CHARLES TOWN UTILITY BOARD
AGENDA

WEDNESDAY, JULY 12, 2023

Regular Meeting | **661 South George Street, Charles Town, WV 25414** | **4:00 PM**

CALL TO ORDER

1. **APPROVAL OF MINUTES**
   a. Approval of June 28, 2023 Regular Meeting Minutes
   UB Minutes 06.28.2023.pdf

2. **PUBLIC COMMENT**
   This portion of the agenda is designed for members of the general public to share thoughts on items of interest in the community. By law, Board members may ask clarifying questions or discuss procedural matters but are not permitted to discuss the policy merits of any issue unless it is scheduled or discussion.

   The public is invited to attend this meeting in person or via webcast (www.ctubwv.com- Board Meetings - Meeting Agendas and Minutes 2023) or by accessing the following zoom link:

   https://us06web.zoom.us/j/81082001120?pwd=QkR6eGs3K25oSFNBb3VlUDFDQTUzQT09

   Meeting ID: 810 8200 1120
   Passcode: 892538
   +1 301 715 8592 US

3. **UNFINISHED BUSINESS**
   a. Stonecrest and Aspen Greens - Draft Letter to Developer
   Draft Letter to Aspen Greens.pdf

4. **NEW BUSINESS**
   a Lead and Copper Presentation
   Presentation by Alan Marchun.pdf
   b. RK&K - Task Order No. 22 - Greenfield Forcemain Upgrade Plans
   Greenfield FM Plans 06.13.2023.pdf
   Greenfield Costs.pdf
   c. GDF - Renewal and Replacement Project Resolution No. 9 - Contractor Pay Application No. 9
   Pay Application No. 9.pdf
   d. Belt Press Belt Purchase

Belt Quote.pdf

5. **MANAGER REPORTS**
   a. Utility Manager Report
      UM Report.pdf
   b. Chairman Report

6. **APPROVAL OF BILLS**
   a. July 12, 2023
      Board Report. 07.12.2023.pdf

7. **ADJOURNMENT**

8. **INFORMATION ONLY**
   a. July 26, 2023 at 4:00 P.M.

Charles Town Utility Board
Regular Board Meeting
June 28, 2023

The Charles Town Utility Board held a regular meeting on June 28, 2023 at 4:00 P.M. Members of the Board present were Robert Trainor, Chairman; Duke Pierson, Vice Chairman; Tommy Stocks, Treasurer; Jeff Whitten, Board Member and Heidi Parker, Board Member. Also present were Kristen Stolipher, Utility Manager; Ashley Stottlemyer, Secretary; and Robert Rodecker, Legal Counsel.

CALL TO ORDER

The Chairman called the meeting to order at 4:00 P.M.

APPROVAL OF MINUTES

Approval of May 24, 2023 Regular Meeting Minutes

The Chairman called for changes or corrections to the May 24, 2023 regular meeting minutes.

Action: With no objections from the Board, the minutes were approved as presented.

PUBLIC COMMENT

The Board received a public comment from Nicola Bastian and Elizabeth Ricketts.

OLD BUSINESS

PSC Case Updates - Possible Executive Session Under: WV State Code Section §6-9A-4(b)(9) - To consider matters involving or affecting the purchase, sale or lease of property, advance construction planning, the investment of public funds or other matters involving commercial competition, which if made public, might adversely affect the financial or other interest of the state or any political subdivision and involving contract matters.

Action: This item was moved to the end of the meeting.

Locust Hill Golf Course Agreement

Mrs. Stolipher provided a draft agreement as a follow up to the previous discussion on the purchase of ultra sound units within two of the Locust Hill ponds. Per the provided draft agreement, CTUB would only be responsible for a third of the total costs of the two units totaling $3,894.10. Also expressed in the draft agreement, the golf course has agreed to be the responsible party for maintenance of these units. Mr. Rodecker and the golf course have reviewed the agreement and had no concerns.

Action: Motion made by Mr. Pierson, second by Mr. Whitten, the Board unanimously approved the agreement as presented and the purchase of the units as detailed within the agreement.

NEW BUSINESS

GDF

- Renewal and Replacement Project Resolution No. 8 - Contractor Pay

Mrs. Stolipher included the contractor application for payment no. 8 in the amount of $872,756.88 for work completed.

Action: Motion made by Mr. Stocks, second by Mr. Pierson, the Board unanimously approved the Contractor Pay Application No. 8.

- Potomac Farms Evaluation

Mrs. Stolipher received a request from Alan Marchun with the local Health Department regarding the Potomac Farms water system and a high-level evaluation of what it would entail to provide water service to this system. The Potomac Farms system is located near the Glen Haven water system currently operated by

CTUB. GDF drafted an assessment which summarized the Potomac Farms water system and evaluated CTUB's options to provide water service. Chris Eckenrode provided a brief review of his findings. The Board provided discussions. There were no objections from the Board to provide the assessment to Mr. Marchun at the local Health Department for review.

Action: No action required by the Board.

Wendy's Pump Station Upgrades

Mrs. Stolipher provided this project was included in the Collections System Project with an initial estimate from RK&K of $100,000.00 to complete, but was always anticipated to be completed in-house. After contacting local contractors for bids, Mrs. Stolipher received a quote from Alvarez for $39,987.00 and Snyder Environmental for $74,450.00 to complete the upgrades. She also mentioned the replacement pumps were purchased in 2022 for $29,900.00. Mrs. Stolipher provided the project will be paid for through capacity improvement fees and funds from the Renewal and Replacement account without impacting customer rates.

Action: Motion by Mr. Whitten, second by Mr. Pierson, the Board unanimously approved the quote from Alverez to perform the Wendy's Pump Station upgrades.

Collection System Project - Easement Acquisition Proposal

As RK&K finalized the project design and needed easements for the project, it was determined the task would be too extensive for staff to handle. Mrs. Stolipher received a proposal from ERM to assist with the acquisition of permanent and temporary easements for the project totaling $102,135.00 which does not include the costs for the actual easements. The Board provided discussions.

Action: Motion by Mr. Pierson, second by Mr. Stocks, the Board unanimously approved the ERM proposal for easement acquisition totaling $102,135.00.

Stonecrest and Aspen Greens Agreement

Mrs. Stolipher briefed the Board on an agreement between Stonecrest and Aspen Greens to provide access for a gravity line connection of the Stonecrest subdivision through the Aspen Greens property rather than constructing a pump station. Stonecrest would construct the gravity line, but would like to be reimbursed for the costs associated with this construction. Representatives from the developer of Stonecrest, DR Horton, were in the audience to discuss with the Board reimbursement options, including the possibility of an additional capacity improvement fee. After a lengthy discussion, the Board agreed to send a letter of support to the developer of Aspen Greens for a gravity line as the best option, with no mention of reimbursement options. Mr. Rodecker will work with Mrs. Stolipher to draft a letter for the Board to review.

Action: No action required by the Board.

MANAGER REPORTS

Utility Manager Report

Mrs. Stolipher briefed the Board on this month's sewer and water efforts including an upcoming presentation by Gannett Fleming on the Class Cost of Service Study at the next board meeting, the continuing efforts of the lead and copper inventory and possible informational public briefings, and the valve assessment program kick-off. She also mentioned a total of 165 hydrants were flushed this cycle and staff has begun hydrant painting.

Action: No action required by the Board.

Chairman Report

The Chairman mentioned the City is in the final stages of the interview process and a new City Manager should be hired within the next couple of weeks.

Action: **No action required by the Board.**

APPROVAL OF BILLS

June 28, 2023

Action: **With no objections from the Board, the payment of the bills were approved.**

EXECUTIVE SESSION

PSC Case Updates - Possible Executive Session Under: WV State Code Section §6-9A-4(b)(9) - To consider matters involving or affecting the purchase, sale or lease of property, advance construction planning, the investment of public funds or other matters involving commercial competition, which if made public, might adversely affect the financial or other interest of the state or any political subdivision and involving contract matters.

Action: **Motion by Mr. Pierson, second by Mr. Whitten, the Board unanimously approved convening into Executive Session at 5:43 P.M. to discuss PSC case updates.**

Executive session was over at 6:11 P.M.

INFORMATION ONLY

The next regular meeting is scheduled for Wednesday, July 12, 2023 at 4:00 P.M. at 661 S. George Street.

There being no further business at this time, the Board adjourned the meeting at 6:11 P.M.

_____	_____
Robert M. Trainor	Ashley Stottlemyer
Chairman	Secretary

Charles Town
Utility Board

661 S. George Street, Suite 101 Charles Town, WV 25414
Phone: (304) 725-2316 ♦ Fax: (304) 725-7150 ♦ Web: www.ctubwv.com

UTILITY BOARD

INTERIM CHAIRMAN
City of Charles Town Mayor Bob Trainor

VICE CHAIRMAN
City of Ranson Mayor Duke Pierson

TREASURER
Thomas Stocks

SECRETARY
Ashley Stottlemyer

Board Member Jefferson Whitten

Board Member Heidi Parker

UTILITY MANAGER
Kristen Stolipher

July 6, 2023

Mr. Maurice A. Gladhill, Manager
Roderick Planes, LLC.
5509 Mount Zion Road
Frederick, MD 21705

Dear Mr. Gladhill,

At the June 28, 2023 meeting of the Charles Town Utility Board (CTUB), representatives of D.R. Horton, Inc. (D.R. Horton) made a presentation regarding its proposal to construct a sewer extension from CTUB facilities on County Route 24, through an easement under and through currently undeveloped property of the Aspen Greens Subdivision, to D.R. Horton's proposed Stonecrest development (Extension Project).

As part of their presentation, D.R. Horton representatives proposed that CTUB approve a developer reimbursement which would serve to reimburse some of the cost of the Extension Project. They also informed CTUB that such extension would enable both Stonecrest and Aspen Greens to connect the purchasers of property in each of the subdivisions to CTUB's facilities for sewage collection and treatment service.

CTUB informed the representatives of D.R. Horton that, due to its policy that prohibits developer reimbursements and the limitations on the use of Capacity Improvement Fees (CIFs), CTUB could not approve a reimbursement for the Extension Project and that it could not set aside a portion of its CIFs for such purpose. However, in recognition of the fact that both the Stonecrest and Aspen Greens developments, as well as CTUB future maintenance operations, would benefit from the Extension Project, I have been instructed to inform you that CTUB fully supports the two developers reaching a cost-sharing agreement for some or all of the cost of construction.

CTUB is aware of another similar developer consortium that developed a reimbursement mechanism through an additional CIF and would urge Aspen Green and Stonecrest to explore such an arrangement for the gravity extension project option through the Aspen Green subdivision.

Please let me know if you have any questions.

Regards,

Kristen Stolipher
Utility Manager

cc: Bill Sudeck, Entitlements Analyst, D.R. Horton
Thomas Moore Lawson, Esquire

DRAFT

LEAD AND COPPER RULE (LCR)

- Original rule was promulgated in 1991 by USEPA, as part of the Safe Drinking Water Act (SDWA).

- All community public water systems (PWS) are required to collect samples from single family residential (SFR) homes which meet certain criteria - called Tiers (Exhibit II-7) and many have been sampling for close to 30 years to date.

- PWS are required to target (select) Tier 1 sites, when available. A Tier 1 site is a SFR that is **either** served by a lead service line **OR** constructed between (1982-1988) that has interior copper plumbing with lead solder. (Note - 1988 is the cutoff due to WV adoption of lead ban which prohibited use of lead solder or flux containing > 0.2% lead content)

- If enough Tier 1 sites are not available, a PWS would then select Tier 2 sites, if available. Tier 2 sites are multi-family residential (MFR) structures meeting the same criteria as Tier 1.

- If there are not enough Tier 1 + 2 sites, a PWS would then select Tier 3 sites, if available. Tier 3 sites are SFR constructed prior to 1983 which contain copper plumbing + lead solder.

- If there are still not enough sites available, representative sites throughout the system would be selected. For example, a PWs that was constructed after 1988 or a mobile home park with all plastic service lines + interior plumbing, these sites do not fall under any Tier and are classified as "OT" or other.

- Initial or standard monitoring is population based, PWS must meet eligible criteria to be considered for reduced monitoring (see Quick Reference Guide, Table 2-2 + 2-3)

- Once a site has been selected and approved, it cannot be changed unless certain criteria is met such as the site is no longer available (uncooperative customer, fire, etc.) plumbing change such as replacing the interior plumbing with plastic - refer to middle paragraph under Exhibit II-7 When a site is replaced, it must be replaced with another site that meets the same criteria as the original site (if available) - see middle paragraph p. 28. The request must be submitted to the State in writing with justification for the change and prior approval obtained prior to changing the site ("Request to Change Sample Site Location"

- Table 1 should list the PWS approved sample sites that are currently being utilized

- Table 2 could be used to list "Alternate Sites" which are available for use if one of the primary sites listed in Table 1 are not available, but the PWS would still need to submit the necessary information to obtain prior approval prior to utilizing any of these sites

- Table 3 would show any changes from the previous to the current plan, noting the requirement at the bottom which states "Sample sites can **ONLY** be removed if the location is vacant, piping materials have changed or the resident is uncooperative. Sample locations must be replaced with a location of the same Tier (when available).

- Compliance is based upon the "90th percentile" lead/copper levels. For example, a utility collects 30 samples. These results are placed in ascending order (from lowest to highest) - sample # 27 would be the 90th percentile. If the 90th percentile is below 15 parts per billion (ppb) for lead, the system is in compliance. For copper, the 90th percentile is 1.3 parts per million (mg/L).

- CTUB is currently on reduced monitoring - one round of 30 samples is required to be collected per year from approved sites, considered "high risk." The Utility is currently in compliance with the action levels for lead and copper and has fed a phosphate based corrosion inhibitor for years to help control the levels. The phosphate levels are closely monitored both leaving the treatment plant and within the distribution system and are kept within an optimal range.

- Under the recently adopted Lead and Copper Rule Revisions (LCRR), PWS must develop an inventory of all service lines (both public and private portion) with completion NLT October 2024.

- CTUB has contracted with 120 Water to assist with this requirement and customers are encouraged to provide as much cooperation as possible to obtain the desired information.

- To date, no lead service lines - either public or private, have been identified.

- If any lead service lines are identified, the utility would be required to include these site(s) within their pool of approved sampling sites and also submit a "Lead Service Line Replacement Plan" (LSLRP) to the State within 30 days following completion of the Service Line Inventory.

- Under the LCRR, there will be (5) Tier classifications. Tier 1 & 2 remain if served by a lead service line only (no longer considers interior plumbing); Tier 3 is a site served by Galvanized Previously Connected to Lead Service Line (these sites will also be included within the LSLRP); Tier 4 will be SFR which contain copper interior plumbing + lead solder, regardless of the year of construction; Tier 5 are all other sites. Following completion of the inventory, PWS may be required to develop a new sampling plan, dependent upon what new information has been gathered.

Alan Marchun, Supervisor
Kearneysville District Health Office
WV Dept. of Health and Human Resources
Bureau for Public Health
Office of Environmental Health Services
Environmental Engineering Division
Kearneysville District Health Office (KDO)
(this is too much of a mouthful so I just say State Health Dept.)

Primacy agency for public water systems. A public water system (PWS) is any facility which has its own source/treatment/distribution and serves at least 25 people per day for at least 60 days per year and includes facilities such as campground, restaurant, school, subdivision, mobile home park, industrial park, PSDs, municipalities, etc.

The KDO is responsible for oversight of 8 county district - Jefferson, Berkeley, Morgan, Mineral, Hampshire, Hardy, Grant, Pendleton

alan.f.marchun@wv.gov
304-725-9453
1948 Wiltshire Rd., Suite 6
Kearneysville, WV 25430

For individuals who desire to get their water tested, here is a partial List of Labs who can perform lead testing:

PACE Analytical (800) 999-0105

WV Office of Laboratory Services (304) 965-2694

FTL Labs (301) 293-3340

It is highly advisable for customers to consult with CTUB prior to collecting any samples to ensure proper protocols are followed. CTUB is not required to pay for additional sampling performed and these may be required to be done at customer expense.

United States
Environmental Protection
Agency

Lead and Copper Rule
Monitoring and Reporting Guidance for Public Water Systems

(Original Document: Lead and Copper Rule Monitoring and Reporting Guidance for Public Water Systems: EPA 816-R-02-009, February 2002)
(Revised Document: Lead and Copper Rule Monitoring and Reporting Guidance for Public Water Systems: EPA 816-R-10-004, March 2010)

Office of Water (4606M)
EPA 816-R-10-004
March 2010
www.epa.gov/safewater

Exhibit II-7: Tiering Classification	
If you are a CWS	***If you are an NTNCWS***
Tier 1 sampling sites are single family structures: • with copper pipes with lead solder installed after 1982 *(but before the effective date of your State's lead ban)* or contain lead pipes; and/or • that are served by a lead service line. **Note:** When multiple-family residences (MFRs) comprise at least 20% of the structures served by a water system, the system may count them as Tier 1 sites.	**Tier 1** sampling sites consist of buildings: • with copper pipes with lead solder installed after 1982 *(but before the effective date of your State's lead ban)* or contain lead pipes; and/or • that are served by a lead service line.
Tier 2 sampling sites consist of buildings, including MFRs: • with copper pipes with lead solder installed after 1982 *(but before effective date of your State's lead ban)* or contain lead pipes; and/or • that are served by a lead service line.	**Tier 2** sampling sites consist of buildings with copper pipes with lead solder installed before 1983.
Tier 3 sampling sites are single family structures with copper pipes having lead solder installed before 1983.	**Tier 3**: Not applicable.
Representative Sample: If a CWS or NTNCWS cannot collect enough samples from tiered sites, it must collect them from sites where the plumbing is similar to that used at other sites served by the water system.	

Once monitoring begins, you must use the same sites, unless a site is no longer accessible to you or no longer fits the requirements of a priority site (e.g., the lead service lines that served the site have been removed).

Sites chosen for reduced monitoring (i.e., monitoring that is conducted at a one-year, three-year, or nine-year frequency) must be representative of those sites that were used during standard monitoring and must follow tiering requirements. For example, if a system has 100 sites, of which 75 are Tier 1 and 25 are Tier 2, it must collect all 50 reduced sites from Tier 1 sites if they are available. Otherwise, the rule does not specify which sites must be chosen for reduced monitoring. You may wish to randomly select the reduced number of sites from the larger pool used during standard monitoring. The intent of the rule is that you do not use only those sampling locations with the lowest lead or copper levels. Your State may determine which sample locations you must use. Before proceeding, check with your State to find out what method the State uses in selecting reduced monitoring sampling sites.

Sources of Information That You Should Review

To identify enough sites that meet targeting criteria, you should survey all records documenting the materials used to construct and repair your distribution system and buildings connected to your distribution system. Relevant information can be attained through the following sources:

- Plumbing Codes;

EPA
United States Environmental Protection Agency

Lead and Copper Rule: A Quick Reference Guide



Overview of the Rule

Title[1]	Lead and Copper Rule (LCR)[2], 56 FR 26460 - 26564, June 7, 1991
Purpose	Protect public health by minimizing lead (Pb) and copper (Cu) levels in drinking water, primarily by reducing water corrosivity. Pb and Cu enter drinking water mainly from corrosion of Pb and Cu containing plumbing materials.
General Description	Establishes action level (AL) of 0.015 mg/L for Pb and 1.3 mg/L for Cu based on 90th percentile level of tap water samples. An AL exceedance is not a violation but can trigger other requirements that include water quality parameter (WQP) monitoring, corrosion control treatment (CCT), source water monitoring/treatment, public education, and lead service line replacement (LSLR).
Utilities Covered	All community water systems (CWSs) and non-transient non-community water systems (NTNCWSs) are subject to the LCR requirements.

Public Health Benefits

Implementation of the LCR has resulted in	▶ Reduction in risk of exposure to Pb that can cause damage to brain, red blood cells, and kidneys, especially for young children and pregnant women. ▶ Reduction in risk of exposure to Cu that can cause stomach and intestinal distress, liver or kidney damage, and complications of Wilson's disease in genetically predisposed people.

Major Monitoring Provisions

Lead and Copper Tap

Applicability	▶ All CWSs and NTNCWSs.
Standard	▶ CWSs and NTNCWSs must collect first-draw samples at taps in homes/buildings that are at high risk of Pb/Cu contamination as identified in 40 CFR 141.86(a). ▶ Number of samples is based on system size (see Table 1). ▶ Systems must conduct monitoring every 6 months unless they qualify for reduced monitoring.
Reduced	▶ See Table 1 for sample number and Table 2 for criteria.

Water Quality Parameter (WQP)

Applicability	▶ Systems serving > 50,000 people. ▶ Systems serving ≤ 50,000 during monitoring periods in which either AL is exceeded.
Standard	▶ WQP samples at taps are collected every 6 months. ▶ WQPs at entry points to distribution system (EPTDS) are collected every 6 months prior to CCT installation, then every 2 weeks.
Reduced	▶ See Table 1 for sample number and page 2 for criteria. Does not apply to EPTDS WQP monitoring.

Table 1: Lead and Copper Tap and WQP Tap Monitoring

Size Category	System Size	Number of Pb/Cu Tap Sample Sites[3]		Number of WQP Tap Sample Sites[4]	
		Standard	Reduced	Standard	Reduced
Large	> 100K	100	50	25	10
	50,001 - 100K	60	30	10	7
Medium	10,001 - 50K	60	30	10	7
	3,301 - 10K	40	20	3	3
Small	501 - 3,300	20	10	2	2
	101 - 500	10	5	1	1
	≤ 100	5	5	1	1

[3] With written State approval, PWSs can collect < 5 samples if all taps used for human consumption are sampled.
[4] Two WQP tap samples are collected at each sampling site.

Table 2: Criteria for Reduced Pb/Cu Tap Monitoring

Annual	1. PWS serves ≤ 50,000 people and is ≤ both ALs for 2 consecutive 6-month monitoring periods; or 2. Any PWS that meets optimal WQPs (OWQPs) and is ≤ Pb AL for 2 consecutive 6-month monitoring periods.
Triennial	1. PWS serves ≤ 50,000 people and is ≤ both ALs for 3 consecutive years of monitoring; or 2. Any PWS that meets OWQP specifications and is ≤ Pb AL for 3 consecutive years of monitoring; or 3. Any PWS with 90th percentile Pb and Cu levels ≤ 0.005 mg/L and ≤ 0.65 mg/L, respectively, for 2 consecutive 6-month monitoring periods (i.e., accelerated reduced Pb/Cu tap monitoring).
Every 9 years	PWS serves ≤ 3,300 people and meets monitoring waiver criteria found at 40 CFR 141.86(g).

Lead Consumer Notice

Within 30 days of learning the results, all systems must provide individual Pb tap results to people who receive water from sites that were sampled, *regardless of whether the results exceed the Pb AL*, as required by 40 CFR 141.85(d).

Consumer Confidence Report (CCR)

All CWSs, irrespective of their lead levels, must provide an educational statement about lead in drinking water in their CCRs as required by 40 CFR 141.154. Must be in 2008 CCR (due July 1, 2009) if EPA is Primacy Agency, State adopts the rule by reference automatically, or adopts during 2008. Otherwise, this statement is required in the 2009 CCR (due July 2010).

[1] This document provides a summary of federal drinking water requirements; to ensure full compliance, please consult the federal regulations at 40 CFR 141 and any approved state requirements.

[2] The June 1991 LCR was revised with the following Technical Amendments: 56 FR 32112, July 15, 1991; 57 FR 28785, June 29, 1992; 59 FR 33860, June 30, 1994.

It was subsequently revised by: the LCR Minor Revisions, 65 FR 1950, January 12, 2000; and the LCR Short-Term Revisions, 72 FR 57782, October 10, 2007.



Treatment Technique and Sampling Requirements if the AL is Exceeded[5]

[5] Based on 90th percentile level. Multiply number of valid samples by 0.9 (e.g., 10 samples x 0.9 = 9; thus, use 9th highest Pb and Cu test result to compare to AL). For 5 samples, average 4th and 5th highest results. For < 5 samples, use highest result.

Water Quality Parameter (WQP)

Applicability	Refer to page 1.
Parameters	▶ pH, alkalinity, calcium *(initial only, unless calcium carbonate stabilization is used)*, conductivity *(initial monitoring only)*, orthophosphate *(if inhibitor is phosphate-based)*; silica *(if inhibitor is silicate-based)*, and temperature *(initial monitoring only)*.
Frequency	▶ Systems installing CCT, must conduct follow-up monitoring for 2 consecutive 6-month periods. ▶ WQP tap monitoring is conducted every 6 months, EPTDS monitoring increases to every 2 weeks. ▶ After follow-up monitoring, State sets OWQP specifications that define optimal CCT.
Reduced Tap Monitoring	▶ Collect reduced number of sampling sites (see Table 1) if meet OWQPs for 2 consecutive 6-month periods. ▶ Collect reduced number of sampling sites at reduced frequency if meet OWQPs for: – 6 consecutive 6-month monitoring periods can monitor annually; – 3 consecutive years of annual monitoring can monitor triennially.

Public Education (PE)

Applicability	▶ Systems that exceed the Pb AL (*not required if only the Cu AL is exceeded*).
Purpose	▶ Educates consumers about lead health effects, sources, and steps to minimize exposure.
Delivery Method	▶ CWSs: deliver materials to bill-paying customers and post lead information on water bills, work in concert with local health agencies to reach at-risk populations (children, pregnant woman), deliver to other organizations serving "at-risk" populations, provide press releases, include new outreach activities from list in 40 CFR 141.85(a)(2)(vi), and post to Web site (CWSs serving > 100,000 only). ▶ NTNCWSs: posting and distribution to all consumers (can be electronic with State permission). Can apply to CWSs such as hospitals and prisons where population cannot make improvements.
Timing	▶ Within 60 days *after end of monitoring period* in which Pb AL was exceeded if not already delivering PE.[6] ▶ Repeat annually except: water bill inserts - quarterly; press releases - 2x/year, and Web posting - continuous. ▶ Can discontinue whenever ≤ Pb AL but must recommence if subsequently exceed Pb AL.

[6] State may allow extension in some situations. Also, State may require approval of message content prior to delivery.

Source Water Monitoring and Source Water Treatment (SOWT)

Applicability	▶ Systems that exceed Pb or Cu AL.
Purpose	▶ Determine contribution from source water to total tap water Pb and Cu levels and need for SOWT.
Timing	▶ One set of samples at each EPTDS is due within 6 months of first AL exceedance. ▶ System has 24 months to install any required SOWT. ▶ State sets maximum permissible levels (MPLs) for Pb and Cu in source water based on initial and follow-up source water monitoring.
Standard	▶ Ground water PWSs monitor once during 3-year compliance periods; surface water PWSs monitor annually.
Reduced	▶ Monitor every 9 years if MPLs are not exceeded during 3 consecutive compliance periods for ground water PWSs or 3 consecutive years for surface water PWSs.

Corrosion Control Treatment (CCT)

Applicability	▶ All large systems except those meeting requirements of 40 CFR 141.81(b)(2) or (b)(3). ▶ Medium and small systems that exceed either AL; may stop CCT steps if ≤ both ALs for 2 consecutive 6-month periods but must recommence CCT if subsequently exceed either AL.
Study	▶ All large systems except as noted above. ▶ If State requires study for small or medium systems, it must be completed within 18 months.
Treatment	▶ Once State determines type of CCT to be installed, PWS has 24 months to install. ▶ Systems installing CCT must conduct 2 consecutive 6 months of follow-up tap and WQP monitoring.
OWQPs	▶ After follow-up Pb/Cu tap and WQP monitoring, State sets OWQPs. *Refer to WQP section above.*

Lead Service Line Replacement (LSLR)

Applicability	▶ Systems that continue to exceed the Pb AL after installing CCT and/or SOWT. ▶ Can discontinue LSLR whenever ≤ Pb AL in tap samples for 2 consecutive 6-month monitoring periods; must recommence if subsequently exceed.
Monitoring	▶ Optional: Sample from LSL to determine if line must be replaced. If all samples are ≤ 0.015 mg/L, line is considered "replaced through testing"; must reconsider these lines if Pb AL is subsequently exceeded. ▶ Required: Sample from any LSLs not completely replaced to determine impact on Pb levels.
Replacement	▶ Must replace at least 7% of LSLs annually; State can require accelerated schedule. ▶ If only portion of LSL is replaced, PWS must: – Notify customers at least 45 days prior to replacement about potential for increased Pb levels. – Collect samples within 72 hours of replacement and provide results within 3 days of receipt.

For additional information on the LCR

Call the Safe Drinking Water Hotline at 1-800-426-4791; visit the EPA Web site at http://water.epa.gov/drink; or contact your State drinking water representative.

Each type of monitoring is discussed in greater detail below. In addition, refer to the monitoring timelines in Appendix C which help illustrate how lead and copper tap monitoring requirements are impacted by a system's size category and whether the system exceeds an action level.

Initial Lead and Copper Tap Monitoring

The LCR specifies dates by which you were required to begin monitoring. The date was dependent on the number of people that you served as shown in Table 2-1 below, and was specified for discrete 6-month monitoring periods of January through June and July through December.

Table 2-1: Schedule for Initial Monitoring[1]

System Size (No. of People Served)	1st Initial Monitoring Period	2nd Initial Monitoring Period
3,300 and under	7/1/93 - 12/31/93	1/1/94 - 6/30/94[2]
3,301 - 50,000	7/1/92 - 12/31/92	1/1/93 - 6/30/93[2]
50,001 and more	1/1/92 - 6/30/92	7/1/92 - 12/31/92

✎ **NOTES:**
[1]If you are a new system, consult with your State LCR Coordinator to find out when you should begin lead and copper monitoring.
[2]Required if you do not exceed either action level during the 1st initial monitoring period, or if your State specifies that you must conduct this monitoring.

If you serve more than 50,000 people, you were required to conduct **both** 6-month rounds of initial lead and copper tap monitoring at the standard number of sites, required for your system size (see Table 2-2).

If you serve 50,000 or fewer people, you were required to conduct a minimum of **one**, 6-month round of initial monitoring at the standard number of sites (see Table 2-2). The requirement for you to conduct a second round of initial lead and copper tap monitoring was based on your 90th percentile lead and copper levels during the first round of monitoring as follows:

- You were not required to collect a second round of initial monitoring if you exceeded the lead or copper action level (unless required by your State). Instead, you were triggered into corrosion control treatment steps (refer back to the corrosion control treatment discussion in Chapter I). You also had the option to continue lead and copper tap monitoring while conducting corrosion

Table 2-2: Minimum Number of Lead and Copper Tap Samples for Systems on Standard Monitoring

System Size	No. of Samples
> 100,000	100
10,001 - 100,000	60
3,301 - 10,000	40
501 - 3,300	20
101 - 500	10
≤ 100	5

Am I Eligible for Reduced Lead and Copper Tap Monitoring? (See §§141.86(d)(4) & (g))

Reduced Lead and Copper Tap Monitoring

Criteria for Annual Monitoring: You can reduce the frequency of your monitoring to annually and collect from a reduced number of sites, as shown in Table 2-3, if:

1. You serve 50,000 or fewer people, and you are at or below both action levels during 2, consecutive, 6-month monitoring periods. The earliest that you could qualify for reduced monitoring is after initial monitoring. You do not need prior approval from the State.

OR

2. For any size system, you operate in accordance with State-specified OWQPs during 2, consecutive, 6-month monitoring periods. ***The LCRMR*** *no longer require you to request reduced monitoring status from the State. However, you must receive written permission to proceed to reduced monitoring*

Table 2-3: Minimum Number of Lead and Copper Tap Samples for Systems on Reduced Monitoring

System Size	No. of Samples
> 100,000	50
10,001 - 100,00	30
3,301 - 10,000	20
501 - 3,300	10
101 - 500	5
≤ 100	5

Note: The number of samples for systems serving ≤ 100 people is the same under standard and reduced monitoring.



REMEMBER: If you do not have the required number of sampling sites, it may be necessary to collect more than one sample from the same location, on different days, in order to collect the minimum number of required samples.

