

DEPARTMENT OF ADMINISTRATION DIVISION OF ENGINEERING, TRAFFIC & TRANSPORTATION

A Year in Review 2021





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Completed & On-going in 2021



On-Call Asphalt Contract \$2.8M

AWARDED AND WORKING

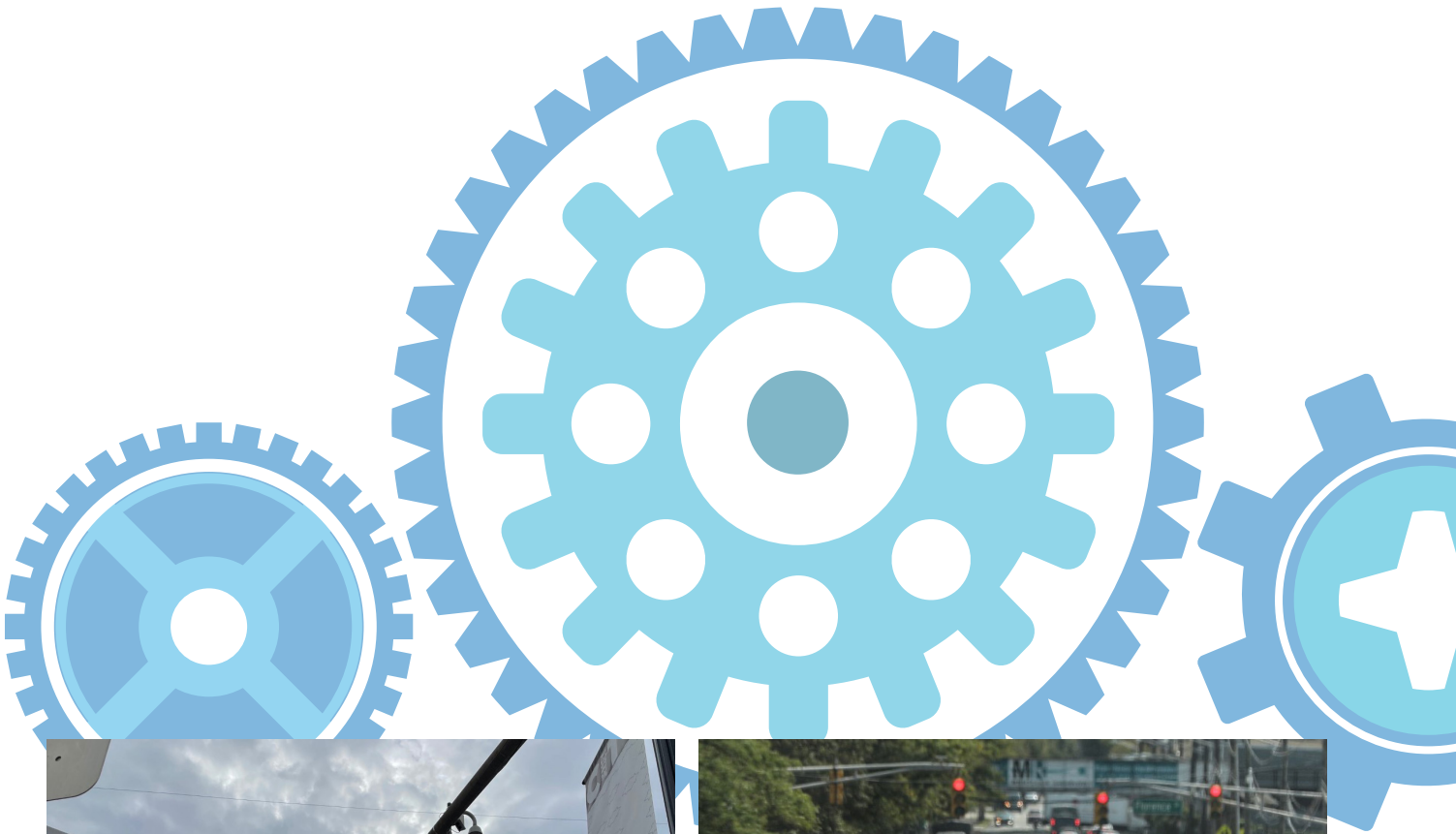
Over the previous 7 years, we have averaged 11 miles of paved roads per year. We were able to nearly double that and paved over 21 miles throughout the City this year. We will begin Spring of 2022 finishing the 2.7 miles of roads promised this year that we were not able to complete. We will also be asking Council for 1.5 miles of road per ward they wish to be paved in 2022 so we can begin our paving limit plans this Winter.



On-Call Concrete Contract \$2.0M

AWARDED AND WORKING

As ADA-accessible ramps must be done prior to paving, our team had an extra amount on their plate this year and have handled the heavy lift incredibly. We had to double our miles paved and that doubled the concrete work needed as well to complete more ADA ramps than any previous year. We completed approximately 500 ramps, which improved pedestrian safety and walkability throughout the city. We have also begun working on some GI concrete bump outs that we will expand upon in 2022.



