

City Manager's Weekly Report

Department:

Administration - City Manager

Notable Notes:

City Manager:

Finance Director Del Grande and I finalized the budget message and presentation for the November 7th budget hearing this week. We are hopeful that Council will approve the budget as proposed on 11/7 which will allow us to cancel the meeting tentatively scheduled for 11/21 as a second budget hearing. In the interim, staff has begun work on the various revenue ordinances that will be required to implement the changes proposed in the budget for 2023 so they can be approved and effective 1/1/23.

I met with several councilmembers this week on general items related to the budget and district specific items raised by their constituents. Each of these meetings generated a list of follow-up items that I distributed to the appropriate staff members to address or answer. Mayor Markham has been appointed to the "Local Governments Committee" of the State's Prescription Opioid Settlement Distribution Commission. This was included as part of the settlement agreement that Council signed onto during 2021. The commission is tasked with distributing funds that come to Delaware in accordance with settlement agreements and 2021's Senate Bill 166 which created the commission and outlined requirements for how the funding can be used. I reviewed documents provided to Mayor Markham on funding applicability to assist him in generating potential ideas for funding opportunities for Newark and our local non-profits that are directly involved in the fight against opioid addiction in Newark. The State anticipates this commission will be in place for at least 10 years, the term of some of the settlement agreement funding streams, but it could last longer.

Planning Director Bensley, Mayor Markham, and I met with consultants hired by UD to create a strategic plan related to UD student housing on November 2. A follow up meeting will be scheduled with Director Bensley to discuss private development projects related to housing in the City.

The remainder of the week was spent on preparation of items for the 11/14 Council meeting, meeting with representatives from our worker's compensation insurance carrier, general administrative tasks, and personnel related items.

Human Resources:

- The HR team had no new postings this week. There are currently two external postings that will close on November 4. One is a full-time Digital Records Coordinator

and the other is for Part-Time Parking Ambassadors. There are two other postings that will be closing on Friday, November 11. One is for a temporary, Part-Time Carpenter and the other is for a full-time Administrative Professional I in the City Secretary's Office.

- We also have several other postings that are open until filled including Police Officer and Before and After Care positions in Parks and Recreation. Please visit the City website for current job postings.
- Ms. Hardin was asked to participate as a panelist for the Delaware Institute for Local Government Leaders event on Thursday, November 3 at the Maple Dale Country Club. The topic of discussion was Workforce Recruitment Challenges and Success Stories. The event was sponsored by The Institute for Public Administration, the Delaware League of Local Governments and the Sustainable Coastal Communities Initiative. (See attached event flyer).
- The City had a new Communications Officer start on Monday, October 31. Onboarding took place on Monday as well.
- An offer was made to one of the candidates for the Maintenance I in PW&WR/Street Division which was accepted, and the employee will start on Monday, November 7. Another conditional offer was made and accepted for the Maintenance I in PW&WR/Refuse Division. Pre-employment tests are pending.
- A conditional offer was made to a certified police officer. The start date is pending completion of pre-employment testing.
- The HR Team continues to support the Newark PD with recruitment efforts to hire new and certified police officers. There are several candidates who are scheduled to take the test and who have taken the test. Those who have passed the written exam will be scheduled for oral board interviews which are scheduled for November 9.
- Ms. Hardin spent the majority of her time attending to personnel matters, labor relations, assisting employees with pension matters, processing death benefits, attending meetings, and following up on emails and phone messages.
- Open enrollment started on Monday, October 31. Mr. Martindale sent emails to employees reminding them of the open enrollment process. Open enrollment will conclude on Friday, November 11.
- Ms. Bradshaw and the City's Fire Protection Specialist held a fire drill at City Hall before lunch time to test out recent protocols provided to each department. All employees made it out of the building safely and without hesitation. Another fire drill is scheduled before the end of the year.
- Finally, Ms. Hardin participated on the interview panel for the position of Customer Service Representative I in the PUBS (Payments and Utility Billing) Division of Finance. Three applicants were interviewed on the afternoon of Thursday, November 3. There are two final interviews on the afternoon of Friday, November 4.

Purchasing/Facilities Maintenance:

CPPO Jeff Martindale's week was dominated by Open Enrollment. Open Enrollment will run through Friday, 11/11 and then all changes must be submitted to DVHT by Friday, 11/18 to ensure employee changes are reflected by 1/1/23. So, most of his reports for the

month of November will look repetitive in this regard.

Mr. Martindale also coordinated several needed facilities projects that must be completed by year-end. A budget amendment will be on the 11/14 consent agenda to make funds available for (1) railings for new concrete stairs at the Municipal Complex, (2) pressure washing of the Municipal Complex, and (3) holiday light rentals for City Hall from 11/28 – 12/30.

There were two bid openings this week for Contract 22-14 (2022 Street Improvement Program) and RFP 22-03 (Insurance Consulting and Risk Management Services). Three proposals were received for both items.

Attached to this report is the Construction Year ('20-'21) Measurement and Verification Report from Energy Savings Company (ESCO) Seiberlich Trane Energy Services (STES). This report shows the verified energy savings the City received from the construction year of the energy savings performance contract project with STES. There were no guaranteed savings for the construction year given that not all items would be in place simultaneously, but STES has completed calculations to show that there were \$91,731 in verified energy savings during the period. The annual project savings summary for guaranteed and forecasted savings over the next 10 years can be found on page 3 of the report. City staff will meet with STES to dive into this report further and may set time on a future Council agenda to discuss the savings in more detail.

The rest of the week was spent on items related to ESCO 2 and grant application follow ups. The City was unsuccessful in receiving a grant worth \$115,000 from the American Public Power Association for our installation of LEDs throughout the City during ESCO 1.

Communications:

Chief Communications Officer:

- Continuing to plan the employee Veterans Day appreciation lunch.
- Beginning to organize the ribbon cutting for the Delaware Avenue bike lane with DelDOT.
- Working with the HR team on a proposal to UD on behalf of Mayor Markham.
- Assisting the IT Apps team with the messaging for the switch to SilverBlaze.
- Working with IT Apps and Tyler on branding and messaging for the app launch.
- Helping Mayor Markham with upcoming event at NUC, working with intern to draft advisories, schedule, etc.
- Completed the Recycle Coach raffle giveaway with TNP.
- Drafted a press release to announce the HCTC award presented to the IT Apps team at their national conference.

Communications Assistant:

- Log Miss Utility tickets for Electric and PW&WR.
- Edit copy from various departments.
- Adding and updating InformMe customer information.
- Create and share content on social media.
- Working on Employee Wellness Committee and Family Promise projects.
- Facilitated the CVS vaccine clinic.

Creative Designer & Web Specialist:

- Public meeting notices have been sent via InformMe.
- The City Council Minutes webpage has been updated with the latest audio minutes.
- Tickets from the RequestTracker website were forwarded to the appropriate department.
- Budget Central has been updated with documents for the 2023 Budget Hearing.
- Created City/Department/Division Forms for Human Resources.
- Nicole Perregrino and Michael Gallagher were assigned Everbridge PD dispatcher accounts.
- City website updated with November's Newark Newsletter.
- The Hillside Park Ribbon Cutting Program has been redesigned to fit two per page.

Activity or Project:

Description:

Status:

Expected Completion:

Execution Status:

Activity or Project:

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Expected Completion:

Execution Status:

City Manager's Weekly Report

Department:

Alderman's Court

Notable Notes:

Alderman's Court held three court sessions from 10/27/22 - 11/2/22. These sessions included arraignments, trials, capias returns, video hearings, and a code violation. Parking Ambassadors were here on Tuesday and Wednesday to handle any parking appeals in person.

Terri participated in a virtual manager's meeting on 10/27/22.

The bailiffs will have their final weapons requalification on 11/5/22.

The court processed 16 PBJ's for traffic violations and 4 Plea by Mails for criminal violations.

Activity or Project:

Payments and Court Sessions

Description:

From 10/27/22 - 11/2/22 Alderman's Court handled 40 arraignments, 50 trials, 16 capias returns, 5 video hearings, and 1 code violation. The court collected a total of 481 parking payments of which 402 were paid online and 79 were paid at court. The court also collected criminal/traffic payments of which 119 were paid online and 29 were paid at court for a total of 148 criminal/traffic payments.

Status:	Completed
Expected Completion:	11-02-2022
Execution Status:	Completed

Activity or Project:**Description:**

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Expected Completion:	
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Activity or Project:**Description:**

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Execution Status:

City Manager's Weekly Report

Department:

City Secretary and City Solicitor's Office

Notable Notes:

The week of 10/27/2022 – 11/02/2022

The legal team was in the office on the following days:

Paul Bilodeau – 11/02.

Bobby O'Neill – 10/27 for Court.

Danielle Mapp-Purcell, Paralegal, prepared the court docket for the November 17th and fulfilled 17 discovery requests with 35 discovery requests remaining in process. Closed 7 FOIA requests. Circulated 4 FOIA requests to staff.

Meetings and minutes:

October 10th Council and October CAC minutes edited.

October 17th underway.

October 24th Council on deck.

November Meetings Update:

November 3 – Joint Council/Planning Commission - CANCELLED

November 7 – Budget Workshop Presentation

November 8 – Conservation Advisory Commission

November 14 – City Council

November 17 – Board of Adjustment - CANCELLED

November 21 – City Council

November 22 – Diversity and Inclusion Commission

November 28 – City Council

Legislative Clerical Projects/Processes:

Vacancies remain for the various City boards. Council is actively engaged in filling positions, and staff have received a few applications which have been forwarded to Council. Staff is scheduling appointments for the November 14th agenda. Networks students processed one box of documents for destruction.

Scanning continues for all new documents processed within the department with back scanning completed as time allows. Modification continues upon discovery of duplicate documents – 105 documents created, 592 pages scanned, and 40 documents modified.

Council and Boards & Commissions agendas posted to the atrium and website.

Lien certificate requests processed during the past weeks are as follows:

- 14 received by attorneys and sent to Finance for processing.
- 23 completed by City staff and returned to the processing attorney.

To date 541 lien certificates have been processed for 2022.

Scanner Count: 3,006 Last week 397 = 2,609

Activity or Project:

Description:

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Completion:**

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Activity or Project:

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Execution Status:

City Manager's Weekly Report

Department:

Finance Department

Notable Notes:

2022-2023 Tax Billing: Tax bills were mailed out to property owners who did not pay their tax bills by 9/30 back on October 17. Reminder that the 2022/2023 tax bills were due on September 30 to avoid paying a late penalty. The 2022-2023 property tax rate is \$0.9348 per \$100 of assessed value, which reflects a 2.5% increase from last year. For more information, please visit: <https://newarkde.gov/134/Property-Taxes>.

2023 Annual Budget: City Manager Coleman and Director Del Grande presented the 2023 Recommended Operating Budget along with the 2023-2027 Recommended Capital Improvement Program on October 11th. On October 18, the CIP was presented to the Planning Commission, which they unanimously are recommending Council support. The next budget meeting will be on November 7th, when the budget can be voted on for the first time. The City is experiencing inflationary costs across all budget lines. Rate adjustments are primarily to cover the rising costs of providing services to our constituents. For example, the cost to provide refuse service to our residents has gone up to \$350 per household vs. the \$300 it was a couple of years ago. All budget information can be found on Budget Central. <https://newarkde.gov/1007/Budget-Central-2023>.

Staff conducted interviews for the Customer Service Representative vacancy on November 3 and 4.

Accounting staff performed our annual inventory on November 3 at the Field Operations Complex, where all inventory is counted to establish a financial value for our financial statements.

Electric bills reflecting the revised RSA rate started mid-October. To maintain statewide electric grid reliability and ensure enough energy is available, our regional grid operator, PJM, designated the Indian River coal plant as a “Reliability Must Run (RMR) Unit”, making it unable to shutdown. The Indian River coal plant was a necessary component to Delaware and Maryland’s electric supply that provided stability to our electric grid. Until system upgrades (new transmission lines) are completed by Delmarva Power, Indian River Power is required to stay operational over the next 4.5 years. The Federal Energy Regulatory Commission (FERC) allows for a cost-of-service recovery rate in these situations, which means that all electric customers on the Delmarva Peninsula are responsible for paying a cost to keep the plant in operation while these new transmission lines are completed. Newark’s share of this expense is approximately \$2.3 million annually, or \$10.3 million this cost, regardless of whether their utility directly receives power from Indian River Power. The City will be adjusting the RSA rate to accommodate this increase in electric that’s being passed along to us. DEMEC’s attorneys are working on finding a resolution to this issue, but we still need to pay these additional costs until a resolution can be achieved.