Criteria for Triennial Monitoring: You can reduce the frequency of sampling to once every 3 years and collect the reduced number of samples if you are:

1. A system that serves 50,000 or fewer people and your 90th percentile lead and copper levels are at or below both action levels for 3 consecutive years. *You do not need prior approval from the State).* Two, consecutive, 6-month periods at or below both action levels (such as the two initial monitoring periods) can count as the first year of the 3 years needed to qualify for triennial monitoring.

2. Any size system that operates in accordance with State-specified OWQPs during, 3 consecutive years, even if you exceed one or both action levels. *You must receive written permission to proceed to reduced monitoring*



EXAMPLE: Selecting Tiered Sites

- ★ A water system serving 3,301 to 10,000 people is on standard monitoring.
- ★ It is required to collect tap samples for a total of 40 sites, 20 of which must be from sites served by a lead service line.
- ★ After reviewing its records (refer back to "Sources of Information that You Should Review"), the water system can identify only 12 sites served by lead service lines.
- ★ It must collect a tap sample from each of these available sites and the remaining 28 samples from other Tier 1 sites.
- ★ If an insufficient number of Tier 1 sites are available, the system must use Tier 2 sites, followed by Tier 3 sites, and lastly by representative sites.

Note: *Refer back to Exhibits II-2 (standard monitoring) and II-3 (reduced monitoring) to identify the appropriate number of sites for your system size.*

If You Cannot Use Original Sampling Site

If you cannot gain access to an original sampling site during any subsequent monitoring period (e.g., homeowner no longer wishes to participate in the sampling program), you must collect a tap water sample from another site which meets the same targeting criteria as the original site. The replacement site should be located within reasonable proximity of the original site. *(Note: Some States require prior notification or approval of any changes in sampling sites, and you must report any sampling site changes when submitting data.)* Form 141-A in Appendix D provides you with an easy-to-follow format for tracking sample site identification and certification.

G. How Do I Collect Lead and Copper Tap Water Samples? *(40 CFR 141.86(b))*

When collecting lead and copper tap samples, you must follow the procedures listed below:

- Always collect a 1-liter sample in one container only (e.g., do not split the sample between two containers).
- Always collect a first-draw sample from a tap where the water has stood in the pipes for at least six hours (e.g., no flushing, showering, etc). However, make sure it is a tap that is used regularly, and not an abandoned or infrequently used tap.
- If your water system is a NTNCWS or CWS (such as a prison or hospital) that does not have enough inside taps where the water stands unused for at least six hours, you are allowed to use interior taps from which water is typically drawn for consumption and which are the most likely to have remained unused for the longest period of time. Your State will tell you whether you must submit a sampling plan for State approval prior to sampling at non-first-draw sample locations or if you can proceed with sampling and submit the plan with your sampling results. *Please check with your State before collecting any non-first draw samples.*

Request to Change Sample Site Location

System Name: _____

PWSID #: _____ County: _____

PROPOSED CHANGE IN SAMPLING SITES

Chemical Contaminant (Lead/Copper, TTHM, HAA5s, etc.): _____

Original Site Address: _____

New Site Address: _____

Approximate Distance Between Sites: _____

Reason for change (attach additional pages of necessary):

_____

_____

_____

_____

LEAD/COPPER ONLY: OLD: NEW:

Targeting Criteria:
(Tier 1, 2, or 3, LSL, etc.) _____ _____

Certification

I certify that the above proposed changes are in accordance with the *West Virginia Public Water System Regulations (64 CSR 3)* and the *Federal Safe Drinking Water Regulations (40 CFR 141).*

SIGNATURE _____

NAME (printed or typed) DATE

TITLE PHONE NUMBER

APPROVAL – FOR INTERNAL USE ONLY

_____
District Office Engineer Signature

Printed Name Date of Approval

C&E Signature Date Entered

Table 1: PRIMARY Sampling Sites

Code **OEHS use only**	Address	Tier Level	Type of Structure	Date of Construction of structure or date of tap installation	Interior Plumbing Material	Method of Interior Plumbing Material Verification	Served by Lead Service Line (Yes–Full, Yes–Partial, No)	Sampling Instructions Issued to Addressee YES/NO

Table 2: ADDITIONAL Sampling Sites*

Name	Address	Tier Level	Type of Structure	Interior Plumbing Material	Verification of Interior Plumbing Material	Served by Lead Service Line (Yes–Full, Yes–Partial, No)	Sampling Instructions Issued to Addressee

***Water system must still request in writing to use these sample locations prior to collecting these samples. Sample locations must be replaced with a location of the same Tier.**

Table 3: Sample Sites Added or Removed from most recent approved site plan*

Address	Change (Added/Removed)	Reason

***Only include sample sites added or removed from the most recent plan in this table. All Sample sites added in this table must also be included in Table 1 above. Sample sites can ONLY be removed if the location is vacant, piping materials have changed, or the resident is uncooperative. Sample locations must be replaced with a location of the same Tier.**

COPY NO.___

CHARLES TOWN UTILITY BOARD

GREENFIELD FORCEMAIN UPGRADE

SAMUEL STREET PUMP STATION FLOW METER INSTALLATION

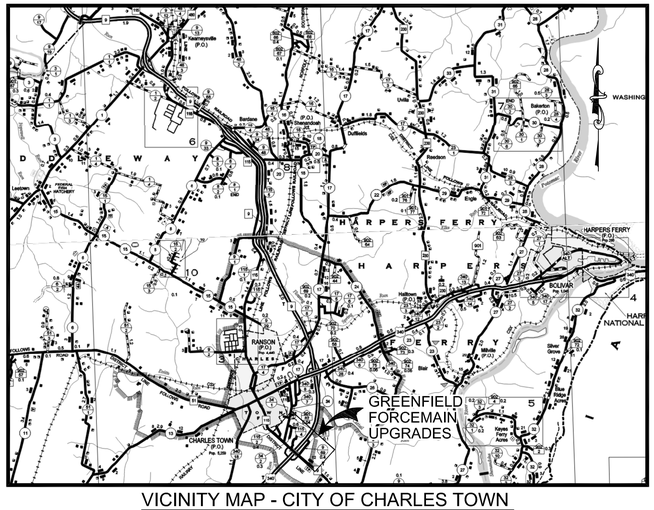


LOCATION MAP - JEFFERSON COUNTY

INDEX	
SHEET	**DESCRIPTION**
1	TITLE PAGE
2	GENERAL NOTES
3	QUANTITIES, LEGEND, AND RIGHT-OF-WAY
4	GREENFIELD FORCEMAIN PLAN SHEET 1 OF 2
5	GREENFIELD FORCEMAIN PLAN SHEET 2 OF 2
6	STANDARD DETAILS
7	SAMUEL STREET P.S. - SITE DEMOLITION PLAN
8	SAMUEL STREET P.S. - BYPASS PUMPING PLAN
9	SAMUEL STREET P.S. - SITE PLAN
10	SAMUEL STREET P.S. - MECHANICAL DEMOLITION PLAN & SECTION
11	SAMUEL STREET P.S. - MECHANICAL PLAN & SECTION
12	SAMUEL STREET P.S. - STRUCTURAL DETAILS
13	SAMUEL STREET P.S. - ELECTRICAL PLAN

CHARLES TOWN UTILITY BOARD
BOARD MEMBERS:

BOB TRAINOR	**CHAIRMAN**
KEITH PIERSON	**VICE CHAIRMAN**
THOMAS STOCKS	**TREASURER**
HEIDI PARKER	**BOARD MEMBER**
JEFFERSON WHITTEN	**BOARD MEMBER**
KRISTEN STOLIPHER	**GENERAL UTILITY MANAGER**



VICINITY MAP - CITY OF CHARLES TOWN

JUNE 13, 2023

CHARLES TOWN UTILITY BOARD

UTILITY MANAGER
DATE: _____

RK&K
P: 304.788.3370
159 Plaza Drive | Keyser, WV 26726
Engineers | Construction Managers | Planners | Scientists
www.rkk.com
Responsive People | Creative Solutions

PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF WEST VIRGINIA, LICENSE NO. 17949, EXPIRATION DATE: 12/31/24.

NOTE:

REFER TO SPECIFICATIONS PRIOR TO CONSTRUCTION. PLANS AND SPECIFICATIONS MUST BE READ TOGETHER TO KNOW FULLY WHAT MUST BE BUILT.

ALL DOCUMENTS INCLUDING DRAWINGS AND SPECIFICATIONS FURNISHED BY ENGINEER PURSUANT TO THIS AGREEMENT ARE INSTRUMENTS OF HIS SERVICES IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE BY THE OWNER OR OTHERS ON EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT. ANY REUSE WITHOUT SPECIFIC WRITTEN VERIFICATION OR ADAPTATION BY ENGINEER WILL BE AT OWNER'S SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO ENGINEER, AND OWNER SHALL INDEMNIFY AND HOLD HARMLESS ENGINEER FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES INCLUDING ATTORNEYS' FEES ARISING OUT OF OR RESULTING THEREFROM. ANY SUCH VERIFICATION OR ADAPTATION PERFORMED BY THE ENGINEER AT THE OWNER'S REQUEST WILL ENTITLE ENGINEER TO FURTHER COMPENSATION AT RATES TO BE AGREED UPON BY OWNER AND ENGINEER.

RK&K
P: 304.788.3370
159 Plaza Drive | Keyser, WV 26726
Engineers | Construction Managers | Planners | Scientists
www.rkk.com
Responsive People | Creative Solutions

PROJECT NO.	19339.022
DATE	June 13, 2023
DESIGNED	RAD
DRAWN	JMW
CHECKED	JWC

REVISIONS

CHARLES TOWN
UTILITY BOARD
661 S. GEORGE ST.
CHARLES TOWN, WV 25414

GREENFIELD
FORCEMAIN
UPGRADE

TITLE PAGE

DRAWING
NO. 1
OF. 13

\\AD.RKK.COM\FSVCLOUD\PROJECTS\2019\19339_CTUBONCALL\19339.022 GREENFIELD FORCE MAIN UPGRADE\ACAD\DRAWINGS\01-TITLE PAGE.DWG

GENERAL NOTES

1. PROJECT DESCRIPTION

THE PROJECT CONSISTS OF UPGRADING THE EXISTING GREENFIELD FORCEMAIN FROM A 4" TO A 6" AND INSTALLING A FLOW METER AT THE SAMUEL STREET PUMP STATION. THE PLANS AND SPECIFICATIONS ARE INTENDED TO COVER A COMPLETE PROJECT AND IT SHALL BE THOROUGHLY UNDERSTOOD THAT A FAILURE TO MENTION SPECIFICALLY ANY WORK WHICH WOULD NATURALLY BE REQUIRED TO COMPLETE THE PROJECT SHALL NOT RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITY TO PERFORM THE WORK.

2. CONTRACTOR RESPONSIBILITIES

THE CONTRACTOR SHALL TAKE IMMEDIATE ACTION TO CORRECT PROBLEMS ASSOCIATED WITH DUST CONTROL, TRAFFIC CONTROL, SEDIMENT AND EROSION, LOCATION OF STORED MATERIALS, EMERGENCY SITUATIONS, ETC. UPON, AND IN ACCORDANCE WITH, WRITTEN DIRECTIVE OF ENGINEER. THE OWNER RESERVES THE RIGHT TO PERFORM THIS WORK AND WITHHOLD COSTS OF WORK FROM CONTRACTOR'S PAYMENT UPON FAILURE OF THE CONTRACTOR TO TAKE ACTION.

3. EXISTING UTILITIES

THE LOCATION AND/OR ELEVATION OF ALL KNOWN UTILITIES AND SUBSURFACE FEATURES AS SHOWN ON THESE PLANS ARE BASED ON THE BEST AVAILABLE INFORMATION FROM EXISTING PLANS AND FIELD INFORMATION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ASCERTAIN THE LOCATION AND OR ELEVATION OF EACH UTILITY WHEN PERFORMING WORK WHICH MAY AFFECT THESE FACILITIES, INCLUDING PROBING, EXCAVATION, OR ANY OTHER PRECAUTION REQUIRED TO CONFIRM LOCATION AND OR ELEVATION AND THE CONTRACTOR SHALL TAKE ALL REASONABLE PRECAUTIONS AGAINST DAMAGE TO THESE UTILITIES WHETHER SHOWN ON THE PLANS OR NOT. HOWEVER, IN THE EVENT OF DAMAGE OR DISRUPTION TO UTILITIES WHICH ARE ACTIVE AND ARE TO REMAIN IN SERVICE, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE RESPONSIBLE OFFICIAL OF THE ENTITY OPERATING THE UTILITY INTERRUPTED. THE CONTRACTOR SHALL LEND ALL POSSIBLE ASSISTANCE IN RESTORING SERVICES AND SHALL ASSUME ALL COST, CHARGES, OR CLAIMS IN CONNECTION WITH THE INTERRUPTIONS AND REPAIR OF SUCH SERVICES, PRIOR TO COMMENCING WORK ON THE PROJECT, CONTRACTOR SHALL SUBMIT DETAILED METHOD OF REPAIRING DAMAGED UTILITIES TO THE ENGINEER FOR APPROVAL. ANY AND ALL COSTS ASSOCIATED WITH REPAIR AND RESTORATION OF SERVICE TO THE DISTURBED UTILITY SHALL BE AT THE CONTRACTORS EXPENSE.

4. BASE MAPPING

THE BASE MAPPING FOR THESE PLANS WAS PRODUCED FROM A COMBINATION OF AERIAL PHOTOGRAPHY, RK&K FIELD SURVEY, DIGITAL FILES OBTAINED FROM CHARLES TOWN UTILITY BOARD AND CAD DESIGN FILES PROVIDED BY PIEDMONT DESIGN GROUP, LLC.

5. VERTICAL AND HORIZONTAL CONTROL

BENCHMARKS WITH ELEVATIONS HAVE BEEN ESTABLISHED THROUGHOUT THE PROJECT AREA. CONTROL POINTS WITH ELEVATIONS AND COORDINATES ARE SHOWN ON INDIVIDUAL PLAN SHEETS. THESE CONTROL POINTS SHALL BE USED FOR CONSTRUCTION.

6. VERIFICATION OF DIMENSIONS

THE CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF ALL PLAN AND ELEVATION DIMENSIONS PRIOR TO ORDERING MATERIALS FOR THE CONSTRUCTION OF THE VARIOUS ITEMS ON THIS PROJECT.

7. PRESERVATION OF PROPERTY CORNERS OR OTHER MONUMENTS

THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION T0 PRESERVE AND MAINTAIN ALL CORNER STONES, IRON PINS, PIPES, CONCRETE MARKERS, OR OTHER MONUMENTS IDENTIFYING PROPERTY OR OTHER FEATURES. THE CONTRACTOR SHALL HAVE ALL SUCH MONUMENTS IN THE PROXIMITY OF THE WORK PROPERLY REFERENCED BY A REGISTERED LAND SURVEYOR. ANY MONUMENTS DAMAGED OR DESTROYED BY THE CONTRACTOR SHALL BE REPLACED AND A CERTIFICATION FURNISHED BY A WV REGISTERED LAND SURVEYOR THAT THE MONUMENT HAS BEEN PROPERLY REPLACED. THE COST FOR THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT AND INCLUDED IN THE VARIOUS BID ITEMS.

8. CONTRACTOR LICENSES

PRIOR TO COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR SHALL SECURE ALL NECESSARY WORK LICENSES AND PERMITS FROM THE APPROPRIATE CITY, COUNTY, OR STATE. THE OWNER SHALL HAVE THE NECESSARY PERMITS TO CONSTRUCT THE PROJECT AND SHALL FURNISH THEM TO THE CONTRACTOR. THE OWNER SHALL BE RESPONSIBLE FOR OBTAINING EASEMENTS SHOWN ON THE PLANS. A COPY OF THE LEGAL DOCUMENTS SHALL BE PROVIDED TO THE CONTRACTOR AT THE PRE-CONSTRUCTION CONFERENCE.

9. UTILITY NOTIFICATION

THE CONTRACTOR SHALL NOTIFY MISS UTILITY OF WEST VIRGINIA, INC. (1-800-245-4848) FOR LOCATING AND NOTIFICATION AT LEAST 3 WORKING DAYS PRIOR TO BEGINNING ANY WORK.

THE CONTRACTOR SHALL NOTIFY THE PROPER OFFICIALS OF AFFECTED UTILITIES AT LEAST 3 WORKING DAYS PRIOR TO BEGINNING ANY WORK THAT MAY AFFECT THEIR FACILITIES. THE UTILITIES AND THE CONTACT PERSON, IF KNOWN, ARE LISTED ON THIS SHEET.

10. EXISTING SUBSURFACE UTILITIES

THE CONTRACTOR SHALL UNCOVER AND DETERMINE THE ELEVATION OF ALL UTILITY LINES WHICH WILL BE CROSSED BY THE PROPOSED SEWER SUFFICIENTLY IN ADVANCE OF CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AS TO THE RESOLUTION OF ANY CONFLICTS. COST FOR ALL LOCATIONS EXPOSED SHALL BE CONSIDERED INCIDENTAL TO THE VARIOUS BID ITEMS UNLESS TEST PITS ARE SPECIFICALLY AUTHORIZED BY THE ENGINEER. IF DETERMINED BY THE ENGINEER THAT RELOCATION OF EXISTING UTILITIES IS NECESSARY, SUCH WORK SHALL BE CONDUCTED IN ACCORDANCE WITH "CHANGES IN THE WORK" IN THE GENERAL CONDITIONS.

11. DRAINAGE

THE LOCATION OF CULVERTS, INLETS, AND OTHER DRAINAGE ITEMS HAVE BEEN DETERMINED FROM DATA AVAILABLE AT THE TIME OF DESIGN AND ARE NOT NECESSARILY COMPLETE. PROPER DRAINAGE MUST BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION. DRIVEWAY CULVERTS AND OTHER STORM DRAINAGE PIPES REMOVED DURING CONSTRUCTION MUST BE REPLACED AT THE SAME LOCATION, GRADE, AND ELEVATION UNLESS OTHERWISE DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL USE DUE DILIGENCE IN PROTECTING FROM DAMAGE ALL EXISTING CULVERTS WHETHER SHOWN ON THE PLANS OR NOT. IF DAMAGE IS CAUSED TO ANY DRAINAGE FEATURES, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR AND/OR RESTORATION OF SAME TO THE SATISFACTION OF THE ENGINEER WITH COST INCIDENTAL TO PROJECT UNLESS APPROVED FOR PAYMENT BY ENGINEER.

12. DUST CONTROL

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE EQUIPMENT, MATERIALS AND LABOR AS REQUIRED OR DIRECTED BY THE ENGINEER TO CONTROL DUST ON TRAVELED WAYS. PROVISIONS SHALL BE MADE TO CONTROL DUST ON WEEKENDS, HOLIDAYS AND OTHER NON WORK DAYS, AS WELL AS SCHEDULED WORK DAYS. ALL COSTS ASSOCIATED WITH DUST CONTROL SHALL BE INCIDENTAL TO THE PROJECT.

13. TRAFFIC CONTROL

MAINTENANCE OF TRAFFIC ALONG STATE, COUNTY OR PRIVATE ROADS SHALL BE IN ACCORDANCE WITH THE WEST VIRGINIA DIVISION OF HIGHWAYS MANUAL ON TEMPORARY TRAFFIC CONTROL FOR STREETS AND HIGHWAYS, 2006 EDITION. MAINTENANCE OF TRAFFIC ON CITY STREETS SHALL BE IN ACCORDANCE WITH CITY REQUIREMENTS. TEMPORARY ROUTES, TRAFFIC DIVERSIONS, AND STREETS OR ROADS TO BE CLOSED TO THROUGH TRAFFIC SHALL BE SUBMITTED BY THE CONTRACTOR IN SCHEDULE FORM FOR REVIEW AND APPROVAL BY THE AUTHORITY HAVING JURISDICTION OVER THE ROUTES INVOLVED AT LEAST LEAST 7 DAYS PRIOR TO THE PLANNED WORK. THE CONTRACTOR SHALL NOTIFY THE JEFFERSON COUNTY OFFICE OF EMERGENCY SERVICES, 304-728-3287 DAILY OF ANY ROAD CLOSINGS.

14. DISPOSAL OF EXCESS AND UNSUITABLE MATERIAL

THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL AND DISPOSAL OF ALL EXCESS OR UNSUITABLE MATERIAL FROM THE PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND COMPLYING WITH ALL LOCAL, STATE, AND FEDERAL LAWS PERTAINING TO DISPOSAL OF MATERIAL. THE COST OF THIS SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT AND INCLUDED IN THE VARIOUS BID ITEMS.

15. SEDIMENT AND EROSION CONTROL; TRENCH DEWATERING

THE CONTRACTOR SHALL PROVIDE FOR ADEQUATE DRAINAGE AND PROPER SOIL EROSION CONTROL MEASURES IN ACCORDANCE WITH THE WV DEP BEST MANAGEMENT PRACTICE MANUAL AS IDENTIFIED WITHIN CHAPTER 3.22. IN ALL CASES, WATER BEING REMOVED FROM THE CONSTRUCTION SITE SHALL BE DISCHARGED SO THAT IT PASSES THROUGH A SEDIMENT CONTROL DEVICE PRIOR TO ENTERING RECEIVING WATERS. DISCHARGE FROM ANY DEWATERING DEVICE MUST CONVEY UPON A STABILIZED SURFACE/CHANNEL AS IT TRAVELS TO RECEIVING WATERS. DEWATERING SHALL NOT FLOOD STREETS OR CREATE PONDING UPON ROADWAYS. CONTRACTOR SHALL TAKE IMMEDIATE ACTION TO CORRECT ANY PONDING OR FLOODING OF ROADWAYS FROM DEWATERING ACTIVITIES.

16. DRIVEWAYS

PRIOR TO DISTURBING EXISTING DRIVEWAYS, THE CONTRACTOR SHALL NOTIFY THE OWNER OR TENANT 24 HOURS PRIOR TO COMMENCEMENT OF THE DISTURBANCE. THE OWNER SHALL BE NOTIFIED OF TIME AND DURATION OF DRIVEWAY CLOSINGS. DRIVEWAYS SHALL NOT BE CLOSED OR BLOCKED FOR EXTENDED PERIODS INCLUDING OVERNIGHT WITHOUT APPROVAL OF THE OWNER AND THE ENGINEER.

17. SURFACE RESTORATION

ALL DISTURBED PROPERTY SHALL BE REPLACED TO ITS PRE-CONSTRUCTION CONDITION. EXCEPT THAT TREES WILL NOT BE REPLACED. COST SHALL BE CONSIDERED INCIDENTAL TO THE VARIOUS PAY ITEMS EXCEPT THAT SPECIFIC PAYMENT WILL BE MADE FOR ITEMS LISTED (AGGREGATE FOR STREETS/ DRIVEWAYS, CONCRETE SIDEWALK REPLACEMENT, ASPHALT PAVING, ETC.) AND APPROVED BY THE ENGINEER.

18. UTILITY POLES AND GUY WIRES

ALL UTILITY POLES LOCATED LESS THAN 5 FEET AS MEASURED FROM THE FACE OF THE POLE TO THE LIMITS OF THE EXCAVATED TRENCH SHALL BE BRACED IN ACCORDANCE WITH THE REQUIREMENTS OF THE POLE OWNER. UTILITY POLE GUY WIRES LESS THAN 4' FROM EDGE OF TRENCH SHALL REQUIRE REVIEW AND APPROVAL OF THE POLE OWNER

19. WATER MAIN AND SANITARY SEWER SEPARATION

PARALLEL WATER AND SEWER LINES SHALL MAINTAIN A 10 FEET SEPARATION. WHERE WATER AND SEWER LINES CROSS, A SEPARATION OF 18 INCHES SHALL BE MAINTAINED WITH WATER LINE ABOVE THE SEWER LINE. PARALLEL WATER AND SEWER LINES SHALL MAINTAIN A HORIZONTAL SEPARATION OF AT LEAST 10'. IN INSTANCES WHERE WATER AND SEWER LINES MAY PARALLEL EACH OTHER WITH MORE THAN 5' BUT LESS THAN 10' OF HORIZONTAL SEPARATION, THE WATER LINE BE AT LEAST 18" ABOVE THE SEWER LINE. IF THE HORIZONTAL SEPARATION DISTANCE IS LESS THAN 5', THE UTILITY BEING INSTALLED MUST BE INSTALLED WITHIN WATERTIGHT CASING. WHEN WATER AND SEWER LINES CROSS, EITHER SKEWED OR PERPENDICULAR CROSSINGS, A MINIMUM 18" SEPARATION SHALL BE MAINTAINED. IF 18" OF SEPARATION CANNOT BE MAINTAINED, THE UTILITY BEING INSTALLED MUST BE INSTALLED WITHIN WATERTIGHT CASING FOR AT LEAST 20 LINEAR FEET CENTERED UPON THE CROSSING, OR UNTIL THE CROSSING REACHES 18" OF VERTICAL SEPARATION OR 10' OF HORIZONTAL SEPARATION, WHICHEVER OCCURS FIRST, KEEPING THE PIPE JOINTS AS FAR FROM THE CROSSING POINT AS POSSIBLE. THE ENGINEER MAY CONSULT THE LOCAL AUTHORITY ABOUT ANY INSTANCES ENCOUNTERED THAT ARE NOT ADDRESSED IN THIS NOTE. ADJUSTMENTS TO THIS NOTE MAY BE MADE AT THE DISCRETION OF THE ENGINEER.

20. PROPERTY LINE LOCATIONS

THE PROPERTY LINES SHOWN ON THESE PLANS WERE DETERMINED FROM THE JEFFERSON COUNTY TAX MAPS AND HAVE NOT BEEN FIELD VERIFIED.

21. WORK ON DIVISION OF HIGHWAYS RIGHT OF WAYS

ALL WORK ON WEST VIRGINIA DIVISION OF HIGHWAYS RIGHT OF WAYS SHALL BE IN ACCORDANCE WITH THE MANUAL FOR ACCOMMODATIONS OF UTILITIES ON HIGHWAY RIGHT OF WAYS AND PERMIT ISSUED FOR PROJECT. DISTURBED DITCHES WITH SLOPES GREATER THAN 5% SHALL BE ROCK LINED AS DIRECTED BY THE ENGINEER. PAYMENT FOR ROCK LINED DITCHES WILL BE AT THE UNIT BID PRICE FOR CLASS II RIP RAP.

22. CONSTRUCTION WORK ON EASEMENTS

THE CONTRACTOR SHALL NOTIFY AFFECTED PROPERTY OWNERS OF THE ANTICIPATED START DATE AND DURATION OF WORK ON THE PROPERTY AT LEAST ONE WEEK PRIOR TO STARTING CONSTRUCTION AND GIVE NOTICE OF ACTUAL START TIME AT LEAST THREE (3) DAYS PRIOR TO STARTING. HOMEOWNER'S EXISTING SEWAGE DISPOSAL SYSTEM SHALL BE REPAIRED BY THE CONTRACTOR IF DAMAGED. HOMEOWNER SHALL BE NOTIFIED OF ANY DISTURBANCES TO EXISTING SYSTEM. THE CONTRACTOR'S ALLOWABLE WORK AND STORAGE AREA IS CONFINED TO SPECIFIED EASEMENT AND RIGHTS OF WAY AREAS AS SHOWN ON THE PLANS. APPROVAL OF THE PROPERTY OWNER AND ENGINEER SHALL BE OBTAINED PRIOR TO TRANSPORTING ANY EQUIPMENT, WORKING OR STORING MATERIALS OUTSIDE OF DESIGNATED EASEMENT AND RIGHTS OF WAY AREAS.

23. TEST PITS

THE LOCATION OF TEST PITS SHOWN ON THE PLANS ARE APPROXIMATE AND TO BE USED FOR ESTIMATE PURPOSES. ALL TEST PITS, WHETHER SHOWN ON THE PLANS OR NOT, SHALL BE APPROVED BY THE ENGINEER PRIOR TO STARTING TEST PIT.

24. BLASTING

WRITTEN APPROVAL FROM THE ENGINEER MUST BE OBTAINED PRIOR TO CONDUCTING BLASTING. BLASTING MATERIALS STORED ON SITE MUST COMPLY WITH APPLICABLE STATE AND FEDERAL LAWS. BLASTING SHALL BE CONDUCTED ONLY BY CERTIFIED PERSONNEL AND IN ACCORDANCE WITH APPLICABLE STATE AND FEDERAL LAWS.

25. AS-BUILT DRAWINGS

THE CONTRACTOR SHALL PERFORM MEASUREMENTS AND KEEP ADEQUATE RECORDS TO PROVIDE AS-BUILT DRAWINGS OF THE PROJECT. THE FIELD LOCATION OF LATERAL CONNECTIONS SHALL BE INCLUDED ON THE AS-BUILT DRAWINGS. THE COST OF AS-BUILT DRAWINGS IS INCIDENTAL TO THE PROJECT. A SET OF AS-BUILT DRAWINGS SHALL BE KEPT CURRENT BY THE CONTRACTOR AS WORK PROGRESSES AND MUST BE UPDATED BEFORE PAY ESTIMATES WILL BE PROCESSED.

26. DAMAGE TO ASPHALT/CONCRETE STREETS OR DRIVEWAYS OR LOTS

BEDDING SHALL BE PLACED ON ASPHALT SURFACES TO PROTECT PAVEMENT FOR TRACKED EQUIPMENT. DAMAGE TO ASPHALT OR CONCRETE STREETS, HIGHWAYS, DRIVEWAYS, OR PARKING AREAS OUTSIDE OF THE MAXIMUM ALLOWABLE TRENCH PATCHING WIDTH AS SPECIFIED HEREIN SHALL BE REPAIRED AS DIRECTED BY THE ENGINEER AT SOLE EXPENSE OF THE CONTRACTOR UNLESS OTHERWISE APPROVED FOR PAYMENT BY THE ENGINEER. DAMAGE TO WV STATE ROADS SHALL BE REPAIRED ACCORDING TO WVDOH STANDARD SPECIFICATIONS & DETAILS.

27. ASPHALT TRENCH REPAIR

ASPHALT TRENCH REPAIR SHALL BE PERFORMED WITHIN 30 DAYS OF COMPLETION OF WATER LINE REPLACEMENT IN RESPECTIVE AREAS.

28. ROCK RIP RAP

ROCK RIP RAP AND GABION STONE SHALL BE NON-ACIDIC AND OF ADEQUATE HARDNESS WITH SIZES AS FOLLOWS:

CLASS 0 (GABION)
CLASS I
CLASS II
CLASS III

29. PLAN PRESENTATION GRAY / BLACK

THE GRAY AND BLACK TEXT AND LINE WORK SHOWN ON THE CONSTRUCTION PLAN SHEETS DENOTES INFORMATION RELEVANT TO EXISTING AND PROPOSED CONSTRUCTION ACTIVITY. INFORMATION SHOWN IN GRAY ARE EITHER EXISTING FEATURES OR PROPOSED IMPROVEMENTS THAT ARE DETAILED ON OTHER PLAN SHEETS AND SHOWN FOR INFORMATION ONLY. INFORMATION SHOWN IN BLACK ARE PROPOSED IMPROVEMENTS DETAILED ON SHEET.

30. CONNECTION TO EXISTING SYSTEMS

ALL CONNECTIONS TO EXISTING SYSTEMS FOR WATER AND SANITARY SEWER LINES SHALL BE INCIDENTAL TO AND INCLUDED IN OTHER ITEM COSTS UNLESS A SPECIFIED BID ITEM IS PROVIDED FOR SUCH CONNECTION.

31. DISPOSAL OF REMOVED EQUIPMENT AND MISCELLANEOUS ITEMS DURING DEMOLITION

THE OWNER RESERVES THE RIGHT TO KEEP ANY MECHANICAL EQUIPMENT, PIPING, VALVES, METERS, OR ANY OTHER ITEMS REMOVED DURING DEMOLITION, IF THEY CHOOSE. COORDINATE REMOVAL OF ITEMS DURING DEMOLITION WITH THE OWNER. ANY ITEMS THAT THE OWNER CHOOSES TO KEEP SHALL BE DELIVERED TO THE OWNER WITH MINIMAL DAMAGE. COORDINATE DELIVERY WITH THE OWNER. EQUIPMENT AND ITEMS THAT THE OWNER CHOOSES NOT TO KEEP SHALL BE DISPOSED OF BY THE CONTRACTOR.

