	8	08-Oct-24	28-Oct-24
PP1400	Erect platform between packaged plants	15	0	08-Oct-24	28-Oct-24
PP1020	F/R/P Equipment Pads for Pumps and Blowers	10	8	29-Oct-24	11-Nov-24
PP1170	Install Misc. Metals	15	0	29-Oct-24	18-Nov-24
PP1100	Install drum screens and conveyor	3	0	19-Nov-24	21-Nov-24
PP1040	Install IR pumps	5	0	22-Nov-24	02-Dec-24

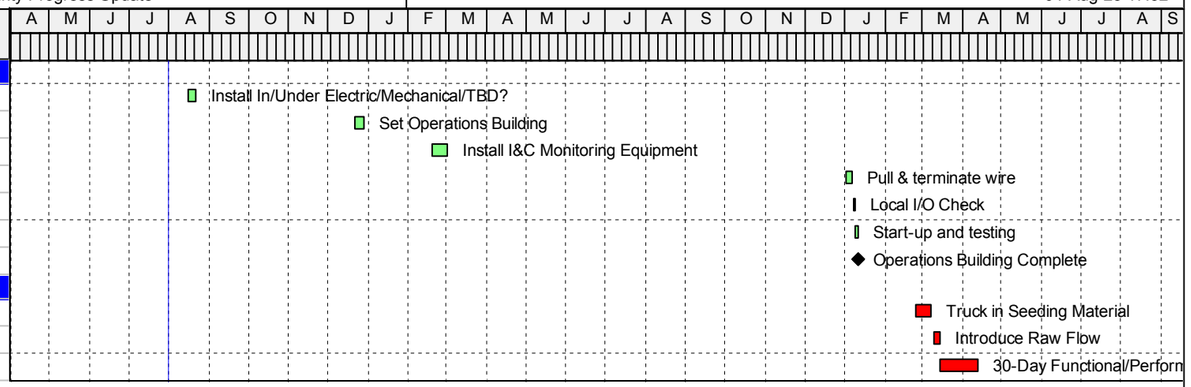


Activity ID	Activity Name	Original Duration	Total Float	Start	Finish
PP1410	Install EQ pumps	5	0	03-Dec-24	09-Dec-24
PP1060	Flange Piping for EQ Pumps	10	0	10-Dec-24	23-Dec-24
PP1070	Flange piping for IR Pumps	10	0	24-Dec-24	08-Jan-25
PP1120	Pull & Terminate Wire	15	10	24-Dec-24	15-Jan-25
PP1050	Install Blowers	5	0	09-Jan-25	15-Jan-25
PP1080	Air piping for Blowers	5	0	16-Jan-25	22-Jan-25
PP1420	Local I/O Check	5	10	16-Jan-25	22-Jan-25
PP1180	Fill package plants for equipment testing	10	0	23-Jan-25	05-Feb-25
PP1130	Startup and Testing of Individual Equipment	10	0	06-Feb-25	19-Feb-25
PP1140	Packaged Plants Complete	0	0		19-Feb-25
Chlorine Contact Chamber		359	29	24-Jul-23 A	13-Jan-25
CC1020	F/R/P lower walls for Reuse Station	10	214	24-Jul-23 A	11-Aug-23
CC1030	Leak Test Reuse Station	10	214	14-Aug-23	25-Aug-23
CC1230	Electrical upper slab in/under	5	224	14-Aug-23	18-Aug-23
CC1040	Backfill Effluent Channel and Prepare Grade for C	5	214	28-Aug-23	01-Sep-23
CC1220	Electrical reuse station in/under	5	214	05-Sep-23	11-Sep-23
CC1050	F/R/P CCC SOG	10	214	12-Sep-23	25-Sep-23
CC1200	F/R/P Reuse Station Walls -2nd Lift	10	214	26-Sep-23	09-Oct-23
CC1240	F/R/P Influent box walls and splitter box walls	10	214	10-Oct-23	23-Oct-23
CC1250	F/R/P west exterior wall and baffle walls	5	214	24-Oct-23	30-Oct-23
CC1260	F/R/P center wall and East baffle walls	5	214	31-Oct-23	06-Nov-23
CC1270	F/R/P East exterior wall and parshall flume	5	214	07-Nov-23	13-Nov-23
CC1280	S/R/P CCC and reuse station walkways	5	214	14-Nov-23	20-Nov-23
CC1070	Leak Test CCC and Reuse Station	10	214	21-Nov-23	06-Dec-23
CC1080	Coatings	15	214	07-Dec-23	28-Dec-23
CC1090	Install VTP Pumps	8	84	02-Jul-24	12-Jul-24
CC1100	Install submersible pumps	5	84	15-Jul-24	19-Jul-24
CC1110	Install gates and parshall flume	4	84	22-Jul-24	25-Jul-24
CC1120	Install mechanical piping	15	84	26-Jul-24	15-Aug-24
CC1130	Install metals	15	84	16-Aug-24	06-Sep-24
CC1140	Electrical Rough In Equipment	10	84	09-Sep-24	20-Sep-24
CC1190	Pull & Terminate Wire	10	37	27-Nov-24	12-Dec-24
CC1210	Local I/O Check	2	37	13-Dec-24	16-Dec-24
CC1150	FIll Structure and Individual Equipment Startup ar	10	29	30-Dec-24	13-Jan-25
CC1160	Chlorine Contact Chamber Complete	0	29		13-Jan-25
Sludge Pump Station		362	0	20-Sep-23	21-Feb-25
SP1000	In/Under Electrical	2	337	20-Sep-23	21-Sep-23
SP1060	In/Under Mechanical	2	337	22-Sep-23	25-Sep-23
SP1010	F/R/P Pump Station Pad	10	337	26-Sep-23	09-Oct-23
SP1020	Install Progressing Cavity Pumps	2	284	27-Dec-23	28-Dec-23
SP1030	Install Flange Piping	3	288	29-Dec-23	03-Jan-24
SP1070	Rough-In Equipment, Wire and Terminate	5	45	06-Dec-24	12-Dec-24
SP1080	Local I/O check	2	45	13-Dec-24	16-Dec-24
SP1040	Start-Up and Testing	2	0	20-Feb-25	21-Feb-25
SP1050	Sludge Pump Station Complete	0	0		21-Feb-25
Chemical Storage		316	32	10-Oct-23	08-Jan-25
CS1000	Install In/Under Electric	5	280	10-Oct-23	16-Oct-23



