City of Napoleon, Ohio

P.O. Box 151 ~ 255 West Riverview Avenue
Napoleon, OH 43545
Telephone: (419) 592-4010 Fax: (419) 599-8393

Memorandum

To: Mayor and Members of City Council
From: Roxanne Dietrich-Clerk of Council
cc: Joel L. Mazur-City Manager,
Billy D. Harmon-City Law Director,
Kelly O'Boyle-City Finance Director
Date: August 7, 2020
Subject: General Information

CALENDAR

MONDAY, AUGUST 10, 2020

Agenda - Electric Committee and BOPA @6:15 pm

1. **Approval of Minutes**
2. **Review/Approval of PSCAF for August 2020**
3. **Update on Substations**
4. **Electric Department Reports**

Agenda – @7:00 pm Municipal Properties, Building, Land Use and ED Committee

1. **Approval of Minutes** – from June 8, 2020 are attached.
2. **Executive Session** – Economic Development

Canceled - Water, Sewer, Refuse, Recycling and Litter Committee

Although the Water and Sewer Committee meeting has been canceled, Dave Pike asked that the enclosed drawings for the 2021 WWTP Improvements Project be included in your packet.

TUESDAY, AUGUST 11, 2020

Canceled –Board of Zoning Appeals

Canceled - Planning Commission

INFORMATIONAL ITEMS

07.31.2020 – AMP Weekly Newsletter

August 2020

Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
2	3 7:00 pm – CITY COUNCIL	4	5	6	7	8
9	10 **6:15 pm** – Electric Comm **6:15 pm** - BOPA **7:00 pm –** Municipal Properties, Building, Land Use/ED Comm.	11	12	13	14	15
16	17 6:00 pm – Parks & Rec Committee 6:00 pm – Tree Commission 7:00 pm – CITY COUNCIL	18	19	20 10:00 am American Road Improvements Bid Opening	21	22
23	24 6:30 pm – Finance & Budget Comm. 7:30 pm - Safety and Human Resources Committee	25 **4:30 pm** – Civil Service	26 6:30 pm - Parks & Rec Board	27	28	29
30	31 5th Monday					

City of Napoleon, Ohio

ELECTRIC COMMITTEE

Meeting Agenda

Monday, August 10, 2020 at 6:15 pm

Council Chambers, 255 West Riverview Avenue, Napoleon, Ohio
The WebEx link to the meeting will be posted on the City's website at www.napoleonohio.com

1) Approval of Minutes: July 13, 2020 (In the absence of any objections or corrections, the Minutes shall stand approved)

2) Review/Approval of the Power Supply Cost Adjustment Factor for August 2020: PSCA 3-month averaged factor $0.02777; JV2 $0.018603

3) Update on Substations

4) Electric Department Reports

5) Any other matters to come before the Committee

6) Adjournment

Roxanne Dietrich

Roxanne Dietrich - Clerk of Council

City of Napoleon, Ohio

ELECTRIC COMMITTEE MEETING MINUTES

Monday, July 13, 2020 at 6:15 pm

PRESENT

Committee Members	Lori Siclair-Chair, Ross Durham, Joe Bialorucki
BOPA Members	Rory Prigge-Acting Chair, Dr. David Cordes
City Manager	Joel L. Mazur
City Staff	Greg Kuhlman-Electric Dist. Supt.
Clerk of Council	Roxanne Dietrich
Others	News Media

ABSENT

BOPA Member	Michael J. DeWit

CALL TO ORDER

Chairperson Siclair called the Electric Committee meeting to order at 6:16 pm.

APPROVAL OF MINUTES

The minutes from the June 8, 2020 meeting were approved as presented.

POWER SUPPLY COST ADJUSTMENT FACTOR FOR JULY 2020: PSCA 3-MONTH AVERAGED FACTOR $0.02841; JV2 $0.018805

Mazur stated July's bill is for May's usage and that was way down but, it was not as low as April's usage on the June bill. We were down 17% for the month. Expect to see that level out and be normal by the end of the year. The annual forecast has us down about 10%. Dr. Cordes asked if we are still long on power? Mazur replied *yes*, the bills are not going down, they are in sync with what our usage is. The three-month rolling average without the $100,00 from the reserve fund would have been at almost .14/kWh. By applying the $100,000, it brought the rate down to .1371/kWh. The $100,000 did not have as much of an impact as we thought it would, but it had some. Our June usage is up from what was forecasted. The cost adjustment factor for April spiked then you add the month of May and even with the $100,000 added, it went up even further. I would suggest another $100,000 application to the June usage for the August month. The way everything is projecting right now, it should put the rate around 13.1 to 13.2 cents per kWh. If you want to get under 13 cents per kWh, I would suggest a range of $160,000-$200,000. We are getting into some pretty heavy usage months and have a pretty high power supply cost adjustment factor going on. This next bill, with the hot weather and air conditioners kicking on, everyone will feel the impact. There would be more impact if we use these dollars now to try to levelize our rates. Dr. Cordes asked does using more power benefit us so we are not as long on power? Mazur said it will bring it down, but the three-month rolling average is what we are looking at. The prior two months are what is hurting this next month. The calculations are suggesting we apply another $100,000 from the reserve fund to next month's rates. This is what we are projecting will happen. By doing nothing, the rate will be around 13.6 or 13.5 cents per kWh. Applying $100,000 will bring that number closer to last year's number that was $91.04/MWh it should take us to the $92.00 to $93.00 range, that would put us at 13.1 or 13.2 cents per kWh. Prigge asked if there have been any more complaints from businesses? Mazur replied there have not been any additional complaints. Siclair asked what would the cost have been had we not done the $100,000? Mazur replied 14 cents per kWh. Bialorucki asked what is the average household range for kilowatts per month now during the summer months? Mazur said for usage? Kuhlman said it is hard to say because water and utilities are all on the

same bill. I would say 600 or 700 kilowatt hours for a family per month. Mazur said it's the air conditioners. Kuhlman said our peak went up to 30 MWh the first of July already. Dr. Cordes asked because of where we are buying power, this should improve after December of this year, will we still be long on power? Mazur said the Morgan Stanley contract is where we purchase power for our remaining requirements, that is a contract that has been around for a while and is our achilles heel right now. When that contract falls off, we will not have the swings in the power supply cost adjustment factor. Prigge asked if any industries are on a peak load formula? Years ago Toledo Edison had peak loading and that determined your bill. I think the City may have had that at one time and maybe got rid of it. I was wondering if industries still have a peak loading formula? Dr. Cordes talked about an incentive for electric cars. Would that help us with being long on power? We have six months, will it make that much of a difference, to have them powered at night during off peak hours. Mazur's concern is they will plug in during peak hours. Our peak was set on Thursday between 4:00 pm -5:00 pm. People come home from work and they would plug them in. Dr. Cordes said they can put it on a timer to draw after 11:00 pm. Mazur said that can be part of the incentive, we want the usage but you do not want to have it at the wrong time. When people would sign up to install their charging systems we would have the ability to link into it during Community Energy Savings Request/peak alert days. That's another topic that is worth revisiting. You want people to use electricity but you don't want them to harm the system. We did set our 1CP peak at 30.214 on Thursday, July 9th and that is lower than last year's 30.35 and even lower than the previous two years that were 33 and 31. If you look at July 8th, our load was actually a little bit higher at 30.24. Our peak is set on the ATSI zone. Kuhlman said each industry has to follow when they have a peak. It is their responsibility to watch their demand because their rate is adjusted by their peak load. They are helped out by doing Efficiency Smart. Mazur said the energy savings peak alerts are starting to resonate. On July 8th, First Energy/the ATSI zone's load was 12,125 MW. Our load was a little higher at 30.224. First Energy's peak hit at 12,465 MW on the following day (July 9th) and we were lower at 30.214. By taking action that difference is going to be about $60,000 into next year's power supply cost. Dr. Cordes how do you communicate? Mazur we run ads on the radio, in the newspaper and social media. Dr. Cordes asked if we have direct access to businesses? Mazur was not sure if we send out anything specific to just industries. $60,000 is about .5% of our rates. That is not dramatic but is enough. Peak alerts are important and they do pay-off. Dr. Cordes-is there a better way to reach people like a mass text like an amber alert. Durham asked if any of the money that we transfer over is recoverable in the CARES Act. Mazur replied, we did look into that and they said we cannot do that. Now if people are struggling with their bills and they want to apply to the City or if we had a program to help people pay their utility bills we could do that but, that's a whole different program altogether. Bialorucki asked how many customers do we have on our electric system? Mazur said 6500 meters is an estimate, it's between 6000 and 6500. There could be multiple meters at some locations. Kuhlman said mainly residential have multiple meters. They put up another building after they have their house and it's easier to go from the pole to the building. Siclair what I heard was, if we do not put more money in this time around, the end result would be the same if not less than what it was this time. Mazur said I would say slightly less maybe .1 to .2 cents per kWh than this month. Keep in mind that people's bills are going to be higher because the usage is up. It's still an inflated rate for much more usage. Siclair asked what was the reason the rate did not come in under 13 cents? Mazur replied our usage was just too low. We put money from the reserves in that put a dent into the rates. The rate would have been at 13.98 cents per kWh and ended up being 13.7 cents. Bialorucki commented so, if it was 14 cents, my usage for May was 838 and my bill would have been $117.32. Putting in the $100,000 that made my bill $114.80, so a savings of $3.00. When I divide that out by $100,000, the other numbers I used were 14 cents and 13 cents, it came up to 13,263 customers. If we only have between 6,000 and 6,500 meters that means businesses are benefiting a lot more than each residence. Mazur said the businesses are the big users. That is shown through COVID when people stayed home. It's

different than water. Our usage is down in electric but, our water usage is actually up. A lot may have to do with people staying home. Siclair added and people are buying pools. Mazur said you have to fill them people are watering their lawns. Generally, water usage goes up when it's hot, it is definitely seasonal. It's evident the businesses benefited from the rate stabilization because their usages are higher than residential. Bialorucki stated if you do $100,000 divided by my savings it would have been $2.50. Then it would be 39,840 users showing there is a very small percentage benefiting from this. When we were talking about the $100,000 and 6,000 households in the area, I was thinking it would be very impactful for everybody. Obviously it's not unless you use a lot. Siclair asked what is the impact to the fund? Mazur said the two funds, electric revenue fund and electric development fund combined are at about 7.5 million dollars. Bialorucki asked are there any other expenses that we know will hit that account this year? Mazur said just our normal budget year, we have encumbrances. At one point I think O'Boyle said there is really 6.7 million dollars but, I think she is factoring in all encumbrances that will be expended. Two years ago the hydro plants kicked in and our power supply costs were actually higher than what we had budgeted for and those two funds equaled about five million dollars. We budgeted enough to make sure that does not happen again. There hasn't been a year other than that year, where we had to dip into these funds to cover expenses. There is nothing on the horizon I can point to that we'll have an expense for. Siclair asked was any of this money going to be used for substation work? Mazur said I think we have $235,000 budgeted for substations. $100,000 is conservative, a lot of people especially businesses would appreciate $100,000. Out of 6.7 million $100,000 is a low percentage and is not anything we cannot make up over time. Durham asked if we are talking about moving $100,000 over, is it possible to position that $100,000 differently? For example, to give every meter a $15 credit. Last month we helped businesses pretty significantly. If we can help each residence at $15 a meter is better than two dollars and some change Bialorucki was talking about. Mazur –yes. I would have to check if it's a meter charge or if it is different for residences, businesses, commercial and industrial users. You can across the board apply to each meter. I didn't do the math on that. Dr. Cordes said you divide $100,000 by how many meters you have. Durham responded using 6,500 meters that would be $15.38 per meter. Dr. Cordes commented industries will say $15 – whew. Durham-we helped them last month. Mazur the motion would be to apply $100,000 from the reserve account to each meter individually. Bialorucki said right now is the perfect time. They have been running their air conditioners and $15 will make a difference. Durham asked if we have the resources to bill that correctly? Mazur replied yes. They do it now with customer charges. The difficult part will be doing the calculation on how many meters we bill for that month and apply a credit to each individual meter across the board. Dr. Cordes-$15 will be more impactful, the people will see it and we will be recognized. We could come up with a hybrid $7.00 per meter with the remaining balance going like last time, we could do a hybrid to help both. Bialorucki said that would be good for next month. Kuhlman commented everybody went through some rough times in March and April when COVID really hit. They were at home feeling the pinch and probably were not using as much. Makes me wonder even if we had we not thrown in the $100,000 in the couple of dollars you noticed on your account probably would have been down anyways because the usage was down at your house. It's rebounding big now. Electric wise you are feeling it in May and June. Mazur said the general number used in the past is 6,000 meters. Bialorucki asked will you be able to tell us how many are residential and how many are commercial?

Motion: Durham Second: Bialorucki
to accept the BOPA recommendation and approve the PSCAF for July 2020 as three-month averaged factor $0.02841 and JV2 $0.018805

Roll call vote on the above motion:
Yea-Durham, Bialorucki, Siclair
Nay-
Yea-3, Nay-0. Motion Passed.

Motion: Bialorucki Second: Durham
to accept the BOPA recommendation to take $100,000 from the Electric Reserve Fund and apply it as a credit to each active meter equally

Roll call vote on the above motion:
Yea-Durham, Bialorucki, Siclair
Nay-
Yea-3, Nay-0. Motion Passed.

UPDATE ON SUBSTATIONS
Mazur reported AMP needs to be here, we have them scheduled to be here in July but, that could change as there is not much travel in Franklin County right now.

ELECTRIC DEPARTMENT REPORTS
The Electric Department Reports for June 2020 are attached.

ADJOURNMENT
Motion: Bialorucki Second: Durham
to adjourn the Electric Committee meeting at 7:15 pm.

Roll call vote on the above motion:
Yea-Durham, Bialorucki, Siclair
Nay-
Yea-3, Nay-0. Motion Passed.

Approved

August 10, 2020 _____
Lori Siclair
Electric Committee Chair

DRAFT

CITY OF NAPOLEON, OHIO - PSCAF

POWER SUPPLY COST ADJUSTMENT FACTOR (PSCAF) - COMPUTATION OF MONTHLY PSCAF

COMPUTATIONS WITH *CORRECTED* DATA FROM JULY, 2015, THROUGH MARCH, 2017

AMP Billed Usage Month	PSCAF City Billing Month	AMP - kWh Delivered As Listed on AMP Invoices	Purchased Power Supply Costs (*=Net of Known) (+ OR - Other Cr's)	Rolling 3-Month Totals Current + Prior 2 Months kWh	Cost	Rolling 3 Month Average Cost	*Less: Fixed Base Power Supply Cost*	PSCA Dollar Difference + or (-)	PSCA-Corrtd. 3 MONTH AVG.FACTOR + Line Loss	Total Residential Cost / kWH For Month
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	
		Actual Billed	Actual Billed w/Cr's	c + prior 2 Mo	d + prior 2 Mo	f / e	*$0.07194 Fixed*	g + h	i X 1.075	
June'18	Aug'18	13,813,277	$ 1,230,516.92	38,621,535	$ 3,569,411.66	$ 0.09242	$ (0.07194)	$ 0.02048	$ **0.02202**	
July'18	Sep'18	15,234,049	$ 1,312,135.13	41,859,747	$ 3,726,901.05	$ 0.08903	$ (0.07194)	$ 0.01709	$ **0.01837**	
Aug'18	Oct'18	15,634,242	$ 1,275,023.19	44,681,568	$ 3,817,675.24	$ 0.08544	$ (0.07194)	$ 0.01350	$ **0.01451**	
Sep'18	Nov'18	13,195,770	$ 1,197,316.71	44,064,061	$ 3,784,475.03	$ 0.08589	$ (0.07194)	$ 0.01395	$ **0.01500**	
Oct'18	Dec'18	12,827,093	$ 1,201,860.98	41,657,105	$ 3,674,200.88	$ 0.08820	$ (0.07194)	$ 0.01626	$ **0.01748**	
Nov'18	Jan'19	12,694,035	$ 1,177,330.24	38,716,898	$ 3,576,507.93	$ 0.09238	$ (0.07194)	$ 0.02044	$ **0.02197**	
Dec'18	Feb'19	12,936,598	$ 1,175,315.11	38,457,726	$ 3,554,506.33	$ 0.09243	$ (0.07194)	$ 0.02049	$ **0.02203**	
Jan'19	Mar'19	13,516,644	$ 1,157,412.90	39,147,277	$ 3,510,058.25	$ 0.08966	$ (0.07194)	$ 0.01772	$ **0.01905**	
Feb'19	Apr'19	12,112,198	$ 1,076,627.71	38,565,440	$ 3,409,355.72	$ 0.08840	$ (0.07194)	$ 0.01646	$ **0.01769**	
Mar'19	May'19	12,476,648	$ 1,111,471.41	38,105,490	$ 3,345,512.02	$ 0.08780	$ (0.07194)	$ 0.01586	$ **0.01705**	
Apr'19	June'19	10,913,916	$ 1,043,515.66	35,502,762	$ 3,231,614.78	$ 0.09102	$ (0.07194)	$ 0.01908	$ **0.02051**	
May'19	July'19	11,554,553	$ 1,074,988.04	34,945,117	$ 3,229,975.11	$ 0.09243	$ (0.07194)	$ 0.02049	$ **0.02203**	
June'19	Aug'19	12,448,976	$ 1,059,406.09	34,917,445	$ 3,177,909.79	$ 0.09101	$ (0.07194)	$ 0.01907	$ **0.02050**	
July'19	Sep'19	15,467,755	$ 1,165,669.13	39,471,284	$ 3,300,063.26	$ 0.08361	$ (0.07194)	$ 0.01167	$ **0.01255**	
Aug'19	Oct'19	14,297,705	$ 1,123,690.94	42,214,436	$ 3,348,766.16	$ 0.07933	$ (0.07194)	$ 0.00739	$ **0.00794**	
Sep'19	Nov'19	12,810,364	$ 1,102,711.16	42,575,824	$ 3,392,071.23	$ 0.07967	$ (0.07194)	$ 0.00773	$ **0.00831**	0.1230
Oct'19	Dec'19	12,026,480	$ 1,080,410.22	39,134,549	$ 3,306,812.32	$ 0.08450	$ (0.07194)	$ 0.01256	$ **0.01350**	0.1245
Nov'19	Jan'20	12,466,183	$ 1,088,822.82	37,303,027	$ 3,271,944.20	$ 0.08771	$ (0.07194)	$ 0.01577	$ **0.01695**	0.1239
Dec'19	Feb'20	12,809,184	$ 1,098,513.89	37,301,847	$ 3,267,746.93	$ 0.08760	$ (0.07194)	$ 0.01566	$ **0.01683**	0.1239
Jan' 20	Mar' 20	12,907,445	$ 1,152,024.27	38,182,812	$ 3,339,360.98	$ 0.08746	$ (0.07194)	$ 0.01552	$ **0.01668**	0.1238
Feb' 20	Apr' 20	12,179,274	$ 1,114,393.10	37,895,903	$ 3,364,931.26	$ 0.08879	$ (0.07194)	$ 0.01685	$ **0.01811**	0.1262
Mar 20	May 20	11,565,546	$ 1,098,886.88	36,652,265	$ 3,365,304.25	$ 0.09182	$ (0.07194)	$ 0.01988	$ **0.02137**	0.1299
Apr 20	June 20	9,957,773	$ 1,056,718.07	33,702,593	$ 3,269,998.05	$ 0.09703	$ (0.07194)	$ 0.02509	$ **0.02697**	0.1371
May 20	July 20	10,376,392	$ 1,082,279.17	31,899,711	3,237,884.12	0.10150	(0.07194)	0.02956	**0.03178**	0.1365
June 20	**Aug 20**	**13,172,159**	**$ 1,136,941.54**	**33,506,324**	**3,275,938.78**	**0.09777**	**(0.07194)**	**0.02583**	**0.02777**	

* Total Includes Other (-) Credits / (+) Debits in Purchased Power Costs, Not Listed on AMP Billings:

PSCAF - Preparer's Signature:

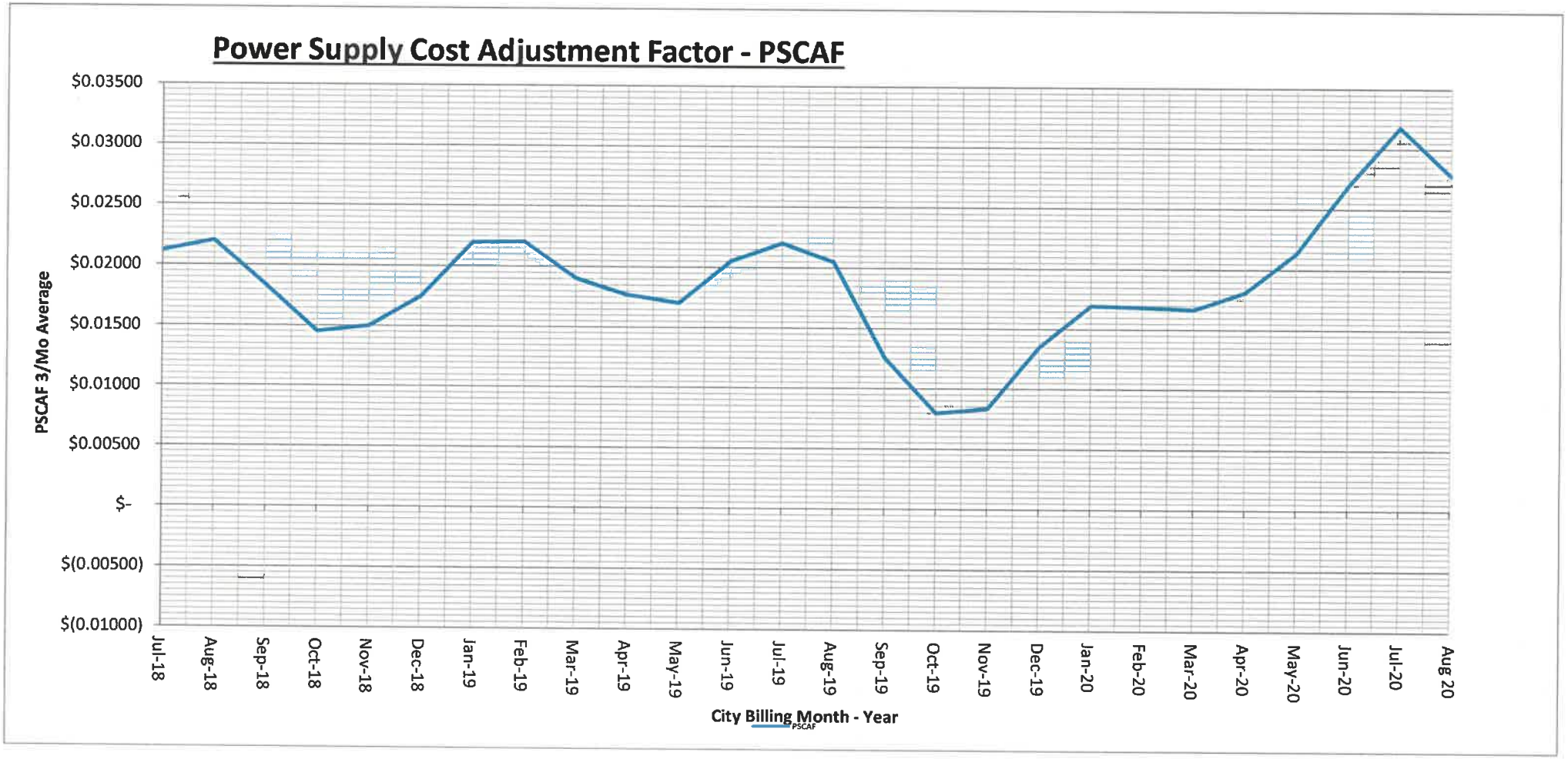
Name - Kelly O'Boyle, Finance Director

Signature — Date: **7/20/2020**

PSCAF - Reviewer's Signature:

Name - Erin Westhoven, Account Clerk II

Signature — Date: **7/20/2020**


Power Supply Cost Adjustment Factor - PSCAF
PSCAF 3/Mo Average
$0.03500
$0.03000
$0.02500
$0.02000
$0.01500
$0.01000
$0.00500
$-
$(0.00500)
$(0.01000)
Jul-18
Aug-18
Sep-18
Oct-18
Nov-18
Dec-18
Jan-19
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Jul-19
Aug-19
Sep-19
Oct-19
Nov-19
Dec-19
Jan-20
Feb-20
Mar-20
Apr-20
May-20
Jun-20
Jul-20
Aug 20
City Billing Month - Year
PSCAF

BILLING SUMMARY AND CONSUMPTION for BILLING CYCLE - August, 2020

2020 - AUGUST BILLING WITH JUNE 2020 AMP BILLING PERIOD AND JULY 2020 CITY CONSUMPTION AND BILLING DATA

PREVIOUS MONTH'S POWER BILLS - PURCHASED POWER KWH AND COST ALLOCATIONS BY DEMAND & ENERGY:

DATA PERIOD	MONTH / YR	DAYS IN MONTH	MUNICIPAL PEAK
AMP-Ohio Bill Month	JUNE, 2020	30	28.661
City-System Data Month	JULY, 2020	31	
City-Monthly Billing Cycle	AUGUST, 2020	31	

	==========CONTRACTED AND OPEN MARKET POWER==========					==PEAKING==	==========HYDRO POWER=		
PURCHASED POWER-RESOURCES ->	AMP CT SCHED. @ ATSI	FREEMONT ENERGY SCHEDULED	PRAIRIE STATE SCHED. @ PJMC REPLMT@ PJMC	MORGAN STNLY. REPLMNT.2015-20 7x24 @ AD	NORTHERN POWER POOL	JV-2 PEAKING SCHED. @ ATSI	AMP-HYDRO CSW SCHED. @ PJMC	MELDAHL-HYDRO SCHED. @ MELDAHL BUS	GREENUP HYDRO SCHED. @ GREENUP BUS
Delivered kWh (On Peak) ->	154,251	4,242,298	3,535,929	2,736,000	6,063	1,968	1,905,266	311,910	109,957
Delivered kWh (Off Peak) ->					26,051				
Delivered kWh (Replacement/Losses/Offset) ->									
Delivered kWh/Sale (Credits) ->					-3,047,147				
Net Total Delivered kWh as Billed ->	**154,251**	**4,242,298**	**3,535,929**	**2,736,000**	**-3,015,033**	**1,968**	**1,905,266**	**311,910**	**109,957**
Percent % of Total Power Purchased->	*1.1710%*	*32.2067%*	*26.8440%*	*20.7711%*	*-22.8894%*	*0.0149%*	*14.4643%*	*2.3679%*	*0.8348%*
COST OF PURCHASED POWER:									
DEMAND CHARGES (+Debits)									
Demand Charges	$32,983.53	$41,115.56	$64,140.68			$691.68	$174,116.47	$13,422.51	$8,639.40
Debt Services (Principal & Interest)		$43,487.87	$114,388.92						
DEMAND CHARGES (-Credits)									
Transmission Charges (Demand-Credits)	-$49,280.84					-$623.72			
Capacity Credit	-$26,750.58	-$19,240.53	-$10,317.13			-$628.02	-$2,759.61	-$1,905.55	-$487.67
Sub-Total Demand Charges	***-$43,047.89***	***$65,362.90***	***$168,212.47***	***$0.00***	***$0.00***	***-$560.06***	***$171,356.86***	***$11,516.96***	***$8,151.73***
ENERGY CHARGES (+Debits):									
Energy Charges - (On Peak)	$13,967.44	$96,001.41	$25,298.56	$172,231.20	$161.09		$68,589.58	$11,228.74	$989.61
Energy Charges - (Replacement/Off Peak)					$342.98				
Net Congestion, Losses, FTR		$655.16	$1,689.23	-$1,132.88			$816.13	-$93.79	-$28.82
Transmission Charges (Energy-Debits)			$816.04						
ESPP Charges									
Bill Adjustments (General & Rate Levelization)						$140.23			
ENERGY CHARGES (-Credits or Adjustments):									
Energy Charges - On Peak (Sale or Rate Stabilization)					-$56,592.74				
Net Congestion, Losses, FTR					$1,781.90				
Bill Adjustments (General & Rate Levelization)		-$197.00					-$11,431.60	-$1,871.46	-$659.74
Sub-Total Energy Charges	***$13,967.44***	***$96,459.57***	***$27,803.83***	***$171,098.32***	***-$54,306.77***	***$140.23***	***$57,974.11***	***$9,263.49***	***$301.05***
TRANSMISSION & SERVICE CHARGES, MISC.:									
RPM / PJM Charges Capacity - (+Debit)									
RPM / PJM Charges Capacity - (-Credit)									
Service Fees AMP-Dispatch Center - (+Debit/-Credit)									
Service Fees AMP-Part A - (+Debit/-Credit)									
Service Fees AMP-Part B - (+Debit/-Credit)									
Other Charges & Bill Adjustments - (+Debit/-Credit)									
Sub-Total Service Fees & Other Charges	***$0.00***	***$0.00***	***$0.00***	***$0.00***	***$0.00***	***$0.00***	***$0.00***	***$0.00***	***$0.00***
TOTAL NET COST OF PURCHASED POWER	***-$29,080.45***	***$161,822.47***	***$196,016.30***	***$171,098.32***	***-$54,306.77***	***-$419.83***	***$229,330.97***	***$20,780.45***	***$8,452.78***
Percent % of Total Power Cost->	*-2.5578%*	*14.2331%*	*17.2407%*	*15.0490%*	*-4.7766%*	*-0.0369%*	*20.1709%*	*1.8278%*	*0.7435%*
Purchased Power Resources - Cost per kWH->	***-$0.188527***	***$0.038145***	***$0.055436***	***$0.062536***	***-$0.018012***	***-$0.213328***	***$0.120367***	***$0.066623***	***$0.076874***

BILLING SUMMARY AND CONS

2020 - AUGUST BILLING WITH JUNE 2020 AMP

PREVIOUS MONTH'S POWER BILLS - PU

DATA PERIOD									
AMP-Ohio Bill Month									
City-System Data Month									
City-Monthly Billing Cycle									
	==========		====WIND====	===SOLAR===	===TRANSMISSION, SERVICE FEES & MISC. CONTRACTS===				
(	NYPA	JV-5	JV-6	AMP SOLAR	EFFNCY.SMART	TRANSMISSION	SERVICE FEES	MISCELLANEOUS	TOTAL -
PURCHASED POWER-RESOURCES -> (	HYDRO	HYDRO	WIND	PHASE 1	POWER PLANT	CHARGES	DISPATCH, A & B	CHARGES &	ALL
(	SCHED. @ NYIS	7x24 @ ATSI	SCHED. @ ATSI	SCHED. @ ATSI	2017 - 2020	Other Charges	Other Charges	LEVELIZATION	RESOURCES
Delivered kWh (On Peak) ->	726,410	2,223,360	19,150	188,294	0	0	0	0	16,160,856
Delivered kWh (Off Peak) ->									26,051
Delivered kWh (Replacement/Losses/Offset) ->		32,401							32,401
Delivered kWh/Sale (Credits) ->									-3,047,147
Net Total Delivered kWh as Billed ->	**726,410**	**2,255,761**	**19,150**	**188,294**	**0**	**0**	**0**	**0**	**13,172,161**
Percent % of Total Power Purchased->	*5.5147%*	*17.1252%*	*0.1454%*	*1.4295%*	*0.0000%*	*0.0000%*	*0.0000%*	*0.0000%*	*100.0001%*
								Verification Total - >	*100.0000%*
COST OF PURCHASED POWER:									
DEMAND CHARGES (+Debits)									
Demand Charges	$6,296.13	$22,942.25	$1,025.10			$193,690.78			$559,064.09
Debt Services (Principal & Interest)		$55,381.81							$213,258.60
DEMAND CHARGES (-Credits)									
Transmission Charges (Demand-Credits)		-$19,709.92	-$848.31	-$3,650.86					-$74,113.65
Capacity Credit	-$2,198.63	-$7,261.35	-$152.67	-$1,242.12					-$72,943.86
Sub-Total Demand Charges	***$4,097.50***	***$51,352.79***	***$24.12***	***-$4,892.98***	***$0.00***	***$193,690.78***	***$0.00***	***$0.00***	***$625,265.18***
ENERGY CHARGES (+Debits):									
Energy Charges - (On Peak)	$9,027.53	$41,724.36		$6,840.72		$9,367.55			$455,427.79
Energy Charges - (Replacement/Off Peak)									$342.98
Net Congestion, Losses, FTR	$1,269.81								$3,174.84
Transmission Charges (Energy-Debits)									$816.04
ESPP Charges					$20,659.88				$20,659.88
Bill Adjustments (General & Rate Levelization)									$140.23
ENERGY CHARGES (-Credits or Adjustments):									
Energy Charges - On Peak (Sale or Rate Stabilization)									-$56,592.74
Net Congestion, Losses, FTR									$1,781.90
Bill Adjustments (General & Rate Levelization)	$3,198.24								-$10,961.56
Sub-Total Energy Charges	***$13,495.58***	***$41,724.36***	***$0.00***	***$6,840.72***	***$20,659.88***	***$9,367.55***	***$0.00***	***$0.00***	***$414,789.36***
TRANSMISSION & SERVICE CHARGES, MISC.:									
RPM / PJM Charges Capacity - (+Debit)						$86,827.64			$86,827.64
RPM / PJM Charges Capacity - (-Credit)									$0.00
Service Fees AMP-Dispatch Center - (+Debit/-Credit)							$133.49		$133.49
Service Fees AMP-Part A - (+Debit/-Credit)							$2,251.27		$2,251.27
Service Fees AMP-Part B - (+Debit/-Credit)							$7,674.60		$7,674.60
Other Charges & Bill Adjustments - (+Debit/-Credit)									$0.00
Sub-Total Service Fees & Other Charges	***$0.00***	***$0.00***	***$0.00***	***$0.00***	***$0.00***	***$86,827.64***	***$10,059.36***	***$0.00***	***$96,887.00***
TOTAL NET COST OF PURCHASED POWER	***$17,593.08***	***$93,077.15***	***$24.12***	***$1,947.74***	***$20,659.88***	***$289,885.97***	***$10,059.36***	***$0.00***	***$1,136,941.54***
Percent % of Total Power Cost->	*1.5474%*	*8.1866%*	*0.0021%*	*0.1713%*	*1.8171%*	*25.4970%*	*0.8848%*	*0.0000%*	*100.000%*
								Verification Total - >	***$1,136,941.54***
Purchased Power Resources - Cost per kWH->	***$0.024219***	***$0.041262***	***$0.001260***	***$0.010344***	***$0.000000***	***$0.000000***	***$0.000000***	***$0.000000***	***$0.086314***
					(Northern Pool Power - On-Peak + Off-Peak - Energy Charge/kWH) = JV2 Electric Service Rate - >				**$0.018603**
					(Northern Pool Power - On-Peak + Off-Peak - Energy Charge/kWH) = JV5 Electric Service Rate - >				**$0.018603**

AMERICAN MUNICIPAL POWER, INC.
1111 Schrock Rd, Suite 100
COLUMBUS, OHIO 43229
PHONE: (614) 540-1111
FAX: (614) 540-1078

INVOICE NUMBER:	209497
INVOICE DATE:	7/17/2020
DUE DATE:	8/3/2020
TOTAL AMOUNT DUE:	$1,136,941.54
CUSTOMER NUMBER:	5020
CUSTOMER P.O. #:	RG10046

PLEASE WRITE INVOICE NUMBER ON REMITTANCE. MAKE CHECK PAYABLE TO AMP

City of Napoleon
Attn: Finance Director
255 W. Riverview Ave., P.O. Box 151
Napoleon, Ohio 43545-0151

Northern Power Pool Billing - June, 2020

MUNICIPAL PEAK:	28,661 kW
TOTAL METERED ENERGY:	13,232,068 kWh

Total Power Charges:	$836,996.21
Transmission / Capacity / Ancillary Services:	$289,885.97
Total Other Charges:	$10,059.36
Total Miscellaneous Charges:	$0.00
GRAND TOTAL POWER INVOICE:	**$1,136,941.54**

****The Total Charges on this invoice may include a credit paid to the Municipal for power supply which was invoiced separately and repurchased by AMP for use as a Northern Power Pool Resource.**

NOTE: PLEASE SEE ENCLOSED BACKUP FOR MORE DETAILED INFORMATION

*** To avoid a delayed payment charge, payment must be made to provide available funds for use by AMP on or before the due date.

Wire or ACH Transfer Information :
Huntington National Bank
Columbus, Ohio
Account 0189-2204055
ABA: #044 000024

Mailing Address :
AMP, Inc.
Dept. L614
Columbus, Oh 43260

Notes:

If you have any questions regarding the detail on this invoice, please contact Mitch Gross at mgross@amppartners.org or at 614-540-0873.

DETAIL INFORMATION OF POWER CHARGES June , 2020
Napoleon

FOR THE MONTH OF:	**June, 2020**	**Total Metered Load kWh:**	**13,232,068**
		Transmission Losses kWh:	**-59,909**
		Distribution Losses kWh:	**0**
		Total Energy Req. kWh:	**13,172,159**
TIME OF FENTS PEAK:	**06/10/2020 @ H.E. 15:00**	**COINCIDENT PEAK kW:**	**28,099**
TIME OF MUNICIPAL PEAK:	**06/10/2020 @ H.E. 14:00**	**MUNICIPAL PEAK kW:**	**28,661**
TRANSMISSION PEAK:	**July 19, 2019 15:00**	**TRANSMISSION PEAK kW:**	**30,346**
		PJM Capacity Requirement kW:	**27,039**

Napoleon Resources

AMP CT - Sched @ ATSI				
Demand Charge:	$2.659962	/ kW *	12,400 kW =	$32,983.53
Energy Charge:	$0.090550	/ kWh *	154,251 kWh =	$13,967.44
Transmission Credit:	$3.974261	/ kW *	-12,400 kW =	-$49,280.84
Capacity Credit:	$2.157305	/ kW *	-12,400 kW =	-$26,750.58
Subtotal			**154,251 kWh =**	**-$29,080.45**
Fremont - sched @ Fremont				
Demand Charge:	$4.689761	/ kW *	8,767 kW =	$41,115.56
Energy Charge:	$0.022630	/ kWh *	4,242,298 kWh =	$96,001.41
Net Congestion, Losses, FTR:	$0.000154	/ kWh *		$655.16
Capacity Credit:	$2.194631	/ kW *	-8,767 kW =	-$19,240.53
Debt Service	$4.960354	/ kW	8,767 kW	$43,487.87
Adjustment for prior month:				-$197.00
Subtotal			**4,242,298 kWh =**	**$161,822.47**
AMP Hydro CSW - Sched @ PJMC				
Demand Charge:	$49.776006	/ kW *	3,498 kW =	$174,116.47
Energy Charge:	$0.036000	/ kWh *	1,905,266 kWh =	$68,589.58
Net Congestion, Losses, FTR:	$0.000428	/ kWh *		$816.13
Capacity Credit:	$0.788911	/ kW *	-3,498 kW =	-$2,759.61
REC Credit (Estimate)	-$0.006000	/ kWh	1,905,266 kWh	-$11,431.60
Subtotal			**1,905,266 kWh =**	**$229,330.97**
Meldahl Hydro - Sched @ Meldahl Bus				
Demand Charge:	$26.631964	/ kW *	504 kW =	$13,422.51
Energy Charge:	$0.036000	/ kWh *	311,910 kWh =	$11,228.74
Net Congestion, Losses, FTR:	-$0.000301	/ kWh *		-$93.79
Capacity Credit:	$3.780853	/ kW *	-504 kW =	-$1,905.55
REC Credit (Estimate)	-$0.006000	/ kWh *	311,910 kWh =	-$1,871.46
Subtotal			**311,910 kWh =**	**$20,780.45**
JV6 - Sched @ ATSI				
Demand Charge:	$3.417000	/ kW *	300 kW =	$1,025.10
Energy Charge:			19,150 kWh	
Transmission Credit:	$2.827700	/ kW *	-300 kW =	-$848.31
Capacity Credit:	$0.508900	/ kW *	-300 kW =	-$152.67
Subtotal			**19,150 kWh =**	**$24.12**
Greenup Hydro - Sched @ Greenup Bus				
Demand Charge:	$26.180000	/ kW *	330 kW =	$8,639.40
Energy Charge:	$0.009000	/ kWh *	109,957 kWh =	$989.61
Net Congestion, Losses, FTR:	-$0.000262	/ kWh *		-$28.82
Capacity Credit:	$1.477788	/ kW *	-330 kW =	-$487.67
REC Credit (Estimate)	-$0.006000	/ kWh *	109,957 kWh =	-$659.74
Subtotal			**109,957 kWh =**	**$8,452.78**
Prairie State - Sched @ PJMC				
Demand Charge:	$12.890008	/ kW *	4,976 kW =	$64,140.68
Energy Charge:	$0.007155	/ kWh *	3,535,929 kWh =	$25,298.56
Net Congestion, Losses, FTR:	$0.000478	/ kWh *		$1,689.23
Capacity Credit:	$2.073378	/ kW *	-4,976 kW =	-$10,317.13
Debt Service	$22.988127	/ kW	4,976 kW	$114,388.92
Transmission from PSEC to PJM/MISO, including non-Prairie State variable charges/credits	$0.000231	/ kWh	3,535,929 kWh	$816.04
Subtotal			**3,535,929 kWh =**	**$196,016.30**
NYPA - Sched @ NYIS				
Demand Charge:	$6.698011	/ kW *	940 kW =	$6,296.13
Energy Charge:	$0.012428	/ kWh *	726,410 kWh =	$9,027.53
Net Congestion, Losses, FTR:	$0.001748	/ kWh *		$1,269.81
Capacity Credit:	$2.351476	/ kW *	-935 kW =	-$2,198.63
Adjustment for prior month:				$3,198.24
Subtotal			**726,410 kWh =**	**$17,593.08**
JV5 - 7X24 @ ATSI				
Demand Charge:	$7.429485	/ kW *	3,088 kW =	$22,942.25
Energy Charge:	$0.018766	/ kWh *	2,223,360 kWh =	$41,724.36
Transmission Credit:	$6.382746	/ kW *	-3,088 kW =	-$19,709.92
Capacity Credit:	$2.351473	/ kW *	-3,088 kW =	-$7,261.35
Debt Service (current month)	$17.934524	/ kW	3,088 kW	$55,381.81
Subtotal			**2,223,360 kWh =**	**$93,077.15**
JV5 Losses - Sched @ ATSI				
Energy Charge:			32,401 kWh	
Subtotal			**32,401 kWh =**	**$0.00**
JV2 - Sched @ ATSI				
Demand Charge:	$2.620000	/ kW *	264 kW =	$691.68
Energy Charge:			1,968 kWh	
Transmission Credit:	$2.362576	/ kW *	-264 kW =	-$623.72
Capacity Credit:	$2.378864	/ kW *	-264 kW =	-$628.02

DETAIL INFORMATION OF POWER CHARGES June , 2020
Napoleon

JV2 Project Fuel Costs not recovered through Energy Sales to Market				$140.23
Subtotal			**1,968 kWh =**	**-$419.83**
AMP Solar Phase I - Sched @ ATSI				
Demand Charge:			1,040 kW	
Energy Charge:	$0.036330	/ kWh *	188,294 kWh =	$6,840.72
Transmission Credit:				-$3,650.86
Capacity Credit:	$1.194346	/ kW *	-1,040 kW =	-$1,242.12
Subtotal			**188,294 kWh =**	**$1,947.74**
Morgan Stanley 2015-2020 - 7x24 @ AD				
Demand Charge:			3,800 kW	
Energy Charge:	$0.062950	/ kWh *	2,736,000 kWh =	$172,231.20
Net Congestion, Losses, FTR:	-$0.000414	/ kWh *		-$1,132.88
Subtotal			**2,736,000 kWh =**	**$171,098.32**
Efficiency Smart Power Plant 2020-23				
ESPP 2020-2023 obligation @ $1.650 /MWh x 150,253.7 MWh / 12				$20,659.88
Subtotal			**0 kWh =**	**$20,659.88**
Northern Power Pool:				
On Peak Energy Charge: (M-F HE 08-23 EDT)	$0.026570	/ kWh *	6,063 kWh =	$161.09
Off Peak Energy Charge:	$0.013166	/ kWh *	26,051 kWh =	$342.98
Sale of Excess Non-Pool Resources to Pool	$0.018572	/ kWh *	-3,047,147 kWh =	-$56,592.74
Pool Congestion Hedge				$1,781.90
Subtotal	**$0.018012**	**/ kWh ***	**-3,015,033 kWh =**	**-$54,306.77**
Total Demand Charges:				**$431,714.63**
Total Energy Charges:				**$405,281.58**
Total Power Charges:			**13,172,159 kWh**	**$836,996.21**
TRANSMISSION / CAPACITY / ANCILLARY SERVICES:				
Demand Charge:	$6.382745	/ kW *	30,346 kW =	$193,690.78
Energy Charge:	$0.000856	/ kWh *	10,948,799 kWh =	$9,367.55
RPM (Capacity) Charges:	$3.211200	/ kW *	27,039 kW =	$86,827.64
TRANSMISSION / CAPACITY / ANCILLARY SERVICES:	**$0.026477**	**/ kWh ***	**10,948,799 kWh =**	**$289,885.97**
Dispatch Center Charges:	$0.000010	/ kWh *	13,232,068 kWh =	$133.49
Service Fee Part A,				
Based on Annual Municipal Sales	$0.000229	/ kWh *	144,873,225 kWh 1/12 =	$2,764.66
SFA Adjustment for January-June				-$513.39
Service Fee Part B.				
Energy Purchases	$0.000580	/kWh *	13,232,068 kWh =	$7,674.60
TOTAL OTHER CHARGES:				**$10,059.36**
GRAND TOTAL POWER INVOICE:				**$1,136,941.54**