On-Call Traffic Signal Maintenance Contract 1.8M

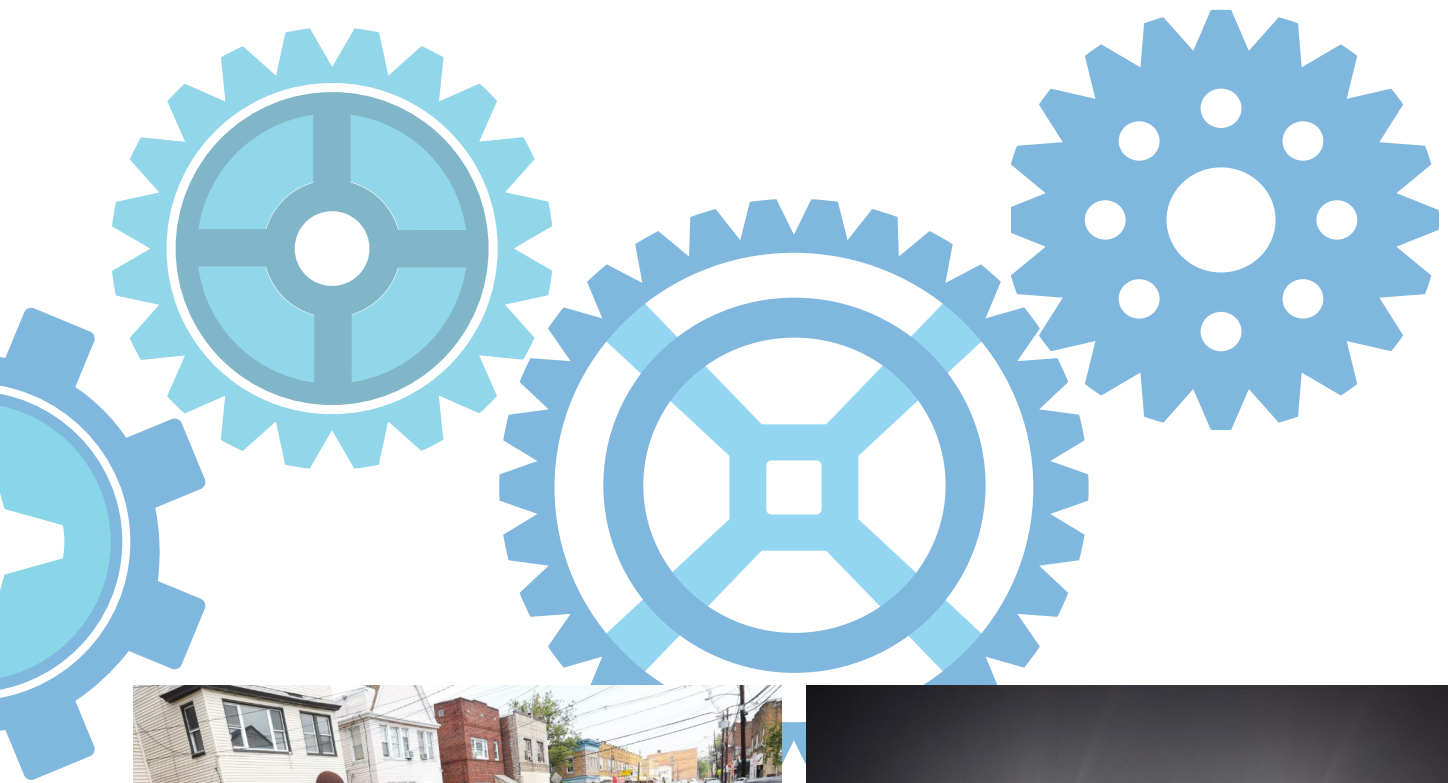
AWARDED AND WORKING

This is constant work that never skips a week. It is the maintenance of signalized intersections and adjustments to optimize traffic flow and minimize congestion.

On-Call Roadway Striping Contract \$2.8M

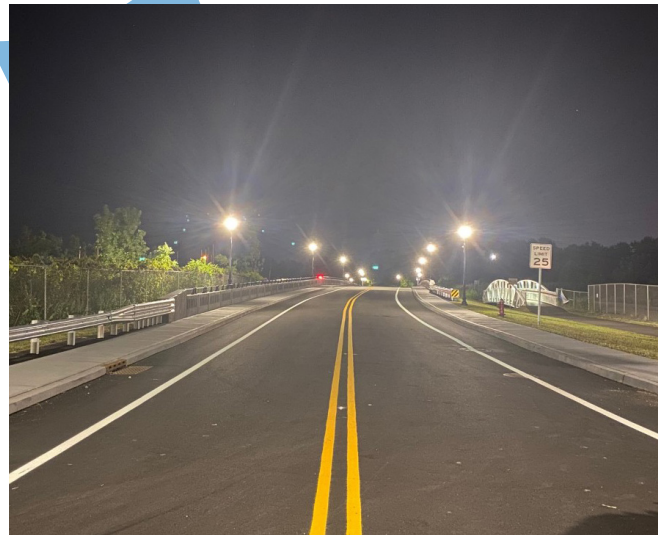
AWARDED AND WORKING

This is also work that never misses a week of progress. On-call striping includes the maintenance of all the stop bars, crosswalks, pavement markings, and the increased bike lane additions we have more recently focused on.



On-Call Speed Humps Program

We usually complete about 60 speed humps per year over the previous 7 years. We closed the year by tripling our production and constructing approximately 175 speed humps this year through two separate contracts operating concurrently.



Jersey Avenue Bridge

Engineering worked incredibly hard on this project for many years to get this large project complete. The bridge has been in discussion for multiple decades, but our group was the Division that saw it come to fruition. This bridge provides a key connection between Downtown and the southern part of the City. As part of the bridge opening, a new traffic signal was constructed at the intersection of Jersey Ave/Phillip Ave, and Johnston Ave/Audrey Zapp Dr.



Project Highlight: Bethune Park

The budget was **\$3M** and the construction cost came in just under that, even with the rise in pricing of materials due to COVID and a shortage of supplies causing a slightly extended construction duration.

Mary McLeod Bethune Park replaced an asphalt parking lot with a small public park comprised of pathways, an amphitheater/concrete stage and seating area, grassy areas, a picnic area, playground, and an outdoor gallery space to be used for celebrations, vending, and farmer's markets. A new parking lot with EV charging stations was constructed across Fulton Avenue to preserve the supply of parking. Both are open and in operation; and proving to be successful. Bethune Community Center also gives residents outdoor offerings of classes and events.



Space and Elements at Bethune Park

The idea of this park was discussed for over a decade so the community had many previous discussions and ideas of what they envisioned.

There was an existing park on the west side of Fulton Avenue that fell into disrepair that was going to be the original site for the new and improved park. Due to the “L” shaped lot, this layout was not ideal for a public park. There was a perfect rectangular lot directly across from the Bethune Center being used for parking right next door that was a much more fitting layout for a public park. We worked with the community in sharing why it would be beneficial to swap locations and build the parking lot on the old park location in a manner that would include as many spaces with less SF. The new parking lot also included a parking guard booth, additional lighting, and EV charging stations. We had to complete this aspect before breaking ground on the new park so Bethune Center and the community were never at a loss for parking. This location swap was a success and added an additional 20% increase of SF for the new park. This change of location did take effort in explaining to the community and also slowed down the construction speed by adding the additional scope of the new parking lot.