Activity ID	Activity Name	Original Duration	Total Float	Start	Finish
CS1120	Install In/Under Mechanical	5	280	17-Oct-23	23-Oct-23
CS1010	FRP SOG & Sump	10	280	24-Oct-23	06-Nov-23
CS1020	F/R/P Chemical Containment Walls & Pads	10	280	07-Nov-23	20-Nov-23
CS1030	Set Bulk Storage Tank	2	255	29-Dec-23	02-Jan-24
CS1040	Erect PEMB Canopy	15	255	03-Jan-24	23-Jan-24
CS1050	Set Chemical Metering Pumps	2	255	24-Jan-24	25-Jan-24
CS1070	Install Sink and Eyewash	2	255	24-Jan-24	25-Jan-24
CS1060	Set Samplers and Analyzers	2	228	01-Mar-24	04-Mar-24
CS1080	Install Chemical Process Piping	5	235	05-Mar-24	11-Mar-24
CS1090	Above grade conduits	5	228	05-Mar-24	11-Mar-24
CS1130	Pull & Terminate Wire	5	40	06-Dec-24	12-Dec-24
CS1150	Local I/O check	2	40	13-Dec-24	16-Dec-24
CS1100	Individual Equipment Start-Up and Testing	5	32	30-Dec-24	06-Jan-25
CS1140	Chemical Fill	2	32	07-Jan-25	08-Jan-25
CS1110	Chemical Storage Complete	0	32		08-Jan-25
Electrical Building		332	52	11-Sep-23	31-Dec-24
EB1010	In/Under Electric Electrical Building	15	268	11-Sep-23	29-Sep-23
EB1090	Install FPL Transformer	1	329	26-Sep-23	26-Sep-23
EB1030	F/R/P SOG Electrical Building	10	268	02-Oct-23	13-Oct-23
EB1000	Diesel Generator and Transformer In/Under	10	345	02-Oct-23	13-Oct-23
EB1020	F/R/P Genset pad and Transformer	10	345	16-Oct-23	27-Oct-23
EB1080	Install Generator	2	345	30-Oct-23	31-Oct-23
A1000	Generator Load Test	2	345	01-Nov-23	02-Nov-23
EB1040	Erect Precast building	5	227	14-Dec-23	20-Dec-23
EB1060	House keeping pads	5	227	21-Dec-23	28-Dec-23
EB1050	Install Lightning Protection	2	296	21-Dec-23	22-Dec-23
EB1070	Electrical Building Interior Finishes	5	227	29-Dec-23	05-Jan-24
EB1200	Install Transformers	2	264	08-Jan-24	09-Jan-24
EB1230	Install PLC's	2	234	19-Feb-24	20-Feb-24
EB1210	Install Lighting Panel	1	166	24-May-24	24-May-24
EB1100	Install Manual Transfer Switches	2	160	10-Jun-24	11-Jun-24
EB1190	Install ATS	1	70	02-Oct-24	02-Oct-24
EB1101	Wire Generator and Primary power	5	70	03-Oct-24	09-Oct-24
EB1110	Utility company power	1	70	10-Oct-24	10-Oct-24
EB1120	Install HVAC System	5	85	11-Oct-24	17-Oct-24
EB1180	Install MCC's	5	10	11-Nov-24	15-Nov-24
EB1240	Wire E/I feeds to Chlorine Contact Tank	5	10	18-Nov-24	22-Nov-24
EB1250	Wire E/I Feeds to Chemical Storage	2	10	25-Nov-24	26-Nov-24
EB1270	Wire E/I feeds to Influent Pump Station	2	10	27-Nov-24	02-Dec-24
EB1280	Wire E/I Feeds to Leachate Tanks	5	10	03-Dec-24	09-Dec-24
EB1290	Wire E/I Feeds to Packaged Plants	10	10	10-Dec-24	23-Dec-24
EB1220	Install Transformers	2	27	11-Dec-24	12-Dec-24
EB1140	Startup electrical gear	10	27	13-Dec-24	27-Dec-24
EB1260	Wire Panels and Equipment within Electrical Build	5	44	13-Dec-24	19-Dec-24
EB1300	Wire E/I feeds to Operations Building	5	30	24-Dec-24	31-Dec-24
EB1160	Test & Balance HVAC	2	37	30-Dec-24	31-Dec-24
EB1170	Electrical Building Complete	0	37		31-Dec-24

Activity ID	Activity Name	Original Duration	Total Float	Start	Finish
Operations Building		357	30	15-Aug-23	10-Jan-25
OB1000	Install In/Under Electric/Mechanical/TBD?	5	360	15-Aug-23	21-Aug-23
OB1010	Set Operations Building	5	276	21-Dec-23	28-Dec-23
OB1020	Install I&C Monitoring Equipment	10	241	19-Feb-24	01-Mar-24
OB1040	Pull & terminate wire	3	30	02-Jan-25	06-Jan-25
OB1050	Local I/O Check	2	30	07-Jan-25	08-Jan-25
OB1060	Start-up and testing	2	30	09-Jan-25	10-Jan-25
OB1030	Operations Building Complete	0	30		10-Jan-25
Start-Up & Testing		35	0	24-Feb-25	13-Apr-25
SU1000	Truck in Seeding Material	10	0	24-Feb-25	07-Mar-25
SU1010	Introduce Raw Flow	5	0	10-Mar-25	14-Mar-25
SU1015	30-Day Functional/Performance Testing	30	0	15-Mar-25	13-Apr-25



22-114 COLUMBIA COUNTY SUBMITTAL LOG
SUBMITTAL LOG

FA: For approval
FI: For information
FC: For review and comment
FR: For record

8/7/2023

SUBMITTAL NO.	DESCRIPTION	TYPE	DATE SUBMITTED	DATE RETURNED	STATUS	VENDOR/SUBCONTRACTOR
01290-001	Schedule of Values	FR				Wharton-Smith
01320-001	Baseline Schedule Narrative	FR	4/12/2023	5/2/2023	APPROVED/APPROVED AS NOTED	Wharton-Smith
01325-001	Pre-Construction Video	FI	4/11/2023	4/28/2023	REVISE & RESUBMIT	Wharton-Smith
01350-001	SWPPP	FR	3/31/2023	5/8/2023	APPROVED/APPROVED AS NOTED	Wharton-Smith
01350-001A	SWPPP	FR	5/24/2023	6/23/2023	APPROVED/APPROVED AS NOTED	Wharton-Smith
01355-001	Hurricane Preparedness Plan	FR				Wharton-Smith
01450-001	Soil Tests - 4.17.23-7.7.23	FR	7/19/2023	7/21/2023	APPROVED/APPROVED AS NOTED	Wharton-Smith
01755-001	Testing Procedures	FR				Wharton-Smith
01780-001	Warranties, Bonds, and Service and Maintinence Contracts	FR				Wharton-Smith
01785-001	Land Surveyor Info	FR				Wharton-Smith
01785-002	Land Survey	FR				Wharton-Smith
01810-001	Water Tightness Tests	FR				Wharton-Smith
01815-001	Sequence of Construction Plan	FR				Wharton-Smith
01815-002	Temporary Systems Plans	FR				Wharton-Smith
02071-001	Geomembrane (HDPE) Product Data/ Installer Qualifications	FA	5/4/2023	5/19/2023	APPROVED/APPROVED AS NOTED	COMANCO
02071-002	Geomembrane Quality Control Certificates	FA	6/28/2023	7/17/2023	APPROVED/APPROVED AS NOTED	COMANCO
02230-001	Sitework Permits	FR				Wharton-Smith
02240-001	Dewatering Plan With Application	FR				Wharton-Smith
02240-002	Dewatering Record Drawings	FR				Wharton-Smith
02300-001	Ground Improvements - BNR Tanks	FR	7/27/2023		SUBMITTED-UNDER REVIEW	GeoTek
02300-002	Records (Existing Conditions)	FR				Wharton-Smith
02300-003	Testing Agency Invoices	FR				Wharton-Smith
02305-001	Material Test Reports (Soil)	FR				Wharton-Smith
02305-002	Records (Existing Conditions)	FI				Wharton-Smith
02370-001	Silt Fence Fabric	FA	3/2/2023	3/17/2023	APPROVED AS NOTED/RESUBMIT OR CONFIRM	Tim-Prep Inc.
02530-001	Gravity Sewer	FA				TBD
02600-001	Filter Point Mat	FA				TBD
02820-001	Chain Link Fences and Gates	FA	4/27/2023	5/31/2023	APPROVED/APPROVED AS NOTED	All-Florida Fence
02920-001	Seeding and Sodding	FA				TBD
03100-001	Concrete Formwork and Accessories Product Data	FA				TBD
03200-001	Concrete Reinforcement - BNR	FA	4/11/2023	5/5/2023	APPROVED/APPROVED AS NOTED	Trinity
03200-002	Concrete Reinforcement - CC Tanks	FA	4/11/2023	5/18/2023	APPROVED/APPROVED AS NOTED	Trinity
03200-003	Concrete Reinforcement - Chemical Storage	FA	4/11/2023	5/11/2023	APPROVED/APPROVED AS NOTED	Trinity
03200-004	Concrete Reinforcement - Electrical Building	FA	4/21/2023	5/24/2023	APPROVED/APPROVED AS NOTED	Trinity
03200-005	Concrete Reinforcement - Influent Pump Station	FA	4/24/2023	5/25/2023	APPROVED/APPROVED AS NOTED	Trinity
03200-006	Concrete Reinforcement - Leachate Tanks	FA	4/24/2023	5/25/2023	APPROVED/APPROVED AS NOTED	Trinity
03200-007	Concrete Reinforcement - CC Tanks Walls & Top Slab	FA	5/11/2023	5/31/2023	APPROVED/APPROVED AS NOTED	Trinity