Activity or Project:

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Information Technology Department

Notable Notes:

Applications Team:

Open Support Tickets from Previous Week - 40

Open Project Tickets from Previous Week - 18

Open Tickets with Vendor R&D from Previous Week - 17

Tickets Opened in the Last Two Weeks - 56

Tickets Closed in the Last Two Weeks - 54

Remaining Open Support Tickets - 41

Remaining Open Project Tickets - 19

Remaining Tickets with Vendor R&D - 17

Summary of meetings attended 10/20-11/02:

Applications Manager Montgomery & Applications Analyst Karanja held a meeting with Finance to discuss general billing workflow on 10/21. Applications Support Administrator Nichols along with PUB Manager Prado attended the Harris CSR7 meeting to discuss move in/move out workflow on 10/24. IT Applications & Infrastructure teams attended the SilverBlaze weekly status call meeting with Harris Computers on 10/25 & 11/1. Applications Manager Montgomery & Applications Support Administrator Nichols held a meeting with Finance to discuss Harris year end automation processes on 10/28. Applications Manager Montgomery & Applications Analyst Karanja attended a meeting with CED and Finance to discuss open AR and annual business license billing on 11/1.

1. Assisted billing technician with connection to NCC new ftp site.
2. Provided annual water consumption data to NCC.
3. Assisted billing technician with resolving stormwater data file fatal errors.
4. Assisted Manager Petersen with transfer of overpayment process in ERP.

5. Updated names levels for Parking staff in ESS to make visible to their respective managers.
6. Reviewed deposit transfer batch for PUB and provided feedback prior to posting.
7. Assisted PUB with lockbox import file not matching settlement report.
8. Updated list of valid exempt codes in stormwater database.
9. Worked with Tyler to resolve issue with TCM after SSL certificate update.
10. Resolved template issue in ERP for CED staff.
11. Resolved scheduled report issue in ERP for Accounting staff.
12. Reviewed balancing issue for PUB and provided feedback for posting.
13. Imported meter marriage files for Water Division.
14. Performed monthly central property update in ERP.
15. Assisted with document merge in ERP, mapped fields for user.
16. Reviewed incorrect payment posting issue for PUB and provided feedback for correction.
17. Worked on and resolved support tickets for end users.
18. Created reports for users as requested.

Infrastructure Team:

Open Support Tickets from Previous Week - 114

Open Project Tickets from Previous Week - 46

Tickets Opened in the Last Two Weeks - 283

Tickets Closed in the Last Two Weeks - 254

Remaining Open Support Tickets - 145

Remaining Open Project Tickets - 44

1. Account review with Verizon.
2. Attended Local Cybersecurity Grant focus group meetings.
3. Held project status calls with SecureWorks.
4. Assisted Accounting team with annual inventory project.
5. Deployed 10 new workstations and monitors.
6. Continued implementation of security awareness platform.
7. Attended training on MITRE ATT&CK framework.

Activity or Project:

Harris Server Migration/SilverBlaze (Applications & Infrastructure)

Description:

SERVER MIGRATION:

Phase I - Planning & Scoping (COMPLETED)

Phase II - Development: 5/24-6/24 (COMPLETED)

Phase III - User Acceptance Testing (Updated dates): 6/27 - 8/12 (COMPLETED)

Phase IV - Deployment to PROD (Updated dates): 8/15 - 8/21 (COMPLETED)

Phase V - Post Live Support: 8/22 - 9/3 (COMPLETED)

SILVERBLAZE:

Phase I - Planning & Scoping: 8/8-8/19 (COMPLETED)

Phase II - Design: 4/18-8/15 (COMPLETED)

Phase III - Development (Updated dates) : 8/29-11/18 (IN PROGRESS)

Phase IV - User Acceptance Testing (Updated dates): 11/7-12/5 *Tentative*

Phase V - Deployment to PROD (Updated dates): 12/5-12/20 *Tentative

Phase VI - Post Live Support (Updated dates): 12/20-1/2 *Tentative

Status:	In-Progress
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Expected Completion:	12-31-2022
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Execution Status:	On Track
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Activity or Project:

Data Center Upgrade (Infrastructure)

Description:

Equipment tracking:

2 Racks - Received

4 PDUs - Received

6 VxRails - Received

CyberVault R750s - Received

DD6900 - Received

2 DD4400 - Received

2 R450s - Received

1 S4128 - Received

Pending shipment with expected delivery dates:

N2200s - December 28, 2022

S5224s - November 9, 2022

Status:	Started
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Expected Completion:	12-31-2022
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Execution Status:	On Track
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Activity or Project:**Description:**

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Expected Completion:	
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Execution Status:	
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City Manager's Weekly Report

Department:

Parks and Recreation Department

Notable Notes:

Held the annual Halloween Party at the George Wilson Center with over 100 participants.

Prepared for and held Newark's Halloween Parade with 50 groups and Trick-or-Treat Main Street with 12 registered groups. Thank you to Mayor Markham, Councilwomen Ford, Councilman McDermott, and Donna Draper for judging the parade and to the local businesses and organizations donating over \$400 worth of prizes for the event.

Completed the striping of youth soccer fields as we head towards the final two weeks of the season.

Completed dead wood trimming of trees in Handloff Park.

Activity or Project:

37th Annual Thanksgiving Day Breakfast

Description:

37th Annual Thanksgiving Day Breakfast will be held Thanksgiving morning November 24 from 8:00 a.m. – 10:30 a.m. at the George Wilson Community Center. Come out and join us for a hearty breakfast and fellowship. This year's menu will include pancakes, eggs, sausage, fruit, coffee, juice, and tea. People over the age of 60 can attend at no cost, all others are \$3 in advance and \$6 at the door. For more information visit www.newarkde.gov/play or call the Recreation Office at 302-366-7000.

Status:	Not Started
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Expected Completion:	11-24-2022
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Execution Status:	On Track
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Activity or Project:**Description:**

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Activity or Project:**Description:**

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Expected Completion:	
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City Manager's Weekly Report

Department:

Planning and Development Department

Notable Notes:

Director's Report

Projects

*BB/RA Zoning District Changes – Planning Commission considered the final changes to Chapter 27, Appendix XIII, Design Review for Downtown Commercial Properties, at their November 1 meeting. The Commissioners voted 5-0 to move the recommendation forward to Council with some minor amendments. Staff spent time preparing the final ordinances and associated materials for Council consideration.

*Nuisance Properties Ordinance – Staff met with representatives from the Newark Landlords Association to review the internal discussions regarding their previous feedback on the nuisance properties ordinance on November 2 and had an internal follow up meeting on November 3. A supplemental memo with amendments that staff would support will be included in the packet for the November 14 public hearing for the bill.

*Development and Implementation of the Transportation Improvement District – Staff finalized and posted the agenda and packet materials for the joint Planning Commission and Council meeting scheduled for Thursday, November 3; however, the meeting was cancelled due to a lack of quorum for the Planning Commission. Staff will be reaching out to both public bodies with potential dates to reschedule.

Meetings (Attended by Land Use, Code Enforcement, and Parking)

*On October 27, Senior Planner Fortner and Planner Higgins staffed the Community Development/Revenue Sharing Advisory Committee meeting to review applications for the 49th Year CDBG program and 2023 Revenue Sharing program. The next meeting will be on November 10. The Committee currently does not have a quorum of members due to vacancies; however, staff is working to get feedback on applications in order to be able to present a recommendation to Council prior to the end of the year as required.

*Staff from Code Enforcement, Finance and IT met to review progress on the business license audit and the 2023 business license billing on November 1. Bills for the upcoming year's business licenses are targeted to go out on November 15.

*On November 1, Senior Planner Fortner and Planner Kennel attended the FEMA National Flood Insurance Program (NFIP) presentation sponsored by DNREC on Best Practices for flood plan management NFIP communities.

*Director Bensley, Planner Solge, and Administrative Professional Dinsmore staffed the Planning Commission meeting on November 1. The Commission approved the final piece

of the recommendation for the BB/RA zoning code changes, approved the recommendation to approve the Comprehensive Plan amendment, rezoning, major subdivision and special use permit for 532 Old Barksdale Road, and reviewed the 2023 draft work plan for Planning Commission.

*Director Bensley, City Manager Coleman and Mayor Markham met with consultants hired by UD to create a strategic plan related to UD student housing on November 2. A follow up meeting will be scheduled with Director Bensley to discuss private development projects related to housing in the City.

*On November 3, Senior Planner Fortner attended the FEMA training sponsored by DNREC on Nonstructural Flood Risk Management.

Land Use

*Deed Transfer Affidavits: 8

*Building Permit Reviews: 15

*The Subdivision Advisory Committee comment letter was finalized and sent to the applicant for the sketch plan development proposal for a convenience store with gas pumps located at 1115 South College Avenue (formerly Friendly's).

*Planning has received comments and compiled the SAC Letter for Minor Subdivision, Comprehensive Development Plan Amendment, and Rezoning at 55 Benny Street.

*Senior Planner Fortner is preparing a report for a Special Use Permit for a restaurant selling alcohol for the Greene Turtle to relocate to the property at 211 South Main Street. He is also working on an ordinance for the December Planning Commission meeting for revisions to the BC zoning district regarding automobile service stations. Finally, he is also working on revisions to the zoning code regarding Parking Lot design.

*Staff worked to finalize the Council packets for 1119 South College Avenue for delivery to the City Secretary's Office. The major subdivision and special use permit for a six-floor 126-room hotel to replace the existing Red Roof Inn is scheduled for Council public hearing and consideration on November 28.

*Second round interviews for the Deputy Director of Planning and Development position are scheduled for November 10.

Code Enforcement

Projects

*127 The Grove (Compass Apartments): Continued unit and garage inspections.

*127 The Grove (Raising Cane's): Continued inspections.

*70 East Cleveland Avenue: Code Enforcement Officer Greenplate issued a Stop Work order for unpermitted work occurring. Fire Protection Specialist Reese deemed property unsafe and posted as such, resident relocated.

Property Maintenance

*Complaints: 18

*Violations: 9

*Citations: 25

*Inspections: 59

*New Rental Inspection: 12

Items of Interest Code Enforcement and Property Maintenance

*Fire Protection Specialist Reese completed plan reviews for the following fire alarm/sprinkler projects: UD Drake Hall, City Hall, Home Depot, 201 Discovery Blvd, Embassy Suites, Red Roof Inn, and Newark Shopping Center.

*The Property Maintenance Inspectors did Halloween patrol for the weekend of October 29 & 30. Citations, violation notices, and warnings issued throughout the day. Good overall results with no major code violations. On October 29, 18 citations and 2 notice of violations were issued. On October 30, 5 citations and zero notice of violations were issued.

*Code Enforcement Manager Petersen, Lead Code Enforcement Officer Poole, Lead Property Maintenance Inspector Straub and Fire Protection Specialist Reese attended a Leadership training hosted by DEMEC.

Parking

*Residential Permits Distributed: 12

*Municipal Lot Permits Sold: 0 (sold out)

*Citations Issued: 931

*Online Appeals Answered: 76

*Immobilized Vehicles: 18

*Towed Vehicles: 5

Parking Items of Interest

*Parking was complimentary on October 30 for the Newark Annual Halloween Parade and Trick-or-Treat. Signage was placed on kiosks and a digital message was displayed on Passport with the complimentary status. Between 11am and 3pm, a digital message was displayed in Zone 19717 and 19718 (Main Street) saying that the area was no parking, as it was a parade route. Record low amount of vehicles were towed from this year's parade. Additional signage was placed on cones and put in parking spaces to ensure that all drivers knew the area was no parking, even if not attempting to make payment.

*Discussion on Lot #4 catch basin and getting it fixed. Concrete around basin is crumbling and temporary work was done to make sure it was safe. Thank you to Public Works and Water Resources for their assistance in getting these repairs done.

*Work with Passport regarding 'Notifications/Restrictions' tab disappearing after an update. This tab controls messaging to users and allows for temporary shutdown of credit card acceptance during events.

Activity or Project:

Description:

Status:

Expected Completion:

Execution Status:

Activity or Project:**Description:****Status:****Expected Completion:****Execution Status:****Activity or Project:****Description:****Status:****Expected Completion:****Execution Status:****City Manager's Weekly Report****Department:**

Police Department

Notable Notes:

Auxiliary Services Division:

- On Monday, October 31st, 2022, Mr. Michael Gallagher started with the Newark Police Department Communications Division as a Communications Officer I. CO Gallagher comes to NPD from the Wilmington Police Department where he was a police dispatcher for seven and half years.