Another challenge was a lack of supplies due to COVID. There was shortage of steel for the structures as well as many elements needed for the statue casting on back order, which added another level of difficulty in delivering the finished product in time for the residents to enjoy in 2021. We cut the ribbon in August



ents

K



BETHUNE PARK Ribbon Cutting

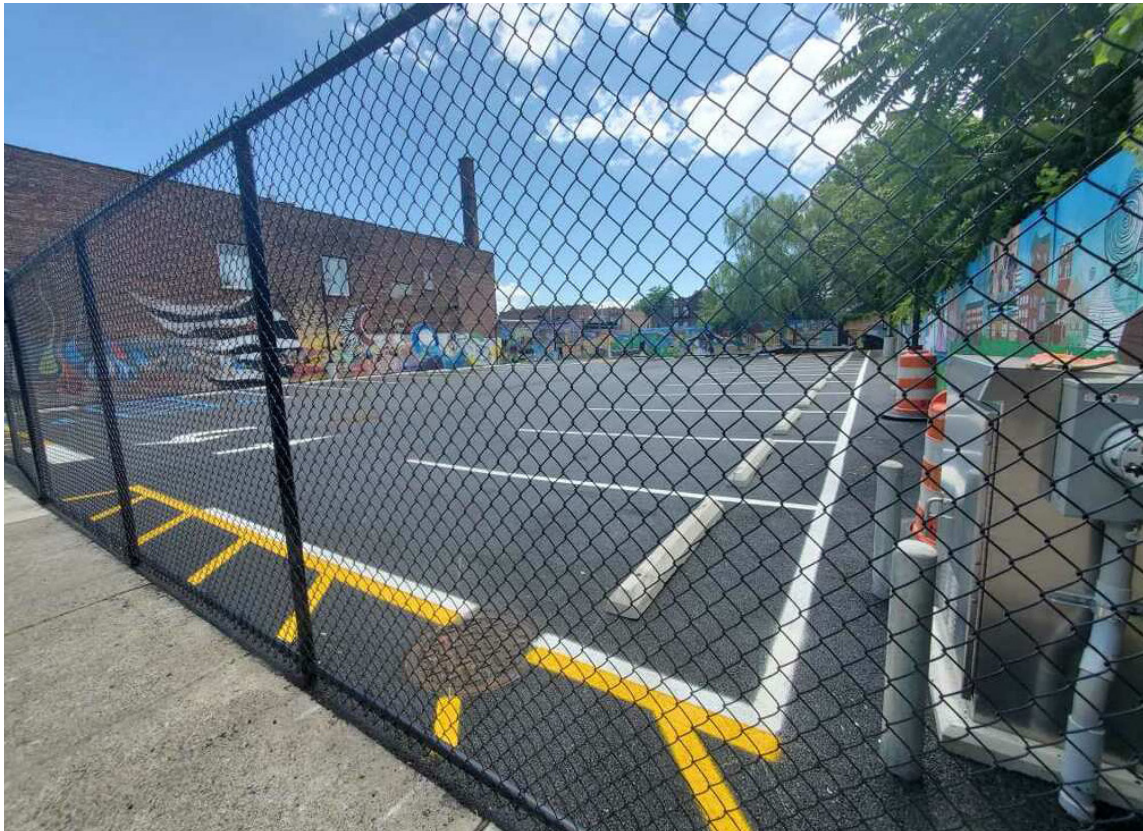


of 2021, giving the residents plenty of nice weather months to enjoy the new public open space.

Like many urban parks, our goal was the squeeze a lot of elements in a small space that provides something for everyone to enjoy. We accomplished this goal by creating one overall integrated park that gives a different feel in each of the sections We aimed to provide a corner for children of varying ages to enjoy playground equipment that also gave it an aesthetic structural appeal. We wanted to provide a comfortable amphitheater atmosphere for a large crowd to comfortably appreciate live music and entertainment. We wanted a space for community gatherings to hold outdoor meetings or organize varying events. We were able to effectively accomplish all of these goals in a park that is only 15,000 SF to work within.

The community has already fully embraced the completed park, which filled a critical need for safe open space in a crowded urban environment. With the Bethune Center just across the street, the park is meeting a diversity of uses, with both active and passive uses of the space. The park buzzing with activity has become a treasured asset to the community and will continue adding an outdoor space for Bethune Center's already beloved programming and classes.

BETHUNE PARKING LOT
before and after



PLAYGROUND
before and after





Central Avenue Streetscape \$4.8M

90% COMPLETED THIS YEAR

The NJ Department of Transportation (NJDOT) Municipal Aid FY2018 Road Program resurfaced and implemented pedestrian safety redesign elements along Central Ave from Manhattan Ave to Patterson Plank Road. This project included ADA-compliant curb ramp reconstruction at all corners, new sidewalks, new lighting, replacements, and resetting of castings, drainage improvements and signage upgrades. Other miscellaneous improvements include the installation of iron benches and trash receptacles, and the addition of trees. We only have some tree work and lighting installations in the beginning of 2022 to finalize this streetscape improvement.



18th St and Hoboken Ave Protected Bike Lanes

The directional protected bike lanes along Washington blvd and 18th St were extended west, from Marin Blvd to Jersey Ave (0.25 mile), and a protected two-way cycle track was constructed between Jersey Ave and Rt 139 (0.58 mile). As part of this project, on-street parking was maintained. This portion of protected bike lanes provides key connection to The Heights.



Newark Ave Pedestrian Plaza \$8M Estimated

75% COMPLETED THIS YEAR

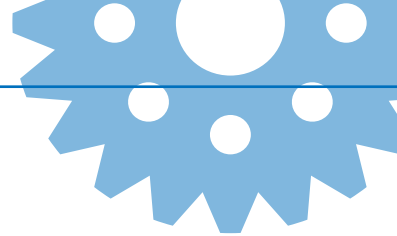
The Newark Avenue Pedestrian Plaza was originally constructed as a preliminary low-cost pilot in 2015, converting the area from mixed-mode to pedestrian only. After analyzing the effects on local businesses and pedestrian, vehicle, and bike traffic, the City began making the plaza a more permanent feature. The improvements include: granite pavers that elevate the street to match the sidewalk, decorative trench drains to line the curb, rain-garden tree planters, and café lighting for improved visibility. A stage area will also be constructed for concerts and community events. We aim to complete the remaining work in the first-half of 2022.



City Hall Basement Reconstruction \$3.0M

COMPLETED THIS YEAR

We created a plan to use union workers and COVID relief funds to gut and renovate the City Hall basement. This construction cost-estimate, staffing, and scheduling began mid August 2020. We aimed to have the basement fully operational for additional staff offices, meeting rooms, and swing spaces by the end of January 2021. We have completed approximately \$3M of work for material and labor costs into the CARES act for this project all while designing and managing the project in real time without any previous notice or planning. This design-build scope increased on a monthly basis but delivered 15,000 LF staying very close to the original schedule with many moving parts involved. We have also addressed some ongoing issues that were not resolved previously such as sinking concrete slabs, dropping back steps, heating pipes not being insulated which wasted energy and money, etc. (City Hall Basement Report attached). Again, this project serves as another example of work that is far outside our Division's scope of work, but we are always happy to assist in any way that will help push progress for the City.



Grand Street

60% COMPLETED THIS YEAR

Our Division began the Grand Street streetscape improvements from Pacific Avenue to Bramhall Avenue. The NJ Dept. of Transportation (NJDOT) Municipal Aid FY2019 Road Program resurfaced and implemented pedestrian safety street redesign. This project includes curb ramp reconstruction at all corners, improved lighting, replacement and re-setting of castings, drainage improvements, and signage upgrades. Other improvements include the installation of iron benches, trash receptacles, and trees. Some tree work and lighting installations are to take place in the beginning of 2022.