Napoleon Capacity Plan - Actual

Jun **2020**
Days 30

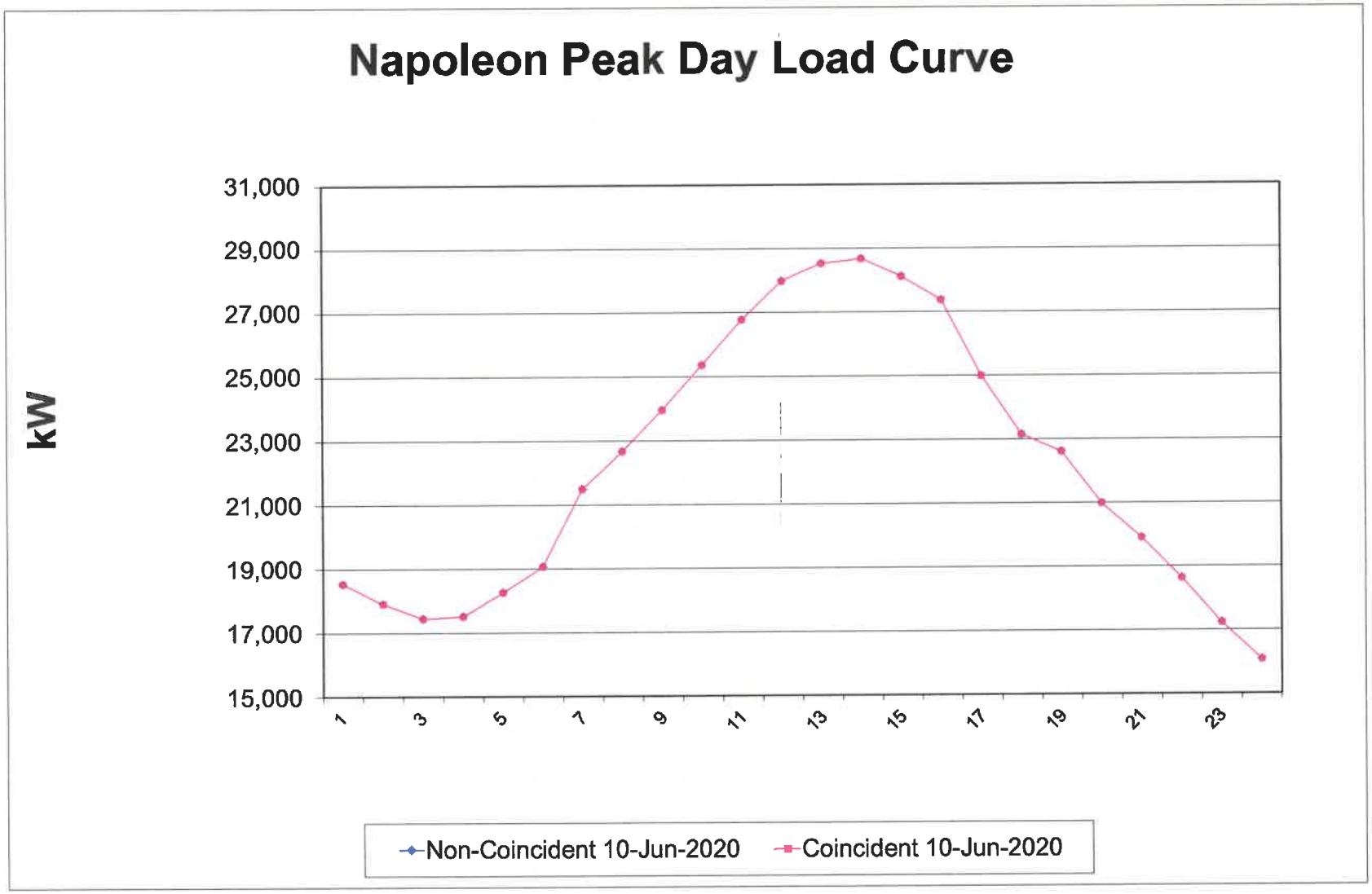
ACTUAL DEMAND = 28.66 MW
ACTUAL ENERGY = 13,232 MWH

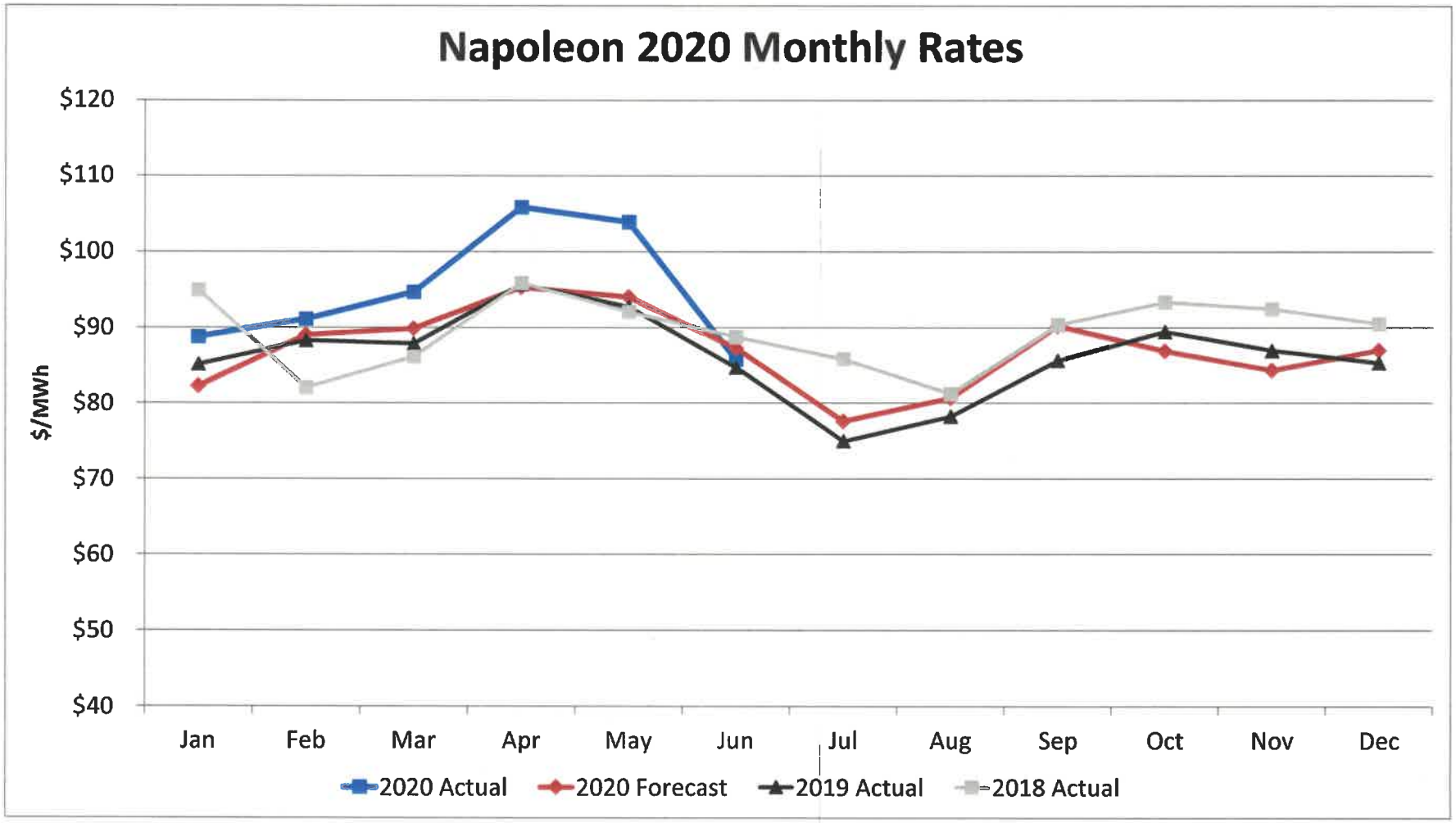
	SOURCE (1)	DEMAND MW (2)	DEMAND MW-MO (3)	ENERGY MWH (4)	LOAD FACTOR (5)	DEMAND RATE $/KW (6)	ENERGY RATE $/MWH (7)	CONGESTION/LOSSES $/MWH (8)	CAPACITY CREDIT RATE $/KW (9)	TRANSMISSION CREDIT RATE $/KW (10)	TOTAL CHARGES (16)	EFFECTIVE RATE $/MWH (17)	% OF DOLLARS (18)
1	NYPA - Ohio	0.94	0.94	726	107%	$6.70	$16.83	$1.75	-$2.34	$0.00	$17,593	$24.22	1.6%
2	JV5	3.09	3.09	2,223	100%	$25.36	$18.77	$0.00	-$2.35	-$6.38	$93,077	$41.86	8.2%
3	JV5 Losses	0.00	0.00	32	0%	$0.00	$0.00	$0.00	$0.00	$0.00	$0	$0.00	0.0%
4	JV6	0.30	0.30	19	9%	$3.42	$0.00	$0.00	-$2.83	-$0.51	$24	$1.26	0.0%
5	AMP-Hydro	3.50	3.50	1,905	76%	$49.78	$30.00	$0.43	-$0.79	$0.00	$229,331	$120.37	20.2%
6	Meldahl	0.50	0.50	312	86%	$26.63	$30.00	-$0.30	-$3.78	$0.00	$20,780	$66.62	1.8%
7	Greenup	0.33	0.33	110	46%	$26.18	$3.00	-$0.26	-$1.48	$0.00	$8,453	$76.87	0.7%
8	AFEC	8.77	8.77	4,242	67%	$9.65	$22.58	$0.15	-$2.19	$0.00	$161,822	$38.15	14.3%
9	Prairie State	4.98	4.98	3,536	99%	$35.88	$7.39	$0.48	-$2.07	$0.00	$196,016	$55.44	17.3%
10	AMP Solar Phase I	1.04	1.04	188	25%	$0.00	$36.33	$0.00	-$1.19	-$3.51	$1,948	$10.34	0.2%
11	Morgan Stanley 2015-2020 7x24	3.80	3.80	2,736	100%	$0.00	$62.95	-$0.41	$0.00	$0.00	$171,098	$62.54	15.1%
12	AMPCT	12.40	12.40	154	2%	$2.66	$90.55	$0.00	-$2.16	-$3.97	-$29,080	-$188.53	-2.6%
13	JV2	0.26	0.26	2	1%	$2.62	$71.25	$0.00	-$2.38	-$2.36	-$420	$0.00	0.0%
14	NPP Pool Purchases	0.00	0.00	32	0%	$0.00	$71.18	$0.00	$0.00	$0.00	$2,286	$71.18	0.2%
15	NPP Pool Sales	0.00		-3,047	0%	$0.00	$18.57	$0.00	$0.00	$0.00	-$56,593	$18.57	-5.0%
	POWER TOTAL	39.91	39.91	13,172	46%	$578,632	$381,587	$0.24	-$73,640	-$73,418	$816,336	$61.97	71.9%
16	Energy Efficiency			0		$0.00	$0.00				$20,660	$0.00	1.8%
17	Installed Capacity	27.04	27.04			$3.21					$86,828	$6.56	7.7%
18	Transmission	30.35	30.35	10,949		$6.38	$0.86				$203,058	$15.35	17.9%
19	Service Fee B			13,232			$0.58				$7,675	$0.58	0.7%
20	Dispatch Charge			13,232			$0.01				$133	$0.01	0.0%
	OTHER TOTAL					$280,518	$37,836				$318,354	$24.06	28.1%
GRAND TOTAL PURCHASED				13,172							$1,134,690		
Delivered to members		28.661	28.661	13,232	64%						$1,134,690	$85.75	100.0%
		DEMAND		ENERGY	L.F.						TOTAL $	$/MWh	Avg Temp
	2020 Forecast	27.71		12,447	62%						$1,086,145	$87.26	69.5
	2019 Actual	28.20		12,470	61%						$1,056,072	$84.69	69.4
	2018 Actual	30.80		13,836	62%						$1,227,571	$88.73	72.1
											Actual Temp		72.3

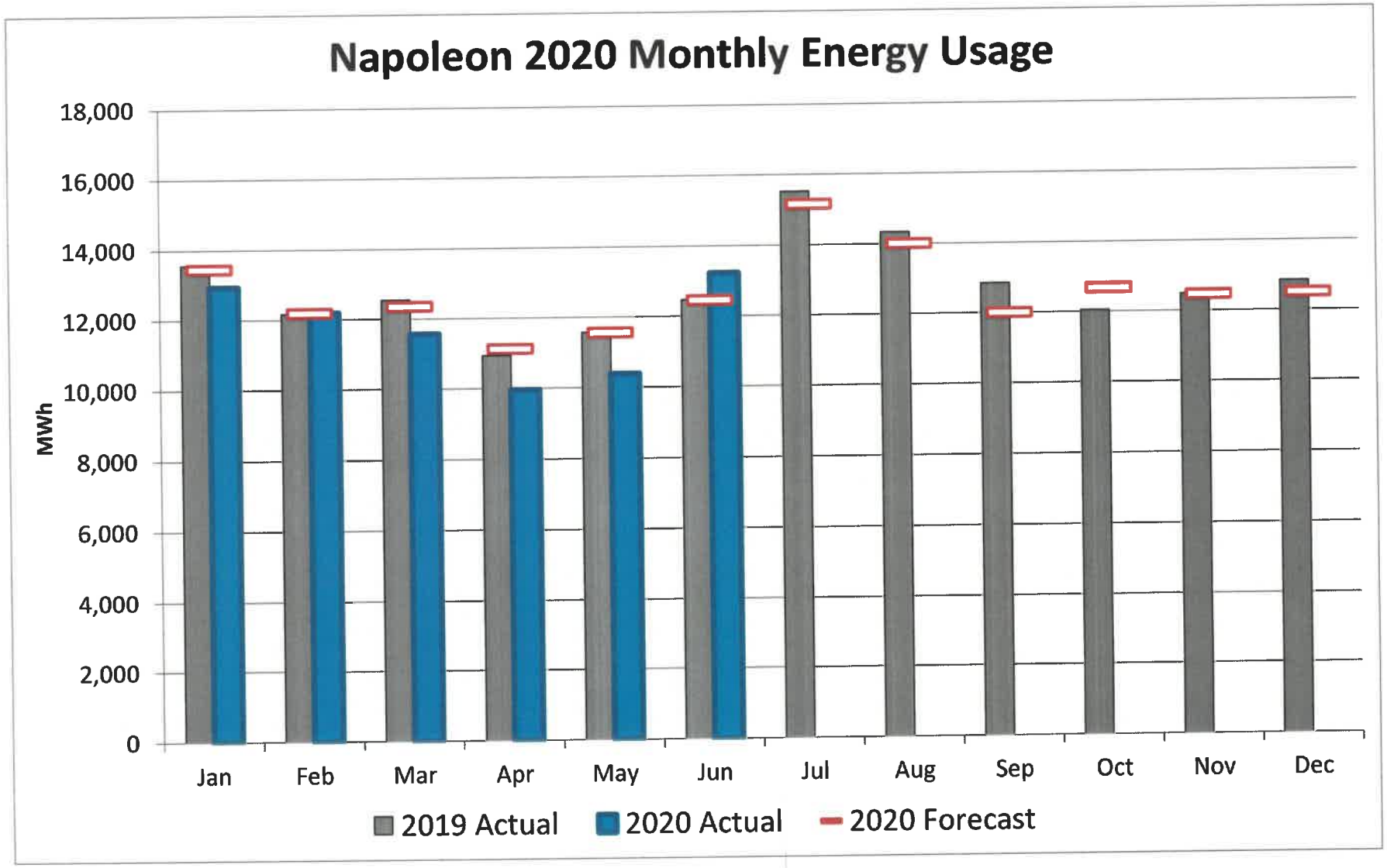
NAPOLEON

Date	Monday 6/1/2020	Tuesday 6/2/2020	Wednesday 6/3/2020	Thursday 6/4/2020	Friday 6/5/2020	Saturday 6/6/2020	Sunday 6/7/2020	Monday 6/8/2020	Tuesday 6/9/2020	Wednesday 6/10/2020	Thursday 6/11/2020	Friday 6/12/2020	Saturday 6/13/2020	Sunday 6/14/2020	Monday 6/15/2020
Hour															
100	12,104	12,336	16,636	15,224	16,162	14,892	12,499	13,753	14,713	18,529	15,601	14,262	13,064	11,629	12,789
200	12,069	12,135	16,242	14,705	15,510	14,263	11,869	13,273	14,093	17,908	14,869	14,120	12,553	11,299	12,458
300	12,017	12,158	15,719	14,509	15,062	13,784	11,418	12,947	13,646	17,443	14,423	13,862	12,135	11,090	12,368
400	12,226	12,311	15,518	14,456	14,985	13,445	11,248	13,056	13,596	17,513	14,508	13,992	12,001	11,104	12,447
500	13,045	13,288	15,954	15,092	15,377	13,336	11,085	13,782	14,351	18,260	14,969	14,297	12,048	11,120	13,264
600	14,136	14,083	16,702	16,054	15,945	13,275	10,864	14,708	15,064	19,061	15,563	14,659	11,940	10,979	14,097
700	15,370	15,632	17,952	17,576	17,689	14,194	11,753	16,235	16,982	21,498	17,196	16,189	12,442	11,543	15,461
800	16,279	16,790	19,004	18,762	19,292	15,767	12,735	17,639	18,381	22,668	18,293	17,381	13,275	12,179	16,663
900	16,763	17,577	20,225	19,464	20,588	17,270	13,693	18,392	19,724	23,948	19,001	18,036	14,042	12,811	17,253
1000	16,966	18,229	21,318	20,562	21,750	18,248	14,408	19,075	21,074	25,339	19,815	18,582	14,489	13,259	17,904
1100	17,250	19,117	22,607	21,541	23,015	19,102	15,105	19,955	22,563	26,757	20,329	19,261	14,626	13,549	18,382
1200	17,513	19,684	23,044	22,404	24,088	19,419	15,653	20,647	24,298	27,968	20,347	19,587	14,644	13,829	19,022
1300	17,604	20,423	23,668	23,158	25,042	19,669	16,031	21,629	25,793	28,510	21,049	20,120	14,452	13,857	19,159
1400	17,456	21,022	23,513	23,451	25,114	19,564	16,518	22,200	26,563	28,661	21,015	20,230	14,276	13,717	19,194
1500	16,917	21,943	23,018	23,637	24,540	19,653	16,956	22,233	26,896	28,099	20,689	20,261	14,361	13,729	18,756
1600	16,048	22,118	22,449	23,402	24,100	19,779	17,266	21,821	26,956	27,357	19,928	20,069	14,325	13,911	18,402
1700	15,721	22,607	22,056	23,270	23,506	19,906	17,743	22,056	26,040	24,973	19,381	19,781	14,380	14,117	18,262
1800	15,714	23,114	21,972	22,943	22,472	19,726	18,075	22,121	25,166	23,139	19,357	19,434	14,395	14,296	18,226
1900	15,424	23,110	21,213	21,968	21,810	18,984	18,332	21,807	24,757	22,605	18,964	18,772	14,141	14,325	17,895
2000	15,104	22,432	20,208	21,084	20,824	17,919	17,581	20,721	23,696	20,981	18,300	17,969	13,747	14,206	17,382
2100	15,288	21,751	19,550	20,806	20,427	16,850	17,053	19,709	23,168	19,890	17,703	17,664	13,647	14,321	17,079
2200	14,658	20,611	18,333	19,840	19,224	15,949	16,345	18,522	21,878	18,628	16,985	16,839	13,256	14,178	16,411
2300	13,654	18,941	17,053	18,403	17,430	14,670	15,269	16,806	20,449	17,225	15,904	15,213	12,534	13,679	15,324
2400	13,084	17,567	16,116	17,151	16,028	13,395	14,482	15,628	19,197	16,075	14,977	13,822	12,008	13,188	14,412
Total	362,410	438,979	470,070	469,462	479,980	403,059	353,981	438,715	499,044	533,035	429,166	414,402	322,781	311,915	392,610

Date	Tuesday 6/16/2020	Wednesday 6/17/2020	Thursday 6/18/2020	Friday 6/19/2020	Saturday 6/20/2020	Sunday 6/21/2020	Monday 6/22/2020	Tuesday 6/23/2020	Wednesday 6/24/2020	Thursday 6/25/2020	Friday 6/26/2020	Saturday 6/27/2020	Sunday 6/28/2020	Monday 6/29/2020	Tuesday 6/30/2020	Wednesday 7/1/2020
Hour																
100	13,763	14,371	15,117	15,902	15,655	16,289	15,818	18,350	14,764	14,808	15,651	14,479	15,135	15,822	17,339	-
200	13,399	14,002	14,677	15,302	14,683	15,543	15,634	17,205	14,571	14,513	15,235	13,902	14,180	15,286	16,795	-
300	13,162	13,365	14,440	14,840	14,061	14,935	15,273	16,577	14,277	14,184	14,730	13,592	13,739	14,674	16,140	-
400	13,565	13,600	14,549	14,999	13,822	14,405	15,208	16,694	14,422	14,465	14,917	13,391	13,389	14,670	16,117	-
500	14,106	14,381	15,065	15,324	13,554	14,059	15,753	17,226	15,076	14,994	15,349	13,395	13,142	15,452	16,644	-
600	14,911	15,179	15,898	15,735	13,298	13,743	17,041	18,306	15,607	15,467	15,643	13,345	13,005	16,014	17,228	-
700	16,283	16,692	17,225	17,565	14,435	14,661	18,591	19,404	16,923	17,009	17,338	14,219	13,664	17,443	19,070	-
800	17,444	17,883	18,487	19,138	16,358	15,817	20,127	20,429	17,980	18,262	18,946	15,858	15,108	19,669	20,654	-
900	18,200	18,837	19,513	20,496	18,051	17,662	21,147	21,573	18,734	18,948	20,130	16,421	16,296	21,003	21,966	-
1000	18,869	19,767	20,700	21,696	19,584	18,558	22,298	21,850	19,375	19,891	21,244	17,763	17,406	22,757	23,230	-
1100	19,794	20,587	21,466	22,705	21,134	18,817	23,702	22,518	19,928	20,531	22,151	18,326	18,829	24,269	24,732	-
1200	20,573	21,650	22,401	23,720	22,017	19,436	24,667	22,706	20,288	21,280	23,097	18,577	19,595	25,425	25,613	-
1300	21,099	22,507	22,955	24,458	22,643	19,327	25,396	22,895	20,687	21,800	23,459	18,774	20,154	26,380	26,580	-
1400	21,500	22,770	23,335	24,483	23,114	19,105	25,807	22,484	20,758	22,052	22,395	19,553	20,824	26,265	26,675	-
1500	21,901	22,963	23,590	24,878	23,422	19,063	26,108	21,772	20,539	22,241	22,015	20,316	21,576	26,367	26,706	-
1600	21,861	22,847	23,569	25,228	23,354	19,410	25,817	20,782	19,522	21,633	20,752	20,789	22,058	26,310	26,281	-
1700	21,611	22,780	23,380	24,988	23,775	19,608	25,948	20,081	19,312	21,538	20,516	21,240	22,457	26,107	26,153	-
1800	21,384	22,581	23,149	24,741	23,639	19,297	25,590	19,740	19,197	21,471	20,258	21,268	22,446	25,445	25,618	-
1900	20,764	22,010	22,481	24,105	22,688	19,096	24,870	19,107	18,831	21,167	19,537	20,943	22,270	25,178	24,689	-
2000	19,837	20,849	21,456	23,182	21,789	18,784	23,981	18,728	18,561	20,108	19,211	20,056	21,554	24,060	23,737	-
2100	19,002	20,106	20,755	22,182	20,962	18,401	23,153	18,127	18,230	19,436	19,372	19,266	20,584	23,031	22,659	-
2200	17,924	19,079	19,694	20,817	19,855	18,024	21,849	17,330	17,407	18,507	18,585	18,383	19,361	21,544	21,253	-
2300	16,444	17,426	18,232	18,801	18,384	17,529	20,478	16,280	16,355	17,338	17,481	17,320	18,076	19,772	19,433	-
2400	15,146	16,222	16,831	16,910	17,120	16,359	19,234	15,335	15,459	16,304	15,838	16,160	16,647	18,323	17,980	-
Total	432,542	436,232	468,965	492,195	457,397	417,928	513,490	465,499	426,803	447,947	453,850	417,336	431,495	511,266	523,292	-
											Maximum	28,661	Minimum	10,864	Grand Total	13,232,068


Napoleon Peak Day Load Curve
kW
31,000
29,000
27,000
25,000
23,000
21,000
19,000
17,000
15,000
1
3
5
7
9
11
13
15
17
19
21
23
Non-Coincident 10-Jun-2020
Coincident 10-Jun-2020


Napoleon 2020 Monthly Rates
$120
$110
$100
$90
$80
$70
$60
$50
$40
$/MWh
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
2020 Actual
2020 Forecast
2019 Actual
2018 Actual


Napoleon 2020 Monthly Energy Usage
MWh
18,000
16,000
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
2019 Actual
2020 Actual
2020 Forecast

2020 JULY BILLING - ELECTRIC PSCAF - BILLING COMPARISONS TO PRIOR PERIODS

Rate Comparisons to Prior Month and Prior Year for Same Period

Customer Type	Service Usage	Service Units	Current AUGUST 2020 Rate	Prior Month JULY 2020 Rate	Prior Year AUGUST 2019 Rate	Service Usage	Service Units	Current AUGUST 2020 Rate	Prior Month JULY 2020 Rate	Prior Year AUGUST 2019 Rate
Customer Type ->			***RESIDENTIAL USER - (w/Gas Heat)***					***RESIDENTIAL USER - (All Electric)***		
Customer Charge			$6.00	$6.00	$6.00			$6.00	$6.00	$6.00
Distribution Energy Charge			$20.93	$20.93	$20.93			$33.39	$33.39	$33.39
Distribution Demand Charge										
Power Supply Energy Charge	978	kWh	$71.20	$71.20	$71.20	1,976	kWh	$143.85	$143.85	$143.85
Power Supply Demand Charge										
PSCAF - Monthly Factor	978	kWh	$27.16	$27.78	$20.05	1,976	kWh	$54.87	$56.14	$40.51
kWH Tax- Level 1	978	kWh	$4.55	$4.55	$4.55	1,976	kWh	$9.19	$9.19	$9.19
kWH Tax- Level 2										
kWH Tax- Level 3										
			---	---	---			---	---	---
Total Electric			***$129.84***	***$130.46***	***$122.73***			***$247.30***	***$248.57***	***$232.94***
Water	6	CCF	$55.35	$55.35	$50.55	11	CCF	$91.89	$91.89	$83.14
Sewer (w/Stm.Sew. & Lat.)	6	CCF	$74.13	$74.13	$70.89	11	CCF	$104.83	$104.83	$98.89
Storm Water (Rate/ERU)			$9.50	$9.50	$9.50			$9.50	$9.50	$9.50
Refuse (Rate/Service)			$18.00	$18.00	$18.00			$18.00	$18.00	$18.00
			---	---	---			---	---	---
Sub-Other Services			***$156.98***	***$156.98***	***$148.94***			***$224.22***	***$224.22***	***$209.53***
			---	---	---			---	---	---
Total Billing - All Services			***$286.82***	***$287.44***	***$271.67***			***$471.52***	***$472.79***	***$442.47***
Verification Totals->			*$286.82*	*$287.44*	*$271.67*			*$471.52*	*$472.79*	*$442.47*
				Cr.Mo to Pr.Mo	*Cr.Yr to Pr.Yr*				*Cr.Mo to Pr.Mo*	*Cr.Yr to Pr.Yr*
Dollar Chg.to Prior Periods				-$0.62	$15.15				-$1.27	$29.05
% Inc/Dec(-) to Prior Periods				-0.22%	5.58%				-0.27%	6.57%
==========	=====	=====	=======	========	==========	=====		=======	========	=========
Cost/kWH - Electric	978	kWh	$0.13276	$0.13339	$0.12549	1,976	kWh	$0.12515	$0.12579	$0.11788
% Inc/Dec(-) to Prior Periods				-0.47%	5.79%				-0.51%	6.17%
Cost/CCF - Water	6	CCF	$9.22500	$9.22500	$8.42500	11	CCF	$8.35364	$8.35364	$7.55818
Cost/GALLONS - Water	4,488	GAL	$0.01233	$0.01233	$0.01126	8,229	GAL	$0.01117	$0.01117	$0.01010
% Inc/Dec(-) to Prior Periods				0.00%	9.50%				0.00%	10.52%
Cost/CCF - Sewer	6	CCF	$12.35500	$12.35500	$11.81500	11	CCF	$9.53000	$9.53000	$8.99000
Cost/GALLON - Sewer	4,488	GAL	$0.01652	$0.01652	$0.01580	8,229	GAL	$0.01274	$0.01274	$0.01202
% Inc/Dec(-) to Prior Periods				0.00%	4.57%				0.00%	6.01%

(Listed Accounts Assume SAME USAGE for kWH and Water (CCF) for All Billing Periods)
(One "1" Unit CCF of Water = "Hundred Cubic Foot" = 748.05 Gallons)

RATE REVIEW COMPARISONS - Current to Prior Month and Prior Year

2020 JULY BILLING - ELECTF

Rate Comparisons to Prior Month a

Customer Type	Service Usage	Service Units	Current AUGUST 2020 Rate	Prior Month JULY 2020 Rate	Prior Year AUGUST 2019 Rate	Service Usage	Service Units	Current AUGUST 2020 Rate	Prior Month JULY 2020 Rate	Prior Year AUGUST 2019 Rate
Customer Type ->	***COMMERCIAL USER - (3 Phase w/Demand)***					***INDUSTRIAL USER - (3 Phase w/Demand)***				
Customer Charge			$18.00	$18.00	$18.00			$100.00	$100.00	$100.00
Distribution Energy Charge	**7,040**	**kWh**	$38.02	$38.02	$38.02	**98,748**	**Reactive**	$2,303.85	$2,303.85	$2,303.85
Distribution Demand Charge	**20.32**	**kW/Dmd**	$92.86	$92.86	$92.86	**1510.1**	**kW/Dmd**	$8,215.30	$8,215.30	$8,215.30
Power Supply Energy Charge	**7,040**	**kWh**	$623.04	$623.04	$623.04	**866,108**	**kWh**	$39,165.42	$39,165.42	$39,165.42
Power Supply Demand Charge								$15,296.55	$15,296.55	$15,296.55
PSCAF - Monthly Factor	**7,040**	**kWh**	$195.50	$200.01	$144.32			$22,849.24	$23,375.83	$16,867.46
kWH Tax- Level 1			$9.66	$9.66	$9.66			$9.66	$9.66	$9.66
kWH Tax- Level 2			$20.80	$20.80	$20.80			$56.24	$56.24	$56.24
kWH Tax- Level 3								$3,087.71	$3,087.71	$3,087.71
Total Electric			***$997.88***	***$1,002.39***	***$946.70***			***$91,083.97***	***$91,610.56***	***$85,102.19***
Water	**25**	**CCF**	$190.17	$190.17	$170.92	**300**	**CCF**	$2,152.61	$2,152.61	$1,936.11
Sewer (w/Stm.Sew. & Lat.)	**25**	**CCF**	$192.19	$192.19	$177.29	**300**	**CCF**	$1,880.69	$1,880.69	$1,717.29
Storm Water (Rate/ERU)			$9.50	$9.50	$9.50			$330.00	$330.00	$330.00
Refuse (Rate/Service)			$5.00	$5.00	$5.00			$5.00	$5.00	$5.00
Sub-Other Services			***$396.86***	***$396.86***	***$362.71***			***$4,368.30***	***$4,368.30***	***$3,988.40***
Total Billing - All Services			***$1,394.74***	***$1,399.25***	***$1,309.41***			***$95,452.27***	***$95,978.86***	***$89,090.59***
Verification Totals->			*$1,394.74*	*$1,399.25*	*$1,309.41*			*$95,452.27*	*$95,978.86*	*$89,090.59*
				Cr.Mo to Pr.Mo	*Cr.Yr to Pr.Yr*				*Cr.Mo to Pr.Mo*	*Cr.Yr to Pr.Yr*
Dollar Chg.to Prior Periods				-$4.51	$85.33				-$526.59	$6,361.68
% Inc/Dec(-) to Prior Periods				-0.32%	6.52%				-0.55%	7.14%
Cost/kWH - Electric	**7,040**	**kWh**	$0.14174	$0.14238	$0.13447	**866,108**	**kWh**	$0.10516	$0.10577	$0.09826
% Inc/Dec(-) to Prior Periods				-0.45%	5.41%				-0.58%	7.02%
Cost/CCF - Water	**25**	**CCF**	$7.60680	$7.60680	$6.83680	**300**	**CCF**	$7.17537	$7.17537	$6.45370
Cost/GALLONS - Water	**18,701**	**GAL**	$0.01017	$0.01017	$0.00914	**224,415**	**GAL**	$0.00959	$0.00959	$0.00863
% Inc/Dec(-) to Prior Periods				0.00%	11.26%				0.00%	11.18%
Cost/CCF - Sewer	**25**	**CCF**	$7.68760	$7.68760	$7.09160	**300**	**CCF**	$6.26897	$6.26897	$5.72430
Cost/GALLON - Sewer	**18,701**	**GAL**	$0.01028	$0.01028	$0.00948	**224,415**	**GAL**	$0.00838	$0.00838	$0.00765
% Inc/Dec(-) to Prior Periods				0.00%	8.40%				0.00%	9.52%

(Listed Accounts Assume SAME USA

(One "1" Unit CCF of Water = "Hundre

BILLING SUMMARY AND CONSUMPTION for BILLING CYCLE - August, 2020

JUNE 2020

2020 - AUGUST BILLING WITH JUNE 2020 AMP BILLING PERIOD AND JULY 2020 CITY CONSUMPTION AND BILLING DATA

Class and/or Schedule	Rate Code	Jul-20 # of Bills	Jul-20 (kWh Usage)	Jul-20 Billed	Billed kVa of Demand	Cost / kWH For Month	Cost / kWH Prior 12 Mo Average	Aug-19 # of Bills	Aug-19 (kWh Usage)	Aug-19 Billed	Cost / kWH For Month	Sep-19 # of Bills	Sep-19 (kWh Usage)	Sep-19 Billed	Cost / kWH For Month
Residential (Dom-In)	E1	3,403	2,216,372	$302,477.21		$0.1365	$0.1247	3,346	2,732,680	$346,222.17	$0.1267	3,359	3,350,534	$393,425.78	$0.1174
Residential (Dom-In) w/Ecosmart	E1E	6	3,602	$494.40		$0.1373	$0.1269	7	5,114	$652.39	$0.1276	7	5,542	$659.37	$0.1190
Residential (Dom-In - All Electric)	E2	634	416,258	$56,777.48		$0.1364	$0.1236	632	440,183	$56,326.12	$0.1280	630	510,776	$60,676.95	$0.1188
Res.(Dom-In - All Elec.) w/Ecosmart	E2E	1	608	$83.37		$0.1371	$0.1263	1	834	$105.55	$0.1266	1	859	$101.69	$0.1184
Total Residential (Domestic)		**4,044**	**2,636,840**	**$359,832.46**	**0**	**$0.1365**	**$0.1245**	**3,986**	**3,178,811**	**$403,306.23**	**$0.1269**	**3,997**	**3,867,711**	**$454,863.79**	**$0.1176**
Residential (Rural-Out)	ER1	798	776,528	$110,452.70		$0.1422	$0.1310	786	867,108	$115,416.57	$0.1331	783	957,566	$118,989.72	$0.1243
Residential (Rural-Out) w/Ecosmart	ER1E	4	2,863	$417.80		$0.1459	$0.1342	4	3,894	$523.03	$0.1343	4	3,819	$483.39	$0.1266
Residential (Rural-Out - All Electric)	ER2	362	386,460	$54,617.68		$0.1413	$0.1294	367	424,736	$56,355.32	$0.1327	367	472,761	$58,550.99	$0.1238
Res. (Rural-Out - All Electric) w/Ecosmar	ER2E	2	1,351	$198.28		$0.1468	$0.1303	2	1,219	$171.23	$0.1405	2	2,134	$267.77	$0.1255
Residential (Rural-Out w/Dmd)	ER3	15	16,062	$2,267.73	173	$0.1412	$0.1246	15	19,604	$2,578.69	$0.1315	15	14,462	$1,828.22	$0.1264
Residential (Rural-Out - All Electric w/Dm	ER4	9	6,449	$941.01	34	$0.1459	$0.1308	9	8,355	$1,126.27	$0.1348	9	9,737	$1,220.01	$0.1253
Total Residential (Rural)		**1,190**	**1,189,713**	**$168,895.20**	**207**	**$0.1420**	**$0.1302**	**1,183**	**1,324,916**	**$176,171.11**	**$0.1330**	**1,180**	**1,460,479**	**$181,340.10**	**$0.1242**
Commercial (1 Ph-In - No Dmd)	EC2	74	31,449	$5,454.36		$0.1734	$0.1626	73	28,115	$4,736.29	$0.1685	73	30,579	$4,830.90	$0.1580
Commercial (1 Ph-Out - No Dmd)	EC2O	50	9,283	$1,947.36		$0.2098	$0.1897	50	8,740	$1,799.65	$0.2059	50	13,407	$2,332.17	$0.1740
Total Commercial (1 Ph) No Dmd		**124**	**40,732**	**$7,401.72**	**0**	**$0.1817**	**$0.1695**	**123**	**36,855**	**$6,535.94**	**$0.1773**	**123**	**43,986**	**$7,163.07**	**$0.1628**
Commercial (1 Ph-In - w/Demand)	EC1	257	244,547	$44,525.35	2275	$0.1821	$0.1564	260	316,168	$49,374.46	$0.1562	259	434,957	$61,778.60	$0.1420
Commercial (1 Ph-Out - w/Demand)	EC1O	25	35,962	$5,584.25	159	$0.1553	$0.1422	24	40,570	$5,959.69	$0.1469	24	50,125	$6,798.92	$0.1356
Total Commercial (1 Ph) w/Demand		**282**	**280,509**	**$50,109.60**	**2,434**	**$0.1786**	**$0.1547**	**284**	**356,738**	**$55,334.15**	**$0.1551**	**283**	**485,082**	**$68,577.52**	**$0.1414**
Commercial (3 Ph-Out - No Dmd)	EC4O	2	40	$41.81	13	$1.0453	$0.1897	2	80	$46.97	$0.5871	2	40	$41.17	$1.0293
Total Commercial (3 Ph) No Dmd		**2**	**40**	**$41.81**	**13**	**$1.0453**	**$0.1897**	**2**	**80**	**$46.97**	**$0.5871**	**2**	**40**	**$41.17**	**$1.0293**
Commercial (3 Ph-In - w/Demand)	EC3	212	1,423,013	$206,824.83	5242	$0.1453	$0.1317	216	1,921,250	$260,730.87	$0.1357	214	2,176,647	$275,955.59	$0.1268
Commercial (3 Ph-Out - w/Demand)	EC3O	37	222,511	$34,531.79	1352	$0.1552	$0.1346	37	274,728	$38,593.50	$0.1405	37	302,688	$39,850.84	$0.1317
Commercial (3 Ph-Out - w/Dmd.&Sub-St.	E3SO	3	78,320	$10,798.50	333	$0.1379	$0.1238	3	113,080	$14,331.86	$0.1267	3	119,120	$14,130.30	$0.1186
Commercial (3 Ph-In - w/Demand, No Ta:	EC3T	1	1,240	$186.67	4	$0.1505	$0.1306	1	2,800	$439.96	$0.1571	1	7,360	$907.68	$0.1233
Commercial (3 Ph-In - w/Dmd.&Sub-St.C	EC3S	1	52,320	$7,398.54	269	$0.1414	$0.1249	0	0	$0.00	$0.0000	0	0	$0.00	$0.0000
Total Commercial (3 Ph) w/Demand		**254**	**1,777,404**	**$259,740.33**	**7,200**	**$0.1461**	**$0.1317**	**257**	**2,311,858**	**$314,096.19**	**$0.1359**	**255**	**2,605,815**	**$330,844.41**	**$0.1270**
Large Power (In - w/Dmd & Rct)	EL1	14	1,982,660	$228,992.03	4142	$0.1155	$0.1051	15	2,010,579	$221,306.70	$0.1101	15	2,252,991	$222,017.11	$0.0985
Large Power (In - w/Dmd & Rct, w/SbCr)	EL2	2	862,901	$96,996.69	1790	$0.1124	$0.1011	3	1,027,578	$108,238.53	$0.1053	3	848,595	$89,630.95	$0.1056
Large Power (Out - w/Dmd & Rct, w/SbC	EL2O	1	217,200	$31,649.69	820	$0.1457	$0.1188	1	427,200	$50,434.47	$0.1181	1	432,000	$46,652.40	$0.1080
Large Power (In - w/Dmd & Rct, w/SbCr)	EL3	2	88,916	$17,002.80	568	$0.1912	$0.1560	2	79,464	$15,662.73	$0.1971	2	82,829	$14,994.63	$0.1810
Total Large Power		**19**	**3,151,677**	**$374,641.21**	**7,320**	**$0.1189**	**$0.1066**	**21**	**3,544,821**	**$395,642.43**	**$0.1116**	**21**	**3,616,415**	**$373,295.09**	**$0.1032**
Industrial (In - w/Dmd & Rct, w/SbCr)	EI1	1	603,851	$70,061.71	1500	$0.1160	$0.0996	1	853,053	$85,795.44	$0.1006	1	949,284	$85,931.28	$0.0905
Industrial (In - w/Dmd & Rct, No/SbCr)	EI2	1	824,956	$90,861.95	1712	$0.1101	$0.1013	1	694,184	$79,070.77	$0.1139	1	813,670	$78,886.15	$0.0970
Total Industrial		**2**	**1,428,807**	**$160,923.66**	**3,212**	**$0.1126**	**$0.1005**	**2**	**1,547,237**	**$164,866.21**	**$0.1066**	**2**	**1,762,954**	**$164,817.43**	**$0.0935**
Interdepartmental (In - No Dmd)	ED1	9	23,207	$3,547.63	124	$0.1529	$0.1320	10	46,865	$6,385.89	$0.1363	10	46,090	$5,885.60	$0.1277
Interdepartmental (Out - w/Dmd)	ED2O	2	865	$149.62		$0.1730	$0.1759	2	605	$107.12	$0.1771	2	629	$105.41	$0.1676
Interdepartmental (In - w/Dmd)	ED2	27	22,445	$3,583.04		$0.1596	$0.1423	29	23,478	$3,570.98	$0.1521	27	23,322	$3,340.49	$0.1432
Interdepartmental (3Ph-In - w/Dmd)	ED3	11	133,288	$19,728.84	693	$0.1480	$0.1303	10	149,378	$19,861.26	$0.1330	10	139,132	$17,754.02	$0.1276
Interdepartmental (Street Lights)	EDSL	6	30,685	$2,967.81		$0.0967	$0.0963	6	21,490	$2,073.47	$0.0965	6	21,490	$2,070.47	$0.0963
Interdepartmental (Traffic Signals)	EDTS	8	1,303	$120.50		$0.0925	$0.0925	8	1,281	$118.45	$0.0925	8	1,410	$130.39	$0.0925
Generators (JV2 Power Cost Only)	GJV2	1	14,760	$277.64	29	$0.0188	$0.0000	1	15,267	$341.06	$0.0223	1	16,041	$374.08	$0.0233
Generators (JV5 Power Cost Only)	GJV5	0	0	$0.00		$0.0000	$0.0000	0	0	$0.00	$0.0000	0	0	$0.00	$0.0000
Total Interdepartmental		**64**	**226,553**	**$30,375.08**	**846**	**$0.1341**	**$0.1211**	**66**	**258,364**	**$32,458.23**	**$0.1256**	**64**	**248,114**	**$29,660.46**	**$0.1195**
SUB-TOTAL CONSUMPTION & DEMAND		**5,981**	**10,732,275**	**$1,411,961.07**	**21,232**	**$0.1316**	**$0.1193**	**5,924**	**12,559,680**	**$1,548,457.46**	**$0.1233**	**5,927**	**14,090,596**	**$1,610,603.04**	**$0.1143**
Street Lights (In)	SLO	13	0	$13.28		$0.0000	$0.0000	14	0	$13.43	$0.0000	14	0	$13.44	$0.0000
Street Lights (Out)	SLOO	2	0	$1.91		$0.0000	$0.0000	2	0	$1.92	$0.0000	2	0	$1.92	$0.0000
Total Street Light Only		**15**	**0**	**$15.19**	**0**	**$0.0000**	**$0.0000**	**16**	**0**	**$15.35**	**$0.0000**	**16**	**0**	**$15.36**	**$0.0000**
TOTAL CONSUMPTION & DEMAND		**5,996**	**10,732,275**	**$1,411,976.26**	**21,232**	**$0.1316**	**$0.1193**	**5,940**	**12,559,680**	**$1,548,472.81**	**$0.1233**	**5,943**	**14,090,596**	**$1,610,618.40**	**$0.1143**