Administration Division:

- Officers from the Administration Unit began planning the 2022 “Presents with Police” holiday gifts, which is expected to take place in mid-December. Additional information will be forthcoming.

Criminal Investigations Division:

- Detectives are investigating two reported sexual assaults that occurred over the weekend. On October 30th, 2022, at approximately 0009 hours, a female victim, 21 YOA, reported that she was waiting near her residence for a rideshare vehicle. The vehicle had been ordered for her by a friend, and the victim did not know the description of the vehicle she was waiting for. The victim observed a vehicle near her residence and thought it was the rideshare vehicle. She contacted that driver and entered the front seat thinking it was the correct vehicle. As they began to drive towards the destination, the suspect had sexual contact with the victim. After a short time, the driver dropped the victim off at the destination. Newark Police have identified the driver and the case is under investigation.
- On October 31st, 2022, at approximately 1800 hours, a sexual assault was reported to Newark Police. The assault occurred in the early morning hours of October 31st. The

female victim, 21 YOA, reported that she ordered a ride through a rideshare app. When the vehicle arrived, she entered the vehicle and they drove towards her destination. During the ride, the driver stopped the vehicle and began to sexually assault the victim. The victim was dropped off by the driver and later contacted police.

- Both victims were examined at an area hospital but were not injured. No known weapons were involved. The suspects in the two incidents are different people.

Patrol Division:

- On Saturday, October 29th, 2022, at approximately 2341 hours, officers responded to South Chapel Street for the report of a hit and run vehicle collision. The suspect vehicle was located a short time later by responding officers and a vehicle stop was initiated on Library Avenue. Field sobriety tests were conducted, and the operator was charged with DUI as well as additional traffic offenses.
- On Sunday, October 30th, 2022, at approximately 0057 hours, officers responded to the Deer Park for a report of an assault. Upon arrival, officers detained the male suspect. After interviewing witnesses, it was discovered that the detained male punched the manager of the Deer Park after he was removed from within the business. The suspect was arrested for Assault, Disorderly Conduct, and Possession of Marijuana (civil).

Special Enforcement Division:

- During the week, the Special Operations Unit will continue police applicant background investigations. On Thursday, the unit participated in the West Park Elementary Harvest Festival. Throughout the weekend, the unit will conduct Cops in Shops and proactive patrols in the business district and student rental areas.
- The Traffic Unit will also continue their work on police applicant background investigations. During the week, the unit will conclude a speed study on Old Paper Mill Road and will conduct traffic enforcement in the areas of South College at Welsh Tract, Ogletown Road, Capitol Trail, and New London Road.

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City Manager's Weekly Report

Department:

Public Works and Water Resources Department

Notable Notes:

Crews continue to collect the leaves raked to the curb. As leaves begin to fall more rapidly, we expect to make a full sweep of the City every two weeks. There is no need to schedule this service, the crews will be in your area soon, just rake them out and we will get them!

Staff will be meeting with New Castle Municipal Services water staff this week to review and discuss their carbon water treatment systems. They have a similar treatment system to what we will be installing at our South Well Field water treatment plant and have been very helpful by sharing their experience over the last eight (8) years.

Refuse and fleet maintenance staff viewed a demo of an electric refuse collection truck. The electric rear end was attached to a diesel chassis; however, the rear end was fully electric and studies have indicated a 35% fuel savings by eliminating the engine power take off (PTO) which typically drives the back end. The performance was impressive and we expect this will be competitive with our standard options in our next replacement cycle.

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The *Institute for Public Administration*, the *Delaware League of Local Governments* and the *Sustainable Coastal Communities Initiative* present the

Delaware Institute for Local Government Leaders

Workforce Recruitment Challenges and Success Stories

Program Agenda

Thursday, November 3, 2022, 9 a.m. to 12:30 p.m. | Maple Dale Country Club

9:00 a.m. Welcome

Jerome Lewis, Director, Institute for Public Administration (IPA)

Marcia Scott, Executive Director, Delaware League of Local Governments

9:15 a.m. Statewide Perspectives on Workforce Challenges

Moderated by Sean O'Neill, Policy Scientist, IPA

Charles Madden, Director of Talent Acquisition, Delaware Prosperity Partnership

Linda Parkowski, Executive Director, Kent Economic Partnership

*Michael Quaranta, Executive Director, Delaware Chamber of Commerce;
Mayor, City of New Castle*

10:15 a.m. Break

10:30 a.m. Local Perspectives and Solutions on Workforce Challenges

Moderated by Sean O'Neill, Policy Scientist, IPA

Jamie Burk, Town Manager, Town of Millsboro

Devan Hardin, Chief Human Resources Officer, City of Newark

Jamesha Williams, Human Resources Director, City of Milford

*Linda Sommermann, Administrative Assistant to the Chief of Police,
Town of Elsmere*



UNIVERSITY OF DELAWARE
**BIDEN SCHOOL OF PUBLIC
POLICY & ADMINISTRATION**

Program Agenda, cont.

11:30 a.m. Updates from IPA

Julia O'Hanlon, Policy Scientist, IPA

11:45 a.m. IPA Local Government Training Certificate Awardees

Sean O'Neill

Delaware Planning Education Program

- Sarah Bluhm, City of Milford
- Sarah Cahall, Town of Camden
- Stephanie Coulbourne, Town of Milton
- Valerie George, New Castle County Council
- Teresa Hudson, City of Milford
- Jennifer Ireland, Town of Millville
- Beth Krumine, DNREC Division of Climate, Coastal and Energy
- Stacey Long, Town of Selbyville
- Susan Miller, Town of Ocean View
- Tom Quass, Town of Milton
- Ashleigh Sander, Town of Dewey Beach
- Peter Servon, Kent County
-

Local Government Leadership

- Michael Boyle, City of Milford
- Stephanie Coulbourne, Town of Milton
- Valerie George, New Castle County Council
- Susan Miller, Town of Ocean View
- Ashleigh Sander, Town of Dewey Beach

12:15 p.m. Wrap Up



UNIVERSITY OF DELAWARE
**BIDEN SCHOOL OF PUBLIC
POLICY & ADMINISTRATION**



TRANE®



SEIBERLICH
ENERGY SERVICES **TRANE**

Construction Period,
2020-21

Measurement and Verification Report



City of Newark
220 S Main St, Newark, DE 19711

Prepared by:
Seiberlich Trane Energy Services
Submitted October 20, 2022

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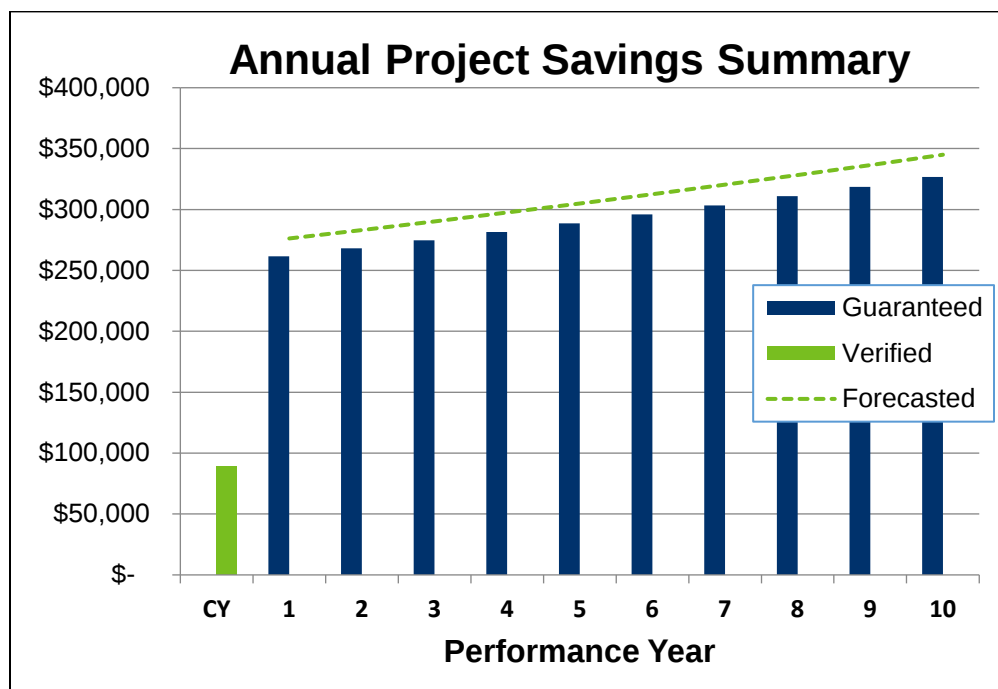
Executive Summary

The following Measurement & Verification (M&V) report details the findings resulting from Seiberlich Trane's installation of new energy efficient equipment and services. The project goal was to decrease electric, natural gas, and water consumption over the next 20 years. The following pages include a detailed report of the financial and energy results, as a result of the successful installation of new lighting, domestic water fixtures, transformers, steam traps, and steam system insulation. This M&V report also shows detailed accounting of the post-installation financial and energy changes.

To summarize our findings, Trane concluded the total monetary value/cost savings for the Construction Period of the performance contract was \$91,731. The savings during the construction period were not guaranteed, so savings were exceeded by \$91,731.

Outlook

We expect to continue on the same path of energy savings and look forward to reporting next year's accomplishments. Should this trend continue as expected, the Year 1 savings for the project may generate over \$33,000 in additional savings above the guaranteed \$261,526 in savings.



As our partner in this energy performance agreement, we ask that you please continue to review additional energy use, new large-scale equipment, or changes in your building's size or function during scheduled biannual visits. Trane will use that information to offer suggestions to minimize the increase in energy and/or provide information necessary to accurately show these changes in the annual report.

Project at a Glance

This project primarily consisted of:

- Interior and Exterior lighting replacements and retrofits
- New/Expanded DDC Controls to reduce runtime and improving system communication
- Retro Commissioning and optimize existing Controls with spot function testing
- Installation of rooftop solar power array
- High efficiency transformers to match the electrical load
- Add VFDs to main loop pumps to reduce water pump energy consumption

General Benefits from these ECMs

Lighting

- Reduced electric costs
- Improved lighting quality (color, efficacy)
- Improved reliability; reduced maintenance costs
- Improved environmental impact

HVAC

- Air Handler Refurbishment
- Chiller Pump Replacement
- Variable loop water flow

VFDs

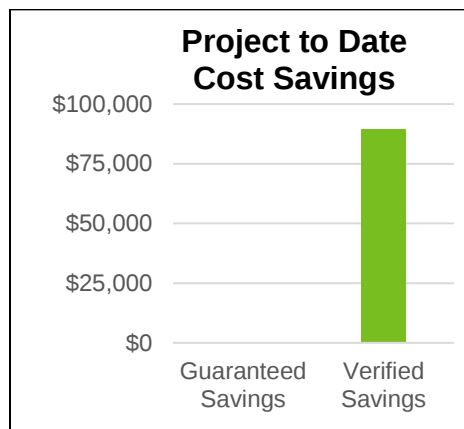
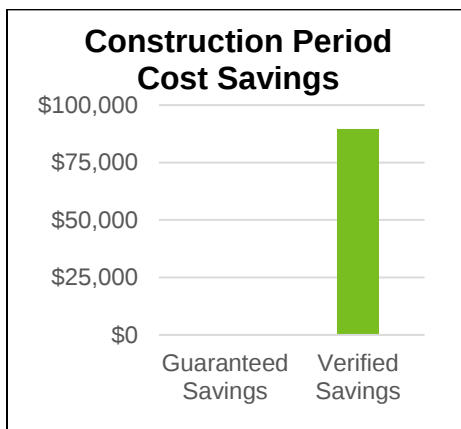
- Eliminating throttle valve flow control
- Establish metering and controls logic for VFDs

Solar

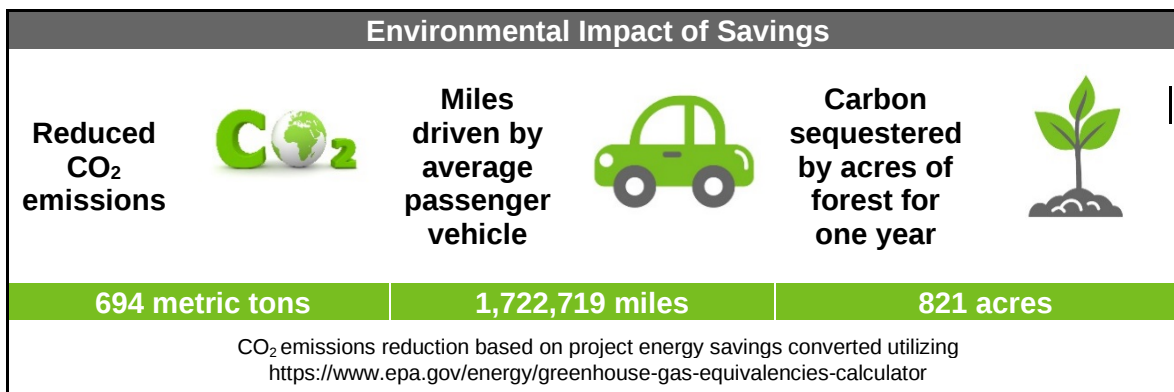
- Generate additional renewable energy
- Ongoing monitoring of array production

Construction Period Savings - \$91,731

During the Construction Period of this project, the Seiberlich Trane/City of Newark Energy Services Project saved \$91,731.