UTILITIES

THE CONTRACTOR SHALL NOTIFY MISS UTILITY THREE (3) DAYS IN ADVANCE OF ANY WORK IN THE VICINITY OF ANY UTILITY LINES.

WORK IN THE STATE OF WEST VIRGINIA–TEL. 1-800-245-4848 OR 811

IN ADDITION, THE CONTRACTOR SHALL NOTIFY EACH RESPECTIVE UTILITY WITHIN THE WORK AREA THREE (3) DAYS IN ADVANCE OF ANY WORK IN THE VICINITY OF THEIR UTILITIES.

FRONTIER (COMMUNICATIONS)
1-800-921-8104

POTOMAC EDISION/ALLEGHENY POWER (ELECTRIC)
1-800-255-3443

CHARLES TOWN UTILITY BOARD (WATER & SEWER)
1-304-725-2316

SEIDIMENT AND EROSION CONTROL NOTES

1. ALL CONSTRUCTION/GRADING WITHIN THE PERMIT AREA SHALL BE PERFORMED IN ACCORDANCE WITH THE "WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION (WVDEP) EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICE MANUAL" AS APPROPRIATE FOR THE AREA THAT THE CONTRACTOR IS WORKING.
2. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING PERMIT APPROVAL FOR ALL OFFSITE STOCKPILES, BORROW PIT OR WASTE AREAS. PRIOR TO EARTH MOVING, CONTRACTOR MUST NOTIFY WVDEP OF ACTIVITIES.
3. THE CONTRACTOR SHALL PROTECT ALL POINTS OF CONSTRUCTION INGRESS AND EGRESS TO PREVENT DEPOSITION OF MATERIALS ON ROADS AND STREETS. ALL MATERIAL DEPOSITED ON ROADS AND STREETS SHALL BE REMOVED IMMEDIATELY.
4. THE SOIL CONSERVATION DISTRICT OR STATE AGENCY HAVING JURISDICTION OVER THE LOCATION OF THIS CONSTRUCTION RESERVES THE RIGHT TO ADD TO, MODIFY, OR DELETE ANY OR ALL SEDIMENT CONTROL MEASURES SHOWN HEREON AS NEEDED TO ESTABLISH PROPER SEDIMENT EROSION CONTROL AND TO MINIMIZE SOIL EROSION.
5. PRIOR TO ANY EARTH MOVING OPERATIONS APPROPRIATE SOIL AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED FOR THAT PHASE OF THE OPERATION.
6. ALL PUMP DISCHARGES FROM DEWATERING OPERATIONS SHALL BE RUN THRU A DEWATERING BASIN OR OTHER APPROVED FILTERING DEVICES TO MINIMIZE DOWNSTREAM SEDIMENTATION.
7. CONTRACTOR SHALL BACKFILL TRENCHES WITHIN THE SAME WORKING DAY AS EXCAVATION. IN THE EVENT THE CONTRACTOR MUST LEAVE A STOCKPILE AT THE SITE OVER NIGHT, HE SHALL INSTALL SILT FENCE AROUND THE PERIMETER OF THE STOCKPILE AREA.
8. FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN:
   A. SEVEN CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER CONTROLS, SWALES, DITCHES, DIKES, PERIMETER SLOPES, AND ALL SLOPES GREATER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1)
   B. TWENTY OR MORE DAYS AFTER DISTURBED AREA HAS BEEN LEFT IDLE AND/OR EXPOSED.
   C. AREAS WHERE THE SEED HAS FAILED TO GERMINATE ADEQUATELY (UNIFORM PERENNIAL VEGETATIVE COVER WITH A DENSITY OF 70%) WITHIN 30 DAYS AFTER SEEDING AND MULCHING MUST BE RESEEDED IMMEDIATELY, OR AS SOON AS WEATHER CONDITIONS ALLOW.
9. REGULAR MAINTENANCE, AT A MINIMUM, SHALL BE PERFORMED ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS AFTER ANY STORM EVENT GREATER THAN 0.5 INCHES PER 24 HOUR PERIOD ANY REQUIRED REPAIRS OR MAINTENANCE SHALL BE MADE IMMEDIATELY.
10. ALL STOCKPILED TOPSOIL SHALL HAVE TEMPORARY SEEDING, AND SILT FENCE ENCLOSURE.
11. ALL BERMS SHALL BE SEEDED AND THEIR SLOPES SHALL NOT EXCEED 2:1 SLOPES.
12. SEEDING SPECIFICATIONS FOR TEMPORARY AND PERMANENT SEEDING:
    TEMPORARY SEEDING:
    SEED: BULBOA RYE. 150 LB.. PER ACRE
    MULCH: STRAW. 2.5 - 3.0 TONS PER ACRE
    ANCHOR MULCH WITH NON-ASPHALTIC LIQUID BINDER OR NETTING

    PERMANENT SEEDING:
    SEED: KENTUCKY 31 TALL FESCUE 190 LB.. PER ACRE AND
    BLUEGRASS 50 LB.. PER ACRE
    MULCH: STRAW 1.5 TONS PER ACRE
    ANCHOR MULCH WITH NON-ASPHALTIC LIQUID BINDER OR NETTING
    LIME: 1 TON PER ACRE
    FERTILIZER: (10-10-10) 1,000 LB.. PER ACRE

    SEED DATES:
    MARCH 15 - MAY 15 & AUGUST 15 - OCTOBER 15: ALL AREAS SHALL BE PERMANENTLY SEEDED AND MULCHED WITH-IN ONE (1) WEEK OF REACHING FINAL GRADE. IF IN SEEDING SEASON OTHERWISE TEMPORARY SEEDING REQUIREMENTS SHALL RECEIVE A PERMANENT SEED MIXTURE DURING THE FIRST GROWING SEASON FOLLOWING THE FINISHED GRADING. AREAS WITH PERMANENT SLOPES OF 2:1 OR STEEPER SHALL BE STABILIZED USING CROWN VETCH, AS PER REQUIREMENTS OF THE LATEST MARYLAND AND STANDARDS AND SPECIFICATIONS FOR CRITICAL AREA STABILIZATION.
13. THE STATE OR COUNTY INSPECTOR HAS THE RIGHT TO MAKE CERTAIN FIELD MODIFICATIONS AS THE SITE SITUATIONS DEEM NECESSARY.
14. THE DISTURBED AREA FOR THIS PROJECT IS ESTIMATED TO BE: 1.66 ACRE

SEQUENCE OF OPERATIONS

1. CONTRACTOR SHALL NOTIFY THE CHARLES TOWN UTILITY BOARD AND WV DEPARTMENT OF ENVIRONMENTAL PROTECTION INSPECTOR, PRIOR TO START OF CONSTRUCTION.
2. CONTRACTOR SHALL BACKFILL TRENCH WITHIN SAME WORKDAY AS EXCAVATION OF TRENCH OCCURS. DO NOT LEAVE BACKFILL MATERIAL STOCKPILED OVER NIGHT. IF BACKFILL STOCKPILES CAN NOT BE AVOIDED, INSTALL SILT FENCE AROUND PERIMETER OF STOCKPILE AREA.
3. MAINTAIN WORK SO THAT ONLY A MAXIMUM OF 500 LF IS DISTURBED AT ANY POINT DURING CONSTRUCTION. CLEAN UP AND STABILIZE WORK AREA PRIOR TO ADVANCING TO THE NEXT 500 LF.
4. MAINTAIN EROSION AND SEDIMENT CONTROL MEASURES DURING THE COURSE OF CONSTRUCTION AND UNTIL SITE HAS STABILIZED.
5. SEED AND MULCH FOR PERMANENT VEGETATIVE STABILIZATION AS SOON AS POSSIBLE AFTER INSTALLATION.
6. THOROUGHLY CLEAN SITE, REMOVING ALL DEBRIS AND MISCELLANEOUS CONSTRUCTION MATERIAL.
7. STABILIZE ALL AREAS DISTURBED BY CLEANUP AND REMOVAL.
8. UPON COMPLETION OF CONSTRUCTION AND SUCCESSFUL ESTABLISHMENT OF VEGETATIVE COVER, REMOVE EROSION AND SEDIMENT CONTROL MEASURES AND DEVICES.
9. COMPLETE ANY AND ALL STABILIZATION WORK NECESSARY TO OBTAIN PERMIT CLOSURE FROM WVDEP AT PROJECT COMPLETION.

RK&K
P: 304.788.3370
159 Plaza Drive | Keyser, WV 26726
Engineers | Construction Managers | Planners | Scientists
www.rkk.com
Responsive People | Creative Solutions

PROJECT NO.	REVISIONS
19339.022	
DATE	
June 13, 2023	
DESIGNED RAD	
DRAWN JMW	
CHECKED JWC	

CHARLES TOWN
UTILITY BOARD
661 S. GEORGE ST.
CHARLES TOWN, WV 25414

GREENFIELD
FORCEMAIN
UPGRADE

GENERAL NOTES

DRAWING NO. 2 OF 13

\\AD.RKK.COM\FSVCLOUD\PROJECTS\2019\19339_CTUBONCALL\19339.022 GREENFIELD FORCE MAIN UPGRADE\ACAD\DRAWINGS\02-GENERAL NOTES.DWG

ITEM NUMBER	DESCRIPTION	UNIT	TOTAL	BID
1	MOBILIZATION	LS	1	1
2	TRAFFIC CONTROL	LS	1	1
3	EROSION AND SEDIMENT CONTROL	LS	1	1
4	AUDIO VISUAL TAPING	LS	1	1
5	6" C900 CLASS 165 PVC FORCEMAIN	LF	2,349'	2,400'
6	FORCEMAIN FLUSHING CONNECTION	EA	3	4
7	CONNECT TO PROPOSED MANHOLE	EA	1	1
8	4' DIAMETER MANHOLE DOGHOUSE (UP TO 6')	EA	1	2
9	MANHOLE FRAME AND COVER (WATERTIGHT)	EA	1	2
10	12" STEEL CASING (BORE & JACK)	LF	80'	100'
11	12" STEEL CASING (OPEN CUT)	LF	40'	50'
12	AIR RELEASE VALVES	EA	3	4
13	CLASS B CONCRETE	CY	0.7	1
14	AGGREGATE FOR BACKFILL	CY	659	660
15	ASPHALT TRENCH PATCH (BASE)	TON	55	60
16	ASPHALT TRENCH PATCH (WEARING)	TON	28	30
17	PUMP STATION FLOW METER INSTALLATION	LS	1	1
18	TEST PIT	EA	2	4

LEGEND

EXISTING SANITARY SEWER MANHOLE	MH	PROPOSED MANHOLE	S
EXISTING SANITARY SEWER LINE	SS	PROPOSED FLUSHING VALVE	FV
EXISTING WATER LINE	W	PROPOSED SEWER FORCEMAIN	FM
EXISTING WATER VALVE	V	EXISTING FENCE	X X
EXISTING WATER METER	M	LIMITS OF DISTURBANCE	LOD
EXISTING FIRE HYDRANT		EXISTING POWER/UTILITY POLE	
RIGHT-OF-WAY LINE		PROPERTY LINE	PL
PROPOSED TEXT	PROPOSED	EXISTING TEXT	*EXISTING*

RIGHT OF WAY

SHEET NUMBER	PROPERTY OWNER	EXISTING CUSTOMER	TAX MAP	PARCEL NUMBER	LOT NUMBER	DEED BOOK	PAGE NUMBER	TYPE OF EASEMENT		EASEMENT LENGTH	DATE OBTAINED	RECORDED		REMARKS
								PERM	CONST			DEED BOOK	PAGE NO	
4	CAROL B REYNOLDS	YES	18	1.14		777	635			104'				DISTRICT 2

ADDRESS	PHONE NUMBER
67 BAILEY BROOKS WAY, CHARLES TOWN, WV 25414	

RK&K
P: 304.788.3370
159 Plaza Drive | Keyser, WV 26726
Engineers | Construction Managers | Planners | Scientists
www.rkk.com
Responsive People | Creative Solutions

PROJECT NO. 19339.022
DATE June 13, 2023
DESIGNED RAD
DRAWN JMW
CHECKED JWC

REVISIONS

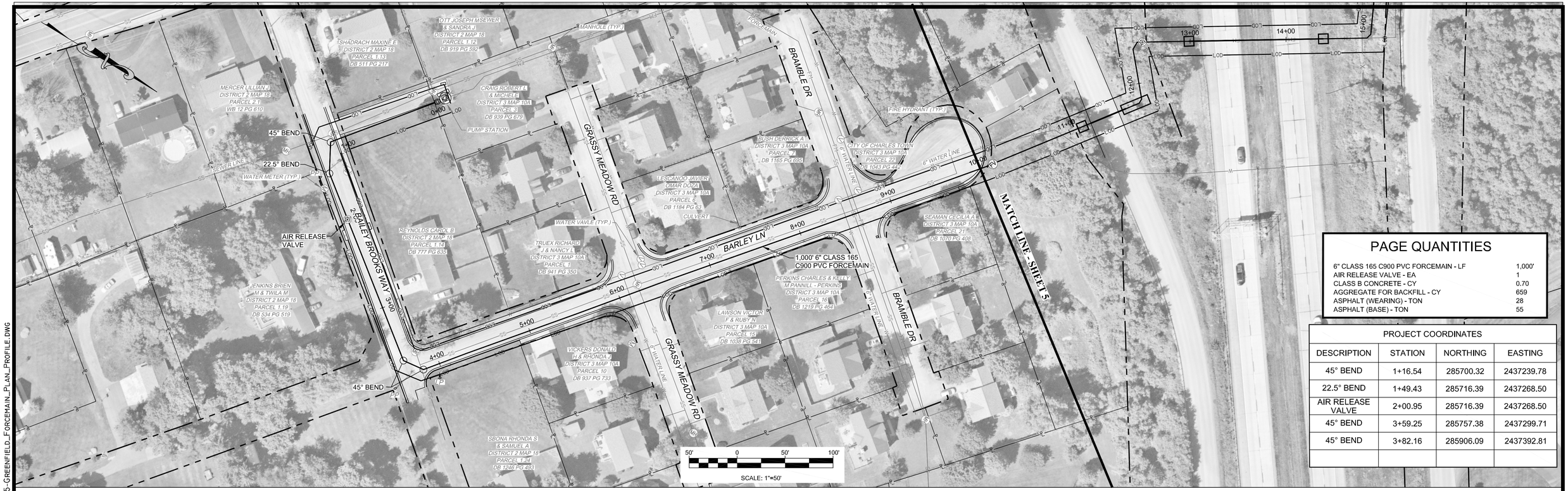
CHARLES TOWN UTILITY BOARD
661 S. GEORGE ST.
CHARLES TOWN, WV 25414

GREENFIELD FORCEMAIN UPGRADE

QUANTITIES, LEGEND, & RIGHT OF WAY

DRAWING NO. 3 OF 13

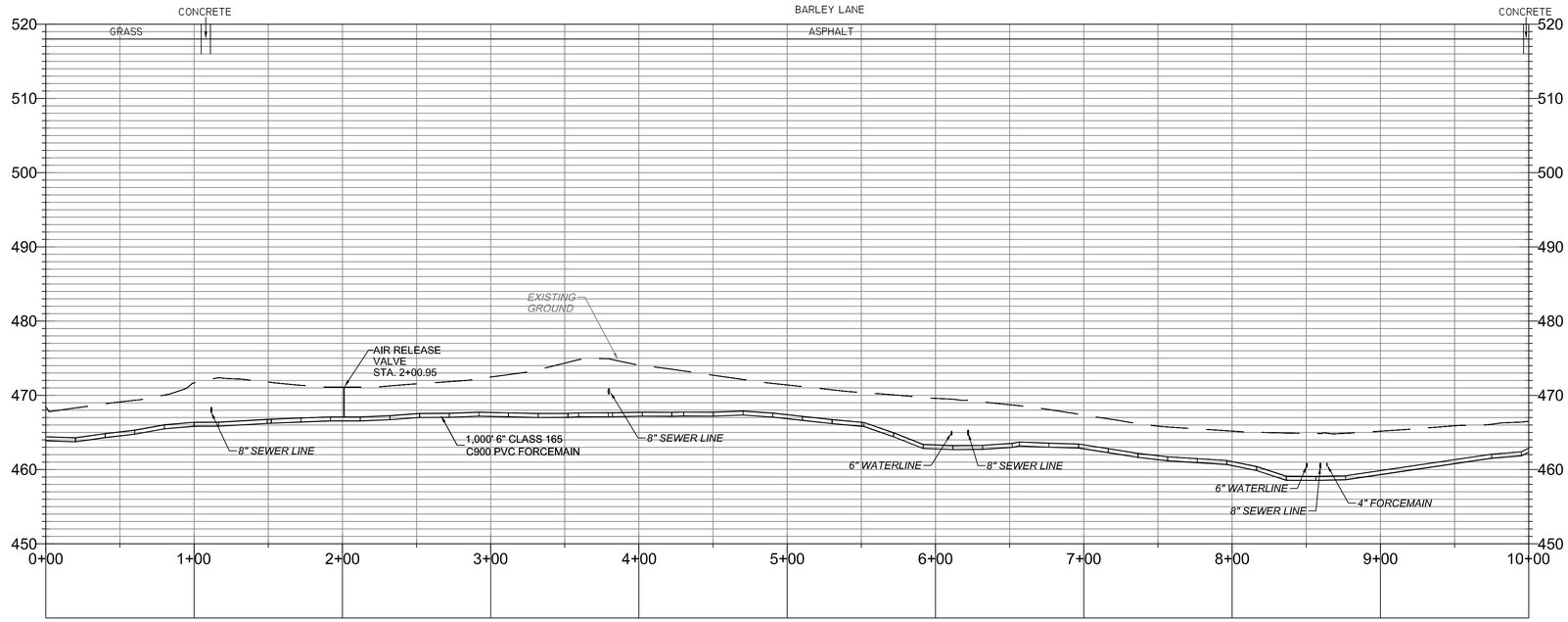
\\AD.RKK.COM\FSVCLOUD\PROJECTS\2019\19339_CTUBONCALL\19339.022 GREENFIELD FORCE MAIN UPGRADE\ACAD\DRAWINGS\03-QUANTITIES.DWG



PAGE QUANTITIES

6" CLASS 165 C900 PVC FORCEMAIN - LF	1,000'
AIR RELEASE VALVE - EA	1
CLASS B CONCRETE - CY	0.70
AGGREGATE FOR BACKFILL - CY	659
ASPHALT (WEARING) - TON	28
ASPHALT (BASE) - TON	55

PROJECT COORDINATES			
DESCRIPTION	STATION	NORTHING	EASTING
45° BEND	1+16.54	285700.32	2437239.78
22.5° BEND	1+49.43	285716.39	2437268.50
AIR RELEASE VALVE	2+00.95	285716.39	2437268.50
45° BEND	3+59.25	285757.38	2437299.71
45° BEND	3+82.16	285906.09	2437392.81



RK&K
P: 304.788.3370
159 Plaza Drive | Keyser, WV 26726
Engineers | Construction Managers | Planners | Scientists
www.rkk.com
Responsive People | Creative Solutions

PROJECT NO.	19339.022
DATE	June 13, 2023
DESIGNED	RAD
DRAWN	JMW
CHECKED	JWC

REVISIONS

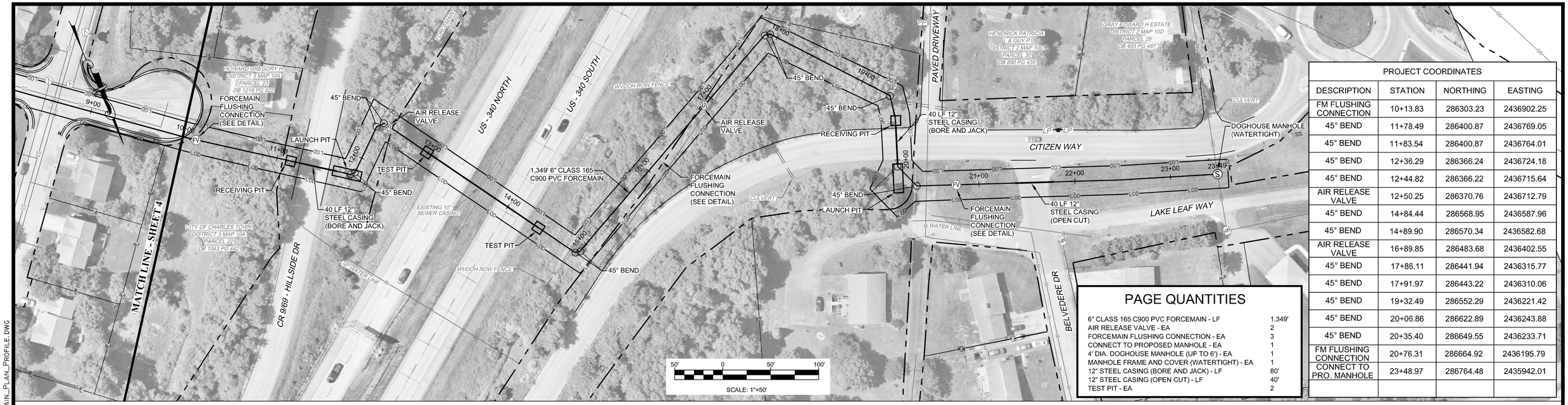
CHARLES TOWN
UTILITY BOARD
661 S. GEORGE ST.
CHARLES TOWN, WV 25414

GREENFIELD
FORCEMAIN
UPGRADE

GREENFIELD FORCEMAIN
PLAN AND PROFILE 1 OF 2

DRAWING
NO. 4
OF. 13

\\AD.RKK.COM\FS\CLOUD\PROJECTS\2019\19339_CTUBONCALL\19339.022 GREENFIELD FORCE MAIN UPGRADE\ACAD\DRAWINGS\04-05-GREENFIELD_FORCEMAIN_PLAN_PROFILE.DWG

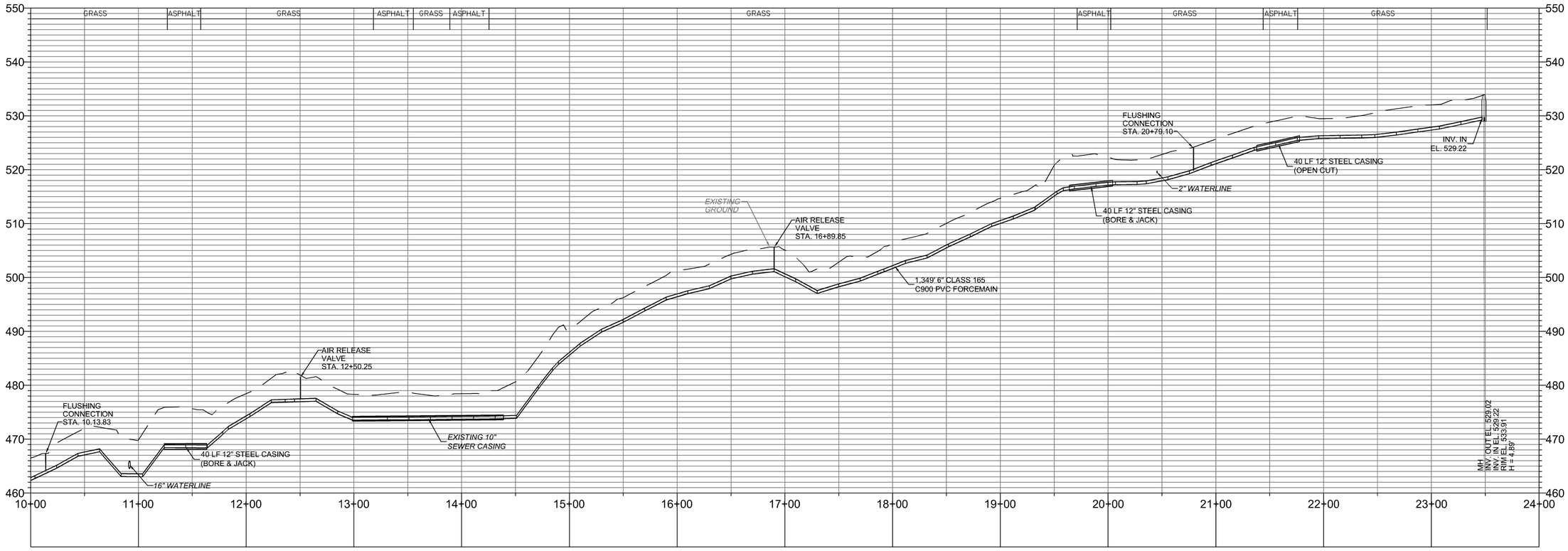


PROJECT COORDINATES

DESCRIPTION	STATION	NORTHING	EASTING
FM FLUSHING CONNECTION	10+13.83	286303.23	2436902.25
45° BEND	11+78.49	286400.87	2436769.05
45° BEND	11+83.54	286400.87	2436764.01
45° BEND	12+36.29	286366.24	2436724.18
45° BEND	12+44.82	286366.22	2436715.64
AIR RELEASE VALVE	12+50.25	286370.76	2436712.79
45° BEND	14+84.44	286568.95	2436587.96
45° BEND	14+89.90	286570.34	2436582.68
AIR RELEASE VALVE	16+89.85	286483.68	2436402.55
45° BEND	17+86.11	286441.94	2436315.77
45° BEND	17+91.97	286443.22	2436310.06
45° BEND	19+32.49	286552.29	2436221.42
45° BEND	20+06.86	286622.89	2436243.88
45° BEND	20+35.40	286649.55	2436233.71
FM FLUSHING CONNECTION	20+76.31	286664.92	2436195.79
CONNECT TO PRO. MANHOLE	23+48.97	286764.48	2435942.01

PAGE QUANTITIES

6" CLASS 165 C900 PVC FORCEMAIN - LF	1,349'
AIR RELEASE VALVE - EA	2
FORCEMAIN FLUSHING CONNECTION - EA	3
CONNECT TO PROPOSED MANHOLE - EA	1
4' DIA. DOGHOUSE MANHOLE (UP TO 6') - EA	1
MANHOLE FRAME AND COVER (WATERTIGHT) - EA	1
12" STEEL CASING (BORE AND JACK) - LF	80'
12" STEEL CASING (OPEN CUT) - LF	40'
TEST PIT - EA	2



RK&K
P: 304.788.3370
159 Plaza Drive | Keyser, WV 26726
Engineers | Construction Managers | Planners | Scientists
www.rkk.com
Responsive People | Creative Solutions

PROJECT NO.	19339.022
DATE	June 13, 2023
DESIGNED	RAD
DRAWN	JMW
CHECKED	JWC

REVISIONS

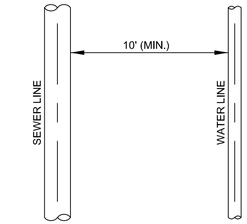
CHARLES TOWN
UTILITY BOARD
661 S. GEORGE ST.
CHARLES TOWN, WV 25414

GREENFIELD
FORCEMAIN
UPGRADE

GREENFIELD FORCEMAIN
PLAN AND PROFILE 2 OF 2

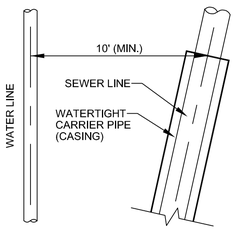
DRAWING
NO...5...
OF...13...

\\AD.RKK.COM\FS\CLOUD\PROJECTS\2019\19339_CTUBONCALL\19339.022 GREENFIELD FORCE MAIN UPGRADE\ACAD\DRAWINGS\04-05-GREENFIELD_FORCEMAIN_PLAN_PROFILE.DWG



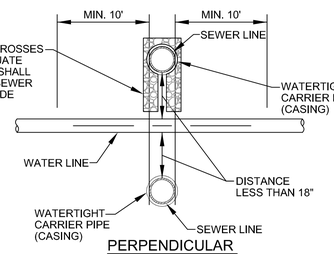
NOTE: WHENEVER POSSIBLE, A SEWER LINE SHALL BE LAID AT LEAST 10 FEET, HORIZONTALLY, FROM ANY EXISTING WATERLINE.

BEST PRACTICE DETAIL

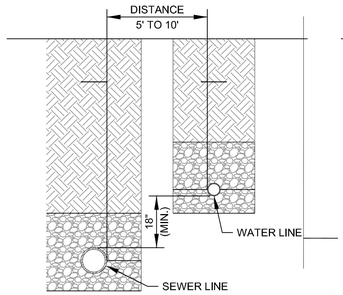


SKEWED CROSSING DETAIL

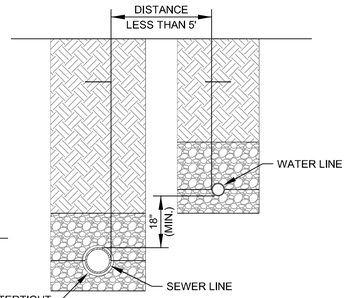
NOTE:
WHERE A WATER MAIN CROSSES UNDER A SEWER, ADEQUATE STRUCTURAL SUPPORT SHALL BE PROVIDED FOR THE SEWER TO MAINTAIN LINE & GRADE



PERPENDICULAR CROSSING DETAIL



WATER PARALLELING SEWER DETAIL 1 OF 2



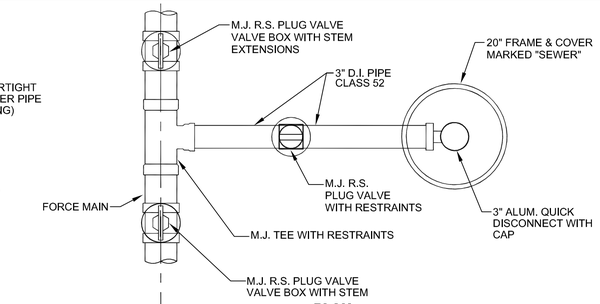
WATER PARALLELING SEWER DETAIL 2 OF 2

NOTES:

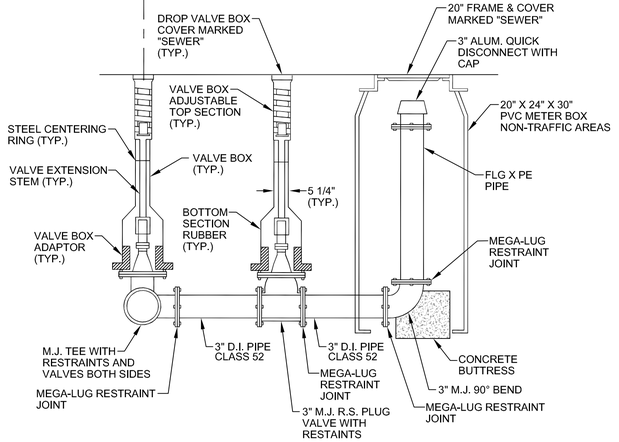
1. SHOULD LOCAL CONDITIONS PREVENT HORIZONTAL SEPARATION OF 10 FEET, A SEWER LINE MAY BE LAID CLOSER THAN 10 FEET, TO A WATER LINE, PROVIDED THAT THE TOP OF THE SEWER LINE IS AT LEAST 18" BELOW THE BOTTOM OF THE WATER LINE.
2. IF IT IS IMPOSSIBLE TO OBTAIN PROPER HORIZONTAL AND VERTICAL SEPARATION EITHER THE WATER OR THE SEWER LINE MAY BE ENCASED IN A WATERTIGHT CARRIER PIPE WHICH EXTENDS 10 FEET ON BOTH SIDES OF THE CROSSING, MEASURED PERPENDICULAR TO THE WATER MAIN.
3. THE CARRIER PIPE SHALL BE OF MATERIALS APPROVED BY THE REGULATORY AGENCY FOR USE IN WATER MAIN CONSTRUCTION.