BILLING SUMMARY AND CON

JUNE 2020

2020 - AUGUST BILLING WITH JUNE 2020 AMP E

Class and/or Schedule	Rate Code	Oct-19 # of Bills	Oct-19 (kWh Usage)	Oct-19 Billed	Cost / kWH For Month	Nov-19 # of Bills	Nov-19 (kWh Usage)	Nov-19 Billed	Cost / kWH For Month	Dec-19 # of Bills	Dec-19 (kWh Usage)	Dec-19 Billed	Cost / kWH For Month	Jan-20 # of Bills	Jan-20 (kWh Usage)	Jan-20 Billed	Cost / kWH For Month
Residential (Dom-In)	E1	3,342	2,627,375	$300,713.94	$0.1145	3,346	2,107,090	$245,966.62	$0.1167	3,352	1,800,455	$222,392.91	$0.1235	3,349	2,102,112	$263,500.39	$0.1254
Residential (Dom-In) w/Ecosmart	E1E	6	4,129	$476.93	$0.1155	6	3,114	$369.72	$0.1187	6	2,459	$312.29	$0.1270	6	2,754	$354.93	$0.1289
Residential (Dom-In - All Electric)	E2	626	418,793	$48,478.09	$0.1158	628	355,532	$41,867.14	$0.1178	636	441,766	$53,448.48	$0.1210	634	630,624	$76,820.23	$0.1218
Res.(Dom-In - All Elec.) w/Ecosmart	E2E	1	659	$76.37	$0.1159	1	544	$64.29	$0.1182	1	492	$61.28	$0.1246	1	490	$62.75	$0.1281
Total Residential (Domestic)		**3,975**	**3,050,956**	**$349,745.33**	**$0.1146**	**3,981**	**2,466,280**	**$288,267.77**	**$0.1169**	**3,995**	**2,245,172**	**$276,214.96**	**$0.1230**	**3,990**	**2,735,980**	**$340,738.30**	**$0.1245**
Residential (Rural-Out)	ER1	787	780,581	$94,896.91	$0.1216	793	665,163	$82,340.16	$0.1238	796	663,550	$85,631.27	$0.1291	792	807,336	$105,185.25	$0.1303
Residential (Rural-Out) w/Ecosmart	ER1E	4	2,819	$354.28	$0.1257	4	2,437	$312.61	$0.1283	4	2,621	$346.78	$0.1323	4	3,204	$426.09	$0.1330
Residential (Rural-Out - All Electric)	ER2	367	388,564	$46,991.85	$0.1209	369	340,605	$41,792.81	$0.1227	366	384,009	$48,605.53	$0.1266	364	481,607	$61,650.77	$0.1280
Res. (Rural-Out - All Electric) w/Ecosmar	ER2E	2	1,794	$220.01	$0.1226	2	1,589	$197.74	$0.1244	2	2,162	$273.05	$0.1263	2	2,699	$345.23	$0.1279
Residential (Rural-Out w/Dmd)	ER3	15	12,756	$1,571.27	$0.1232	15	11,385	$1,422.85	$0.1250	15	25,028	$3,074.29	$0.1228	15	100,391	$12,192.74	$0.1215
Residential (Rural-Out - All Electric w/Dm	ER4	9	8,911	$1,083.02	$0.1215	9	7,443	$922.40	$0.1239	9	7,187	$931.24	$0.1296	9	14,140	$1,793.23	$0.1268
Total Residential (Rural)		**1,184**	**1,195,425**	**$145,117.34**	**$0.1214**	**1,192**	**1,028,622**	**$126,988.57**	**$0.1235**	**1,192**	**1,084,557**	**$138,862.16**	**$0.1280**	**1,186**	**1,409,377**	**$181,593.31**	**$0.1288**
Commercial (1 Ph-In - No Dmd)	EC2	74	28,344	$4,423.71	$0.1561	75	26,125	$4,169.05	$0.1596	73	28,919	$4,644.14	$0.1606	73	34,043	$5,428.03	$0.1594
Commercial (1 Ph-Out - No Dmd)	EC2O	50	10,059	$1,854.12	$0.1843	50	9,208	$1,751.53	$0.1902	52	9,411	$1,848.51	$0.1964	50	13,491	$2,402.69	$0.1781
Total Commercial (1 Ph) No Dmd		**124**	**38,403**	**$6,277.83**	**$0.1635**	**125**	**35,333**	**$5,920.58**	**$0.1676**	**125**	**38,330**	**$6,492.65**	**$0.1694**	**123**	**47,534**	**$7,830.72**	**$0.1647**
Commercial (1 Ph-In - w/Demand)	EC1	258	377,106	$52,169.22	$0.1383	259	314,297	$45,469.05	$0.1447	259	270,782	$42,443.32	$0.1567	258	281,890	$44,567.60	$0.1581
Commercial (1 Ph-Out - w/Demand)	EC1O	24	46,145	$6,129.64	$0.1328	25	39,651	$5,351.54	$0.1350	24	36,593	$5,245.08	$0.1433	24	43,441	$6,278.22	$0.1445
Total Commercial (1 Ph) w/Demand		**282**	**423,251**	**$58,298.86**	**$0.1377**	**284**	**353,948**	**$50,820.59**	**$0.1436**	**283**	**307,375**	**$47,688.40**	**$0.1551**	**282**	**325,331**	**$50,845.82**	**$0.1563**
Commercial (3 Ph-Out - No Dmd)	EC4O	2	240	$65.91	$0.2746	2	160	$55.99	$0.3499	2	80	$46.41	$0.5801	2	4,440	$628.10	$0.1415
Total Commercial (3 Ph) No Dmd		**2**	**240**	**$65.91**	**$0.2746**	**2**	**160**	**$55.99**	**$0.3499**	**2**	**80**	**$46.41**	**$0.5801**	**2**	**4,440**	**$628.10**	**$0.1415**
Commercial (3 Ph-In - w/Demand)	EC3	214	2,333,225	$284,939.75	$0.1221	214	2,026,057	$250,461.66	$0.1236	212	1,797,126	$233,151.82	$0.1297	213	1,740,229	$229,454.61	$0.1319
Commercial (3 Ph-Out - w/Demand)	EC3O	37	298,438	$37,614.65	$0.1260	37	311,185	$39,378.01	$0.1265	36	507,722	$63,884.66	$0.1258	36	416,639	$53,651.15	$0.1288
Commercial (3 Ph-Out - w/Dmd.&Sub-St.	E3SO	3	115,840	$13,235.25	$0.1143	3	107,040	$12,418.98	$0.1160	3	109,440	$13,095.45	$0.1197	3	100,680	$12,423.31	$0.1234
Commercial (3 Ph-In - w/Demand, No Ta	EC3T	1	8,160	$955.95	$0.1172	1	5,800	$714.10	$0.1231	1	4,280	$580.40	$0.1356	1	1,400	$195.31	$0.1395
Commercial (3 Ph-In - w/Dmd.&Sub-St.C	EC3S	0	0	$0.00	$0.0000	0	0	$0.00	$0.0000	0	0	$0.00	$0.0000	0	0	$0.00	$0.0000
Total Commercial (3 Ph) w/Demand		**255**	**2,755,663**	**$336,745.60**	**$0.1222**	**255**	**2,450,082**	**$302,972.75**	**$0.1237**	**252**	**2,418,568**	**$310,712.33**	**$0.1285**	**253**	**2,258,948**	**$295,724.38**	**$0.1309**
Large Power (In - w/Dmd & Rct)	EL1	15	2,215,279	$211,874.83	$0.0956	15	2,018,915	$196,488.29	$0.0973	15	2,005,027	$198,903.63	$0.0992	15	1,748,187	$184,229.31	$0.1054
Large Power (In - w/Dmd & Rct, w/SbCr)	EL2	3	1,062,552	$99,051.98	$0.0932	3	1,069,099	$98,928.35	$0.0925	3	1,089,944	$102,810.47	$0.0943	3	1,006,691	$101,740.34	$0.1011
Large Power (Out - w/Dmd & Rct, w/SbC	EL2O	1	382,800	$38,486.91	$0.1005	1	290,400	$33,017.98	$0.1137	1	324,000	$35,708.02	$0.1102	1	355,200	$39,268.32	$0.1106
Large Power (In - w/Dmd & Rct, w/SbCr)	EL3	2	82,589	$13,470.01	$0.1631	2	80,550	$13,127.04	$0.1630	2	113,457	$19,884.22	$0.1753	2	126,563	$19,833.72	$0.1567
Total Large Power		**21**	**3,743,220**	**$362,883.73**	**$0.0969**	**21**	**3,458,964**	**$341,561.66**	**$0.0987**	**21**	**3,532,428**	**$357,306.34**	**$0.1012**	**21**	**3,236,641**	**$345,071.69**	**$0.1066**
Industrial (In - w/Dmd & Rct, w/SbCr)	EI1	1	934,470	$80,449.52	$0.0861	1	880,467	$77,265.04	$0.0878	1	814,630	$75,719.92	$0.0930	1	782,625	$77,014.37	$0.0984
Industrial (In - w/Dmd & Rct, No/SbCr)	EI2	1	892,849	$79,725.62	$0.0893	1	815,531	$74,982.37	$0.0919	1	831,049	$78,113.33	$0.0940	1	777,345	$79,927.37	$0.1028
Total Industrial		**2**	**1,827,319**	**$160,175.14**	**$0.0877**	**2**	**1,695,998**	**$152,247.41**	**$0.0898**	**2**	**1,645,679**	**$153,833.25**	**$0.0935**	**2**	**1,559,970**	**$156,941.74**	**$0.1006**
Interdepartmental (In - No Dmd)	ED1	10	23,257	$3,136.55	$0.1349	10	22,917	$3,073.64	$0.1341	10	23,899	$3,069.72	$0.1284	10	34,098	$4,308.99	$0.1264
Interdepartmental (Out - w/Dmd)	ED2O	2	574	$95.67	$0.1667	2	540	$91.63	$0.1697	2	477	$86.23	$0.1808	2	470	$86.96	$0.1850
Interdepartmental (In - w/Dmd)	ED2	27	20,200	$2,844.59	$0.1408	27	22,433	$3,130.49	$0.1395	27	45,949	$6,300.76	$0.1371	27	60,814	$8,439.35	$0.1388
Interdepartmental (3Ph-In - w/Dmd)	ED3	10	137,778	$16,928.90	$0.1229	10	147,910	$18,169.78	$0.1228	10	160,730	$20,314.79	$0.1264	10	151,425	$19,242.97	$0.1271
Interdepartmental (Street Lights)	EDSL	6	21,490	$2,075.89	$0.0966	6	32,771	$3,138.42	$0.0958	6	32,771	$3,159.27	$0.0964	6	32,671	$3,128.40	$0.0958
Interdepartmental (Traffic Signals)	EDTS	8	1,378	$127.40	$0.0925	8	1,345	$124.40	$0.0925	8	1,192	$110.22	$0.0925	8	1,203	$111.24	$0.0925
Generators (JV2 Power Cost Only)	GJV2	1	16,161	$354.73	$0.0219	1	17,934	$311.69	$0.0174	1	27,105	$264.54	$0.0098	1	30,054	$1,887.69	$0.0628
Generators (JV5 Power Cost Only)	GJV5	0	0	$0.00	$0.0000	0	0	$0.00	$0.0000	0	0	$0.00	$0.0000	0	0	$0.00	$0.0000
Total Interdepartmental		**64**	**220,838**	**$25,563.73**	**$0.1158**	**64**	**245,850**	**$28,040.05**	**$0.1141**	**64**	**292,123**	**$33,305.53**	**$0.1140**	**64**	**310,735**	**$37,205.60**	**$0.1197**
SUB-TOTAL CONSUMPTION & DEMAND		**5,909**	**13,255,315**	**$1,444,873.47**	**$0.1090**	**5,926**	**11,735,237**	**$1,296,875.37**	**$0.1105**	**5,936**	**11,564,312**	**$1,324,462.03**	**$0.1145**	**5,923**	**11,888,956**	**$1,416,579.66**	**$0.1192**
Street Lights (In)	SLO	14	0	$13.44	$0.0000	14	0	$13.43	$0.0000	14	0	$13.43	$0.0000	14	0	$13.44	$0.0000
Street Lights (Out)	SLOO	2	0	$1.92	$0.0000	2	0	$1.91	$0.0000	2	0	$1.91	$0.0000	2	0	$1.91	$0.0000
Total Street Light Only		**16**	**0**	**$15.36**	**$0.0000**	**16**	**0**	**$15.34**	**$0.0000**	**16**	**0**	**$15.34**	**$0.0000**	**16**	**0**	**$15.35**	**$0.0000**
TOTAL CONSUMPTION & DEMAND		**5,925**	**13,255,315**	**$1,444,888.83**	**$0.1090**	**5,942**	**11,735,237**	**$1,296,890.71**	**$0.1105**	**5,952**	**11,564,312**	**$1,324,477.37**	**$0.1145**	**5,939**	**11,888,956**	**$1,416,595.01**	**$0.1192**

BILLING SUMMARY AND CON

JUNE 2020

2020 - AUGUST BILLING WITH JUNE 2020 AMP E

Class and/or Schedule	Rate Code	Feb-20 # of Bills	Feb-20 (kWh Usage)	Feb-20 Billed	Cost / kWH For Month	Mar-20 # of Bills	Mar-20 (kWh Usage)	Mar-20 Billed	Cost / kWH For Month	Apr-20 # of Bills	Apr-20 (kWh Usage)	Apr-20 Billed	Cost / kWH For Month	May-20 # of Bills	May-20 (kWh Usage)	May-20 Billed	Cost / kWH For Month
Residential (Dom-In)	E1	3,353	2,227,957	$277,842.04	$0.1247	3,357	2,194,203	$273,619.51	$0.1247	3,370	1,989,944	$252,935.61	$0.1271	3,379	1,957,424	$255,584.56	$0.1306
Residential (Dom-In) w/Ecosmart	E1E	6	2,826	$362.90	$0.1284	6	2,816	$361.36	$0.1283	6	2,587	$338.58	$0.1309	6	2,843	$377.81	$0.1329
Residential (Dom-In - All Electric)	E2	628	670,954	$81,369.44	$0.1213	630	704,823	$85,183.87	$0.1209	631	619,040	$76,175.24	$0.1231	634	521,516	$66,499.40	$0.1275
Res.(Dom-In - All Elec.) w/Ecosmart	E2E	1	532	$67.53	$0.1269	1	551	$69.65	$0.1264	1	448	$58.39	$0.1303	1	464	$61.79	$0.1332
Total Residential (Domestic)		**3,988**	**2,902,269**	**$359,641.91**	**$0.1239**	**3,994**	**2,902,393**	**$359,234.39**	**$0.1238**	**4,008**	**2,612,019**	**$329,507.82**	**$0.1262**	**4,020**	**2,482,247**	**$322,523.56**	**$0.1299**
Residential (Rural-Out)	ER1	790	849,808	$110,182.04	$0.1297	788	826,839	$107,272.00	$0.1297	791	742,059	$98,164.62	$0.1323	793	758,108	$102,630.03	$0.1354
Residential (Rural-Out) w/Ecosmart	ER1E	4	3,438	$453.88	$0.1320	4	3,100	$412.73	$0.1331	4	2,828	$384.07	$0.1358	4	2,635	$369.16	$0.1401
Residential (Rural-Out - All Electric)	ER2	362	508,585	$64,818.71	$0.1274	362	513,989	$65,386.64	$0.1272	362	446,437	$57,912.35	$0.1297	363	429,735	$57,305.95	$0.1334
Res. (Rural-Out - All Electric) w/Ecosmar	ER2E	2	2,654	$339.49	$0.1279	2	2,764	$352.31	$0.1275	2	2,335	$304.08	$0.1302	2	2,299	$307.21	$0.1336
Residential (Rural-Out w/Dmd)	ER3	15	146,970	$17,739.27	$0.1207	15	25,307	$3,187.36	$0.1259	15	27,525	$3,492.32	$0.1269	15	27,829	$3,619.72	$0.1301
Residential (Rural-Out - All Electric w/Dm	ER4	9	11,986	$1,532.42	$0.1279	9	9,809	$1,269.02	$0.1294	9	7,128	$957.19	$0.1343	9	5,975	$836.42	$0.1400
Total Residential (Rural)		**1,182**	**1,523,441**	**$195,065.81**	**$0.1280**	**1,180**	**1,381,808**	**$177,880.06**	**$0.1287**	**1,183**	**1,228,312**	**$161,214.63**	**$0.1312**	**1,186**	**1,226,581**	**$165,068.49**	**$0.1346**
Commercial (1 Ph-In - No Dmd)	EC2	74	35,871	$5,678.93	$0.1583	74	35,797	$5,664.22	$0.1582	74	35,365	$5,656.59	$0.1599	74	32,131	$5,326.82	$0.1658
Commercial (1 Ph-Out - No Dmd)	EC2O	50	11,780	$2,173.33	$0.1845	50	11,970	$2,196.80	$0.1835	50	12,742	$2,317.77	$0.1819	50	11,004	$2,119.67	$0.1926
Total Commercial (1 Ph) No Dmd		**124**	**47,651**	**$7,852.26**	**$0.1648**	**124**	**47,767**	**$7,861.02**	**$0.1646**	**124**	**48,107**	**$7,974.36**	**$0.1658**	**124**	**43,135**	**$7,446.49**	**$0.1726**
Commercial (1 Ph-In - w/Demand)	EC1	257	302,449	$47,334.25	$0.1565	257	313,276	$49,189.61	$0.1570	257	299,425	$48,508.19	$0.1620	257	274,832	$46,322.88	$0.1685
Commercial (1 Ph-Out - w/Demand)	EC1O	25	41,403	$5,935.19	$0.1434	25	43,547	$6,095.83	$0.1400	25	43,400	$6,107.31	$0.1407	25	42,962	$6,270.11	$0.1459
Total Commercial (1 Ph) w/Demand		**282**	**343,852**	**$53,269.44**	**$0.1549**	**282**	**356,823**	**$55,285.44**	**$0.1549**	**282**	**342,825**	**$54,615.50**	**$0.1593**	**282**	**317,794**	**$52,592.99**	**$0.1655**
Commercial (3 Ph-Out - No Dmd)	EC4O	2	1,040	$174.82	$0.1681	2	400	$89.33	$0.2233	2	40	$41.39	$1.0348	2	760	$140.89	$0.1854
Total Commercial (3 Ph) No Dmd		**2**	**1,040**	**$174.82**	**$0.1681**	**2**	**400**	**$89.33**	**$0.2233**	**2**	**40**	**$41.39**	**$1.0348**	**2**	**760**	**$140.89**	**$0.1854**
Commercial (3 Ph-In - w/Demand)	EC3	212	1,688,719	$222,678.01	$0.1319	214	1,837,506	$239,708.56	$0.1305	212	1,635,535	$217,693.09	$0.1331	212	1,435,766	$198,136.69	$0.1380
Commercial (3 Ph-Out - w/Demand)	EC3O	36	285,600	$38,879.27	$0.1360	36	286,076	$38,698.15	$0.1353	36	273,659	$37,755.85	$0.1380	36	251,993	$35,672.91	$0.1416
Commercial (3 Ph-Out - w/Dmd.&Sub-St.	E3SO	3	98,320	$12,243.36	$0.1245	3	99,880	$12,474.53	$0.1249	3	94,040	$11,791.91	$0.1254	3	79,200	$10,324.59	$0.1304
Commercial (3 Ph-In - w/Demand, No Ta	EC3T	1	1,480	$209.30	$0.1414	1	1,400	$193.28	$0.1381	1	1,360	$186.96	$0.1375	1	1,320	$187.89	$0.1423
Commercial (3 Ph-In - w/Dmd.&Sub-St.C	EC3S	0	0	$0.00	$0.0000	1	102,720	$11,249.52	$0.1095	1	97,440	$11,923.12	$0.1224	1	79,680	$10,114.70	$0.1269
Total Commercial (3 Ph) w/Demand		**252**	**2,074,319**	**$274,009.94**	**$0.1321**	**255**	**2,327,582**	**$302,324.04**	**$0.1299**	**253**	**2,102,034**	**$279,350.93**	**$0.1329**	**253**	**1,847,959**	**$254,436.78**	**$0.1377**
Large Power (In - w/Dmd & Rct)	EL1	15	1,598,234	$172,601.65	$0.1080	13	1,721,351	$179,206.40	$0.1041	14	1,817,253	$196,177.95	$0.1080	14	1,798,307	$197,248.46	$0.1097
Large Power (In - w/Dmd & Rct, w/SbCr)	EL2	3	937,001	$95,111.19	$0.1015	2	935,415	$89,858.29	$0.0961	2	800,590	$82,287.74	$0.1028	2	900,600	$91,681.73	$0.1018
Large Power (Out - w/Dmd & Rct, w/SbC	EL2O	1	274,800	$33,004.71	$0.1201	1	379,200	$40,656.81	$0.1072	1	356,400	$39,110.59	$0.1097	1	122,400	$24,150.88	$0.1973
Large Power (In - w/Dmd & Rct, w/SbCr)	EL3	2	108,215	$10,418.87	$0.0963	2	74,380	$10,314.37	$0.1387	2	57,600	$6,250.96	$0.1085	2	85,309	$11,457.31	$0.1343
Total Large Power		**21**	**2,918,250**	**$311,136.42**	**$0.1066**	**18**	**3,110,346**	**$320,035.87**	**$0.1029**	**19**	**3,031,843**	**$323,827.24**	**$0.1068**	**19**	**2,906,616**	**$324,538.38**	**$0.1117**
Industrial (In - w/Dmd & Rct, w/SbCr)	EI1	1	648,953	$67,477.05	$0.1040	1	886,576	$85,953.58	$0.0970	1	805,455	$80,592.47	$0.1001	1	410,316	$52,124.53	$0.1270
Industrial (In - w/Dmd & Rct, No/SbCr)	EI2	1	748,763	$77,149.51	$0.1030	1	837,502	$82,186.49	$0.0981	1	739,129	$77,982.87	$0.1055	1	722,408	$77,272.88	$0.1070
Total Industrial		**2**	**1,397,716**	**$144,626.56**	**$0.1035**	**2**	**1,724,078**	**$168,140.07**	**$0.0975**	**2**	**1,544,584**	**$158,575.34**	**$0.1027**	**2**	**1,132,724**	**$129,397.41**	**$0.1142**
Interdepartmental (In - No Dmd)	ED1	12	36,405	$4,558.19	$0.1252	10	32,325	$4,076.93	$0.1261	10	32,250	$4,167.98	$0.1292	11	24,215	$3,230.94	$0.1334
Interdepartmental (Out - w/Dmd)	ED2O	2	476	$87.69	$0.1842	2	466	$86.28	$0.1852	2	536	$96.39	$0.1798	2	718	$123.24	$0.1716
Interdepartmental (In - w/Dmd)	ED2	29	61,731	$8,578.30	$0.1390	27	68,568	$9,453.34	$0.1379	27	55,966	$7,858.32	$0.1404	27	45,285	$6,571.66	$0.1451
Interdepartmental (3Ph-In - w/Dmd)	ED3	10	158,974	$20,332.08	$0.1279	10	192,052	$24,619.47	$0.1282	10	223,743	$28,648.01	$0.1280	10	173,829	$23,742.28	$0.1366
Interdepartmental (Street Lights)	EDSL	6	32,771	$3,158.23	$0.0964	6	32,771	$3,147.92	$0.0961	6	31,302	$3,024.88	$0.0966	6	31,302	$3,019.83	$0.0965
Interdepartmental (Traffic Signals)	EDTS	8	1,243	$114.93	$0.0925	8	1,239	$114.55	$0.0925	8	1,146	$105.96	$0.0925	8	1,213	$112.15	$0.0925
Generators (JV2 Power Cost Only)	GJV2	1	27,895	$3,378.92	$0.1211	1	26,760	-$145.31	-$0.0054	1	23,021	$1.84	$0.0001	1	19,727	$354.89	$0.0180
Generators (JV5 Power Cost Only)	GJV5	0	0	$0.00	$0.0000	0	0	$0.00	$0.0000	0	0	$0.00	$0.0000	0	0	$0.00	$0.0000
Total Interdepartmental		**68**	**319,495**	**$40,208.34**	**$0.1258**	**64**	**354,181**	**$41,353.18**	**$0.1168**	**64**	**367,964**	**$43,903.38**	**$0.1193**	**65**	**296,289**	**$37,154.99**	**$0.1254**
SUB-TOTAL CONSUMPTION & DEMAND		**5,921**	**11,528,033**	**$1,385,985.50**	**$0.1202**	**5,921**	**12,205,378**	**$1,432,203.40**	**$0.1173**	**5,937**	**11,277,728**	**$1,359,010.59**	**$0.1205**	**5,953**	**10,254,105**	**$1,293,299.98**	**$0.1261**
Street Lights (In)	SLO	14	0	$13.43	$0.0000	14	0	$13.43	$0.0000	14	0	$13.43	$0.0000	14	0	$13.44	$0.0000
Street Lights (Out)	SLOO	2	0	$1.92	$0.0000	2	0	$1.92	$0.0000	2	0	$1.91	$0.0000	2	0	$1.92	$0.0000
Total Street Light Only		**16**	**0**	**$15.35**	**$0.0000**	**16**	**0**	**$15.35**	**$0.0000**	**16**	**0**	**$15.34**	**$0.0000**	**16**	**0**	**$15.36**	**$0.0000**
TOTAL CONSUMPTION & DEMAND		**5,937**	**11,528,033**	**$1,386,000.85**	**$0.1202**	**5,937**	**12,205,378**	**$1,432,218.75**	**$0.1173**	**5,953**	**11,277,728**	**$1,359,025.93**	**$0.1205**	**5,969**	**10,254,105**	**$1,293,315.34**	**$0.1261**

BILLING SUMMARY AND CON

JUNE 2020

2020 - AUGUST BILLING WITH JUNE 2020 AMP E

Class and/or Schedule	Rate Code	Jun-20 # of Bills	Jun-20 (kWh Usage)	Jun-20 Billed	Cost / kWH For Month	Jul-20 # of Bills	Jul-20 (kWh Usage)	Jul-20 Billed	TOTAL KWH USEAGE PRIOR 12 MO	TOTAL BILLING PRIOR 12 MO	Avg.Cost Per kWH For Period	Avg.Num. of Bills For Period	Avg.Per.% of Bills For Period
Residential (Dom-In)	E1	3,387	1,718,095	$236,497.31	$0.1377	3,403	2,216,372	$302,477.21	27,024,241	$3,371,178.05	$0.1247	3,362	56.4996%
Residential (Dom-In) w/Ecosmart	E1E	6	2,551	$356.96	$0.1399	6	3,602	$494.40	40,337	$5,117.64	$0.1269	6	0.1036%
Residential (Dom-In - All Electric)	E2	631	419,252	$56,530.73	$0.1348	634	416,258	$56,777.48	6,149,517	$760,153.17	$0.1236	631	10.6072%
Res.(Dom-In - All Elec.) w/Ecosmart	E2E	1	467	$64.75	$0.1387	1	608	$83.37	6,948	$877.41	$0.1263	1	0.0168%
Total Residential (Domestic)		**4,025**	**2,140,365**	**$293,449.75**	**$0.1371**	**4,044**	**2,636,840**	**$359,832.46**	**33,221,043**	**$4,137,326.27**	**$0.1245**	**4,000**	**67.2273%**
Residential (Rural-Out)	ER1	795	639,402	$91,409.71	$0.1430	798	776,528	$110,452.70	9,334,048	$1,222,570.98	$0.1310	791	13.2934%
Residential (Rural-Out) w/Ecosmart	ER1E	4	2,259	$334.82	$0.1482	4	2,863	$417.80	35,917	$4,818.64	$0.1342	4	0.0672%
Residential (Rural-Out - All Electric)	ER2	360	344,896	$48,616.05	$0.1410	362	386,460	$54,617.68	5,122,384	$662,604.65	$0.1294	364	6.1215%
Res. (Rural-Out - All Electric) w/Ecosmar	ER2E	2	1,858	$262.49	$0.1413	2	1,351	$198.28	24,858	$3,238.89	$0.1303	2	0.0336%
Residential (Rural-Out w/Dmd)	ER3	15	22,104	$3,030.10	$0.1371	15	16,062	$2,267.73	449,423	$56,004.56	$0.1246	15	0.2521%
Residential (Rural-Out - All Electric w/Dm	ER4	9	5,825	$850.29	$0.1460	9	6,449	$941.01	102,945	$13,462.52	$0.1308	9	0.1513%
Total Residential (Rural)		**1,185**	**1,016,344**	**$144,503.46**	**$0.1422**	**1,190**	**1,189,713**	**$168,895.20**	**15,069,575**	**$1,962,700.24**	**$0.1302**	**1,185**	**19.9191%**
Commercial (1 Ph-In - No Dmd)	EC2	74	27,839	$4,890.75	$0.1757	74	31,449	$5,454.36	374,577	$60,903.79	$0.1626	74	1.2394%
Commercial (1 Ph-Out - No Dmd)	EC2O	50	8,207	$1,779.61	$0.2168	50	9,283	$1,947.36	129,302	$24,523.21	$0.1897	50	0.8431%
Total Commercial (1 Ph) No Dmd		**124**	**36,046**	**$6,670.36**	**$0.1851**	**124**	**40,732**	**$7,401.72**	**503,879**	**$85,427.00**	**$0.1695**	**124**	**2.0825%**
Commercial (1 Ph-In - w/Demand)	EC1	257	225,868	$40,012.79	$0.1772	257	244,547	$44,525.35	3,655,597	$571,695.32	$0.1564	258	4.3345%
Commercial (1 Ph-Out - w/Demand)	EC1O	25	36,864	$5,460.73	$0.1481	25	35,962	$5,584.25	500,663	$71,216.51	$0.1422	25	0.4131%
Total Commercial (1 Ph) w/Demand		**282**	**262,732**	**$45,473.52**	**$0.1731**	**282**	**280,509**	**$50,109.60**	**4,156,260**	**$642,911.83**	**$0.1547**	**283**	**4.7476%**
Commercial (3 Ph-Out - No Dmd)	EC4O	2	440	$99.20	$0.2255	2	40	$41.81	7,760	$1,471.99	$0.1897	2	0.0336%
Total Commercial (3 Ph) No Dmd		**2**	**440**	**$99.20**	**$0.2255**	**2**	**40**	**$41.81**	**7,760**	**$1,471.99**	**$0.1897**	**2**	**0.0336%**
Commercial (3 Ph-In - w/Demand)	EC3	212	1,303,373	$188,819.23	$0.1449	212	1,423,013	$206,824.83	21,318,446	$2,808,554.71	$0.1317	213	3.5810%
Commercial (3 Ph-Out - w/Demand)	EC3O	36	239,296	$35,577.42	$0.1487	37	222,511	$34,531.79	3,670,735	$494,088.20	$0.1346	36	0.6120%
Commercial (3 Ph-Out - w/Dmd.&Sub-St.	E3SO	3	70,800	$9,523.56	$0.1345	3	78,320	$10,798.50	1,185,760	$146,791.60	$0.1238	3	0.0504%
Commercial (3 Ph-In - w/Demand, No Ta:	EC3T	1	1,360	$201.03	$0.1478	1	1,240	$186.67	37,960	$4,958.53	$0.1306	1	0.0168%
Commercial (3 Ph-In - w/Dmd.&Sub-St.C	EC3S	1	61,920	$8,530.62	$0.1378	1	52,320	$7,398.54	394,080	$49,216.50	$0.1249	0	0.0070%
Total Commercial (3 Ph) w/Demand		**253**	**1,676,749**	**$242,651.86**	**$0.1447**	**254**	**1,777,404**	**$259,740.33**	**26,606,981**	**$3,503,609.54**	**$0.1317**	**254**	**4.2673%**
Large Power (In - w/Dmd & Rct)	EL1	14	1,806,232	$205,727.67	$0.1139	14	1,982,660	$228,992.03	22,975,015	$2,414,774.03	$0.1051	15	0.2437%
Large Power (In - w/Dmd & Rct, w/SbCr)	EL2	2	723,913	$82,076.62	$0.1134	2	862,901	$96,996.69	11,264,879	$1,138,412.88	$0.1011	3	0.0434%
Large Power (Out - w/Dmd & Rct, w/SbC	EL2O	1	57,600	$17,684.16	$0.3070	1	217,200	$31,649.69	3,619,200	$429,824.94	$0.1188	1	0.0168%
Large Power (In - w/Dmd & Rct, w/SbCr)	EL3	2	90,249	$14,540.09	$0.1611	2	88,916	$17,002.80	1,070,121	$166,956.75	$0.1560	2	0.0336%
Total Large Power		**19**	**2,677,994**	**$320,028.54**	**$0.1195**	**19**	**3,151,677**	**$374,641.21**	**38,929,215**	**$4,149,968.60**	**$0.1066**	**20**	**0.3375%**
Industrial (In - w/Dmd & Rct, w/SbCr)	EI1	1	353,747	$49,943.89	$0.1412	1	603,851	$70,061.71	8,923,427	$888,328.80	$0.0996	1	0.0168%
Industrial (In - w/Dmd & Rct, No/SbCr)	EI2	1	792,094	$85,333.12	$0.1077	1	824,956	$90,861.95	9,489,480	$961,492.43	$0.1013	1	0.0168%
Total Industrial		**2**	**1,145,841**	**$135,277.01**	**$0.1181**	**2**	**1,428,807**	**$160,923.66**	**18,412,907**	**$1,849,821.23**	**$0.1005**	**2**	**0.0336%**
Interdepartmental (In - No Dmd)	ED1	9	21,057	$2,955.08	$0.1403	9	23,207	$3,547.63	366,585	$48,397.14	$0.1320	10	0.1695%
Interdepartmental (Out - w/Dmd)	ED2O	2	696	$124.12	$0.1783	2	865	$149.62	7,052	$1,240.36	$0.1759	2	0.0336%
Interdepartmental (In - w/Dmd)	ED2	27	32,009	$4,922.51	$0.1538	27	22,445	$3,583.04	482,200	$68,593.83	$0.1423	27	0.4594%
Interdepartmental (3Ph-In - w/Dmd)	ED3	11	133,450	$18,466.29	$0.1384	11	133,288	$19,728.84	1,901,689	$247,808.69	$0.1303	10	0.1709%
Interdepartmental (Street Lights)	EDSL	6	30,685	$2,950.80	$0.0962	6	30,685	$2,967.81	352,199	$33,915.39	$0.0963	6	0.1008%
Interdepartmental (Traffic Signals)	EDTS	8	1,164	$107.64	$0.0925	8	1,303	$120.50	15,117	$1,397.83	$0.0925	8	0.1344%
Generators (JV2 Power Cost Only)	GJV2	1	17,327	$313.62	$0.0181	1	14,760	$277.64	252,052	$7,715.39	$0.0306	1	0.0168%
Generators (JV5 Power Cost Only)	GJV5	0	0	$0.00	$0.0000	0	0	$0.00	0	$0.00	$0.0000	0	0.0000%
Total Interdepartmental		**64**	**236,388**	**$29,840.06**	**$0.1262**	**64**	**226,553**	**$30,375.08**	**3,376,894**	**$409,068.63**	**$0.1211**	**65**	**1.0854%**
SUB-TOTAL CONSUMPTION & DEMAND		**5,956**	**9,192,899**	**$1,217,993.76**	**$0.1325**	**5,981**	**10,732,275**	**$1,411,961.07**	**140,284,514**	**$16,742,305.33**	**$0.1193**	**5,935**	**99.7339%**
Street Lights (In)	SLO	13	0	$13.29	$0.0000	13	0	$13.28	0	$160.91	$0.0000	14	0.2325%
Street Lights (Out)	SLOO	2	0	$1.92	$0.0000	2	0	$1.91	0	$22.99	$0.0000	2	0.0336%
Total Street Light Only		**15**	**0**	**$15.21**	**$0.0000**	**15**	**0**	**$15.19**	**0**	**$183.90**	**$0.0000**	**16**	**0.2661%**
TOTAL CONSUMPTION & DEMAND		**5,971**	**9,192,899**	**$1,218,008.97**	**$0.1325**	**5,996**	**10,732,275**	**$1,411,976.26**	**140,284,514**	**$16,742,489.23**	**$0.1193**	**5,950**	**100.0000%**

Napoleon Power & Light

JULY 2020 DEPARTMENT SUMMARY

Standby Callouts:
There were eight callouts for the month. Six callouts resulted in an outage.

Lineman Crew:
Crew focused on the following projects this month: Paul Martin and Sons 3 Phase Service; Replaced 40" pole and installed URD service at 14-888 County Road V; Vorwerk Farms 3 Phase Service; John Frysinger URD Service on County Road U; Dave Aldrige URD Service on County Road U; Storm cleanup on N Perry St; Installed guys and anchors on Huddle Rd and Haley Ave; Trimmed trees and installed service on Shelby St; Rebuild on Bauman Pl; Trimmed trees out of 3 Phase across from ADS; Changed out security lights to LED on E Riverview and N Scott; Pole and primary wire upgraded on County Road M-1 and 16; Removed guy wire and anchor on Route 6 at Nordens; Performed shop maintenance; Rerouted secondary service on County Road 15 at Damon's; Installed anchor and guy on County Road P-1; Installed anchor and guy at 800 Daggett Dr; Installed URD service at County Road U and County Road 11; Removed primary service to Loose Field Soccer Stadium.

Line Clearance Crew:
Crew managed and maintained clearance space at thirteen locations throughout the service area. They also assisted the lineman crew with one project this month.

Storeroom/Inventory Purchasing/Meter Reading:
Shawn read meters, managed inventory and assisted the lineman crew as needed.

Substation Crew:
Crew completed weekly and monthly checks at all 4 substations.

System Load/Daily Generation Output/Power Portfolio:
Peak load for the month was 27.41 MW occurring on 07/09/20 at 8:00 PM. This was a decrease of .78 MW compared to prior year. Average Load for the month was 17.98 MW. This was a decrease of .19 MW compared to prior year. JV2 ran 13 days and produced 5.35 MWh. The turbines ran 13 days and produced 1580.52 MWh.

Napoleon Power & Light

JULY 2020 STANDBY CALL-OUTS SUMMARY

July 4, 2020:
Electric personnel were dispatched at 4:30 PM to R-208 County Road 16. An outage caused by unknown reason lasted one hour and affected one customer. Personnel refused the cutout.

July 8, 2020:
Electric personnel were dispatched at 5:30 PM to County Road 13 and County Road U. An outage caused by lightning lasted one hour and affected four customers. Personnel repaired primary wire with splices.

July 11, 2020:
Electric personnel were dispatched at 1:30 AM to 8-329 County Road P3. An outage caused by an animal lasted one hour and affected one customer. Personnel replaced 6 amp fuse.

July 11, 2020:
Electric personnel were dispatched at 11:00 AM to Dairy Queen on Scott Street. An outage caused by a broken fuse lasted one hour and affected three customers. Personnel replaced 30

July 19, 2020:
Electric personnel were dispatched at 3:55 PM to Coon Hollow Drive. An outage caused by trees lasted two and a half hours and affected fifteen customers. Personnel removed tree that fell in storm and repaired wires.

July 28, 2020:
Electric personnel were dispatched at 11:16 AM to 234 Yeager Street. An outage caused by an animal lasted one hour and affected seven customers. Personnel removed raccoon, refused door and reenergized.

July 30, 2020:
One employee was dispatched at 3:45 PM to 538 Huddle Road. The callout resulted in a non-outage. Personnel located a line for a water main break.

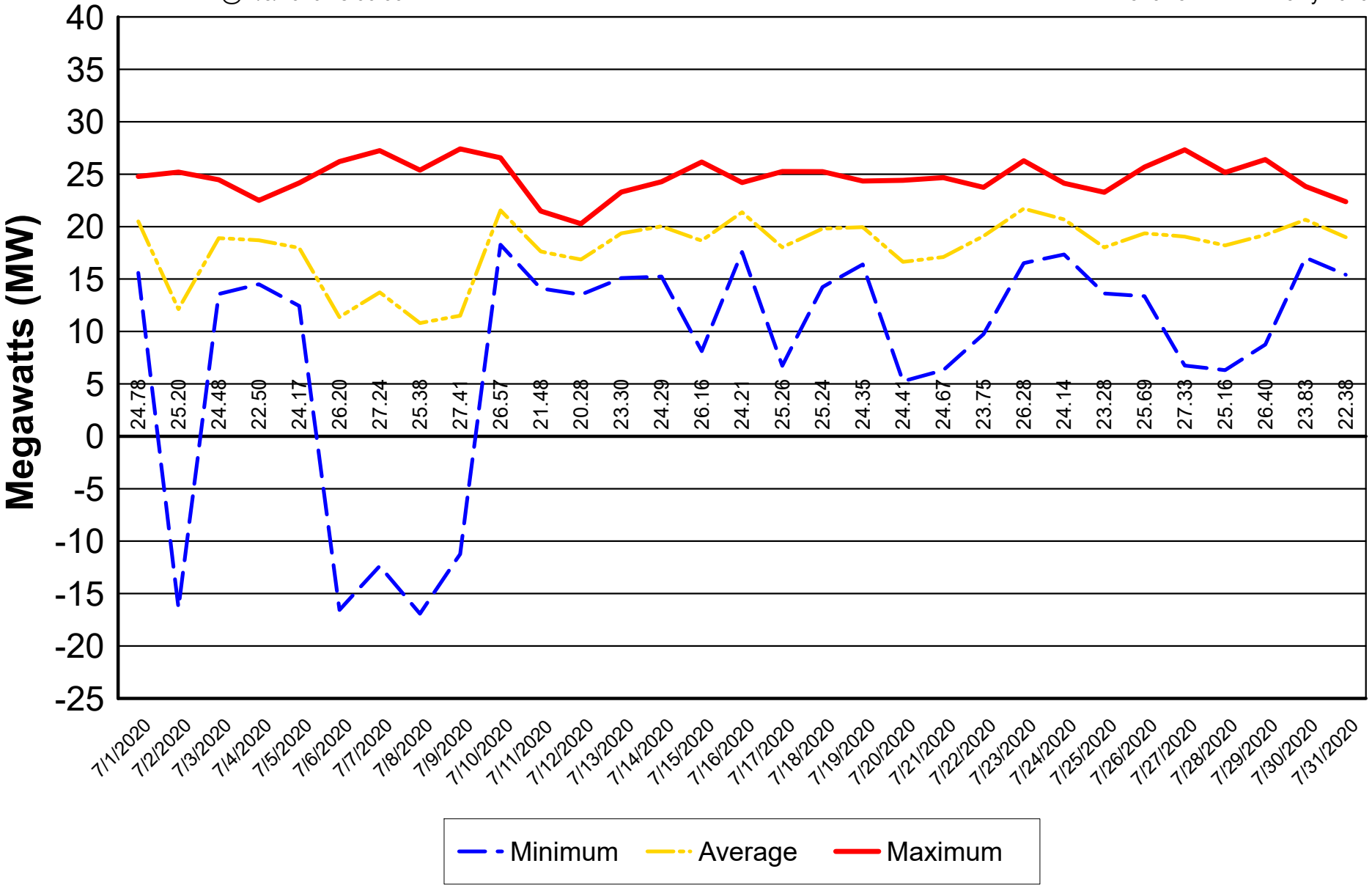
July 31, 2020:
One employee was dispatched at 3:43 AM to 1035 Lynne Avenue. The callout resulted in a non-outage. Personnel located a line for a water main break.

Napoleon Power & Light

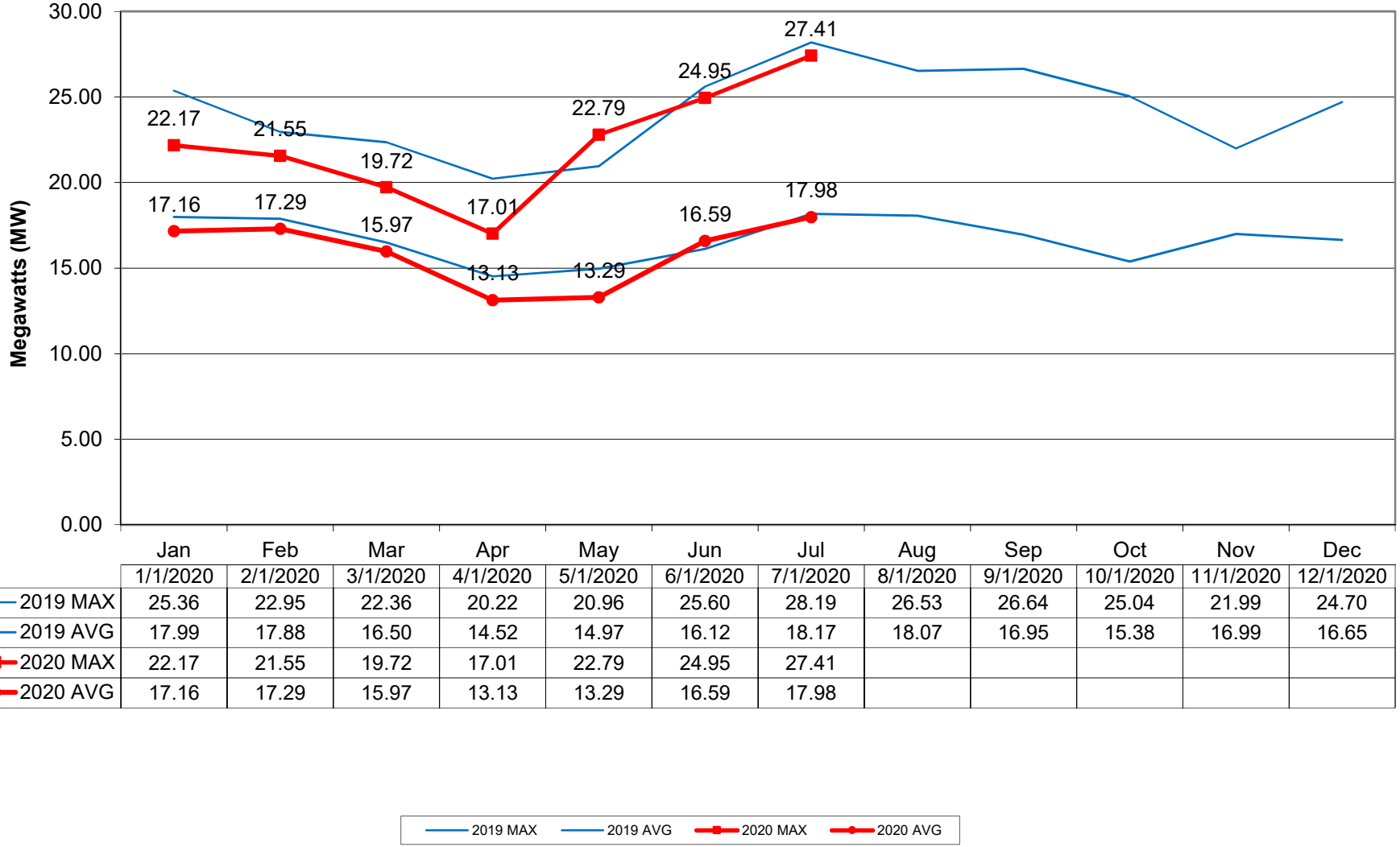
System Load

Peak Load:
27.41 MW @ 7/9/2020 8:00:00PM

Month of: July 2020



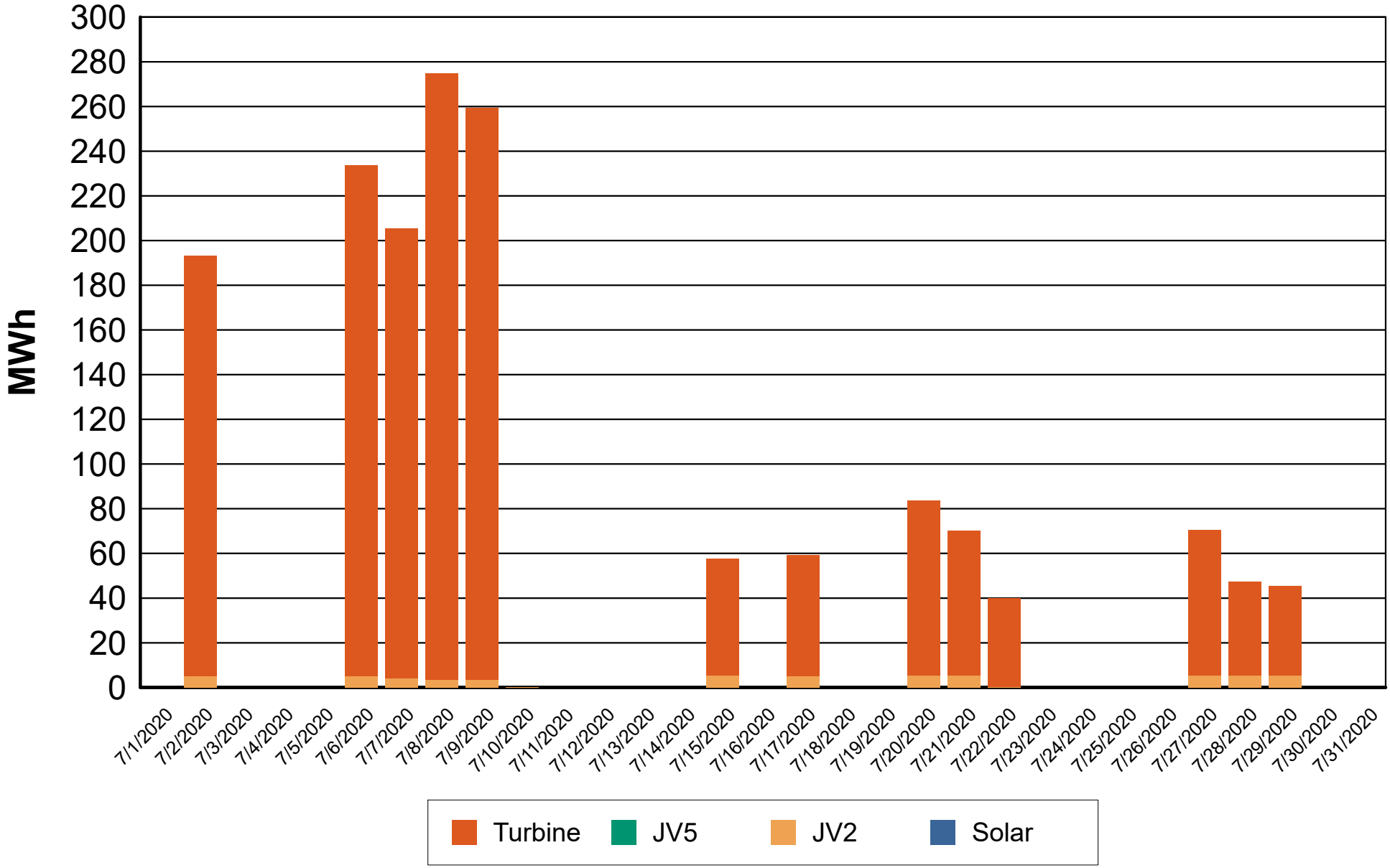
NAPOLEON POWER & LIGHT



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	1/1/2020	2/1/2020	3/1/2020	4/1/2020	5/1/2020	6/1/2020	7/1/2020	8/1/2020	9/1/2020	10/1/2020	11/1/2020	12/1/2020
2019 MAX	25.36	22.95	22.36	20.22	20.96	25.60	28.19	26.53	26.64	25.04	21.99	24.70
2019 AVG	17.99	17.88	16.50	14.52	14.97	16.12	18.17	18.07	16.95	15.38	16.99	16.65
2020 MAX	22.17	21.55	19.72	17.01	22.79	24.95	27.41					
2020 AVG	17.16	17.29	15.97	13.13	13.29	16.59	17.98					

Napoleon Power & Light

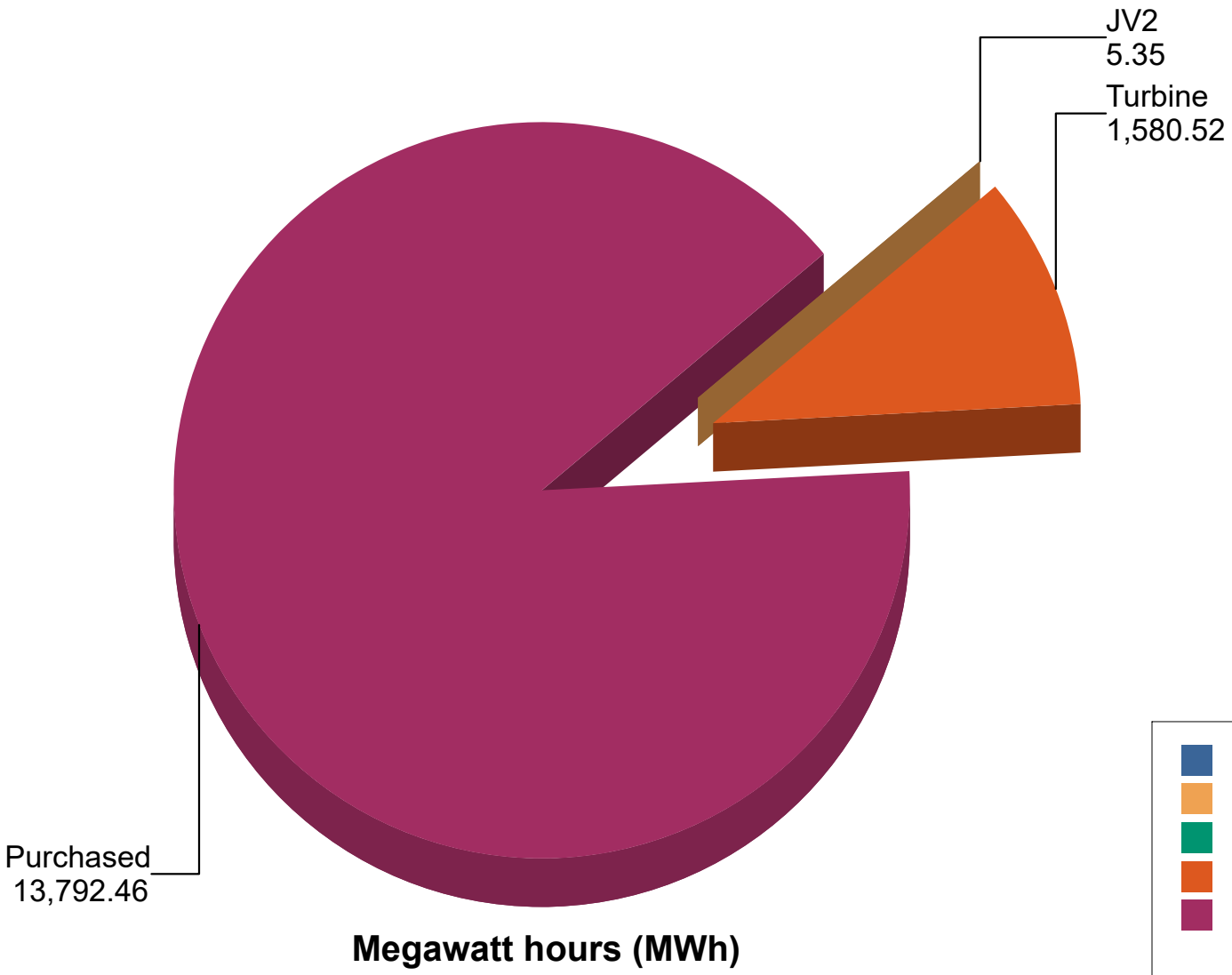
Daily Generation Output



Napoleon Power & Light

Power Portfolio

July 2020



Solar	0.00	0.0%
JV2	5.35	0.0%
JV5	0.00	0.0%
Turbine	1,580.52	10.3%
Purchased	13,792.46	89.7%
Total:	15,378.33	100.0%

City of Napoleon, Ohio

BOARD OF PUBLIC AFFAIRS

Meeting Agenda

Monday, August 10, 2020 at 6:15 pm

Council Chambers, 255 West Riverview Avenue, Napoleon, Ohio
The WebEx link to the meeting will be posted on the City's website at ***www.napoleonohio.com***

JOINT MEETING WITH ELECTRIC COMMITTEE

1. Approval of Minutes: July 13, 2020 (In the absence of any objections or corrections, the Minutes shall stand approved)
2. Review/Approval of the Power Supply Cost Adjustment Factor for August 2020: Power Supply Cost Adjustment (PSCA) 3-month averaged factor $0.02777; JV2 $0.018603
3. Update on Substations
4. Electric Department Reports
5. Any Other Matters to Come Before the Board
6. Adjournment

Roxanne Dietrich

Roxanne Dietrich - Clerk of Council

City of Napoleon, Ohio

BOARD OF PUBLIC AFFAIRS MEETING MINUTES

Monday, July 13, 2020 at 6:15 pm

PRESENT

BOPA Members	Rory Prigge-Acting Chair, Dr. David Cordes
Committee Members	Lori Siclair-Chair, Ross Durham, Joe Bialorucki
City Manager	Joel L. Mazur
City Staff	Greg Kuhlman-Electric Dist. Supt.
Clerk of Council	Roxanne Dietrich
Others	News Media

ABSENT

BOPA Member	Michael J. DeWit

CALL TO ORDER

Acting Chair Prigge called the Board of Public Affairs meeting to order at 6:16 pm.