The total environmental impact of this project through the Construction Period as calculated by the EPA is shown in the graphic below.



Measurement & Verification Details

Background

This document is in reference to the Energy Performance Contract (hereinafter the "Agreement") entered into as of 12/1/2021 by and between Trane and the Customer.

Savings Guarantee

The energy savings for the Construction Period of the project were not guaranteed. As a result, the guaranteed energy savings for the Construction Period are:

- 0 kWh of electrical consumption
- 0 therms natural gas
- 0 kGal water

Guarantee Period

The guarantee phase of the project commenced on 7/1/2022. The project has a guarantee term of 20 years. The 20 annual guarantee period, therefore, is from 7/1/2022 to 6/30/2042.

Savings Calculation Methods

The savings methodology was based on guidelines from the International Performance Measurement and Verification Protocol (IPMVP). IPMVP Option A (Retrofit Isolation: Key Parameter Measurement) was used to measure baseline and performance period energy consumption and calculate energy savings.

ECM	IPMVP	Verification	Verification Status
Lighting Retrofit	Option A	One time pre- and post-measurements	✓
HVAC	Option A	One time pre- and post-measurements	✓
Solar	Option A	One time pre- and post-measurements	✓
VFDs	Option A	One time pre- and post-measurements	✓
HVAC	Option C	Ongoing measurements	✓

Construction Period Energy Savings

Construction Period energy savings are shown in the table below. Cost savings have been calculated using the base utility rates as described on page 16 of this report. Descriptions of how the savings were calculated for each Energy Conservation Measure (ECM) are included in pages 8 through 15 of this report. An energy savings summary is provided on the following page.

Energy Type	Guaranteed Savings	Verified Savings	Excess/Shortfall
Electric Energy (kWh)	0	1,012,177	1,012,177
Natural Gas (therms)	0	0	0
Water (kGal)	0	0	0
Cost Savings	\$0	\$91,731	\$91,731

Energy Savings Summary Table

City of Newark ENERGY SAVINGS SUMMARY Construction Period

Contract Guarantee Units

kWh 0
Therms 0
kGal 0

Construction Period Guarantee Information

total Guaranteed Energy Savings \$0
Excess/Shortfall \$91,731

Year	Verified Energy Savings			Deviation from Guarantee			Cost Savings	
Phase	Electrical Energy (kWh)	Natural Gas (therms)	Water (kGal)	Electrical Energy (kWh)	Natural Gas (therms)	Water (kGal)	Cost Savings	Excess/Shortfall
CY	1,012,177	0	0	1,012,177	0	0	\$91,731	\$91,731
Year 1								
Year 2								
Year 3								
Year 4								
Year 5								
Year 6								
Year 7								
Year 8								
Year 9								
Year 10								
Year 11								
Year 12								
Year 13								
Year 14								
Year 15								
Year 16								
Year 17								
Year 18								
Year 19								
Year 20								
Total	1,012,177	0	0	1,012,177	0	0	\$91,731	\$91,731

Energy Conservation Measure (ECM) Verification

Lighting Retrofit

ECMs

This performance guarantee applies to the following ECMs:

- ECM #1 – Interior Municipal Building
- ECM #2 – Interior Police Building
- ECM #3 – Exterior Municipal & Police
- ECM #5 – Wilson Community Center
- ECM #6 – Pole Topper Street Lighting
- ECM #7 – Lighting Controls, Street Lighting
- ECM #8 – Field Operations Complex
- ECM #9 – Municipal Parking Lots Lighting
- ECM #10 – Municipal Parking Lots Lighting Controls

ECM Description

Interior and exterior lighting fixtures were retrofit with new LED lighting. This performance guarantee applies to the Lighting Retrofit ECM described in Schedule A of the Agreement.

Construction Period Savings

The table below compares the guaranteed and verified energy savings for the Construction Period. The methodology and calculations used to verify these savings are included in the sections following the table.

Energy Type	Guaranteed Savings	Verified Savings	Excess/Shortfall
Electric Energy (kWh)	0	183,179	183,179
Natural Gas (therms)	0	0	0
Water (kGal)	0	0	0
Cost Savings	\$0	\$13,861	\$13,861

Pre-Retrofit Measurement Methodology

A qualified electrician measured and recorded the existing lighting wattage with a handheld wattmeter in accordance with the agreement. The measurements were taken at the fixture or circuit level as indicated in the provided measurement sheet.

Post-Retrofit Measurement Methodology

This measurement will occur once, following installation of the lighting retrofit. A qualified electrician measured and recorded the existing lighting voltage and amperage with a handheld wattmeter in accordance with the agreement. The measurements were taken at the fixture or circuit level as indicated in the provided measurement sheet.

Computation of Energy Savings

Breakdown of lighting savings by ECM

ECM #	ECM	Construction Year kWh Savings
5	LED Lighting - Wilson Comm Center	23,850
6	LED Lighting - Pole Topper LED Retrofit, Quantity 811	111,078
7A	Lighting Controls - Street & Pedestrian Lights (811)	10,686
7B	Lighting Controls - Street & Pedestrian Lights (2,000)	0
8	LED Lighting - Field Operations Complex	30,676
9	LED Parking Lot Lighting	6,890

Trane re-computed energy use using the measured pre- and post- watt values. Trane compared the baseline period energy use to the performance period energy use to determine verified Energy Savings. After the first guarantee year, this measurement is mutually agreed upon and will not require any additional verification for the remainder of the guarantee term.

Solar

ECMs

- ECM #14 – Reservoir Solar Array
- ECM #15 – Rooftop Solar Muni & Police
- ECM #17 – Rooftop Solar Yard Red Building
- ECM #19 – Expand McKees Solar Park

ECM Description

Installation of rooftop and non-roof-penetrating solar photovoltaic arrays. This performance guarantee applies to the Solar Array ECM described in Schedule A of the Agreement.

Construction Period Savings

The table below compares the guaranteed and verified energy savings for the Construction Period. The methodology and calculations used to verify these savings are included in the sections following the table.

Energy Type	Guaranteed Savings	Verified Savings	Excess/Shortfall
Electric Energy (kWh)	0	411,767	411,767
Natural Gas (therms)	0	0	0
Water (kGal)	0	0	0
Cost Savings	\$0	\$40,217	\$40,217

Computation of Energy Savings

A count of installed solar panels are shown below. HelioScope as-builts included in Appendix.

ECM #	ECM	DC Nameplate (kW)	Construction Year kWh Savings
14	Reservoir Solar Array (429.3 kW)	429.3	48,058
15	Rooftop Solar - Muni & Police (111.5 kW)	111.5	57,325
17	Rooftop Solar - Yard Red Building (228.2 kW)	228.2	171,181
19	Expand McKees Solar Park (431.8 kW)	431.8	135,204

After the first guarantee year, this measurement is mutually agreed upon and will not require any additional verification for the remainder of the guarantee term.

VFDs

ECMs

- ECM #22 – Pump VFDs for Curtis Water Treatment Plant

ECM Description

The plant pumps and filters approximately 737,000,000 gallons per year. VFDs were installed on (3) 40 HP “raw water” pumps.

Construction Period Savings

The table below compares the guaranteed and verified energy savings for the Construction Period. The methodology and calculations used to verify these savings are included in the sections following the table.

Energy Type	Guaranteed Savings	Verified Savings	Excess/Shortfall
Electric Energy (kWh)	0	17,255	17,255
Natural Gas (therms)	0	0	0
Water (kGal)	0	0	0
Cost Savings	\$0	\$1,306	\$1,306

Baseline Measurement Methodology

Pump	HP	VFD	Motor Efficiency	Operating kW	Hours/Year
#1	121	Yes	95.4%	77.1	8760
#2	125	No	91.7%	91.7	7096

Proposed Measurement Methodology

Pump	HP	VFD	Motor Efficiency	Operating kW	Hours/Year
#1	121	Yes	95.4%	77.1	7096
#2	121	Yes	95.4%	77.1	8760

Computation of Energy Savings

A count of proposed and installed quantity of VFDs are summarized in the table below. Full pre- and post-retrofit measurements are included in the appendix.

ECM	Construction Year Annual Savings
#22	17,255

Option C

ECMs

- ECM #11 – Retrofit Municipal Building HVAC
- ECM #12 – Retrofit Police Building HVAC

ECM Description

Majority of measures at the Police and Municipal building were analyzed as Option C due to the effect of multiple measures.

Construction Period Savings

The table below compares the guaranteed and verified energy savings for the Construction Period. The methodology and calculations used to verify these savings are included in the sections following the table.

Energy Type	Guaranteed Savings	Verified Savings	Excess/Shortfall
Electric Energy (kWh)	0	399,975	399,975
Natural Gas (therms)	0	0	0
Water (kGal)	0	0	0
Cost Savings	\$0	\$30,266	\$30,266

Computation of Energy Savings

Metrix was used to analyze option C savings. Charts are available in the appendix.

Base Utility Rates and Meter Details

The Base and Construction Period utility rates are shown. These rates were used to determine cost savings per the agreement. Utility rates are escalated annually at 2.5%. SREC pricing was determined from the 2021 SREC Delaware auction. There is not assumed inflation/escalation to this price.

Base Utility Rates

Location	Electric (\$/kWh)	Natural Gas (\$/CCF)	SREC (\$/MWh)
City of Newark	\$0.0757	\$0.7987	\$22.00

Construction Period Utility Rates

Location	Electric (\$/kWh)	Natural Gas (\$/CCF)	SREC (\$/MWh)
City of Newark	\$0.0757	\$0.7987	\$22.00

Baseline Adjustments

While Trane reserves the right to make baseline adjustments in response to changes to the facility(s) or deviations in the operating parameters per the Agreement, there have been no baseline adjustments made for the Construction Period of the guarantee term.

Measurement & Verification Glossary

Baseline Energy Usage: Energy consumption and demand occurring during the Baseline Period.

Baseline Period: The period of time that represents operation of the facility or system before implementation of an ECM.

Baseline Adjustment (BLA): The adjustments made during the reporting period due to changes in any energy governing characteristic of the facility within the measurement boundary.

Calibration: The process of checking simulated energy and demand against actual measured energy and demand. Once the mean difference between simulated and measured quantities is within acceptable tolerance, the simulation is called “calibrated”. See Option D.

Construction Period Savings: Savings realized after an ECM has been implemented but before the entire project has been completed. This is also referred to as Installation Period Savings and Interim Period Savings.

Consumption: Energy consumed as rate over time (kWh, Therm, kGal)

Cost savings: Monetary savings from the implementation of ECM(s).

Demand: The highest rate of power or gas use, measured by a utility between meter readings.

Energy Conservation Measure (ECM): An activity or set of activities designed to increase the energy efficiency of a facility, system, or piece of equipment.

Guaranteed Energy Savings: The amount of energy guaranteed to be saved resulting from the implementation of ECMs.

Guarantee Year: 12-month period starting from 1st day of the calendar month following customer’s execution of the Certificate of Final Completion, unless the Certification of Final Completion is signed on the first day of the calendar month- in which case the Guarantee Year would start on that day.

IPMVP: International Performance Measurement and Verification Protocol

Metrix: Third party energy software program used to normalize energy usage for weather and other variables and present true energy savings. In addition to normalizing for variables, Metrix also sets benchmarking, performs load factor analysis and rate analysis, helps determine changes in energy usage patterns, and offers performance reporting.