03250-001	Concrete Joints and Joint Accessories	FA	4/7/2023	5/4/2023	APPROVED/APPROVED AS NOTED	WSI
03300-001	Curing Compound	FA	4/7/2023	5/4/2023	APPROVED/APPROVED AS NOTED	WSI
03300-002	Concrete Mix Design	FA	4/10/2023	5/5/2023	REVISE & RESUBMIT	SRM
03300-002A	Concrete Mix Design	FA	5/24/2023	6/29/2023	APPROVED/APPROVED AS NOTED	SRM
03300-002B	Concrete Mix Design	FA	6/30/2023	8/2/2023	APPROVED/APPROVED AS NOTED	SRM
03480-001	Precast Concrete Storm Inlets	FA	2/21/2023	4/7/2023	APPROVED/APPROVED AS NOTED	Tim-Prep Inc.
03480-002	Precast Concrete Manholes	FA	2/23/2023	4/4/2023	APPROVED/APPROVED AS NOTED	OLDCASTLE INFRASTRUCTURE, Inc.
03480-003	Precast Wet Wells	FA	2/23/2023	3/17/2023	REVISE & RESUBMIT	OLDCASTLE INFRASTRUCTURE, Inc.
03480-003A	Precast Wet Wells	FA	3/31/2023	4/27/2023	APPROVED/APPROVED AS NOTED	OLDCASTLE INFRASTRUCTURE, Inc.
03480-004	Precast Storm Sewer Piping	FA	3/2/2023	4/4/2023	APPROVED/APPROVED AS NOTED	Tim-Prep Inc.
03480-005	Precast Concrete MH-104	FA	4/17/2023	4/27/2023	APPROVED/APPROVED AS NOTED	OLDCASTLE INFRASTRUCTURE, Inc.
03480-006	Fiberglass Plant Drain PS Wet Well	FA	6/19/2023	7/18/2023	REVISE & RESUBMIT	Messina & Associates
03490-001	Polymer Concrete Manholes and Pump Stations	FA				TBD
03600-001	Grouting	FA	4/7/2023	5/4/2023	APPROVED/APPROVED AS NOTED	WSI
03610-001	Non-Shrink Epoxy Machinery Grout: Product Data	FA	4/7/2023	5/4/2023	APPROVED/APPROVED AS NOTED	WSI
03930-001	Schedule of Demolition	FA				WSI
03930-002	Concrete Bonding	FA				TBD
05500-001	Influent PS Access Hatches	FA	4/27/2023		APPROVED/APPROVED AS NOTED	Hydra Services, Inc.
05500-001A	Influent PS Access Hatches	FA	7/19/2023	7/21/2023	APPROVED/APPROVED AS NOTED	Hydra Services, Inc.
05500-002	Metal Fabrications Shop Drawings	FA				TBD
05520-001	Metal Handrails and Railings	FA				TBD
09900-001	Painting and Coating Product Data	FA				TBD
09900-002	Painting and Coating Surface Preparation Product Data	FA				TBD
09900-003	Paint Color Swatches	FA				TBD
11000-001	PDPS Packaged Pump Station	FA	7/6/2023	7/21/2023	REVISE & RESUBMIT	Messina & Associates
11214-001	Vertical Turbine Pumps: Internal Recycle Pumps	FA	6/14/2023	7/18/2023	APPROVED/APPROVED AS NOTED	Trillium Flow
11214-002	Vertical Turbine Pumps Product Data	FA				TBD
11214-003	Vertical Turbine Pumps Testing Procedures	FI				TBD
11220-001	Submersible Mixer Shop Drawings	FA				TBD
11220-002	Submersible Mixer Product Data	FA				TBD
11220-003	Submersible Mixer Test Reports	FR				TBD
11260-001	Chemical Metering Pumps and Skids	FA	5/23/2023	6/30/2023	REVISE & RESUBMIT	Lutz-JESCO
11331-001	Drum Screens and Conveyor Compactor	FA	4/19/2023	5/17/2023	APPROVED/APPROVED AS NOTED	SAVECO North America, Inc.
11355-001	IR End-Suction Non-Clog Centrifugal Pumps Shop Drawings	FA	5/24/2023	7/13/2023	REVISE & RESUBMIT	Trillium Flow
11355-002	EQ End-Suction Non-Clog Centrifugal Pumps Shop Drawings	FA	5/24/2023	7/13/2023	REVISE & RESUBMIT	Trillium Flow
11356-001	Progressing Cavity Pumps	FA	5/5/2023	6/15/2023	REVISE & RESUBMIT	DXP/Netsch
11356-001A	Progressing Cavity Pumps	FA	7/19723	8/2/2023	APPROVED/APPROVED AS NOTED	DXP/Netsch
11378-001	Positive Displacement Blowers Shop Drawings	FA	5/19/2023	6/15/2023	APPROVED AS NOTED/RESUBMIT OR CONFIRM	Universal Blowers
11378-001A	Positive Displacement Blowers	FA	8/2/2023		SUBMITTED-UNDER REVIEW	Universal Blowers
11390-001	BNR Package Plant	FA	6/8/2023	7/6/2023	APPROVED AS NOTED/RESUBMIT OR CONFIRM	Evoqua
11390-001A	BNR Package Plant	FA	7/27/2023		SUBMITTED-UNDER REVIEW	Evoqua
11390-002	BNR Package Plant Final Coatings	FA	6/23/2023	7/24/2023	APPROVED/APPROVED AS NOTED	Evoqua
11535-001	Submersible Pumps/Mixer - Influent PS	FA	6/2/2023	8/3/2023	REVISE & RESUBMIT	Hydra Services, Inc.
11535-002	Submersible Pumps - Reject PS	FA	6/9/2023	7/21/2023	REVISE & RESUBMIT	Hydra Services, Inc.
11550-001	Coarse-Bubble Diffusers - Leachate Tanks	FA	5/26/2023	6/16/2023	APPROVED AS NOTED/RESUBMIT OR CONFIRM	SSI Aeration, Inc.
11550-001A	Coarse-Bubble Diffusers - Leachate Tanks	FA	7/27/2023	8/2/2023	APPROVED/APPROVED AS NOTED	SSI Aeration, Inc.
11551-001	Fine-Bubble Diffusers - Aeration Basin & Aerobic Digester	FA	6/12/2023	7/21/2023	APPROVED AS NOTED/RESUBMIT OR CONFIRM	SSI Aeration, Inc.
11600-001	Laboratory Equipment Shop Drawings and instructions	FA				TBD
11605-001	Composite Sampling Equipment	FA				TBD
13060-001	Fiber Optic Cabling	FA				TBD