APPROVAL OF MINUTES

The minutes from the June 8, 2020 meeting were approved as presented.

POWER SUPPLY COST ADJUSTMENT FACTOR FOR JULY 2020: PSCA 3-MONTH AVERAGED FACTOR $0.02841; JV2 $0.018805

Motion: Dr. Cordes Second: Prigge

to approval of the Power Supply Cost Adjustment Factor for July 2020 as PSCA 3-month Averaged Factor $0.02841; JV2 $0.018805

Roll call vote on the above motion:
Yea-Prigge, Dr. Cordes
Nay-
Yea-2, Nay-0 Motion Passed.

Mazur stated July's bill is for May's usage and that was way down but, it was not as low as April's usage on the June bill. We were down 17% for the month. Expect to see that level out and be normal by the end of the year. The annual forecast has us down about 10%. Dr. Cordes asked if we are still long on power? Mazur replied *yes*, the bills are not going down, they are in sync with what our usage is. The three-month rolling average without the $100,00 from the reserve fund would have been at almost .14/kWh. By applying the $100,000, it brought the rate down to .1371/kWh. The $100,000 did not have as much of an impact as we thought it would, but it had some. Our June usage is up from what was forecasted. The cost adjustment factor for April spiked then you add the month of May and even with the $100,000 added, it went up even further. I would suggest another $100,000 application to the June usage for the August month. The way everything is projecting right now, it should put the rate around 13.1 to 13.2 cents per kWh. If you want to get under 13 cents per kWh, I would suggest a range of $160,000-$200,000. We are getting into some pretty heavy usage months and have a pretty high power supply cost adjustment factor going on. This next bill, with the hot weather and air conditioners kicking on, everyone will feel the impact. There would be more impact if we use these dollars now to try to levelize our rates. Dr. Cordes asked does using more power benefit us so we are not as long on power? Mazur said it will bring it down, but the three-month rolling average is what we are looking at. The prior

DRAFT

two months are what is hurting this next month. The calculations are suggesting we apply another $100,000 from the reserve fund to next month's rates. This is what we are projecting will happen. By doing nothing, the rate will be around 13.6 or 13.5 cents per kWh. Applying $100,000 will bring that number closer to last year's number that was $91.04/MWh it should take us to the $92.00 to $93.00 range, that would put us at 13.1 or 13.2 cents per kWh. Prigge asked if there have been any more complaints from businesses? Mazur replied there have not been any additional complaints. Siclair asked what would the cost have been had we not done the $100,000? Mazur replied 14 cents per kWh. Bialorucki asked what is the average household range for kilowatts per month now during the summer months? Mazur said for usage? Kuhlman said it is hard to say because water and utilities are all on the same bill. I would say 600 or 700 kilowatt hours for a family per month. Mazur said it's the air conditioners. Kuhlman said our peak went up to 30 MWh the first of July already. Dr. Cordes asked because of where we are buying power, this should improve after December of this year, will we still be long on power? Mazur said the Morgan Stanley contract is where we purchase power for our remaining requirements, that is a contract that has been around for a while and is our achilles heel right now. When that contract falls off, we will not have the swings in the power supply cost adjustment factor. Prigge asked if any industries are on a peak load formula? Years ago Toledo Edison had peak loading and that determined your bill. I think the City may have had that at one time and maybe got rid of it. I was wondering if industries still have a peak loading formula? Dr. Cordes talked about an incentive for electric cars. Would that help us with being long on power? We have six months, will it make that much of a difference, to have them powered at night during off peak hours. Mazur's concern is they will plug in during peak hours. Our peak was set on Thursday between 4:00 pm -5:00 pm. People come home from work and they would plug them in. Dr. Cordes said they can put it on a timer to draw after 11:00 pm. Mazur said that can be part of the incentive, we want the usage but you do not want to have it at the wrong time. When people would sign up to install their charging systems we would have the ability to link into it during Community Energy Savings Request/peak alert days. That's another topic that is worth revisiting. You want people to use electricity but you don't want them to harm the system. We did set our 1CP peak at 30.214 on Thursday, July 9th and that is lower than last year's 30.35 and even lower than the previous two years that were 33 and 31. If you look at July 8th, our load was actually a little bit higher at 30.24. Our peak is set on the ATSI zone. Kuhlman said each industry has to follow when they have a peak. It is their responsibility to watch their demand because their rate is adjusted by their peak load. They are helped out by doing Efficiency Smart. Mazur said the energy savings peak alerts are starting to resonate. On July 8th, First Energy/the ATSI zone's load was 12,125 MW. Our load was a little higher at 30.224. First Energy's peak hit at 12,465 MW on the following day (July 9th) and we were lower at 30.214. By taking action that difference is going to be about $60,000 into next year's power supply cost. Dr. Cordes how do you communicate? Mazur we run ads on the radio, in the newspaper and social media. Dr. Cordes asked if we have direct access to businesses? Mazur was not sure if we send out anything specific to just industries. $60,000 is about .5% of our rates. That is not dramatic but is enough. Peak alerts are important and they do pay-off. Dr. Cordes-is there a better way to reach people like a mass text like an amber alert. Durham asked if any of the money that we transfer over is recoverable in the CARES Act. Mazur replied, we did look into that and they said we cannot do that. Now if people are struggling with their bills and they want to apply to the City or if we had a program to help people pay their utility bills we could do that but, that's a whole different program altogether. Bialorucki asked how many customers do we have on our electric system? Mazur said 6500 meters is an estimate, it's between 6000 and 6500. There could be multiple meters at some locations. Kuhlman said mainly residential have multiple meters. They put up another building after they have their house and it's easier to go from the pole to the building. Siclair what I heard was, if we do not put more money in this time around, the end result would be the same if not less than what it was this time. Mazur said I would say slightly less maybe .1 to .2 cents per kWh than this month. Keep in mind that

people's bills are going to be higher because the usage is up. It's still an inflated rate for much more usage. Siclair asked what was the reason the rate did not come in under 13 cents? Mazur replied our usage was just too low. We put money from the reserves in that put a dent into the rates. The rate would have been at 13.98 cents per kWh and ended up being 13.7 cents. Bialorucki commented so, if it was 14 cents, my usage for May was 838 and my bill would have been $117.32. Putting in the $100,000 that made my bill $114.80, so a savings of $3.00. When I divide that out by $100,000, the other numbers I used were 14 cents and 13 cents, it came up to 13,263 customers. If we only have between 6,000 and 6,500 meters that means businesses are benefiting a lot more than each residence. Mazur said the businesses are the big users. That is shown through COVID when people stayed home. It's different than water. Our usage is down in electric but, our water usage is actually up. A lot may have to do with people staying home. Siclair added and people are buying pools. Mazur said you have to fill them people are watering their lawns. Generally, water usage goes up when it's hot, it is definitely seasonal. It's evident the businesses benefited from the rate stabilization because their usages are higher than residential. Bialorucki stated if you do $100,000 divided by my savings it would have been $2.50. Then it would be 39,840 users showing there is a very small percentage benefiting from this. When we were talking about the $100,000 and 6,000 households in the area, I was thinking it would be very impactful for everybody. Obviously it's not unless you use a lot. Siclair asked what is the impact to the fund? Mazur said the two funds, electric revenue fund and electric development fund combined are at about 7.5 million dollars. Bialorucki asked are there any other expenses that we know will hit that account this year? Mazur said just our normal budget year, we have encumbrances. At one point I think O'Boyle said there is really 6.7 million dollars but, I think she is factoring in all encumbrances that will be expended. Two years ago the hydro plants kicked in and our power supply costs were actually higher than what we had budgeted for and those two funds equaled about five million dollars. We budgeted enough to make sure that does not happen again. There hasn't been a year other than that year, where we had to dip into these funds to cover expenses. There is nothing on the horizon I can point to that we'll have an expense for. Siclair asked was any of this money going to be used for substation work? Mazur said I think we have $235,000 budgeted for substations. $100,000 is conservative, a lot of people especially businesses would appreciate $100,000. Out of 6.7 million $100,000 is a low percentage and is not anything we cannot make up over time. Durham asked if we are talking about moving $100,000 over, is it possible to position that $100,000 differently? For example, to give every meter a $15 credit. Last month we helped businesses pretty significantly. If we can help each residence at $15 a meter is better than two dollars and some change Bialorucki was talking about. Mazur –yes. I would have to check if it's a meter charge or if it is different for residences, businesses, commercial and industrial users. You can across the board apply to each meter. I didn't do the math on that. Dr. Cordes said you divide $100,000 by how many meters you have. Durham responded using 6,500 meters that would be $15.38 per meter. Dr. Cordes commented industries will say $15 – whew. Durham-we helped them last month. Mazur the motion would be to apply $100,000 from the reserve account to each meter individually. Bialorucki said right now is the perfect time. They have been running their air conditioners and $15 will make a difference. Durham asked if we have the resources to bill that correctly? Mazur replied yes. They do it now with customer charges. The difficult part will be doing the calculation on how many meters we bill for that month and apply a credit to each individual meter across the board. Dr. Cordes-$15 will be more impactful, the people will see it and we will be recognized. We could come up with a hybrid $7.00 per meter with the remaining balance going like last time, we could do a hybrid to help both. Bialorucki said that would be good for next month. Kuhlman commented everybody went through some rough times in March and April when COVID really hit. They were at home feeling the pinch and probably were not using as much. Makes me wonder even if we had we not thrown in the $100,000 in the couple of dollars you noticed on your account probably would have been down anyways because the usage was down at your house. It's rebounding big now. Electric wise you are feeling it in

May and June. Mazur said the general number used in the past is 6,000 meters. Bialorucki asked will you be able to tell us how many are residential and how many are commercial?

Motion: Dr. Cordes Second: Prigge
to take $100,000 from the Electric Reserve Fund and Apply it as a credit to each active meter equally

Roll call vote on the above motion:
Yea-Prigge, Dr. Cordes
Nay-
Yea-2, Nay-0. Motion Passed.

UPDATE ON SUBSTATIONS
Mazur reported AMP needs to be here, we have them scheduled to be here in July but, that could change as there is not much travel in Franklin County right now.

ELECTRIC DEPARTMENT REPORTS
The Electric Department Reports for June 2020 are attached and incorporated herein.

UPDATE ON WWTP PHASE I IMPROVEMENTS PROJECT
Mazur reported Phase 1A – the digester cleaning has been completed. Initially we were going to do the head works first but, decided not to with all the solids coming into the Wastewater Treatment Plant from the Water Treatment Plant. For Phase 1B we decided to do the sludge dewatering. Phase 1C will be the rest of the digester rehab, head works facility, screw pump and other little things that need to happen. Pike informed the committee and board that Phases 1B and 1C will be combined and the project name will now be 2021 Wastewater Treatment Plant Improvements. The name change will help simply things with funding and the paperwork. The digester cleaning is all done, we are still waiting on the final inspection report from Jones and Henry. Moving forward, we will be deciding on some of the major equipment that we want to spec. We went out for a backhoe and prices came back lower than anticipated. The design and drawing work by Jones and Henry is at sixty-percent. We are a little bit closer on the sludge dewatering, there is some electrical that we have not seen yet. By the end of this month we should see 90% on drawings and design for the dewatering portion and probably a lot more information will come through on the actual digesters. We have a good start on the head works building. With equipment list out now, we can proceed on sizing. Mazur noted we hired Adam Hoff from Hoff Consulting as our third party consultant to help with the review of the design. We wanted someone on board that knew the wastewater treatment plant and would be another set of eyes to look at the design. A lot of kinks that we had at the Water Treatment Plant had to do with the design and we are still dealing with some of those. We are spending more to have Adam Hoff on board, but feel it will pay off in the end. Pike strongly agreed with that. We are meeting with Jones & Henry on Wednesday to talk about the electric aspects and controls. We are moving forward slow and steady. Mazur said the Wastewater Plant Rehab is now in our Long Term Control Plan. The added sludge from the Water Treatment Plant coming into the Wastewater Treatment Plant is putting stress on the old equipment. We are treating more solids, almost double and that flipped the dynamics of how we are phasing this project. I have been stressing 12.5 million for this project. We are trying to stick to that number the best we can. We are restarting our rate review with Courtney and Associates. Water production at the plant is up, in June alone it was up 8% in production. Courtney is starting the rate review now as we are comfortable the usage is where it needs to be. Prigge asked since the Water Treatment Plant was tweaked, have you seen a reduction in solids at the Wastewater Treatment Plant? Pike replied *no*. Right now the water is so bad in the river they are sending solids to us because they have to backwash

the filter so often in this type of weather. We have gained 1' of solids/day due to the 90° weather. We need rain to push everything up. The ground is so dry it soaks up what rain we do get. The river level has not changed. We did have one CSO, there was not much there.

REVIEW RATES FOR MULCH

Mazur said we provide a good service and a good product at the Yard Waste Site and people use it a lot. Even people from out-of-town want to use it all the time. There are a lot of people who scoop the mulch or contractors who want to get loads. A lot of people use it and by end of this spring, our mulch was gone. We do deliver mulch to people outside of the city limits and they pay a fee for this service. The Yard Waste Site is not a composting facility. We do not want it to be a composting facility as it would fall under other rules and regulations from the OhioEPA. The Yard Waste Site is a transfer station. We produce the product and it leaves the site relatively quick. The demand is so great we have a policy we only do deliveries on Fridays. We do have substantial outside usage that we are keeping an eye on. We have had a lot of discussion on how to address this as we do want to continue to provide service. Rathge noted basically the ordinance that was passed after the county quit paying us, was for use of the drop-off site it did not address the product going out. We see a lot more people picking up their own and we cannot control that when someone is not there all the time. The biggest thing I see we can do is have a permit for residential at $60 and commercial would be $200. The permit would be in place for use of mulch products. Hopefully that would slow the usage down and/or we can recoup some of the costs. We charge $15 for an operator and dump truck per hour. We would have to do four to five loads in an hour to recoup our costs and that is not possible. We have been out of mulch for a month. We have a good product, people want it and it puts us in competition with commercial vendors in the area. We have to get rid of it but, be careful what you wish for. Mazur explained the yard waste site policy change in 2018 that was adopted said no person or business entity outside of the corporation limits shall utilize the city yard waste site without written approval of the City Manager, that's any use. Originally, we focused on dumping at the site but this includes any use at the site and taking from the site. There are people from the outside using the site. We do spot checks at the Police Department. People are asking about it. Without a permit, it is illegal to use if you live outside of the corporation limits. Rathge said we did a comparison on what it costs to get mulch in different places. We are way below what the industry charges for mulch. It is not asking much to have people outside of the corporation limits to pay an annual non-resident or contractor fees for use of the site. Maybe that will help curb some of the over-usage of the mulch pile we are producing. Mazur said what bothers me is we provide a good service but the residents are not realizing it as much as the people outside the city limits are realizing it. The pie charts from 2019 and 2020 you can see the biggest portions are being loaded out into personal vehicles or us hauling mulch out into the county. It's a huge percentage right now. We are not checking for that permit. Siclair said it's not that it has to be more expensive, the policy has to be used. Rathge said we have been on the other side where had so much mulch we could not get rid of it. It's a double edged sword. The vendor does a nice job and makes a better product and now the demand is up. Siclair said when I ordered they asked for my address. Rathge said the only way we can police is when people call to schedule with us for Friday deliveries, we need to start checking and make sure they have a permit. I want wording in there to make sure is it okay and that we are doing things in the right way. Siclair said I agree but, I thought we had done that, so that is my confusion. We are not asking for an increase in the cost of a permit. Mazur – *no*. We have to get rid of the mulch, we don't want to go overboard, we are not having any trouble getting rid of the mulch now. The problem is we ran out of mulch in the spring and the service is no longer there. The rule is written that non-resident and non-resident businesses can use if they have a permit. It was not really clear at the time as it was more focused on dumping than mulch pickup. On the other side, we have a pile of chips out there that we need to get rid of. Siclair said I don't know if you can contradict yourself. Rathge noted there

have been a couple of contractors that used chips for driveways or when they come in and grind we have them blend it in slowly as they double grind the mulch. The wood chips come in faster than we can get rid of it. Mazur noted if someone is willing to take our junk, it's a big mountain of chips we don't have a use for and we have to get rid of them. It does sound contradictory but, we have to get rid of them. Comadoll asked how many tree trimming outfits have a permit? Mazur said last year we had $2,800 worth of permits. Comadoll said he sees contractors going in there all the time. Rathge said if they are working for a citizen and delivering to that citizen is where the problem comes in. I'm looking for the magic answer is why I'm coming to you. You can't make a contractor that is working for a citizen in town pay $200. Mazur said the way the rule is written the onus is on as the user to provide documentation where the material is coming from. The way it is written, the person using the mulch has to show it is coming from a resident. Mazur said what it comes down to is, policing at this point. When you look at the ordinance, it does not specifically say but addresses the policy adopted, that people can use if they get a permit. I want to make it clear, for now no action is needed. Siclair noted I can see where citizens think the policy is for the dumping portion and not pick up. Rathge said we will just start asking when they call and make an appointment if they have a permit. Mazur said we get stumps in that we cannot process. Rathge said that's another problem we have now. There must be disease in pine trees as we are getting a lot of these and no one want to use them for fire wood. There are three or four logs laying there that we cannot do anything with. Mazur commented every year we deal with this it goes into the cost of the operation. The sanitation fund is doing fine. Prigge said what it comes down to is we have to start policing. Mazur said the unencumbered balance in the sanitation fund is 1.4 million dollars, that is a little bit down. There are no large capital items for this year. I will follow-up with the Law Director, if we need to adjust the ordinance we will take that to Council. This became an issue when people wanted to use the much and it was not there. Bialorucki asked do you think it was because of COVID and more people were home? Siclair noted there were a lot more home improvements projects. Dr. Cordes asked about having a camera that records people's license plates that come in and out?

UNLIMITED PICKUP RATES

Mazur reported every year we have unlimited pickup and our numbers are increasing, we are only talking about tires. Rathge explained, the county landfill has raised their rates twice in the last five to six years. The current rate is ten cents per pound and that is where this discussion is coming from. Mazur said look at the rates we charge vs. what we are being charged. At this last pickup, we saw double the amount of tires. This is a small item, but we saw an anomaly when the rates went up and now we are picking up more tires. These are the spring cleanup numbers. In 2020 more people were home and doing home improvements projects consequently, the tonnage for the spring cleanup was up. The labor costs are up as we did not have CCNO workers and the scrap metal price is way down. We are recommending to change the number of tags required for disposal of tires. Prigge commented that is still a very reasonable rate. I do not have problem raising the rate to the number of tags recommended.

Motion: Prigge Second: Dr. Cordes
to recommend raising the rate for number of tags required for disposal of tires as proposed

Siclair asked who is disposing of tires? I did not see any in front of homes. Mazur commented they were out there and are the number one breeding ground for mosquitos. Comadoll said I noticed the number of tires at a couple of places. I would like to bring this in front of the whole Council and see what is on their mind. Working with tires is a pain, if can offset our costs.
Prigge withdrew his motion.

Dr. Cordes asked are we causing our problem by being so cheap? I saw some and thought like what is going on that there's that many tires at that house. Mazur said we want to provide a service for the customers but, we do not want to create a situation where it is abused. The annual spring costs are going up and the tonnage is up thus making the cost of labor go up.

ADJOURNMENT

Motion: Prigge Second: Dr. Cordes
to adjourn the Board of Public Affairs meeting at 8:15 pm

Roll call vote on the above motion:
Yea-Prigge, Dr. Cordes
Nay-
Yea-2, Nay-0. Motion Passed.

Approved

August 10, 2020 _____
Mike DeWit - Chair

DRAFT

City of Napoleon, Ohio

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Memorandum

To:	City Council, Mayor, City Manager, City Law Director, City Finance Director, Department Supervisors, News media
From:	Roxanne Dietrich, Clerk of Council
Date:	August 7, 2020
Subject:	Water, Sewer, Refuse, Recycling and Litter Committee – Cancellation

The regularly scheduled meeting of the ***Water, Sewer, Refuse, Recycling and Litter Committee*** for Monday, August 10, 2020 at 7:00 pm has been CANCELED at the direction of the Committee Chair.

PLAN VIEW | ELEVATION

- BV - BUTTERFLY VALVE
- MAG / FLOW METER
- PV - PLUG VALVE
- PV - PLUG VALVE - GEAR OPERATED
- PV - PLUG VALVE - LEVER OPERATED
- MV - MUD VALVE
- CV - CHECK VALVE
- ARV - AIR RELEASE VALVE

VALVE SYMBOL LEGEND

- STEEL
- GRAVEL FILL
- EARTH
- BLOCK
- CONCRETE
- SPECIAL BACKFILL
- EXISTING MATERIAL
- MUD MAT
- RIGID INSULATION
- ROCK
- BRICK
- CHECKERED PLATE
- GRATING

STRUCTURAL LEGEND

1 / A101 — INTERIOR ELEVATION MARKER

1 A101 SIM — SECTION MARKER

DELINEATION OF SECTIONS

1 A101 SIM — DETAIL CALL OUT IN PLAN OR SECTION

AREA TO BE DETAILED

DETAILED NUMBER/LETTER

A — DETAIL SAME SHEET MARKER

DELINEATION OF BLOW - UP DETAILS

D — DOOR TAG

W — WINDOW TAG

A-0.01 — SHEET ID

SHEET NUMBER

DISCIPLINE PREFIX

CALLED NORTH — CALLED NORTH ARROW

VIEW/DRAWING NAME — DRAWING TITLE

SCALE: 1/8" = 1'-0"

1 A101 VIEW/DRAWING NAME — SECTION OR DETAIL TITLE

SCALE: 1/8" = 1'-0"

TOPOGRAPHY LEGEND

TOPOGRAPHY LINES:

- CENTER LINE
- FENCE LINE
- PROPERTY LINE
- PERMANENT EASEMENT
- CONSTRUCTION EASEMENT
- SILT FENCE

SYMBOLS:

- SA — MANHOLE (ALPHA DESIGNATION REFERS TO UTILITY TYPE, "U" IS "UNKNOWN" TYPE)
- PP — POWER POLE OR TELEPHONE POLE
- LLP — LIGHT POLE
- FH, YH — FIRE HYDRANT OR YARD HYDRANT
- VALVE
- CO — CLEAN OUT
- IP — IRON PIN (OR LABELED POST, MARKER ETC.)
- CATCH BASINS
- BORING B-2 — SOIL BORING
- ASPHALT PAVEMENT
- 4" CONCRETE SIDEWALK
- 72 — Control Point
- 1031 — Benchmark

NOTES:

1. ACCURACY OF EXISTING ELEVATIONS AND DIMENSIONS IS NOT GUARANTEED. FIELD VERIFY BEFORE CONSTRUCTION.
2. ALL NOTES ON THE DRAWINGS BEAR THE SAME IMPORTANCE. SOME NOTES AND DIMENSIONS ARE BOLD TO AID IN READING THE DRAWINGS IN AREAS OF HIGH GRAPHIC DENSITY.
3. VALVE AND EQUIPMENT SYMBOLS SHOWN ARE ILLUSTRATIVE AND MAY NOT APPEAR AS THE ACTUAL VALVE REQUIRED TO BE USED IN SPECIFICATIONS.
4. SCHEDULES ARE NOT GEED TO BE COMPLETE. ALL ITEMS SHOWN ON DRAWINGS OR SPECIFIED SHALL BE FURNISHED AND INSTALLED WHETHER LISTED IN SCHEDULE OR NOT.

NOTES:

1. 100 YEAR FLOOD ELEVATION 656.6 (NAVD 88)
2. PLANT BENCHMARK TOP OF RECIRCULATION CHAMBER ELEVATION 654.0 (PLANT DATUM HISTORIC DRAWINGS) OR 653.3 (NAVD 88)
3. ELEVATIONS SHOWN ON THESE DRAWINGS ARE IN NAVD 88, U.N.O.

YARD PIPING LEGEND

UTILITY LINES:

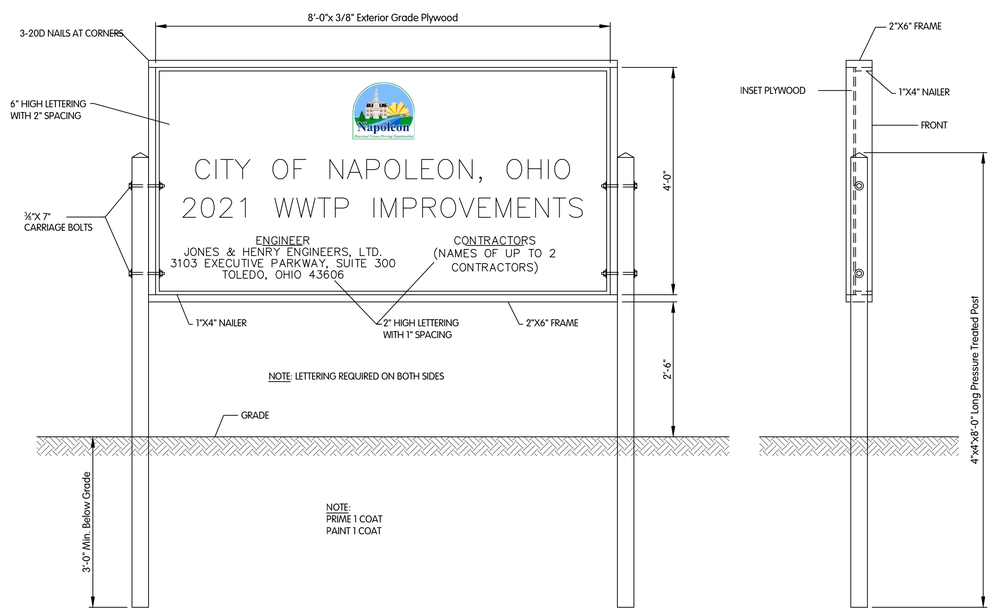
AA	AERATION AIR
AL	ALUM
BTE	BIOTOWER EFFLUENT
C	CABLE (UNDERGROUND)*
CA	COMPRESSED AIR
CL	CHLORINE SOLUTION
CO	COMBINED SEWER
CW	COLD CITY WATER
CLG	CHLORINE GAS
DG	DIGESTER GAS
DS	DIGESTED SLUDGE
DW	DILUTION WATER
EW	EFFLUENT WATER
E	ELECTRICAL (UNDERGROUND)*
FC	FERRIC/FERROUS CHLORIDE
FD	FOUNDATION DRAIN
FE	FINAL EFFLUENT
FO	FIBER OPTIC
FU	FUEL OIL
G	GAS LINE (OFF SITE)
GR	GREASE
IC	IRON CHLORIDE
HW	HOT CITY WATER
ML	MIXED LIQUOR
NG	NATURAL GAS
P	POLYMER
PE	PRIMARY EFFLUENT
PS	PRIMARY SLUDGE
PW	PLANT WATER
RAS	RETURN ACTIVATED SLUDGE
RD	ROOF DRAIN
RS	RAW SEWAGE
SA	SANITARY SEWER
SB	SECONDARY BYPASS
SC	SCUM
SE	SECONDARY EFFLUENT
S	SIGNAL (UNDERGROUND)*
SPA	SPARE
ST	STORM SEWER
SM	STEAM
SP	DIGESTER SUPERNATANT
TD	TANK DRAIN
T	TELEPHONE (UNDERGROUND)*
TE	THICKENER EFFLUENT
TS	THICKENED SLUDGE
WAS	WASTE ACTIVATED SLUDGE
ST54	LARGE DIAMETER LINES (ANY TYPE)
	UTILITY LINE TO BE REMOVED
	UTILITY LINE TO BE ABANDONED
SAB	NEW UTILITY LINE
54" SANITARY SEWER	LARGE DIAMETER NEW UTILITY LINE

ALPHA DESIGNATION REFERS TO UTILITY TYPE, NUMERICAL DESIGNATION REFERS TO PIPE NOMINAL DIAMETER. LINES WITH NO NUMERICAL DESIGNATION ARE OF UNKNOWN SIZE.

* AERIAL LINES, IF SHOWN, ARE DESIGNATED WITH LOWER CASE LETTERS

MITIGATIVE MEASURES

1. ACCESS FOR EMERGENCY VEHICLES MUST BE PROVIDED AT ALL TIMES
2. IF DURING THE COURSE OF CONSTRUCTION, EVIDENCE OF DEPOSITS OF HISTORICAL AND/OR ARCHAEOLOGICAL INTEREST IS FOUND, THE OPERATOR WILL CEASE OPERATIONS AND NOTIFY THE OWNER. THE OWNER WILL THEN NOTIFY THE STATE HISTORICAL PRESERVATION OFFICE. NO FURTHER DISTURBANCE OF THE DEPOSITS WILL OCCUR UNTIL AN OFFICIAL FROM THE STATE OFFICE HAS SURVEYED THE FIND, MADE A DETERMINATION OF THE VALUE OF THE FIND AND EFFECT OF CONTINUED CONSTRUCTION DISTURBANCES, AND SUBMITTED THE RESULTS OF THE DETERMINATION TO THE OWNER.
3. ANY SITE PREPARATION THAT WILL INVOLVE EARTH MOVING (SUCH AS CLEARING AND GRUBBING) WILL NOT BEGIN MORE THAN TWO WEEKS IN ADVANCE OF THE START OF EXCAVATION. THE PURPOSE OF THIS RESTRICTION IS TO PREVENT THE EXISTENCE OF LARGE AREAS OF EXPOSED SOILS FOR AN EXTENDED PERIOD OF TIME WHEN CONSTRUCTION IN NOT PROCEEDING.
4. ALL DISTURBED VEGETATION IS TO BE RESEEDED AS PART OF RESTORATION, UNLESS THE AREA WILL BE PAVED OR OCCUPIED BY NEW COLLECTION OR TREATMENT FACILITIES.
5. ALL MOTORIZED CONSTRUCTION EQUIPMENT WILL BE EQUIPPED WITH PROPER EMISSION CONTROL EQUIPMENT, MUFFLERS, AND INTAKE SILENCERS, AS APPROPRIATE TO MINIMIZE NOISE POLLUTION.
6. ALL CONSTRUCTION WILL TAKE PLACE DURING NORMAL WEEKDAY, DAYLIGHT WORKING HOURS, NOT ON WEEKEND OR HOLIDAYS, UNLESS NECESSARY TO RESOLVE AN EMERGENCY SITUATION.
7. NO MANHOLE OR SEWER EXCAVATION WILL BE LEFT OPEN AWAITING CONNECTION OR REMOVAL AT A LATER DATE BY THE CONTRACTOR'S FORCES, OR OTHERS, BUT SHALL BE TEMPORARILY BACKFILLED AND RESURFACED, IF APPLICABLE, WITH A TEMPORARY PAVEMENT PASSABLE TO TRAFFIC.
8. WHEN TEMPORARY DIVERSION OF WASTEWATER FLOWS IS NECESSARY TO COMPLETE CONSTRUCTION, FLOW DIVERSION DEVICES WILL BE WATERTIGHT. DISCHARGE OF FLOWS DIRECTLY INTO THE ENVIRONMENT, RATHER THAN INTO AN APPROPRIATE TREATMENT OR COLLECTION FACILITY, IS PROHIBITED.
9. ONLY WATER OR CALCIUM CHLORIDE WILL BE USED AS DUST PALLIATIVE.
10. STOCKPILED TOPSOIL AND FILL MATERIAL SHALL BE PROTECTED WITH EROSION CONTROL BARRIERS OR TEMPORARY SEEDING.
11. NO FILL, TOPSOIL, OR HEAVY EQUIPMENT SHALL BE STORED WITHIN 200 FEET OF A STREAM BANK OR WITHIN THE DRIPLINE OF A TREED AREA.
12. IF, DUE TO WEATHER, FINAL GRADING CANNOT BE ACCOMPLISHED IMMEDIATELY, MULCHING AND TEMPORARY SEEDING, IF FEASIBLE, OR SOME TYPE OF TEMPORARY EROSION CONTROL MEASURES, MUST BE USED WITHIN 30 DAYS UNTIL LONG-TERM RESTORATION CAN OCCUR.
13. EXCESS SOIL THAT IS STOCKPILED MUST BE EITHER REMOVED OR REGRADED WITHIN 15 DAYS OF THE COMPLETION OF CONSTRUCTION.



FRONT ELEVATION

SIDE ELEVATION

PROJECT JOB SIGN DETAIL

¾"=1'-0"

PIPING ABBREVIATIONS

MATERIAL

ABS	ABS ACRYLONITRILE-BUTADIENE-STYRENE	HDPE	HIGH DENSITY POLYETHYLENE
ABSC	ABS COMPOSITE SEWER PIPE (TRUSS PIPE)	PCP	PLAIN CONCRETE PIPE
BSP	BLACK STEEL PIPE	PE	POLYETHYLENE
CIP	CAST IRON PIPE	PP	POLYPROPYLENE
CISP	CAST IRON SOIL PIPE	PPVC	PERFORATED POLYVINYL CHLORIDE PIPE
CMP	CORRUGATED METAL PIPE	PVC	POLYVINYL CHLORIDE PIPE
CPP	CONCRETE PRESSURE PIPE	PVCP	PERFORATED VITRIFIED CLAY PIPE
CPT	CORRUGATED POLYETHYLENE TUBING	PVDF	POLYVINYLIDENE FLUORIDE (KYNAR)
CPVC	CHLORINATED POLYVINYL CHLORIDE PIPE	RCP	REINFORCED CONCRETE PIPE
CU	COPPER TUBING OR PIPING	SP	STEEL PIPE
DIP	DUCTILE IRON PIPE	SSP	STAINLESS STEEL PIPE
FRP	FIBERGLASS REINFORCED PIPE	SWS	SPIRAL WELDED STEEL
GLDIP	GLASS-LINED DUCTILE IRON PIPE	UPVC	UNPLASTICIZED POLYVINYL CHLORIDE PIPE
GSP	GALVANIZED STEEL PIPE	VCP	VITRIFIED CLAY PIPE

No.	Date	Revision	Chkd. By
.	.	.	.

Plans Prepared By:

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Fluid thinking ...
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Napoleon — Manufacturing Power Opportunities

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Napoleon, Ohio 43545
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2021 WWTP Improvements General Legend

Created: 7/27/20	Status: 90%	Scale: None	
Drawn: RHN	Approved: DWM		
Drawing Name: 7550003G08.DWG			

THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE

G-2

TOL-7550003G08-LEGEND
7/31/2020 6:32 AM - RNEUMAN
8/4/2020 1:28 PM

MANHOLE SCHEDULE					
NO.	NORTHING	EASTING	TYPE	CASTING EL.	PIPE DATA
5-1	633,644.09	1,525,365.34	TYPE II 5' DIA.	660.8	16" E INV. EL. 640.87 16" W INV. EL. 640.87 8" N INV. EL. 640.85 12" W INV. EL. 640.80 12" N INV. EL. 656.54
5-2	633,688.31	1,525,382.03	TYPE I 4' DIA.	660.7	8" E INV. EL. 654.47 8" S INV. EL. 654.46
5-3	633,484.39	1,525,397.44	TYPE I 4' DIA. WITH VALVE	653.4	8" W INV. EL. 652.20
5-4	633,241.96	1,525,489.40	TYPE I 4' DIA.	651.0	6" W INV. EL. 648.10

EXISTING STRUCTURE DATA		
NAME	TYPE	DATA
2395	SANITARY MANHOLE	CASTING EL. 651.51 48" SW INV. EL. 640.16 48" NE INV. EL. 640.16
5237	SANITARY MANHOLE	CASTING EL. 655.06 12" E INV. EL. 650.00 12" N INV. EL. 649.00
5299	CATCH BASIN	CASTING EL. 650.28 8" SE INV. EL. 647.18
5300	STORM MANHOLE	CASTING EL. 650.75 8" NW INV. EL. 646.25 8" E INV. EL. 645.35 15" E INV. EL. 645.35
5360	SANITARY MANHOLE	CASTING EL. 651.64 6" E INV. EL. 641.64 6" N INV. EL. 640.54 6" NW INV. EL. 645.54 6" W INV. EL. 640.54 8" SW INV. EL. 640.54
5361	CATCH BASIN	CASTING EL. 651.06 8" W INV. EL. 647.76
5417	STORM MANHOLE	CASTING EL. 650.80 8" W INV. EL. 645.46 8" E INV. EL. 645.46 8" NE INV. EL. 645.38
5418	CATCH BASIN	CASTING EL. 651.04 8" NW INV. EL. 646.53 8" E INV. EL. 646.44
5437	CATCH BASIN	CASTING EL. 650.53 8" E INV. EL. 646.53 8" N INV. EL. 646.53 8" SW INV. EL. 646.53 8" SE INV. EL. 646.53 8" NE INV. EL. 644.90
5491	CATCH BASIN	CASTING EL. 650.94 8" S INV. EL. 646.69
5703	STORM MANHOLE	CASTING EL. 650.85 6" N INV. EL. 646.05 8" E INV. EL. 646.15 6" S INV. EL. 646.05
5794	CATCH BASIN	CASTING EL. 650.02 8" SE INV. EL. 646.32
5803	SANITARY MANHOLE	CASTING EL. 650.80 8" SW INV. EL. 645.23 12" E INV. EL. 644.90 12" SW INV. EL. 644.90 8" NE INV. EL. 646.60
5891	CATCH BASIN	CASTING EL. 651.99 8" W INV. EL. 641.89 8" E INV. EL. 641.99
6246	STORM MANHOLE	CASTING EL. 651.07 6" S INV. EL. 646.57 8" W INV. EL. 646.47
6250	CATCH BASIN	CASTING EL. 650.85 8" W INV. EL. 645.45 15" E INV. EL. 645.03
8003	CATCH BASIN	CASTING EL. 654.98 8" NW INV. EL. 652.13
8013	STORM MANHOLE	CASTING EL. 654.66 8" NE INV. EL. 649.66 8" SW INV. EL. 649.46 12" W INV. EL. 649.46
8037	CATCH BASIN	CASTING EL. 650.37 12" NW INV. EL. 646.97
8043	CATCH BASIN	CASTING EL. 655.05 8" SE INV. EL. 651.90

EXISTING STRUCTURE DATA		
NAME	TYPE	DATA
8067	CATCH BASIN	CASTING EL. 650.02 18" SW INV. EL. 645.12 12" SE INV. EL. 645.12 18" NE INV. EL. 645.22
8068	SANITARY MANHOLE	CASTING EL. 650.19 48" SW INV. EL. 640.16 14" N INV. EL. 644.56 48" SE INV. EL. 639.66
8069	CATCH BASIN	CASTING EL. 650.57 18" SW INV. EL. 646.27 12" SE INV. EL. 647.07 18" NE INV. EL. 646.22
8072	STORM MANHOLE	CASTING EL. 653.32 12" SE INV. EL. 650.22 12" E INV. EL. 649.22 18" NE INV. EL. 646.42
8260	CATCH BASIN	CASTING EL. 657.00 12" SE INV. EL. 653.00 12" S INV. EL. 645.65
8261	STORM MANHOLE	CASTING EL. 657.52 12" N INV. EL. 642.52 12" SW INV. EL. 641.52
8275	STORM MANHOLE	CASTING EL. 657.25 4" NE INV. EL. 649.55 12" NE INV. EL. 640.25 42" W INV. EL. 639.15 42" E INV. EL. 639.05
8301	CATCH BASIN	CASTING EL. 656.36 12" NW INV. EL. 653.16
8526	CATCH BASIN	CASTING EL. 649.50 12" NW INV. EL. 646.60
8530	SANITARY MANHOLE	CASTING EL. 650.75 48" NW INV. EL. 639.75 48" SE INV. EL. 639.65
8793	CATCH BASIN	CASTING EL. 650.27 8" S INV. EL. 647.47
8794	STORM MANHOLE	CASTING EL. 650.79 24" W INV. EL. 643.39 24" N INV. EL. 643.29 24" E INV. EL. 643.29
8795	STORM MANHOLE	CASTING EL. 651.27 24" W INV. EL. 646.03 24" NE INV. EL. 643.67 24" S INV. EL. 643.67
8890	STORM MANHOLE	CASTING EL. 653.00 24" S INV. EL. 638.57 30" N INV. EL. 638.57 30" W INV. EL. 638.57
8927	CATCH BASIN	CASTING EL. 650.19 8" S INV. EL. 646.56
8928	CATCH BASIN	CASTING EL. 650.59 4" NW INV. EL. 646.49 24" S INV. EL. 638.54 8" W INV. EL. 641.99 30" N INV. EL. 638.59 15" E INV. EL. 638.29
8930	STORM MANHOLE	CASTING EL. 651.83 24" W INV. EL. 643.23 24" S INV. EL. 643.18 24" N INV. EL. 643.03
8936	STORM MANHOLE	CASTING EL. 651.48 18" SE INV. EL. 643.48 15" SW INV. EL. 643.58 8" W INV. EL. 643.48 12" W INV. EL. 643.58 8" N INV. EL. 646.18 24" N INV. EL. 643.05
8952	STORM MANHOLE	CASTING EL. 651.14 24" S INV. EL. 638.14 24" SE INV. EL. 646.09 15" NE INV. EL. 643.14 24" N INV. EL. 638.24
8952A	STORM MANHOLE	CASTING EL. 651.51 24" NW INV. EL. 646.46 4" W INV. EL. 648.16 4" SW INV. EL. 648.16

EXISTING STRUCTURE DATA		
NAME	TYPE	DATA
8953	STORM MANHOLE	CASTING EL. 653.04 18" S INV. EL. 644.23 18" NW INV. EL. 644.23
8990	CATCH BASIN	CASTING EL. 650.52 8" W INV. EL. 647.27
9009	SANITARY MANHOLE	CASTING EL. 650.97 3" S INV. EL. 647.80 3" W INV. EL. 646.35
9022	STORM MANHOLE	CASTING EL. 650.77 8" N INV. EL. 645.47 8" S INV. EL. 645.47 8" SW INV. EL. 645.37 12" E INV. EL. 644.87
9023	CATCH BASIN	CASTING EL. 650.61 8" N INV. EL. 647.41
9060	CATCH BASIN	CASTING EL. 650.18 8" E INV. EL. 648.28
9107	CATCH BASIN	CASTING EL. 650.27 8" SE INV. EL. 648.07 8" NE INV. EL. 646.97
9115	CATCH BASIN	CASTING EL. 650.40 8" NW INV. EL. 648.55
9116	STORM MANHOLE	CASTING EL. 650.85 18" S INV. EL. 644.35 8" SW INV. EL. 645.45 15" W INV. EL. 644.55 8" NW INV. EL. 645.45 18" N INV. EL. 644.35
9117	CATCH BASIN	CASTING EL. 650.13 8" SE INV. EL. 646.73
9168	CATCH BASIN	CASTING EL. 649.75 8" NW INV. EL. 646.86
9175	STORM MANHOLE	CASTING EL. 650.43 15" W INV. EL. 645.03 8" SE INV. EL. 646.86 18" N INV. EL. 639.25 6" SW INV. EL. 645.97
9176	SANITARY MANHOLE	CASTING EL. 650.35 12" W INV. EL. 645.87 8" NW INV. EL. 646.15
9177	CATCH BASIN	CASTING EL. 650.17 8" SE INV. EL. 646.77