Measurement & Verification (M&V): The process of using measurements to reliably determine savings created within an individual facility by an energy management program. Savings cannot be directly measured, because they represent the absence of energy use. Instead, savings are determined by comparing measured use before and after implementation of one or more ECMs, making appropriate adjustments for changes in conditions.

Metering: Collection of energy data over time at a facility through the use of measurement devices.

Mutually Agreed to Savings: Methodology used with energy retrofits where M&V costs would have a significant negative impact on the savings. The savings are verified mutually by Trane and Customer after installation or commissioning.

Normalized Savings: The reduction in energy use or cost that occurred in the reporting period relative to what would have occurred if the facility had been equipped and operated as if it was in the baseline period using the previously agreed upon conditions.

Option A: Methodology specified in IPMVP. Retrofit Isolation: Key parameter measurements. Energy savings are determined by measuring the agreed upon parameter before and after a retrofit, and multiplying the difference by an agreed-upon factor.

Option B: Methodology specified in IPMVP. Retrofit Isolation: All parameter measurements. Individual loads are continuously monitored to determine performance, and this measured performance is compared with a baseline to determine savings.

Option C: Methodology specified in IPMVP. Whole Facility. Savings are determined by measuring and analyzing overall energy use in a facility and identifying the effects of energy projects from changes in overall energy use patterns.

Option D: Methodology specified in IPMVP. Calibrated simulation. Savings are determined when calibrated simulation of baseline energy use is compared to calibrated simulation of post-installation energy consumption.

Performance Period: The defined period of time chosen for the purposes of verifying savings after implementation of ECMs. This is also referred to as the reporting period.

Scenario: A certain instance that happens within a project that could vary from project to project.

Sample Measurement: Measurements are performed on a subset of all units to determine average energy consumption per unit. Energy consumption is applied to entire population. This method is typically used in lighting, water, and Building Automation System ECMs.

Trends: Sampling of data over time such as space temperature, occupancy, set points, kW, kWh. It is used to verify savings. It is also referred to as data logging.

Verified Energy Savings: The substantiated reduction in energy use measured during the performance period.

Appendix

1. Solar HelioScope As-Builts
2. Option C Charts

Final Design 7-27-21 Newark Admin Bldg., 220 S. Main St, Newark, DE

Report

Project Name	Newark Admin Bldg.
Project Address	220 S. Main St, Newark, DE
Prepared By	Joe McGowan jmcgowan@southernexpsolar.com

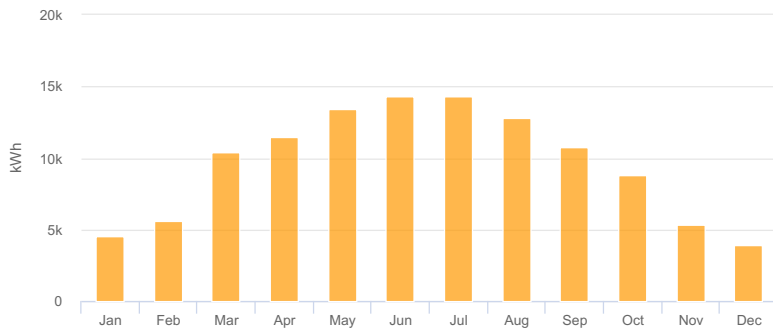
System Metrics

Design	Final Design 7-27-21
Module DC Nameplate	89.0 kW
Inverter AC Nameplate	66.6 kW Load Ratio: 1.34
Annual Production	115.6 MWh
Performance Ratio	83.3%
kWh/kWp	1,299.1
Weather Dataset	TMY, WILMINGTON NEW CASTLE CNTY AP, NSRDB (tmy3, I)
Simulator Version	78af4eba73-9c25b53ac8-18fc2398aa-51e04960be

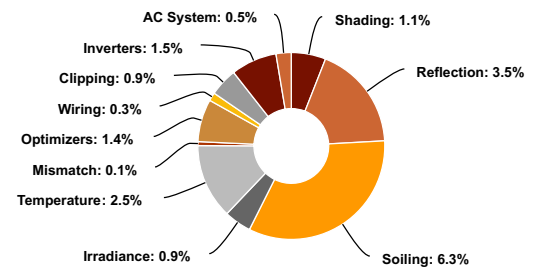
Project Location



Monthly Production



Sources of System Loss



Annual Production

	Description	Output	% Delta
Irradiance (kWh/m ²)	Annual Global Horizontal Irradiance	1,478.6	
	POA Irradiance	1,559.4	5.5%
	Shaded Irradiance	1,541.7	-1.1%
	Irradiance after Reflection	1,488.5	-3.5%
	Irradiance after Soiling	1,394.3	-6.3%
	Total Collector Irradiance	1,394.3	0.0%
Energy (kWh)	Nameplate	125,449.2	
	Output at Irradiance Levels	124,327.6	-0.9%
	Output at Cell Temperature Derate	121,265.8	-2.5%
	Output After Mismatch	121,107.3	-0.1%
	Optimizer Output	119,410.6	-1.4%
	Optimal DC Output	119,088.3	-0.3%
	Constrained DC Output	117,989.4	-0.9%
	Inverter Output	116,203.6	-1.5%
	Energy to Grid	115,622.5	-0.5%
Temperature Metrics			
	Avg. Operating Ambient Temp		15.4 °C
	Avg. Operating Cell Temp		22.4 °C
Simulation Metrics			
	Operating Hours	4614	
	Solved Hours	4614	

Condition Set

Description	Condition Set 1											
Weather Dataset	TMY, WILMINGTON NEW CASTLE CNTY AP, NSRDB (tmy3, I)											
Solar Angle Location	Meteo Lat/Lng											
Transposition Model	Perez Model											
Temperature Model	Sandia Model											
Temperature Model Parameters	Rack Type			a		b			Temperature Delta			
	Fixed Tilt			-3.56		-0.075			3°C			
	Flush Mount			-2.81		-0.0455			0°C			
Soiling (%)	J	F	M	A	M	J	J	A	S	O	N	D
	25	25	8	5	2	2	2	2	2	2	8	25
Irradiation Variance	5%											
Cell Temperature Spread	4° C											
Module Binning Range	0% to 2%											
AC System Derate	0.50%											
Module Characterizations	Module					Uploaded By			Characterization			
	ZXM6-NHLDD144-445/M (ZNShine)					Folsom Labs			Spec Sheet Characterization, PAN			
Component Characterizations	Device			Uploaded By				Characterization				

Components		
Component	Name	Count
Inverters	SE66.6KUS (SolarEdge)	1 (66.6 kW)
Strings	10 AWG (Copper)	7 (814.5 ft)
Optimizers	P950 (SolarEdge)	102 (96.9 kW)
Module	ZNShine, ZXM6-NHLDD144-445/M (445W)	200 (89.0 kW)

Wiring Zones			
Description	Combiner Poles	String Size	Stringing Strategy
Wiring Zone	-	13-32	Along Racking

Field Segments									
Description	Racking	Orientation	Tilt	Azimuth	Intrarow Spacing	Frame Size	Frames	Modules	Power
Field Segment 1	Fixed Tilt	Landscape (Horizontal)	10°	219.71877°	1.5 ft	1x1	30	30	13.4 kW
Field Segment 4	Fixed Tilt	Landscape (Horizontal)	10°	222.14598°	1.5 ft	1x1	48	47	20.9 kW
Field Segment 3	Fixed Tilt	Landscape (Horizontal)	10°	222.8789°	1.5 ft	1x1	125	123	54.7 kW



FOC 2 ZN 445 7-28-21 Newark Maintenance, Phillips and B Street, Newark, DE

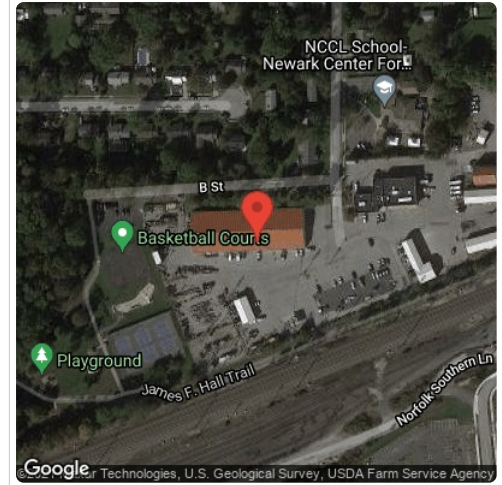
Report

Project Name	Newark Maintenance
Project Address	Phillips and B Street, Newark, DE
Prepared By	Joe McGowan jmcgowan@southernexpsolar.com

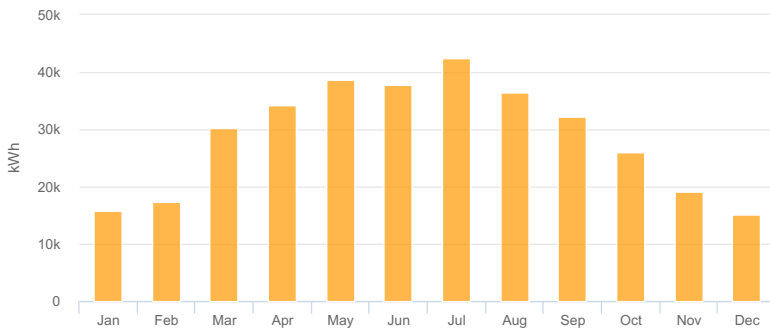
System Metrics

Design	FOC 2 ZN 445 7-28-21
Module DC Nameplate	259.9 kW
Inverter AC Nameplate	200.0 kW Load Ratio: 1.30
Annual Production	345.2 MWh
Performance Ratio	81.0%
kWh/kWp	1,328.5
Weather Dataset	TMY, 10km grid (39.65,-75.75), NREL (prospector)
Simulator Version	78af4eba73-9c25b53ac8-18fc2398aa-51e04960be

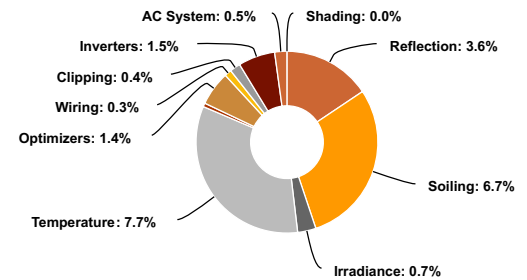
Project Location



Monthly Production



Sources of System Loss



Annual Production

	Description	Output	% Delta
Irradiance (kWh/m ²)	Annual Global Horizontal Irradiance	1,513.6	
	POA Irradiance	1,640.5	8.4%
	Shaded Irradiance	1,640.5	0.0%
	Irradiance after Reflection	1,581.6	-3.6%
	Irradiance after Soiling	1,475.1	-6.7%
	Total Collector Irradiance	1,475.1	0.0%
Energy (kWh)	Nameplate	393,279.3	
	Output at Irradiance Levels	390,330.2	-0.7%
	Output at Cell Temperature Derate	360,431.0	-7.7%
	Output After Mismatch	359,883.3	-0.2%
	Optimizer Output	354,836.6	-1.4%
	Optimal DC Output	353,819.5	-0.3%
	Constrained DC Output	352,280.2	-0.4%
	Inverter Output	346,977.7	-1.5%
	Energy to Grid	345,242.8	-0.5%
Temperature Metrics			
	Avg. Operating Ambient Temp		14.9 °C
	Avg. Operating Cell Temp		30.6 °C
Simulation Metrics			
	Operating Hours	4675	
	Solved Hours	4675	

Condition Set

Description	Condition Set 1											
Weather Dataset	TMY, 10km grid (39.65,-75.75), NREL (prospector)											
Solar Angle Location	Meteo Lat/Lng											
Transposition Model	Perez Model											
Temperature Model	Sandia Model											
Temperature Model Parameters	Rack Type			a		b			Temperature Delta			
	Fixed Tilt			-3.56		-0.075			3°C			
	Flush Mount			-2.81		-0.0455			0°C			
Soiling (%)	J	F	M	A	M	J	J	A	S	O	N	D
	25	30	8	4	2	2	2	2	2	2	8	20
Irradiation Variance	5%											
Cell Temperature Spread	4° C											
Module Binning Range	0% to 5%											
AC System Derate	0.50%											
Module Characterizations	Module					Uploaded By			Characterization			
	ZXM6-NHLDD144-445/M (ZNShine)					Folsom Labs			Spec Sheet Characterization, PAN			
Component Characterizations	Device			Uploaded By				Characterization				