13100-001	Large Modular Pre-Cast Concrete Building Plans/Specs	FA	5/23/2023	6/16/2023	REVISE & RESUBMIT	Concrete Modular
13120-001	Pre-Engineered Metal Building - Chemical Storage	FA	6/1/2023	7/28/2023	APPROVED/APPROVED AS NOTED	Brevard Constructors
13127-001	Mobile Office/Lab Trailer - Plans/Specs	FA				TBD
13150-001	Programmable Logic Controller Panels	FA	7/27/2023		SUBMITTED-UNDER REVIEW	Rocha
13201-001	Glass-Fused-To-Steel Liquid Storage Tanks	FA	4/19/2023	5/17/2023	APPROVED/APPROVED AS NOTED	Florida Aquastore
13206-001	Sodium Hypo Tanks	FA				TBD
13300-001	Plant Monitoring and Control System Training Plan	FI				Rocha
13420-001	Fiber Optic Communication Subsystem (FOCS) Cable Schedule	FI				Rocha
13420--002	FOCS Component Product Data	FA				Rocha
13500-001	Process Control System (PCS) Testing Plans	FI				Rocha
13600-001	Process Control System Instrumentation	FA				TBD
13600-002	PCS Field Instruments	FA				Rocha
13600-003	PCS Control Panels, Consoles, and Cabinets	FA				Rocha
13600-004	PCS Field Wiring and Piping Diagrams	FA				Rocha
13600-005	PCS Operator Interface Graphics Layout	FA				Rocha
13600-006	Plant Monitoring and Control System	FA				Rocha
13600-007	PCS I/O Identification and Data	FA				Rocha
13600-008	Preliminary Software Documentation	FA				Rocha
13600-009	System Software Documentation	FA				Rocha
13600-010	HMI Screens	FA				Rocha
13600-011	PCS Shipping, Handling, Storage, Installation, and Start-up Instructions	FI				Rocha
13615-001	Parshall Flume	FA	6/19/2023	7/18/2023	REVISE & RESUBMIT	MFG Construction Products
13615-001A	Parshall Flume	FA	7/27/2023		SUBMITTED-UNDER REVIEW	MFG Construction Products
15000-001	Blow-Off Hydrant	FA	4/4/2023	5/31/2023	APPROVED/APPROVED AS NOTED	Core & Main
15000-002	Static Mixer	FA	5/5/2023	5/26/2023	APPROVED/APPROVED AS NOTED	Statiflo
15000-003	Trench Drain	FA	6/28/2023	7/21/2023	APPROVED/APPROVED AS NOTED	Ferguson Waterworks
15050-001	Misc. Mechanical	FA				TBD
15053-001	HVAC	FA				TBD
15055-001	Tracer Wire	FA	3/30/2023	5/2/2023	APPROVED/APPROVED AS NOTED	Core & Main
15060-001	Pipe Hangers and Supports	FA				TBD
15062-001	Hangers and Supports for HVAC Piping and Equipment	FA				TBD
15065-001	Fabricated Gates	FA	5/30/2023	6/16/2023	APPROVED/APPROVED AS NOTED	RW Gate
15075-001	Process Equipment, Piping, and Valve Identification	FA				TBD
15080-001	Outside Pipe Insulation	FA				TBD
15105-001	Wall Pipes, Seep Rings, and Penetrations	FA				TBD
15110-001	Manual, Check, and Process Valves	FA	3/28/2023	4/25/2023	APPROVED AS NOTED/RESUBMIT OR CONFIRM	Core & Main
15110-002	Process Valve Actuators	FA				TBD
15119-001	Electric Motor Actuators for Gates	FA				TBD
15121-001	Misc. Pipe Fittings and Accessories	FA				Core & Main
15121-001	Flexible Pipe Couplings and Expansion Materials	FA				Core & Main
15125-001	Tapping Sleeves	FA	2/2/2023	2/16/2023	APPROVED/APPROVED AS NOTED	Core & Main
15125-001	Gate Valves, Tapping Valves, and Fire Hydrants	FA	2/2/2023	2/16/2023	APPROVED/APPROVED AS NOTED	Core & Main
15125-001A	Gate Valves, Tapping Valves, and Fire Hydrants	FA	3/30/2023	5/4/2023	APPROVED/APPROVED AS NOTED	Core & Main
15125-003	Eyewash Stations	FA	7/19/2023	8/3/2023	APPROVED/APPROVED AS NOTED	Core & Main
15140-001	Domestic Water Piping	FA				Core & Main
15144-001	Pressure Testing of Piping	FA				Core & Main
15145-001	Domestic Water Piping Specialties	FA				Core & Main
15146-001	HDPE Pipe	FA	3/28/2023	4/27/2023	APPROVED AS NOTED/RESUBMIT OR CONFIRM	Core & Main
15146-002	HDPE Pipe Fittings and Adapters	FA	3/30/2023	5/2/2023	APPROVED/APPROVED AS NOTED	Core & Main
15146-003	HDPE Flange Adapters	FA	7/19/2023	8/3/2023	APPROVED/APPROVED AS NOTED	Core & Main

15150-001	Sanitary Waste and Vent Piping	FA				Core & Main
15155-001	Ductile Iron Pipe and Fittings	FA	2/2/2023	2/16/2023	APPROVED/APPROVED AS NOTED	Core & Main
15155-001A	Ductile Iron Pipe and Fittings	FA	3/30/2023	4/28/2023	APPROVED/APPROVED AS NOTED	Core & Main
15155-002	Mechanical Restraints	FA	3/28/2023	4/27/2023	APPROVED AS NOTED/RESUBMIT OR CONFIRM	Core & Main
15155-003	Nuts and Bolts for DI Pipe and Fittings	FA	3/30/2023	5/2/2023	APPROVED/APPROVED AS NOTED	Core & Main
15155-004	Flanged Fittings and Adapters	FA	7/19/2023	8/2/2023	APPROVED/APPROVED AS NOTED	Core & Main
15250-001	Small-Diameter Piping	FA				Core & Main
15276-001	Stainless Steel Pipe Materials List	FI				TBD
15276-002	Stainless Steel Pipe	FA				Core & Main
15285-001	PVC Drainage Piping and Fittings	FA	2/2/2023	2/16/2023	APPROVED/APPROVED AS NOTED	Core & Main
15285-001A	PVC Drainage Piping and Fittings	FA	3/30/2023	4/28/2023	APPROVED/APPROVED AS NOTED	Core & Main
15290-001	PVC Pipe, 3 Inches and Smaller	FA				Core & Main
15291-001	PVC Pressure Pipe and Fittings	FA	2/2/2023	2/16/2023	APPROVED/APPROVED AS NOTED	Core & Main
15291-001A	PVC Pressure Pipe and Fittings	FA	3/30/2023	5/2/2023	APPROVED/APPROVED AS NOTED	Core & Main
15294-001	CPVC Waste Drainpipe, 4 Inches and Smaller	FA				Core & Main
16000-001	General Electrical	FA	3/23/2023	4/19/2023	APPROVED/APPROVED AS NOTED	Cogburn
16000-002	Dry Type Transformers	FA	3/28/2023	4/19/2023	APPROVED/APPROVED AS NOTED	Cogburn
16000-003	Low-Voltage Switchboards	FA	3/28/2023	4/19/2023	APPROVED/APPROVED AS NOTED	Cogburn
16060-001	Power Distribution System Coordination Study	FR				Cogburn
16110-001	Raceways and Fittings	FA				Cogburn
16130-001	Junction, Pull, and Service Boxes	FA				Cogburn
16140-001	Push Button Devices	FA	4/11/2023	5/4/2023	APPROVED/APPROVED AS NOTED	Cogburn
16150-001	Electric Motors	FA				Cogburn
16160-001	Panelboards	FA	3/28/2023	4/19/2023	APPROVED/APPROVED AS NOTED	Cogburn
16170-001	Safety Switches	FA	3/28/2023	4/19/2023	APPROVED/APPROVED AS NOTED	Cogburn
16216-001	Diesel Engine Driven Generator	FA	1/20/2023	1/26/2023	APPROVED/APPROVED AS NOTED	RING POWER
16250-001	Automatic Transfer Switch	FA	3/28/2023	4/19/2023	APPROVED/APPROVED AS NOTED	Cogburn
16402-001	Electrical Pull Boxes	FA	3/24/2023	4/19/2023	APPROVED/APPROVED AS NOTED	Cogburn
16450-001	Grounding System	FA				Cogburn
16500-001	Lighting System	FA	3/23/2023	4/19/2023	REVISE & RESUBMIT	Cogburn
16500-001A	Lighting System	FA	6/20/2023	7/24/2023	APPROVED/APPROVED AS NOTED	Cogburn
16601-001	Lightning Protection System	FA	4/18/2023	5/4/2023	APPROVED/APPROVED AS NOTED	Cogburn
16921-001	Surge Protective Devices	FA	3/28/2023	4/19/2023	APPROVED/APPROVED AS NOTED	Cogburn
16921-002	480-Volt Motor Control Centers	FA	5/22/2023	6/24/2023	APPROVED/APPROVED AS NOTED	Cogburn
16921-003	Combo FVNR Starters	FA	5/22/2023	6/6/2023	APPROVED/APPROVED AS NOTED	Cogburn