SEWER AND WATER VERTICAL & HORIZONTAL SEPARATION DETAIL

NOT TO SCALE



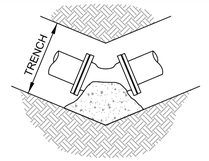
PLAN



SECTION

22.5 & 45 DEGREE CONTACT AREA (SF)

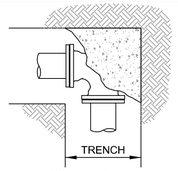
PIPE SIZE	PRESSURE CLASS				
	100	150	200	250	300
2	1	1	1	1	1
4	1	1	2	2	2
6	2	2	3	4	5
8	3	4	5	7	8
10	4	6	8	10	12
12	5	9	12	15	18
14	8	12	16	20	24



22.5° & 45° BENDS

90 DEGREE BEND CONTACT AREA (SF)

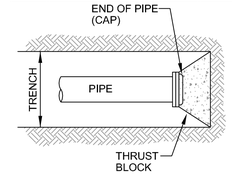
PIPE SIZE	PRESSURE CLASS				
	100	150	200	250	300
2	1	1	1	1	1
4	2	2	3	3	4
6	3	4	5	7	8
8	5	7	10	12	15
10	7	11	15	19	22
12	9	16	21	27	32
14	12	12	29	36	44



90° BEND

PLUGGED END CONTACT AREA (SF)

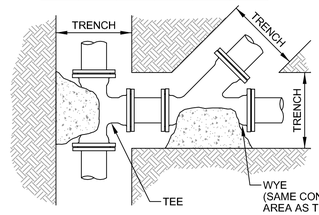
PIPE SIZE	PRESSURE CLASS				
	100	150	200	250	300
2	1	1	1	1	1
4	1	2	2	2	3
6	2	3	4	5	6
8	4	5	7	9	10
10	5	8	11	13	16
12	7	12	15	19	23
14	10	16	21	26	31



PLUGGED END

TEE & WYE CONTACT AREA (SF)

PIPE SIZE	PRESSURE CLASS				
	100	150	200	250	300
2	1	1	1	1	1
4	1	2	2	2	3
6	2	3	4	5	6
8	4	5	7	9	10
10	5	8	11	13	16
12	7	12	15	19	23
14	10	16	21	26	31



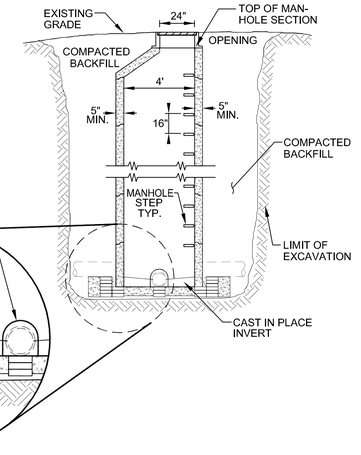
TEE & WYE

THRUST BLOCK GENERAL NOTES

1. ALL CONCRETE SHALL BE 3000 P.S.I. (AE)
2. THRUST BLOCKS SHALL BE IMBEDDED IN UNDISTURBED SOIL.
3. SOIL BEARING CAPACITY IS ASSUMED AT 3000 LB. SQ. FT. FOR WEAKER SOILS THRUST BLOCK AREAS SHALL BE INCREASED AS REQUIRED.
4. WRAP PIPE WITH POLYETHYELENE TO PREVENT CONTACT BETWEEN PIPE AND THE CONCRETE.
5. WITH APPROVAL OF ENGINEER, MEGA-LUG JOINT RESTRAINTS MAYBE SUBSTITUTED FOR THRUST BLOCKS PER MANUFACTURER'S RECOMMENDATION (TO BE FURNISHED BY CONTRACTOR), FOR DUCTILE IRON, USE UNIFLANGE 1400 OR EBBA 1100 AND FOR C900 PVC, USE UNIFLANGE 1500 OR EBBA 2000PV.

PIPE BUTTRESS DETAIL

NOT TO SCALE

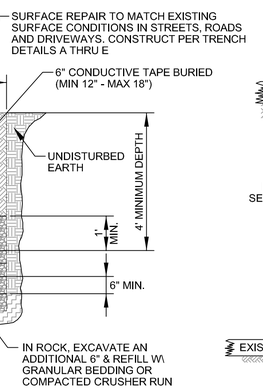


NOTES:

1. PRECAST DIMENSIONS AND ELEVATIONS SHALL BE DETERMINED FROM TEST PIT INFORMATION AND A SHOP DRAWING SHALL BE SUBMITTED AND APPROVED BY THE ENGINEER BEFORE STRUCTURE FABRICATION. THE C STRUCTURE AND OTHER LOCATION INFORMATION FOR THE STRUCTURE SHALL BE GIVEN ON THE CONTRACT DOCUMENTS.
2. THE EXISTING STORM DRAIN PIPING SHALL BE SUPPORTED ON GRADE WITH CONCRETE BRICK OR SOLID CONCRETE BLOCK AND WILL BE ENCASED IN MD DEPT. OF TRANS. S.H.A. MIX NO. 2 CONCRETE (3,000 PSI) TO THE SPRINGLINE OF THE PIPE, AND TO THE FLOOR SLAB SUBGRADE AND BETWEEN THE STRUCTURE AND UNDISTURBED EARTH. THE NEW STRUCTURE SHALL ALSO BE SUPPORTED BY CONCRETE BRICK OR SOLID CONCRETE BLOCK WHICH WILL BECOME PART OF THE FLOOR SLAB CONCRETE.
3. GROUT AROUND PIPES PER RECOMMENDATION OF SEAL MANUFACTURER.
4. PRECAST MANHOLE TO MEET ASTM C 478 SPECIFICATIONS.
5. REFER TO SECTION 02536 PART 2.01B FOR STEP SPECIFICATION.
6. LARGER MANHOLES TO BE APPROVED ON PER CASE BASIS.

PRECAST DOGHOUSE MANHOLE WITH ECCENTRIC TOP SECTION

NOT TO SCALE

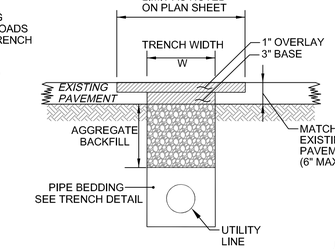


NOTES:

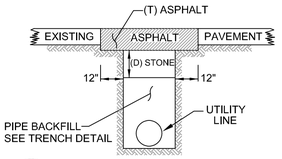
1. W = MAXIMUM PERMISSIBLE TRENCH WIDTH, BASED UPON, W = O.D. + 24", UNLESS APPROVED BY THE ENGINEER.
2. TRENCHES TO BE SHEETED AND BRACED AS REQUIRED.
3. PROVIDE BEARING FOR FULL LENGTH OF BARREL, DIG HOLES FOR THE BELL.
4. BACKFILL ON SIDES TO 1/2 O.D. OF PIPE TO HOLD PIPE IN PLACE PRIOR TO PLACING ADDITIONAL BEDDING.
5. BACKFILL TO BE COMPACTED IN 6" LAYERS TO 95% OF MAXIMUM DENSITY AT OPTIMUM MOISTURE (+2%) IN ROADS AND STREETS. COMPACT TO MATCH EXISTING GROUND IN OTHER AREAS.
6. MAINTAIN MINIMUM OF 4' OF COVER TO THE TOP OF PIPE.
7. A CASING PIPE SHALL BE REQUIRED IN ROAD CROSSINGS WHERE SHOWN ON PLANS
8. ALL WATER LINES REQUIRE PERMIT FROM APPLICABLE REGULATORY ENTITIES. PERMIT REQUIREMENTS SUPERCEDE WHAT IS SHOWN ON THIS DETAIL.

SEWER LINE TRENCH DETAIL

NOT TO SCALE



TYPE A TRENCH REPAIR
ASPHALT PAVEMENT
OVERLAY DETAIL

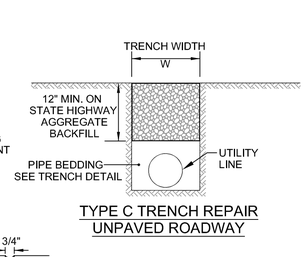


"T"
5" STATE HIGHWAY - 3" BASE, 2" WEARING
3" CITY STREETS & ALLEYS - 2" BASE, 1" WEARING
3" DRIVEWAYS - 2" BASE, 1" WEARING

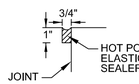
"D"
PAVED STATE HIGHWAY - 4" COMPACTED LIFTS ABOVE BEDDING (18" MIN.)
PAVED CITY STREETS & ALLEYS - 4" LIFTS ABOVE BEDDING
6" DRIVEWAYS (UNPAVED)

NOTE: IF MORE STRINGENT, PERMIT REQUIREMENTS SUPERCEDE ABOVE DEPTHS

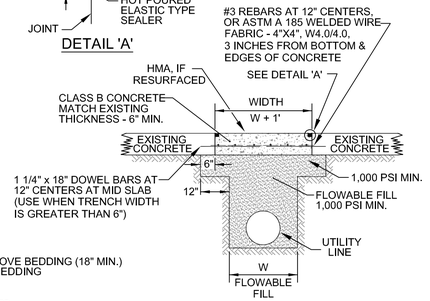
TYPE B TRENCH REPAIR
ASPHALT PAVEMENT



TYPE C TRENCH REPAIR
UNPAVED ROADWAY



DETAIL 'A'



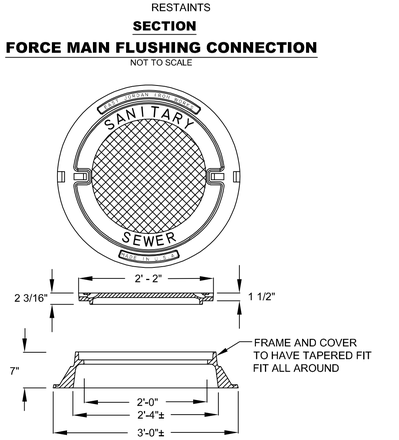
TYPE D TRENCH REPAIR
CONCRETE SIDEWALK OR
DRIVEWAY TRENCH REPAIR

TYPE A & B TRENCH REPAIR DETAILS TYPE C & D TRENCH REPAIR DETAILS

NOT TO SCALE NOT TO SCALE

FORCE MAIN FLUSHING CONNECTION

NOT TO SCALE



NOTES:
1. MANHOLE COVERS SHALL NOT HAVE VENT HOLES
2. AVERAGE WEIGHT IS 400 LBS
3. DIMENSIONS ABOVE ARE FOR EAST JORDAN IRONWORKS PRODUCTS
4. APPROVED SUPPLIERS:
   EAST JORDAN IRON WORKS
   HIGHWAY: FRAME - PROD. NO. 1045Z UNDIPPED
   COVER - PROD. NO. 1040A UNDIPPED, SELF SEALING
   FRAME & COVER - PROD. NO. 1045AGS UNDIPPED, SELF SEALING
   WATERTIGHT: FRAME & COVER PROD. NO. 1045ZPT/1010APT, UNDIPPED
   NEENAH
   HIGHWAY: FRAME & COVER R-1642, UNDIPPED, SELF SEALING
   WATERTIGHT: FRAME & COVER R-1916, UNDIPPED
5. FRAME AND COVER TO COMPLY WITH ASTM A48, CLASS 30 TENSILE STRENGTH.
6. USE THREADED STAINLESS STEEL STANDARD HEXAGON HEAD BOLTS TO ANCHOR FRAME AND COVER TO MANHOLE.

MANHOLE FRAME AND COVER

NOT TO SCALE

\\AD.RKK.COM\FSVCLOUD\PROJECTS\2019\19339_CTUBONCALL\19339.022 GREENFIELD FORCE MAIN UPGRADE\ACAD\DRAWINGS\06-STANDARD DETAILS.DWG

RK&K
P: 304.788.3370
159 Plaza Drive | Keyser, WV 26726
Engineers | Construction Managers | Planners | Scientists
www.rkk.com
Responsive People | Creative Solutions

PROJECT NO.	
19339.022	
DATE	
June 13, 2023	
DESIGNED	RAD
DRAWN	JMW
CHECKED	JWC

REVISIONS

CHARLES TOWN
UTILITY BOARD
661 S. GEORGE ST.
CHARLES TOWN, WV 25414

GREENFIELD
FORCEMAIN
UPGRADE

STANDARD DETAILS

DRAWING NO. 6
OF. 13

ADJOINING PROPERTY OWNER TO EAST
MILDRED BUSH
TM 10D, PAR 5
DB 506/181

ADJOINING PROPERTY OWNER TO NORTH
NEIL BENTLEY
TM 9, PAR 10
DB 1125/578

CITY OF CHARLES TOWN
TM 9, PAR 13
DB 299/304

WILLIAM & LANA SHULTZ
TM 9, PAR 14
DB 530/118



NOTES

1. ITEMS SHOWN IN DARK ARE TO BE REMOVED OR RELOCATED AS PART OF THIS PROJECT. ITEMS SHOWN IN GRAY WITH SLANTED TEXT ARE EXISTING ITEMS TO REMAIN IN PLACE AND IN OPERATION UNLESS STATED OTHERWISE.
2. CONTRACTOR IS RESPONSIBLE FOR ALL SEDIMENT AND EROSION CONTROL MEASURES AND MAINTAINING SUCH MEASURES THROUGH COMPLETION OF THE PROJECT.

SITE DEMOLITION PLAN

1"=5' 5' 0 5' 10'

RK&K
P: 304.788.3370
159 Plaza Drive | Keyser, WV 26726
Engineers | Construction Managers | Planners | Scientists
www.rkk.com
Responsive People | Creative Solutions

PROJECT NO.	19339.022
DATE	June 13, 2023
DESIGNED	BJF
DRAWN	BJF
CHECKED	JWC

REVISIONS

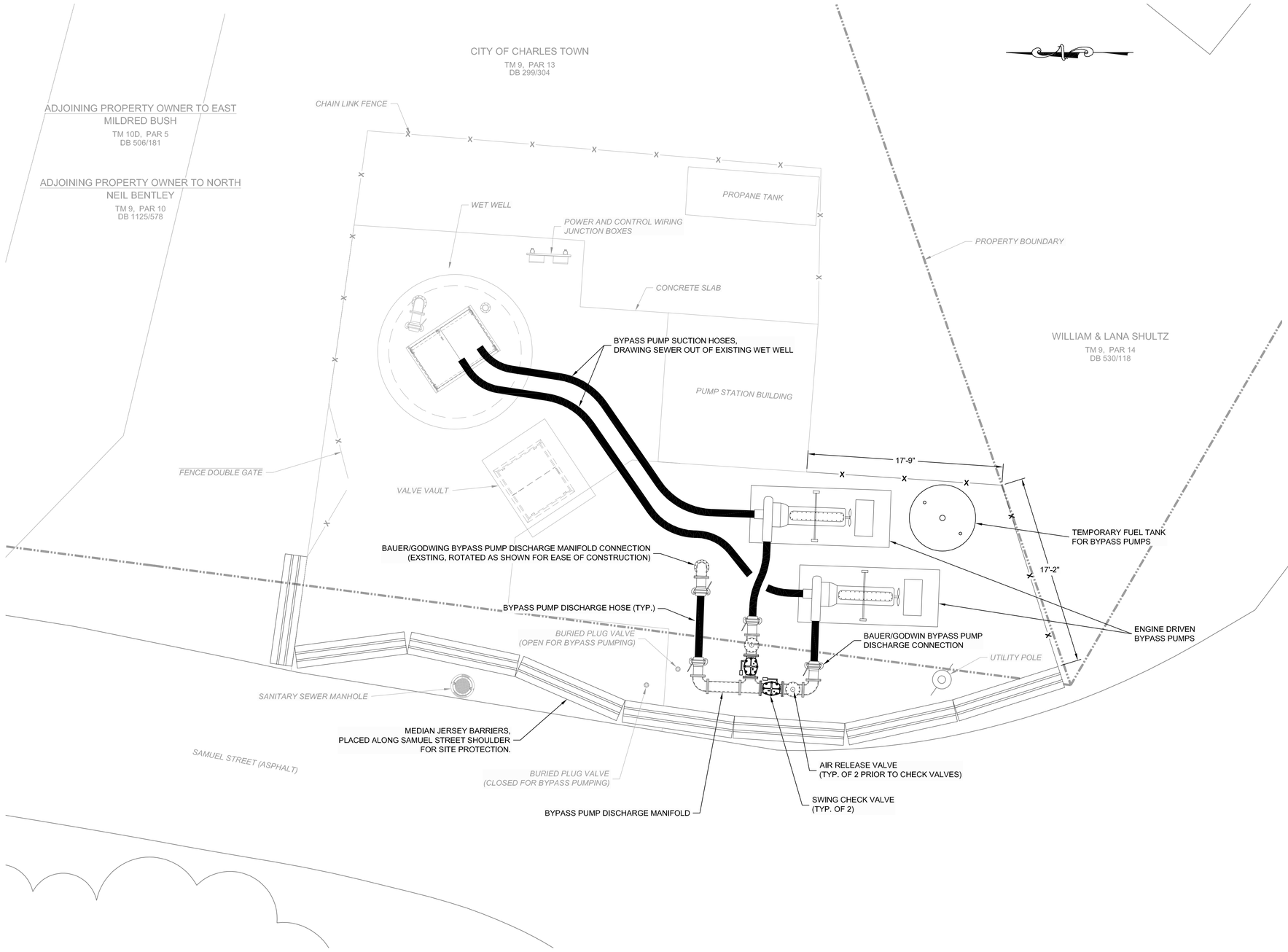
CHARLES TOWN
UTILITY BOARD
661 S. GEORGE ST.
CHARLES TOWN, WV 25414

GREENFIELD
FORCEMAIN
UPGRADE

SAMUEL STREET PUMP STATION
SITE DEMOLITION PLAN

DRAWING
NO. 7
OF. 13

\\AD.RKK.COM\FSVCLOUD\PROJECTS\2019\19339_CTUBONCALL\19339.022 GREENFIELD FORCE MAIN UPGRADE\ACAD\DRAWINGS\07-SAMUELSTREET_SITEDEMO.DWG



BYPASS PUMPING PLAN

1"=5' 5' 0 5' 10'

GENERAL NOTES

1. CONTRACTOR SHALL BE RESPONSIBLE FOR BYPASS PUMPING DURING PUMP PROJECT CONSTRUCTION. BYPASS PUMP SUCTION POINT SHALL BE THE EXISTING SAMUEL STREET PUMP STATION WET WELL IN ORDER TO CATCH ALL NORMAL PUMP STATION GRAVITY SEWER FLOW. BYPASS PUMPS SHALL BE CONTROLLED VIA EXISTING PUMP STATION CONTROLS. JERSEY BARRIERS SHALL BE PLACED AS SHOWN ON THIS SHEET. BYPASS PUMPING SYSTEM SHALL BE SET UP IN A WAY THAT ALLOW RELIABLE BYPASS PUMP OPERATION AND DOES NOT INTERFERE WITH NORMAL TRAFFIC FLOW ON NEARBY SAMUEL STREET AND SOUTH GEORGE STREET.
2. THE BYPASS PUMPING OPERATION SHALL BE CONTINUOUS DURING THE ENTIRE COURSE OF CONSTRUCTION FOR THE PUMP STATION REHABILITATION.
3. ALL TEST PITTING, VALVING/PLUMBING, PIPE THRUST SUPPORTS, DISCHARGE HEADER CRIBBING AND SUPPORTS, ETC. SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND INSTALLED PER PUMP MANUFACTURER'S SPECIFICATIONS.
4. TWO ENGINE-DRIVEN BYPASS PUMPS SHALL BE UTILIZED IN ORDER TO PROVIDE A BACKUP (STAND-BY) PUMP AT ALL TIMES. EACH BYPASS PUMP SHALL BE SIZED FOR 1,100 GPM @ 40' TDH (APPROXIMATELY 7' OF THIS TDH BEING SUCTION LIFT).
5. CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING AND MAINTAINING TEMPORARY CONSTRUCTION CONSTRUCTION FENCE DURING THE ENTIRE COURSE OF THE PROJECT. FENCE SHALL BE INSTALLED IN A MANNER TO DISCOURAGE AND NOT ALLOW PEDESTRIAN ENTRY ONTO THE PROJECT SITE. COORDINATE FENCE LAYOUT WITH THE ENGINEER.
6. JERSEY BARRIERS SHALL BE PINNED TOGETHER AND PINNED TO THE GROUND IN ORDER TO PREVENT MOVEMENT.
7. THE SUCTION AND DISCHARGE PIPING LAYOUT SHOWN ON THIS DRAWING IS FOR GUIDANCE PURPOSES ONLY. THE CONTRACTOR SHALL COORDINATE PIPING LAYOUT WITH THE ENGINE DRIVEN PUMP SUPPLIER/MANUFACTURER.
8. DISCHARGE HEADER SHALL BE CONSTRUCTED OF FLANGE JOINT DUCTILE IRON PIPE.
9. ENGINE DRIVEN PUMPS SHALL HAVE SOUND ATTENUATING ENCLOSURES TO MINIMIZE NOISE DISTURBANCES TO NEIGHBORING RESIDENCES.
10. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ADEQUATE FUEL SUPPLY FOR BYPASS PUMP OPERATION.
11. CONTRACTOR SHALL BE RESPONSIBLE FOR INSULATING PUMPS AND PIPING DURING COLD WEATHER.
12. TEMPORARY FUEL TANKS ARE TO BE DOUBLE WALL OR HAVE SOME OTHER METHOD OF SECONDARY CONTAINMENT IN THE EVENT OF A FUEL LEAK.

RK&K
P: 304.788.3370
159 Plaza Drive | Keyser, WV 26726
Engineers | Construction Managers | Planners | Scientists
www.rkk.com
Responsive People | Creative Solutions

PROJECT NO.	19339.022
DATE	June 13, 2023
DESIGNED	BJF
DRAWN	BJF
CHECKED	JWC

REVISIONS

CHARLES TOWN
UTILITY BOARD
661 S. GEORGE ST.
CHARLES TOWN, WV 25414

GREENFIELD
FORCEMAIN
UPGRADE

SAMUEL STREET PUMP STATION
BYPASS PUMPING PLAN

DRAWING
NO. 8
OF. 13

\\AD.RKK.COM\FS\CLOUD\PROJECTS\2019\19339_CTUBONCALL\19339.022 GREENFIELD FORCE MAIN UPGRADE\ACAD\DRAWINGS\08-SAMUELSTREET_BYPASSPUMPINGPLAN.DWG

ADJOINING PROPERTY OWNER TO EAST
MILDRED BUSH
TM 10D, PAR 5
DB 506/181

ADJOINING PROPERTY OWNER TO NORTH
NEIL BENTLEY
TM 9, PAR 10
DB 1125/578

CITY OF CHARLES TOWN
TM 9, PAR 13
DB 299/304

CHAIN LINK FENCE
WET WELL
POWER AND CONTROL WIRING JUNCTION BOXES
PROPANE TANK
CONCRETE SLAB
PUMP STATION BUILDING
VALVE VAULT
FENCE DOUBLE GATE
4'-4"
12'-8"
CAST-IN-PLACE CONCRETE SLAB
BYPASS CONNECTION
15'-0"
6'-9"
CHAIN LINK FENCE REINSTALLED AFTER COMPLETION OF CONSTRUCITON.
METER VAULT
14'-9"
PLUG VALVE CURB BOXES
SANITARY SEWER MANHOLE
UTILITY POLE
PROPERTY BOUNDARY

WILLIAM & LANA SHULTZ
TM 9, PAR 14
DB 530/118

SAMUEL STREET (ASPHALT)
SOUTH GEORGE STREET (ASPHALT)

NOTES

1. ITEMS SHOWN IN DARK ARE INCIDENTAL TO AND SHALL BE COMPLETED WITHIN THIS CONTRACT. ITEMS SHOWN IN GRAY WITH SLANTED TEXT ARE EXISTING ITEMS TO REMAIN IN PLACE AND IN OPERATION UNLESS STATED OTHERWISE.
2. CONTRACTOR IS RESPONSIBLE FOR ALL SEDIMENT AND EROSION CONTROL MEASURES AND MAINTAINING SUCH MEASURES THROUGH COMPLETION OF THE PROJECT.
3. ALL BURIED YARD PIPING SHALL BE RESTRAINED MECHANICAL JOINT DUCTILE IRON CLASS 53, UNLESS OTHERWISE NOTED. CONTRACTOR RESPONSIBLE FOR ALL PIPE TRANSITIONS.

SITE PLAN

1"=5' 5' 0 5' 10'

\\AD.RKK.COM\FS\CLOUD\PROJECTS\2019\19339_CTUBONCALL\19339.022 GREENFIELD FORCE MAIN UPGRADE\ACAD\DRAWINGS\09-SAMUELSTREET_SITECONSTRUCTION.DWG

RK&K
P: 304.788.3370
159 Plaza Drive | Keyser, WV 26726
Engineers | Construction Managers | Planners | Scientists
www.rkk.com
Responsive People | Creative Solutions

PROJECT NO.	19339.022
DATE	June 13, 2023
DESIGNED	BJF
DRAWN	BJF
CHECKED	JWC

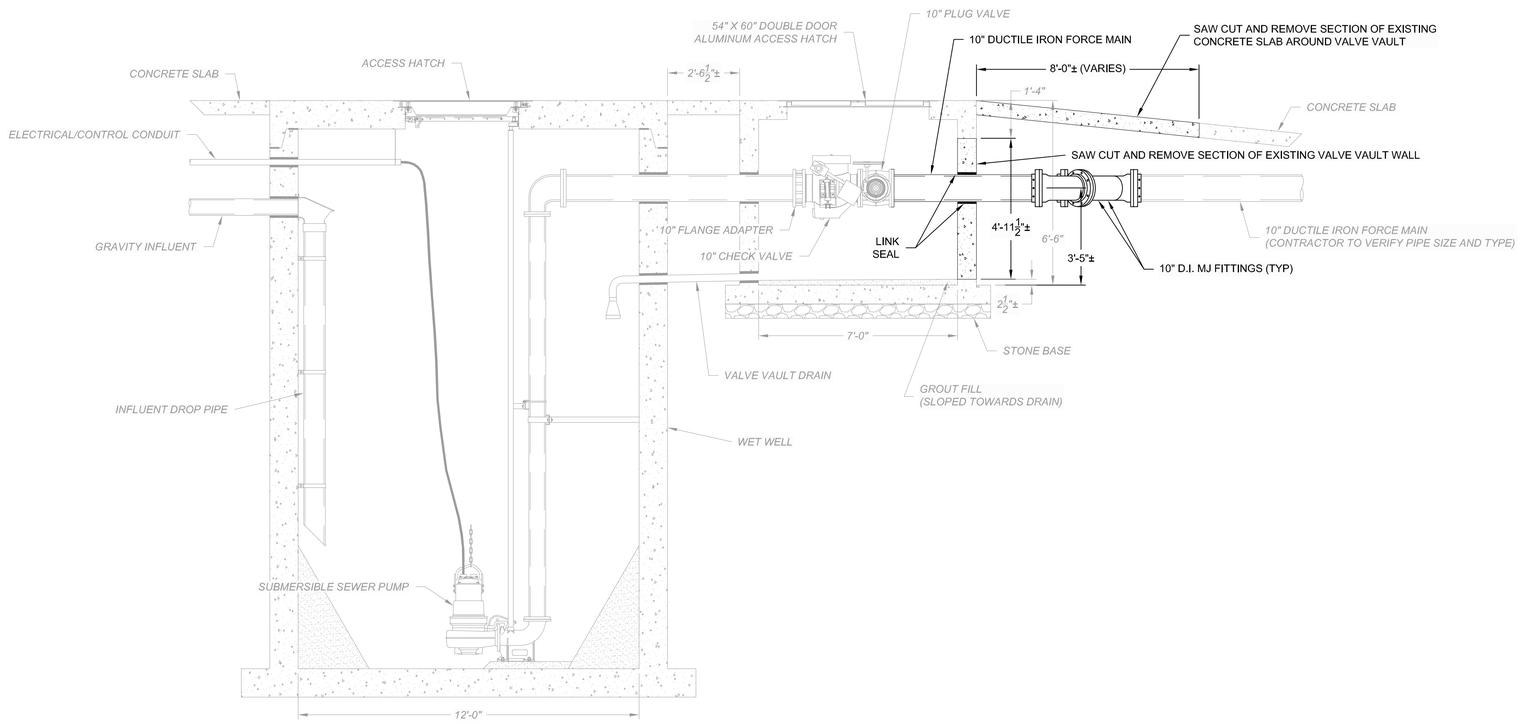
REVISIONS

CHARLES TOWN
UTILITY BOARD
661 S. GEORGE ST.
CHARLES TOWN, WV 25414

GREENFIELD
FORCEMAIN
UPGRADE

SAMUEL STREET PUMP STATION
SITE PLAN

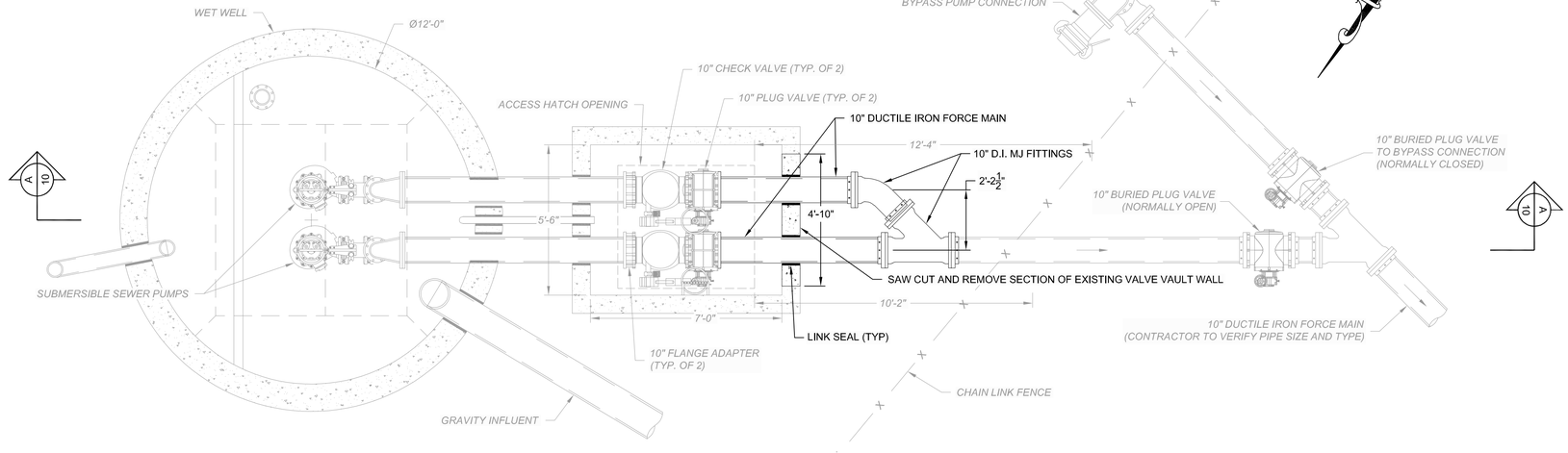
DRAWING
NO. 9
OF. 13



SECTION A-A/10

NOTES

1. ITEMS SHOWN IN DARK ARE INCIDENTAL TO AND SHALL BE REMOVED WITHIN THIS CONTRACT. ITEMS SHOWN IN GRAY WITH SLANTED TEXT ARE EXISTING ITEMS TO REMAIN IN PLACE AND IN OPERATION UNLESS STATED OTHERWISE.
2. FOR CLARITY PURPOSES, PIPING HAS BEEN ROTATED TO THIS VIEW. ACTUAL LOCATIONS MAY VARY.
3. COORDINATE DEMOLITION WITH CHARLES TOWN UTILITY BOARD AND ALL AFFECTED UTILITIES.