Components		
Component	Name	Count
Inverters	SE100KUS (SolarEdge)	2 (200.0 kW)
Strings	10 AWG (Copper)	19 (2,885.4 ft)
Optimizers	P950 (SolarEdge)	299 (284.1 kW)
Module	ZNShine, ZXM6-NHLDD144-445/M (445W)	584 (259.9 kW)

Wiring Zones			
Description	Combiner Poles	String Size	Stringing Strategy
Wiring Zone	-	13-32	Along Racking

Field Segments									
Description	Racking	Orientation	Tilt	Azimuth	Intrarow Spacing	Frame Size	Frames	Modules	Power
Field Segment 1	Flush Mount	Landscape (Horizontal)	10°	177.81°	0.0 ft	1x1	584	584	259.9 kW



Conservative Array reduced V2

McKee's Solar Park, 101 Terrace Ave, Newark, DE

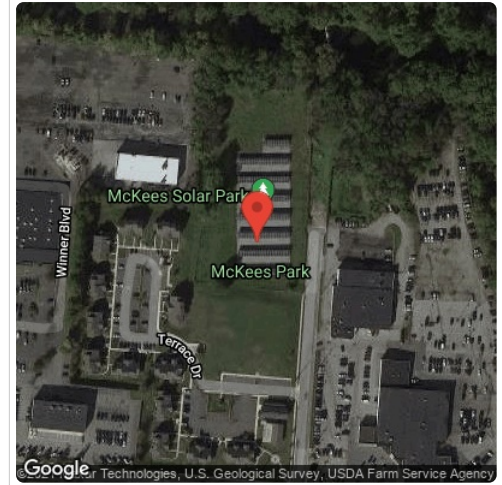
Report

Project Name	McKee's Solar Park
Project Address	101 Terrace Ave, Newark, DE
Prepared By	Joe McGowan jmcgowan@southernexpsolar.com

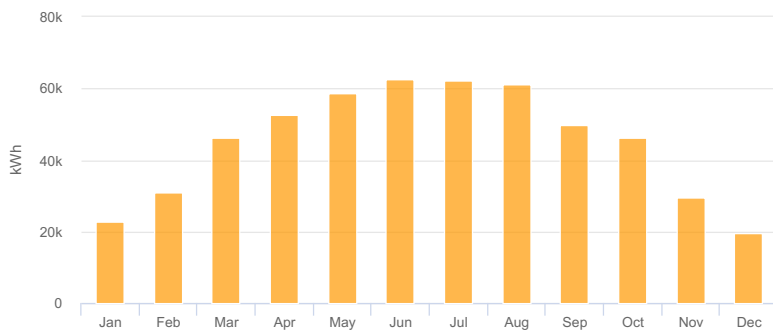
System Metrics

Design	Conservative Array reduced V2
Module DC Nameplate	400.5 kW
Inverter AC Nameplate	300.0 kW Load Ratio: 1.34
Annual Production	542.3 MWh
Performance Ratio	80.7%
kWh/kWp	1,354.0
Weather Dataset	TMY, WILMINGTON, NSRDB (tmy2)
Simulator Version	b8c9467f24-a73fd48c56-ed7d400984-08c73f820b

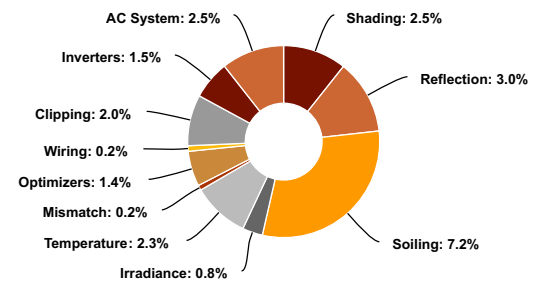
Project Location



Monthly Production



Sources of System Loss



Annual Production

	Description	Output	% Delta
Irradiance (kWh/m ²)	Annual Global Horizontal Irradiance	1,491.3	
	POA Irradiance	1,678.7	12.6%
	Shaded Irradiance	1,636.4	-2.5%
	Irradiance after Reflection	1,587.9	-3.0%
	Irradiance after Soiling	1,474.3	-7.2%
	Total Collector Irradiance	1,474.2	0.0%
Energy (kWh)	Nameplate	605,686.6	
	Output at Irradiance Levels	600,805.4	-0.8%
	Output at Cell Temperature Derate	587,193.1	-2.3%
	Output After Mismatch	586,015.7	-0.2%
	Optimizer Output	577,804.0	-1.4%
	Optimal DC Output	576,534.5	-0.2%
	Constrained DC Output	564,832.8	-2.0%
	Inverter Output	556,191.4	-1.5%
	Energy to Grid	542,286.6	-2.5%
Temperature Metrics			
	Avg. Operating Ambient Temp		15.1 °C
	Avg. Operating Cell Temp		22.2 °C
Simulation Metrics			
	Operating Hours	4723	
	Solved Hours	4723	

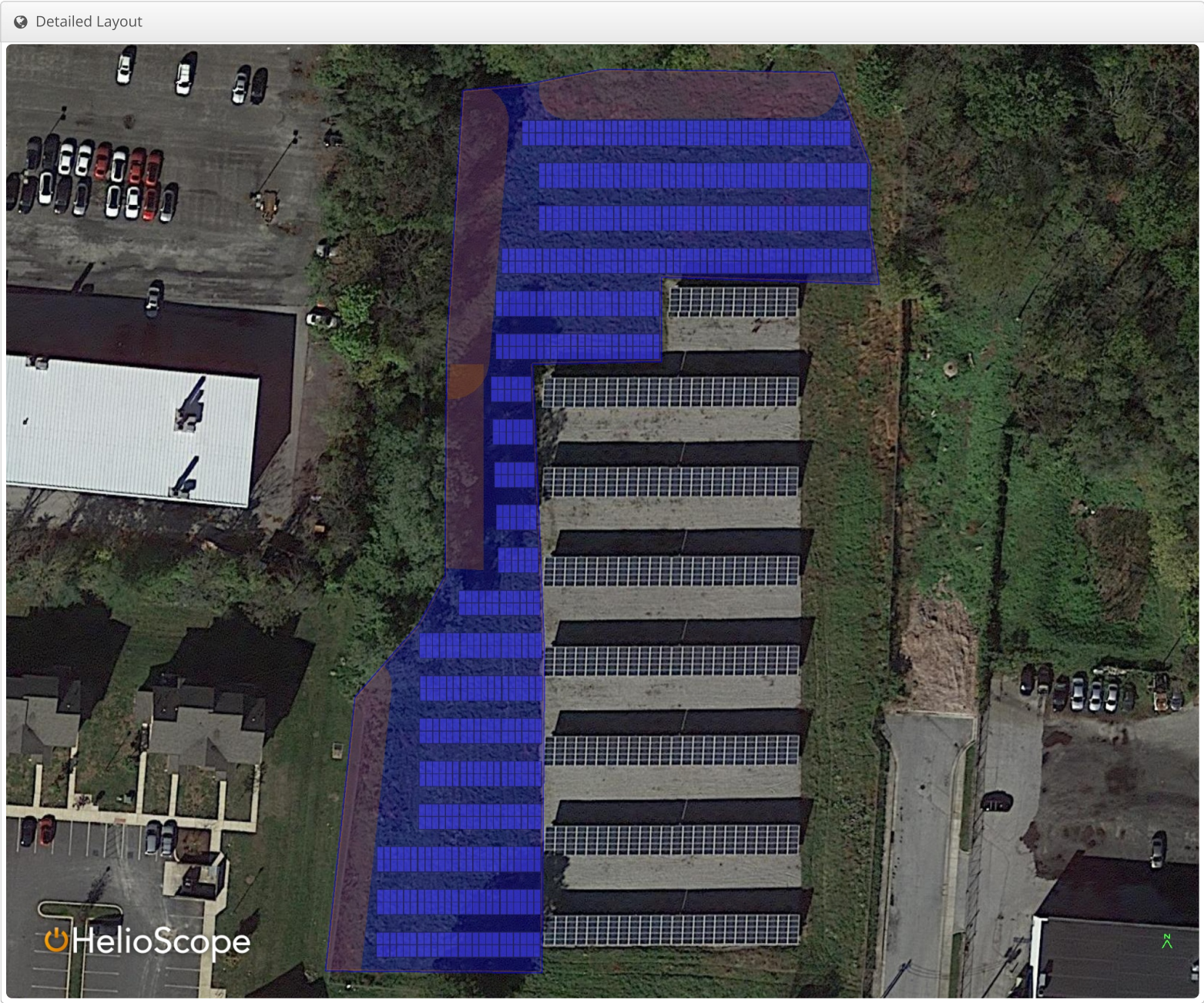
Condition Set

Description	Condition Set 1											
Weather Dataset	TMY, WILMINGTON, NSRDB (tmy2)											
Solar Angle Location	Meteo Lat/Lng											
Transposition Model	Perez Model											
Temperature Model	Sandia Model											
Temperature Model Parameters	Rack Type			a		b			Temperature Delta			
	Fixed Tilt			-3.56		-0.075			3°C			
	Flush Mount			-2.81		-0.0455			0°C			
Soiling (%)	J	F	M	A	M	J	J	A	S	O	N	D
	30	25	10	4	2	2	2	2	2	2	10	25
Irradiation Variance	5%											
Cell Temperature Spread	4° C											
Module Binning Range	0% to 5%											
AC System Derate	2.50%											
Module Characterizations	Module					Uploaded By			Characterization			
	ZXM6-NHLDD144-445/M (ZNShine)					Folsom Labs			Spec Sheet Characterization, PAN			
Component Characterizations	Device			Uploaded By				Characterization				

Components		
Component	Name	Count
Inverters	SE100KUS (SolarEdge)	3 (300.0 kW)
Strings	10 AWG (Copper)	29 (4,945.7 ft)
Optimizers	P950 (SolarEdge)	464 (440.8 kW)
Module	ZNShine, ZXM6-NHLDD144-445/M (445W)	900 (400.5 kW)

Wiring Zones			
Description	Combiner Poles	String Size	Stringing Strategy
Wiring Zone 1	-	13-32	Along Racking

Field Segments									
Description	Racking	Orientation	Tilt	Azimuth	Intrarow Spacing	Frame Size	Frames	Modules	Power
Field Segment 1	Fixed Tilt	Portrait (Vertical)	20°	180°	9.0 ft	2x6	75	900	400.5 kW



Reservoir Narrow Row Spacing ZN 8-18-21

Reservoir, Creek View Road, Newark, DE

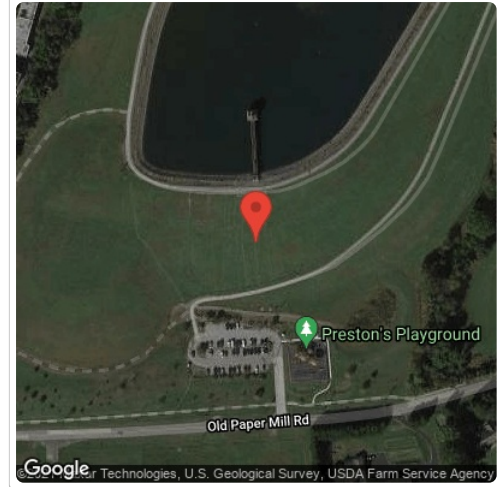
Report

Project Name	Reservoir
Project Address	Creek View Road, Newark, DE
Prepared By	Joe McGowan jmcgowan@southernexpsolar.com

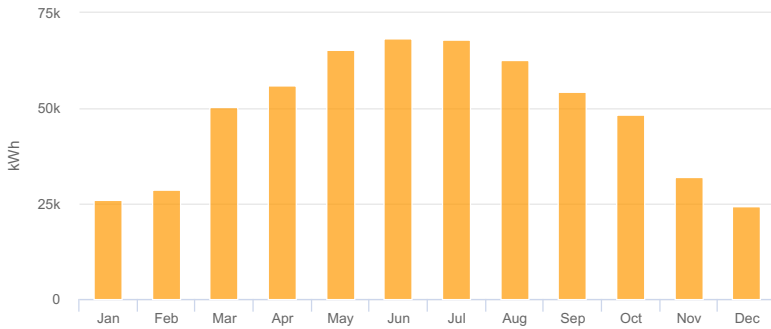
System Metrics

Design	Reservoir Narrow Row Spacing ZN 8-18-21
Module DC Nameplate	441.4 kW
Inverter AC Nameplate	400.0 kW Load Ratio: 1.10
Annual Production	584.7 MWh
Performance Ratio	79.7%
kWh/kWp	1,324.4
Weather Dataset	TMY, WILMINGTON NEW CASTLE CNTY AP, NSRDB (tmy3, I)
Simulator Version	4aabb9f3ea-3e077897d9-35f54b48ad-9eef421f88