Columbia County NFMIP WWTP
RFI LOG

RFI #	INITIATED BY	DESCRIPTION	DATE RECEIVED	DATE SUBMITTED	DATE RETURNED	CURRENT STATUS	Notes	RFI Subject
001	Jose Romero	Evoqua Performance Testing	3/9/2023	3/9/2023	3/24/2023	Answered	Submitted performance testing document is insufficient and will require additional correspondance	"Attached is the proposed Process Performance Warranty from Evoqua and is intended to clarify the test protocol and dispute resolution associated with the performance of the Package Plants within Specification Section 11390. Please confirm this is acceptable."
002	Jose Romero	Potable Water piping Elimination	3/14/2023	3/14/2023	4/3/2023	Answered	Accepted. Clarify with EOR on direction of water service and backflow shift. The dead end still requires a fire hydrant oe blow-off for flushing purposes.	To reflect comments thus far: 500-LF of the potable water line as detailed on drawings C17 and M1 has been eliminated South of the second hydrant assembly. The water service with back flow assembly and flushing connection will shift North accordingly.
003	Jose Romero	VTP Witnessed Testing	3/14/2023	3/14/2023	3/24/2023	Answered	Factory witnessed testing requirements for VTP's has been removed	The requirement for factory witnessed testing for the vertical turbine pumps as detailed in specification section 11214, 2.05-C was removed as a way to reduce costs during GMP-1. Please confirm removal of factory witnessed testing for vertical turbine pumps.
004	Jose Romero	CCC Drain Elimination	3/14/2023	3/14/2023	4/3/2023	Answered	(4/3/23) - 4 sumps will be necessary. 2 at influent, 2 at effluent. Pumps to be provided by contractor. Pump-out connection recommended. Requires additional correspondance. (4/13/23) - 1. An alternative proposal for Chlorine Contact Tank (CCT) drains is provided herein that allows the use of the package plant drain pump station installed at the shallower depth. The CCT will be used for the current 0.5 MGD WWTF and the future 1.5 MGD WWTF expansion and for both facilities, it is a critical unit treatment process that needs to meet Class I reliability requirements in accordance with best management practices and FDEP guidelines. The suggested revisions will allow plant operations to easily, and completely drain CCT structure for routine cleaning and maintenance or following a plant upset event and put it back into operation within a reasonable timeframe per rule to meet discharge permit requirements. See attached drawing markups. 2. Drains are not required for both flow meters near the CCT. The piping layout allows flow to bypass meter if it requires removal for repair and/or replacement and temporary final effluent containment vessels can be used by Owner when performing maintenance on the flow meters.	Drains associated with the chlorine contact tank were eliminated during the value engineering efforts. In lieu of the drains, two (2) - 2'x'2'x2' sumps will be cast into the base of the tank for pump out means.
005	Jose Romero	Coating Modifications	3/14/2023	3/14/2023	3/24/2023	Answered	Acknowledged, provide submittals	A deduct has been accepted by Columbia County to reduce the concrete structures that are coated and to allow for a Sherwin-Williams alternate coating to be provided in lieu of Tnemec. Below is a summarization of the changes: 1. Concrete coatings have been eliminated from the chlorine contact tank and the chemical storage and feed system structure. 2.The sump in the chemical storage and feed systems structure, detailed on drawing S11, will be coated and funded from project contingency allowance.
006	Jose Romero	Hot Dip Galvanized Supports	3/14/2023	3/14/2023	3/24/2023	Answered	HDG Supports are acceptable	During the value engineering process Columbia County agreed to utilize hot dip galvanized steel in lieu of 316 stainless steel fo all of the pipe supports on the project. Please confirm.
007	Jose Romero	Plant Drain and PS Modifications	3/14/2023	3/14/2023	4/19/2023	Answered	1. Alternative proposal for gravity drains system to package lift station in accordance with best management practices and FDEP guidelines. See attached drawings. 2. Contractor shall have valves above grade and 6" discharge piping for the PDPS as shown on sheet M15 of the Contract Drawings. 3. Contractor shall submit a new pump design with a maximum total head at primary design condition of 40 feet at 400 GPM due to new invert of the PDPS. 4. MH-103 remains unchanged with regards to depth, diameter, and inverts. 5. MH-104 diameter remains unchanged. East IE is 174.2 with MH-106 removed, North IE is 174.10, and South IE is 175.1 with the alternative proposal. The lowest invert of the manhole is 174.10. 6. Fiberglass PDPS pipe invert elevations for the North and East remained unchanged from the original precast manhole. The South pipe IE is now 173.81 and the PDPS IE is now 166.35. 7. Contractor shall verify the following with the manufacturer for the package pump station: • a wetwell diameter of 8' as shown in M15 of the Contract Drawings; • a package triplex capable of adding a third future pump as shown in M15 of the Contract Drawings; • show on the proposed package station drawings a wetwell vent, pipe supports, alarm elevations, link seals, top and bottom concrete slabs, location of aluminum access cover, pipe penetrations with invert elevations, drainage for valve vault, fillet; and • buoyancy calculations. 8. Contractor shall verify with manufacturer that aluminum hatch will have a maximum deflection of L/240, have a ¼" aluminum channel frame, have a removable lock handle, and that the hatch shall be watertight with a drainage coupling to the channel frame in accordance with Specification 5500 Section 2.14.A of the Contract Documents. 9. Contractor shall use float switches that use two #19 AWG stranded conductors in accordance with Specification 11535 Section 2.04.A of the Contract Documents. 10. Contractor shall use 120-volt control panel circuitry in accordance with Specification 11535 Section 2.05.C.1 of the Contract Documents. 11. The Contractor shall show that motor control will have redundant high- and low-level alarms to provide backup to switches in accordance with Specification 11535 Section 2.05.C.3 paragraph a and b of the Contract Documents. 12. Contractor shall provide a list of proposed deviations to current specifications (if any) for proposed pump station controls and instrumentation.	During the value engineering process the following cost saving modifications and alternatives were identified: 1. Manholes MH-105 and MH-106 can be eliminated to reduce cost. 2. The total depth of the remaining manholes and lift station can be greatly reduced. 3. Due to the total reduction in system depth, a packaged lift station can be utilized. 4. Lift station discharge can be run above grade and pad mounted. Attached is an example of the proposed packaged lift station and a redlined site drawing showing modifications. Please provide the following information and applicable updated drawings: Packaged lift station: 1. Please provide size of fiberglass manhole and required invert elevations. 2.Please provide required pump sizing and horsepower. Manholes MH-103 and MH-104: 1. Please provide required diameter, depths, and inverts of manholes.
008	Jose Romero	Site Light Fixture Changes	3/14/2023	3/14/2023	3/24/2023	Answered	Confirmed that alternate lighting can be submitted for review	During the value-engineering process, it was proposed that light fixtures could be modified to save cost. Below are the proposed modifications. Please note that sufficient information will be provided during the submittal process for these suggested alternates. 1. Lithonia RSX series fixtures are proposed for Fixtures C as detailed on drawing E22. See attached cutsheet for reference. 2. Round tapered aluminum direct burial poles are proposed for Fixture C and D.