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255 West Riverview Avenue
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Fax: (419) 599-8393

2021
WWTP Improvements
General
Underground Structur Data

Created: 7/27/20
Status: 90%
Scale: NONE
Drawn: RHN
Approved: DWM
Drawing Name: 7550003G11.DWG

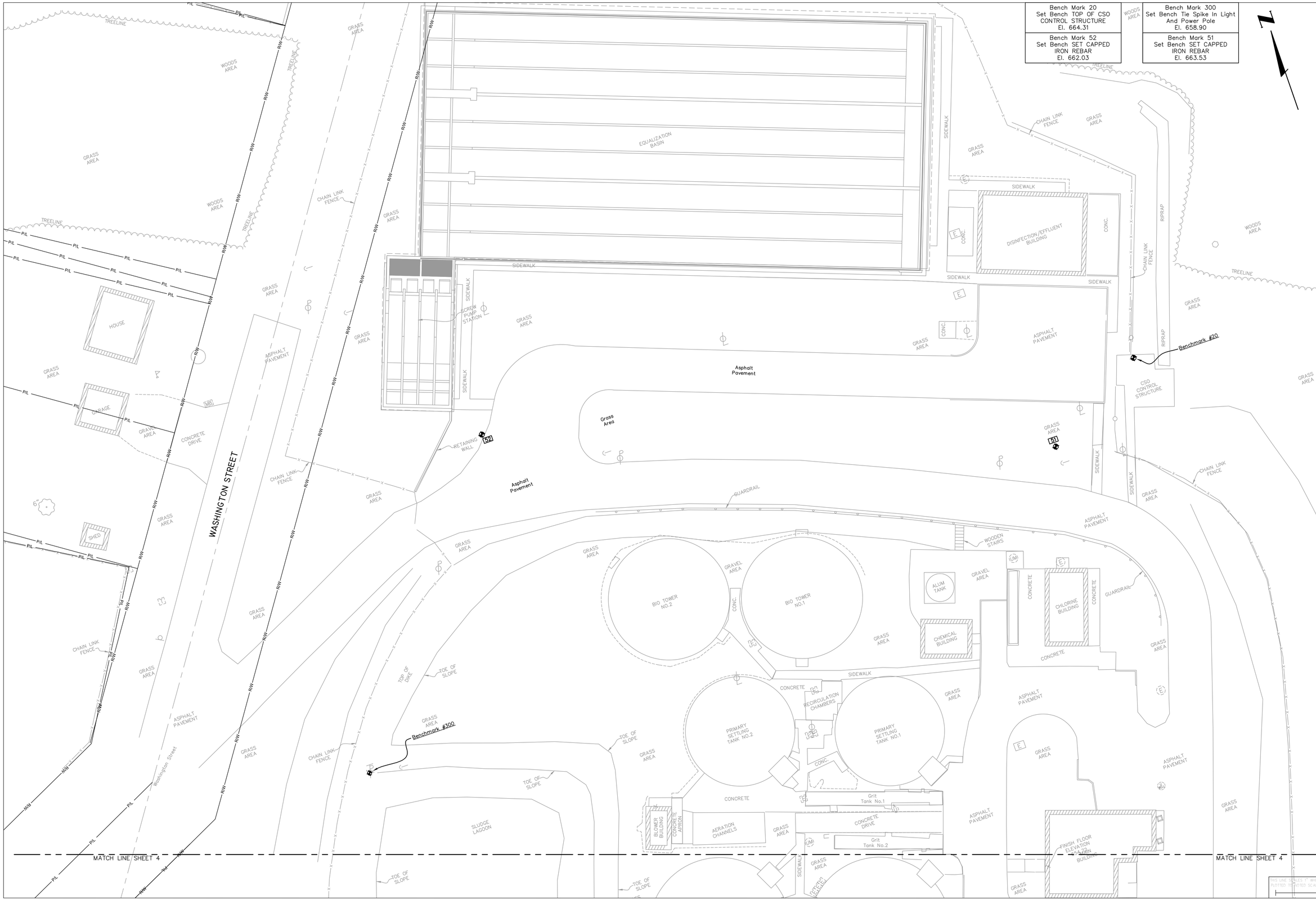
THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE

G-3
Sheet 3 Of 176

TOL-7550003GI-EXISTING STRUCTURAL DATA
7/24/2020 2:56 PM - RNEUMAN
8/4/2020 1:29 PM

Bench Mark 20
Set Bench TOP OF CSO CONTROL STRUCTURE El. 664.31
Bench Mark 52 Set Bench SET CAPPED IRON REBAR El. 662.03

Bench Mark 300
Set Bench Tie Spike In Light And Power Pole El. 658.90
Bench Mark 51 Set Bench SET CAPPED IRON REBAR El. 663.53



No.	Date	Revision	Chkd. By
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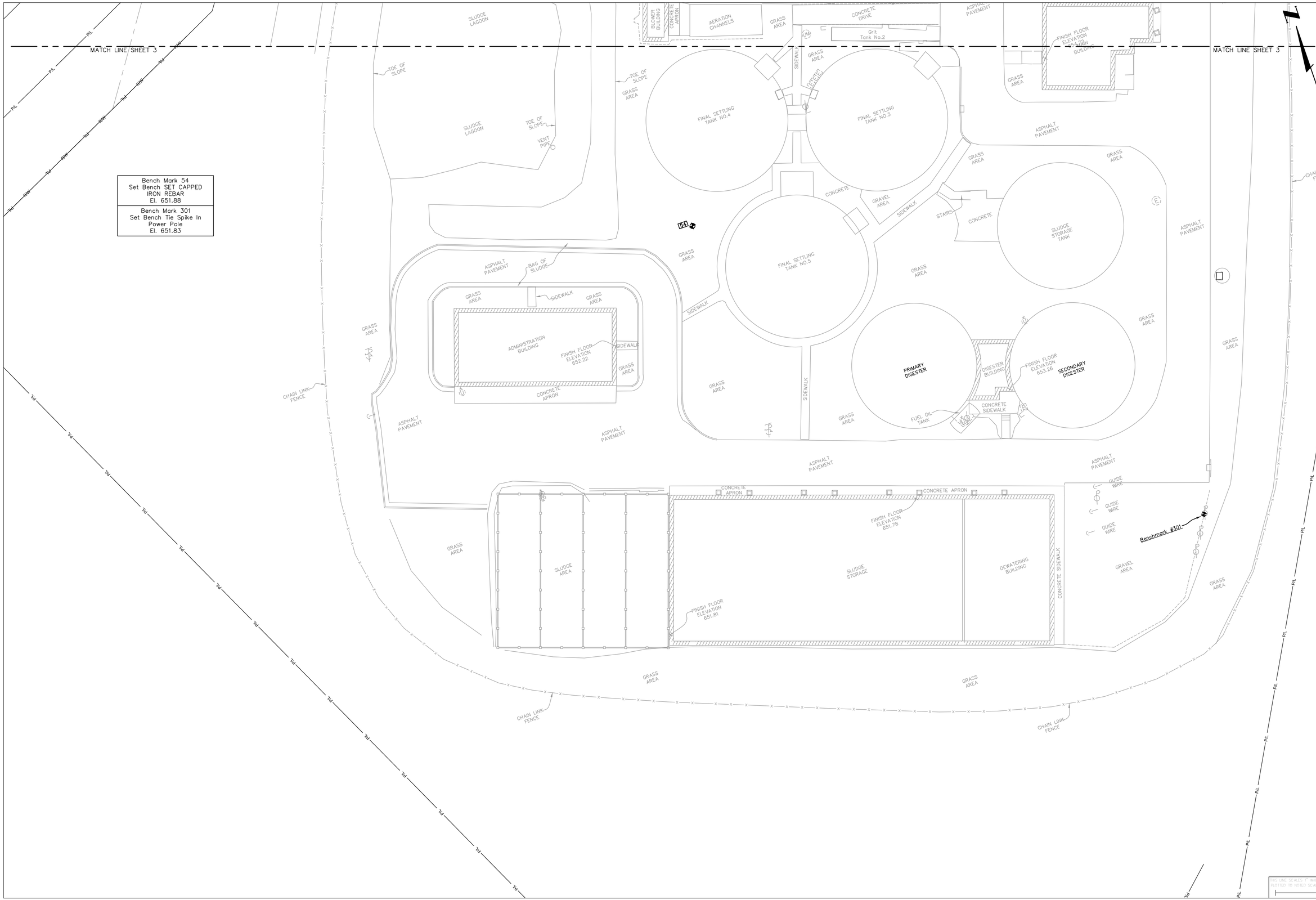
2021 WWTP Improvements General Existing Site Plan – North

Created:	Status:	Scale:
7/29/20	90%	1"=20'
Drawn: RHN	Approved: DWM	
Drawing Name: 7550003G02.DWG		

G-4

TOL-7550003G02-EXISTING SITE PLAN- NORTH
8/3/2020 9:31 AM - RNEUMAN
8/4/2020 1:29 PM



No.	Date	Revision	Chkd. By
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2021 WWTP Improvements General Existing Site Plan South

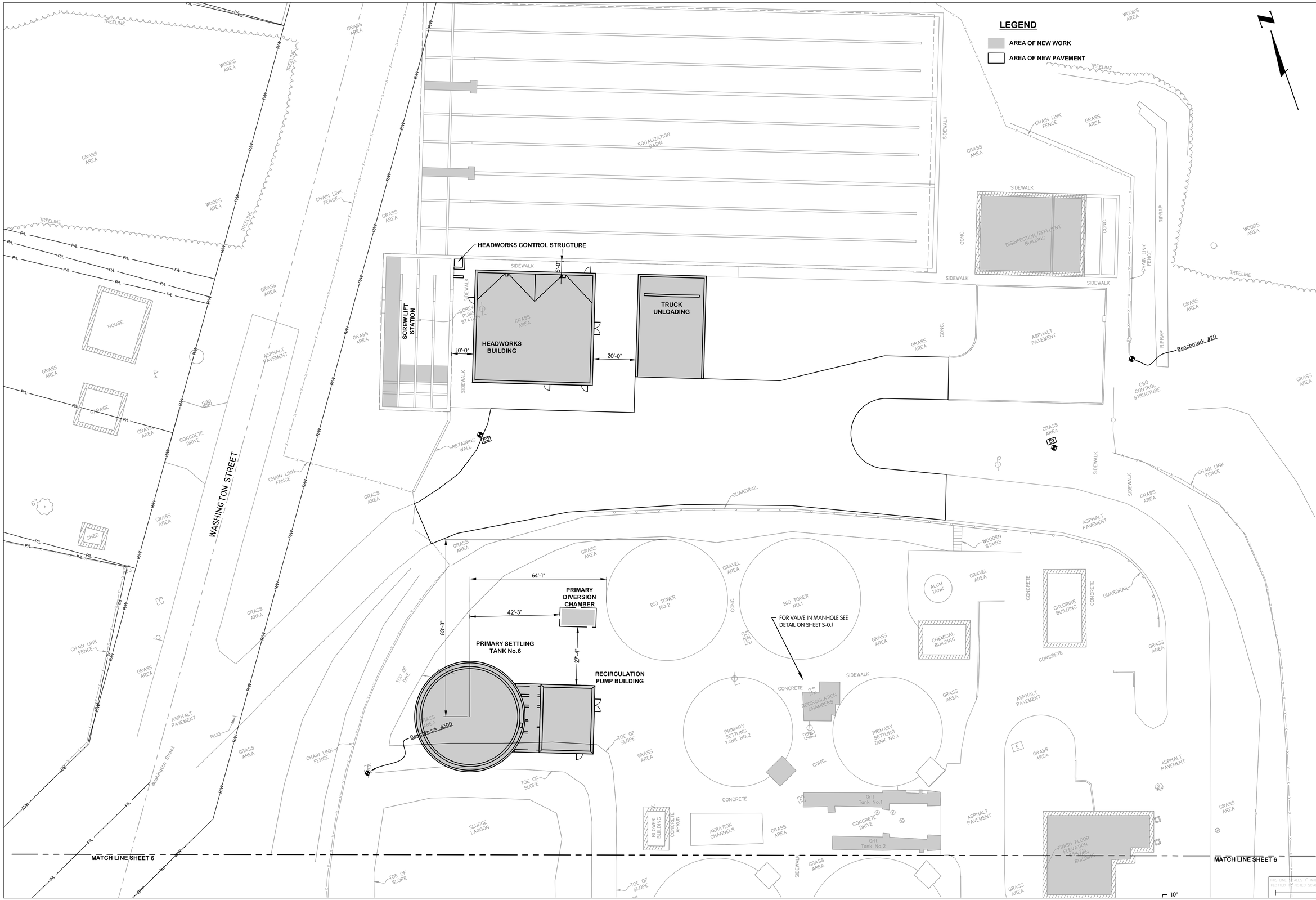
Created:	Status:	Scale:
7/27/20	90%	1"=20'
Drawn: RHN	Approved: DWM	
Drawing Name: 7550003G03.DWG		

THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE

G-5

Sheet 5 Of 176

TOL-7550003G03-EXISTING SITE PLAN- SOUTH
7/31/2020 9:04 AM - RNEUMAN
8/4/2020 1:29 PM



No.	Date	Revision	Chkd. By
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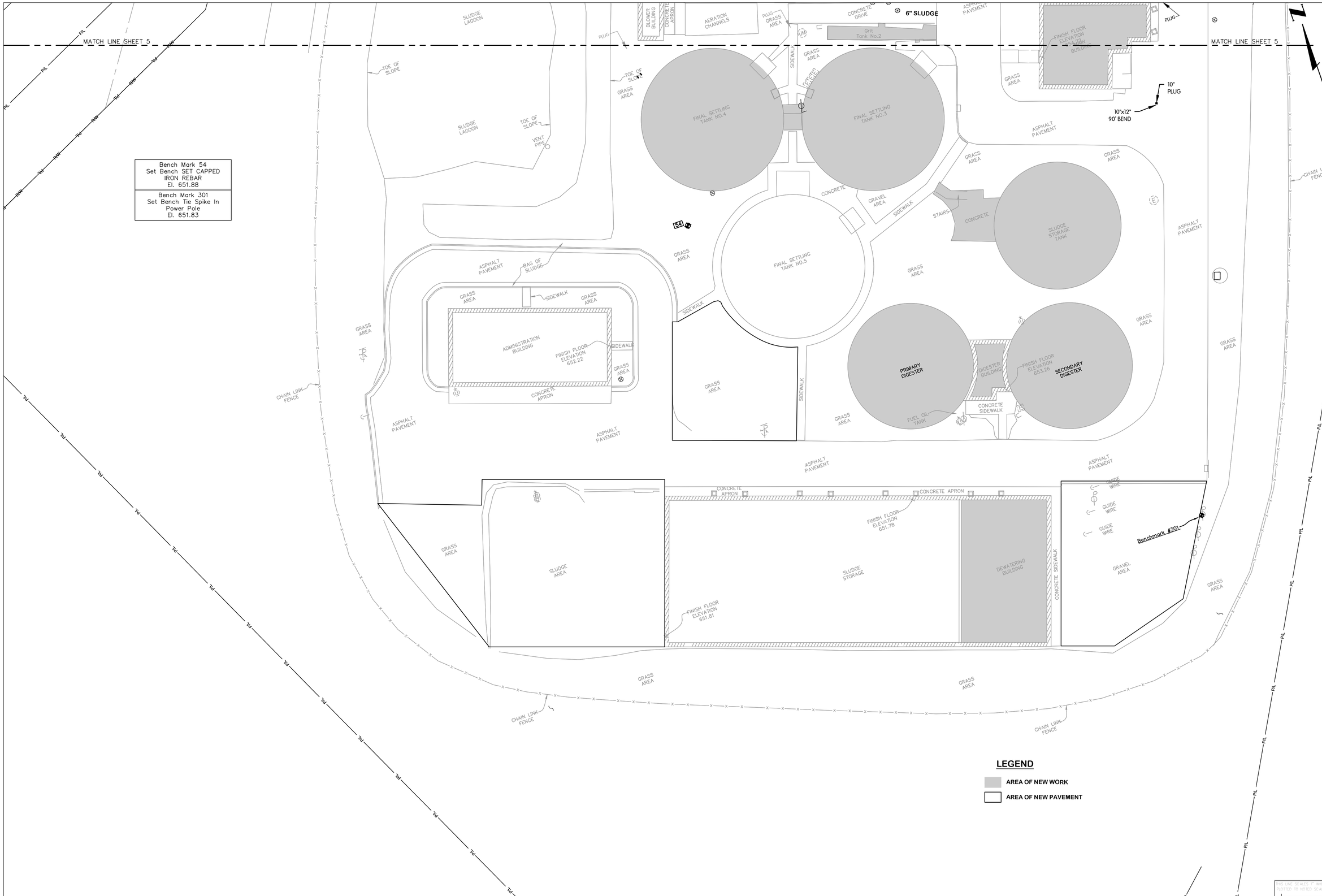
2021
WWTP Improvements
General
New work – North Site Plan

Created:	Drawn:	Status:	Approved:	Scale:
7/29/20	RHN	90%	DWM	1"=20'

Drawing Name: 7550003G06.DWG

G-6

TOL-7550003G06-NEW SITE PLAN- NORTH
7/31/2020 9:02 AM - RNEUMAN
8/4/2020 1:30 PM



No.	Date	Revision	Chkd. By
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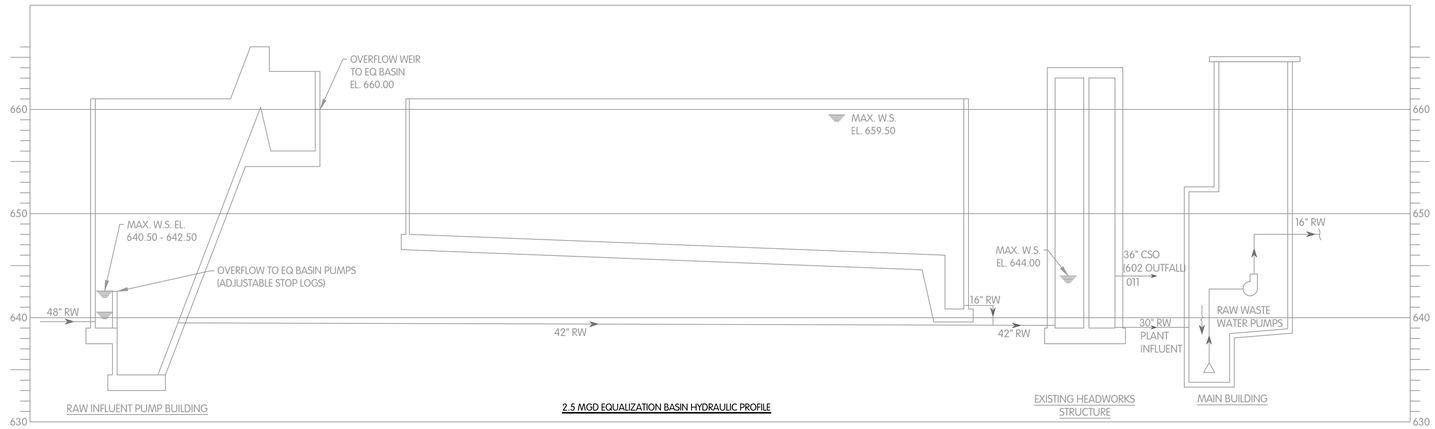
2021
WWTP Ipmrovements
General
New Work Site Plan - South

Scale: 1"=20'
Status: 90%
Approved: DWM
Created: 7/27/20
Drawn: RHN
Drawing Name: 7550003G07.DWG

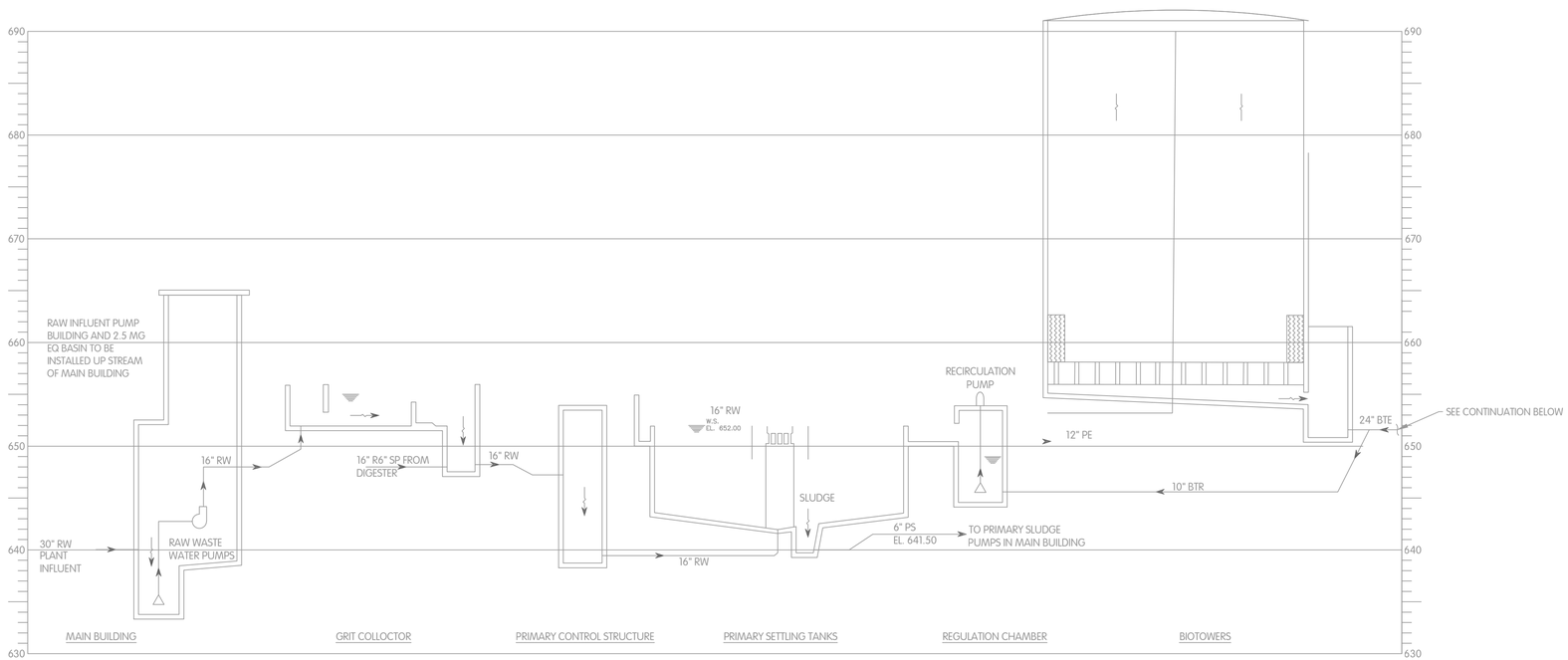
THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE

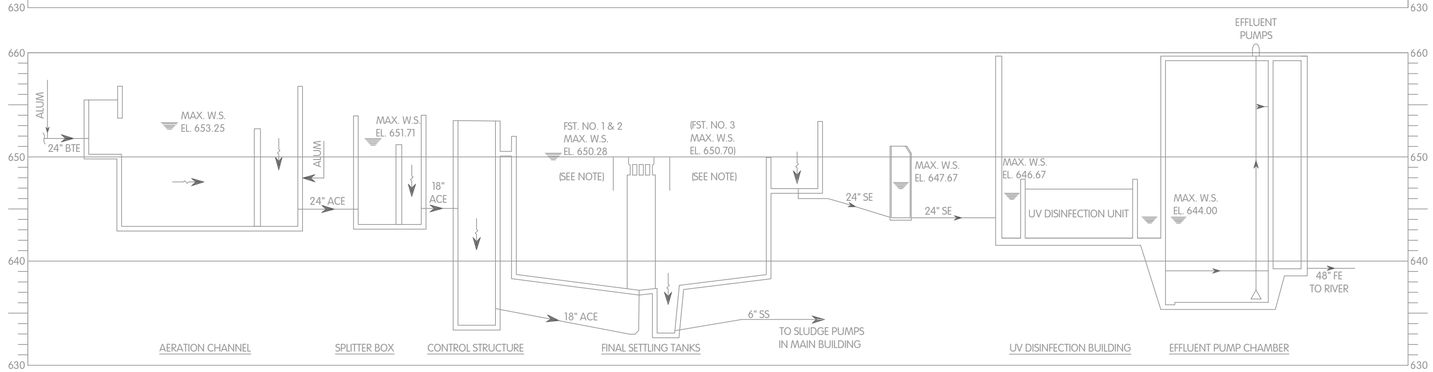
G-7
Sheet 7 Of 176

TOL-7550003G07-NEW SITE PLAN- SOUTH
7/31/2020 7:28 AM - RNEUMAN
8/4/2020 1:30 PM



2.5 MGD EQUALIZATION BASIN HYDRAULIC PROFILE





PLANT HYDRAULIC PROFILE

NOTE:
EXISTING MAX. W.S. ELEVATIONS ARE PER RECORD DRAWINGS
AND ARE FOR REFERENCE PURPOSES ONLY. FURTHER, TO ADJUST ELEVATIONS
TO PROPOSED DATUM, RECORD ELEVATION - 0.70 FT. = PROPOSED ELEVATION.

THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE

No.	Date	Revision	Chkd. By
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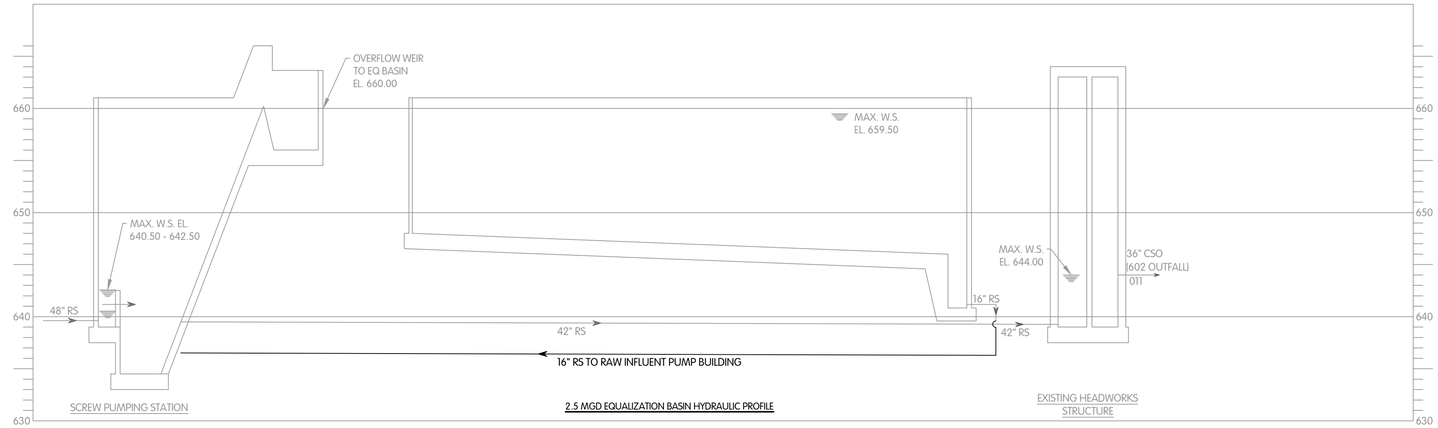
2021
WWTP Improvements
General
Hydaulic – Profile Existing

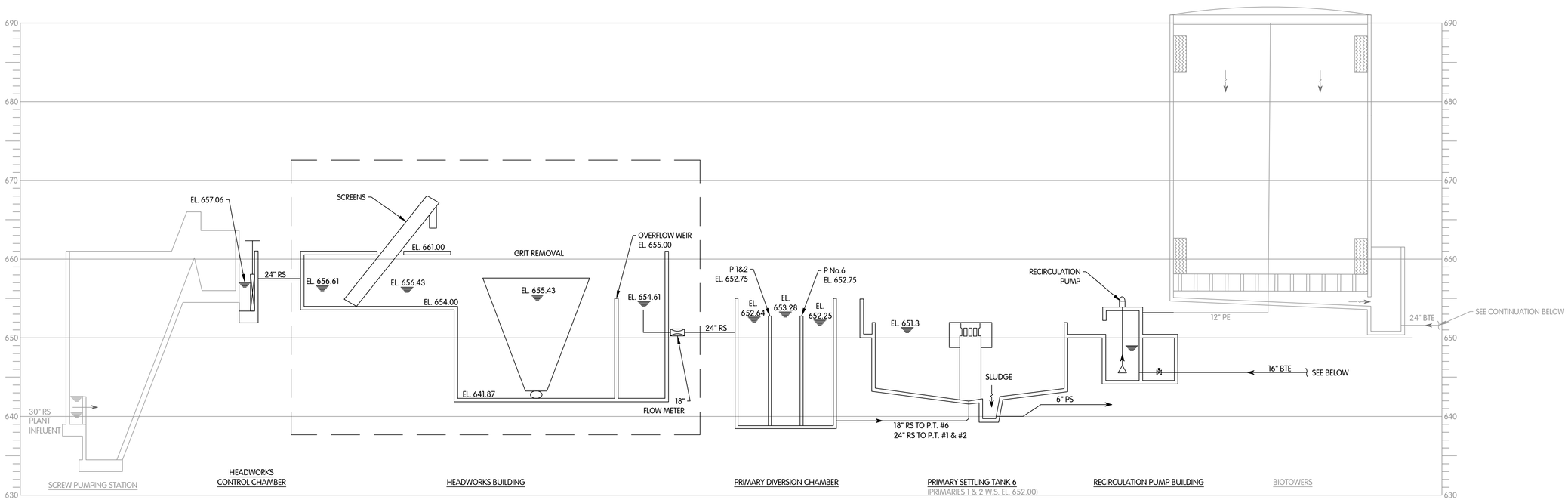
Scale: None
Status: 90%
Approved: DWM
Created: 7/27/20
Drawn: RHN
Drawing Name: 7550003G09.DWG

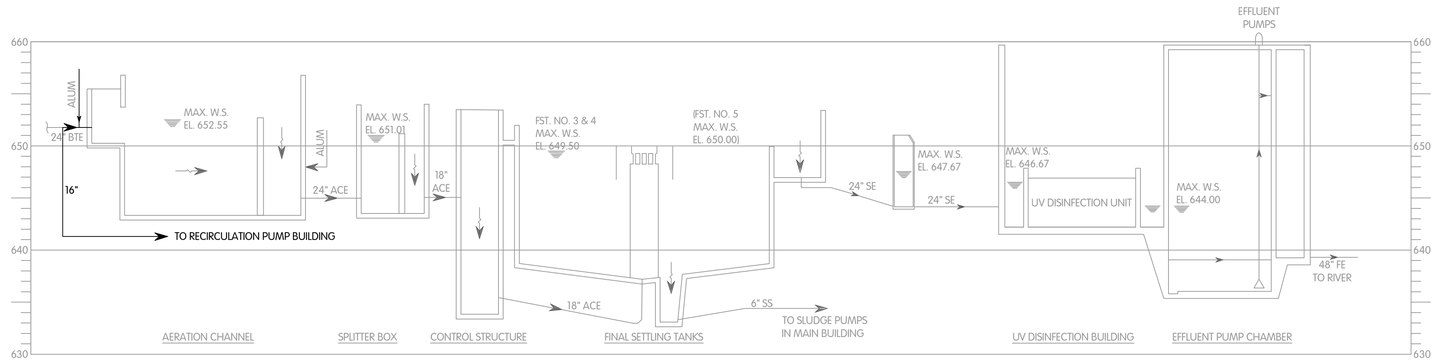
G-8
Sheet 8 Of 176

TQL-7550003G09-HYDRAULIC PROFILE - EXISTING
7/27/2020 11:53 AM - RNEUMAN
8/4/2020 1:30 PM



2.5 MGD EQUALIZATION BASIN HYDRAULIC PROFILE





PLANT HYDRAULIC PROFILE

No.	Date	Revision	Chkd. By
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2021
WWTP Improvements
General
Hydaulic Profile – New

Scale: None
Status: 90%
Approved: DWM
Drawn: RHN
Drawing Name: 7550003G10.DWG
Created: 8/4/20

THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE

Sheet G-9
9 Of 176

TOL-7550003G10-HYDRAULIC PROFILE - NEW
8/4/2020 12:11 PM - RNEUMAN
8/4/2020 1:30 PM

REMOVE SIDEWALK

REMOVE LIGHT POLE

REMOVE LIGHT POLE

REMOVE ASPHALT PAVEMENT AND BASE

SAW CUT ASPHALT TO MATCH EXISTING

REMOVE ELECTRICAL POLE AND WIRING

SAW CUT ASPHALT TO MATCH EXISTING

SAW CUT ASPHALT TO MATCH EXISTING

REMOVE AND REPLACE GUARDRAIL AS REQUIRED TO INSTALL ASPHALT PAVEMENT

REMOVE CONCRETE SIDEWALK

FOR VALVE IN MANHOLE SEE DETAIL ON SHEET S-0.1

REMOVE CONCRETE PAVEMENT

Benchmark #20

Benchmark #300

MATCH LINE SHEET 4

MATCH LINE SHEET 4

WASHINGTON STREET

EQUALIZATION BASIN

DISINFECTION/EFFLUENT BUILDING

CSO CONTROL STRUCTURE

BIO TOWER NO.2

BIO TOWER NO.1

ALUM TANK

CHEMICAL BUILDING

CHLORINE BUILDING

RECIRCULATION CHAMBERS

PRIMARY SETTLING TANK NO.2

PRIMARY SETTLING TANK NO.1

AERATION CHANNELS

BLOWER BUILDING

SLUDGE LAGOON

FINISH FLOOR ELEVATION 654.20 BUILDING

HOUSE

GARAGE

SHED

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2021 WWTP Improvements Removal Site Plan – North

Created: 7/27/20	Status: 90%	Scale: 1"=20'	
Drawn: RHN	Approved: DWM		
Drawing Name: 7550003R01.DWG			

R-I

Sheet 10 Of 176

10"

TOL-7550003R01-EXISTING SITE PLAN- NORTH
7/31/2020 7:56 AM - RNEUMAN
8/4/2020 1:30 PM

MATCH LINE SHEET 3

Benchmark #300
Set Bench Tie in Power and Telephone Pole
Elevation = 658.91

SLUDGE LAGOON
TOE OF SLOPE
VENT PIPE
BLOWER BUILDING
CONCRETE APRON
AERATION CHANNELS
GRASS AREA
CONCRETE DRIVE
Grit Tank No.2
ASPHALT PAVEMENT
FINISH FLOOR ELEVATION 653.20 BLOWER BUILDING
PLUG
10" PLUG
12" 90° BEND
REMOVE AND REPLACE ASPHALT AS REQUIRED FOR NEW PIPING INSTALLATION
FINAL SETTLING TANK NO.4
FINAL SETTLING TANK NO.3
FINAL SETTLING TANK NO.5
SIDEWALK
CONCRETE
GRAVEL AREA
STAIRS
SLUDGE STORAGE TANK
MH 5-4
PRIMARY DIGESTER
SECONDARY DIGESTER
DIGESTER BUILDING
FINISH FLOOR ELEVATION 653.26
FUEL OIL TANK
REMOVE SIDEWALK AS NECESSARY FOR FUEL OIL TANK REMOVAL
REMOVE STEPS
REMOVE CONCRETE CURB AND GUTTER
SAW CUT AND REMOVE ASPHALT PRIOR TO PAVING
REMOVE 4000 GALLON FUEL OIL TANK SEE SPECIFICATION
BAG OF SLUDGE
ADMINISTRATION BUILDING
FINISH FLOOR ELEVATION 652.22
CHAIN LINK FENCE
SAW CUT ASPHALT PRIOR TO PAVING
REMOVE CURB AND GUTTER
REMOVE SLUDGE DRYING SLAB AND WALLS
CONCRETE APRON
FINISH FLOOR ELEVATION 651.78
SLUDGE STORAGE
DEWATERING BUILDING
CONCRETE SIDEWALK
FINISH FLOOR ELEVATION 651.81
GUIDE WIRE
Benchmark #301
Benchmark #301
Set Bench Tie in Power Pole
Elevation = 651.83
PL

THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE

No.	Date	Revision	Chkd. By
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2021
WWTP Improvements
Removals
Site Plan – South

Created:	Status:	Scale:
7/31/20	90%	1"=20'
Drawn: RHN	Approved: DWM	
Drawing Name: 7550003R02.DWG		

R-2
Sheet 11 Of176

TOL-7550003R02-SITE PLAN REMOVALS - SOUTH
7/31/2020 11:04 AM - RNEUMAN
8/4/2020 1:31 PM

NOTE:
ALL ELECTRICAL CONDUITS
ARE NOT SHOWN

REMOVE PIPE TO INSTALL FITTINGS AND
REDUCER TO ROUTE TO SCREW PUMP STATION

REMOVE WATER LINE FOR NEW HEADWORKS
SALVAGE YARD AND FIRE HYDRANT FOR REUSE

PLACE CAP ON DIP AT MANHOLE

Benchmark #20

REMOVE 12" TOWER INFLUENT PIPE

REMOVE 12" TOWER
INFLUENT PIPE

REMOVE ABANDONED WATER LINE

REMOVE MANHOLE
AND VALVE

REMOVE 10"
RECIRCULATION
(2 PLACES)

Benchmark #300

REMOVE 24" FOR
NEW WYE AND
SOLID SLEEVE

REMOVE 2" ALUM

REMOVE 6" DRAIN FOR NEW
TEE AND SOLID SLEEVE

REMOVE EXISTING
6" SLUDGE

MATCH LINE
SHEET 23

MATCH LINE SHEET 23

No.	Date	Revision	Chkd. By
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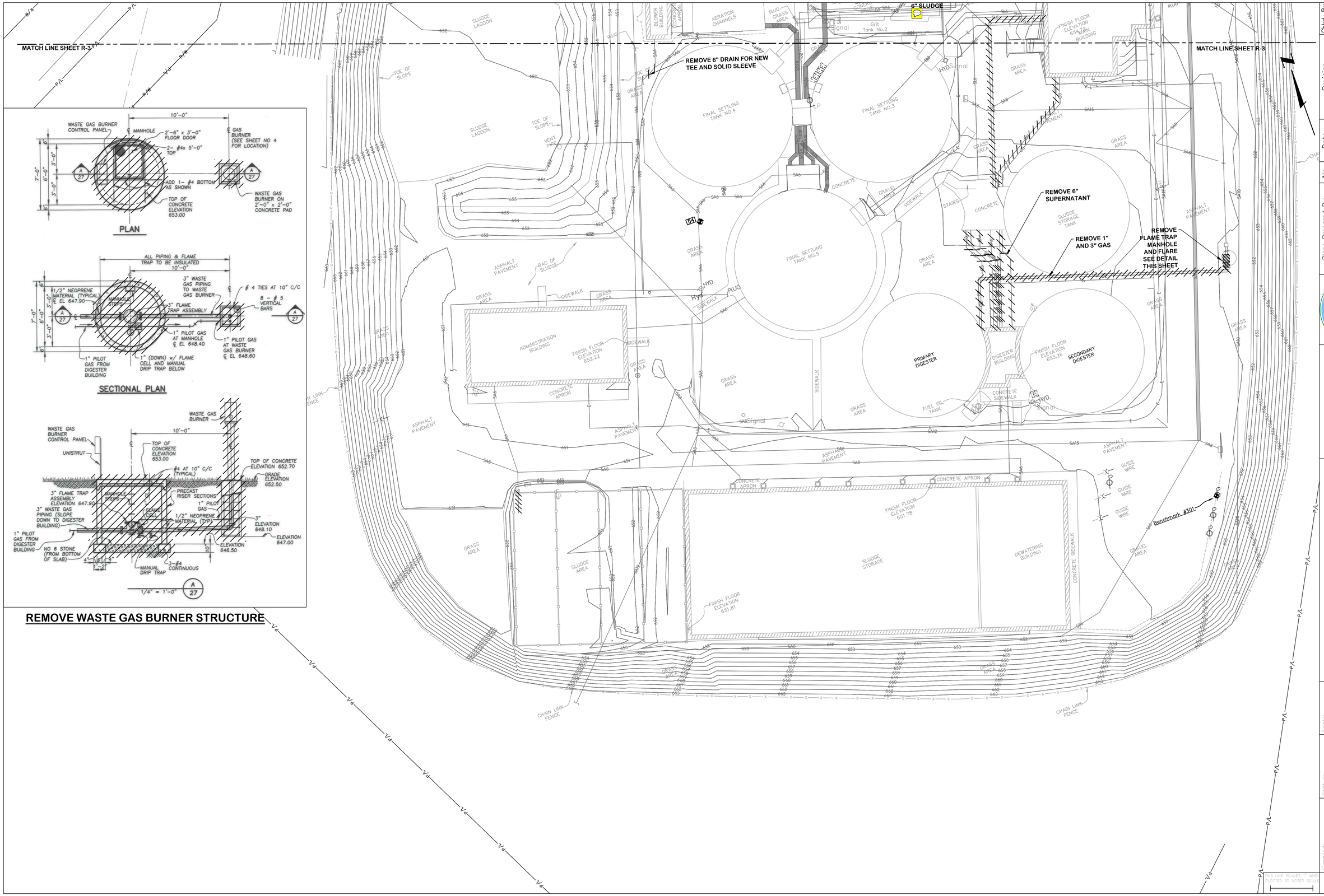
2021
WWTP Improvements
Removals
Yard Piping – North

Created: 7/31/20
Status: 90%
Scale: 1"=20'
Drawn: RHN
DWM
Drawing Name: 7550003R27.DWG

SCALES 1" WHEN PLOTTED TO NOTED SCALE

R-3
Sheet 12 Of 176

TOL-7550003R27-YARD PIPING REMOVALS EXISTING - NORTH
8/4/2020 10:38 AM - RNEUMAN
8/4/2020 1:31 PM



No.	Date	Revision	Chkd. By
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Engineering Department
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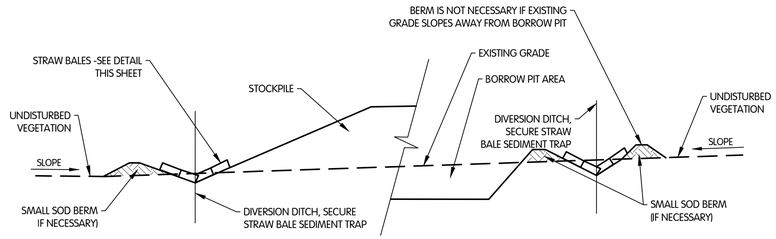
2021
WWTP Improvements
Removals
Yard Piping -South

Scale: 1"=20'
Status: 90%
Approved: DWM
Created: 7/27/20
Drawn: RHN
Drawing Name: 7550003R28.DWG

THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE

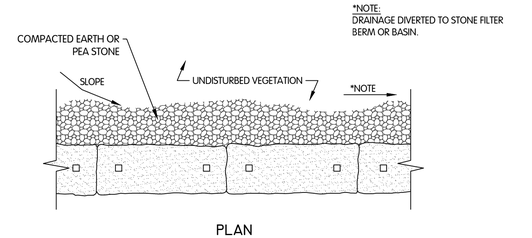
R-4
Sheet 13 Of 176

TOL-7550003R28-YARD PIPING REMOVALS EXISTING - SOUTH
8/4/2020 10:53 AM - RNEUMAN
8/4/2020 1:31 PM

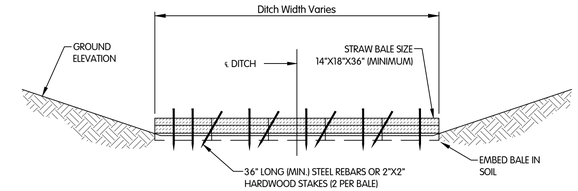


TEMPORARY DIVERSION DITCH DETAIL

NTS



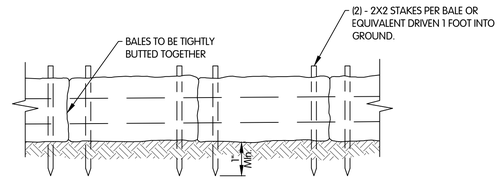
PLAN



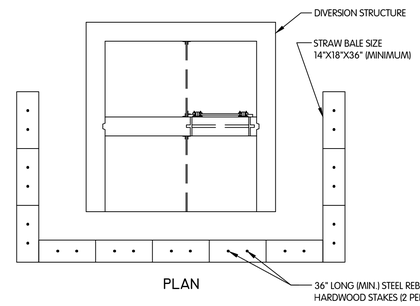
SEDIMENT TRAP DITCH DETAIL

¼"=1'-0"

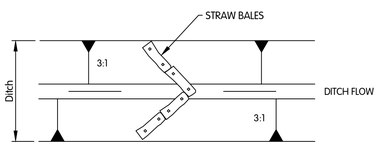
NOTES:
1. EXACT NUMBER OF BALES TO BE DETERMINED.
2. STRAW BALES SHOULD BE EMBEDDED 4" INTO THE DITCH.
3. END BALES SHOULD BE SLIGHTLY SLOPED UPHILL.
4. DETAIL TYPICAL OF BOTH TRAP LOCATIONS.
5. OTHER SEDIMENT TRAP LOCATIONS TO BE DETERMINED AS NEEDED.
6. DRIVE FIRST STAKE AT AN ANGLE TOWARDS PREVIOUS BALE TO FORCE BALES TOGETHER.



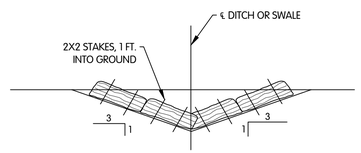
ELEVATION



PLAN



PLAN VIEW

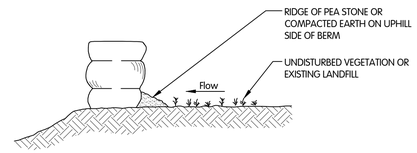


NOTE:
INSTALL STRAW BALES EVERY 200 FT. IN DITCHES AROUND BORROW AREAS, STOCKPILES, OR OTHER AREAS WHERE SEDIMENT TRAP IS NEEDED DURING CONSTRUCTION.

SECTION

STRAW BALE SEDIMENT TRAP DETAIL

NTS

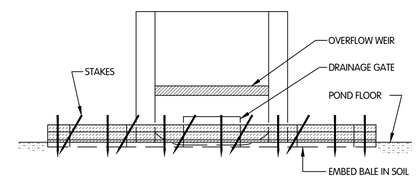


SECTION

NOTE:
1. PROVIDE SILT FENCE AT OUTLET
2. SMALL EARTH BERM MAY BE CONSTRUCTED INSTEAD.