DEMOLITION PLAN

3/8"=1'-0" (24" 12" 0 2' 4' 6')

RK&K
P: 304.788.3370
159 Plaza Drive | Keyser, WV 26726
Engineers | Construction Managers | Planners | Scientists
www.rkk.com
Responsive People | Creative Solutions

PROJECT NO.	19339.022
DATE	June 13, 2023
DESIGNED	BJF
DRAWN	BJF
CHECKED	JWC

REVISIONS

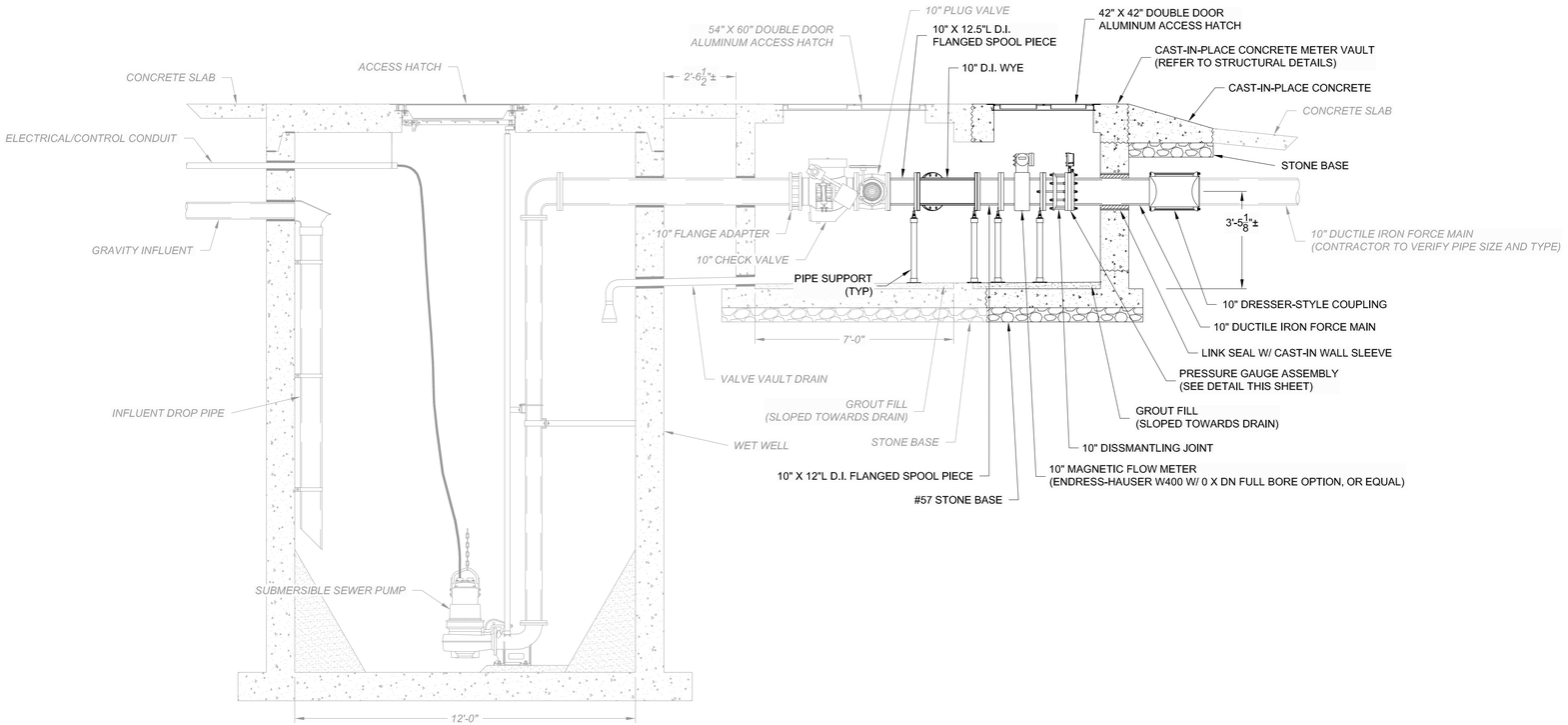
CHARLES TOWN UTILITY BOARD
661 S. GEORGE ST.
CHARLES TOWN, WV 25414

GREENFIELD FORCEMAIN UPGRADE

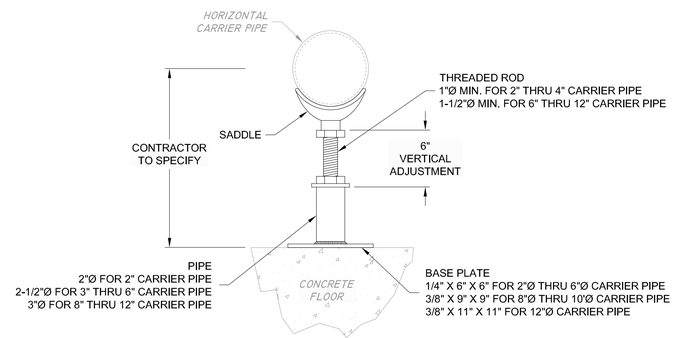
SAMUEL STREET PUMP STATION
FLOWMETER INSTALLATION
MECHANICAL DEMOLITION PLAN & SECTION

DRAWING NO. 10
OF. 13

\\AD.RKK.COM\FS\CLOUD\PROJECTS\2019\19339_CTUBONCALL\19339.022 GREENFIELD FORCE MAIN UPGRADE\ACAD\DRAWINGS\10-SAMUELSTREET_FLOWMETER_MECHDEMO.DWG



SECTION B-B/11

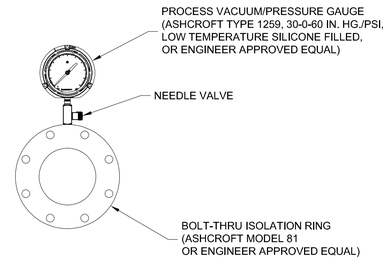


★ = PIPE STAND LOCATION ON PLAN VIEW DRAWINGS.
STANCHION SHALL BE STAINLESS STEEL.

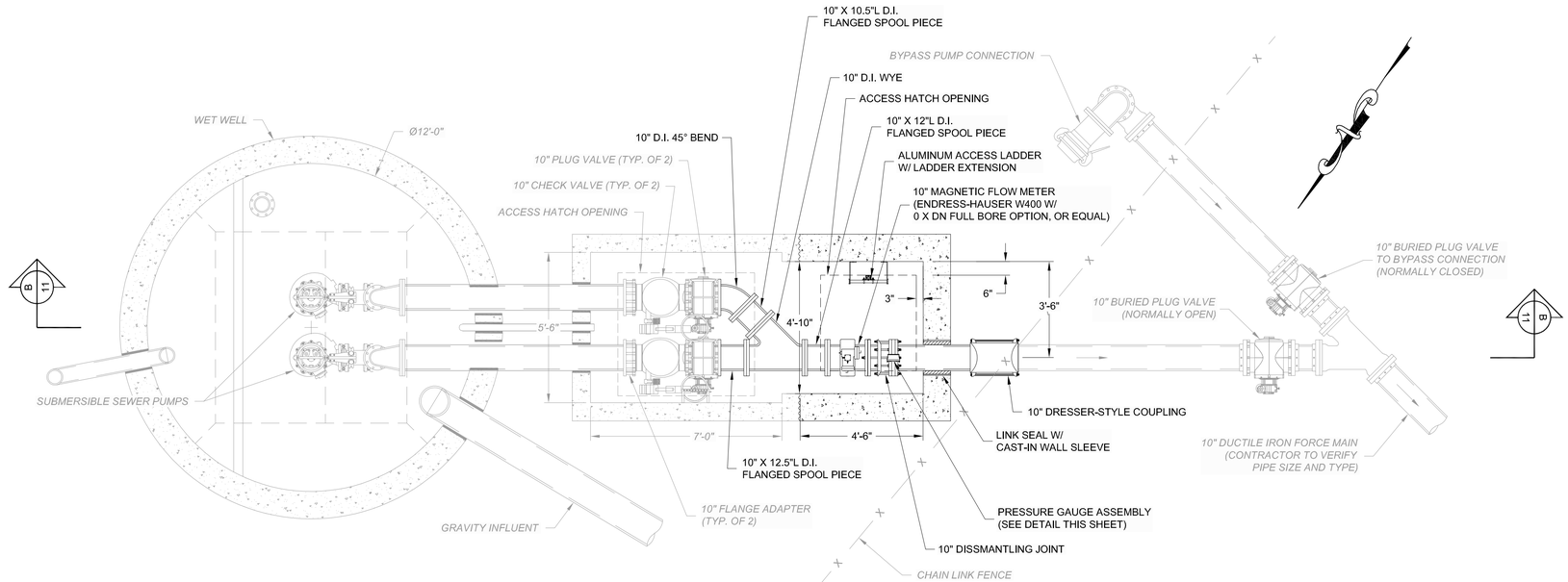
STANCHION SADDLE
HORIZONTAL PIPE SUPPORT
NOT TO SCALE

NOTES

1. ITEMS SHOWN IN DARK ARE INCIDENTAL TO AND SHALL BE COMPLETED WITHIN THIS CONTRACT. ITEMS SHOWN IN GRAY WITH SLANTED TEXT ARE EXISTING ITEMS TO REMAIN IN PLACE AND IN OPERATION UNLESS STATED OTHERWISE.
2. ALL BURIED YARD PIPING SHALL BE RESTRAINED MECHANICAL JOINT DUCTILE IRON CLASS 53, UNLESS OTHERWISE NOTED. ALL EXPOSED PIPING IN WET WELL AND VAULTS SHALL BE FLANGE JOINT PAINTED DUCTILE IRON CLASS 53, UNLESS OTHERWISE NOTED. CONTRACTOR RESPONSIBLE FOR ALL PIPE TRANSITIONS, BURIED AND EXPOSED.
3. ANCHOR AND SUPPORT ALL PIPE AND FITTINGS PER MANUFACTURER'S RECOMMENDATIONS.
4. ALL HARDWARE MUST BE STAINLESS STEEL.
5. ELECTROMAGNETIC FLOW METER SHALL BE ENDRESS-HAUSER PROMAG W-400 (OR EQUAL), SPECIFIED WITH NO INLET AND OUTLET RUNS (0 X DN) OPTION AND NO RESTRICTION (FULL-BORE DESIGN) OPTION.
6. EXISTING DIMENSIONS, LAYOUT, AND EQUIPMENT LOCATIONS ARE APPROXIMATE THRU INFORMATION PROVIDED TO RK&K AND RK&K'S OWN RESEARCH. CONTRACTOR TO VERIFY ALL DIMENSIONS AND INFORMATION PRIOR TO BEGINNING CONSTRUCTION.



PRESSURE GAUGE FOR SEWER APPLICATIONS
NOT TO SCALE



CONSTRUCTION PLAN

3/8"=1'-0" 24" 12" 0 2' 4' 6'

RK&K
P: 304.788.3370
159 Plaza Drive | Keyser, WV 26726
Engineers | Construction Managers | Planners | Scientists
www.rkk.com
Responsive People | Creative Solutions

PROJECT NO.	19339.022
DATE	June 13, 2023
DESIGNED	BJF
DRAWN	BJF
CHECKED	JWC

REVISIONS

CHARLES TOWN
UTILITY BOARD
661 S. GEORGE ST.
CHARLES TOWN, WV 25414

GREENFIELD
FORCEMAIN
UPGRADE

SAMUEL STREET PUMP STATION
FLOWMETER INSTALLATION
MECHANICAL PLAN & SECTION

DRAWING NO. 11 OF 13

\\AD.RKK.COM\FS\CLOUD\PROJECTS\2019\19339_CTUBONCALL\19339.022 GREENFIELD FORCE MAIN UPGRADE\ACAD\DRAWINGS\11-SAMUELSTREET_FLOWMETER_MECHCONSTRUCTION.DWG

1. DESIGN CRITERIA:
   - A. ACI 318-14 "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE".
   - B. ACI 350-06 "CODE REQUIREMENTS FOR ENVIRONMENTAL ENGINEERING CONCRETE STRUCTURES".

2. CONCRETE:
   - A. ALL CONCRETE SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 4,500 PSI, UNLESS OTHERWISE NOTED.
   - B. CHAMFER ALL EXPOSED EDGES ¾" X ¾". CHAMFER REQUIRED UNLESS NOTED OTHERWISE IN DRAWINGS.
   - C. REINFORCED CONCRETE STRUCTURES SHALL BE DETAILED AND CONSTRUCTED IN ACCORDANCE WITH THE CURRENT "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE" (ACI 318-14), AND "SPECIFICATIONS FOR STRUCTURAL CONCRETE" (ACI 301-10).
   - D. SEE CIVIL, MECHANICAL AND ELECTRICAL DRAWINGS FOR ALL EMBEDDED ITEMS SUCH AS SCREWS, ANCHORS, ELECTRICAL CONDUITS, OPENINGS, ETC. WHICH MAY INTERFERE WITH CONCRETE CONSTRUCTION.

3. REINFORCING STEEL
   - A. ALL REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60, AND SHALL HAVE A FUSION BONDED EPOXY POWDER COATING CONFORMING TO ASTM D3963. COATING SHALL BE A BRIGHT COLOR IN CONTRAST TO THAT OF REINFORCEMENT STEEL AND RUST.
   - B. MINIMUM COVER FOR ANY BAR SHALL BE 2" UNLESS OTHERWISE NOTED, WITH THE EXCEPTION OF BARS IN CONCRETE PLACED AGAINST GROUND WHICH SHALL HAVE A 3" MINIMUM COVER.
   - C. DO NOT WELD OR TACK REINFORCING STEEL.
   - D. REINFORCING STEEL SHALL BE DETAILED IN ACCORDANCE WITH ACI 315-99, "DETAILS AND DETAILING OF CONCRETE REINFORCEMENT" EXCEPT WHERE SHOWN OTHERWISE.
   - E. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF REINFORCING STEEL BEFORE PROCEEDING WITH FABRICATION.

4. GENERAL REQUIREMENTS
   - A. ELEVATIONS ARE TO BE ACTUAL FINISH ELEVATION. SEE CIVIL AND MECHANICAL DRAWINGS FOR GRADE ELEVATIONS.
   - B. SHORING REQUIRED FOR THE STABILITY OF THE UNCOMPLETED STRUCTURE OR FOR INSTALLATION OR MODIFICATION OF STRUCTURAL MEMBERS SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
   - C. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS, DIMENSIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES OR CONFLICTS FOUND IN CONTRACT DOCUMENTS AND/OR FIELD CONDITIONS.
   - D. CONTRACTOR SHALL COORDINATE ALL REQUIRED OPENINGS WITH MECHANICAL AND ELECTRICAL DRAWINGS. CONTRACTOR SHALL COORDINATE FINAL SIZE AND LOCATION OF ALL OPENINGS WITH THE ACTUAL EQUIPMENT SUPPLIED, PROJECT REQUIREMENTS, AND WITH FIELD CONDITIONS.
   - E. ALL SUPPORT OF EXCAVATING REQUIRED SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
   - F. ANY ADDITIONAL PIPE SUPPORTS THAT ARE REQUIRED AND NOT SHOWN OR DETAILED SHALL BE DESIGNED BY THE CONTRACTOR. CALCULATIONS AND DETAILS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.
   - G. WHEN INSTALLING NEW CONCRETE ON OR TO EXISTING CONCRETE, ROUGHEN EXISTING CONCRETE TO A FULL 1/4" AMPLITUDE AND APPLY BONDING COMPOUND IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
   - H. LOCATE ANY EXISTING UTILITY LINES OR APPURTENANCES AND ADVISE ENGINEER OF ANY CONFLICTS WITH NEW STRUCTURES PRIOR TO THEIR CONSTRUCTION. DO NOT DEMOLISH ANY EXISTING STRUCTURES WITHOUT WRITTEN AUTHORIZATION.
   - I. ALL EXCAVATIONS SHALL BE KEPT DRY. STANDING WATER SHALL NOT BE ALLOWED IN EXCAVATIONS.

5. LOADINGS

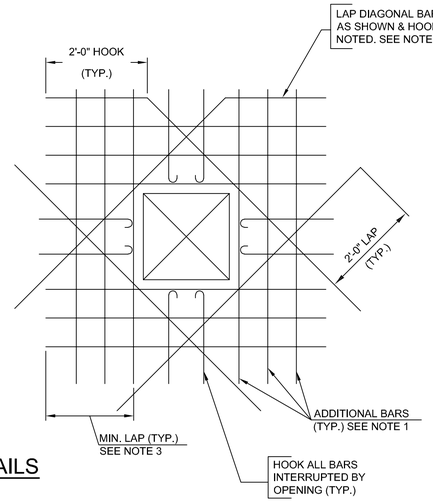
DEAD LOADS

- CONCRETE	150 PCF

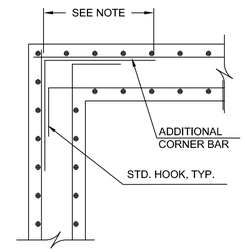
LIVE LOADS

-FLUID	65 PCF
-LIVE LOAD	150 PCF

NOTES:
1. NUMBER OF ADDITIONAL REINFORCING BARS AT EACH SIDE OF OPENING SHALL EQUAL HALF THE NUMBER OF INTERRUPTED BARS IN EACH LAYER OF REINFORCING.
2. SIZE OF ADDITIONAL REINFORCING BARS TO EQUAL SIZE OF INTERRUPTED REINFORCING BARS.
3. PROVIDE STANDARD HOOK BARS IF LAP LENGTH EXTENSION CANNOT BE OBTAINED AT JOINTS OR OTHER OBSTRUCTIONS. PLACE ADDITIONAL BARS IN SAME PLANES AS INTERRUPTED REINFORCING.
4. SIZE OF DIAGONAL BARS SHALL BE THE SIZE OF THE LARGEST NORMAL REINFORCING BAR CUT, UNLESS OTHERWISE NOTED. LOCATE DIAGONALS IN EACH LAYER OF REINFORCING.
5. PLACE DIAGONAL BARS INSIDE NORMAL REINFORCING.
6. ALL REINFORCING TO CLEAR OPENING OR FLANGE COLLARS BY 2".
7. ADDITIONAL REINFORCING BARS ARE REQUIRED AT ALL LOCATIONS WHERE THE REINFORCING IS INTERRUPTED BY AN OPENING.
8. IF THE OPENING CAN BE CAST WITHOUT INTERRUPTING ANY REINFORCING STEEL AND PROVIDING REQUIRED CLEAR COVER, THEN ADDITIONAL REINFORCING AROUND THE OPENING IS NOT REQUIRED.
9. FOR ALL OPENINGS, THE MINIMUM REINFORCING STEEL CONCRETE COVER SHALL BE MAINTAINED.

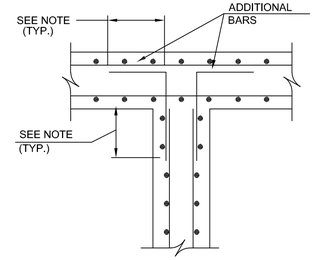


ADDITIONAL REINFORCING BAR DETAILS
NO SCALE

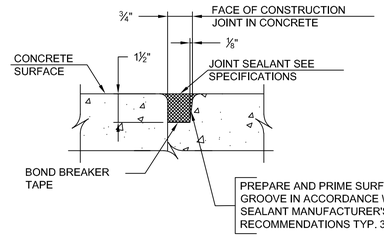


NOTES:
1. UNLESS OTHERWISE NOTED ON THE DRAWING, PROVIDE MINIMUM LAP AS REQUIRED. IF BAR SIZES DIFFER, USE THE MIN. LAP LENGTH AS REQUIRED FOR THE SMALLER OF THE TWO BARS BEING SPLICED.
2. UNLESS OTHERWISE NOTED ON THE DRAWING, THE ADDITIONAL BARS SHALL BE THE SAME SIZE AND AT THE SAME SPACING AS THE HORIZONTAL BARS.

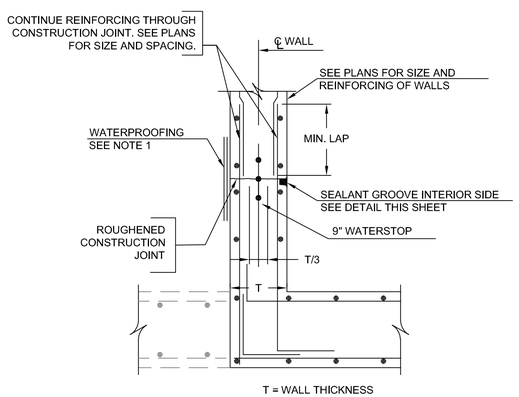
CORNER REINFORCING DETAIL
NO SCALE



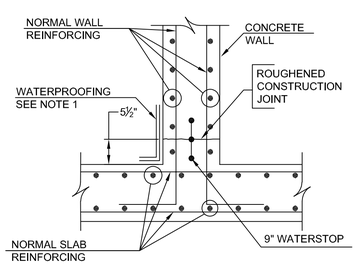
WALL INTERSECTION DETAIL
NO SCALE



JOINT SEALANT DETAIL
NO SCALE

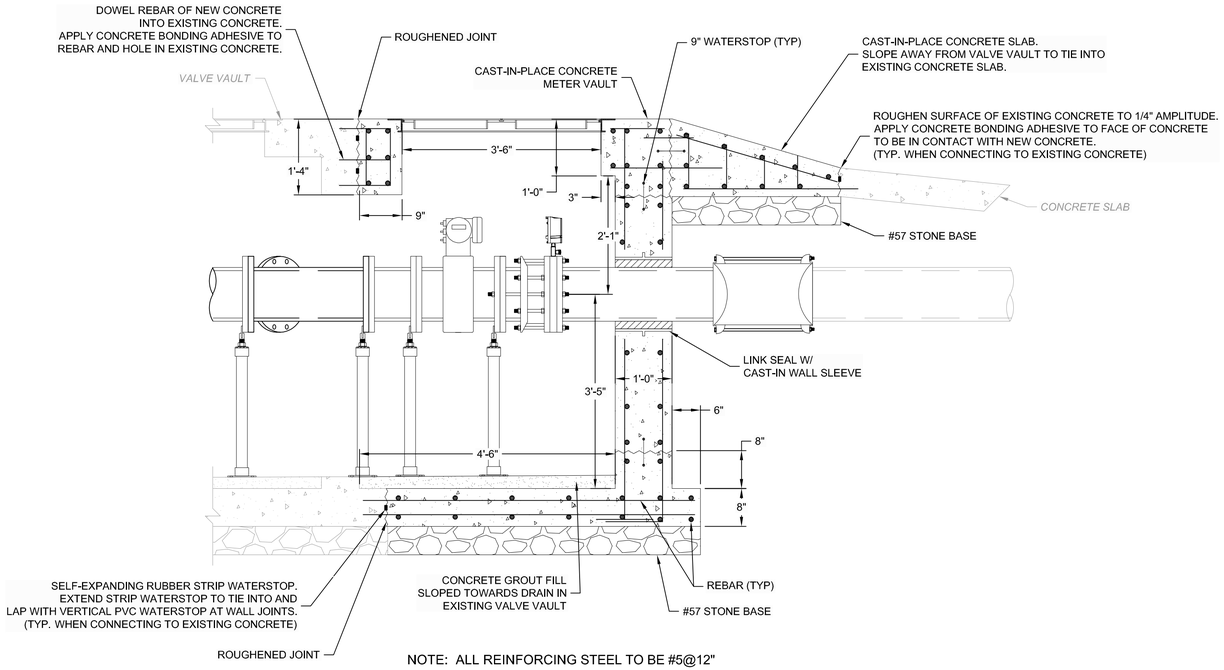


CONSTRUCTION JOINT-WALL TO WALL
NO SCALE



TYPICAL WALL-SLAB CONSTRUCTION JOINT
NO SCALE

NOTE:
1. PROVIDE MEMBRANE WATERPROOFING IF ADJACENT TO EARTH.



NOTE: ALL REINFORCING STEEL TO BE #5@12"

VALVE VAULT SECTION
NO SCALE

RK&K
P: 304.788.3370
159 Plaza Drive | Keyser, WV 26726
Engineers | Construction Managers | Planners | Scientists
www.rkk.com
Responsive People | Creative Solutions

PROJECT NO.	19339.022
DATE	June 13, 2023
DESIGNED	BJF
DRAWN	BJF
CHECKED	JWC

REVISIONS

CHARLES TOWN
UTILITY BOARD
661 S. GEORGE ST.
CHARLES TOWN, WV 25414

GREENFIELD
FORCEMAIN
UPGRADE

SAMUEL STREET PUMP STATION
STRUCTURAL DETAILS

DRAWING NO. 12
OF 13

\\AD.RKK.COM\FS\CLOUD\PROJECTS\2019\19339_CTUBONCALL\19339.022 GREENFIELD FORCE MAIN UPGRADE\ACAD\DRAWINGS\12-STRUCTURALDETAILS.DWG



WIRING LEGEND

1	FLOW METER SIGNAL CABLES-(2) 1"C TO MAGNETIC FLOW METER TRANSMITTER IN PUMP STATION BUILDING
2	2#14-1"C TO PUMP CONTROL PANEL FLOODING FLOAT SWITCH MOUNT 1" A.F.F.
3	2#12, #12 GRD.-3/4"C TO MAIN BREAKER PANEL
4	1 PR. #18 SHIELDED-1"C TO PUMP STATION CONTROL PANEL

NOTES

1. ITEMS SHOWN IN DARK ARE INCIDENTAL TO AND SHALL BE COMPLETED WITHIN THIS CONTRACT. ITEMS SHOWN IN GRAY WITH SLANTED TEXT ARE EXISTING ITEMS TO REMAIN IN PLACE AND IN OPERATION UNLESS STATED OTHERWISE.
2. ALL CONDUIT SHALL BE PVC COATED GALVANIZED RIGID STEEL.
3. MAGNETIC FLOW METER TRANSMITTER SHALL BE MOUNTED ON WALL AS SHOWN IN PLACE OF EXISTING AUTO-DIALER THAT IS NO LONGER IN USE. AUTODIALER SHALL BE DISCONNECTED, REMOVED, AND DELIVERED TO THE CHARLES TOWN UTILITY BOARD (CTUB) UNDAMAGED AND IN AS-IS EXISTING CONDITION. COORDINATE DELIVERY WITH CTUB PERSONNEL.
4. CONTRACTOR TO PROVIDE A 20-AMP CIRCUIT BREAKER FOR INSTALLATION IN EXISTING MAIN BREAKER PANEL FOR POWERING THE MAGNETIC FLOW METER TRANSMITTER.
5. MAGNETIC FLOW METER TRANSMITTER SHALL BE TIED INTO THE PUMP STATION'S MISSION SCADA SYSTEM FOR REMOTE MONITORING AND RECORDING OF PUMP STATION FLOWS AND FLOWRATES. COORDINATE CONNECTION AND TIE-IN WITH CTUB AND MISSIONS SCADA SYSTEM PERSONNEL.
6. ELECTRIC SERVICE FOR THE PUMP STATION IS 120/240 VOLT, 3-PHASE, 4-WIRE DELTA HIGH-LEG.

ELECTRICAL PLAN

1"=5' 5' 0 5' 10'

RK&K
P: 304.788.3370
159 Plaza Drive | Keyser, WV 26726
Engineers | Construction Managers | Planners | Scientists
www.rk.com
Responsive People | Creative Solutions

PROJECT NO.	19339.022
DATE	June 13, 2023
DESIGNED	BJF
DRAWN	BJF
CHECKED	JWC

REVISIONS

CHARLES TOWN
UTILITY BOARD
661 S. GEORGE ST.
CHARLES TOWN, WV 25414

GREENFIELD
FORCEMAIN
UPGRADE

SAMUEL STREET PUMP STATION
ELECTRICAL PLAN

DRAWING NO. 13
OF 13

\\AD.RKK.COM\FS\CLOUD\PROJECTS\2019\19339_CTUBONCALL\19339.022 GREENFIELD FORCE MAIN UPGRADE\ACAD\DRAWINGS\13-SAMUELSTREET_ELECTRICALPLAN.DWG

No.	Description	Quantity	Unit	Unit Price	Total Price
	GREENFIELD PROJECT - JULY 2023 ESTIMATE				
1	Mobilization	1	LS	$ 10,000	$ 10,000
2	Traffic Control	1	LS	$ 10,000	$ 10,000
3	Erosion and Sediment Control	1	LS	$ 10,000	$ 10,000
4	Audio Visual Taping	1	LS	$ 10,000	$ 10,000
5	6" C900 Class 165 PVC FM	2,400	LF	$ 50	$ 120,000
6	Flushing Valve	4	EA	$ 3,500	$ 14,000
7	Connect to Existing	1	EA	$ 5,000	$ 5,000
8	4' Diameter Doghouse Manhole (Up to 6')	2	EA	$ 7,500	$ 15,000
9	Manhole Frame and Cover - Watertight	2	EA	$ 600	$ 1,200
10	12" Steel Casing Bore & Jack	100	LF	$ 200	$ 20,000
11	12" Steel Casing Open Cut	50	LF	$ 110	$ 5,500
12	Air Release Valve	4	EA	$ 5,500	$ 22,000
13	Concrete	1	CY	$ 200	$ 140
14	Aggregate for Backfill	660	CY	$ 50	$ 33,000
15	Asphalt Trench Patch (Base)	60	TON	$ 150	$ 9,000
16	Asphalt Trench Patch (Wearing)	30	TON	$ 180	$ 5,400
17	Samuel Street PS Flow Meter	1	LS	$ 112,000	$ 112,000
18	Test Pit Excavation and Refill	4	EA	$ 1,000	$ 4,000
			Construction Subtotal		**$ 406,300**
	Construction Contingency	10%		$	40,700
	ESTIMATED CONSTRUCTION COST			**$**	**447,000**

CHARLES TOWN UTILITY BOARD
2022 RENEWAL AND REPLACEMENT PROJECT

RESOLUTION NO. 9

RESOLUTION OF THE CITY OF CHARLES TOWN UTILITY BOARD APPROVING INVOICES RELATING TO THE CONSTRUCTION AND OTHER SERVICES FOR THE 2022 CHARLES TOWN WASTEWATER TREATMENT PLANT IMPROVEMENTS PROJECT AND AUTHORIZING PAYMENT THEREOF,

WHEREAS, the City of Charles Town Utility Board (CTUB) has reviewed the invoices attached hereto and incorporated herein by reference relation to the project:

a) That none of the items for which payment is proposed to be made has formed the basis for any disbursement theretofore made.

b) That each item for which the payment is proposed to be paid is or was necessary in connection with the Project and constitutes a cost of the project.

c) That each of such costs has been otherwise properly incurred.

d) That the payment for each of the items proposed is due and owing.

NOW, THEREFORE, BE IT RESOLVED the City of Charles Town Utility Board that the payment of the attached Contractor's Application for Payment No. 9 as summarized below, is hereby authorized and directed.

Vendor	**Renewal and Replacement Project at the Charles Town Wastewater Treatment Facility**
Alvarez Contractors, Inc.	$432,539.77
Total	**$432,539.77**

ADOPTED BY the City of Charles Town Utility Board, at the meeting held on the 12th day of July 2023.