Columbia County NFMIP WWTP
RFI LOG

009	Jose Romero	Pre-Engineered Fiberglass Building Removal	3/14/2023	3/14/2023	4/3/2023	Answered	1. Contractor shall build a high enough wall with deep enough wing-walls on the North side of the bulk storage canopy to protect analyzer equipment from rain and sun exposure from the North, West, and East. 2. Contractor shall use north wall for support and mounting. The analyzer shall face the south side. 3. Contractor shall include a floor drain near the analyzer and provide drainage piping to both samplers and analyzer that does not share the same pipe from the hypochlorite emergency spill drain line as shown on sheet M16 of the contract drawings. 4. Contractor shall provide a details sheet with section view that shows mounting and layout of the new analyzer location and supporting equipment	During the value engineering efforts for GMP-1 it was identified that the pre-engineered fiberglass chemical building could be eliminated, and the equipment could be placed under the bulk storage canopy. See the attached drawing and advise if the proposed bulk storage canopy layout is acceptable. Below are a list of the items moved and modified. -The influent sampler, effluent sampler, analyzer board, and commercial sink have been placed on the west wall of the canopy building. -The 6" drain has been extended to the Northeast to collect drainage from the commercial sink and effluent sampler. -The potable water line tees before it enters the south side of the canopy building and runs to the North to feed the commercial sink. Lines SA-1 and SA-2 have been re-routed to enter the West side of the canopy building.
010	Jose Romero	Sitework Changes - Import Fill	3/14/2023	3/14/2023	4/18/2023	Answered	1. Any excess topsoil will be stockpiled in designated area onsite. 2. The ability to use insitu soils in borrow areas will be dependent on requirements of approved sieveanalysis from soil proctors. 3. The grades in the southeast prtion of the plant were modified to form a sheet flow from the edge of the proposed interior plant roadway to the center of the proposed swale that runs along the property line from the east to the west towards the effluent storage pond. 4. We will expand the current pond per the drawing to the extent that the borrow fill is required. 5. The asphalt surface has been deleted in its entirety. 6. Base limerock thickness has been reduced to 6" from 8" where asphalt paving was to take place. 7. We will use strippings for fill in the proposed stormwater pond berms/slopes and other areas that are deemed to be a viable place to disgard it. 8. All fill for the structures/effluent pond/roadways will be structural fill borrowed from onsite as approved. 9. The grades in the middle of the site to the east of the interior plant roadway were modified to form a sheet flow from the edge of the roadway to the centerline of the proposed swale to the east.	During the value engineering efforts for GMP-1 it was proposed that the SWMF pond could be shifted to significantly reduce the amount of imported fill dirt required. The proposed change shifts the pond Northeast towards the Effluent Storage Pond. See the attached drawing from our site subcontractor for reference of the proposed change. This drawing was evaluated by Moore Bass Consulting, they provided the below comments and concerns. Please provide direction and revised drawings for this change: 1.) -If the pond is regraded as shown in the PDF (1st page),the plan will need to be revised to accommodate an access berm around the backside (West side) for maintenance vehicles. -On the second attached drawing, circled in green and with green arrows indicates where the 20' maintenance access could be graded to cross the swale and run adjacent to the effluent pond. The grading would need to remain at the elevation noted for other portions of the maintenance access area around the pond. -On the third attached drawing, circled in red with red arrows indicates how the access berm was accommodated on the original design. Vehicles would have driven down and back up the slope to exit. If there is room to make this slope 10:1 and add a geoweb underlay for the sloped portion, that would be ideal. 2.) Our site subcontractor provided a list of clarifications for items they propose to modify, this can be found on the 4th page of the attached document. -Item #3: Moore Bass evaluated this proposed change and confirmed that this was acceptable. -Item #9: Impervious areas should not be sent to the East because the swale treatment calculations would not hold up to the additional volume that would be added -Please evaluate item #3 and #9 to ensure that the revised grading doesn't create low areas or extensions of the swale that may get soggy or lack positive outfall to drain or remain dry.
011	Jose Romero	ABB Gear	3/14/2023	3/14/2023	3/24/2023	Answered	Additional correspondence will be required after short circuit study is completed.	During GMP-1 ABB provided value engineering services to reduce cost on the specified electrical gear for the project by proposing modifications to the gear. Please see the attached document with mark-ups documenting their proposed changes. Any necessary changes that are identified after the short circuit study will be made and funded via a contingency draw.
012	Jose Romero	Spray Field and Pipe Corridor Easement Documents	3/16/2023	3/16/2023	7/28/2023	Answered	It has come to Jones Edmunds attention that the concerns and requested documentation in "RFI 012 – Spay Field and Pipe Corridor Easement Documents" have been resolved between the Owner, Weyehaeuser and Wharton-Smith. No technical feedback is required from Jones Edmunds at this time.	In accordance with note 3 on drawing M19, please provide easement(s) documents between Columbia County and Weyerhauser with legal description of the easement(s) for us to provide to the surveyor for staking of the pipe corridor and sprayfields.
013	Jose Romero	GMP-1 Value Engineering Summary	3/16/2023	3/16/2023	4/3/2023	Answered	Acknowledged. No exceptions noted.	The intent of this RFI is to summarize the changes made during the GMP-1's value-engineering efforts: 1. Standard concrete precast with Agru liner is being provided in lieu of polymer precast for the following sewage drainage structures: MH-101, 102, 103, 104, influent pump station, and the master sanitary manhole. 2. Ribbon curbing has been removed, instead, sod will be utilized to stabilize edge of roadways. See attached drawing C12. 3. A concrete cap will be provided over all electrical ductbanks in lieu of fully encased ductbanks. The cap will be 4" non-reinforced concrete, red powder will be placed on the concrete caps during the curing process to allow for safe identification in the future. See attached document for clarity. 4. Valve position indicators have been removed from valves. In lieu of valve indicators, valve boxes will be installed as detailed in the attached document on drawing M35, detail 4. 5. The reclaimed water piping diameter has been reduced from 12" to 8" from the effluent of the chlorine contact tanks to the spray fields as indicated on drawing M18. 6. The potable water main from Highway 90 into the plant has been reduced from 8" to 6" diameter.

Columbia County NFMIP WWTP
RFI LOG

014	Jose Romero	Spray Field Clarifications	4/11/2023	4/11/2023	5/18/2023	Answered	1. Contractor will not damage, remove, or trim trees on any adjacent lands without prior consent. The spray field are not to be clear cut, and piping is to be laid in between tree rows. It is understood that some trees may need to be removed for equipment installation, but Contractor shall coordinate with Weyerhaeuser to potentially harvest/salvage these trees in lieu of removal by Contractor. 2. The proposed zones B, E, and D have less combined acreage than the original Zones A, C, and E. Additionally, the current monitoring well layout would not capture flow from Zone D and B and the intermediate well MWI-2S is in a future zone and would be better constructed at the zone being constructed in this phase. Jones Edmunds will coordinate a revised map with FDEP explaining the proposed adjustments to design. If they agree, coordinates will be provided to Wharton Smith. This item will need to be addressed in a future RFI. 3. Installing RCW-3 on grade between the plant and spray fields may be coordinated, if approved by Weyerhaeuser and the Correctional Facility Staff and piping is not obstructing roadway or access to the roadway. Weyerhaeuser requires that their vehicles have unrestricted access to manage and patrol the property. Additionally, the correctional facilities patrol vehicles will also require to have access to any land adjacent to the road, especially in case of emergency pursuit. As discussed in construction progress meetings, Wharton Smith will bury the 8-inch pipe east of the correctional facility to prevent obstruction on anything that would be in Weyerhaeuser's travel area.	During the Value Engineering process, the sprayfield scope was reduced to only include Zones A, C and E with the rest being designated as future. The installation of the spray fields themselves, as detailed, are to be installed on grade between rows of trees based on our understanding (awaiting RFI#012 response) that the complete clearing of the sprayfield areas is not intended nor permitted by the land owner. Upon further site investigation with this understanding in mind, Zones A and C are both heavily overgrown and would require a significant amount of clearing that was not captured as part of the GMP provided. To minimize the additional clearing work needed, we propose installing Zone B and Zone D in lieu of Zone A and Zone C. In addition, due to the unidentified site conditions within the RCW-3 right of way, we are proposing to install the 8" RCW-3 between the plant and spray field areas on grade for ease of access and maintenance as well as eliminate additional work that would need to be added to GMP-3. Attached are drawings detailing the items captures in this RFI. To summarize, please confirm the following: 1. The spray fields are not to be clear cut and the spray field headers are to be intalled between rows of planted trees is acceptable. 2. Installing spray field zones B (in lieu of A), E, and D (in lieu of C) in as close to conforming with sprayfied detail for Zone E on Drawing M19 as possible is acceptable. 3. Installing RCW-3 between the plant and spray field area on grade is acceptable. Air/Vacuum relief valve would be installed at the high points, at least every 1,500LF, and precast concrete saddles would be installed, at a given spacing, to secure the pipe. Please advise if a coordination meeting would be beneficial for all stakeholders to discuss.
015	Jose Romero	Spray Field Monitoring Wells	4/11/2023	4/11/2023		In-Progress		Note 1 on Drawing M18 indicates there are four (4) new monitoring wells to be installed (MWB-1AS, MWI-2S, MWC-3S, and MWC-4S). Please provide northings and eastings for these proposed monitoring wells. Note 7 indicates two (2) existing piezometer are to be grout filled. Please confirm these are B-2 Piezometer and B-4 Piezometer. Please provide northings and eastings for these piezometers. Please confirm if there are any schedule constraints for when these can be grout filled. Please confirm no action is needed for B-1, B-3, and B-5. Attached is a markup of the drawings to clarify our understanding.
016	Travis Cassella	BNR Tank Outer Wall Inside Diameter	4/14/2023	4/14/2023	4/21/2023	Answered	81' diameter is correct.	Drawings M8 and S5-Detail A, show the inside diameter dimension of the BNR tank outer wall as 80'-6". Specification section 11390.2.01.C.4 calls for an overall tank diameter of 81'. Evoqua's design is based on an 81'0" inside diameter for the BNR outside tank wall. Please confirm that the 81'0" inside diameter dimension is correct.
017	Travis Cassella	8in EQ-1 Routing	4/17/2023	4/17/2023	4/21/2023	Answered	Installing the 8" EQ-1 line closer to the CCC as proposed in red by the Contractor on drawing M11 has been noted and is approved. The 8" EQ-1 flow meter station is intended to be directly adjacent to the 12" RCW-1 flow meter station. Access to either flow meter is maintained with the bypass piping installed below grade. The 8" EQ-1 flow meter station can be offset to the East as necessary to provide space between flow meter and the corner of the CCC. See drawings in RFI folder.	Drawing M3 and M11 have different routings shown for the 8in EQ-1 line. Please confirm the intent for this line is the routing shown on drawing M3, and note the 8-in EQ-1 line will be installed inside (closer to the CCC as shown on M11) of the 8" RCW-1 line and that this is different than what is shown on M3. Please also identify where the 8" EQ-1 flow meter station is intended with the routing on M3.
018	Travis Cassella	20in RCW-1 Routing	4/17/2023	4/17/2023	4/21/2023	Answered	Re-route accepted. See drawings in RFI folder.	The invert elevation of the 20" RCW-1 is at EL. 177.0 per Drawings M12 and CD07. The routing of this line on Drawing M3 has this line being ran where the finish grade elevation is falling from EL. 180 to EL. 179 and as low as EL. 177 in the berm. With 20" DIPS HDPE DR-17 pipe having an OD of 21.6 inches, this line will only have +/- 14.5 inches of cover in the EL. 180 areas and would be less or exposed in some areas of the berm as currently drawn. To maximize cover, please see the attached proposed re-route. Please advise if there are any other protection means needed for this shallow bury pipe (i.e. encasement, concrete cap, etc.).
019	Travis Cassella	BNR Centerline Dimension	4/21/2023	4/21/2023	5/8/2023	Answered	NORTHEN BNR TANK TO BE SHIFTED HORIZONTALY NORTH BY 4'2" TO CREATE 105' 0" OF CENTERLINE SEPARATION BETWEEN BNR TANKS. PADS, PUMPS, BLOWERS, PIPES AND OTHER SUPPORTING EQUIPMENT IN CLOSE PROXIMITY SHALL BE SHIFTED WITH NORTHERN BNR PLANT. PIPES IN AND OUT OF NORTHERN BNR AND FOR SUPPORTING EQUIPOMENT SHALL BE EXTENDED ONLY IN THEIR STRAIGHT HORIZONTAL RUNS WHEN POSSIBLE TO MINIMIZE CHANGES TO ANGLED FITTINGS. 2" PW-1 ROUTING TO REMAIN UNCHANGED.	Please confirm centerline dimension between the two BNR tanks.
020	Travis Cassella	FPL Electrical Easement	4/21/2023	4/21/2023	5/8/2023	Answered	The future force main can be shifted East to satisfy FPL's requests. FPL must stay within the 30-foot utility easement, or additional landowner coordination will be necessary.	FPL has provided preliminary comments regarding their needs for the electrical easement. 1. FPL requires the electrical easement to be shifted from the East side of the utility easement to the West side. This will eliminate the need to modify pull boxes in the future once the new roadway swale is constructed. 2. FPL requires a 10' wide electrical easement. 3. Conduits shall be direct buried from Highway 90 to FPL supplied transformer. 4. Pull boxes shall be installed every 700 LF along the conduit run. Please provide confirmation that the future force main can be shifted East to satisfy FPL's requests
021	Travis Cassella	Fine Bubble Diffuser SCFM	4/24/2023	4/24/2023	5/8/2023	Answered	Addendum 1 section 2.01.B.1.c and 2.01.B.4.b are correct. Each Aerobic Digester Basin within a Package Plant requires 217 fine-bubble diffusers, each capable of 1.50 SCFM, totaling 325 SCFM.	Please confirm the intended SCFM per digester basin.
022	Travis Cassella	CAD Files Discrepancy	4/25/2023	4/25/2023	5/8/2023	Answered	CAD files XR001-C-BLDG-SITE and XR001-C-YP-VE are correct. CAD file T3134.0001is a Moore Bass file that needs to be aligned to the correct CAD files previously provided. 2. See attached CAD files for northings and eastings.	Discrepancies have been found between the "YP" and "Base" CAD files. While preparing to layout the influent box structure coordinates in the field, our surveyor found that the "XR001-C-YP-VE" drawing lays out the yard piping approximately 5.3 LF west of where the base file lays these structures and pipelines out. Please verify which files are correct and provide updated CAD files to correct this issue.
023	Jose Romero	Safety Interlocks	5/2/2023	5/2/2023	5/11/2023	Answered	Safety Interlocks are not required.	1.) There are currently no mechanical safety interlocks (Kirk Locks) called for the switchboard breakers feeding MCC-1 and MCC-and the tie breaker between MCC-1 and MCC-2. Please advise if safety interlocks are to be added for operator safety. 2.) There are currently no mechanical safety interlocks (Kirk Locks) called out for the MCC-3 and MCC-4 main and tie breakers. Please advise if safety interlocks are to be added for operator safety.