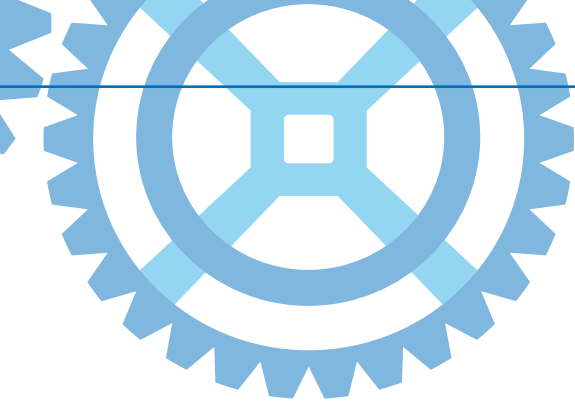


West Side Avenue Streetscape

70% COMPLETED THIS YEAR

We are partnering with MUA, as it incorporates green infrastructure to assist with drainage issues. This project began in the summer of 2021, to be completed by mid-2022. It will be a streetscape from Sip to Broadway with plans to carry this design further south on WestSide Avenue in upcoming years. The project will be the first continuous run streetscape that incorporates both green infrastructure and concrete curb extensions at intersections. It will be a successful measure in safety and flood mitigation while also serving the purpose of aesthetics.





Jersey Ave Protected Bike Lanes

Jersey Ave, between Grand St and the New Jersey Ave Bridge, was repaved and restriped to establish parking protected directional bike lanes. On-street parking was maintained and the head-in angled parking was converted to reverse-angle parking along the Light Rail tracks to help with visibility when drivers exit the parking spaces. Curb extensions and dedicated loading zones are also incorporated into the new striping plan.

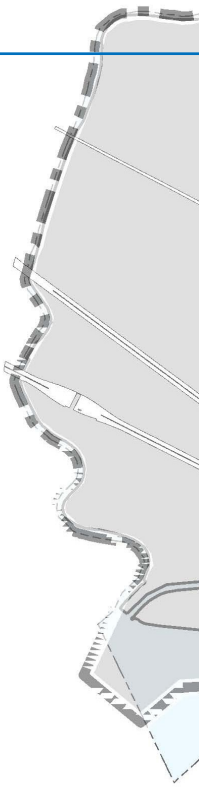
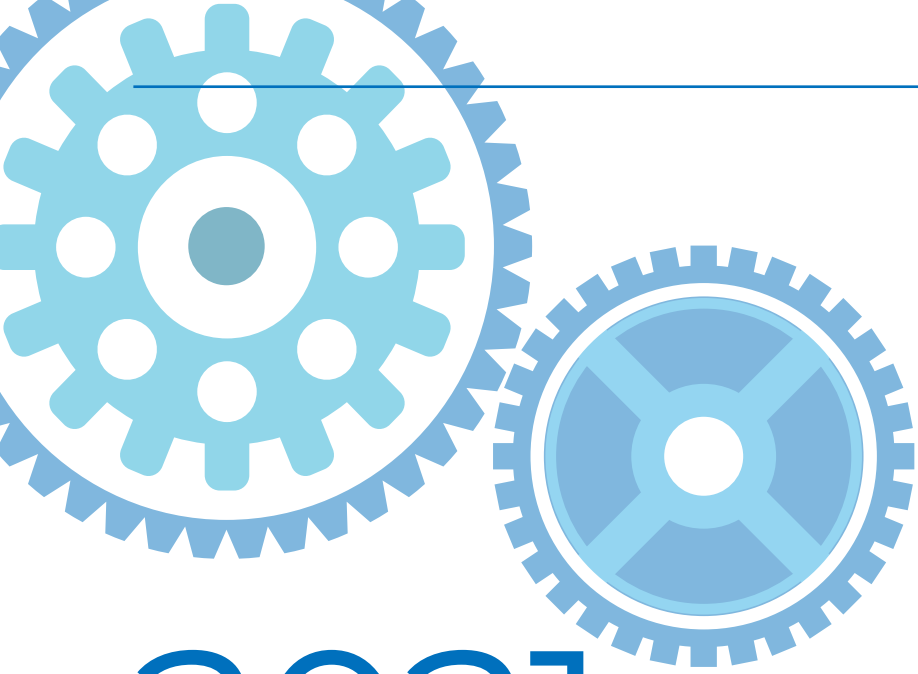


Johnston Avenue \$1.8M

SET TO RECOMMEND AWARD IN 2022

The NJ Transportation Planning Authority (NJTPA) FY2017 Road Program will aim to resurface and implement pedestrian safety street redesign on Johnston Avenue from Phillip Street to Grand Street, including compliance with Americans with Disabilities Act (ADA) and protected bike lanes. This project will also include curb-ramp reconstruction at all corners, replacement and resetting of castings, drainage improvements, signage updates, and decorative streetlights, etc., and parking will be relocated to the north side of the roadway.