STRAW BALE DIVERSION BERM

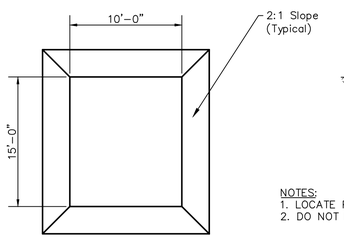
NTS



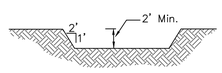
ELEVATION

SEDIMENT TRAP AT DIVERSION STRUCTURE

¼"=1'-0"



PLAN VIEW
(NO SCALE)

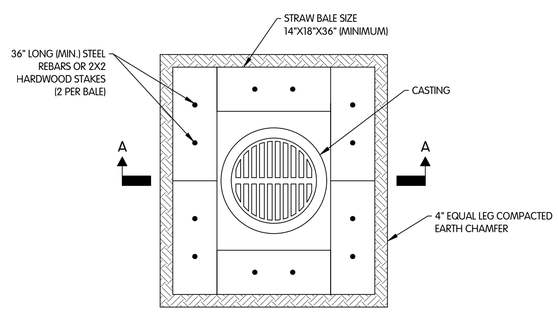


CROSS-SECTION VIEW
(NO SCALE)

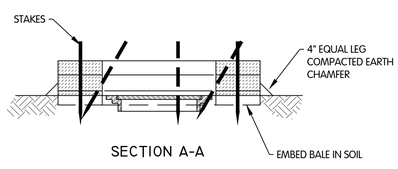
NOTES:
1. LOCATE PER PLAN
2. DO NOT LOCATE IN SWALE OR ANY OTHER WATERCOURSE

CONCRETE WASH-OUT DETAIL

NTS



PLAN



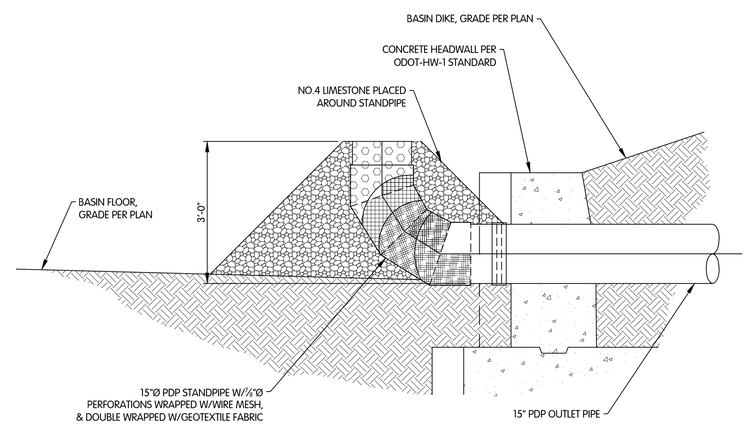
SECTION A-A

NOTES:
1. BUILD INLET UP TO GROUND ELEVATION.
2. STRAW BALES SHOULD BE EMBEDDED 4" INTO THE DITCH.
3. TOPS OF BALES SHOULD BE 14" ABOVE INLET, EMBEDDED AS IN NOTE 2.
4. DRIVE FIRST STAKE AT AN ANGLE TOWARDS PREVIOUS BALE TO FORCE BALES TOGETHER.

SEDIMENT TRAP AROUND CATCH BASINS, MANHOLES, & INLETS

(TO BE PLACED WHERE SHOWN ON THE DRAWINGS AND AS THE CONTRACTOR'S WORK REQUIRES TO FILTER SEDIMENT FROM THE STORM WATER RUN OFF).

½"=1'-0"



TEMPORARY SEDIMENT BASIN OUTLET STRUCTURE DETAIL

NTS

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2021
WWTP Improvements
Civil
Soil Erosion Control Details

Scale: AS SHOWN
Status: 90%
Approved: DWM
Created: 7/27/20
Drawn: RHN
Drawing Name: 7550003C1201.DWG

THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE

C-0.1
Sheet 30 Of 176

TOL-7550003C1201-CIVIL DETAILS
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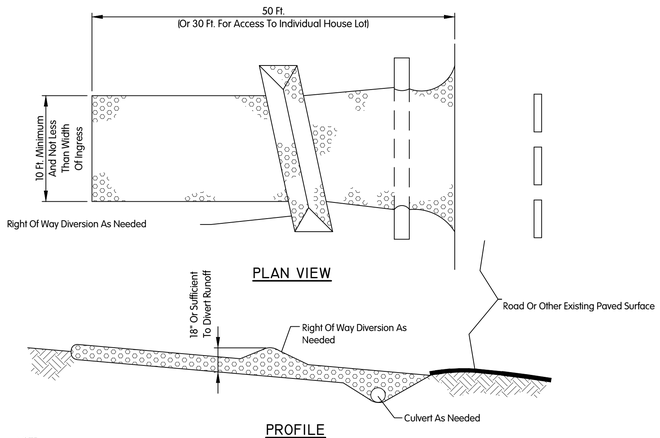
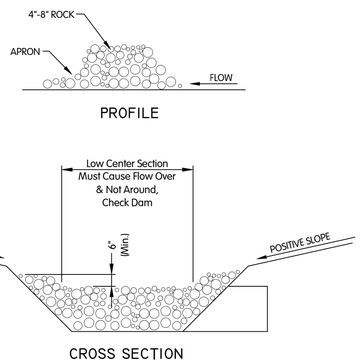
8/4/2020 1:31 PM



NOTE:
1. STONE SIZE - TWO-INCH STONE SHALL BE USED, OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH - THE CONSTRUCTION ENTRANCE SHALL BE AS LONG AS REQUIRED TO STABILIZE HIGH TRAFFIC AREAS BUT NOT LESS THAN 50 FT. (EXCEPT ON SINGLE RESIDENCE LOT WHERE A 30 FT. MINIMUM LENGTH APPLIES.
3. THICKNESS - THE STONE LAYER SHALL BE AT LEAST 6 IN. THICK.
4. WIDTH - THE ENTRANCE SHALL BE AT LEAST 10 FT. WIDE, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
5. BEDDING - A GEOTEXTILE SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING STONE. IT SHALL HAVE A GRAB TENSILE STRENGTH OF AT LEAST 200 LB. AND A MULLEN BURST STRENGTH OF AT LEAST 190 LB.
6. CULVERT - A PIPE OR CULVERT SHALL BE CONSTRUCTED UNDER THE ENTRANCE IF NEEDED TO PREVENT SURFACE WATER FLOWING ACROSS THE ENTRANCE FROM BEING DIRECTED OUT ONTO PAVED SURFACES.
7. WATER BAR - A WATER BAR SHALL BE CONSTRUCTED AS PART OF THE CONSTRUCTION ENTRANCE IF NEEDED TO PREVENT SURFACE RUNOFF FROM FLOWING THE LENGTH OF THE CONSTRUCTION ENTRANCE AND OUT ONTO PAVED SURFACES.
8. MAINTENANCE - TOP DRESSING OF ADDITIONAL STONE WALL SHALL BE APPLIED AS CONDITIONS DEMAND. MUD SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC ROADS, OR ANY SURFACE WHERE RUNOFF IS NOT CHECKED BY SEDIMENT CONTROLS, SHALL BE REMOVED IMMEDIATELY. REMOVAL SHALL BE ACCOMPLISHED BY SCRAPING OR SWEEPING.
9. CONSTRUCTION ENTRANCES SHALL NOT BE RELIED UPON TO REMOVE MUD FROM VEHICLES AND PREVENT OFF SITE TRACKING VEHICLES THAT ENTER AND LEAVE THE CONSTRUCTION SITE SHALL BE RESTRICTED FROM MUDDY AREAS.

CONSTRUCTION ENTRANCE

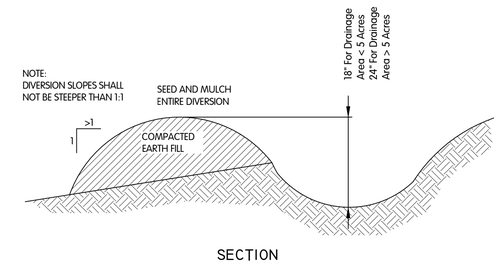
RCE NTS



NOTES:
1. THE CHECK DAM SHALL BE CONSTRUCTED OF 4 IN.TO 8 IN. DIAMETER STONE, PLACED SO THAT IT COMPLETELY COVERS THE WIDTH OF THE CHANNEL.
2. THE TOP OF THE CHECK DAM SHALL BE CONSTRUCTED SO THAT THE CENTER IS APPROXIMATELY 6 IN. LOWER THAN THE OUTER EDGES, SO WATER WILL FLOW ACROSS THE CENTER AND NOT AROUND THE ENDS.
3. THE MAXIMUM HEIGHT OF THE CHECK DAM AT THE CENTER OF THE WEIR SHALL NOT EXCEED 3 FT.
4. SPACING BETWEEN DAMS SHALL BE AS SHOWN IN THE PLANS OR BY THE FOLLOWING TABLE:

CHECK DAM SPACING				
DAM HEIGHT (FT.)	CHANNEL SLOPE			
	< 5%	5-10%	10-15%	15-20%
1	65 Ft.	30 Ft.	20 Ft.	15 Ft.
2	130 Ft.	65 Ft.	40 Ft.	30 Ft.
3	200 Ft.	100 Ft.	65 Ft.	50 Ft.

CHECK DAM



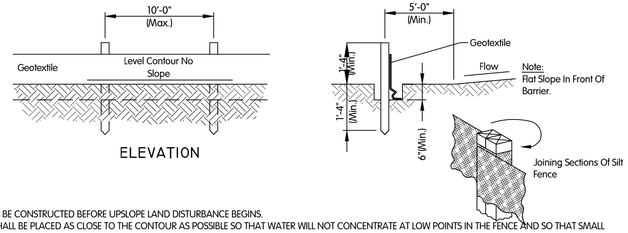
NOTES:
1. DIVERSION SHALL BE COMPACTED BY TRAVERSING WITH TRACKED EARTH MOVING EQUIPMENT.
2. DIVERSIONS SHALL NOT BE BREACHED OR LOWERED TO ALLOW CONSTRUCTION TRAFFIC TO CROSS; INSTEAD THE TOP WIDTH MAY BE MADE WIDER AND SIDE SLOPES MADE FLATTER THAN SPECIFIED ABOVE.
3. DIVERSIONS SHALL BE STABILIZED WITH VEGETATION AND CHECK DAMS OR THE FOLLOWING TREATMENTS.

TEMPORARY DIVERSION STABILIZATION TREATMENT			
DIVERSION SLOPE	< 2 ACRES	2-5 ACRES	5-10 ACRES
0-3%	SEED AND STRAW	SEED AND STRAW	SEED AND STRAW
3-5%	SEED AND STRAW	SEED AND STRAW	MATTING
5-8%	SEED AND STRAW	MATTING	MATTING
8-20%	SEED AND STRAW	MATTING	ENGINEERED

NOTE:
DIVERSIONS WITH STEEPER SLOPES OR GREATER DRAINAGE AREAS ARE BEYOND THE SCOPE OF THIS STANDARD AND MUST BE DESIGNED FOR STABILITY. SEED, STRAW AND MATTING USED SHALL MEET THE SPECIFICATIONS FOR TEMPORARY SEEDING, MULCHING AND MATTING.

TEMPORARY DIVERSION

TD NTS



NOTES:
1. SILT FENCE SHALL BE CONSTRUCTED BEFORE UPSLOPE LAND DISTURBANCE BEGINS.
2. ALL SILT FENCE SHALL BE PLACED AS CLOSE TO THE CONTOUR AS POSSIBLE SO THAT WATER WILL NOT CONCENTRATE AT LOW POINTS IN THE FENCE AND SO THAT SMALL SWALES OR DEPRESSIONS WHICH MAY CARRY SMALL CONCENTRATED FLOWS TO THE SILT FENCE ARE DISSIPATED ALONG ITS LENGTH.
3. TO PREVENT WATER PONDED BY THE SILT FENCE FROM FLOWING AROUND THE ENDS, EACH END SHALL BE CONSTRUCTED UPSLOPE SO THAT THE ENDS ARE AT A HIGHER ELEVATION .
4. WHERE POSSIBLE, SILT FENCE SHALL BE PLACED ON THE FLATTEST AREA AVAILABLE.
5. WHERE POSSIBLE, VEGETATION SHALL BE PRESERVED FOR 5 FT. (OR AS MUCH AS POSSIBLE) UPSLOPE FROM THE SILT FENCE. IF VEGETATION IS REMOVED, IT SHALL BE REESTABLISHED WITHIN 7 DAYS FROM THE INSTALLATION OF THE FENCE.
6. SOIL STOCKPILES OR OTHER SOURCES OF SEDIMENT SHALL HAVE SILT FENCE PROTECTION.
7. THE SILT FENCE SHALL BE PLACED IN A TRENCH CUT A MINIMUM OF 6" DEEP. THE TRENCH SHALL BE CUT WITH A TRENCHER, CABLE LAYING MACHINE, OR OTHER SUITABLE DEVICE WHICH WILL ENSURE AN ADEQUATELY UNIFORM TRENCH DEPTH.
8. THE SILT FENCE SHALL BE PLACED WITH THE STAKES ON THE DOWN SLOPE SIDE OF THE GEOTEXTILE AND SO THAT 8" OF CLOTH ARE BELOW THE GROUND SURFACE. EXCESS MATERIAL SHALL LAY ON THE BOTTOM OF THE 6" DEEP TRENCH. THE TRENCH SHALL BE BACK FILLED AND COMPACTED.
9. SEAMS BETWEEN SECTIONS OF SILT FENCE SHALL BE OVERLAPPED WITH THE END STAKES OF EACH SECTION WRAPPED TOGETHER BEFORE DRIVING INTO THE GROUND.
10. MAINTENANCE-- SILT FENCE SHALL ALLOW RUNOFF TO PASS ONLY AS DIFFUSE FLOW THROUGH THE GEOTEXTILE. IF RUNOFF OVER TOPS THE SILT FENCE, FLOWS UNDER OR AROUND THE ENDS, OR IN ANY OTHER WAY BECOMES A CONCENTRATED FLOW, ONE OF THE FOLLOWING SHALL BE PERFORMED, AS APPROPRIATE:
    A. THE LAYOUT OF THE SILT FENCE SHALL BE CHANGED.
    B. ACCUMULATED SEDIMENT SHALL BE REMOVED.
    C. OTHER PRACTICES SHALL BE INSTALLED.

CRITERIA FOR SILT FENCE MATERIALS:

1. FENCE POSTS - THE LENGTH SHALL BE A MINIMUM OF 32" LONG. WOOD POST WILL BE 2" X 2" HARDWOOD OF SOUND QUALITY. THE MAXIMUM SPACING BETWEEN POSTS SHALL BE 10 FT.
2. SILT FENCE FABRIC (SEE CHART BELOW):

FABRIC PROPERTIES	VALUES	TEST METHOD
GRAB TENSILE STRENGTH	90 LB. MINIMUM	ASTM D 1682
MULLEN BURST STRENGTH	190 P.S.I. MINIMUM	ASTM D 3786
SLURRY FLOW RATE	0.3 GAL./MIN./FT.^{2} MAX.	
EQUIVALENT OPENING SIZE	40-80	US STD. SIEVE CW-02215
ULTRAVIOLET RADIATION STABILITY	90% MINIMUM	ASTM-G-26

SILT FENCE

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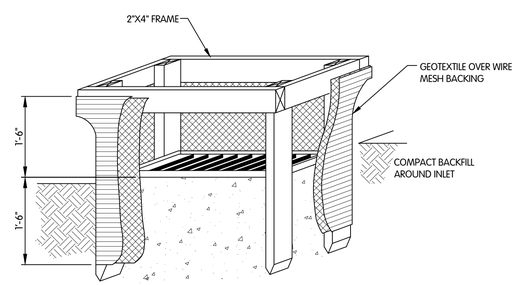
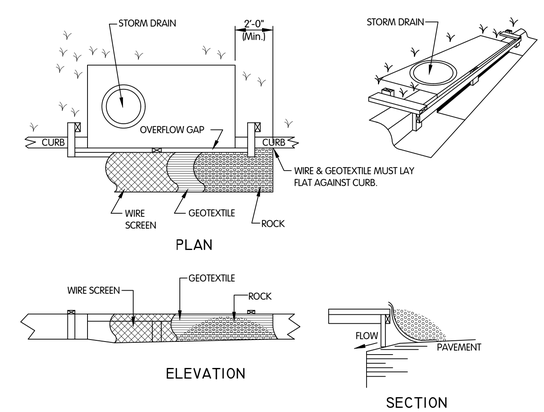


NOTES:
1. INLET PROTECTION SHALL BE CONSTRUCTED EITHER BEFORE UPSLOPE LAND DISTURBANCE BEGINS OR BEFORE THE STORM DRAIN BECOMES OPERATIONAL.
2. THE EARTH AROUND THE INLET SHALL BE EXCAVATED COMPLETELY TO A DEPTH AT LEAST 18 INCHES.
3. THE WOODEN FRAME SHALL BE CONSTRUCTED OF 2 X 4 CONSTRUCTION GRADE LUMBER. THE 2 X 4 POSTS SHALL BE DRIVEN 18" INTO THE GROUND AT FOUR CORNERS OF THE INLET AND THE TOP PORTION OF 2 X 4 FRAME ASSEMBLED USING THE OVERLAP JOINT SHOWN. THE TOP OF THE FRAME SHALL BE AT LEAST 6" BELOW ADJACENT ROADS IF PONDED WATER WOULD POSE A SAFETY HAZARD TO TRAFFIC.
4. WIRE MESH SHALL BE OF SUFFICIENT STRENGTH TO SUPPORT FABRIC WITH WATER FULLY IMPOUNDED AGAINST IT. IT SHALL BE STRETCHED TIGHTLY AROUND THE FRAME AND FASTENED SECURELY TO THE FRAME.
5. GEOTEXTILE SHALL HAVE AN EQUIVALENT OPENING SIZE OF 20 - 40 SIEVE AND BE RESISTANT TO SUNLIGHT. IT SHALL BE STRETCHED TIGHTLY AROUND THE FRAME AND FASTENED SECURELY. IT SHALL EXTEND FROM THE TOP OF THE FRAME TO 18" BELOW THE INLET NOTCH ELEVATION. THE GEOTEXTILE SHALL OVERLAP ACROSS ONE SIDE OF THE INLET SO THE ENDS OF THE CLOTH ARE NOT FASTENED TO THE SAME POST.
6. BACKFILL SHALL BE PLACED AROUND THE INLET IN COMPACTED 6" LAYERS UNTIL THE EARTH IS EVEN WITH NOTCH ELEVATION ON ENDS AND TOP ELEVATION ON SIDES.
7. A COMPACTED EARTH DIKE OR A CHECK DAM SHALL BE CONSTRUCTED IN THE DITCH LINE BELOW THE INLET IF THE INLET IS NOT IN A DEPRESSION AND IF RUNOFF BYPASSING THE INLET WILL NOT FLOW TO A SETTLING POND. THE TOP OF EARTH DIKES SHALL BE AT LEAST 6" HIGHER THAN THE TOP OF THE FRAME.

INLET PROTECTION IN SWALES, DITCH LINES OR YARD INLETS

NTS IP



NOTES:
1. INLET PROTECTION SHALL BE CONSTRUCTED EITHER BEFORE UPSLOPE LAND DISTURBANCE BEGINS OR BEFORE THE STORM DRAIN BECOMES OPERATIONAL.
2. THE WOODEN FRAME IS TO BE CONSTRUCTED OF 2X4 CONSTRUCTION GRADE LUMBER. THE END SPACERS SHALL BE A MINIMUM OF 1 FT. BEYOND BOTH ENDS OF THE THROAT OPENING. THE ANCHORS SHALL BE NAILED TO 2X4 STAKES DRIVEN ON THE OPPOSITE SIDE OF THE CURB.
3. THE WIRE MESH SHALL BE OF SUFFICIENT STRENGTH TO SUPPORT FABRIC AND STONE. IT SHALL BE A CONTINUOUS PIECE WITH A MINIMUM WIDTH OF 30" AND 4 FT. LONGER THAN THE THROAT LENGTH OF THE INLET, 2 FT. ON EACH SIDE.
4. GEOTEXTILE CLOTH SHALL HAVE AN EQUIVALENT OPENING SIZE (EOS) OF 20-40 SIEVE AND BE RESISTANT TO SUNLIGHT. IT SHALL BE AT LEAST THE SAME SIZE AS THE WIRE MESH.
5. THE WIRE MESH AND GEOTEXTILE CLOTH SHALL BE FORMED TO THE CONCRETE GUTTER AND AGAINST THE FACE OF THE CURB ON BOTH SIDES OF THE INLET AND SECURELY FASTENED TO THE 2X4 FRAME.
6. 2" STONE SHALL BE PLACED OVER THE WIRE MESH AND GEOTEXTILE IN SUCH A MANNER AS TO PREVENT WATER FROM ENTERING THE INLET UNDER OR AROUND THE GEOTEXTILE CLOTH.

CURB INLET PROTECTION

No.	Date	Revision	Chkd. By
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2021
WWTP Improvements
Civil
Soil Erosion Control Details

Scale: AS SHOWN
Status: 90%
Approved: DWM
Oriented: 7/27/20
Drawn: RHN
Drawing Name: 75500003C1202.DWG

THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE

C-0.2
Sheet 31 Of 176

TOL-75500003C1202-CIVIL DETAILS
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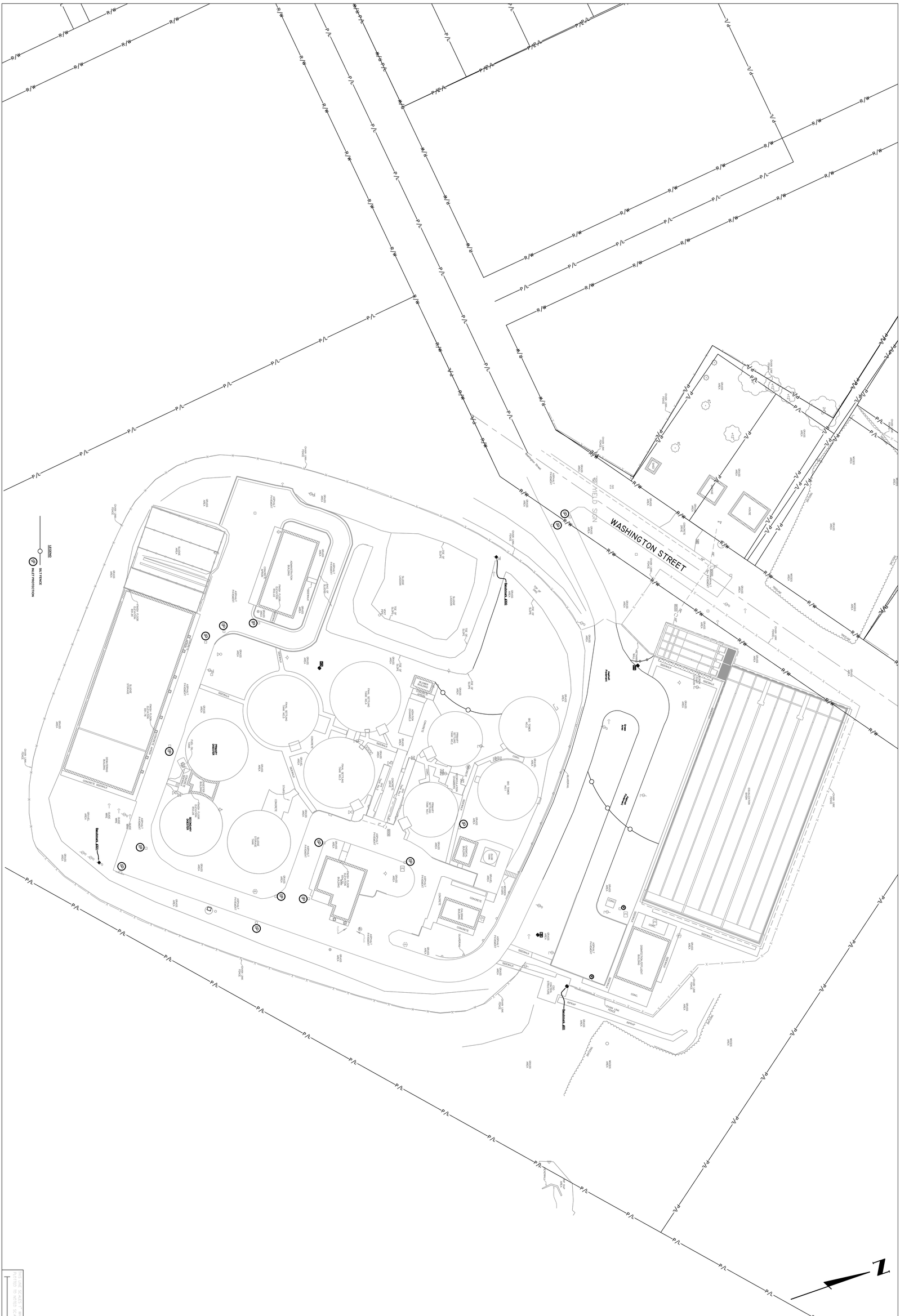

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Drawing Name: 7550003C1203.DWG		

Sheet: C-0.3
32 of 76

2021
WWTP Improvements
Civil
Erosion Control Site – Plan

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Napoleon
Heartland Values, Flowing Opportunities

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3333 Kingsley Park Drive, Suite 300
Toledo, Ohio 43606

No.	Date	Revision	Chkd. By
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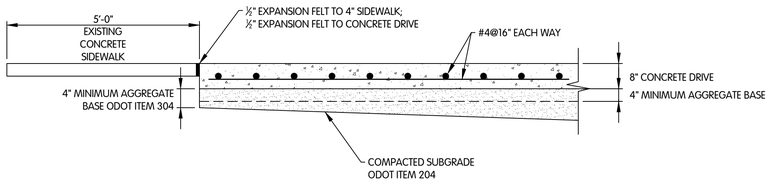
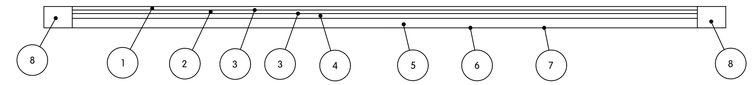


8" CONCRETE DRIVE DETAIL

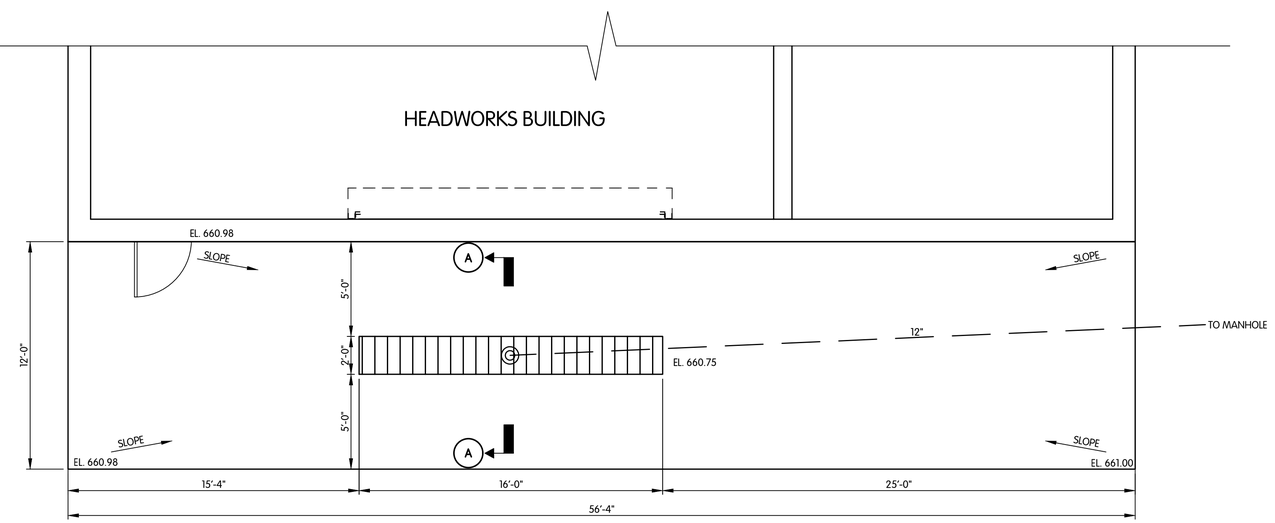
NTS



TYPICAL ASPHALT PAVEMENT SECTION DETAIL

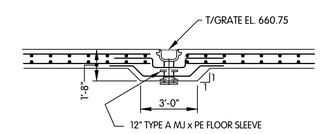
NTS

1	ITEM 448	1½" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, MEDIUM PG 64-22
2	ITEM 448	1½" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, MEDIUM PG 64-22
3	ITEM 407	TACK COAT (0.1 GAL/SY.)
4	ITEM 301	3" BITUMINOUS AGGREGATE BASE
5	ITEM 304	8" AGGREGATE BASE, AS PER PLAN (COMPACT IN 2 LIFTS)
6	ITEM 712.09	STABILIZATION FABRIC TYPE D, SOIL TYPE 2
7	ITEM 204	SUBGRADE COMPACTION
8	ITEM 411	STABILIZED CRUSHED AGGREGATE



TRENCH DRAIN PLAN

¼"=1'-0"



TRENCH DRAIN DETAIL A-A

¼"=1'-0"

No.	Date	Revision	Chkd. By
.	.	.	.

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2021
WWTP Improvements 2021
Civil
Pavement Details

Created: 7/27/20
Status: 90%
Scale: AS SHOWN
Drawn: RHN
Approved: DWM
Drawing Name: 7550003C1204.DWG

THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE

C-0.4

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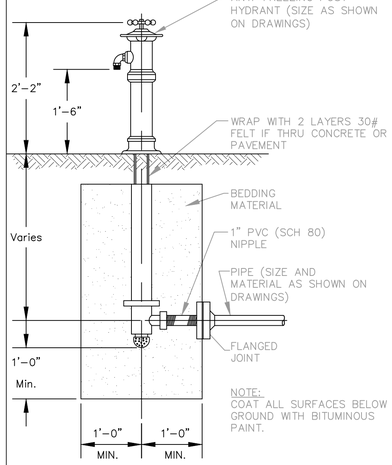
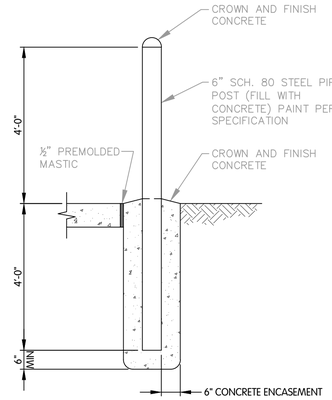
8/4/2020 1:32 PM



POST HYDRANT DETAIL

NTS



GUARDPOST DETAIL

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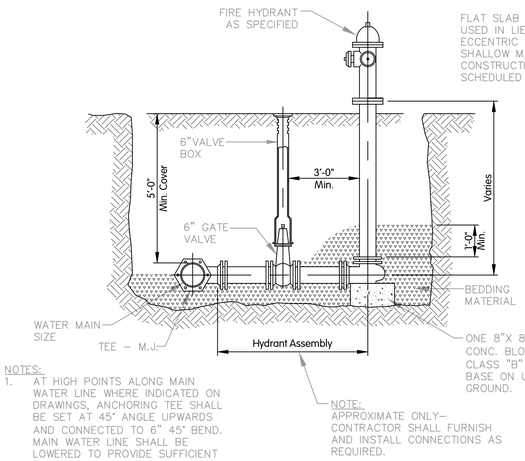
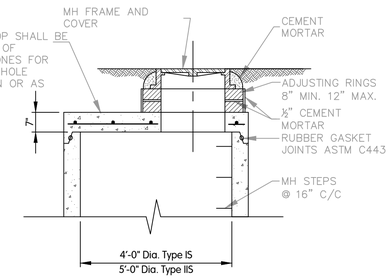


NOTES:

1. AT HIGH POINTS ALONG MAIN WATER LINE WHERE INDICATED ON DRAWINGS, ANCHORING TEE SHALL BE SET AT 45° ANGLE UPWARDS AND CONNECTED TO 6" 45° BEND. MAIN WATER LINE SHALL BE LOWERED TO PROVIDE SUFFICIENT COVER AS SPECIFIED.
2. ALL JOINTS SHALL BE RESTRAINED EXCEPT IN RUN OF TEE.

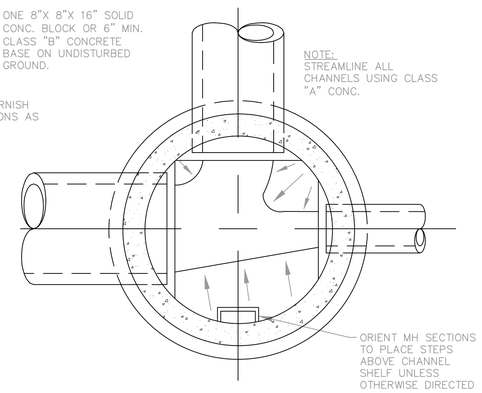
FIRE HYDRANT ASSEMBLY

NTS



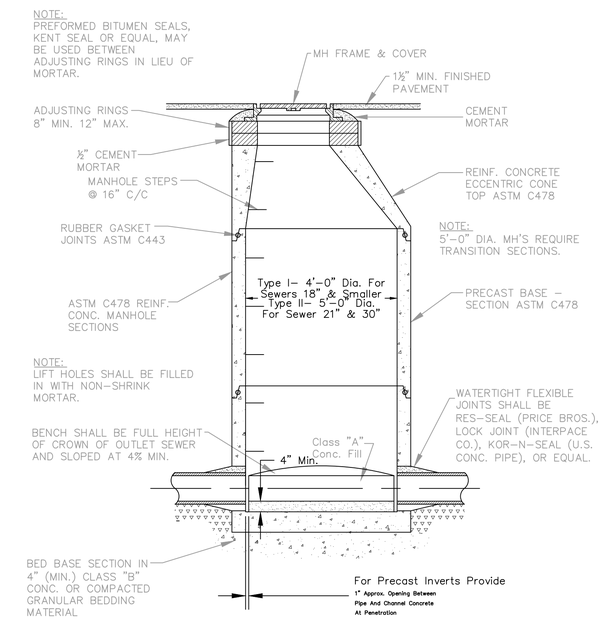
TYPE IS, IIS & IIIS MANHOLES

½"=1'-0"



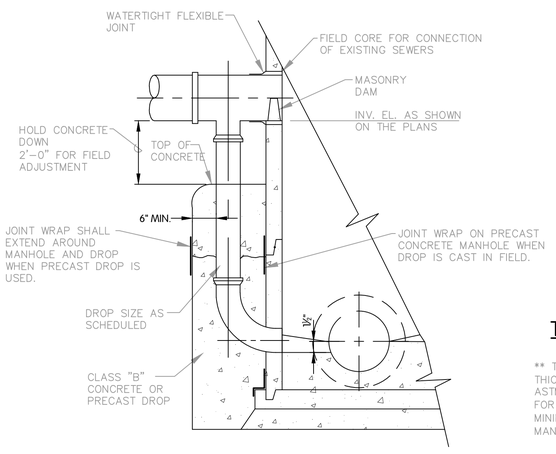
SECTIONAL PLAN

½"=1'-0"



TYPE I & II MANHOLES

½"= 1'-0"



MANHOLE WITH DROP

NTS

SIZE	"W"	"U"**	"T"
6"	2'-6"	2'-0"	4"
8"	2'-6"	2'-1"	4"
10"	2'-6"	2'-3"	4"
12"	2'-9"	2'-5"	4"
15"	3'-0"	2'-8"	5"
18"	3'-6"	3'-0"	5"
21"	3'-11"	3'-4"	6"
24"	4'-3"	3'-8"	6"
27"	5'-6"	3'-11"	6"
30"	5'-9"	4'-4"	6"
36"	6'-3"	5'-2"	6"
42"	6'-11"		8"
48"	7'-4"		9"
54"	8'-0"		9"

TRENCH SCHEDULE

** TABLE IS FOR ASTM D-3034, WALL THICKNESS CLASS SDR 35 FOR 6"-15" AND ASTM F-679 WALL THICKNESS CLASS T-1 FOR 18"-36". FOR OTHER FLEXIBLE PIPES, MINIMUM TRENCH WIDTH "U" SHALL MEET MANUFACTURER'S REQUIREMENTS.

CATCH BASIN SCHEDULE

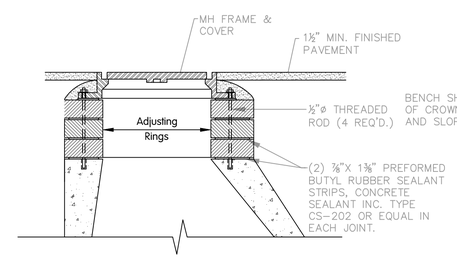
CB NO.	TYPE	TOP OF CASTING	OUTLET	INLET	REMARKS

WILL BE COMPLETED

MANHOLE SCHEDULE

MH NO.	SHEET NO.	TYPE	ELEVATIONS		REMARKS
			CASTING	INVERT	

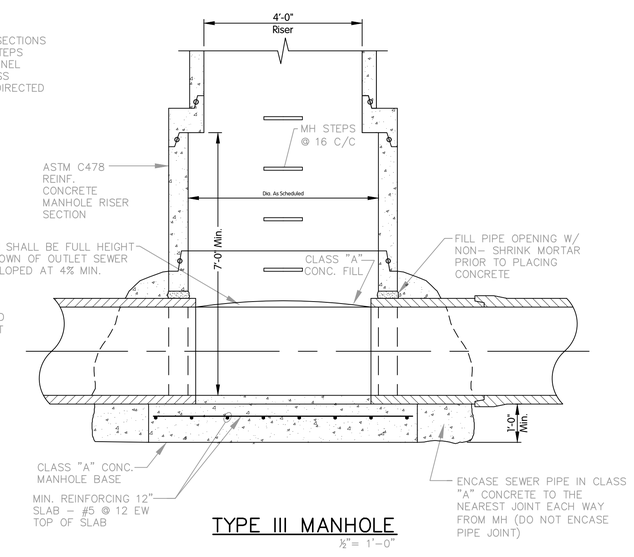
WILL BE COMPLETED



BUTYL RUBBER SEALANT DETAIL

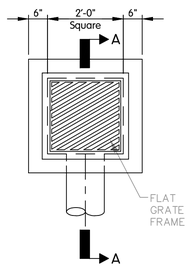
NTS

NOTE:
PREFORMED BUTYL RUBBER SEALANT BETWEEN MH ADJUSTING RINGS MAY BE USED IN LIEU OF CEMENT MORTAR.

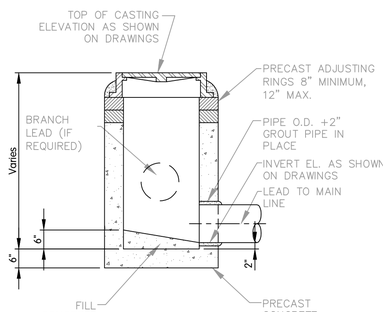


TYPE III MANHOLE

½"= 1'-0"



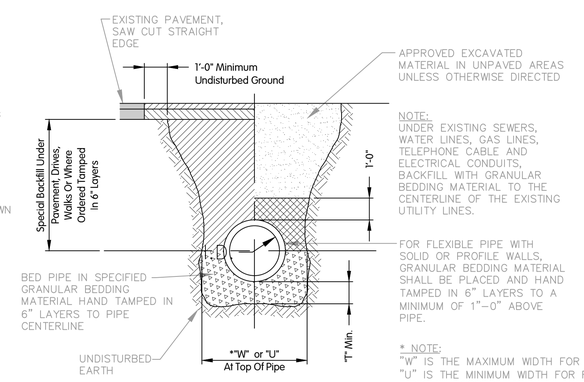
FLAT GRATE - PLAN



SECTION A-A

PRECAST CATCH BASIN DETAIL

½"=1'-0"



NOTE:
UNDER EXISTING SEWERS, WATER LINES, GAS LINES, TELEPHONE CABLE AND ELECTRICAL CONDUITS, BACKFILL WITH GRANULAR BEDDING MATERIAL TO THE CENTERLINE OF THE EXISTING UTILITY LINES.

FOR FLEXIBLE PIPE WITH SOLID OR PROFILE WALLS, GRANULAR BEDDING MATERIAL SHALL BE PLACED AND HAND TAMPED IN 6" LAYERS TO A MINIMUM OF 1"-0" ABOVE PIPE.

* NOTE:
"W" IS THE MAXIMUM WIDTH FOR RIGID PIPES. "U" IS THE MINIMUM WIDTH FOR FLEXIBLE PIPES IN ACCORDANCE WITH ASTM D-2321.

TRENCH DETAIL

NTS

JOINT RESTRAINT TABLE (FOR PUMPED LINES)

LENGTH OF PIPE TO BE RESTRAINED IN EACH DIRECTION FROM ℄ OF BEND

DEGREE OF BEND	6"	8"	12"	16"	18"	30"	36"	42"	48
90°	22'	28'	40'	51'					
45°	9'	12'	17'	21'					
22½°	4'	6'	8'	10'					
11¼°	2'	3'	4'	5'					
Tee	44'	59'	87'	114'					
Plug	50'	66'	93'	121'					

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Napoleon, Ohio 43545
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Fax: (419) 599-8393

2021
WWTP Improvements
Civil
Yard Piping Details

Created:	Status:	Scale:
7/27/20	90%	AS SHOWN
Drawn: RHN	Approved: DWM	
Drawing Name: 75500003C401.DWG		

THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE

C-0.5

TOL-75500003C401-YARD PIPING - DETAILS
7/31/2020 2:56 PM - RNEUMAN
8/4/2020 1:32 PM

NOTE:
ALL ELECTRICAL CONDUITS
ARE NOT SHOWN

EQUALIZATION BASIN
DISINFECTION/EFFLUENT BUILDING
SCREW PUMP STATION
YARD HYD.
FIRE HYD.
Asphalt Pavement
Grass Area
Benchmark #20
CONTROL STRUCTURE
WASHINGTON STREET
BIO TOWER NO.2
BIO TOWER NO.1
GRAVEL AREA
ALUM TANK
CHEMICAL BUILDING
CHLORINE BUILDING
REDIRCULATION CHAMBERS
PRIMARY SETTLING TANK NO.2
PRIMARY SETTLING TANK NO.1
Benchmark #300
SLUDGE LAGOON
BLOWER BUILDING
CONCRETE APRON
AERATION CHANNELS
Grit Tank No.1
Grit Tank No.2
FINISH FLOOR ELEVATION 654.50 BUILDING
HOUSE
GARAGE
SHED
WOODS AREA
GRASS AREA
TREELINE
CHAIN LINK FENCE
CONCRETE DRIVE
RETAINING WALL
GUARDRAIL
RIPRAP
SIDEWALK
CONC.
TOE OF SLOPE
PLUG
MATCH LINE SHEET 23

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Yard Piping Existing – North

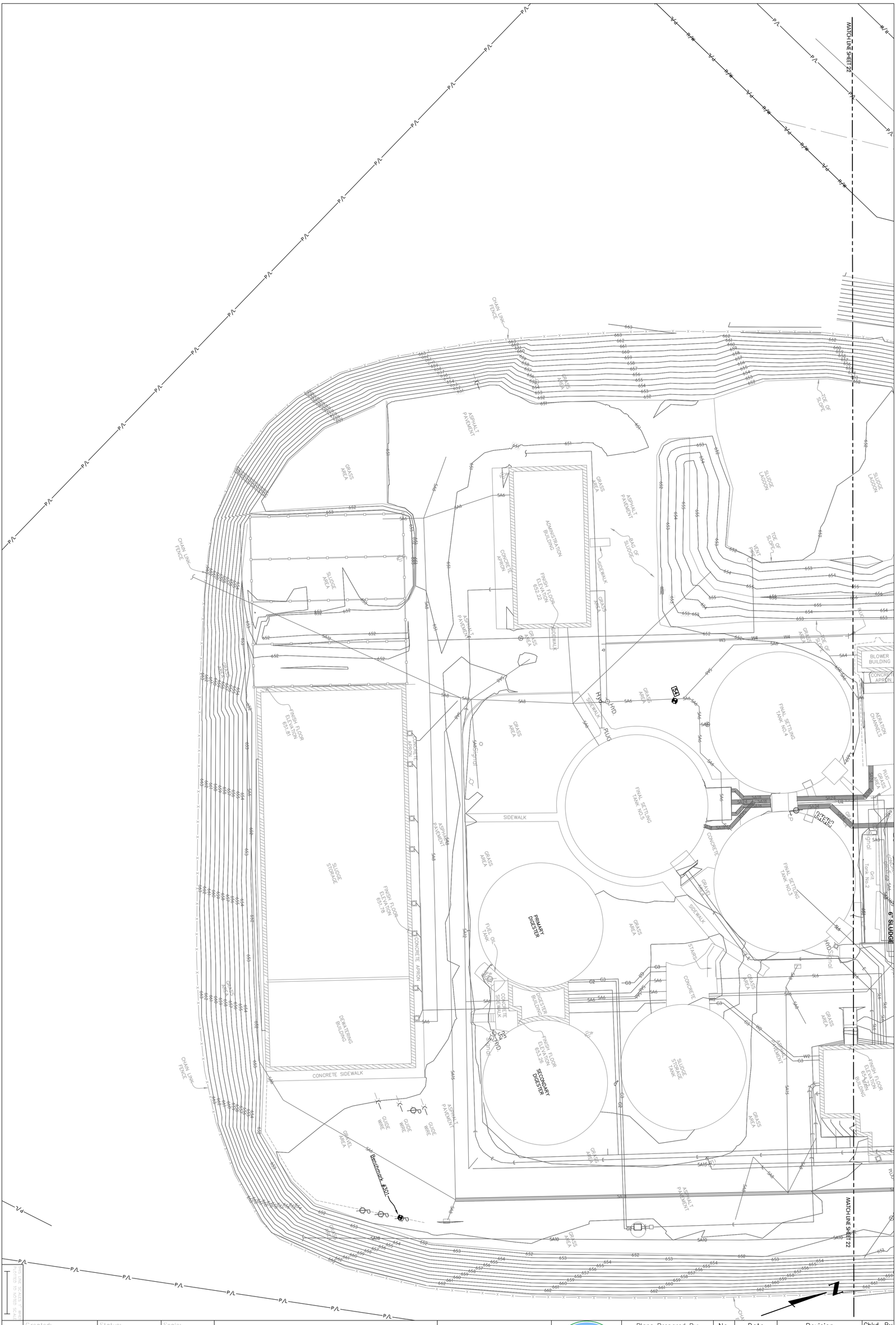
Created: 7/27/20
Status: 90%
Scale: 1"=20'
Drawn: RHN
DWM
Drawing Name: 7550003C1.DWG

SCALES 1" WHEN PRINTED TO NOTED SCALE

C-1.1
Sheet 35 Of 176

TOL-7550003C1-YARD PIPING EXISTING - NORTH
8/4/2020 11:19 AM - RNEUMAN
8/4/2020 1:32 PM

TOL-7550003C2-YARD PIPING EXISTING - SOUTH
8/4/2020 10:59 AM - RNEUMAN
8/4/2020 1:32 PM



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Drawn: RHN	Approved: DWM	
Drawing Name: 7550003C2.DWG		

2021 WWTP Improvements
Civil
Yard Piping Existing – South

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.	.	.	.