Columbia County NFMIP WWTP
RFI LOG

024	Jose Romero	BNR Slab Anchor Embedment	5/12/2023	5/12/2023	5/26/2023	Answered	The proposed anchoring embedment's are not acceptable. Please find attached a recommended detail that can be used at anchor locations. Should other alternatives need to be discussed, we can meet with team to discuss. See RFI Drawings. M:\01Jobs2022\22-114 Columbia County NFMIP WWTP\C-22 RFIs\RFI#024 - BNR Slab Embedment	Evoqua has provided preliminary anchor bolt locations and sizing for the BNR Foundation. See below for summary: 1.) Submersible mixers: Evoqua proposes to use 5/8"x5" wedge anchors. The anchors will have a 3-1/2" embedment. 2.) Aeration Pipe Supports (Method 1 – Preferred): Evoqua proposes to drill and epoxy 3/8" all thread rods. The rods will have a 2-3/8" embedment. 3.) Aeration Pipe Supports (Method 2 – Alternate): Evoqua proposes to use 3/8" drop-in anchors. The anchors will have a 1-9/16" embedment. Please review the attached and advise if the proposed embedments and methods are acceptable for the 5-1/2" base slab as shown on sheet S5.
025	Travis Cassella	Telecommunication Conduits	5/22/2023	5/22/2023	5/31/2023	Answered	The Contractor shall follow the telecommunication conduits as indicated on the attached drawing, C16, provided as part of this RFI. The reason is to avoid potential conflict with the proposed installation of the FPL electrical line and telecommunication pull-boxes and due to the proposed future fill materials needed to create berm for roadway swale as indicated on drawing C12. Contractor responsible for following minimum vertical and horizontal separation requirements as defined in details 1 and 2 of drawing CD4.	The site telecommunication conduits are shown on the West side of the plant entrance road on drawing C16 but are shown on the East side of the road on drawing E03: 1. Please confirm the conduits are to be routed on the West side of the road per drawing C16. 2. Please confirm it is acceptable to install the conduits between the 10' FPL easement and the 6" force main as shown in the attached drawing.
026	Travis Cassella	Plant Drain Pump Station	5/24/2023	5/24/2023	6/6/2023	Answered	The Contractor shall provide Florida-Engineer Signed and Sealed buoyancy calculations with the proposed fiberglass duplex package plant for review and approval.	Please advise if the following modifications to the plant drain pump station are acceptable. The intent of these modifications are to provide cost saving for Columbia County. They have been previously reviewed and accepted by Columbia County. 1. Provide a duplex packaged station in lieu of a triplex as noted in RFI#007 response. 2. Utilize a fiberglass basin with a fiberglass bottom, additional 57 stone (2' total), and a concrete ballast around the base of the well in lieu of the required concrete bottom slab. 3. Provide an aluminum lid on the pump station, install concrete slab around aluminum lid, and protective bollards along the perimeter of the concrete slab to protect from vehicular traffic.
027	Jose Romero	Type B Light Fixtures	5/24/2023	5/24/2023	6/8/2023	Answered	Lithonia #ARC2LEDP140KMVOLTDDBXD	Response to Submittal 16500-001 – Lighting System states "Type B wall mounted fixtures to be full cutoff." Fixture B (Holophane W4GLED) shown on sheet E22 lighting fixture schedule is not full cutoff – it has a BUG rating of 0-3-3. Please specify what style wallpack is needed for this fixture.
028	Travis Cassella	Leachate Tank Elevations	6/1/2023	6/1/2023	6/7/2023	Answered	The "Float Level Control Table" on drawing M6 calls out a finish floor elevation for the leachate tanks at elevation 180.75. The response provided to the "Drawing Discrepancy Coordination Document" stated that the slab between the tanks should have a minimum elevation of 181.25. Please confirm it is acceptable to make the finish floor for the Leachate Tanks 181.25 to match the slab between the tanks.	Provide confirmation on Leachate Tank finsih floor elevation.
029	Travis Cassella	Grating Span	6/7/2023	6/7/2023		Answered		Please advise if the attached grating detail is acceptable to use for sizing aluminum grating depth.
030	Travis Cassella	Parshall Flume	6/7/2023	6/7/2023	6/30/2023	Answered	The block out on the Parshall flume effluent is meant to show the wall beyond the section cut. In order for the Parshall flume to work accurately, there is meant to be no obstruction on its effluent side. The opening downstream of the effluent of the Parshall flume should be the full 5.00'x2.83' opening, similar to what the channel will have for the grout and flume. The flume elevation has flexibility so long as there is a rise from the influent box and a free fall without obstruction from the effluent box. The grout may be lessened underneath the flume to allow room for the aluminum grating support.	Clarify elevation or block out requirement on effluent side of parshall flume. Provide elevation for top of flume (below embedded angle).
031	Travis Cassella	Chemical Containment Box	6/8/2023	6/8/2023	6/30/2023	Answered	Drawing M32 Detail is correct. Contractor to provide a 4'x4' Chemical Containment Box with depth as required to allow buried chemical to enter the bottom of the box between 6" and 12" from the bottom, and whose top is 8" above finished grade. It is estimated the depth will be between 4'5" and 4'11".	Please provide clarification regarding the Chemical Containment Box. Drawing M16 calls out a 2'x2' Chemical Containment Box with a depth 3.4' below grade. Drawing M32 Detail 6 calls out a 4'x4' Chemical Containment Box with no specific depth below grade. Please advise on the dimensions and provide elevations of the chemical containment box at the chemical storage building.
032	Travis Cassella	BNR Slab Thickness	6/12/2023	6/12/2023	6/26/2023	Answered	1. We need loading on channels under all straight walls to confirm details marked in this submittal. This can be done in coordination meeting. 2. Refer to attached mark-up. See RFI Drawings	Please provide updated drawing S5 detailing required slab thickness.
033	Travis Cassella	Greenstreak Waterstop	6/19/2023	6/19/2023	6/19/2023	Answered	Use the 6" PVC Waterstop Model 732..	Please advise if the Greenstreak waterstop is acceptable.
034	Travis Cassella	Alternate Sampler	6/20/2023	6/20/2023	7/28/2023	Answered	The proposed Teledyne Model 5800 Refrigerated Sampler in lieu of the specified Teledyne Model 6712 Refrigerated Sampler is acceptable.	Please advise if the alternate sampler is acceptable.
035	Travis Cassella	Combo FVNR Starters Clarification	6/27/2023	6/27/2023	7/21/2023	Answered	Please replace with maintained on/off switch	Please provide clarification on the engineer's submittal comment #1