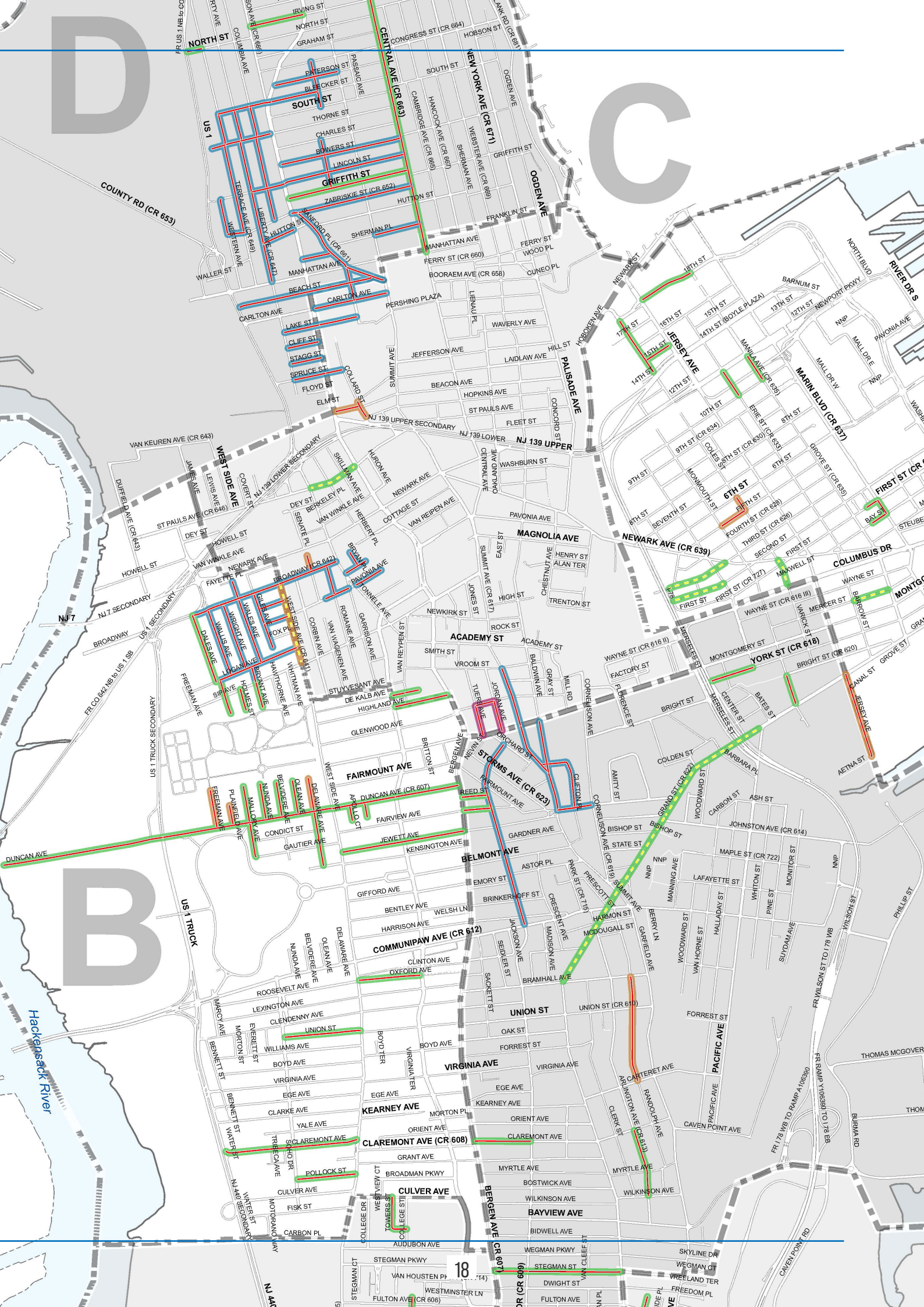




2021 Jersey City Resurfacing

Over the previous 7 years, we have averaged 11 miles of paved roads per year. We were able to nearly double that and paved over 21 miles throughout the City this year.





D

C

B

A

COUNTY RD (CR 653)

US 1

US 7

US 1 TRUCK

Hackensack River

Map containing numerous street names including: NORTH ST, SOUTH ST, GRIFFITH ST, NEW YORK AVE (CR 671), OGDEN AVE, JERSEY AVE, NEWARK AVE (CR 639), YORK ST (CR 618), FAIRMOUNT AVE, BELMONT AVE, COMMUNIPAW AVE (CR 612), VIRGINIA AVE, KEARNEY AVE, CLAREMONT AVE (CR 608), CULVER AVE, BERGEN AVE (CR 607), and many others.



Ground Floor at City Hall

15,000 SF
of storage space
converted into
new state of the
art crafted
usable office and
meeting space
in City Hall's
ground level.

Mayor and Council,

I am so incredibly proud of this project that turned 15,000 SF of storage space to new, state of the art crafted useable office and meeting space in City Hall ground level.

It was an honor to work with such incredible people to make this drastic transformation happen at such a grueling pace.

I was given a project to lead that was very much outside a typical engineering scope. This project was an architectural project, using local union staff, new procurement methods, COVID Cares Funding, and outside the box design/build method in order to get the majority of the work done by year's end and reimbursed. We had to push to complete it as fast as possible to secure as much grant funding from August 2020, through December 2020, which added a great deal of pressure and stress for all staff involved.

Our team worked so well with all twelve local unions who provided incredible workers who shared much of their knowledge and skills during the design/build process. Our internal Jersey City staff also worked very hard to write the book on these new procedures.

I would like to thank all our internal team who had so much added to their plate to make this project successful, including Aiden O'Hora, who worked on the daily reports included in Section 6 of this document. The city hall coordination team of John Minella, John Metro, and Emily Wahler, who assisted with decisions. Our purchasing and finance teams worked so hard on the hundreds of rushed purchase orders as we designed and flooded their desks as well as paying the many new workers; especially, Silendra Bajinauth, Nicole Liebhart, Kyle Greaves, Stephanie Santana, Raquel Tosado and her team. Vivek Ravel and Henry Bell assisted with the IT coordination to bring the AV equipment up to our high standard. Our HR department had over 50 hires to bring on board. There was great amounts of interdisciplinary teamwork that yielded these improvements to acknowledge.

Background & History

The City Hall of Jersey City is an elaborate granite and marble structure of mixed Victorian and Classical architecture.

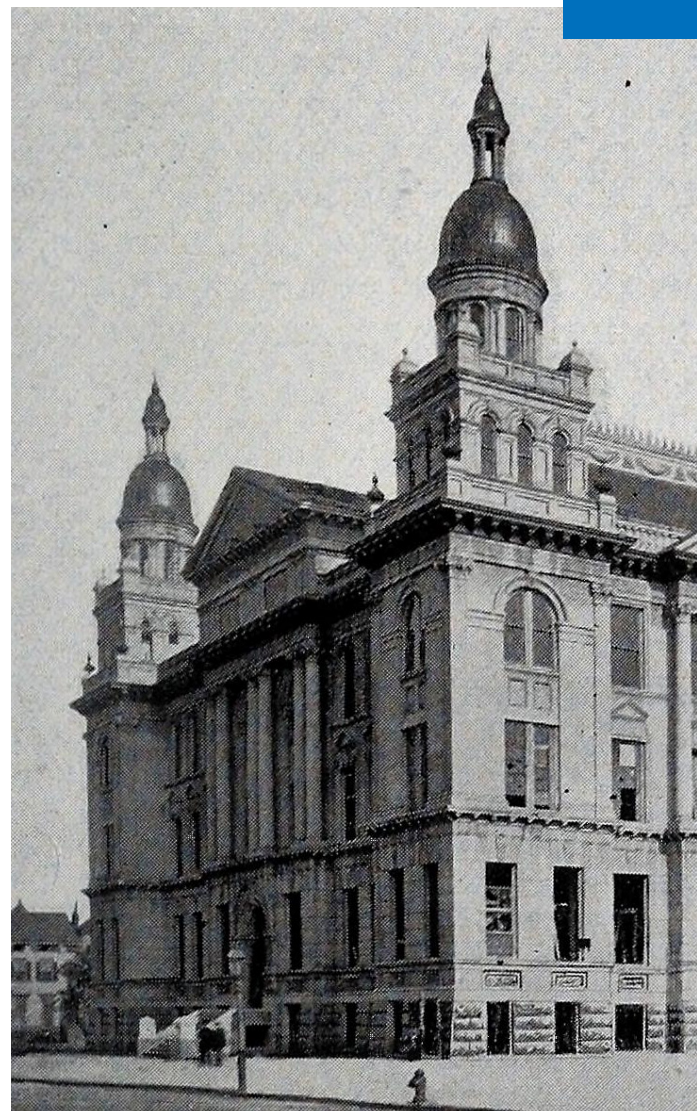
It was designed by the architect Lewis H. Broome (1849-1927) and completed in 1896. A park-like setting and landscaping around the building, similar to that of the City Hall of New York, was planned for the city's second seat of government. An entire city block of commercial structures and residences was leveled to make room for the new building.