By: _____
Robert Trainor, Interim Chairman

EJCDC
ENGINEERS JOINT CONTRACT DOCUMENTS COMMITTEE

Contractor's Application for Payment No. 9

Application Period: 6/01/23-6/30/23	Application Date: 6/30/2023	
To (Owner): CHARLES TOWN UTILITY BOARD	From (Contractor): ALVAREZ CONTRACTORS, INC.	Via (Engineer): GWIN, DOBSON & FOREMAN INC.
Project: CHARLES TOWN WASTEWATER TREATMENT PLANT IMPROVEMENTS PROJECT	Contract: CONTRACT #1	
Owner's Contract No.:	Contractor's Project No.:	Engineer's Project No.:

Application For Payment

Change Order Summary

Approved Change Orders

Number	Additions	Deductions
CO 1	$498,183.42	
CO 2	$41,179.57	
TOTALS	$539,362.99	
NET CHANGE BY CHANGE ORDERS	**$539,362.99**	

1. ORIGINAL CONTRACT PRICE	$	$10,151,000.00
2. Net change by Change Orders	$	$539,362.99
3. Current Contract Price (Line 1 ± 2)	$	$10,690,362.99
4. TOTAL COMPLETED AND STORED TO DATE (Column F total on Progress Estimates)	$	$4,042,006.75
5. RETAINAGE:		
a. 10% X $2,779,051.42 Work Completed	$	$277,905.14
b. 10% X $1,262,955.33 Stored Material	$	$126,295.53
c. Total Retainage (Line 5.a + Line 5.b)	$	$404,200.68
6. AMOUNT ELIGIBLE TO DATE (Line 4 - Line 5.c)	$	$3,637,806.08
7. LESS PREVIOUS PAYMENTS (Line 6 from prior Application)	$	$3,205,266.31
8. AMOUNT DUE THIS APPLICATION	$	$432,539.77
9. BALANCE TO FINISH, PLUS RETAINAGE (Column G total on Progress Estimates + Line 5.c above)	$	$7,052,556.92

Contractor's Certification

The undersigned Contractor certifies, to the best of its knowledge, the following:
(1) All previous progress payments received from Owner on account of Work done under the Contract have been applied on account to discharge Contractor's legitimate obligations incurred in connection with the Work covered by prior Applications for Payment;
(2) Title to all Work, materials and equipment incorporated in said Work, or otherwise listed in or covered by this Application for Payment, will pass to Owner at time of payment free and clear of all Liens, security interests, and encumbrances (except such as are covered by a bond acceptable to Owner indemnifying Owner against any such Liens, security interest, or encumbrances); and
(3) All the Work covered by this Application for Payment is in accordance with the Contract Documents and is not defective.

Contractor Signature

By: _____ Date: 6/30/2023

Payment of: $ $432,539.77
(Line 8 or other - attach explanation of the other amount)

is recommended by: _____ 7/7/2023
(Engineer) (Date)

Payment of: $ $432,539.77
(Line 8 or other - attach explanation of the other amount)

is approved by: _____
(Owner) (Date)

Approved by: _____
Funding or Financing Entity (if applicable) (Date)

© 2013 National Society of Professional Engineers for EJCDC. All rights reserved.

Progress Estimate - Lump Sum Work

Contractor's Application

For (Contract):	CHARLES TOWN WASTEWATER TREATMENT PLANT IMPROVEMENTS PROJECT	Application Number:	9
Application Period:	6/01/23-6/30/23	Application Date:	6/30/2023

			Work Completed		E	F		G
A		B	C	D				
Schedule of Values Item No.	Description	Scheduled Value ($)	From Previous Application (C+D)	This Period	Materials Presently Stored (not in C or D)	Total Completed and Stored to Date (C + D + E)	% (F / B)	Balance to Finish (B - F)
1	D1 - Moblization/Demob.	$20,000.00	$20,000.00	$0.00	$0.00	$20,000.00	100.0%	$0.00
2	D1 - Bonds/Insurance	$178,000.00	$178,000.00	$0.00	$0.00	$178,000.00	100.0%	$0.00
3	D1 - Video Taping	$4,500.00	$4,500.00	$0.00	$0.00	$4,500.00	100.0%	$0.00
4	D1 - Field Office	$18,000.00	$9,180.00	$540.00	$0.00	$9,720.00	54.0%	$8,280.00
5	D1 - QC Testing (Cash Allowance)	$50,000.00	$13,500.00	$2,000.00	$0.00	$15,500.00	31.0%	$34,500.00
6	D1 - Submittals/Shop Drawings by ACI	$40,000.00	$34,000.00	$2,000.00	$0.00	$36,000.00	90.0%	$4,000.00
	DIVISION 2 - SITE WORK							
7	D2 - Sediment & Erosion Control	$20,200.00	$16,564.00	$404.00	$0.00	$16,968.00	84.0%	$3,232.00
	SITE DEMOLITION							
8	D2 - Concrete Pads	$4,100.00	$205.00	$0.00	$0.00	$205.00	5.0%	$3,895.00
9	D2 - Remove all Ex. Underground Lines at Centrifuge Bldg. Site	$32,900.00	$29,610.00	$0.00	$0.00	$29,610.00	90.0%	$3,290.00
10	D2 - Remove all Ex. Underground Lines at Electrical Bldg. Site	$12,400.00	$12,400.00	$0.00	$0.00	$12,400.00	100.0%	$0.00
11	D2 - Remove Portions of Underground Lines at Ex. Press Bldg.	$4,200.00				$0.00		$4,200.00
	STRUCTURES & BUILDING DEMOLITION							
12	D2 - Headworks Building	$40,200.00	$0.00	$16,080.00	$0.00	$16,080.00	40.0%	$24,120.00
13	D2 - Influent Pump Station & Bypass Pump Set Up	$97,500.00	$92,625.00	$0.00	$0.00	$92,625.00	95.0%	$4,875.00
14	D2 - UV Equipment	$18,300.00				$0.00		$18,300.00
15	D2 - Plant Drain Pump Station	$14,800.00				$0.00		$14,800.00
16	D2 - Electrical Building by ACI	$7,900.00				$0.00		$7,900.00
17	D2 - Sludge Day Tank & Pump Building	$97,800.00	$97,800.00	$0.00	$0.00	$97,800.00	100.0%	$0.00
18	D2 - Digester Blower Building	$32,500.00	$30,875.00	$0.00	$0.00	$30,875.00	95.0%	$1,625.00
19	D2 - Sludge Transfer Pump Building	$3,200.00				$0.00		$3,200.00
20	D2 - Digester Tank	$8,200.00	$7,790.00	$0.00	$0.00	$7,790.00	95.0%	$410.00
21	D2 - SBR	$1,600.00				$0.00		$1,600.00
	EXCAVATION (MAJOR STRUCTURES)							
22	D2 - Centrifuge Building	$38,900.00	$38,900.00	$0.00	$0.00	$38,900.00	100.0%	$0.00
23	D2 - Electrical Building by ACI	$7,800.00	$7,800.00	$0.00	$0.00	$7,800.00	100.0%	$0.00
24	D2 - Blower Pad	$5,100.00	$0.00	$4,335.00	$0.00	$4,335.00	85.0%	$765.00
25	D2 - Generator Pad	$5,200.00	$1,300.00	$0.00	$0.00	$1,300.00	25.0%	$3,900.00
	BACKFILL (MAJOR STRUCTURES)							
26	D2 - Centrifuge Building	$42,300.00	$29,610.00	$0.00	$0.00	$29,610.00	70.0%	$12,690.00
	STRUCTURAL STONE							
27	D2 - Centrifuge Building	$13,400.00				$0.00		$13,400.00
28	D2 - Electrical Building	$5,600.00	$5,600.00	$0.00	$0.00	$5,600.00	100.0%	$0.00
29	D2 - FRP Building	$2,000.00	$0.00	$2,000.00	$0.00	$2,000.00	100.0%	$0.00
30	D2 - Generator Pad	$1,500.00				$0.00		$1,500.00
31	D2 - Blower Pad	$1,500.00	$0.00	$1,350.00	$0.00	$1,350.00	90.0%	$150.00
	YARD PIPING							

© 2013 National Society of Professional Engineers for EJCDC. All rights reserved.

Progress Estimate - Lump Sum Work

Contractor's Application

For (Contract):	CHARLES TOWN WASTEWATER TREATMENT PLANT IMPROVEMENTS PROJECT	Application Number:	9
Application Period:	6/01/23-6/30/23	Application Date:	6/30/2023

			Work Completed		E	F		G
A		B	C	D				
Schedule of Values Item No.	Description	Scheduled Value ($)	From Previous Application (C+D)	This Period	Materials Presently Stored (not in C or D)	Total Completed and Stored to Date (C + D + E)	% (F / B)	Balance to Finish (B - F)
32	D2 - 2" Sch 80 PVC Water Service to Headworks Bldg.	$9,900.00	$9,405.00	$0.00	$0.00	$9,405.00	95.0%	$495.00
33	D2 - 2" Sch 80 PVC Water Service to Centrifuge Bldg.	$25,100.00	$1,255.00	$0.00	$5,871.20	$7,126.20	28.4%	$17,973.80
34	D2 - 4" DIP WAS Line from Centrifuge Bldg. to Sanitary Sewer	$16,600.00	$16,600.00	$0.00	$0.00	$16,600.00	100.0%	$0.00
35	D2 - 4" DIP WAS Inlet to Centrifuge Bldg.	$17,400.00				$0.00		$17,400.00
36	D2 - 4" DIP Sludge Drain Off Line from Digester	$16,800.00	$5,880.00	$0.00	$0.00	$5,880.00	35.0%	$10,920.00
37	D2 - 4" DIP WAS Line from Centrifuge Bldg. to Digester	$16,700.00	$0.00	$0.00	$2,000.00	$2,000.00	12.0%	$14,700.00
38	D2 - 6" PVC Drain from Centrifuge Bldg. to Manhole	$16,500.00	$12,375.00	$0.00	$0.00	$12,375.00	75.0%	$4,125.00
39	D2 - 4" PVC Drain from Centrifuge Bldg. to Manhole	$15,200.00	$11,400.00	$0.00	$0.00	$11,400.00	75.0%	$3,800.00
40	D2 - 6" DIP Existing System Connection to New T-Valve	$16,700.00				$0.00		$16,700.00
41	D2 - 8" PVC Drain Line Under Centrifuge Bldg.	$13,500.00				$0.00		$13,500.00
42	D2 - 24" & 12" HDPE Storm Drain at Centrifuge Bldg.	$58,000.00	$29,000.00	$0.00	$5,737.52	$34,737.52	59.9%	$23,262.48
43	D2 - 18" HDPE Storm Drain at Electrical Bldg.	$39,000.00	$33,150.00	$0.00	$0.00	$33,150.00	85.0%	$5,850.00
44	D2 - 10" Stainless Steel Air Line to Digester	$10,900.00	$0.00	$9,810.00	$0.00	$9,810.00	90.0%	$1,090.00
	YARD STRUCTURES							
45	D2 - 4' Dia. Precast Drain Line Manhole	$3,400.00				$0.00		$3,400.00
46	D2 - Type G Precast Drop Inlet	$9,200.00				$0.00		$9,200.00
	FINAL RECLAMATION							
47	D2 - Asphalt Paving	$98,800.00				$0.00		$98,800.00
48	D2 - Final Grading, Seed & Mulch	$5,700.00				$0.00		$5,700.00
	DIVISION 3 - CONCRETE							
	SITE CONCRETE							
49	D3 - Generator Pad	$10,100.00				$0.00		$10,100.00
50	D3 - FRP Shelter Pad	$9,400.00				$0.00		$9,400.00
51	D3 - Digester Blower Pad	$28,200.00	$0.00	$23,970.00	$0.00	$23,970.00	85.0%	$4,230.00
52	D3 - Digester Equipment Pads	$24,900.00				$0.00		$24,900.00
53	D3 - Sidewalks at Blower Bldg. Area	$10,700.00				$0.00		$10,700.00
54	D3 - Sidewalks at Covered Sludge Storage Area	$11,400.00				$0.00		$11,400.00
	ELECTRICAL BLDG.							
55	D3 - Grade Beams	$38,300.00	$38,300.00	$0.00	$0.00	$38,300.00	100.0%	$0.00
56	D3 - Concrete Pads/SOG	$18,100.00	$18,100.00	$0.00	$0.00	$18,100.00	100.0%	$0.00
57	D3 - Door Stoops/Pads	$12,000.00				$0.00		$12,000.00
58	D3 - Exterior SOG/Sidewalks	$15,400.00				$0.00		$15,400.00
59	D3 - Misc. Equipment Pads	$3,000.00				$0.00		$3,000.00
	COVERED SLUDGE STORAGE AREA & CENTRIFUGE BLDG.							
60	D3 - Footings, Grade Beams & Walls	$162,000.00	$48,600.00	$81,000.00	$0.00	$129,600.00	80.0%	$32,400.00
61	D3 - Thickened SOG at Trench Drains	$22,200.00				$0.00		$22,200.00
62	D3 - 6" SOG at 2 - Areas	$49,700.00				$0.00		$49,700.00
63	D3 - Equipment Pads, Containment Curbs & Walls	$15,400.00				$0.00		$15,400.00

© 2013 National Society of Professional Engineers for EJCDC. All rights reserved.

Progress Estimate - Lump Sum Work

Contractor's Application

For (Contract):	CHARLES TOWN WASTEWATER TREATMENT PLANT IMPROVEMENTS PROJECT	Application Number:	9
Application Period:	6/01/23-6/30/23	Application Date:	6/30/2023

			Work Completed		E	F		G
A		B	C	D				
Schedule of Values Item No.	Description	Scheduled Value ($)	From Previous Application (C+D)	This Period	Materials Presently Stored (not in C or D)	Total Completed and Stored to Date (C + D + E)	% (F / B)	Balance to Finish (B - F)
64	D3 - Door/Stoop	$8,100.00				$0.00		$8,100.00
	DIGESTER BLDG. & TANK							
65	D3 - Equipment Pads	$4,400.00				$0.00		$4,400.00
	DIVISION 4 - MASONRY							
	CENTRIFUGE BUILDING							
66	D4 - 12" Standard CMU's	$53,000.00				$0.00		$53,000.00
	DIVISION 5 - MISC. METALS							
	SITE							
67	D5 - Permanent Bollards	$7,200.00				$0.00		$7,200.00
68	D5 - Removable Bollards	$12,300.00	$0.00	$3,075.00	$0.00	$3,075.00	25.0%	$9,225.00
	ELECTRICAL BLDG.							
69	D5 - Partition Walls	$69,200.00	$0.00	$55,360.00	$0.00	$55,360.00	80.0%	$13,840.00
70	D5 - Roof/Ceiling Framing	$35,000.00	$0.00	$35,000.00	$0.00	$35,000.00	100.0%	$0.00
	CENTRIFUGE BUILDING							
71	D5 - W8 x 28 Steel Lintel	$1,800.00	$0.00	$0.00	$1,000.00	$1,000.00	55.6%	$800.00
72	D5 - Monorail Framing	$11,100.00	$0.00	$0.00	$7,690.00	$7,690.00	69.3%	$3,410.00
73	D5 - Covered Storage Framing	$12,900.00	$0.00	$0.00	$8,850.00	$8,850.00	68.6%	$4,050.00
74	D5 - Steel Erection	$25,500.00	$0.00	$0.00	$17,910.00	$17,910.00	70.2%	$7,590.00
75	D5 - Stainless Steel Polymer Fill Station	$4,600.00	$0.00	$0.00	$3,000.00	$3,000.00	65.2%	$1,600.00
	DIVISION 6 - WOOD AND PLASTICS							
	CENTRIFUGE BUILDING							
76	D6 - Wood Trusses & Sheathing	$69,500.00				$0.00		$69,500.00
77	D6 - Wood Framing & Interior Finishes	$53,700.00				$0.00		$53,700.00
78	D6 - FRP Grating & Ladders	$11,700.00				$0.00		$11,700.00
	ELECTRICAL SHELTER							
79	D6 - FRP Shelter Building	$48,600.00				$0.00		$48,600.00
	DIVISION 7 - THERMAL & MOISTURE PROTECTION							
	ELECTRICAL BLDG.							
80	D7 - SSR Roofing & Soffit	$105,900.00				$0.00		$105,900.00
	CENTRIFUGE BUILDING							
81	D7 - SSR Roofing & Soffit	$107,200.00				$0.00		$107,200.00
82	D7 - Corefill Insulation	$2,900.00				$0.00		$2,900.00
83	D7 - EIFS Outsulation	$39,300.00				$0.00		$39,300.00
	DIVISION 8 - DOORS & WINDOWS							
	ELECTRICAL BLDG.							
84	D8 - Hollow Metal Doors, Frames & Hardware	$25,500.00				$0.00		$25,500.00
	CENTRIFUGE BUILDING							
85	D8 - FRP Door & Window	$16,800.00				$0.00		$16,800.00

© 2013 National Society of Professional Engineers for EJCDC. All rights reserved.

Progress Estimate - Lump Sum Work

Contractor's Application

For (Contract):	CHARLES TOWN WASTEWATER TREATMENT PLANT IMPROVEMENTS PROJECT	Application Number:	9
Application Period:	6/01/23-6/30/23	Application Date:	6/30/2023

			Work Completed		E	F		G
A		B	C	D				
Schedule of Values Item No.	Description	Scheduled Value ($)	From Previous Application (C+D)	This Period	Materials Presently Stored (not in C or D)	Total Completed and Stored to Date (C + D + E)	% (F / B)	Balance to Finish (B - F)
86	D8 - Overhead Door (10'x12')	$16,200.00				$0.00		$16,200.00
87	D8 - Fixed Window	$3,800.00				$0.00		$3,800.00
	DIVISION 9 - FINISHES							
	ELECTRICAL BLDG.							
88	D9 - ACT Ceiling	$38,900.00				$0.00		$38,900.00
89	D9 - Paint Walls, Floors & Doors	$11,000.00				$0.00		$11,000.00
	CENTRIFUGE BUILDING							
90	D9 - Paint Walls, Floors & Doors	$31,000.00				$0.00		$31,000.00
91	D9 - Chemical Containment	$6,500.00				$0.00		$6,500.00
92	D9 - Piping	$5,700.00				$0.00		$5,700.00
	DIVISION 10 - SPECIALTIES							
93	D10 - Fire Extinguishers	$400.00				$0.00		$400.00
94	D10 - Project Signs	$6,700.00				$0.00		$6,700.00
	DIVISION 11 - EQUIPMENT							
	SITE							
95	D11 - Influent Pump Station - Submersible Pumps	$189,200.00	$18,920.00	$0.00	$140,566.30	$159,486.30	84.3%	$29,713.70
96	D11 - Plant Drain Pump Station Submersible Pumps	$89,400.00	$8,940.00	$0.00	$60,242.70	$69,182.70	77.4%	$20,217.30
	CENTRIFUGE BUILDING							
97	D11 - Centrifuge System	$619,200.00	$61,920.00	$0.00	$0.00	$61,920.00	10.0%	$557,280.00
98	D11 - Digester Sludge Pump	$30,000.00	$3,000.00	$0.00	$0.00	$3,000.00	10.0%	$27,000.00
99	D11 - Inline Grinder	$34,500.00	$3,450.00	$0.00	$0.00	$3,450.00	10.0%	$31,050.00
100	D11 - Polymer Feed System	$32,900.00	$3,290.00	$0.00	$0.00	$3,290.00	10.0%	$29,610.00
101	D11 - Polymer Bulk Tank	$7,800.00	$780.00	$0.00	$0.00	$780.00	10.0%	$7,020.00
	UV BUILDING							
102	D11 - UV System with Controls	$303,900.00	$30,390.00	$0.00	$237,600.00	$267,990.00	88.2%	$35,910.00
	HEADWORKS BUILDING							
103	D11 - Mechanical Bar Screen w/Controls	$159,000.00	$15,900.00	$79,500.00	$43,095.00	$138,495.00	87.1%	$20,505.00
104	D11 - Washer/Compactor w/Controls	$85,600.00	$8,560.00	$42,800.00	$23,205.04	$74,565.04	87.1%	$11,034.96
105	D11 - Grit Removal System w/Controls	$262,000.00	$26,200.00	$0.00	$204,620.00	$230,820.00	88.1%	$31,180.00
	EXISTING DIGESTER							
106	D11 - Digester Aeration & Mixing System w/Controls	$670,000.00	$67,000.00	$0.00	$337,252.50	$404,252.50	60.3%	$265,747.50
	EXISTING SBR TANKS							
107	D11 - MCP w/ PLC & Instrumentation	$274,800.00	$27,480.00	$0.00	$0.00	$27,480.00	10.0%	$247,320.00
	DIVISION 13 - SPECIAL CONSTRUCTION							
	SCADA / INTEGRATION							
108	D13 - SCADA, Control Panels, MCC, Field Instrumentation	$765,000.00	$76,500.00	$0.00	$36,698.00	$113,198.00	14.8%	$651,802.00
	DIVISION 14 - CONVEYING SYSTEMS							
	CENTRIFUGE BUILDING							

© 2013 National Society of Professional Engineers for EJCDC. All rights reserved.

Progress Estimate - Lump Sum Work

Contractor's Application

For (Contract):	CHARLES TOWN WASTEWATER TREATMENT PLANT IMPROVEMENTS PROJECT	Application Number:	9
Application Period:	6/01/23-6/30/23	Application Date:	6/30/2023

			Work Completed		E	F		G
A		B	C	D				
Schedule of Values Item No.	Description	Scheduled Value ($)	From Previous Application (C+D)	This Period	Materials Presently Stored (not in C or D)	Total Completed and Stored to Date (C + D + E)	% (F / B)	Balance to Finish (B - F)
109	D14 - Hoist & Monorail	$27,700.00				$0.00		$27,700.00
	HEADWORKS BUILDING							
110	D14 - Screw Conveyor	$70,200.00	$7,020.00	$0.00	$0.00	$7,020.00	10.0%	$63,180.00
	DIVISION 15 - MECHANICAL							
	PROCESS PIPING							
111	D15 - Influent PS - DI Pipe, Fittings, Valves & Sch 40 Stilling Well	$49,000.00	$0.00	$0.00	$16,935.80	$16,935.80	34.6%	$32,064.20
112	D15 - Effluent PS- Sch 40 Stilling Well	$3,900.00				$0.00		$3,900.00
113	D15 - Plant Drain PS - DI Pipe, Fittings, Valves & Sch 40 Stilling Well	$19,500.00	$0.00	$0.00	$4,488.80	$4,488.80	23.0%	$15,011.20
114	D15 - Plan Drain PS - New Top Slab w/Hatch & Vent Pipe	$5,000.00				$0.00		$5,000.00
115	D15 - Plant Drain PS - Portable Hoist w/Socket	$3,000.00				$0.00		$3,000.00
116	D15 - Electrical Bldg- 12" Lug Style BF Valve w/SS Flange Spool	$10,700.00				$0.00		$10,700.00
117	D15 - Centrifuge Bldg. - DI Pipe, Fittings & Valves	$86,800.00	$0.00	$0.00	$25,049.25	$25,049.25	28.9%	$61,750.75
118	D15 - Centrifuge Bldg. - Sch 80 PVC Polymer Feed System	$27,100.00				$0.00		$27,100.00
119	D15 - Sludge Transfer Pump Bldg - DI Pipe, Fittings & Valves	$5,700.00	$0.00	$0.00	$684.20	$684.20	12.0%	$5,015.80
120	D15 - Headworks Bldg. - DI Pipe, Fittings & Valves	$47,200.00	$0.00	$0.00	$4,339.41	$4,339.41	9.2%	$42,860.59
121	D15 - Headworks Bldg. - Sch 80 PVC Drains	$9,000.00				$0.00		$9,000.00
122	D15 - Ex. Digester Bldg. Mixing Sys. Air Comp. Room - 2" SS Air Pipe	$11,600.00				$0.00		$11,600.00
123	D15 - Ex. Digester Bldg. Mixing Sys. Air Comp. Room - 2" Sch 40 PV	$3,200.00				$0.00		$3,200.00
124	D15 - Ex. Digester Tank - 6" DI Pipe & Fittings w/Elec. Actuated T-Va	$43,000.00				$0.00		$43,000.00
125	D15 - Ex. Digester Tank - 10" SS Pipe & Valve Air Supply Line to Mar	$19,500.00	$0.00	$0.00	$9,389.98	$9,389.98	48.2%	$10,110.02
126	D15 - Ex. Digester Tank - Pipe Penetrations to Tank by Mack Ind.	$15,700.00				$0.00		$15,700.00
127	D15 - Digester Blower Pad - 10" & 8" SS Pipe, Fittings & Valves	$15,800.00	$0.00	$0.00	$9,389.97	$9,389.97	59.4%	$6,410.03
128	D15 - SBR Tanks - Install Process Sensors & Instrumentation	$12,000.00				$0.00		$12,000.00
	PLUMBING							
129	D15 - Headworks Bldg. - Sch 80 PVC Water Pipe, Fittings, Valves, BF	$35,800.00	$7,160.00	$17,900.00	$0.00	$25,060.00	70.0%	$10,740.00
130	D15 - Centrifuge Bldg. - Sch 80 PVC Water Pipe, Fittings, Valves, BFF	$46,200.00				$0.00		$46,200.00
131	D15 - Centrifuge Bldg. - Sch 80 PVC Drain Pipe, Fittings, Floor Drains	$16,700.00				$0.00		$16,700.00
132	D15 - Centrifuge Bldg. - Plumbing Fixtures & Eyewash/Shower	$32,800.00				$0.00		$32,800.00
	HVAC							
133	D15 - Electrical Bldg. - Split System HVAC Unit	$22,600.00				$0.00		$22,600.00
134	D15 - Centrifuge Bldg. - Exhaust Fans, Louvers, Unit Heaters	$29,900.00				$0.00		$29,900.00
	DIVISION 16 - ELECTRICAL							
	ELECTRICAL WORK BY S&S ELECTRIC							
135	D16 - Electrical Demolition	$163,500.00	$65,400.00	$3,270.00	$0.00	$68,670.00	42.0%	$94,830.00
136	D16 - Lighting - Material	$11,300.00	$11,300.00	$0.00	$0.00	$11,300.00	100.0%	$0.00
137	D16 - Lighting - Labor	$8,900.00				$0.00		$8,900.00
138	D16 - Gear - Material	$278,300.00	$52,877.00	$5,566.00	$0.00	$58,443.00	21.0%	$219,857.00
139	D16 - Gear - Labor	$60,900.00	$3,045.00	$0.00	$0.00	$3,045.00	5.0%	$57,855.00

© 2013 National Society of Professional Engineers for EJCDC. All rights reserved.

Progress Estimate - Lump Sum Work

Contractor's Application

For (Contract):	CHARLES TOWN WASTEWATER TREATMENT PLANT IMPROVEMENTS PROJECT	Application Number:	9
Application Period:	6/01/23-6/30/23	Application Date:	6/30/2023

			Work Completed		E	F		G
A		B	C	D				
Schedule of Values Item No.	Description	Scheduled Value ($)	From Previous Application (C+D)	This Period	Materials Presently Stored (not in C or D)	Total Completed and Stored to Date (C + D + E)	% (F / B)	Balance to Finish (B - F)
140	D16 - Emergency Generator - Material	$382,500.00				$0.00		$382,500.00
141	D16 - Emergency Generator - Labor	$22,700.00				$0.00		$22,700.00
142	D16 - Devices - Material	$5,600.00				$0.00		$5,600.00
143	D16 - Devices - Labor	$7,300.00				$0.00		$7,300.00
144	D16 - Boxes/Troughs - Material	$101,900.00	$8,152.00	$17,323.00	$0.00	$25,475.00	25.0%	$76,425.00
145	D16 - Boxes/Troughs - Labor	$59,900.00	$1,198.00	$13,777.00	$0.00	$14,975.00	25.0%	$44,925.00
146	D16 - SCADA Equipment Install - Labor	$25,800.00				$0.00		$25,800.00
147	D16 - Conduit - Material	$380,500.00	$152,200.00	$7,610.00	$0.00	$159,810.00	42.0%	$220,690.00
148	D16 - Conduit - Labor	$634,000.00	$240,920.00	$0.00	$0.00	$240,920.00	38.0%	$393,080.00
149	D16 - Cable - Material	$487,600.00	$24,380.00	$9,752.00	$0.00	$34,132.00	7.0%	$453,468.00
150	D16 - Cable - Labor	$358,000.00	$17,900.00	$7,160.00	$0.00	$25,060.00	7.0%	$332,940.00
151	D16 - Grounding - Material	$12,000.00	$1,200.00	$600.00	$0.00	$1,800.00	15.0%	$10,200.00
152	D16 - Grounding - Labor	$20,700.00	$2,070.00	$1,035.00	$0.00	$3,105.00	15.0%	$17,595.00
153	D16 - Temporary Electric	$53,500.00	$21,400.00	$2,675.00	$0.00	$24,075.00	45.0%	$29,425.00
	BID ALTERNATE A - INFLUENT METERING VAULT							
154	Bonds & Insurance	$2,800.00	$2,800.00	$0.00	$0.00	$2,800.00	100.0%	$0.00
155	Demolition	$14,000.00				$0.00		$14,000.00
156	Excavation & Backfill	$7,600.00				$0.00		$7,600.00
157	Precast Concrete Vault	$23,000.00	$0.00	$0.00	$17,257.50	$17,257.50	75.0%	$5,742.50
158	Piping, Fittings, Valves & Supports	$45,000.00	$0.00	$0.00	$20,911.23	$20,911.23	46.5%	$24,088.77
159	16" Mag Meter	$14,600.00				$0.00		$14,600.00
160	Electrical Material	$16,000.00	$1,600.00	$0.00	$0.00	$1,600.00	10.0%	$14,400.00
161	Electrical Labor	$29,000.00				$0.00		$29,000.00
	BID ALTERNATE B - WAS METERING VAULT							
162	Bonds & Insurance	$4,400.00	$4,400.00	$0.00	$0.00	$4,400.00	100.0%	$0.00
163	Demolition	$14,700.00				$0.00		$14,700.00
164	Excavation & Backfill	$10,200.00				$0.00		$10,200.00
165	Precast Concrete Vault	$21,000.00	$0.00	$0.00	$16,557.50	$16,557.50	78.8%	$4,442.50
166	Piping, Fittings, Valves & Supports	$65,600.00	$0.00	$0.00	$2,613.43	$2,613.43	4.0%	$62,986.57
167	Flow Meters	$17,100.00				$0.00		$17,100.00
168	Misc. Metals	$23,000.00				$0.00		$23,000.00
169	Electrical Material	$33,000.00	$3,300.00	$0.00	$0.00	$3,300.00	10.0%	$29,700.00
170	Electrical Labor	$46,000.00				$0.00		$46,000.00
	CHANGE ORDER #1							
171	CHANGE ORDER #1	$498,183.42	$498,183.42	$0.00	$0.00	$498,183.42	100.0%	$0.00
172	CHANGE ORDER #2	$41,179.57				$0.00		$41,179.57
	SubTotal	**$10,690,362.99**	**$2,333,159.42**	**$445,892.00**	**$1,262,955.33**	**$4,042,006.75**	**37.8%**	**$6,648,356.24**

© 2013 National Society of Professional Engineers for EJCDC. All rights reserved.