Project Location

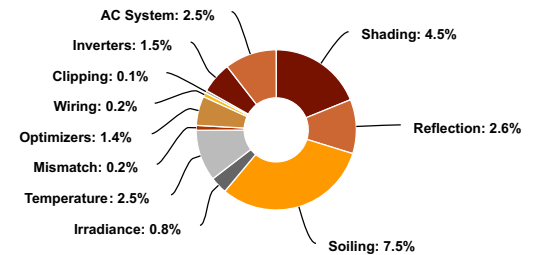


Monthly Production



Month	GHI (kWh/m ²)	POA (kWh/m ²)	Shaded (kWh/m ²)	Nameplate (kWh)	Grid (kWh)
January	62.7	87.4	81.6	26,594.6	26,146.2
February	79.4	102.7	97.6	29,775.0	28,688.7
March	127.4	149.9	143.6	53,381.6	50,417.8
April	146.6	157.6	151.2	60,854.1	55,861.1
May	173.8	177.5	170.8	73,238.5	65,477.7
June	188.4	187.6	180.6	77,367.6	68,491.1
July	187.1	188.4	181.0	77,512.5	67,994.4
August	163.6	173.3	166.3	71,278.7	62,741.1
September	130.2	148.1	141.9	60,802.2	54,325.4
October	101.5	128.2	122.5	52,421.2	48,366.6
November	63.3	84.1	79.2	33,743.4	31,846.0
December	54.7	78.0	71.9	24,976.9	24,294.0

Sources of System Loss



⚡ Annual Production			
	Description	Output	% Delta
Irradiance (kWh/m²)	Annual Global Horizontal Irradiance	1,478.6	
	POA Irradiance	1,662.7	12.5%
	Shaded Irradiance	1,588.1	-4.5%
	Irradiance after Reflection	1,546.8	-2.6%
	Irradiance after Soiling	1,431.5	-7.5%
	Total Collector Irradiance	1,431.4	0.0%
Energy (kWh)	Nameplate	641,946.3	
	Output at Irradiance Levels	636,646.8	-0.8%
	Output at Cell Temperature Derate	620,940.6	-2.5%
	Output After Mismatch	619,486.4	-0.2%
	Optimizer Output	610,747.8	-1.4%
	Optimal DC Output	609,529.3	-0.2%
	Constrained DC Output	608,774.8	-0.1%
	Inverter Output	599,641.3	-1.5%
	Energy to Grid	584,650.2	-2.5%
Temperature Metrics			
Avg. Operating Ambient Temp		15.4 °C	
Avg. Operating Cell Temp		22.5 °C	
Simulation Metrics			
		Operating Hours	4614
		Solved Hours	4614

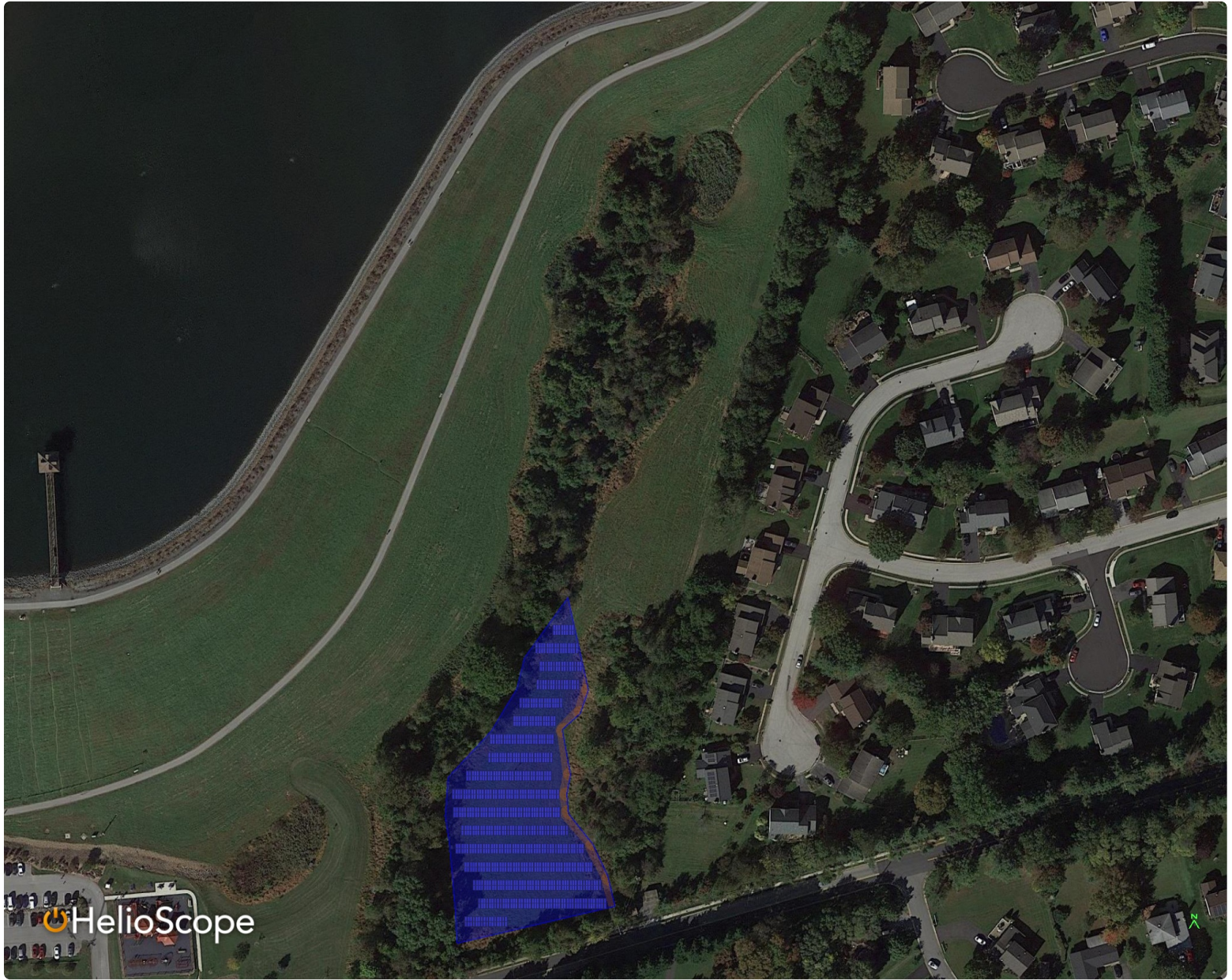
🗉 Components		
Component	Name	Count
Inverters	SE100KUS (SolarEdge)	4 (400.0 kW)
Strings	10 AWG (Copper)	31 (4,264.5 ft)
Optimizers	P950 (SolarEdge)	496 (471.2 kW)
Module	ZNShine, ZXM6-NHLDD144-445/M (445W)	992 (441.4 kW)

🔌 Wiring Zones			
Description	Combiner Poles	String Size	Stringing Strategy
Wiring Zone	-	13-32	Along Racking

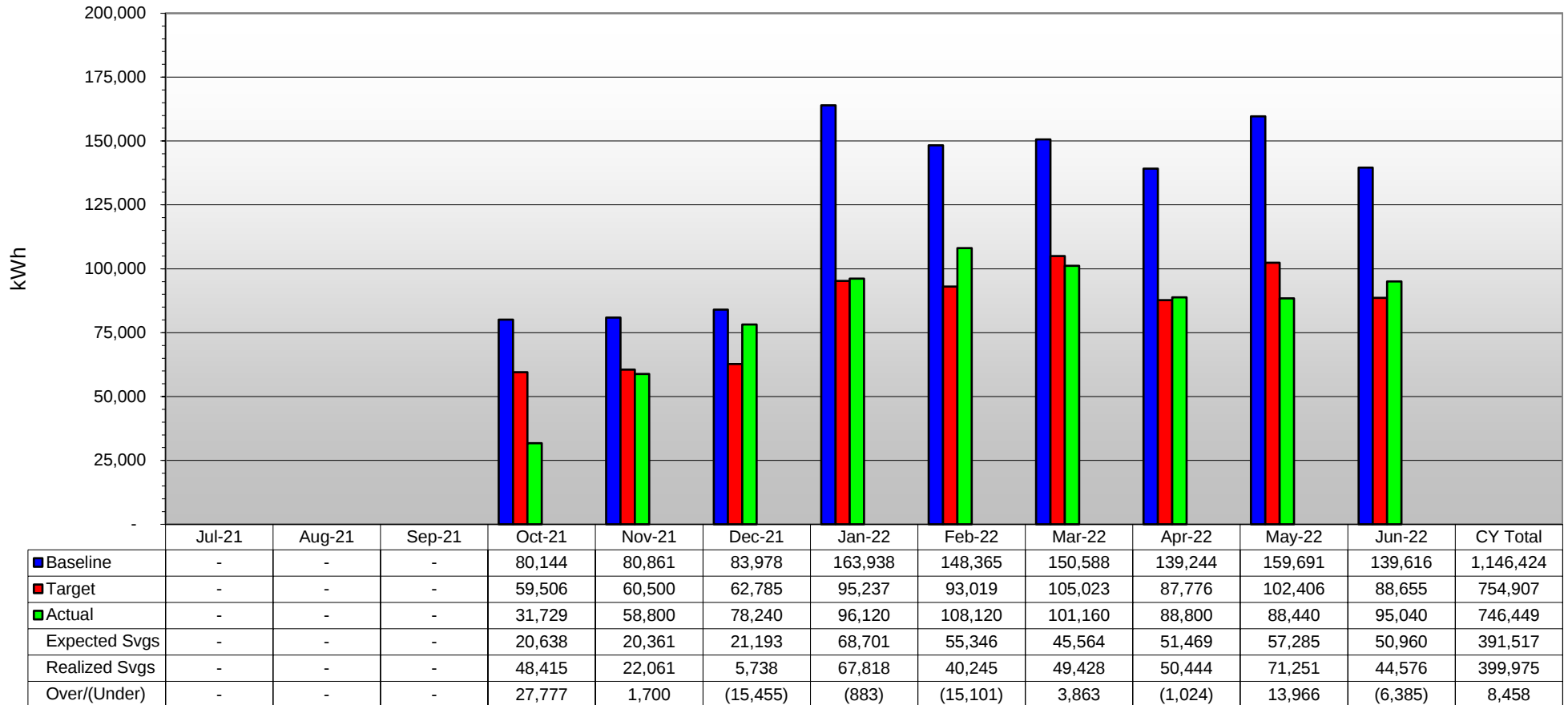
🏠 Field Segments									
Description	Racking	Orientation	Tilt	Azimuth	Intrarow Spacing	Frame Size	Frames	Modules	Power
Field Segment 1	Fixed Tilt	Portrait (Vertical)	20°	180°	10.8 ft	2x8	62	992	441.4 kW

☁ Condition Set												
Description	Condition Set 1											
Weather Dataset	TMY, WILMINGTON NEW CASTLE CNTY AP, NSRDB (tmy3, I)											
Solar Angle Location	Meteo Lat/Lng											
Transposition Model	Perez Model											
Temperature Model	Sandia Model											
Temperature Model Parameters	Rack Type			a		b			Temperature Delta			
	Fixed Tilt			-3.56		-0.075			3°C			
	Flush Mount			-2.81		-0.0455			0°C			
Soiling (%)	J	F	M	A	M	J	J	A	S	O	N	D
	25	30	15	8	2	2	2	2	2	2	2	20
Irradiation Variance	5%											
Cell Temperature Spread	4° C											
Module Binning Range	0% to 3%											
AC System Derate	2.50%											
Module Characterizations	Module					Uploaded By		Characterization				
	ZXM6-NHLDD144-445/M (ZNShine)					Folsom Labs		Spec Sheet Characterization, PAN				
Component Characterizations	Device		Uploaded By					Characterization				

Detailed Layout



City of Newark Services Contract with Seiberlich Trane
Construction Year Reconciliation Performance Summary - Electric Total kWh Savings
1 Building - 2 Electric Meter