Columbia County NFMIP WWTP
RFI LOG

036	Travis Cassella	CCT Gate Elevations	7/3/2023	7/3/2023	7/28/2023	Answered	1. It is correct that a concrete wall is intended in accordance with the M-Drawings. The concrete walls below the two gates just south of the Parshall Flume should be 12" thick reinforced with #5 vertical each face @ 6" o.c., coinciding with the first submittal Detail-10. The horizontal reinforcing should be #5 @ 8" o.c. to match the adjacent perpendicular wall to the north of the gates. Top of Concrete elevation should be approximately 181.00 (field adjust as needed for gate coverage/overlap). 2. Gates should be 4'x4' with top elevation when closed of approximately 185.00 (field adjust as needed for gate coverage/overlap with concrete opening). Design intent is when gate is closed, it will completely isolate/obstruct flow from going downstream to channel, but if an emergency overflow occurred, flow would spill over top of closed gate before spilling over tank walls to the outside.	Please provide CCT top of gate elevations for G-1 and G-2
037	Jose Romero	8in EQ-1 Routing	7/6/2023	7/6/2023	7/28/2023	Answered	The proposed location and orientation are acceptable, but accessibility to the Chlorine Contact Tanks' stairs must always be maintained.	Please advise if location and orientation of 8in flow meter station is acceptable.
038	Travis Cassella	Sampling Pumps	7/25/2023	7/25/2023	7/28/2023	Answered	Alternate sampling pumps not accpetable. Sampling pumps shall have a flow rate of 5-10 GPM	Please advise if the attached Little Giant sampling pumps are acceptable for use in lieu of the specified Grundfos Model JP05-SS. These pumps are capable of 1-3 GPM flow rate which is sufficient for feeding the chlorine analyzer panel. The pumps would be fed by a waterproof 120VAC switch above the chamber; this would allow for the starters in the MCC to be spared. See attached marked-up drawings for reference.
039	Travis Cassella	Influent Composite Sampler Lacation	7/25/2023	7/25/2023	7/28/2023	Answered	Composite sampler cannot sample flow from EQ basin.	Our I&C subcontractor has recommended that the composite sampler be relocated between the BNR tanks to take samples of the screened flow in the EQ basins. The associated conductivity probe would also be moved with the sampler. The concern is that the 1" sampling line from the influent pump station to the chemical storage building (housing the composite sampler) will become clogged with rags and require frequent maintenance. The composite sampler comes with its own peristaltic pump and will lift up to 28 feet. This would eliminate the need for the sampling pump at the influent pump station and allow for its starter in the MCC to be spared. Additional coordination would be required for the specific location of the sampler. If there is enough space it could be placed on the platform near the drum screens, if not, it would need to be placed on the slab between the tanks. Please advise if this proposed change is acceptable.
040	Travis Cassella	Stormwater Pond Extension	7/26/2023	7/26/2023	8/1/2023	Answered	1. Please find the attached email and markup, which were coordinated during the VE coordination with Wharton Smith's bidding team. The allowed layout accounted for the future structures intended in that area. The proposed extension will directly impact both the egress and the foundational support of those proposed structures. 2. The water management district handbook allows the permanent pool to be as deep as 12 feet in this pond. The current design is estimated near 5.5' deep between normal water elevation and pond bottom (permanent pool), so additional excavation is allowed to acquire remaining fill. The handbook mentions pond slope requirement as 4 to 1 and doesn't distinguish between slopes above or below the nromal water elevation.	As indicated in RFI#010's response, the need to re-size the pond to generate enough fill material to mitigate importing is now required. Please see the attached proposed extension of the stormwater pond. The extension of the pond will be along the East bank of the pond as shown in the attached drawings. All required pond sloping will be maintained and storm inlet and MES's will shift East accordingly. Please confirm this is acceptable.
041	Travis Cassella	Inlet S-4 Modification	7/25/2023	7/25/2023	7/28/2023	Answered	Modification not acceptable, inlet was designed to be above ditch bottom.	Storm inlet structure S-4 has a grate elevation of 182.00, the surround grade is 181.00. Due to the grate being higher than the surrounding grade, water is accumulating around the structure instead of draining. Please see the attached documents and advise if it is acceptable to cut a window into the East side of the structure to allow water to drain into the structure.
042	Travis Cassella	BNR Instrument Transmitter Assembly	7/26/2023	7/26/2023	8/2/2023	Answered	Due to the questions provided in RFI 042 (BNR Instrument Transmitter Assembly) are related to RFI039 (Influent Composite Sampler Location), please refer to response provided for RFI 039	This RFI is being submitted to provide supplemental information for RFI#039-Influent Composite Sampler Location. If the influent composite sampler is relocated between the BNR tanks as proposed in RFI#039, an instrumentation transmitter/surge/sunshield assembly would need to be mounted on the platform between the tanks. The transmitter assembly would host the two DO probes and the conductivity probe that are currently designed to be housed in the analyzer board assembly, detailed on drawing M32-Detail 1. See the attached sketch of the proposed transmitter assembly: The assembly with sunshield would be 24" wide x 36" tall and could be single pole stanchion mounted. The assembly would require a 120VAC feed and a fiber run to the PLC panel. Please confirm this instrument transmitter assembly and its proposed location are acceptable.
043	Travis Cassella	EQ Pump Motor Service Factor	7/26/2023	7/26/2023		In-Progress		Our EQ Pump vendor has requested an exception to submittal review comment #15 on submittal #: 11355-002- EQ Non-Clog Centrifugal Pump. The requested exception is to allow for a Motor Service Factor of 1.0 in lieu of the specified 1.15. Our pump vendors motor provider has stated that due to the low RPM's of the motor, a service factor of 1.15 would generate too much heat. Please review this request and advise if the requested exception is acceptable.