After Hurricane Sandy in 2012 much of the lower level was flooding with over 5 feet of water. For various reasons much of the lower level was left untouched and was partially used for seasonal storage. During the Pandemic of 2020-21, the Administration saw the value of utilizing the lower level as a way to increase social distancing requirements and give employees and visitors more space to conduct business.

With very little time for planning and design, the Administration, through the Division of Engineering, Traffic and Transportation and various consultants worked to quickly ramp up the demolition, which required removal of multiple layers of ceilings, lights, floorings, wall finishes, and a century of various telecommunications wiring.

To facilitate the social distancing mandates several existing walls were removed to create larger spaces, which brought back parts of the buildings back to their original form. Other areas were heavily remediated due to various storms which deteriorated many of the concrete slabs.

During construction, the Administration was able to work with an in-house labor force to ensure that they





HALL PRIOR TO COMPLETION

1895 Architectural Records



demolished work-down building components with care not to harm any historical details and components. Many historic details were folded into the project, for example, the painting of the central historic stairs, painting of structural ceiling brackets, and detail at the elevator doors.

Due to cost and time, wood details were utilized instead of stone (which helps date the renovations from the original construction). Overall, the design is a practical blend of contemporary aesthetics while celebrating moments of the building's history in a tasteful way.

Although not seeking certification, the design team looked to LEED Certification and WELL Certification guidelines as a source of inspiration for the design of the space, especially utilizing local products, energy efficiency and health and wellness best practices. Instead of designing to minimum codes, the team tried to achieve maximum benefit for the least amount of money.

Amenities

Some of the highlights of the newly-renovated 15,000 square foot space include the following amenities which were achieved through collaboration of everyone on the design-build team.

Council L Room

In order to help serve the citizens of Jersey City a new gathering space was created as a supplemental space to the chambers, which were renovated in a historical manner about 20 years ago. To make the space more flexible for more concurrent meetings, a moveable partition was added to create another space.

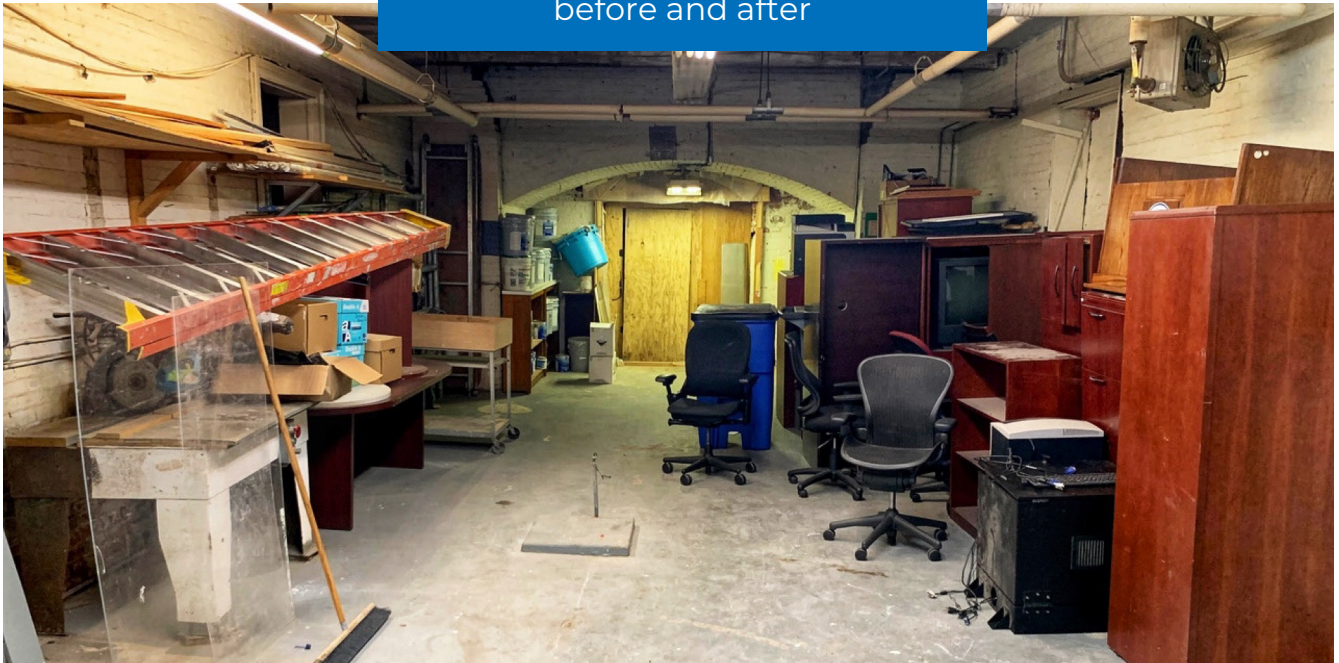
COUNCIL L ROOM before and after



Large Conference Room

Once used for seasonal storage and housekeeping supplies, the old, dilapidated room was given a new life. We boldly reimagined the room as a new large gathering space for larger meetings and gatherings, where social distancing can be considered and easily employed.