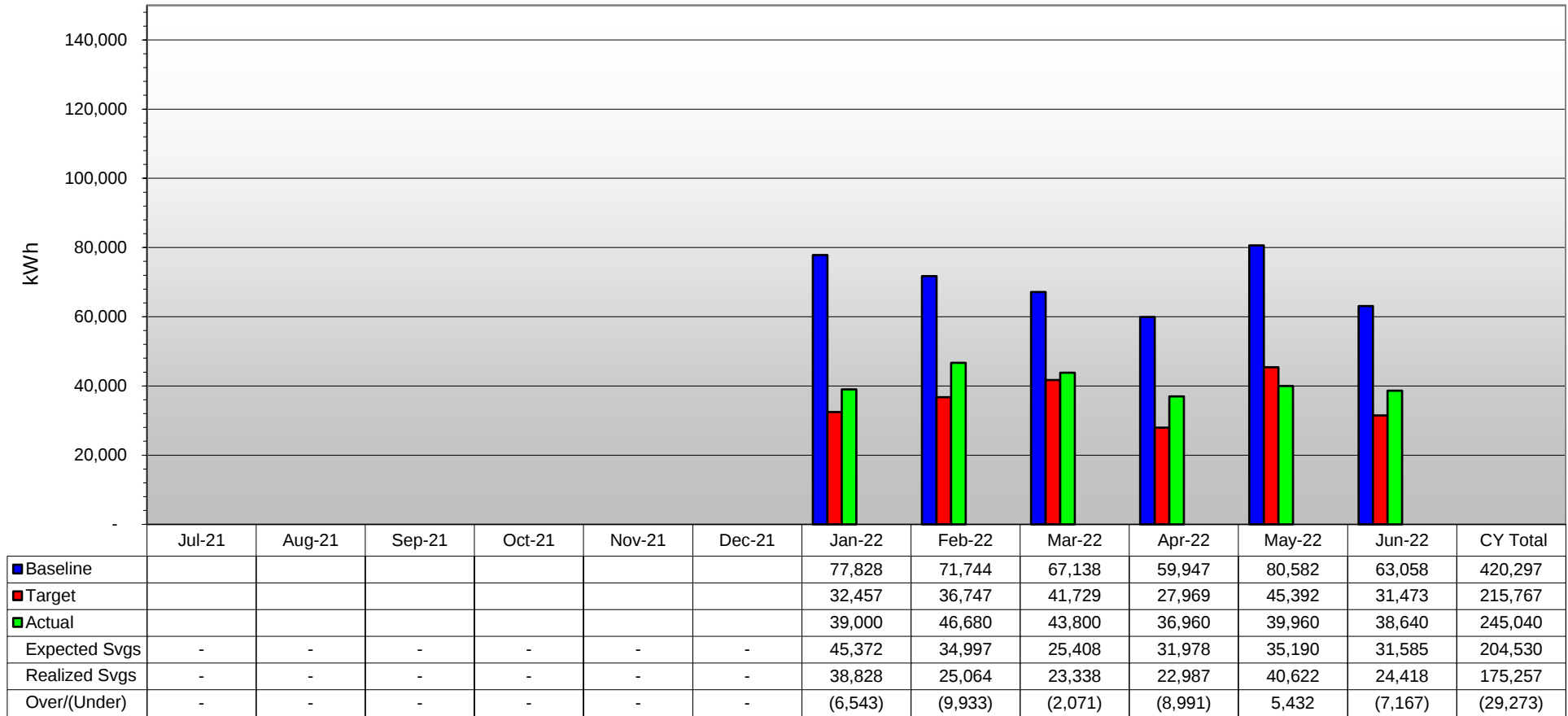


- Baseline Cost is the calculated total utility dollars based on the contracted rate
- Target Cost is the calculated total utility dollars after measures are implemented, based on the contracted rate (Target = Baseline - Expected Svgs)
- SimActual Cost is the calculated total utility dollars simulated, based on the contracted rate
- Expected Svgs is the calculated cost based on the contracted rate (Expected Svgs = Baseline - Target)
- Realized Svgs is the Baseline Cost less the SimActual Cost, both based on the contracted rate (Realized Svgs = Baseline - SimActual)
- Over/(Under) is the Realized Svgs less the Expected Svgs, both based on the contracted rate (Over/(Under) = Realized Svgs - Expected Svgs)

Municipal Building

Construction YearReconciliation Performance Summary - Electric Total kWh

1 Electric Meter

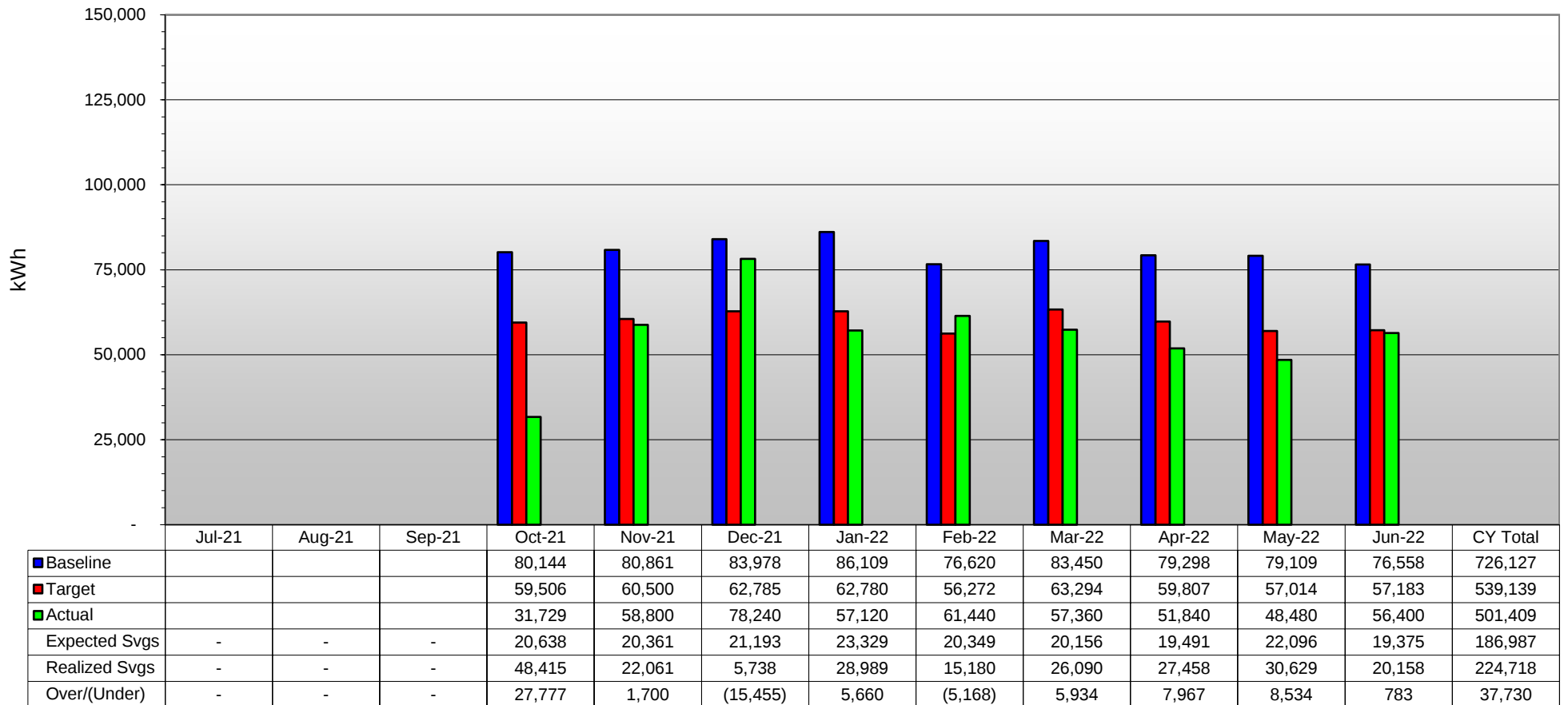


- Baseline is the adjusted and calculated kWh consumption based on historical weather and utility bill data
- Target is the calculated kWh consumption after measures are implemented (Target = Baseline - Expected Svgs)
- Actual is the kWh consumption directly from the utility bills
- Expected Svgs is the projected kWh savings (Expected Svgs = Baseline - Target)
- Realized Svgs is the Baseline kWh consumption less the Actual kWh consumption (Realized Svgs = Baseline - Actual)
- Over/(Under) is the Realized Svgs less the Expected Svgs (Over/(Under) = Realized Svgs - Expected Svgs)

Police Building

Construction YearReconciliation Performance Summary - Electric Total kWh

1 Electric Meter



- Baseline Cost is the calculated total utility dollars based on the average monthly rate
- Target Cost is the calculated total utility dollars after measures are implemented, based on the average monthly rate (Target = Baseline - Expected Svgs)
- Actual Cost is the actual total utility dollars
- Expected Svgs is the calculated cost based on the average monthly rate (Expected Svgs = Baseline - Target)
- Realized Svgs is the Baseline Cost less the Actual Cost, both based on the average monthly rate (Realized Svgs = Baseline - Actual)
- Over/(Under) is the Realized Svgs less the Expected Svgs, both based on the average monthly rate (Over/(Under) = Realized Svgs - Expected Svgs)

NEWARK POLICE DEPARTMENT

WEEK 10/23/22-10/29/22

INVESTIGATIONS

CRIMINAL CHARGES

	2021 TO <u>DATE</u>	2022 TO <u>DATE</u>	THIS WEEK <u>2022</u>	2021 TO <u>DATE</u>	2022 TO <u>DATE</u>	THIS WEEK <u>2022</u>
<u>PART I OFFENSES</u>						
a)Murder/Manslaughter	1	0	0	0	0	0
b)Attempt	0	0	0	0	0	0
Kidnap	1	3	0	4	4	0
Rape	5	9	0	2	9	0
Unlaw. Sexual Contact	8	4	0	2	3	0
Robbery	21	14	0	33	14	0
- Commercial Robberies	2	1	0	3	4	0
- Robberies with Known Suspects	5	2	0	4	0	0
- Attempted Robberies	5	1	0	13	1	0
- Other Robberies	9	10	0	13	9	0
Assault/Aggravated	23	17	0	66	34	1
Burglary	28	29	0	13	23	1
- Commercial Burglaries	6	5	0	4	6	0
- Residential Burglaries	19	14	0	6	6	1
- Other Burglaries	2	10	0	2	11	0
Theft	600	655	13	108	140	2
Theft/Auto	56	53	2	13	11	0
Arson	0	0	0	0	0	0
All Other	4	24	1	47	45	0
TOTAL PART I	746	808	16	287	283	4
<u>PART II OFFENSES</u>						
Other Assaults	205	243	6	178	288	8
Rec. Stolen Property	0	1	0	9	12	1
Criminal Mischief	167	143	2	48	61	2
Weapons	5	15	1	49	68	1
Other Sex Offenses	8	6	0	4	6	0
Alcohol	149	245	12	151	382	16
Drugs	122	129	0	81	151	2
Noise/Disorderly Premise	740	470	14	252	144	0
Ordinance Violation	125	0	0	24	0	0
Disorderly Conduct	372	316	11	92	95	4
Trespass	315	562	10	85	100	3
All Other	379	506	13	224	251	3
TOTAL PART II	2587	2636	69	1197	1558	40
<u>MISCELLANEOUS:</u>						
Alarm	449	530	13	0	0	0
Animal Control	395	370	3	9	19	0
Recovered Property	151	159	3	0	0	0
Service	28224	24494	580	0	0	0
Suspicious Per/Veh	356	329	6	0	0	0
TOTAL MISC.	29575	25882	605	9	19	0

	THIS WEEK <u>2021</u>	2021 TO <u>DATE</u>	THIS WEEK <u>2022</u>	2022 TO <u>DATE</u>
TOTAL CALLS	809	36,384	783	33,421



**Newark Police Department
Weekly Traffic Report**



10/23/22-10/29/22

TRAFFIC SUMMONSES	2021 YTD	2022 YTD	THIS WEEK 2021	THIS WEEK 2022
Moving/Non-Moving	10454	9197	239	90
DUI	133	123	6	1
TOTAL	10587	9320	245	91

*Included in the total collision numbers

TRAFFIC COLLISIONS				
Fatal	1	1	0	0
Personal Injury	154	149	6	7
Property Damage (Reportable)	861	774	27	31
*Hit & Run	182	141	2	6
*Private Property	204	161	7	7
TOTAL	1016	924	33	38

Note: Typically, the YTD numbers are generated by adding the current week statistics to the YTD statistics from the previous reporting period. Periodically, the numbers for this report will be generated from the beginning of the year to capture data that may have otherwise been omitted due to a processing delay or other administrative anomaly, more accurately updating the year-to-date totals.