Sheet C-1.2 of 176

STUB PIPE 1 FOOT INTO EQ BASIN AND PLACE CAP ON PIPE

MH 5-2

RELOCATED FIRE HYDRANT

MH 5-1

16" EQ RETURN

12" TRENCH DRAIN

24" PRIMARY INFLUENT

6" SCUM

63 LF OF 40' CARRIER PIPE

18" PRIMARY INFLUENT

24" PRIMARY EFFLUENT

24" PRIMARY INFLUENT

12" TOWER INFLUENT

12" TOWER INFLUENT

16" RECIRCULATION

6" SCUM

6" DRAIN

24"x6" WYE

6" SLUDGE

FOR VALVE IN MANHOLE SEE DETAIL ON SHEET S-0.1

MH 5-3

Benchmark #20

Benchmark #300

6" CUT IN TEE AND SOLID SLEEVE

10" PLUG

WASHINGTON STREET

MATCH LINE SHEET 25

MATCH LINE SHEET 25

No.	Date	Revision	Chkd. By
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Yard Piping New – North

Created:	Status:	Scale:
8/3/20	90%	1"=20'
Drawn:	Approved:	
RHN	DWM	
Drawing Name:		
755000303.DWG		

THIS SHEET SCALES 1" WHEN PLOTTED TO NOTED SCALE

C-1.3

Sheet 37 Of 176

TOL-755000303-YARD PIPING NEW - NORTH
8/4/2020 10:38 AM - RNIEMAN
8/4/2020 1:33 PM

No.	Date	Revision	Chkd. By
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Yard Piping New – South

Created:	Status:	Scale:
8/3/20	90%	1"=20'
Drawn: RHN	Approved: DWM	
Drawing Name: 7550003C4.DWG		

THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE

C-1.4

TOL-7550003C4-YARD PIPING NEW - SOUTH
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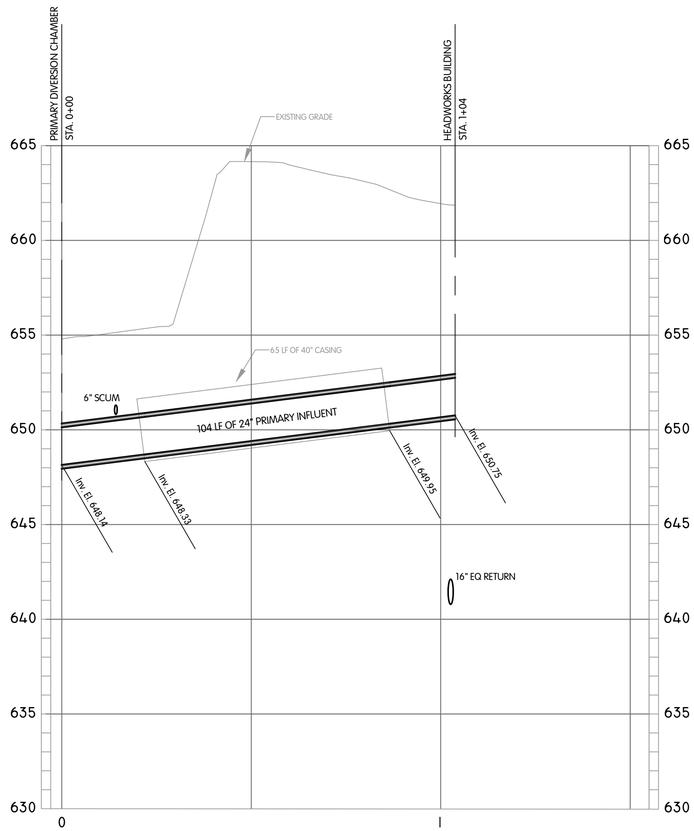
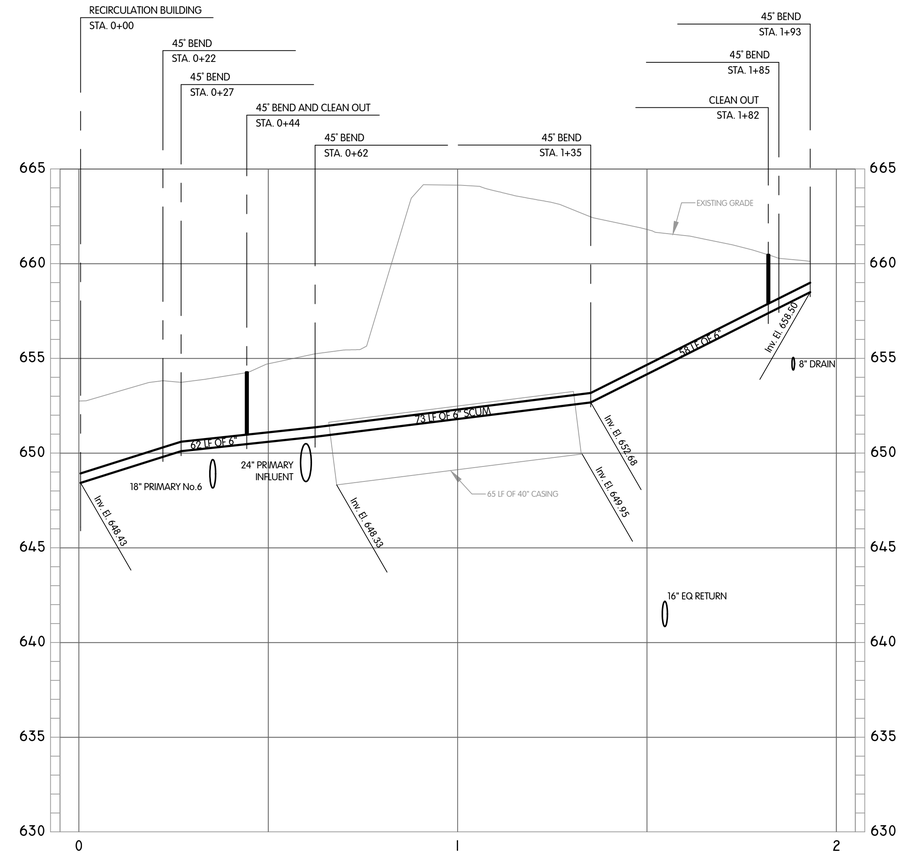
8/4/2020 1:33 PM



24" PRIMARY INFLUENT



6" SCUM

NOTES:

1. INVERT ELEVATIONS ARE SHOWN ON THE YARD PIPING PROFILE SHEET, U.N.O.
2. CENTERLINE ELEVATIONS ARE TYPICALY SHOWN FOR PIPING ON PLAN AND BUILDING / STRUCTURE SHEETS, U.N.O.

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2021
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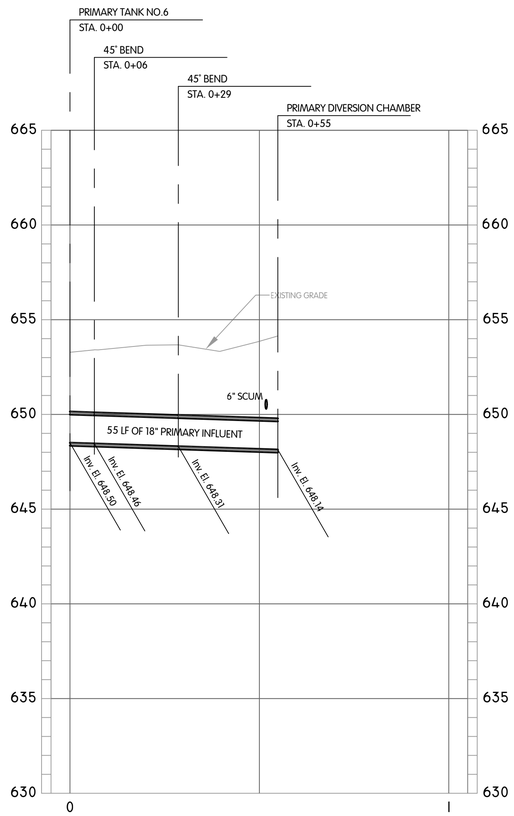
Civil
Yard Piping Profiles

Scale: 1"=20' HOR 1"=4' VERT
Status: 90%
Approved: DWM
Created: 8/3/20
Drawn: RHN
Drawing Name: 755000305.DWG

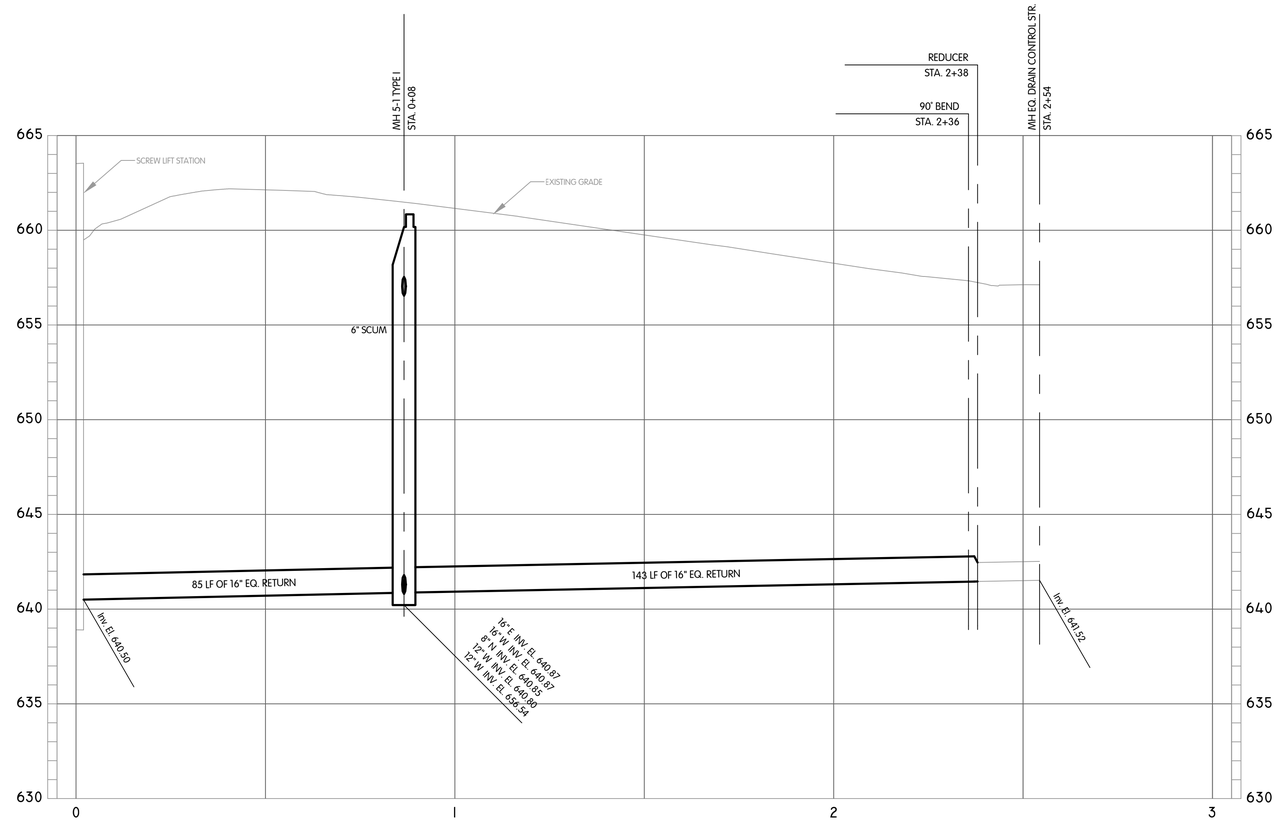
THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE

C-2.1

TOL-755000305-YARD PIPING - PROFILES
8/4/2020 1:59:22 PM
SHEET: 755000305DWG



18" PRIMARY 6 INFLUENT



12" EQUALIZATION BASIN RETURN

NOTES:

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Civil
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Scale: 1"=20' HOR 1"=4' VERT

Status: 90%

Approved: DWM

Created: 8/3/20

Drawn: RHN

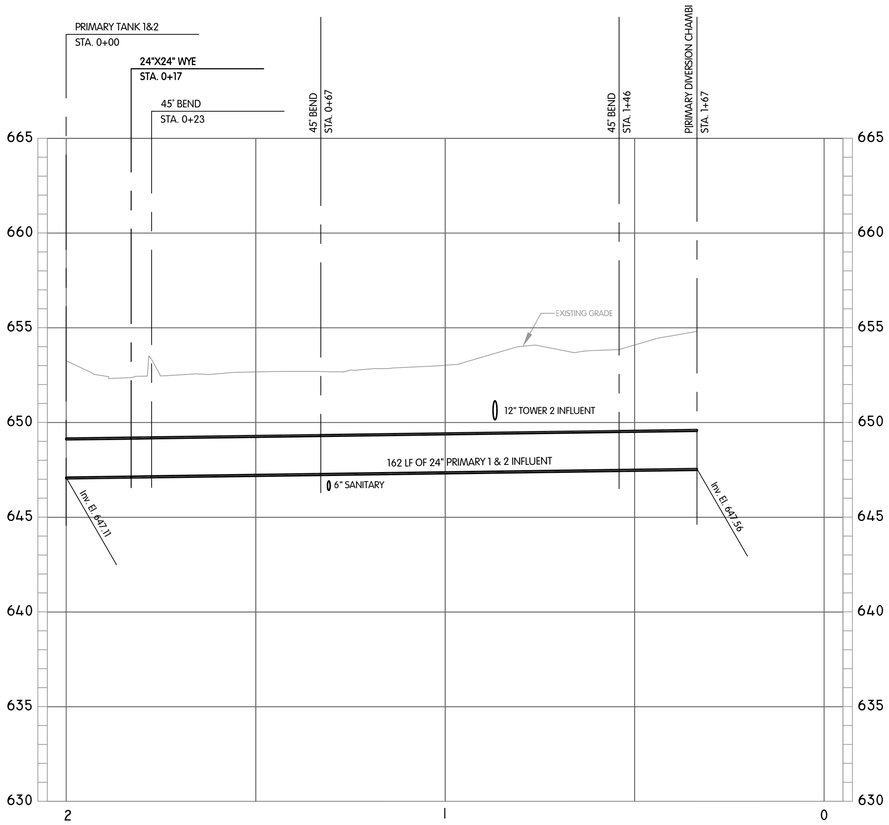
Drawing Name: 755000306.DWG

THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE

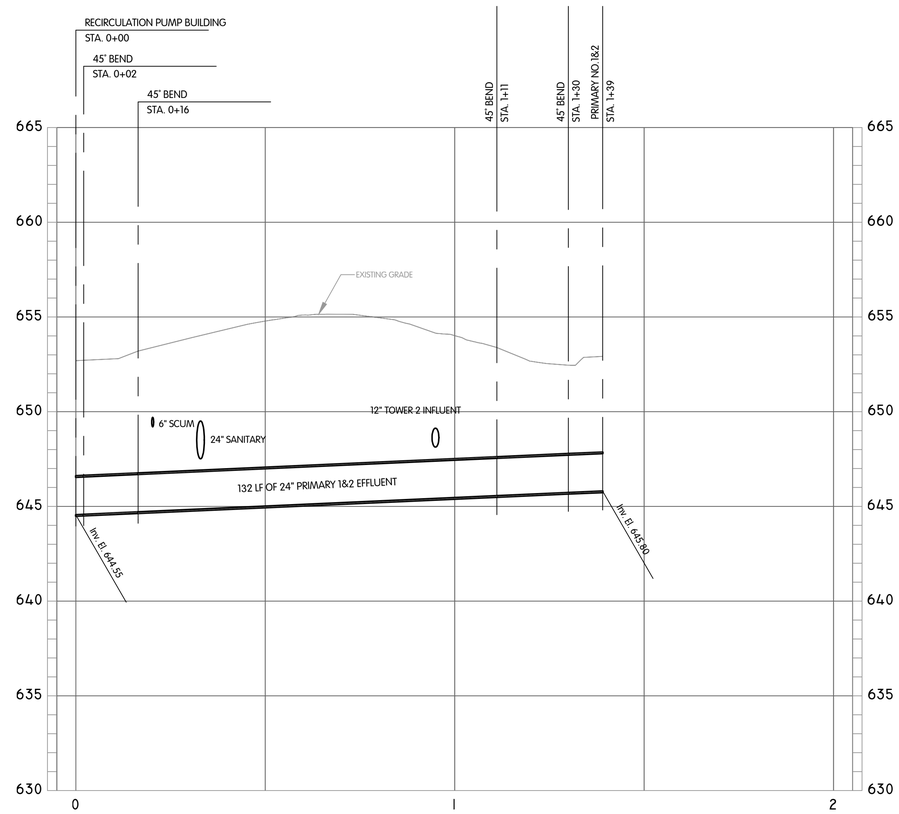
C-2.2

Sheet 40 Of 176

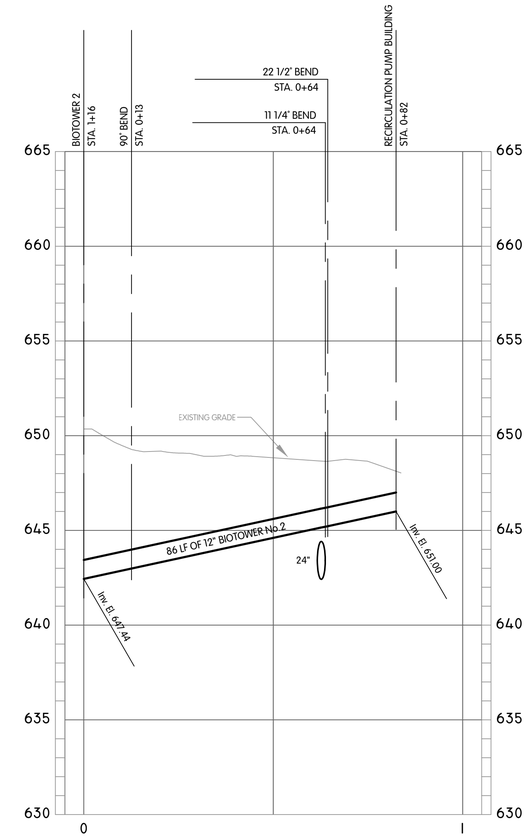
TOL-755000306-YARD PIPING - PROFILES
HOLLY/NAPOLEON - PROFILES
HOLLY/NAPOLEON - PROFILES
08/04/21 1:06:09
OPERATOR: RHN
IMAGE: CITYLOGO:NAPOLEON.PNG;755000H-JHLOGO.PNG



24" PRIMARY 1&2 INFLUENT



24" PRIMARY 1&2 EFFLUENT



12" BIOTOWER No.2

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Civil
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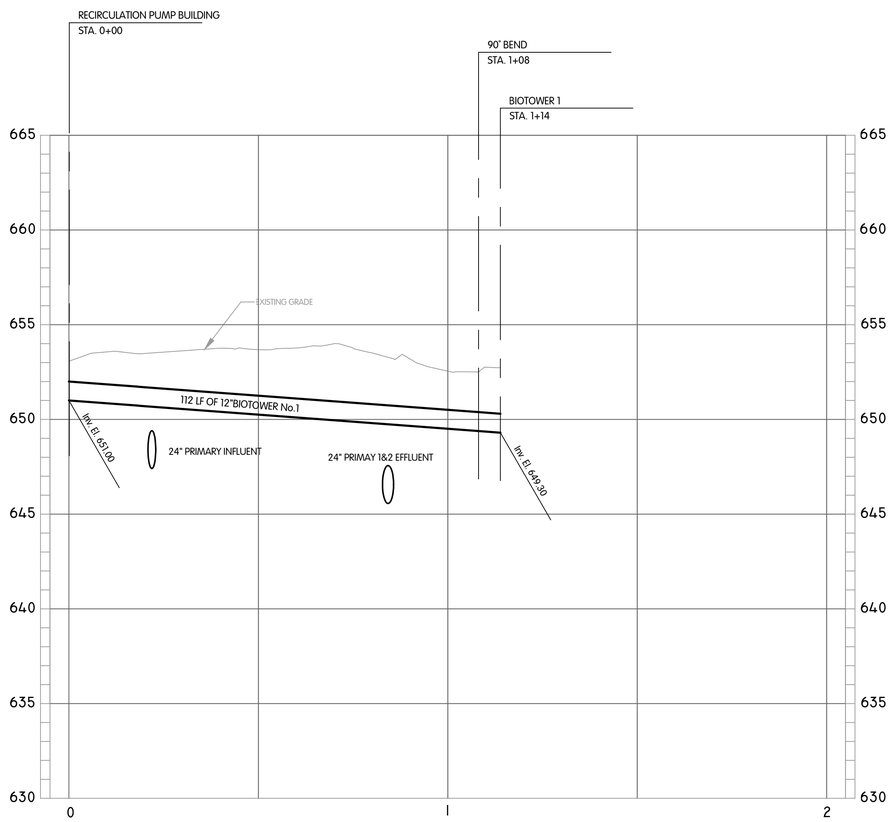
Scale: 1"=20' HOR 1"=4' VERT
Status: 90%
Approved: DWM
Created: 7/27/20
Drawn: RHN
Drawing Name: 7550003C7.DWG

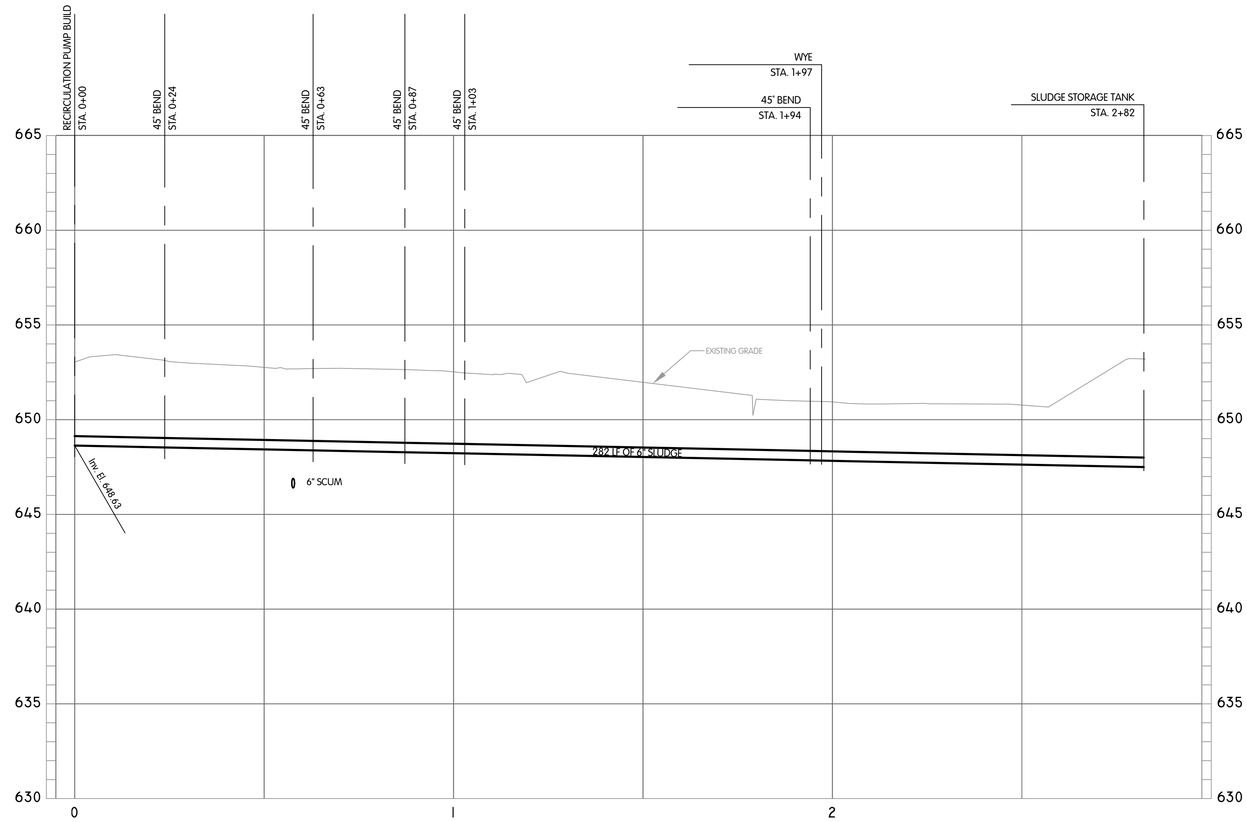
THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE

C-2.3

TOL-7550003C7-YARD PIPING - PROFILES
9/4/2020 4:43:29 PM RHUNN
9/4/2020 1:36:22 PM
IMAGE: C:\TILDES\NAPOLEON-PNG\7550001-JHLOGO.PNG



12" BIOTOWER No.1



6" SLUDGE

NOTES:

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2021
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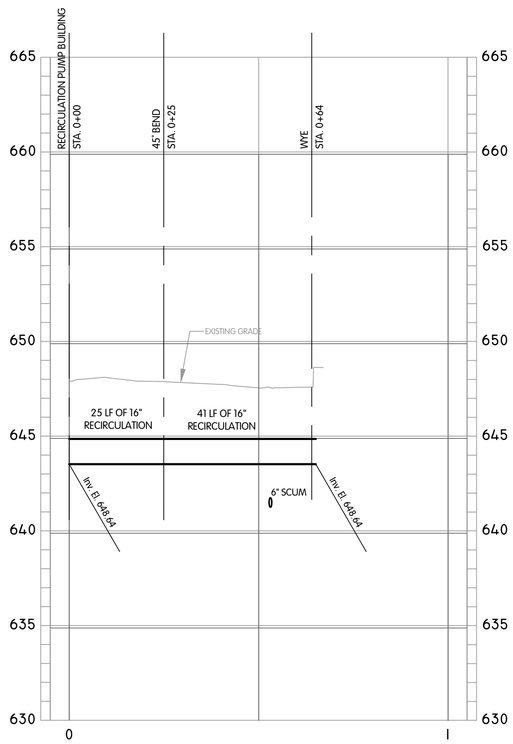
Civil
Yard Piping Profiles

Scale: 1"=20' HOR 1"=4' VERT
Status: 90%
Approved: DWM
Created: 8/3/20
Drawn: RHN
Drawing Name: 7550003C13.DWG

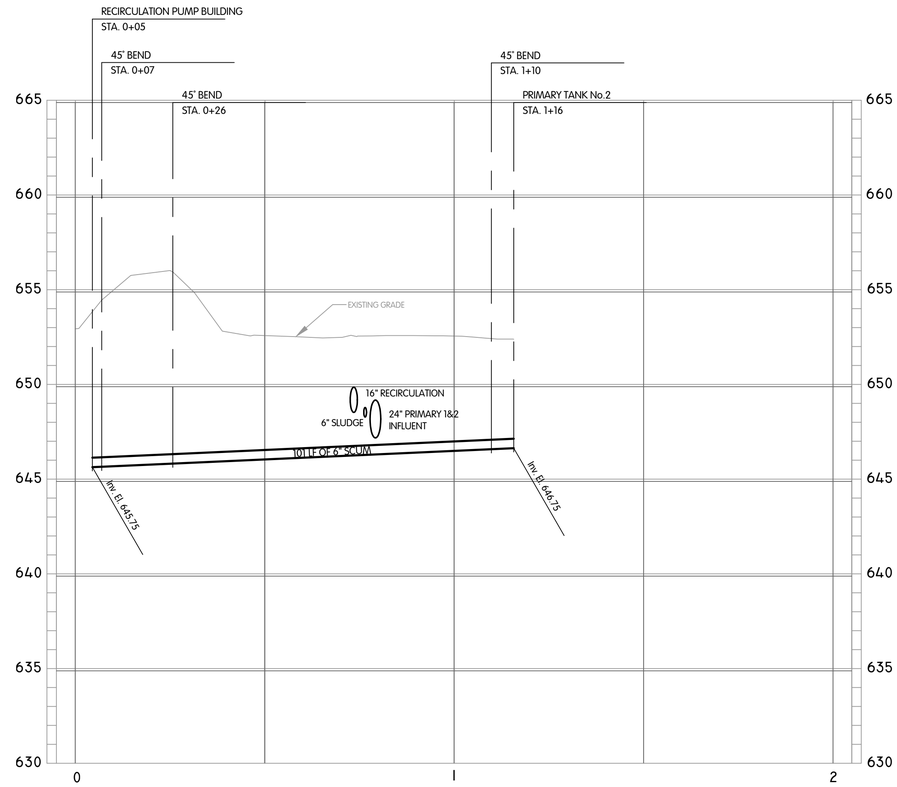
THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE

C-2.4

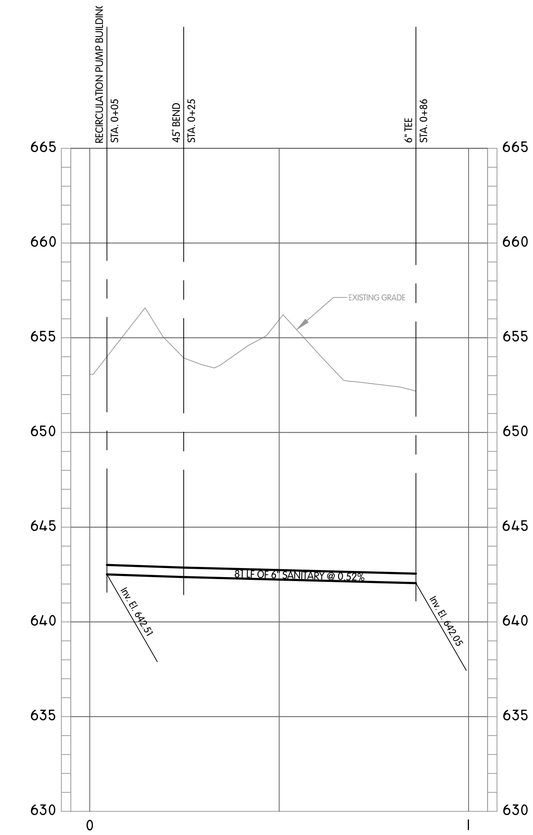
TOL-7550003C13-YARD PIPING - PROFILES
8/4/2020 1:05:22 PM
SHEET 7550003C13V



16" RECIRCULATION



6" SCUM



6" TANK DRAIN

NOTES:

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Civil
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Created: 7/27/20
Status: 90%
Scale: 1"=20' HOR 1"=4' VERT
Drawn: RHN
Approved: DWM
Drawing Name: 7550003C14.DWG

THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE

C-2.5

TQL-7550003CIV-YARD PIPING - PROFILES
8/4/2020 1:06:07 PM
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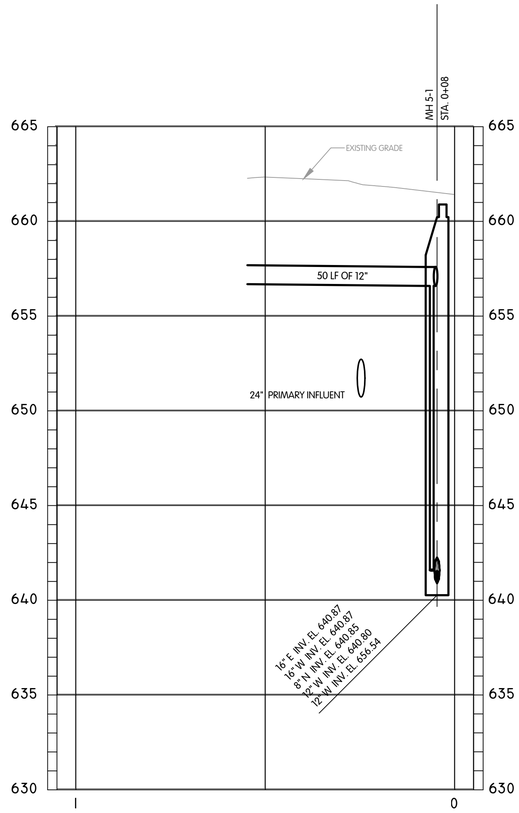
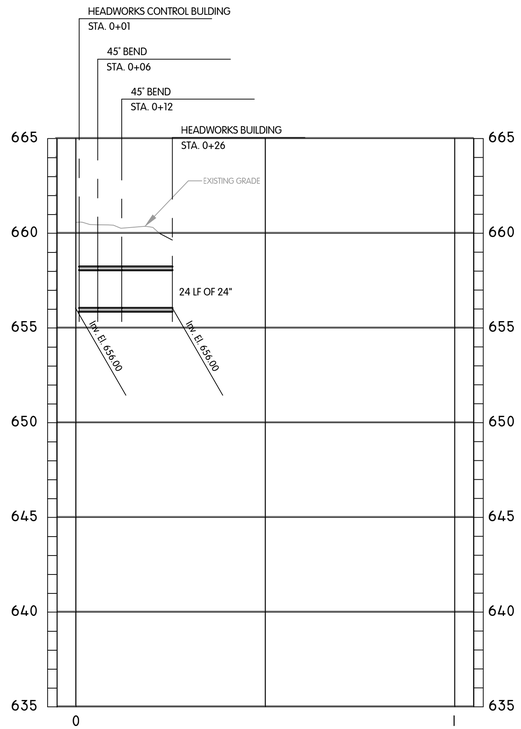
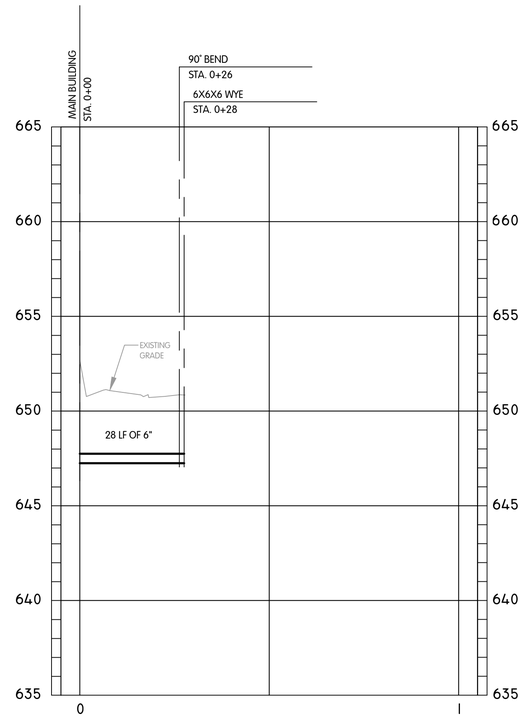


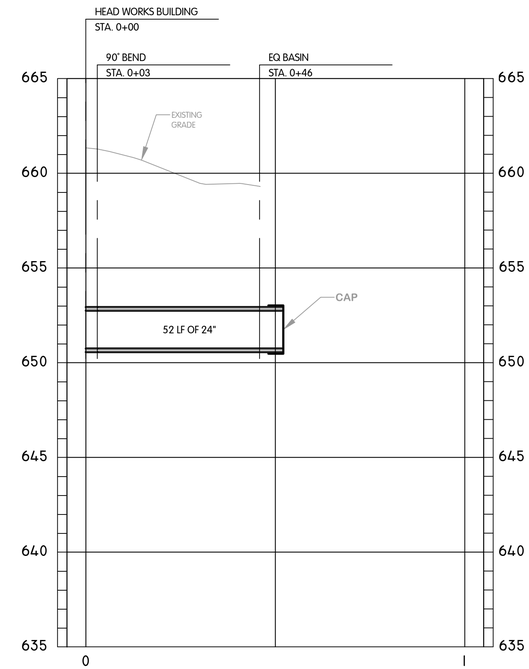
6" TRENCH DRAIN



24" HEADWORKS INFLUENT



6" SLUDGE FROM MAIN BUILDING



24" AT EQ

NOTES:

1. **INVERT ELEVATIONS ARE SHOWN ON THE YARD PIPING PROFILE SHEET, U.N.O.**
2. **CENTERLINE ELEVATIONS ARE TYPICALY SHOWN FOR PIPING ON PLAN AND BUILDING / STRUCTURE SHEETS, U.N.O.**

No.	Date	Revision	Chkd. By
.	.	.	.

Plans Prepared By:

Jones & Henry Engineers, Ltd.

Fluid thinking®...
www.JHeng.com
3103 Executive Pkwy.
Suite 300
Toledo, Ohio 43606

City Of Napoleon
Engineering Department
255 West Riverview Avenue
Napoleon, Ohio 43545
Phone: (419) 592-4010
Fax: (419) 599-8393

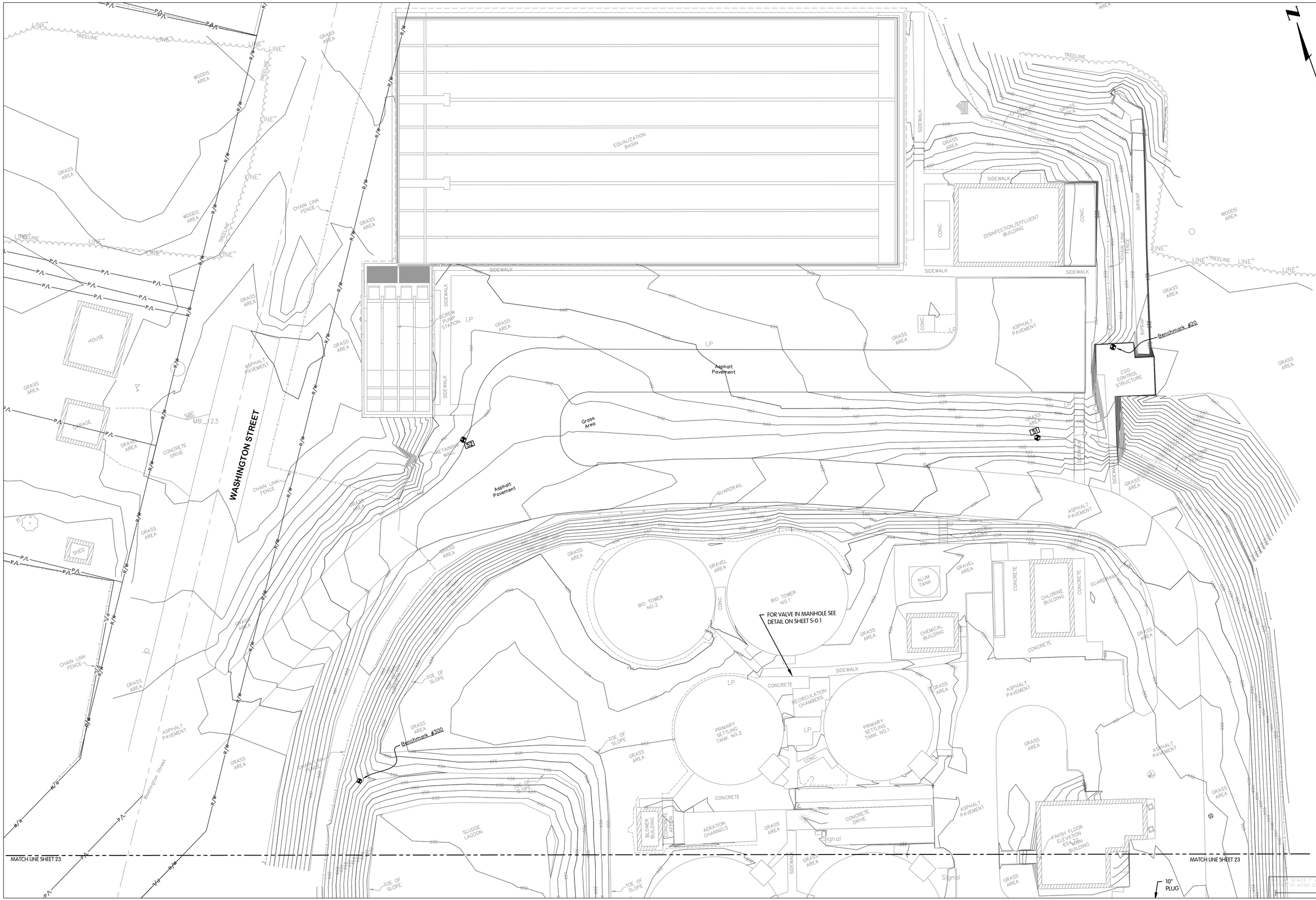
2021
WWTP Improvements
Civil
Yard PPiping Profiles

Created: 7/27/20
Status: 90%
Scale: 1"=20' HOR 1"=4' VERT
Drawn: RHN
Approved: DWM
Drawing Name: 7550003C408.DWG

THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE

C-2.6

TQL-7550003C408-YARD PIPING - PROFILES



No.	Date	Revision	Chkd. By
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2021.
WWTP Improvements
Civil
Grading Existing – North

Created:	Status:	Scale:
7/27/20	90%	1"=20'
Drawn: RHN	Approved: DWM	
Drawing Name: 7550003C8.DWG		

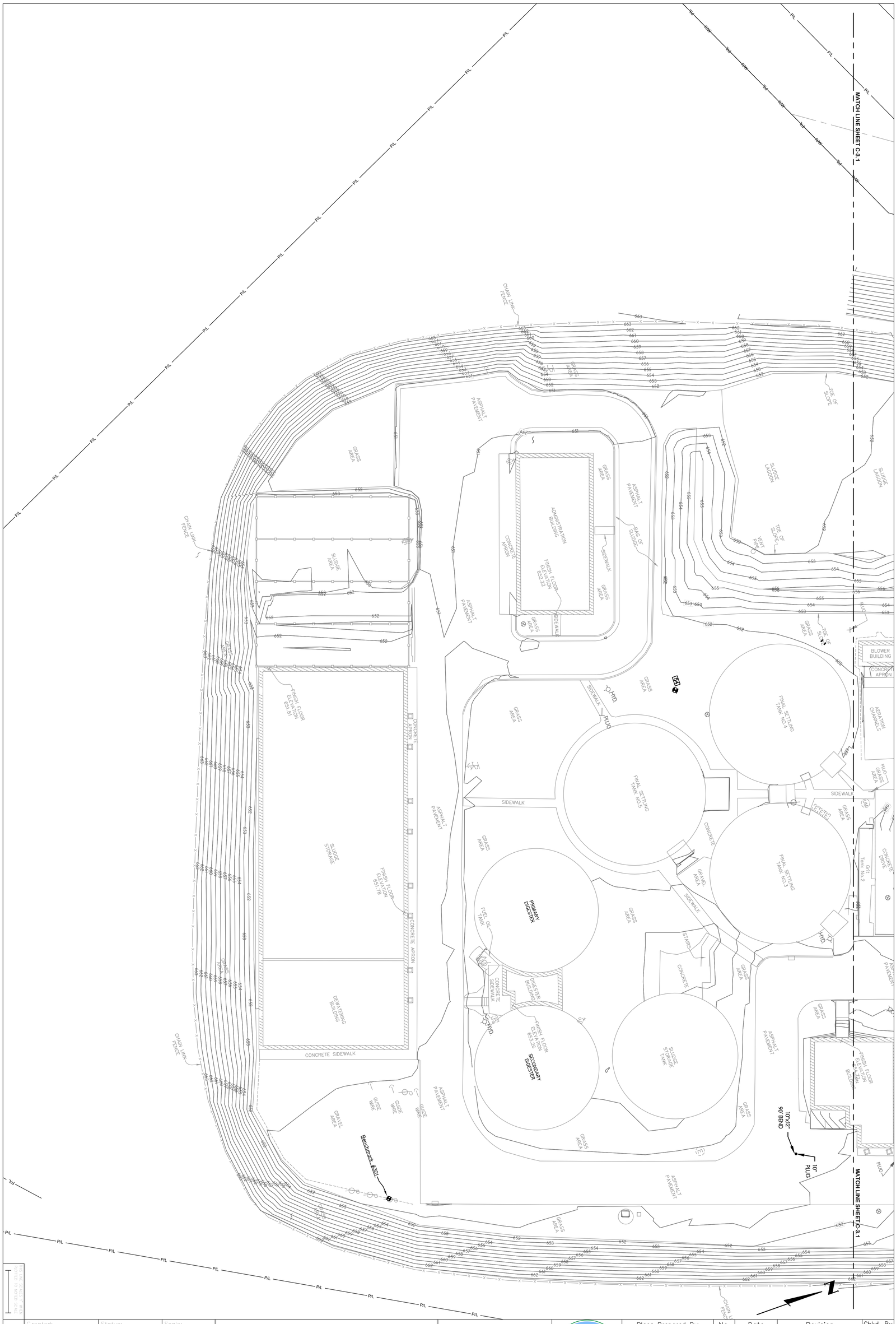
IF THIS BAR DOES NOT SCALE 1" WHEN PLOTTED AS NOTED, SCALE ACCORDINGLY

C-3.1

Sheet 47 Of 176

TOL-7550003C8-EXISTING GRADING PLAN - NORTH
8/4/2020 11:15 AM - RNEUMAN
8/4/2020 1:39 PM

TOL-7550003C9-NEW SITE GRADING PLAN - SOUTH
8/4/2020 11:16 AM - RNEUMAN
8/4/2020 1:39 PM



Created: 7/27/20	Status: 90%	Scale: 1"=20'
Drawn: RHN	Approved: DWM	
Drawing Name: 7550003C9.DWG		

Sheet C-3.2 of 76

2021 WWTP Improvements
Civil
Grading Existing – South

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Engineering Department
255 West Riverview Avenue
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Fax: (419) 599-8393

Napoleon
Heartland Values, Flowing Opportunities

Plans Prepared By:
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No.	Date	Revision	Chkd. By
.	.	.	.