Stored Material Summary

Contractor's Application

For (Contract):	CHARLES TOWN WASTEWATER TREATMENT PLANT IMPROVEMENTS PROJECT							Application Number:	9		
Application Period:	6/01/23-6/30/23							Application Date:	6/30/2023		
A		B	C		D		E		F		G
					Stored Previously				Incorporated in Work		
Bid Item No.	Supplier Invoice No.	Submittal No. (with Specification Section	Storage Location	Description of Materials or Equipment Stored	Date Placed into Storage (Month/Year)	Amount ($)	Amount Stored this Month ($)	Subtotal Amount Completed and Stored to Date (D + E)	Date (Month/ Year)	Amount ($)	Materials Remaining in Storage ($) (D + E - F)
34, 37, 42, 158, 166	S100204638.001		Inwood shop	CITCO Water - Piping, Valves, Fittings for Yard Piping & Bid Alternates	1/2023	$16,302.08		$16,302.08	4/2023	$10,737.51	$5,564.57
111, 113, 117, 119, 158, 166	S100198279.001		Inwood shop	CITCO Water - Piping, Valves, Fittings for Mechanical Piping & Bid Alternates	1/2023	$33,962.32		$33,962.32			$33,962.32
136	3624349		onsite	Scott Electric - lighting	1/2023	$3,299.00		$3,299.00	3/2023	$3,299.00	
42	S100204638.002		Inwood shop	CITCO Water - Piping, Valves, Fittings for Yard Piping	1/2023	$5,281.95		$5,281.95			$5,281.95
158	S100198279.002		Inwood shop	CITCO Water - Piping, Valves, Fittings for Bid Alternate A	1/2023	$7,075.75		$7,075.75			$7,075.75
138	S6606924.005, S6606924.003		onsite	Schaedler yesco electrical material for gear	2/2023	$2,481.00		$2,481.00	3/2023	$2,481.00	
13	21073974		Inwood shop	ISCO Industries Piping for Bypass pump	2/2023	$6,795.23		$6,795.23	3/2023	$6,795.23	
43	S100207506.001		Inwood shop	CITCO Water - Nyloplast Drain Basins	2/2023	$14,097.00		$14,097.00	4/2023	$14,097.00	
171	483242		Inwood shop	Skyline Steel - H-Piles	3/2023	$62,060.00		$62,060.00	4/2023	$62,060.00	
106	6183.03-.05		Inwood shop	Enviromix, Inc. - Digester Aeration & Mixing Sys w/Controls	3/2023	$259,425.00		$259,425.00			$259,425.00
157,165	MIVC0029470		Inwood shop	Mack Industries - PS Meter Vault, WAS Valve Vault	4/2023	$33,815.00		$33,815.00			$33,815.00
102	902090889		Inwood shop	Veolia UV System	4/2023	$237,600.00		$237,600.00			$237,600.00
117	S100211394.001		Inwood shop	CITCO Water - Process Piping for Centrifuge Bldg	4/2023	$5,774.80		$5,774.80			$5,774.80
117	S100209868.002		Inwood shop	CITCO Water - Process Piping for Centrifuge Bldg	4/2023	$4,582.50		$4,582.50			$4,582.50
117	S100198279.004		Inwood shop	CITCO Water - Process Piping for Centrifuge Bldg	4/2023	$3,386.75		$3,386.75			$3,386.75
111,120	S100209822.004		Inwood shop	CITCO Water - Process Piping for HW Bldg & Inf PS	4/2023	$11,549.36		$11,549.36			$11,549.36
33	S100213814.001		Inwood shop	CITCO Water - Yard Piping for Water Svc to Centrifuge Bldg	4/2023	$5,871.20		$5,871.20			$5,871.20
158	S100211150.003		Inwood shop	CITCO Water - Piping for Bid Alternate A - Inf. Metering Vault	4/2023	$5,581.64		$5,581.64			$5,581.64
105	9865-1, 9865-2		Inwood shop	Envirodyne Systems Inc. - Grit Removal System	4/2023	$70,462.00		$70,462.00			$70,462.00
13	0134274-IN		Inwood shop	Precision Pump & Valve - Pumps for bypass	4/2023	$32,204.00		$32,204.00	5/2023	$32,204.00	
103,104	93254		Inwood shop	Zima Corporation - Bar Screen, Washer/Compactor	4/2023	$165,750.30		$165,750.30	6/2023	$99,450.26	$66,300.04
108	220802-1		Inwood shop	Micro-Tech Designs, Inc. - SCADA equipment	4/2023	$36,698.00		$36,698.00			$36,698.00
106	6183.06		Inwood shop	Enviromix, Inc. - Diffusers, Aeration piping, pipes/supports	5/2023	$77,827.50		$77,827.50			$77,827.50
125,127	683		Inwood shop	B.A. Martin Welding - SS Piping for Digester	5/2023	$18,779.95		$18,779.95			$18,779.95
71-75	1457		Inwood shop	Southern Steel Products Company - Misc. Metals for Cent. Bldg.	5/2023	$38,450.00		$38,450.00			$38,450.00
95-96	9261		Inwood shop	Pumpman Pittsburgh - Submersible Pumps	5/2023	$200,809.00		$200,809.00			$200,809.00
105	9865-3		Inwood shop	Envirodyne Systems Inc. - Grit Removal System	6/2023		$134,158.00	$134,158.00			$134,158.00
				Totals		**$1,359,921.33**	**$134,158.00**	**$1,494,079.33**		**$231,124.00**	$1,262,955.33

EJCDC® C-620 Contractor's Application for Payment
© 2013 National Society of Professional Engineers for EJCDC. All rights reserved.

ENVIRODYNE SYSTEMS INC.
75 Zimmerman Drive
Camp Hill, PA 17011-6822
Phone (717) 763-0500
Fax (717) 763-9308

INVOICE

NUMBER	PAGE
I-9865-3	1
YOUR ORDER NO.	CUSTOMER
11340	ALV001
INVOICE DATE	INVOICE TOTAL
06/21/2023	$134,158.00

TO **ALVAREZ CONTRACTORS, INC**
P.O. BOX 555
OAKLAND, MD 21550

SHIPPED TO ALVAREZ CONTRACTORS, INC
24 SHOWTIME DRIVE
INWOOD, WV 25428

Attn.: Katie Alvarez

Phone: (301) 662-5283
Email: kalvarez2@comcast.net

OUR ORDER NO.	SALESPERSON	TERMS	FOB	DATE SHIPPED	SHIPPED VIA
9865		Net 30	Jobsite	6/21/23	Whitewater Freight

QUANTITY ORDERED	QUANTITY SHIPPED	STOCK NUMBER/DESCRIPTION	UNIT PRICE	UNIT	AMOUNT
		S.O. No. 9865 (A-B) (D-E)			
		CHARLES TOWN, WV			
1	1	GRIT SEPARATOR MECHANISM			
1	1	GRIT DEWATERING SYSTEM			
		TOTAL NET AMOUNT			**$134,158.00**
		Re: Sales &/or Use Tax - Net Amount does not include any WV State &/or local sales/use tax. Buyer to pay any such applicable tax direct to appropriate agency(ies). Seller is not licensed to collect sales tax in the jurisdiction in w hich the project is located.			

Date: July, 12 2023

Charles Town Utility Board
2022 Renewal and Replacement Project
Schedule B

A. COST OF PROJECT	APPROVED CONSTRUCTION BUDGET	Paid by CTUB from Operating Account	Paid by CTUB from Operating Account 6/1/2022-11/7/2022	Paid by CTUB from Operating Account 11/8/2022-12/8/2022	Paid by CTUB from Operating Account 12/9/2022-1/18/2023	Paid by CTUB from Operating Account 1/19/2023-3/8/2023	Paid by CTUB from Operating Account 3/9/2023-4/12/2023	Paid by CTUB from Operating Account 4/13/2023-5/10/2023	Paid by CTUB from Operating Account 5/11/2023-6/28/2023	Resolution No. 1 Contractor's Application for Payment No. 1	Resolution No. 2 Contractor's Application for Payment No. 2	Resolution No. 3 Contractor's Application for Payment No. 3	Resolution No. 4 Contractor's Application for Payment No. 4	Resolution No. 5 Contractor's Application for Payment No. 5	Resolution No. 6 Contractor's Application for Payment No. 6	Resolution No. 7 Contractor's Application for Payment No. 7	Resolution No. 8 Contractor's Application for Payment No. 8	Resolution No. 9 Contractor's Application for Payment No. 9	BALANCE REMAINING
1 **CONSTRUCTION**																			
a. Contract	$ 10,151,000.00									$ 258,858.00	$ 188,174.70	$ 134,861.40	$ 91,314.99	$ 92,171.91	$ 498,898.59	$ 769,319.84	$ 673,483.46	$ 432,539.77	$ 7,011,377.34
b. Construction Contingency 5% - (See note #2 below)	$ 466,370.43																		$ 466,370.43
c. Change Order #1 (See note #3 & #4 below)	$ 498,183.42															$ 298,910.00	$ 199,273.42		$ -
d. Change Order #2	$ 41,179.57																		$ 41,179.57
2 **ENGINEERING SERVICES**																			
GDF Engineering fees (including CA and RPR)	$ 760,000.00	$ 410,782.47	$ 32,115.37	$ 8,829.82	$ 50,270.24	$ 8,627.43	$ 5,867.80	$ 51,001.73	$ 22,948.87										$ 169,556.27
Additional RPR inspection (not yet Board approved)	$ 125,000.00																		$ 125,000.00
Initial GDF R&R Report	$ 40,082.50	$ 40,082.50																	$ -
3 **LEGAL SERVICES**																			
a. Local Project Attorney	$ 20,000.00	$ 544.00	$ 2,312.00																$ 17,144.00
4 **ADMINISTRATIVE SERVICES**																			
a. Project Accountant (CPA)	$ 20,000.00	$ 2,937.50	$ 7,400.00																$ 9,662.50
b. Other Administrative Costs	$ 10,000.00	$ 1,190.00	$ 4,196.01																$ 4,613.99
5 **Total Project Costs Lines 1-6**	**$ 12,131,815.92**	**$ 455,536.47**	**$ 46,023.38**	**$ 8,829.82**	**$ 50,270.24**	**$ 8,627.43**	**$ 5,867.80**	**$ 51,001.73**	**$ 22,948.87**	**$ 258,858.00**	**$ 188,174.70**	**$ 134,861.40**	**$ 91,314.99**	**$ 92,171.91**	**$ 498,898.59**	**$ 1,068,229.84**	**$ 872,756.88**	**$ 432,539.77**	**$ 7,844,904.10**
B. SOURCES OF FUNDS	**APPROVED PROJECT FUNDING**																		
1 PROJECT FUNDS																			
a. Capacity Improvement Fees	$ 1,170,163.00																		$ 1,170,163.00
b. R&R, Operating Cash, Working Capital (See note #1 below)	$ 2,015,122.92	$ (455,536.47)	$ (46,023.38)	$ (8,829.82)	$ (50,270.24)	$ (8,627.43)	$ (5,867.80)	$ (51,001.73)	$ (22,948.87)							$ (298,910.00)	$ (199,273.42)		$ 867,833.76
c. EEG Grant Funds	$ 1,966,030.00																		$ 1,966,030.00
Total Internal Funds & EEG Grant Funds	**$ 5,151,315.92**																		**$ 4,004,026.76**
d. Bond Proceeds 2022B & 2022C	**$ 6,980,500.00**									$ (258,858.00)	$ (188,174.70)	$ (134,861.40)	$ (91,314.99)	$ (92,171.91)	$ (498,898.59)	$ (769,319.84)	$ (673,483.46)	$ (432,539.77)	**$ 3,840,877.34**
Total Funds Available	**$ 12,131,815.92**	**$ (455,536.47)**	**$ (46,023.38)**	**$ (8,829.82)**	**$ (50,270.24)**	**$ (8,627.43)**	**$ (5,867.80)**	**$ (51,001.73)**	**$ (22,948.87**	**$ (258,858.00)**	**$ (188,174.70)**	**$ (134,861.40)**	**$ (91,314.99)**	**$ (92,171.91)**	**$ (498,898.59)**	**$ (1,068,229.84**	**$ (872,756.88)**	**$ (432,539.77)**	**$ 7,844,904.10**

Note #1 - March 1, 2023 this line item was increased to include the full amount of Change Order #1. Internal funds that were previously allocated for the Collection System project will be dedicated to this Change Order. This will require an increase of the requested funds from CWSRF for the Collection System Project
Note #2 - March 8, 2023 this line item was decreased by $41,179.57 to include the full amount of Change Order #2.
Note #3 - Pay App #7 in the amount of $1,068,229.84 includes $298,910 from Change Order #1. $769,319.84 will be paid from the 2022B and $298,910 will be paid from the Renewal & Replacement Accoun
Note #4 - Pay App #8 in the amount of $872,756.88 includes the remaining balance of $199,273.42 from Change Order #1. $673,483.46 will be paid from the 2022B and $199,273.42 will be paid from the Renewal & Replacement Accoun

APPLIED
Industrial Technologies®

Quotation

Service Center Address: APPLIED INDUSTRIAL TECHNOLOGIES 154 MARATHON DR WINCHESTER, VA 22602-2416 TEL: 540-869-7400 FAX: 540-869-7474 **Account Manager:**	**Quote Create Date (MM-DD-YYYY):** 07-06-2023 **Quotation Number:** **512054521**	**Sales Rep:** NICHOLAS CURATOLO **Phone:** **Email:** NCURATOLO@APPLIED.COM **PO #:** **Req #:** **Inquiry #:**	**Page:** 1/1

Sold-To Address: **Account:** C2690 CHARLES TOWN UTILITY BOARD 842 SOUTH GEORGE STREET CHARLES TOWN WV 25414	**Ship-To Address:** **Account:** C2690 CHARLES TOWN UTILITY BOARD MATT LOPORTO 842 SOUTH GEORGE STREET CHARLES TOWN WV 25414
Payment Terms: COD - CASH BASIS	**Customer Contact:** **Customer Contact Phone:**
Transport Mode and Means: CUSTOMER PICKUP, CUSTOMER PICK UP **Terms:**	

Item #	Quantity	UOM	Manufacturer Part #	Customer Part #	Est Delivery Date	Unit Price (USD)	Extended Price (USD)
000010	1.000	EA	**APPLETON CONVYR BELT-4/2201/8X1/16-18"X47'-PUNCHED/WSW/WC**			10,709.300	10,709.30

Description: APCB_4/2201/8X1/16-18"X47'-PUNCHED/WSW/~

Order Notes:
4 PLY 220 1/8X1/16 - 18"IN WIDE X 47'FT LONG EDGES OF BELT CHEMGLAZED - 3"IN TALL X 2"IN SIDEWALL FLUSH EACH EDGE 3"IN TALL X 14"IN WIDE CLEATS CENTERED ON 12"IN CENTERS PUNCHED FOR 140ES PLATE FASTENERS RECESSED TOP
COVERS

LEAD TIME IS 9-10 WORKING WEEKS

SUBTOTAL (WITHOUT TAX)	10,709.30
TAX	567.59
TOTAL(USD)	11,276.89

TOTAL IN WORDS: ELEVEN THOUSAND TWO HUNDRED SEVENTY-SIX DOLLARS AND EIGHTY-NINE CENTS

Special Information:
Order Notes:

PRICES QUOTED ABOVE ARE THOSE IN EFFECT AT THE TIME OF QUOTATION. MANUFACTURER INCREASES MAY APPLY UNLESS SPECIFICALLY STATED ON THE FACE OF THIS QUOTATION. RETURNED PRODUCT IS SUBJECT TO A RESTOCKING CHARGE.

THIS QUOTATION CONTAINS CONFIDENTIAL INFORMATION, MAY NOT BE DISCLOSED TO THIRD PARTIES AND IS SUBJECT TO OUR STANDARD TERMS AND CONDITIONS OF SALE, SHOWN ON THE REVERSE SIDE OF THIS DOCUMENT AND AVAILABLE AT WWW.APPLIED.COM. BUYER'S ACCEPTANCE OF SHIPMENT OR PERFORMANCE AND/OR PAYMENT CONSTITUTES ACCEPTANCE OF APPLIED'S TERMS AND CONDITIONS.

THIS QUOTE MAY CONTAIN ITEMS THAT ARE SPECIAL ORDER, UNIQUE, OR CUT TO SIZE. THESE ITEMS ARE NON-RETURNABLE AND NON-CANCELABLE. YOUR ORDER IS SPECIFICALLY CONDITIONED ON ACCEPTING THESE TERMS.

Charles Town
Utility Board
661 S. George Street, Suite 101 Charles Town, WV 25414
Phone: (304) 725-2316 ♦ Fax: (304) 725-7150 ♦ Web: www.ctubwv.com

MEMORANDUM TO THE BOARD OF DIRECTORS

FROM: Kristen Stolipher, Utility General Manager
SUBJECT: Utility General Manager's Report
DATE: July 12, 2023

ADMINISTRATIVE

- Customer Counts
  - Sewer 8,551
  - Water 6,612

WATER

- Lead and Copper Inventory on-going
- Hydrant painting efforts continuing

SEWER

- Renewal and Replacement Project
- Collection System project update by RK&K on July 26

Customer Name	Location	Lot Number	CIF Date Paid	Number of Sewer EDUs	Sewer CIF Amount Paid	Number of Water EDU's	Water CIF Amount Paid
Lennar	Shenandoah Springs	5, 6	1/10/2023	2	$ 9,110.00		
Lutman Land Development	Beckwith/Shutter		1/10/2023	4	$ 11,720.00	4	$ 17,596.00
Lennar	Norborne Glebe	T015-T021, T068-T074	1/20/2023	14	$ 41,020.00	14	$ 61,586.00
Dan Ryan Builders	Aspen Greens	75	1/20/2023	1	$ 2,930.00		
Lennar	Lennar	1-4	1/20/2023	4	$ 18,220.00		
Dan Ryan Builders	Tate Manor	75-80	1/26/2023	6	$ 17,580.00	6	$ 26,394.00
Dan Ryan Builders	Tate Manor	70-74	1/26/2023	5	$ 14,650.00	6	$ 21,995.00
Lennar	Norborne Glebe	T022-T034	2/9/2023	13	$ 38,090.00	13	$ 57,187.00
Dan Ryan Builders	Huntfield	322-328	2/8/2023	7	$ 20,510.00	7	$ 30,793.00
Dan Ryan Builders	Aspen Greens	51, 70, 83	2/8/2023	3	$ 8,790.00		
Dan Ryan Builders	Huntfield	554-558	2/9/2023	5	$ 14,650.00	5	$ 21,995.00
Dan Ryan Builders	Aspen Greens	69	2/22/2023	1	$ 2,930.00		
Dan Ryan Builders	Aspen Greens	48	2/23/2023	1	$ 2,930.00		
Dan Ryan Builders	Huntfield	625	2/24/2023	1	$ 2,930.00	1	$ 4,399.00
Dan Ryan Builders	Huntfield	376	2/28/2023	1	$ 2,930.00	1	$ 4,399.00
Dan Ryan Builders	Aspen Greens	50	3/3/2023	1	$ 2,930.00		
Lennar	Norborne Glebe	253-259	3/3/2023	7	$ 20,510.00	7	$ 30,793.00
Lennar	Norborne Glebe	T035-T041, T055-T060	3/3/2023	13	$ 38,090.00	13	$ 57,187.00
Dan Ryan Builders	Huntfield	893-897	3/13/2023	5	$ 14,650.00	5	$ 21,995.00
Dan Ryan Builders	Aspen Greens	53, 71	3/14/2023	2	$ 5,860.00		
DRH	Magnolia Springs	188-194	3/14/2023	7	$ 20,510.00		
Wormald	Beallair	215	3/14/2023	1	$ 2,930.00		
Stanley Martin	Presidents Pointe	97-104	3/14/2023	8	$ 36,440.00		
Colandrea Corp	Inferno Brewery	13	3/15/2023	4.03	$ 18,356.65		
Lennar	Norborne Glebe	T042-T054, T061-T067	3/21/2023	20	$ 58,600.00	20	$ 87,980.00
Maronda	Huntwell West	1,5,6,7	3/21/2023	4	$ 11,720.00		
Maronda	Huntwell West	3,4,8,9,10	3/22/2023	5	$ 14,650.00		
Washington Landing LLC	Washington Landing 700,800,900		3/24/2023			35.5	$ 91,464.00
Dan Ryan Builders	Aspen Greens	67, 72, 81	3/28/2023	3	$ 8,790.00		
Dan Ryan Builders	Huntfield	469	3/28/2023	1	$ 2,930.00	1	$ 4,399.00
Wormald	Beallair	216, 232, 303	3/28/2023	3	$ 8,790.00		
Dan Ryan Builders	Aspen Greens	55	3/30/2023	1	$ 2,930.00		
Stanley Martin	Presidents Pointe	105-108	3/31/2023	4	$ 18,220.00		
Engle	169 Euclid Ave - detached garage		4/3/2023	1	$ 2,930.00	1	$ 4,399.00
Dan Ryan Builders	Huntfield	364	4/7/2023	1	$ 2,930.00	1	$ 4,399.00
Dan Ryan Builders	Huntfield	897-904	4/7/2023			8	$ 35,192.00
Dan Ryan Builders	Tate Manor	53-58	4/7/2023	6	$ 17,580.00	6	$ 26,394.00
Dan Ryan Builders	Tate Manor	11	4/10/2023	1	$ 2,930.00		
Dan Ryan Builders	Aspen Greens	54	4/13/2023	1	$ 2,930.00		
Dan Ryan Builders	Aspen Greens	68	4/18/2023	1	$ 2,930.00		
Wormald	Beallair	54, 225	4/21/2023	2	$ 5,860.00		
Stanley Martin	Presidents Pointe	109-116	4/25/2023	8	$ 36,440.00		
Dan Ryan Builders	Huntfield	451-456	4/25/2023	6	$ 17,580.00	6	$ 26,394.00
Dan Ryan Builders	Huntfield	374	4/26/2023	1	$ 2,930.00	1	$ 4,399.00
DRH	Magnolia Springs	188-197	4/28/2023			10	$ 43,990.00
DRH	Magnolia Springs	195-197	4/28/2023	3	$ 8,790.00		
DRH	Magnolia Springs	258-268, 273-288	4/28/2023	27	$ 79,110.00	27	$ 118,773.00
DRH	Magnolia Springs	897-904	4/28/2023	8	$ 23,440.00		
Dan Ryan Builders	Aspen Greens	52, 58	5/3/2023	2	$ 5,860.00		
Dan Ryan Builders	Huntfield	437-440	5/3/2023	4	$ 11,720.00	4	$ 17,596.00
Secatello	E 7th Ave, Parcel 141 Townhomes (1 existing)	A&B	5/3/2023	1	$ 2,930.00	1	$ 4,399.00
Holtzman	W Burr Park	16	5/4/2023	4.09	$ 13,127.00		
Wormald	Beallair	208	5/5/2023	1	$ 2,930.00		
Stanley Martin	Presidents Pointe	117-122	5/12/2023	6	$ 27,330.00		
Wormald	Beallair	224	5/16/2023	1	$ 2,930.00		
Dan Ryan Builders	Huntfield	445	5/16/2023	1	$ 2,930.00	1	$ 4,399.00
Dan Ryan Builders	Huntfield	446-450	5/16/2023	5	$ 14,650.00	5	$ 21,995.00
Dura Trac	West Burr		5/18/2023	0.3	$ 879.00		
Dan Ryan Builders	Huntfield	441-444	5/19/2023	4	$ 11,720.00	4	$ 17,596.00
Porter	Charles Town Road	17, 19	5/22/2023	2	$ 5,860.00	2	$ 8,798.00
Dan Ryan Builders	Aspen Greens	57, 63, 66	5/24/2023	3	$ 8,790.00		
Wormald	Beallair	211, 226	5/24/2023	2	$ 5,860.00		
Lutman Land Development	Jefferson Avenue	10	5/24/2023	1	$ 2,930.00	1	$ 4,399.00
Stanley Martin	Presidents Pointe	123-126	5/26/2023	4	$ 18,220.00		
Jiffy Lube	Joshua Freeway Blvd	11	5/29/2023	0.8	$ 3,644.00		
Dan Ryan Builders	Aspen Greens	74	6/6/2023	1	$ 2,930.00		
Dan Ryan Builders	Huntfield	342-348	6/6/2023	7	$ 20,510.00	7	$ 30,793.00
Dan Ryan Builders	Aspen Greens	56	6/7/2023	1	$ 2,930.00		
Dan Ryan Builders	Huntfield	347A	6/7/2023			1	$ 4,399.00
Lutman Land Development	Samuel Station	24-29	6/7/2023	6	$ 17,580.00	6	$ 26,394.00
Dan Ryan Builders	Huntfield	347A	6/8/2023	1	$ 2,930.00		
Dan Ryan Builders	Huntfield	470	6/16/2023	1	$ 2,930.00	1	$ 4,399.00
Dan Ryan Builders	Aspen Greens	61, 64	6/21/2023	2	$ 5,860.00		
Dan Ryan Builders	Huntfield	778	6/23/2023	1	$ 2,930.00	1	$ 4,399.00
Wormald	Beallair	204	6/27/2023	1	$ 2,930.00		
Lennar	Norborne Glebe	14, 19, 23-26, 29, 33	6/28/2023	8	$ 23,440.00	8	$ 35,192.00
			Total	**294.22**	$ 929,556.65	**240.5**	$ 988,860.00

Charles Town Utility Board
2023 Capacity Improvement Fee Collections/EDU for Sewer

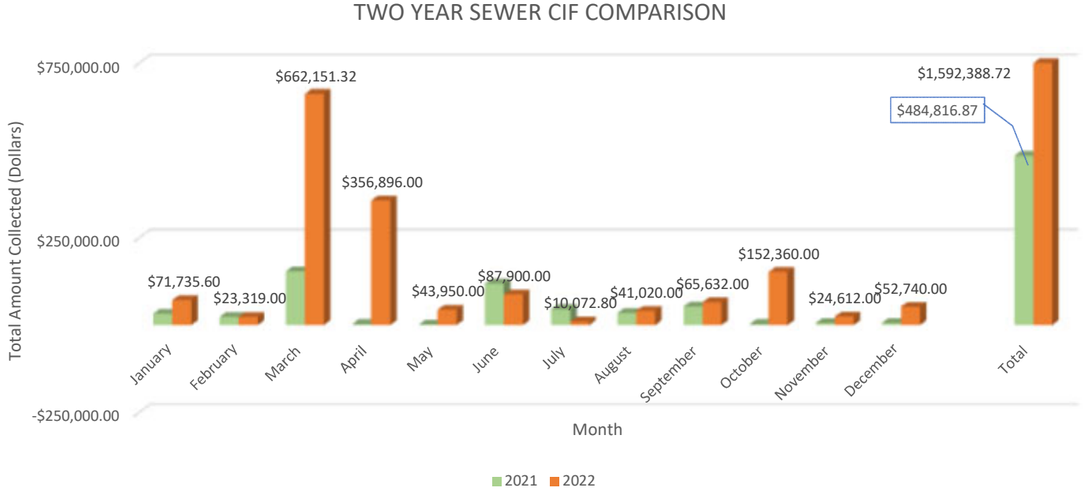
Month	Commercial	Residential	Total Number of EDU's	Total Sewer CIF Collected	CIF Paid to Ranson	Total
Jan-23		36	36	$ 115,230.00	$ 9,750.00	$ 105,480.00
Feb-23		32	32	$ 93,760.00		$ 93,760.00
Mar-23	4.03	85	89.03	$ 286,906.65	$ 19,500.00	$ 267,406.65
Apr-23		66	66	$ 206,380.00	$ 13,000.00	$ 193,380.00
May-23	5.19	37	42.19	$ 142,310.00	$ 17,875.00	$ 124,435.00
Jun-23		29	29	$ 84,970.00		$ 84,970.00
Jul-23						$ -
Aug-23						$ -
Sep-23						$ -
Oct-23						$ -
Nov-23						$ -
Dec-23						$ -
Total 2023	**9.22**	**285**	**294.22**	**$ 929,556.65**	**$ 60,125.00**	**$ 869,431.65**

Charles Town Utility Board
2023 Capacity Improvement Fee Collections/EDU for Water

Month	Commercial	Residential	Total Number of EDU's	Total Water CIF
Jan-23		30	30	$ 127,571.00
Feb-23		27	27	$ 118,773.00
Mar-23		81.5	81.5	$ 293,818.00
Apr-23		60	60	$ 263,940.00
May-23		18	18	$ 79,182.00
Jun-23		24	24	$ 105,576.00
Jul-23				
Aug-23				
Sep-23				
Oct-23				
Nov-23				
Dec-23				
Total 2023	**0**	**240.5**	**240.5**	**$ 988,860.00**

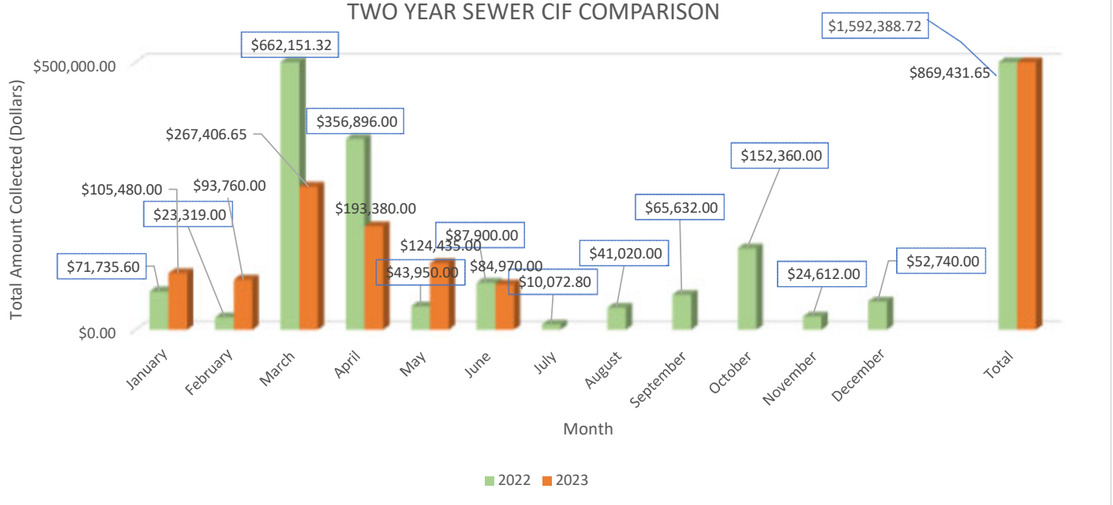
Charles Town Utility Board
2022 Capacity Improvement Fee Collections/EDU for Sewer

Month	Commercial	Residential	Total Number of EDU's	Total Sewer CIF Collected	CIF Paid to Ranson	Total
Jan-22	1.53	29.03	30.56	$ 71,735.60		$ 71,735.60
Feb-22		17	17	$ 23,319.00		$ 23,319.00
Mar-22	146.59	34	180.59	$ 662,151.32		$ 662,151.32
Apr-22		129	129	$ 389,396.00	$ 32,500.00	$ 356,896.00
May-22		15	15	$ 43,950.00		$ 43,950.00
Jun-22		30	30	$ 87,900.00		$ 87,900.00
Jul-22	0.04	3	3.04	$ 10,072.80		$ 10,072.80
Aug-22		14	14	$ 41,020.00		$ 41,020.00
Sep-22	0.4	22	22.4	$ 90,007.00	$ 24,375.00	$ 65,632.00
Oct-22	0	52	52	$ 175,110.00	$ 22,750.00	$ 152,360.00
Nov-22	0	8	8.4	$ 24,612.00		$ 24,612.00
Dec-22	0	18	18	$ 52,740.00		$ 52,740.00
Total 2022	**1.97**	**301**	**519.99**	**$1,672,013.72**	**$79,625.00**	**$1,592,388.72**



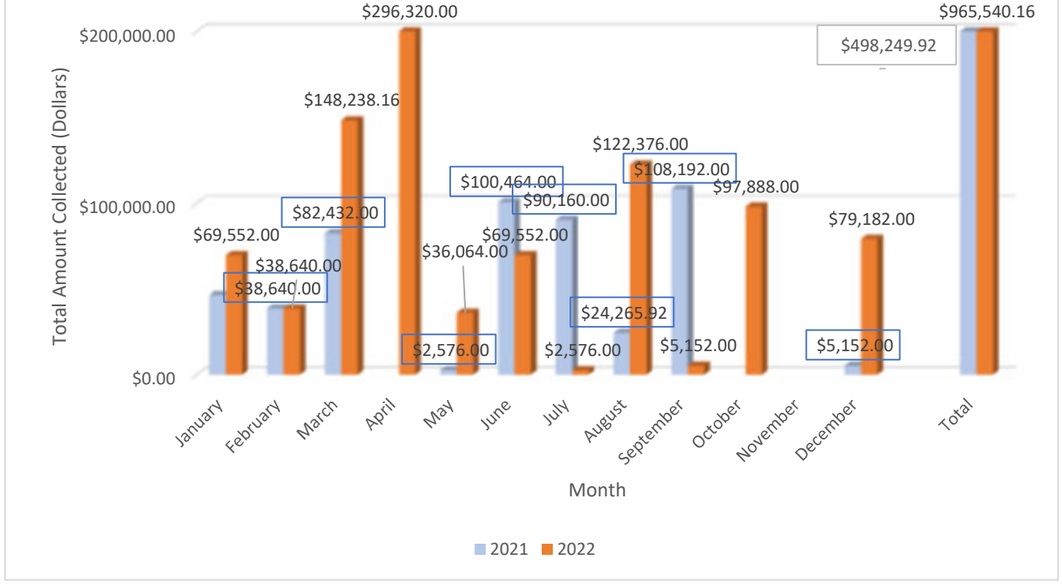
Charles Town Utility Board
2023 Capacity Improvement Fee Collections/EDU for Sewer