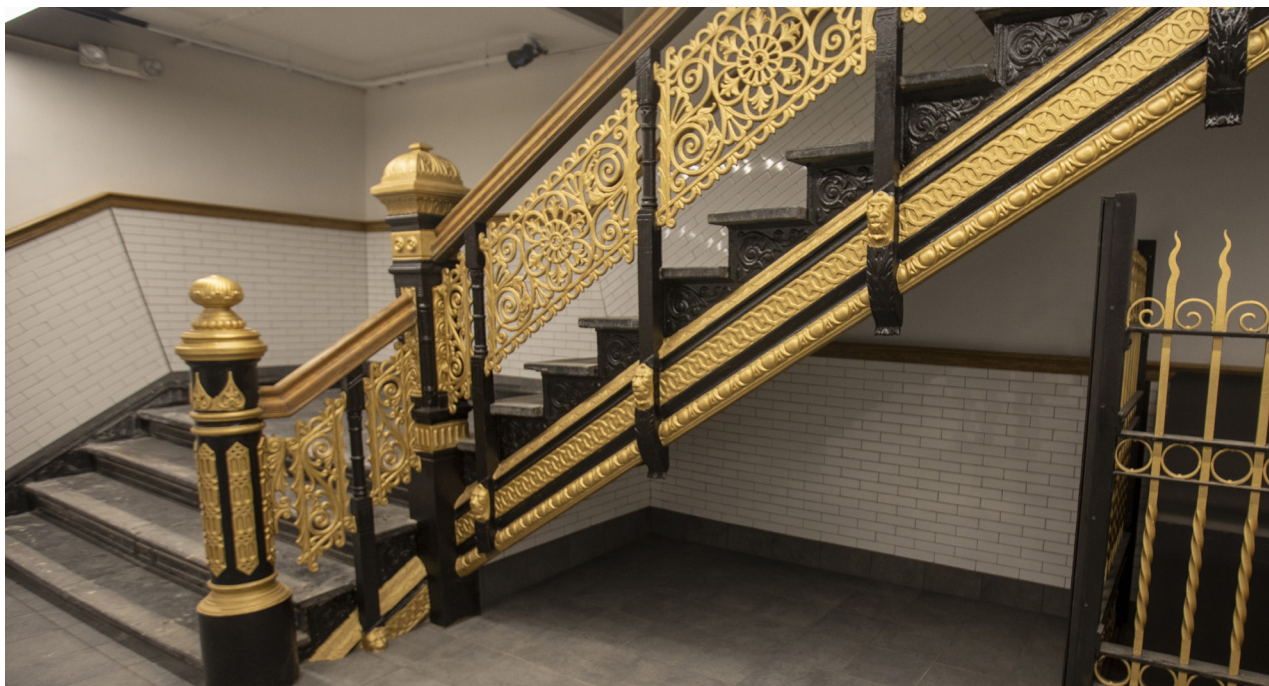
LARGE CONFERENCE ROOM
before and after

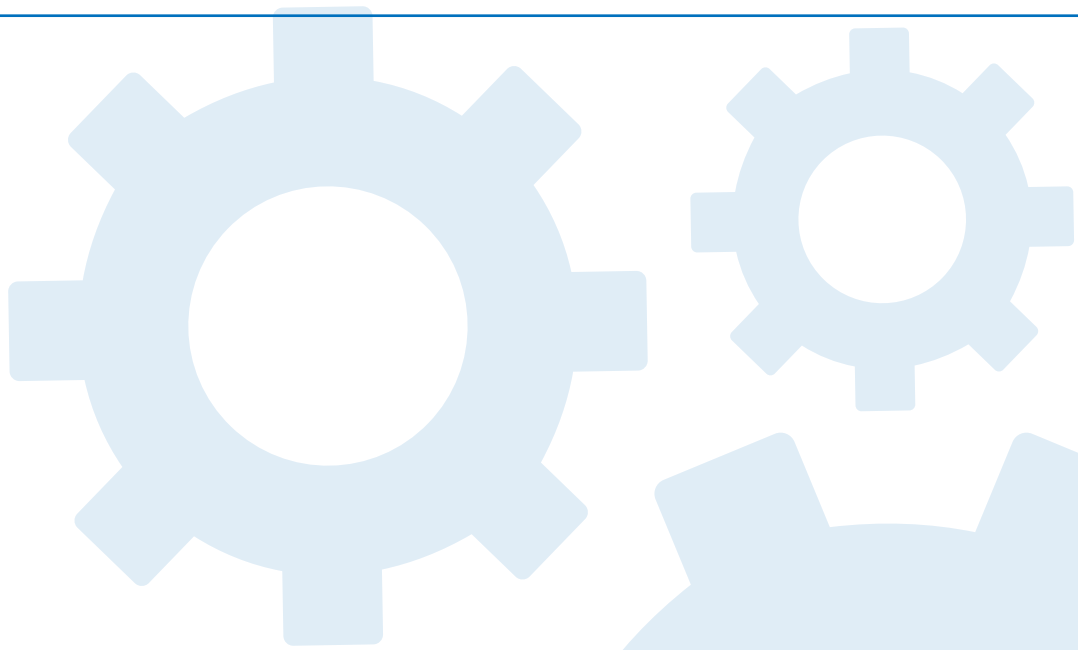


The Central Staircase

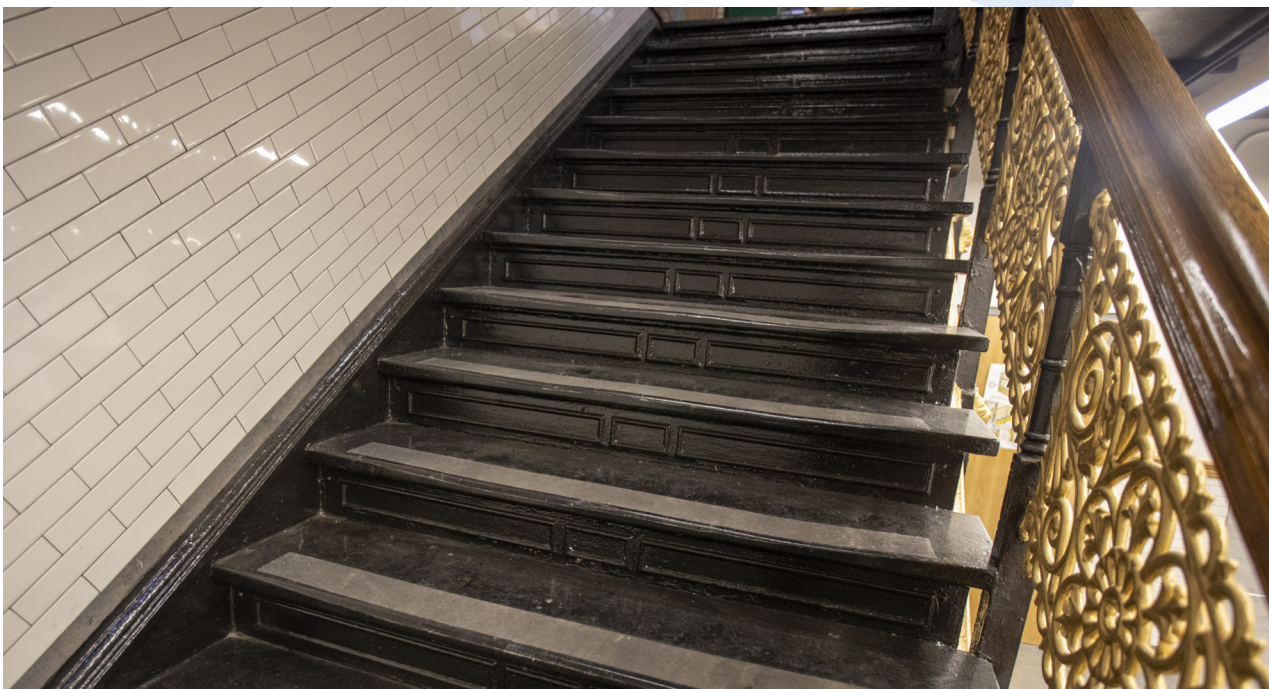
The tired original staircase was reimagined with black and gold paint which nods back to other areas of the building where the staircase was painted entirely either gold or black. The re-imagined staircase uses both of these president colors to make a bold statement.