No.	Date	Revision	Chkd. By
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Napoleon
Manufactured Energy Partnership

City Of Napoleon
Engineering Department
255 West Riverview Avenue
Napoleon, Ohio 43545
Phone: (419) 592-4010
Fax: (419) 599-8393

2021
WWTP Improvements
Civil
Grading And Paving Plan New-North

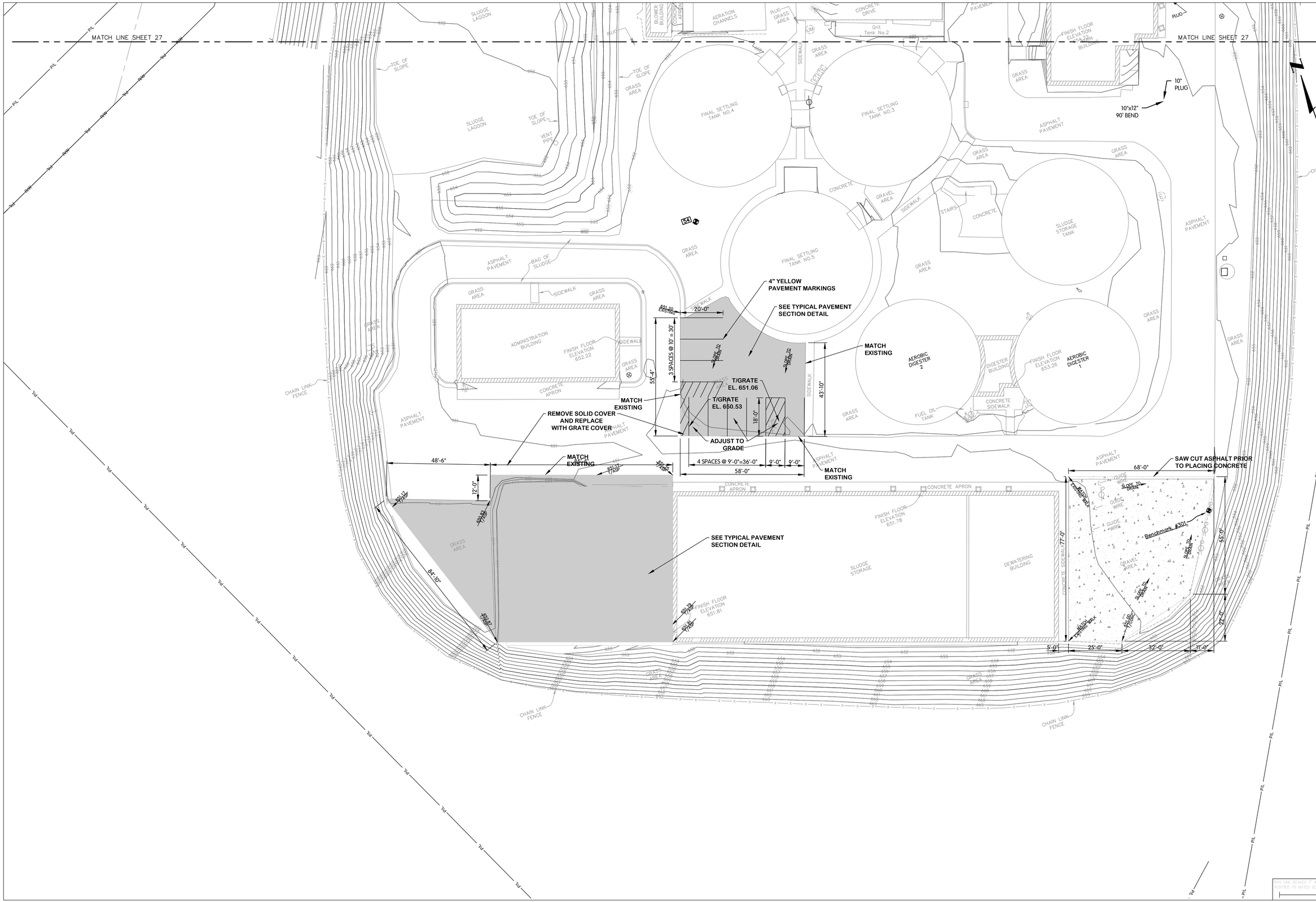
Created:	Drawn:	Status:	Approved:	Scale:
8/4/20	RHN	90%	DWM	1"=20'

Drawing Name: 7550003C10.DWG

C-4.1

Sheet 47 Of 176

TOL-7550003C10-SITE GRADING & PAVING PLAN NORTH
8/4/2020 12:06 PM - RNEUMAN
8/4/2020 1:39 PM



No.	Date	Revision	Chkd. By
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Napoleon
Manufactured Energy Opportunities

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Napoleon, Ohio 43545
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2021 WWTP Improvements Civil

Paving And Grading New – South

Created:	Status:	Scale:
7/27/20	90%	1"=20'
Drawn: RHN	Approved: DWM	
Drawing Name: 7550003C11.DWG		

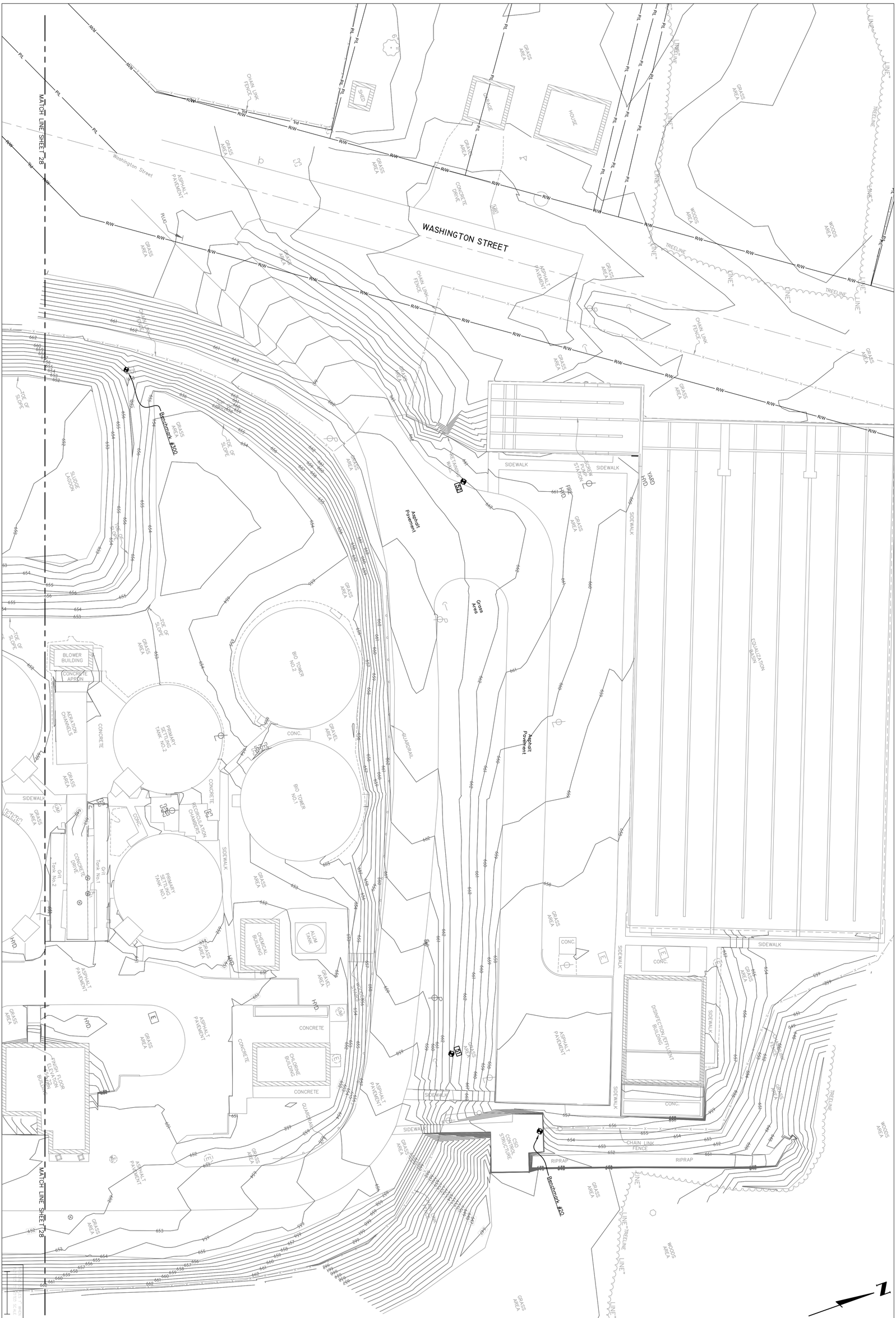
THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE

C-4.2

Sheet 48 Of 176

TOL-7550003C11-SITE GRADING & PAVING PLAN NEW - SOUTH
8/4/2020 11:18 AM - RNEUMAN
8/4/2020 1:39 PM

TOL-7550003C1101-DIKE IMPROVEMENTS DETAILS
8/4/2020 11:18 AM - RNEUMAN
8/4/2020 1:40 PM



Sheet: C-5.1 of 176	Created: 7/29/20	Status: 90%	Scale: 1'=20'
	Drawn: RHN	Approved: DWM	
	Drawing Name: 7550003C1101.DWG		

2021
WWTP Improvements
Civil
Dike Improvements Details – North

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Napoleon
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Toledo, Ohio 43606

No.	Date	Revision	Chkd. By
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MATCH LINE SHEET 27

MATCH LINE SHEET 27

SLUDGE LAGOON
TOE OF SLOPE
SLUDGE LAGOON
TOE OF SLOPE
VENT PIPE
TOE OF SLOPE
GRASS AREA
BLOWER BUILDING
CONCRETE APRON
AERATION CHANNELS
GRASS AREA
CONCRETE DRIVE
ASPHALT PAVEMENT
FINISH FLOOR ELEVATION 654.70 BLOWER BUILDING
PLUG
10" PLUG
10"x12" 90° BEND
SIDEWALK
GRASS AREA
FINAL SETTLING TANK NO.4
FINAL SETTLING TANK NO.3
HYD.
ASPHALT PAVEMENT
GRASS AREA
GRASS AREA
CHAIN LINK FENCE
CONCRETE
GRAVEL AREA
SIDEWALK
STAIRS
CONCRETE
SLUDGE STORAGE TANK
ASPHALT PAVEMENT
54
GRASS AREA
FINAL SETTLING TANK NO.5
GRASS AREA
ASPHALT PAVEMENT
BAG OF SLUDGE
GRASS AREA
SIDEWALK
GRASS AREA
HYD.
SIDEWALK
PLUG
ADMINISTRATION BUILDING
FINISH FLOOR ELEVATION 652.22
SIDEWALK
GRASS AREA
CONCRETE APRON
GRASS AREA
CHAIN LINK FENCE
ASPHALT PAVEMENT
ASPHALT PAVEMENT
GRASS AREA
SIDEWALK
GRASS AREA
AEROBIC DIGESTER 2
DIGESTER BUILDING
FINISH FLOOR ELEVATION 653.28
AEROBIC DIGESTER 1
GRASS AREA
FUEL OIL TANK
CONCRETE SIDEWALK
HYD.
GRASS AREA
ASPHALT PAVEMENT
ASPHALT PAVEMENT
CONCRETE APRON
CONCRETE APRON
GUIDE WIRE
GUIDE WIRE
GUIDE WIRE
Benchmark #301
FINISH FLOOR ELEVATION 651.78
GRASS AREA
SLUDGE AREA
SLUDGE STORAGE
DEWATERING BUILDING
CONCRETE SIDEWALK
GRAVEL AREA
GRASS AREA
FINISH FLOOR ELEVATION 651.81
GRASS AREA
GRASS AREA
CHAIN LINK FENCE
CHAIN LINK FENCE
P/L

No.	Date	Revision	Chkd. By
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Plans Prepared By:

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2021
WWTP Improvements
Civil
Dike Improvements Details - South

Created:	Status:	Scale:
7/28/20	90%	1"=20'
Drawn: RHN	Approved: DWM	
Drawing Name: 7550003C1102.DWG		

THIS LINE SCALES 1" WHEN PLOTTED TO WATER SCALE

C-5.2

Sheet 50 Of 176

TOL-7550003C1102-DIKE IMPROVEMENTS DETAILS
8/4/2020 11:18 AM - RNEUMAN
8/4/2020 1:40 PM

City of Napoleon, Ohio

MUNICIPAL PROPERTIES, BUILDINGS, LAND USE, AND ECONOMIC DEVELOPMENT COMMITTEE

SPECIAL MEETING AGENDA

Monday, August 10, 2020 at 7:00 pm

LOCATION:
Council Chambers, 255 West Riverview Avenue, Napoleon, Ohio

1) Approval of Minutes: June 08, 2020 (In the absence of any objections or corrections, the Minutes shall stand approved)

2) Executive Session – Economic Development

3) Adjournment

Roxanne Dietrich

Roxanne Dietrich – Clerk of Council

City of Napoleon, Ohio

MUNICIPAL PROPERTIES, BUILDING, LAND USE AND ECONOMIC DEVELOPMENT COMMITTEE MEETING MINUTES

Monday, June 08, 2020 at 7:00 pm

PRESENT

Committee Members	Molly Knepley-Chair, Lori Siclair, Jason Maassel
on WebEx:	Joe Bialorucki
City Manager	Joel L. Mazur
Law Director	Billy Harmon
Clerk of Council	Roxanne Dietrich
Others on WebEx	News Media, Dennis Miller and Wil Burns (Maumee Valley Planning Organization)

ABSENT

CALL TO ORDER

Chairperson Knepley called the Municipal Properties, Building, Land Use and Economic Development Committee meeting to order at 7:07 pm.

APPROVAL OF MINUTES

The minutes from the May 11, 2020 meeting were approved as presented.

AMERICAN ROAD TAX INCREMENT FINANCING DISTRICT AND STATE INFRASTRUCTURE BANK LOANS

Mazur reported Dennis Miller and Wil Burns from Maumee Valley Planning Organization (MVPO) have been working in partnership and collaborating with us during this process. Tax Increment Financing (TIF) is a financial tool used to help with public infrastructure projects for the sake of Economic Development. Any increase in property taxes will go towards paying off the cost to put public infrastructure in. The TIF district is set up for a period of time and will need funding upfront to pay for the project. The debt is paid off with TIF district revenue. The State Infrastructure Bank (SIB) loan is 3% fixed interest rate for a maximum of 25 years. There is no payment for the first thirty months with interest paid the second year. Loan repayment can be tailored to fit our need. Additional funds can be made available if something were to happen. The total project cost for Loves Development will be about $3 million. Changes are required to the intersection at Industrial and American and maybe a traffic light at Industrial and US 24 on the north side. With these added costs, the total may be more than $3 million, the additional costs are not associated with the City of Napoleon TIF District. Loves project is scheduled for 2020, the project scheduled for 2021 is a $1.5 million project. We would be looking to apply for a $1.5 million SIB loan to take care of that project, engineering will be paid for out of the TIF. Loves Development needs major improvements made on American Road. American Road is a city owned road and we will need to do something with it at some point. American Road is not built to handle industrial traffic. At one time that was a county road, it was dedicated to the city when there were annexations. Loves realizes there are significant improvements that need to be done. Their project engineer, CESO, has been working with MVPO. The city is working with Loves engineers and project manager to see the project through and that it meets our standards. The city and MVPO have secured $600,000 in funding from three different grants: Transportation Improvement District, Ohio Jobs and Commerce and 629 Funds that is another ODOT program administered by RGP. Two of the grants will be administered by MVPO and the Jobs and Commerce grant will be administered by the City.

We had preliminary conversations with the school districts (the TIF district covers two school districts, Liberty Center and Napoleon). Council approval is required if the TIF is at 75% for a 10-year term. With

the SIB loan it might make more sense to align the TIF with a maximum term of a SIB loan, so 25 years. The TIF District can go up to 30 years. Conceptually it would be 100% at 25 years with a payment in lieu of taxes to each of the school districts depending what developed properties fall in their district. American Road Holdings is under development with a 10 year CRA, Shank Properties is developed with a 10 year CRA. Loves does not have a CRA, the tax increase would go towards paying the debt service for the TIF district. This is an opportunity to have a development in place that will benefit from this road improvement. That is why this is being proposed now but, we have to establish the TIF district before those improvements are actual. We can have a smaller amount owed over the first 10 years and as those CRAs fall off the improvements for those properties, the tax increases, could be used towards paying off the TIF plus whatever else is developed in the TIF district. Burns said the properties with CRAs would be exempt from contributing to the TIF until year eleven. Mazur said in this case, it would be year nine or ten as they are already a year into the CRA. Siclair said so, seven years in between if no payment is due the first year and only interest in the second year. Mazur noted we would still collect from improvements made to Love's Development. Miller said once you establish the TIF district, the funds collected cannot only be used to pay off the SIB loan but, can also be used for future improvements that might occur in that area over the term of the TIF district. If we have other improvements that are needed to help serve additional development properties, we will have those funds collected into an account at the city that can be appropriated to make other improvements to that area. Usually we do a Master Plan on how to build the area out and service. We work with the engineer to determine what additional needs may be needed. The city oversees the funds to improve infrastructure. Mazur said County Road R is half in the city and half on the county side. To stop at the intersection may include a portion of Road R. Miller said the TIF district can do up to 300 acres. Burns noted we are at 287 acres. Knepley asked how do the schools feel? Mazur replied they were receptive and open to the idea. The next step would be to seek approval from this committee to move forward to establish a TIF district, to seek a SIB loan and plan the project for next year. Maassel asked why is the property in the upper left included? Is it part of the district? When American Road and Oakwood gets improved, will their taxes go up? Miller explained the only way taxes increase is if the property has a development on it. It will not be reappraised because it is in a TIF district. That property was included as it has the same ownership as the part that fronts on Oakwood Avenue. If you do not want to include this portion, we can take out this proposed area. Maassel asked, you are fairly confident Loves is coming and they will get their portion done? The city is spending a lot of money to improve the rest of American Road and Oakwood Avenue with the hope that future development happens there to help pay off the SIB and TIF. Mazur said the TIF district generates revenue to pay off the SIB. Maassel asked if no further development goes in, is the city is on the hook for payments? It's 30 months after completion and then a year of no interest and then a year of interest only. Mazur said the clock starts when the loan gets closed. Miller said we will take the loan out when you are prepared to bid the project to demonstrate we have funds to pay the contractor. Maassel cited, so if today we are bidding the project and get the money, thirty months from now is January 1, 2023. So, 2023 would be interest only. Miller-right and in 2024 amortization would kick in unless we can negotiate a longer term and I think that is probably what we should attempt to do in the course of laying out the financing with the SIB. That would be important for making a decision and to figure out debt service for budgeting purposes. Maassel-if this does not happen how do they make themselves even? Miller-we would try if ODOT would give us a SIB loan with some type of back loading of the principal payment only for the first 5, 6 or 7 years is what we should look to do. Maassel asked in your experience, ODOT usually does that? Miller–it is a pretty flexible program. Burns-we had a conversation with the person that runs the program and I believe it is flexible. We would have to get into that further as we get more information to the members of Council. Maassel asked do we need to move the city limits? Mazur-yes, if we could. Burns-the projections would be based on Loves Development, what they would generate to give us an idea of what the shortfall may be. Maassel-we have Loves, Paul Martin and Sons, the Vet Clinic, and the crematorium for Rodenberger coming in, Harley Davidson is not included. Mazur said it is not, adding that acreage would not benefit the TIF district as that property is already developed. The city would be on the hook for the SIB loan. The reality is you do American Road now or, you do it later

with all capital funds. We are already getting truck traffic down that road. American Road is aging and deteriorating. Siclair said in trying to develop there, there will be more traffic and we have to prepare for that. Is there anything to deter someone from developing there? Mazur-the condition of the road, the city will not provide any additional CRA incentives. Siclair-that could possibly defer someone from developing in that area. Other than that infrastructure is a benefit. Mazur asked Miller when the road is redone, does the County Auditor re-evaluate the properties to take into consideration the infrastructure in front of the properties? Miller-just the actual on-site improvements are what they appraise. Burns-there are other creative incentives to help other than CRAs. Siclair noted the Master Plan is important at this point. Mazur-this project is in-line with the Master Plan because of what is being proposed at Industrial. I see this as the next frontier for industrial development in Napoleon.

Motion: Siclair Second: Maassel
to recommend City Council approve establishing a TIF district and seek a SIB loan

Roll call vote on the above motion:
Yea-Bialorucki, Knepley, Maassel, Siclair
Nay-
Yea-4, Nay-0. Motion Passed.

The Use of City Assets to Promote Events, Activities or Economic Development Inside the City Limits in which the City is not a Traditional Partner
Maassel said a request was received from the 424 garage sales that are going on this weekend. They asked if we would promote their event on the City's website and social media. Harmon said this could be in line with what we are allowed to say and do, there is the potential you can upset someone. If this comes through, I would suggest taking it on a case-by-case basis. We can put things on the city website, but do we want to. Mazur stated he sees management of the city website as administrative. Unless City Council wants to pass a policy on what goes on the website. The 424 garage sales are a great event, but we don't sponsor it directly nor do we partner with them like we do with the Fall Fest, where we are contributing funds to that event. Maassel citied thus the traditional partner. Mazur said we partner with the Chamber for Ribfest. I feel like that is why we have the Chamber of Commerce, CIC and other organizations to help promote events. My concern is we would start oversaturating our messages. I would also caution we could be putting ourselves in a position if someone gets upset or what happens if something is missed. Harmon noted we could run into the potential of promoting a business that may not be abiding by the law. Maassel said I do not like the idea of having to pick and choose. Harmon personally I don't think it is a great idea. Siclair agreed, it is not the city's place to do that type of thing, I would automatically look to the Chamber to see what is going on. Maassel summed it up, would it potentially help promote economic development? Yes. Are there other avenues already established to promote economic activity? Yes. No action was taken.

Siclair asked about the south side project, after the bridge the manholes are not level with street. Mazur said it will be corrected at some point. I will have something in the weekly FYI.

ADJOURNMENT
Motion: Maassel Second: Siclair
to adjourn the Municipal Properties Committee meeting at 8:00 pm.

Roll call vote on the above motion:
Yea-Bialorucki, Knepley, Maassel, Siclair
Nay-
Yea-4, Nay-0. Motion Passed.

Approved

August 10, 2020 _____

Molly Knepley – Chair
Municipal Properties, Building, Land Use and Economic Development Committee

City of Napoleon, Ohio

255 West Riverview Avenue, P.O. Box 151
Napoleon, OH 43545
Telephone: (419) 592-4010 Fax: (419) 599-8393
www.napoleonohio.com

Memorandum

To: *Board of Zoning Appeals, City Council, Mayor, City Manager, City Law Director, City Finance Director, Department Supervisors, News media*
From: Roxanne Dietrich – Clerk of Council
Date: August 7, 2020
Subject: *BZA – Cancellation*

The regularly scheduled meeting of the Board of Zoning Appeals set for Tuesday, August 11, 2020 at 4:30 pm has been CANCELED due to lack of agenda items.

City of Napoleon, Ohio

255 West Riverview Avenue, P.O. Box 151
Napoleon, OH 43545
Telephone: (419) 599-1235 Fax: (419) 599-8393
www.napoleonohio.com

Memorandum

To:	City Council, Mayor, City Manager, City Law Director, City Finance Director, Department Supervisors, News media
From:	Roxanne Dietrich, Clerk of Council
Date:	August 7, 2020
Subject:	Planning Commission – Cancellation

The regularly scheduled meeting of the **PLANNING COMMISSION** for Tuesday, August 11, 2020 at 5:00 pm has been CANCELED due to a lack of agenda items.

AMP Update for July 31, 2020

American Municipal Power, Inc. <webmaster@amppartners.org>

Fri 7/31/2020 5:14 PM

To: Roxanne Dietrich <rdietrich@napoleonohio.com>

Having trouble viewing this email? Click here to view web page version

July 31, 2020

FERC to review competing proposals on PJM transmission planning

By Lisa G. McAlister - senior vice president and general counsel for regulatory affairs

After working over four years in the PJM stakeholder forum, an AMP-led coalition achieved the necessary PJM Members Committee supermajority vote, against opposition by PJM and the PJM transmission owners (TOs), to make a Section 205 filing to revise the planning process for transmission facilities that have reached the end of their operational life. Over the past few years, end of life conditions have been the primary driver for approximately 80 percent of proposed supplemental projects. The stakeholder proposal will increase transparency and have PJM, rather than the individual TOs, be responsible for planning. The PJM TOs filed a competing proposal that would usurp transmission planning responsibilities from PJM and grant the TOs additional authority, resulting in a less transparent, piecemeal planning process. This battle will now go the FERC to decide which of the two proposals is just and reasonable.

If you have any questions or need additional information about the proposals, please contact me at lmcalister@amppartners.org or 614.540.6400.

AMP holds lineworker training

By Scott McKenzie - director of member training and safety

AMP held a Lineworker Training Basic 2 course in Columbus, July 27-31. The training course provides apprentice lineworkers in their second year the opportunity to expand their knowledge and skills. Topics covered in the course include enhanced climbing skills, installation of equipment, underground and overhead conductors, substations, live-line equipment and further explanation of transformer basics.

Lineworkers in attendance included: Michael Dowdell and Joseph Puhalla, Amherst; Devin Fourman and Devin Marker, Arcanum; Daniel Kinchy and Zachary Magers, Clyde; AJ Caporaletti and Mason Sapper, Cuyahoga Falls; Jason Peters, Eldorado; Kyle Olesky, Hudson; Larry Batovsky and Matthew Evans, Newton Falls; Nicholas Carlson, Pioneer; Nathan Teater, St. Clairsville; and John Threlkeld, Williamstown;

Throughout the year, AMP offers high-quality training designed to improve employee performance and enhance safety. Members are encouraged to browse the updated AMP Training Catalog and sign up for any courses that might benefit their community. If you have questions about training, please contact Jennifer Flockerzie at jflockerzie@amppartners.org or 614.540.0853.

AMP hosted webinar: COVID-19 Update

By Holly Karg - director of media relations and communications

Today, AMP hosted a virtual COVID-19 Update presentation featuring an epidemiologist, Tina Lewis. The presentation covered the evolution of the pandemic, infection and prevention data, as well us geographic updates on the spread of the virus.

Lewis is an epidemiologist and clinical microbiologist who holds a Masters of Public Health in Epidemiology from Emory University. She has worked as an epidemiology contractor for the Center for Disease Control, as the District Epidemiologist in Fulton County, Ga., and as an epidemiology contractor for The Energy Authority.

A recording of the webinar can be viewed on the Member Extranet (login required) here. The video is also posted as unlisted on AMPtv - AMP's YouTube Channel. If you need the direct link, please contact me at hkarg@amppartners.org.

We encourage members to share policies, procedures, communications or other information developed to help manage your local efforts related to the COVID-19 crisis. If you would like to provide resources for posting, receive call-in information for the member conference calls or need assistance with extranet login credentials, please send an email to COVID-19@amppartners.org.

Please contact Corey Bentine at cbentine@amppartners.org or me at hkarg@amppartners.org if you have any questions.

New PJM peaks keep coming

By Mike Migliore - vice president of power supply planning and marketing

As Columbus experienced its 20th day above 90 degrees and Danville its 23rd, PJM hit their second and fifth highest loads this week. On July 27, PJM, as well as APS, PP&L, Penelec, Meted and Dayton Power & Light, saw new annual peaks. On July 28, the PJM peak fell just short of the fifth highest load as rain moved across the system around 4 p.m. On July 29, hot temperatures again spread across the east coast, which drove PJM's peak load to its fifth highest of the year, surpassing the load on July 21 by 48 MW. August will start out with a return to normal temperatures, so current forecasts indicate that no peak shaving will be needed for the first week of the month.

The current CPs reported by PJM for 2020 are shown below. (EPT = Eastern Prevailing Time, also known as clock time)

ZONE	2020 Peak Load Thru 7/30/20 (MW)	Date	Hour Ending EPT	2019 Peak
AEP	21,657	7/9/2020	17	22,514
FE	12,465	7/9/2020	17	12,572
APS	8,637	7/27/2020	18	9,596
PPL	7,260	7/27/2020	18	7,939
DUKE	4,975	721/2020	18	5,052
DELMARV	4,086	7/20/2020	18	4,098
DAYTON	3,296	7/27/2020	15	3,246
PENELEC	2,908	7/27/2020	15	3,015
METED	2,976	7/27/2020	19	2,986

PJM 1CP	144,565	7/20/2020	17	151,570
PJM 2CP	143,756	7/27/2020	17	143,187
PJM 3CP	143,473	7/9/2020	18	141,150
PJM 4CP	141,453	7/6/2020	15	141,389
PJM 1CP	144,565	7/20/2020	17	151,570

Nominations sought for OMEA Board and honorary membership

By OMEA Nominating Committee

Four seats on the Ohio Municipal Electric Association (OMEA) Board of Directors expire this year and the OMEA nominating committee is seeking nominations. The seats up for election this year on the OMEA Board of Directors are currently held by Celina, Hamilton, Oberlin and St. Marys. Three of these seats must be filled by an elected official. There is one nonelected seat up for election this year.

Nominations are due by Aug. 28, and should be directed to the nominating committee, which is made up of Bryan Mayor Carrie Schlade, 419.633.6000 or mayor@cityofbryan.com; Edgerton Mayor Robert Day, 419.298.2912 or rday@edgerton-ohio.com; and Tipp City Mayor Joe Gibson, 937.667.8425 or gibsonj@tippcity.net. You may also contact Michael Beirne, OMEA executive director, at 614.540.0835 or mbeirne@amppartners.org.

We also welcome suggestions for OMEA honorary membership. Honorary membership is awarded to individuals who have had a distinguished public power career with significant accomplishments - with special consideration given to individuals who have retired from service or announced that they will be retiring in the near future.

AMP Economic Development Resource Page

By Alexis Fitzsimmons - director of economic and business development

The Economic Development section of the Member Extranet (login required) features valuable resources and information to assist member communities with economic development efforts. Topics include:

- Downtown redevelopment
- Opportunity zones
- Disaster recovery
- Brownfield redevelopment
- Professional education resources
- Professional associations
- D&B Hoovers Database access

If you have any suggestions or ideas for additional topics to include on this page, please contact me at afitzsimmons@amppartners.org or 614.359.3472.

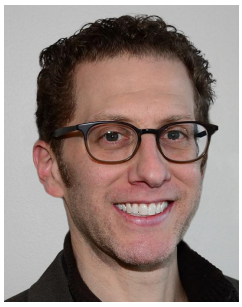
AMP promotes Philipps and Lieberman

By Tracy Reimbold - CPO and vice president of administrative services

AMP is pleased to announce that Beth Philipps and Steven Lieberman have been promoted to the positions of executive administrative assistant and assistant vice president of transmission and PJM affairs, respectively.

As executive administrative assistant, Philipps will assume recording secretary responsibilities related to the AMP Board of Trustees and its committees, and will provide administrative support to the CEO.

Philipps joined AMP in 2012 as an administrative assistant for generation operations, working on the hydroelectric projects. She is an active member of AMP's E-Team, an engagement team that provides programs, activities and resources that support civic responsibility, health and wellness, and uphold AMP's sustainability principles. In 2017, she received her certification as a Certified Associate in Project Management. She holds a bachelor's degree in english-technical writing from Wright State University.



As assistant vice president of transmission and PJM affairs, Lieberman will continue to be responsible for ensuring AMP's concerns regarding evolving market design are considered in the PJM stakeholder process, the Federal Energy Regulatory Commission and the Department of Energy, as well as ensuring AMP operations and planning personnel are apprised of latest PJM rules. New duties will include overseeing AMP's transmission cost control advocacy efforts, as well as AMP Transmission's planning and project development opportunities.

Lieberman joined AMP in 2017 as director of PJM regulatory affairs. He has more than 20 years of experience in the electric industry, specializing in power market fundamentals and regulatory affairs. He currently serves as the PJM Member Committee Vice-Chair, the Liaison Committee Chair, and as a member of the Finance and Nominating committees. He holds a bachelor's degree in environmental science with a concentration in geographic analysis and dual specialization in geographic information systems and remote sensing from Boston University.

Please join me in congratulating Beth and Steven on their new roles!

Sustainability Annual Report now available

By Erin Miller - assistant vice president of energy policy and sustainability

The 2019 AMP Sustainability Annual Report is now available on the AMP website. AMP is committed to our sustainability principles, and we have fully transitioned our annual reports to digital format. We encourage you to share the link to the 2019 AMP Sustainability Annual Report with your colleagues, community leaders and customers.

Click here to view the report.

Efficiency Smart enhances incentives for small businesses, encourages buying local

By Steven Nyeste - senior marketing project manager, Efficiency Smart

The COVID-19 pandemic has created a number of economic challenges, and small businesses have been particularly affected. To help, Efficiency Smart has launched a new initiative to assist small businesses in reducing their operating costs while boosting local economies.

For a limited time, Efficiency Smart is offering bonus incentives for small businesses that purchase LED products from designated local contractors and suppliers. As one of the most cost-effective upgrades, switching to LEDs is a simple way for businesses to save money and they can often pay for themselves quickly in energy savings. The increased incentives for buying local makes reduced operating costs more attainable for small businesses while increasing investment in the community.

Efficiency Smart provides energy efficiency services to subscribing AMP member communities. For more information about Efficiency Smart, visit www.efficiencysmart.org or call 877.889.3777.

Encourage efficiency with AMP's *Summer Efficiency Tips* video

By Holly Karg - director of media relations and communications

With high temperatures affecting much of the AMP member footprint, energy use is on the rise, and that can lead to higher transmission rates in the future. When hot days are forecasted, AMP member communities are encouraged to share content like AMP's Summer Efficiency Tips video on their social media channels.

In addition to this video, AMP has created the Community Energy Savings Day Toolkit, which can be accessed here on the Public Power Connections page of the member extranet (login required). The goal of this toolkit is to assist members in communicating to consumers the request and benefits of reducing energy usage during peak demand days and times. It includes a video, fact sheets, sample messages, phone scripts and social media graphics.

If you have questions, please feel free to contact me at hkarg@amppartners.org or 614.540.6407. If you need help downloading content or accessing the Public Power Connections page, please contact Bethany Kiser at bkiser@amppartners.org or 614.540.0945.

July 2020: Prices rebound with hot weather

By Mike Migliore

Much of the AMP member footprint sweated, this July was one of hottest on record. Average temperatures for the month rivaled the hottest months of 2011 and 2012. However, on-peak prices in those years averaged near $60/MWh, while 2020 on-peak prices finished $30/MWh below those marks. Day-ahead prices at the A/D Hub topped out at a relatively low $84/MWh at 5 p.m. on July 8. Real-time prices did exceed $100/MWh for 15 hours on July 6-8 with a high of $171/MWh on July 6. Neither day-ahead nor real-time prices exceeded $100/MWh for the last 23 days of the month.

Average Daily Rate Comparisons			
	July 2020 $/MWh	June 2020 $/MWh	July 2019 $/MWh
A/D Hub 7x24 Price	$25.54	$19.05	$28.26
PJM West 7x24 Price	$25.42	$18.52	$27.64
A/D to AMP-ATSI Congestion/Losses	$0.44	-$0.42	-$1.16
A/D to Blue Ridge Congestion/Losses	-$1.56	-$0.47	-$0.78
A/D to PJM West Congestion/Losses	-$0.12	-$0.53	-$0.62
PJM West to PP&L Congestion/Losses	-$3.53	-$1.73	-$2.59
MISO to A/D Hub Congestion/Losses	$2.46	$0.90	$1.90

Energy market update

By Jerry Willman - assistant vice president of energy marketing

The September 2020 natural gas contract debuted yesterday and decreased $0.101/MMBtu to close at $1.829 yesterday. The EIA reported an injection of 26 Bcf for the week ending July 24, which was just above market expectations of 25 Bcf. The year-ago build was 56 Bcf and the five-year average was 33 Bcf. Storage is now 3,241 Bcf, 23.9 percent above a year ago and 15.3 percent above the five-year average. The natural gas seasonal injection running total is +1,255 Bcf versus the five-year average of +1,118 Bcf.

On-peak power prices for 2021 at AD Hub closed yesterday at $32.25/MWh, which increased $0.60/MWh for the week

On Peak (16 hour) prices into AEP/Dayton hub

Week ending July 31

MON	TUE	WED	THU	FRI
$36.09	$29.12	$32.88	$28.72	$24.50

Week ending July 24

MON	TUE	WED	THU	FRI
$37.86	$28.32	$27.88	$26.83	$28.03

AEP/Dayton 2021 5x16 price as of July 30 — $32.25
AEP/Dayton 2021 5x16 price as of July 23 — $31.65

AFEC weekly update

By Jerry Willman

The AMP Fremont Energy Center (AFEC) operated in 1x1 configuration last Friday and Saturday, and then operated in 2x1 configuration for the remainder of the week. The plant shut down overnight Saturday and Sunday for the off-peak hours based on PJM economics. Combustion turbine unit two returned to service on Sunday after exhaust manifold maintenance. Duct firing operated for 71 hours this week. For the week, the plant generated at a 71 percent capacity factor (based on 675 MW rating).

Security tip - New phishing attack

By Jared Price - vice president of information technology and CTO

A new phishing attack is using a number of tactics to trick unsuspecting users into handing over their login credentials. The email claims that you have unread emails due to your cloud storage being full. It then gives you options to resolve the issue. Clicking on either link sends you to a phony login page for your service provider, where any information entered on this page will be sent directly to the scammers.

What makes this scam so sneaky? First, the phony login page not only looks official, but also functions like a real login page. Only passwords that meet real requirements are accepted. If an acceptable password is entered, you are redirected to the actual website of the service provider you just provided credentials for. Second, the email is sent from a no-reply address using the domain "servicedesk.com." Most of us are used to seeing emails from support desks, which makes this sender feel legitimate. Third, the email itself bypasses security filters that you may have in place by using a combination of factors that makes your email security filters think the link is secure.

Do not be fooled! Remember these tips:

- Phishing emails are often designed to create a sense of urgency. In this case, the idea that you're missing important emails. Think before you click, the bad guys rely on impulsive clicks.
- Email security filters can only do so much to protect your sensitive information. Stay alert and help create a human firewall for your organization.
- When an email asks you to log in to an account or online service, log in to your account through your browser and not by clicking the link in the email. That way, you can ensure you're logging into the real website and not a phony look-a-like.

Focus Forward 2020 Webinar Series

Register by clicking this schedule or contact Erin Miller, assistant vice president of energy policy and sustainability at 614.540.1019 or by email at emiller@amppartners.org.

November 12, 10 a.m.

- EV Rate Design and Managing Demand

The Focus Forward Advisory Council has identified these topics to help educate and inform AMP's members about emerging industry trends and to prepare for further integration of distributed energy resources.

AMP

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Classifieds

Members interested in posting classifieds in Update may send a job description with start and end advertisement dates to zhoffman@amppartners.org. There is no charge for this service.

City of Cuyahoga Falls seeks applicants for electrical engineer

The City of Cuyahoga Falls is seeking a highly qualified individual for the position of electrical engineer. Under the general supervision of the electric utility superintendent, this position is responsible for the application, design and documentation of electrical equipment and projects in the City of Cuyahoga Falls' electric distribution system. Performs various technical and engineering tasks related to the city's electric substation, transmission and distribution systems. Works closely with other departments and contractors including the IT Department in planning, developing, implementing and troubleshooting a wide variety of technical issues and projects. Ensures engineering designs and their applications are compliant with code and standards set forth by the appropriate authoritative bodies. Responsible for project planning, support of field operations, staff management and implementation of projects within the Electric Department.

Candidates must hold a bachelor's degree or higher in electrical engineering from an accredited university with at least a year's worth of co-op experience or at least five years of technical engineering-related experience or any combination of education and experience that provides the required skills and abilities. Engineering Intern (EI or EIT) professional certification preferred. Having all the listed knowledge is a plus. Must be able to obtain and secure a Project Management Professional (PMP) certification within the first 12 months of employment. Candidates must be a non-smoker and non-tobacco user, including but not limited to cigarettes, cigars, pipes, snuff, etc. for the duration of their employment with the City of Cuyahoga Falls. To see the full job description, click here.

Starting annual salary is $82,040. After five successful years in the position, the annual salary is $102,575.
The typical workweek is Monday through Friday; 8:00 a.m. to 5:00 p.m. Interested candidates must submit a City of Cuyahoga Falls Civil Service Application and detailed resume. Applications can be found online here. No fee is required to apply for this position. Deadline for applications is August 5. Applications must be mailed to the City of Cuyahoga Falls, Attn: Civil Service Commission, 2310 Second St., Cuyahoga Falls, OH 44221.

Village of Versailles seeks candidate for village administrator

The Village of Versailles is seeking qualified, professional candidates for the position of village administrator. The person appointed will report to the mayor and will provide general administrative direction; supervises activities of assigned personnel; advises employees on proper operations and procedures; directs the management and operation for all utility, street, urban forestry, park, cemetery, planning, zoning, business and economic development activities, and grant writing activities. In addition, this position works jointly with other departments such as the fire department, emergency medical services and police department. A complete job description is available by contacting the Village of Versailles Administrative Office at 937.526.3294 extension 203, or by visiting the Village of Versailles website at www.versaillesohio.com

The candidate will have a high school diploma or general education degree (GED), completion of college level course work in public or business administration, five years of professional supervisory and management experience in municipal government and public utility operations; or any equivalent combination of training and experience. A valid Ohio driver's license is required. Successful candidate will be a person who possesses excellent communication and leadership skills. Salary commensurate with the qualifications and experience of the successful candidate. A complete benefits package will also be offered.

Please submit resume to Mayor Jeff A. Subler, Village of Versailles, 177 North Center Street, P.O. Box 288, Versailles, OH 45380, or via email at jeffasubler@versaillesohio.com Interested individuals are asked to submit a cover letter and resume by 4 p.m. on Aug. 5. The Village of Versailles is an Equal Opportunity Employer.

Borough of Ephrata seeks applicants for two positions

Utilities manager
The Borough of Ephrata is seeking applicants for the position of utilities manager. This position plans, directs and manages operational activities and improvements for borough electric, water and wastewater divisions, and is responsible for identifying and meeting the current and future operational needs of the utility operations, setting and accomplishing goals and developing subordinate division superintendents and managers.

A bachelor's degree in civil, mechanical or electrical engineering or other related field is preferred or equivalent experience. Successful candidate must have a proven, successful record of accomplishment as a manager and five years progressive operations experience in a leadership capacity with well-developed management, public relations and customer service skills. Experience with services provided on a multi-municipal basis desired. Must be safety conscious and demonstrate excellent interpersonal skills through teamwork, initiative and good judgement. Must have a thorough knowledge of municipal utility operations. Experience in wastewater collection/treatment, water production/distribution activities and/or electric generation and distribution systems preferred.

Technical support manager
The Borough of Ephrata is seeking applicants for the position of technical support manager. This position provides technical supervision, planning, organizing and direction of functions in the operation and maintenance of the electrical distribution system of the borough. Essential duties and responsibilities include providing technical assistance in the design, engineering, sizing, selection and maintenance of electric distribution components. Provides guidance for the maintenance, operation and construction of the electric distribution system and substations to ensure system reliability and the availability of energy supply to all customers. Recommends and implement improvement to operating distribution system and equipment to ensure system reliability is maintained and losses are minimized. Maintains an appropriate inventory of equipment and supplies to ensure that emergency service restorations occur in a minimum amount of time and that new services can be installed in a reasonable amount of time. Assists in the preparation and administration of division operating and capital budgets to meet Borough budget guidelines and minimize cost impact on customers. Develops and manages division work plan including assistance to other divisions as needed, and researches and initiates division purchases to facilitate accomplishment of division work plans. Establishes and monitors street lighting programs to ensure adequate lighting for safety and convenience of residents, as well as electric meter installation and testing programs to ensure the accurate measurement of customer demand and energy. Coordinates and trains employees in established system operating procedures for the safety of employees and for system reliability

Candidates must have a demonstrated ability to use Microsoft Outlook, Word and Excel proficiently. Prior responsibility for maintenance of process equipment and upgrading technology is highly desirable. Candidates must have the ability to communicate effectively, verbally and in writing with employees, customers, government

The Borough offers an attractive wage, comprehensive benefit package and a workplace with an emphasis on quality and teamwork. Qualified candidates should send your resume to: Human Resources Department, Borough of Ephrata, 124 South State St., Ephrata, PA 17522, or email to skramer@ephrataboro.org. Visit our website at www.ephratboro.org. EOE M/F/D/V

City of Bowling Green seeks applicants for water treatment plant operator

The City of Bowling Green is seeking applicants for the position of water treatment plant operator. This position is responsible for the safe, efficient and compliant operation and maintenance of the city's water treatment plant. Perform laboratory analyses; oversee plant operations; collect and test water samples; inspect the plant and equipment and make necessary adjustments; ensure proper levels of clearwell and water towers; record chemical feed amounts, meter readings, plant flow; maintain records; cleans and paints; train employees; perform preventive maintenance, both electrical and mechanical; handle hazardous and toxic chemicals; conduct tours; perform other related duties as assigned. High school diploma or equivalent; three to five years of relevant experience required. Must be able to obtain a Class I OEPA Water Treatment Certification within two years of hire and obtain Chemical Analysis Certification. A copy of the job description will be provided to applicants.

Interested persons must complete an application packet that is available either by visiting the Personnel Department of the City of Bowling Green at 304 N. Church St, Bowling Green, OH 43402-2399 or by accessing the online application here. Resumes may be included, but will not substitute for a completed application. Application materials must be returned to the Personnel Department by one of the following methods: email to BGPersonnel@bgohio.org, fax to 419.352.1262 or by U.S. Mail or hand-delivery to the address above. Office hours are Monday through Friday, 8 a.m.-4:30 p.m. You may reach the Personnel Department by phone at 419.354.6200. Deadline for making application is July 31, 4:30 p.m. AA/EEO

Town of Berlin seeks applicants for line technician apprentice

The Town of Berlin is seeking applicants for the position of line technician apprentice. The line technician apprentice will aid in the operations and duties of the Electric Department with the ultimate goal of becoming a certified class 1 linesman. Specific job duties and responsibilities include, but are not limited to the following: assists with installations, maintenance and repairs of overhead distribution systems and related facilities; assists with installations, maintenance and repair work on low and high voltage transmissions and distribution lines; operates a bucket truck, ditch witch, plow, back-hoe, line truck and other related equipment; assists with installing electric services; installs secondary cable and assists with underground installation; trims trees from electric lines' performs work on de-energized lines; attaches guy wires to poles; possess the ability to climb poles in excess of 60 feet; keeps all vehicles supplied with tools and materials; performs meter readings, disconnects, re-connects and streetlight repairs; assist with generation, as needed; performs home energy audits, as needed; and performs cable locating. Other duties as assigned in accordance with departmental functions/goals. Required to be on stand-by or on-call.

Successful candidate must have a high school diploma or general education degree (GED). Some experience in electric line construction and/or maintenance preferred. Must serve a minimum six-month probationary period. Incumbent must agree to attend and satisfactorily complete a line technician certification course that will be paid for by the Town. Ability and willingness to perform manual labor; ability to follow oral directions; learn to set poles; string wire and perform related work. Ability to observe safety rules and regulations; strength to perform manual work and physical stamina to withstand working under adverse weather conditions; ability to climb poles; ability to establish and maintain effective working relationships with other workers.

Applications may be obtained from Town Hall located at: 10 William Street, Berlin, MD 21811 or downloaded from our website. Applications must be submitted to the Human Resources office located at 10 William Street; Berlin, MD 21811. The Town of Berlin is an EEO employer. M/F/V/D

Village of Grafton seeks applicants for assistant service superintendent

The Village of Grafton seeks a qualified assistant service superintendent with skilled trades and equipment operation experience. The ideal candidate will have extensive knowledge in municipal infrastructure maintenance and repair, hold a current Ohio Class 1 Water System/Distribution Operator license plus a certification in water system backflow management.

The assistant superintendent will be required to report to the village administrator and regularly communicate and coordinate municipal services with other utility departments when needed. Personnel management skills and the ability to work as a team is essential. Job duties range from but not limited to department vehicle and asset management, material inventory management, landscape maintenance, parks, street, sewer and water-main service and repair, plus all municipal seasonal roadway maintenance services. Some heavy lifting at times may be required.

This full-time position is offered at a competitive hourly rate based upon experience and includes an attractive benefit plan providing health care, vision and dental insurance. Paid holidays after 60-days. Paid vacation, personal days and sick days after one year, plus a public employee retirement plan through OPERS. Grafton offers a stable and upbeat, professional work environment, continuing education and work force training with opportunity for career advancement. The Village of Grafton is an EEO employer and Drug-Free Workplace.

A pre-employment background check and drug screen is required.

This position will remain open until filled. Interested candidates can submit resume to: Grafton Village Hall, 960 Main St. Grafton, OH 44044, or by email to the village administrator at jbprice@villageofgrafton.org.

City of Amherst seeks applicants for electric lineworker

The City of Amherst is seeking applicants for the position of electric lineworker. Duties include the operation, maintenance and routine construction of the electric distribution system.

Minimum qualifications include a high school diploma or equivalent, successful completion of journey lineworker apprenticeship program and four years of experience as apprentice lineworker, or an

equivalent combination of education and experience which provides the skills and abilities necessary to perform the job. Valid State of Ohio Driver's License, valid Ohio Class A Commercial Driver's License and Journeyman Lineworker Certification required. Annual pay range is $82,000-$95,000, depending on qualifications.

For more information regarding an application and job description call Amherst City Hall at 440.988.4380 or request by email at mayor@amherstohio.org.

Town of Bedford seeks applicants for assistant right-of-way supervisor

The Town of Bedford is seeking applicants for the position of assistant right-of-way supervisor. Applicants must be experienced in trimming, climbing and working around electric hazards. Class A CDL required and the ability to operate a bucket truck, chain saws and other right-of-way clearing equipment. Ability to supervise right-of-way crew and promote on the job safety. Compensation based on experience and skill level. Salary up to $45,760 annually with benefits package to include health insurance, retirement, life insurance and annual leave.

Applications are available online at www.bedfordva.gov. Submit a completed town application online or mail to: Human Resources, 215 E. Main St., Bedford, VA 24523. Applications will be accepted until the position is filled. Resumes alone are not accepted and must be sent in with application. EOE

Qualifications
Must have a Class A CDL (or obtain a CDL in first year of employment) and be experienced right-of-way trimmer.

Opportunities available at AMP

AMP is seeking applicants for the following positions:

IT intern

Systems analyst (SCADA and plant systems)

IT intern - cybersecurity

For complete job descriptions, please visit the AMP careers page.

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