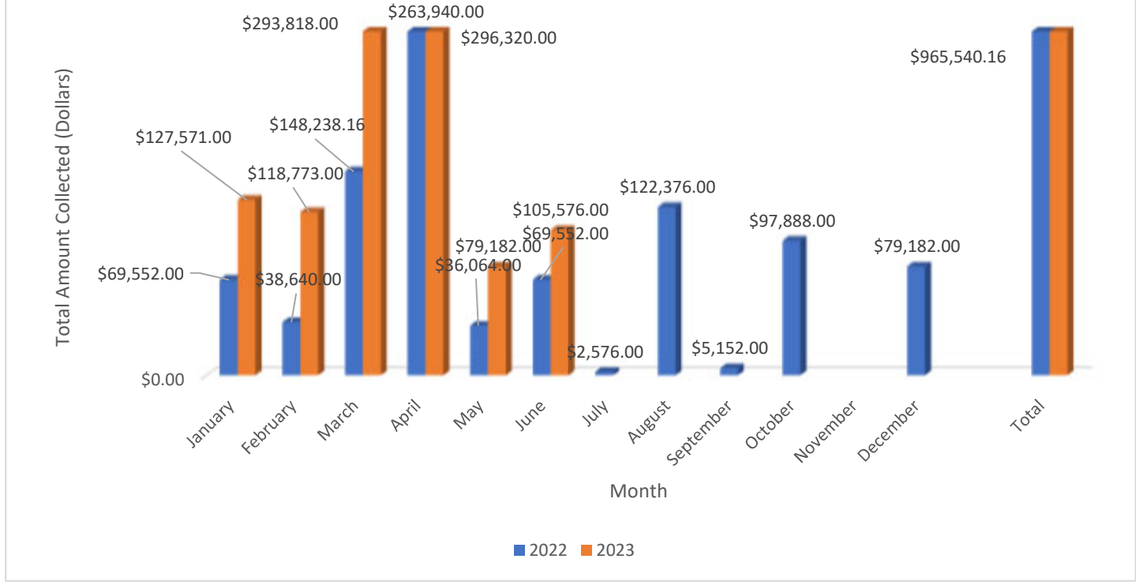
Month	Commercial	Residential	Total Number of EDU's	Total Sewer CIF Collected	CIF Paid to Ranson	Total
Jan-23		36	36	$ 115,230.00	$ 9,750.00	$ 105,480.00
Feb-23		32	32	$ 93,760.00		$ 93,760.00
Mar-23	4.03	85	89.03	$ 286,906.65	$ 19,500.00	$ 267,406.65
Apr-23		66	66	$ 206,380.00	$ 13,000.00	$ 193,380.00
May-23	5.19	37	42.19	$ 142,310.00	$ 17,875.00	$ 124,435.00
Jun-23		29	29	$ 84,970.00		$ 84,970.00
Jul-23						
Aug-23						
Sep-23						
Oct-23						
Nov-23						
Dec-23						
Total 2023	**9.22**	**285**	**294.22**	**$929,556.65**	**$60,125.00**	**$869,431.65**



Charles Town Utility Board 2022 Capacity Improvement Fee Collections/EDU for Water				
Month	Commercial	Residential	Total Number of EDU's	Total Water CIF
Jan-22		27	27	$ 69,552.00
Feb-22		15	15	$ 38,640.00
Mar-22	39.35	30	69.35	$ 148,238.16
Apr-22	23.03	92	115.03	$ 296,320.00
May-22		14	14	$ 36,064.00
Jun-22		27	27	$ 69,552.00
Jul-22		1	1	$ 2,576.00
Aug-22	36	12	47.5	$ 122,376.00
Sep-22		2	2	$ 5,152.00
Oct-22	0	38	38	$ 97,888.00
Nov-22	0	0	0	
Dec-22	0	18	18	$ 79,182.00
Total 2022	**97.88**	**238**	**373.88**	**$ 965,540.16**

2023 Capacity Improvement Fee Collections/EDU for Water				
Month	Commercial	Residential	Total Number of EDU's	Total Water CIF
Jan-22		30	30	$ 127,571.00
Feb-22		27	27	$ 118,773.00
Mar-22		81.5	81.5	$ 293,818.00
Apr-22		60	60	$ 263,940.00
May-22		18	18	$ 79,182.00
Jun-22		24	24	$ 105,576.00
Jul-22				
Aug-22				
Sep-22				
Oct-22				
Nov-22				
Dec-22				
Total 2023	**0**	**241**	**240.5**	**$ 988,860.00**





CHARLES TOWN UTILITY BOARD
WASTEWATER TREATMENT PLANT FLOW DATA

CHARLES TOWN WASTEWATER PLANT FLOW DATA						
YEAR	Total Design (MGD)	TOTAL ANNUAL FLOW (MG)	AVERAGE DAILY (MGD)	Total Design minus Average Daily	Total Available (gpd)	Total Available (EDU's)
2015	1.75	384	1.05	0.7	700,000	4,667
2016	1.75	419	1.14	0.61	610,000	4,067
2017	1.75	393	1.08	0.67	670,000	4,467
2018	1.75	491	1.34	0.41	410,000	2,733
2019	1.75	459	1.26	0.49	490,000	3,267
2020	1.75	419.7	1.15	0.60	603,333	4,022
2021	1.75	401.61	1.11	0.64	637,500	4,250
2022	1.75	387.15	1.06	0.69	687,500	4,583
2023	1.75	185.91	1.04	0.71	713,333	4,756

TUSCAWILLA WASTEWATER PLANT FLOW DATA						
YEAR	Total Design (MGD)	TOTAL ANNUAL FLOW (MG)	AVERAGE DAILY (MGD)	Total Design minus Average Daily	Total Available (gpd)	Total Available (EDU's)
2015	0.5	48	0.13	0.37	370,000	2,467
2016	0.5	49	0.13	0.37	370,000	2,467
2017	0.5	48	0.14	0.36	360,000	2,400
2018	0.5	78	0.21	0.29	290,000	1,933
2019	0.5	55.24	0.15	0.35	350,000	2,333
2020	0.5	1.09	0.16	0.34	340,000	2,267
2021	0.5	32.55	0.10	0.40	400,833	2,672
2022	0.5	62.8	0.17	0.33	328,333	2,189
2023	0.5	39.41	0.22	0.28	281,667	1,878

Total EDU's available between CT and Tuscawilla	
2015	7,133
2016	6,533
2017	6,867
2018	4,667
2019	5,600
2020	6,289
2021	6,922
2022	6,772
2023	6,633

2021		
	Total	AVERAGE
JANUARY	35.83	1.22
FEBRUARY	32.98	1.18
MARCH	36.39	1.17
APRIL	34.33	1.18
MAY	33.24	1.07
JUNE	36.24	1.21
JULY	30.99	1.00
AUGUST	29.94	0.97
SEPTEMBER	36.36	1.17
OCTOBER	29.97	0.97
NOVEMBER	30.12	1.00
DECEMBER	35.22	1.21
Annual Total	401.61	1.11

2022		
	Total	AVERAGE
JANUARY	37.25	1.20
FEBRUARY	33.8	1.21
MARCH	33.28	1.07
APRIL	32.98	1.1
MAY	35.86	1.16
JUNE	29.9	1.00
JULY	29.78	0.96
AUGUST	30.19	1.01
SEPTEMBER	29.62	0.96
OCTOBER	29.02	0.94
NOVEMBER	30.09	1.00
DECEMBER	35.38	1.14
Annual Total	387.15	1.06

2023		
	Total	AVERAGE
JANUARY	36.55	1.21
FEBRUARY	28.96	1.03
MARCH	30.46	1.02
APRIL	29.52	0.98
MAY	30.78	0.99
JUNE	29.64	0.99
JULY		
AUGUST		
SEPTEMBER		
OCTOBER		
NOVEMBER		
DECEMBER		
Annual Total	185.91	1.04

2021		
	Total	AVERAGE
JANUARY	0.52	0.07
FEBRUARY	2.22	0.08
MARCH	4.22	0.14
APRIL	1.12	0.04
MAY	0.89	0.03
JUNE	3.37	0.11
JULY	3.9	0.13
AUGUST	3.6	0.12
SEPTEMBER	4.53	0.15
OCTOBER	3.94	0.13
NOVEMBER	3.73	0.12
DECEMBER	0.51	0.07
Annual Total	32.55	0.10

2022		
	Total	AVERAGE
JANUARY	0	0
FEBRUARY	0	0
MARCH	4.34	0.14
APRIL	4.68	0.16
MAY	6.03	0.19
JUNE	6.21	0.21
JULY	6.48	0.21
AUGUST	7.01	0.23
SEPTEMBER	7.11	0.24
OCTOBER	7.27	0.23
NOVEMBER	6.94	0.23
DECEMBER	6.73	0.22
Annual Total	62.8	0.17

2023		
	Total	AVERAGE
JANUARY	7.3	0.24
FEBRUARY	6.38	0.23
MARCH	6.41	0.21
APRIL	6.13	0.20
MAY	6.30	0.20
JUNE	6.89	0.23
JULY		
AUGUST		
SEPTEMBER		
OCTOBER		
NOVEMBER		
DECEMBER		
Annual Total	39.41	0.21833333

CHARLES TOWN UTILITY BOARD
WATER TREATMENT PLANT FLOW DATA

CHARLES TOWN WATER PLANT FLOW DATA						
YEAR	Total Design (MGD)	TOTAL ANNUAL FLOW (MG)	AVERAGE DAILY (MGD)	Total Design minus Average Daily	Total Available (gpd)	Total Available (EDU's)
2019	2.8	644.32	1.77	1.03	1,034,980	6,900
2020	2.8	615.64	1.68	1.12	1,117,946	7,453
2021	2.8	601.87	1.64	1.16	1,164,627	7,764
2022	2.8	588.97	1.60	1.20	1,204,163	8,028
2023	2.8	298.72	0.82	1.98	1,979,588	13,197

2021		
	Total	AVERAGE
JANUARY	50,030,727	1,613,894
FEBRUARY	45,304,029	1,618,001
MARCH	50,881,983	1,641,354
APRIL	49,098,224	1,636,607
MAY	53,910,537	1,739,050
JUNE	53,051,728	1,711,346
JULY	53,198,248	1,716,073
AUGUST	54,959,872	1,772,899
SEPTEMBER	49,200,580	1,587,115
OCTOBER	49,336,781	1,591,509
NOVEMBER	45,777,260	1,476,686
DECEMBER	47,118,143	1,519,940
Annual Total	601,868,112	1,635,373

2022		
	Total	AVERAGE
JANUARY	47,918,736	1,545,766
FEBRUARY	43,703,896	1,560,853
MARCH	48,063,482	1,550,435
APRIL	47,294,978	1,525,644
MAY	49,834,352	1,607,560
JUNE	49,111,936	1,584,256
JULY	51,919,787	1,674,832
AUGUST	51,872,384	1,673,303
SEPTEMBER	50,844,952	1,640,160
OCTOBER	50,572,280	1,631,364
NOVEMBER	47,643,899	1,536,900
DECEMBER	50,188,260	1,618,976
Annual Total	588,968,942	1,595,837

2023		
	Total	AVERAGE
JANUARY	50,324,969	1,623,386
FEBRUARY	44,512,256	1,589,723
MARCH	51,243,776	1,653,025
APRIL	49,507,092	1,597,003
MAY	51,882,496	1,673,629
JUNE	51,245,216	1,708,174
JULY		0
AUGUST		0
SEPTEMBER		0
OCTOBER		0
NOVEMBER		0
DECEMBER		0
Annual Total	298,715,805	820,412

GLEN HAVEN WATER PLANT FLOW DATA						
YEAR	Total Design (MGD)	TOTAL ANNUAL FLOW (MG)	AVERAGE DAILY (MGD)	Total Design minus Average Daily	Total Available (gpd)	
2020	0.0216	1.04	0.01	0.01	13,120	
2021	0.0216	3.06	0.01	0.01	13,213	-
2022	0.0216	2.70	0.01	0.01	14,335	-
2023	0.0216	0.00	0.00	0.02	21,600	-

2021		
	Total	AVERAGE
JANUARY	242,200	7,813
FEBRUARY	203,500	7,268
MARCH	241,800	8,636
APRIL	262,300	8,743
MAY	289,700	9,345
JUNE	276,500	8,919
JULY	302,900	9,771
AUGUST	302,900	9,771
SEPTEMBER	227,800	7,348
OCTOBER	285,100	9,197
NOVEMBER	227,200	7,329
DECEMBER	201,500	6,500
Annual Total	3,063,400	8,387

2022		
	Total	AVERAGE
JANUARY	204,300	6,590
FEBRUARY	178,600	5,761
MARCH	191,200	6,168
APRIL	222,000	7,161
MAY	237,300	7,655
JUNE	286,600	9,245
JULY	301,600	9,729
AUGUST	262,800	8,477
SEPTEMBER	221,600	7,148
OCTOBER	236,700	7,635
NOVEMBER	215,200	6,942
DECEMBER	144,500	4,661
Annual Total	2,702,400	7,265

2023		
	Total	AVERAGE
JANUARY	233,300	7,526
FEBRUARY	184,300	5,945
MARCH	218,200	7,039
APRIL	234,800	7,574
MAY	264,800	8,542
JUNE	268,900	8,674
JULY		0
AUGUST		0
SEPTEMBER		0
OCTOBER		0
NOVEMBER		0
DECEMBER		0
Annual Total	1,404,300	3,775

CAVALAND WATER PLANT FLOW DATA						
YEAR	Total Design (MGD)	TOTAL ANNUAL FLOW (MG)	AVERAGE DAILY (MGD)	Total Design minus Average Daily	Total Available (gpd)	
2020	0.036	0.59	0.00	0.03	31,210	
2021	0.036	1.91	0.01	0.03	30,766	
2022	0.036	0.00	0.00	0.03	31,041	
2023	0.036	0.00	0.00	0.04	36,000	

2021		
	Total	AVERAGE
JANUARY	150,900	4,868
FEBRUARY	132,900	4,746
MARCH	145,800	5,207
APRIL	152,900	5,097
MAY	177,900	5,739
JUNE	159,000	5,129
JULY	169,600	5,471
AUGUST	177,300	5,719
SEPTEMBER	175,600	5,665
OCTOBER	176,000	5,677
NOVEMBER	151,200	4,877
DECEMBER	143,000	4,613
Annual Total	1,912,100	5,234

2022		
	Total	AVERAGE
JANUARY	150,100	4,842
FEBRUARY	127,200	4,103
MARCH	130,300	4,203
APRIL	141,600	4,568
MAY	145,000	4,677
JUNE	155,500	5,016
JULY	173,500	5,597
AUGUST	167,200	5,394
SEPTEMBER	138,500	4,468
OCTOBER	144,300	4,655
NOVEMBER	145,300	4,687
DECEMBER	226,300	7,300
Annual Total	1,844,800	4,959

2023		
	Total	AVERAGE
JANUARY	134,900	4,352
FEBRUARY	122,700	3,958
MARCH	140,000	4,516
APRIL	143,100	4,616
MAY	153,400	4,948
JUNE	166,200	5,361
JULY		0
AUGUST		0
SEPTEMBER		0
OCTOBER		0
NOVEMBER		0
DECEMBER		0
Annual Total	860,300	2,313

VENDOR SORT KEY	DESCRIPTION	FUND	DEPARTMENT	AMOUNT

========== FUND TOTALS ==========	
50 WATER FUND	100,938.83
60 SEWER FUND	566,764.24
GRAND TOTAL:	667,703.07

TOTAL PAGES: 6

APPROVED BY: _____

APPROVED BY: _____

This Packet:	$ 667,703.07
Security Deposit Refunds:	1,128.88
WVCorp, check dated 7/01/23:	41,494.00
Total:	$ 710,325.95

Note:

Highlighted are for the R&R Project;

Highlighted is to be reimbursed with Capacity Improvement Fees

VENDOR SORT KEY	DESCRIPTION	FUND	DEPARTMENT		AMOUNT
THE CI THORNBURG CO, INC.	CHLORINE	WATER FUND	WATER		2,585.00
				TOTAL:	2,585.00
U.S. BANK	PCARD 9146	WATER FUND	WATER		488.50
	PCARD 9146	WATER FUND	WATER		35.10
	PCARD 9146	WATER FUND	WATER		681.16
	PCARD 9146	WATER FUND	WATER		888.70
	PCARD 9146	WATER FUND	WATER		746.45
	PCARD 9146	WATER FUND	WATER		252.98
	PCARD 9146	WATER FUND	WATER		69.50
	PCARD 9146	WATER FUND	WATER		1,939.46
	PCARD 9146	SEWER FUND	SEWER		596.58
	PCARD 9146	SEWER FUND	SEWER		35.09
	PCARD 9146	SEWER FUND	SEWER		1,603.26
	PCARD 9146	SEWER FUND	SEWER		138.44
	PCARD 9146	SEWER FUND	SEWER		3,892.95
	PCARD 9146	SEWER FUND	SEWER		858.96
	PCARD 9146	SEWER FUND	SEWER		911.00
	PCARD 9146	SEWER FUND	SEWER		724.02
	PCARD 9146	SEWER FUND	SEWER		1,727.06
				TOTAL:	15,589.21
HD SUPPLY INC	BIO-BLOCK, PIPE PLUG, FLAG	SEWER FUND	SEWER		473.26
	TEST TUBES, BALL PLUG, HOS	SEWER FUND	SEWER		1,037.88
	TEST TUBES, BALL PLUG, HOS	SEWER FUND	SEWER		44.25
	TEST TUBES	SEWER FUND	SEWER		63.42
	CHERNE GRIPPER 3" ENDSTYLE	SEWER FUND	SEWER		9.83
				TOTAL:	1,628.64
WAKEFIELD & ASSOCIATES INC	JUNE COLLECTIONS	WATER FUND	WATER		105.20
	JUNE COLLECTIONS	SEWER FUND	SEWER		105.19
				TOTAL:	210.39
MIKE WEAVER	CELL PHONE REIMBURSEMENT	WATER FUND	WATER		150.00
				TOTAL:	150.00
STEVE WILLIAMS JR	CELL PHONE REIMBURSEMENT	WATER FUND	WATER		150.00
				TOTAL:	150.00
WINCHESTER METALS, INC	HOT ROLLED PLATE	SEWER FUND	SEWER		184.16
				TOTAL:	184.16
WIRELESS NETWORKS GROUP, INC.	MISC SVCS, JUNE	WATER FUND	WATER		5,900.00
				TOTAL:	5,900.00
WV WATER DEVELOPMENT AUTHORITY	#2017-175 INFRSTRCTR FNDPR	SEWER FUND	NON-DEPARTMENTAL		1,005.12
				TOTAL:	1,005.12

VENDOR SORT KEY	DESCRIPTION	FUND	DEPARTMENT		AMOUNT
	PETTY CASH- MISC RECEIPTS	SEWER FUND	SEWER		17.33
	PETTY CASH- MISC RECEIPTS	SEWER FUND	SEWER		15.00
				TOTAL:	78.30
PUBLIC SERVICE COMMISSION OF WV	INTRASTATE REVENUE ASSESME	WATER FUND	WATER		12,512.29
	INTRASTATE REVENUE ASSESME	WATER FUND	WATER		8,273.13
				TOTAL:	20,785.42
PYRZ WATER SUPPLY CO, INC	PERISTALTIC PUMP	SEWER FUND	SEWER		6,500.00
				TOTAL:	6,500.00
RAILROAD MGMT CO, IV LLC	RANSON, PIPE SWR LICNSE FE	SEWER FUND	SEWER		647.31
				TOTAL:	647.31
CORPORATION OF RANSON	JUNE UT COLLECTIONS	WATER FUND	NON-DEPARTMENTAL		3,660.45
				TOTAL:	3,660.45
OSCAR REYES	CELL PHONE REIMBURSEMENT	SEWER FUND	SEWER		150.00
				TOTAL:	150.00
RK & K ENGINEERS	TO22 GRNFLD FRC MN UPGRDS	SEWER FUND	NON-DEPARTMENTAL		2,779.42
				TOTAL:	2,779.42
SG PLUMBING, INC.	S CHURCH ST	SEWER FUND	SEWER		1,575.00
	WASHINGTON ST	SEWER FUND	SEWER		2,874.31
	LIBERTY ST	SEWER FUND	SEWER		2,192.94
				TOTAL:	6,642.25
ROBBIE SHIPE	CELL PHONE REIMBURSEMENT	SEWER FUND	SEWER		150.00
				TOTAL:	150.00
APRIL SHULTZ	CELL PHONE REIMBURSEMENT	WATER FUND	WATER		75.00
	CELL PHONE REIMBURSEMENT	SEWER FUND	SEWER		75.00
				TOTAL:	150.00
SPRINT	MONTHLY CELL SERVICE	WATER FUND	WATER		151.52
	MONTHLY CELL SERVICE	SEWER FUND	SEWER		247.45
				TOTAL:	398.97
DAVID STAUBS	CELL PHONE REIMBURSEMENT	SEWER FUND	SEWER		150.00
				TOTAL:	150.00
STEPTOE & JOHNSON PLLC	GENERAL EMPLOYER COUNSELIN	WATER FUND	WATER		40.62
	GENERAL ENVIRONMENTAL	SEWER FUND	SEWER		9,965.00
	GENERAL EMPLOYER COUNSELIN	SEWER FUND	SEWER		40.63
				TOTAL:	10,046.25
ASHLEY STOTTLEMYER	CELL PHONE REIMBURSEMENT	WATER FUND	WATER		75.00
	CELL PHONE REIMBURSEMENT	SEWER FUND	SEWER		75.00
				TOTAL:	150.00
GERALD TAYLOR CO., INC.	PUMP / TRANSPORT	WATER FUND	WATER		758.44
	TRANSPORT	SEWER FUND	SEWER		1,039.50
	SUPERVAC	SEWER FUND	SEWER		2,417.60
				TOTAL:	4,215.54

VENDOR SORT KEY	DESCRIPTION	FUND	DEPARTMENT	AMOUNT
			TOTAL:	3,316.50
PROTOUCH COMMUNICATIONS, LLC	JUN SVCS: AFTER HRS-EMERGE	WATER FUND	WATER	100.33
	JUN SVCS: AFTER HRS-EMERGE	SEWER FUND	SEWER	100.33
			TOTAL:	200.66
INWOOD QUARRY, INC.	C1 PICKUPS: 7/05/23	WATER FUND	WATER	291.42
	C1 PICKUPS: 7/05/23	WATER FUND	WATER	291.43
	C1 & I10 PICKUPS: 7/10/23	WATER FUND	WATER	453.47
	C1 & I10 PICKUPS: 7/10/23	WATER FUND	WATER	453.48
			TOTAL:	1,489.80
IRON MOUNTAIN, INC	SHREDDING, STORAGE	WATER FUND	WATER	462.48
	SHREDDING, STORAGE	SEWER FUND	SEWER	462.48
			TOTAL:	924.96
KM ELECTRICAL SOLUTIONS LLC	SOLENOID TWWTP	SEWER FUND	SEWER	6,125.00
			TOTAL:	6,125.00
TRAVIS MARKLEY	CELL PHONE REIMBURSEMENT	SEWER FUND	SEWER	150.00
			TOTAL:	150.00
DAVID MARTIN	CELL PHONE REIMBURSEMENT	WATER FUND	WATER	75.00
	CELL PHONE REIMBURSEMENT	SEWER FUND	SEWER	75.00
			TOTAL:	150.00
MCKINNEY'S AUTO REPAIR	WATER VEHICLE SERVICE	WATER FUND	WATER	116.86
	UTILITY MNGR VEHICLE SERVI	WATER FUND	WATER	70.93
	UTILITY MNGR VEHICLE SERVI	SEWER FUND	SEWER	70.93
			TOTAL:	258.72
METLIFE, INC	AD&D PAYABLE	WATER FUND	WATER	8.71
	LIFE PAYABLE	WATER FUND	WATER	42.12
	LTD PAYABLE	WATER FUND	WATER	286.89
	STD PAYABLE	WATER FUND	WATER	304.70
	AD&D PAYABLE	SEWER FUND	SEWER	10.51
	LIFE PAYABLE	SEWER FUND	SEWER	50.88
	LTD PAYABLE	SEWER FUND	SEWER	338.32
	STD PAYABLE	SEWER FUND	SEWER	363.82
			TOTAL:	1,405.95
MISS UTILITY OF WV, INC.	MESSAGE FEES: JUNE	WATER FUND	WATER	362.60
			TOTAL:	362.60
THOMAS NALLS	JUNE TANK LOT RENT	WATER FUND	NON-DEPARTMENTAL	3,832.91
			TOTAL:	3,832.91
CEDRIC NELSON	PER DIEM 7/16 - 7/21/23	WATER FUND	WATER	324.50
			TOTAL:	324.50
PACE ANALYTICAL SERVICES, LLC	TESTING: TUSC WKLY	SEWER FUND	SEWER	135.80
	TESTING: CT WKLY	SEWER FUND	SEWER	225.70
			TOTAL:	361.50
PETTY CASH @ 661 S GEORGE ST	PETTY CASH- MISC RECEIPTS	WATER FUND	WATER	29.32
	PETTY CASH- MISC RECEIPTS	WATER FUND	WATER	16.65

VENDOR SORT KEY	DESCRIPTION	FUND	DEPARTMENT	AMOUNT
			TOTAL:	20,549.71
COYNE CHEMICAL	AMMNMNSLFT40%NSF,HYDRFLSCL	WATER FUND	WATER	3,002.11
	CONTAINER RETURN	SEWER FUND	SEWER	225.00-
	SODIUM HYPOCHLORITE 15%	SEWER FUND	SEWER	691.60
			TOTAL:	3,468.71
CREAMER'S WRECKER SERVICE, LLC	WATER VEHICLE SERVICE	WATER FUND	WATER	461.42
			TOTAL:	461.42
D.R. HORTON, INC.	SEWER UPSIZING PER AMEA	SEWER FUND	NON-DEPARTMENTAL	7,500.00
			TOTAL:	7,500.00
DEPT OF ENVIRONMENTAL PROTECTION	WTP	WATER FUND	WATER	200.00
	RAW WATER INTAKE	WATER FUND	WATER	200.00
	DEERFIELD PRMTRNWL:GRNDWTR	SEWER FUND	SEWER	214.80
	WWTP	SEWER FUND	SEWER	200.00
	NORTHPORT PS	SEWER FUND	SEWER	200.00
	TWWTP	SEWER FUND	SEWER	200.00
	WAR ADMIRAL PS	SEWER FUND	SEWER	200.00
			TOTAL:	1,414.80
ENCOVA INSURANCE	INSTALLMENT	WATER FUND	WATER	2,576.08
	INSTALLMENT	SEWER FUND	SEWER	2,377.92
			TOTAL:	4,954.00
STEVEN FARIAS	CELL PHONE REIMBURSEMENT	SEWER FUND	SEWER	150.00
			TOTAL:	150.00
FRONTIER COMMUNICATIONS	304-876-2120-111514-4	WATER FUND	WATER	111.60
	304-876-9970-121914-4	WATER FUND	WATER	111.60
			TOTAL:	223.20
GUTTMAN ENERGY	W/E 6/25/23	WATER FUND	WATER	232.15
	W/E 7/02/23	WATER FUND	WATER	986.05
	W/E 7/09/23	WATER FUND	WATER	444.90
	W/E 6/25/23	SEWER FUND	SEWER	871.54
	W/E 6/25/23	SEWER FUND	SEWER	36.11
	W/E 7/02/23	SEWER FUND	SEWER	898.93
	W/E 7/02/23	SEWER FUND	SEWER	317.03
	W/E 7/09/23	SEWER FUND	SEWER	663.33
			TOTAL:	4,450.04
GWIN DOBSON & FOREMAN INC	KNGS XNG WTP SLDGEFRCMN TI	WATER FUND	NON-DEPARTMENTAL	1,550.68
	WA RETAINER SVCS	WATER FUND	WATER	1,548.17
	WWTP UPGRADES	SEWER FUND	NON-DEPARTMENTAL	4,430.45
	WWTP UPGRADES	SEWER FUND	NON-DEPARTMENTAL	19,622.38
	WW RETAINER SVCS	SEWER FUND	SEWER	1,394.90
	EPA ADMIN ORDER	SEWER FUND	SEWER	1,238.25
			TOTAL:	29,784.83
ANDREAS HALE	CELL PHONE REIMBURSEMENT	SEWER FUND	SEWER	150.00
			TOTAL:	150.00
RIVER ROCK HOLDINGS INC	CABLE INSTALLS 3 LOCATIONS	WATER FUND	NON-DEPARTMENTAL	336.50
	INSTALL CCTV CAMERAS	WATER FUND	NON-DEPARTMENTAL	2,980.00

VENDOR SORT KEY	DESCRIPTION	FUND	DEPARTMENT	AMOUNT
3RD TIME TRUCKING	HAULING	WATER FUND	WATER	723.10
			TOTAL:	723.10
ALS GROUP USA CORP	TESTING: WV3301905	WATER FUND	WATER	436.00
	TESTING	WATER FUND	WATER	140.00
	TESTING: GH	WATER FUND	WATER	349.00
	TESTING: TUSC & CT	SEWER FUND	SEWER	225.00
	TESTING: TUSC & CT	SEWER FUND	SEWER	525.00
			TOTAL:	1,675.00
ALVAREZ CONTRACTORS, INC	WWTP PROJECT	SEWER FUND	NON-DEPARTMENTAL	432,539.77
			TOTAL:	432,539.77
AMERIGAS	TANK RENTAL: GH	WATER FUND	WATER	239.82
	TANK RENTAL: JOB CORPS	SEWER FUND	SEWER	133.29
	TANK RENTAL: JOB CORPS	SEWER FUND	SEWER	133.29
			TOTAL:	506.40
NEAL O NILSEN	OFFICE 365 BASIC - 25 USER	WATER FUND	WATER	78.00
	OFFICE 365 BASIC - 25 USER	WATER FUND	WATER	78.00
	OFFICE 365 BASIC - 25 USER	SEWER FUND	SEWER	78.00
	OFFICE 365 BASIC - 25 USER	SEWER FUND	SEWER	78.00
			TOTAL:	312.00
JP & RF BURNS PARTNERSHIP	JUNE LOADS - 63	SEWER FUND	SEWER	11,277.00
			TOTAL:	11,277.00
BRODY CARPER	CELL PHONE REIMBURSEMENT	SEWER FUND	SEWER	150.00
			TOTAL:	150.00
CHARLES TOWN SEWER	JUNE FUNDING	SEWER FUND	NON-DEPARTMENTAL	13,706.49
			TOTAL:	13,706.49
CHARLES TOWN WATER	JUNE FUNDING	WATER FUND	NON-DEPARTMENTAL	9,581.96
			TOTAL:	9,581.96
CITY NATIONAL BANK	LOCKBOX SVCS: JUNE	WATER FUND	WATER	141.32
	LOCKBOX SVCS: JUNE	SEWER FUND	SEWER	141.32
			TOTAL:	282.64
CITY OF CHARLES TOWN	UB COLLECTIONS JUNE	WATER FUND	NON-DEPARTMENTAL	17,114.37
	JUL RENT@ 661 S GEORGE ST	WATER FUND	WATER	1,275.00
	MAY UTILITIES@ 661 S GEORG	WATER FUND	WATER	684.05
	JUL RENT@ 661 S GEORGE ST	SEWER FUND	SEWER	1,275.00
	MAY UTILITIES@ 661 S GEORG	SEWER FUND	SEWER	684.05
			TOTAL:	21,032.47
CORE & MAIN	SETTER	WATER FUND	WATER	4,106.64
	SETTER	WATER FUND	WATER	4,106.64
	COUPLING	WATER FUND	WATER	6.41
	NIPPLE, TEE, ST90	WATER FUND	WATER	74.96
	PIPE,CLNOUTADPT&PLG,GSKT,C	SEWER FUND	SEWER	6,363.80
	CPLG	SEWER FUND	SEWER	934.80
	CPLG, FLG, PIPE	SEWER FUND	SEWER	2,033.55
	VLVBXW/LID, PVCTRNSGSKT, C	SEWER FUND	SEWER	2,470.46
	MJREDC153, UFR1400-DA-6URE	SEWER FUND	SEWER	452.45