CENTRAL STAIRCASE
before and after





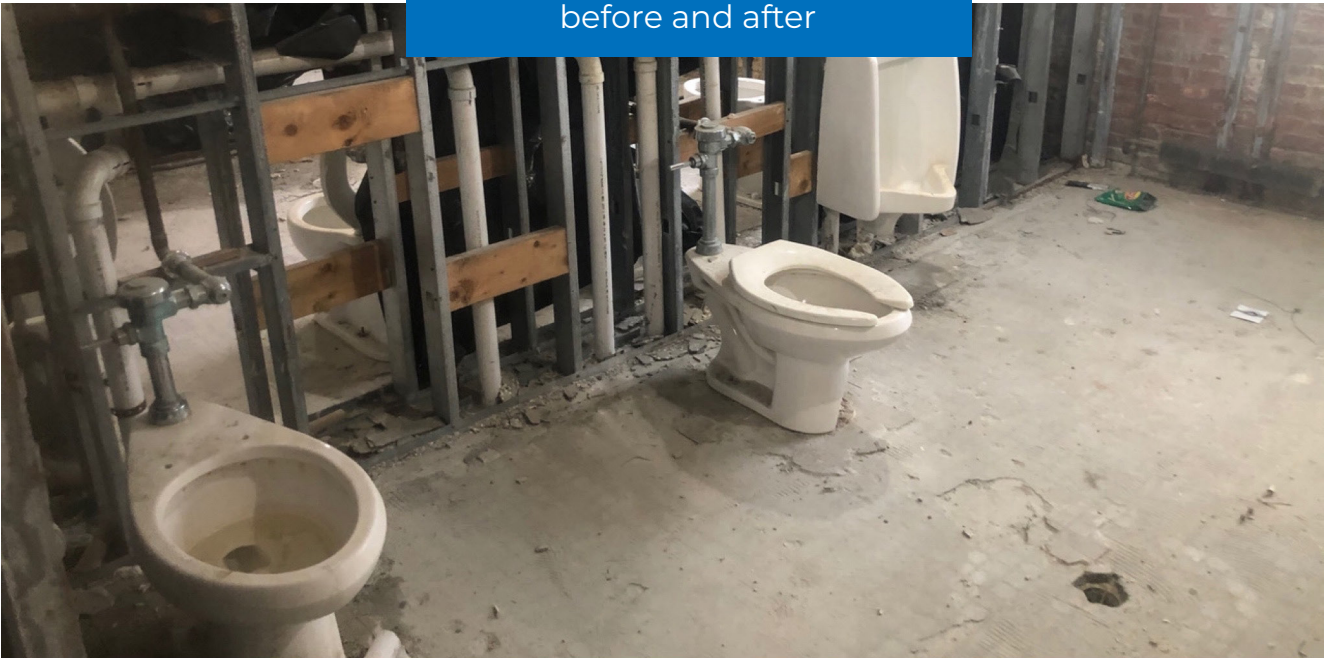
CENTRAL STAIRCASE DETAIL
before and after

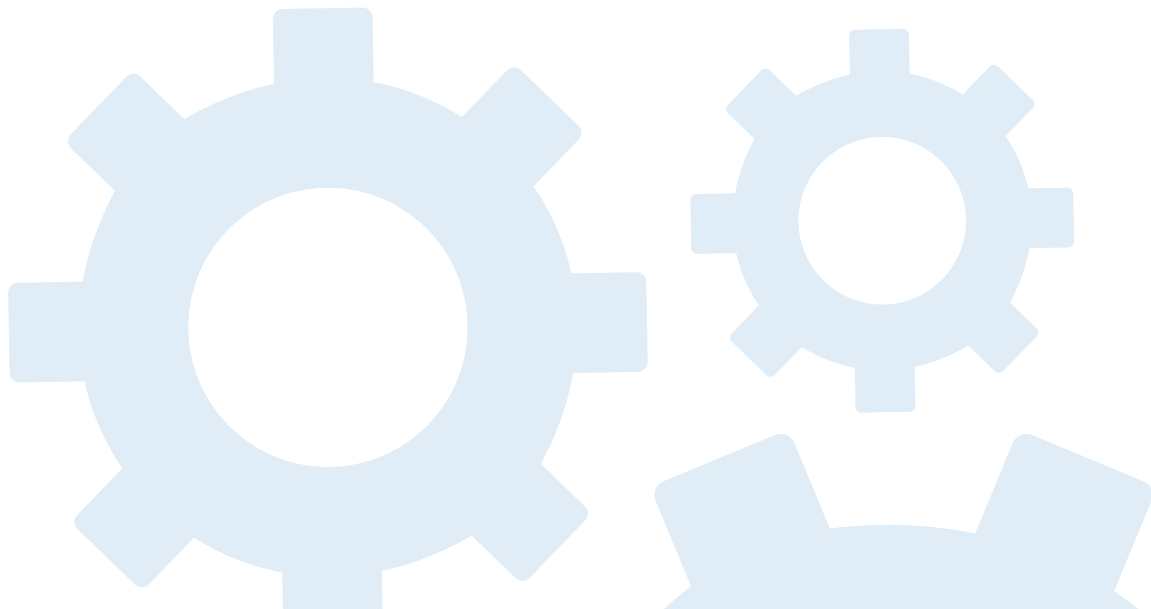


Non-Binary Restrooms & Lactation Room

One of the greatest accomplishments from the perspective of social equity is the non-binary private restrooms that were built to add maximum privacy instead of the typical flimsy bathroom stall dividers. A brand new spacious accessible bathroom and spacious lactation suite were also constructed in an old worn-out storage space.

NON BINARY RESTROOMS
before and after





LACTATION SUITE
before and after



Office Space

Part of the health and wellness initiative was to ensure that all staff and visitors to the space have plenty of space in accordance with health and wellness guidelines.

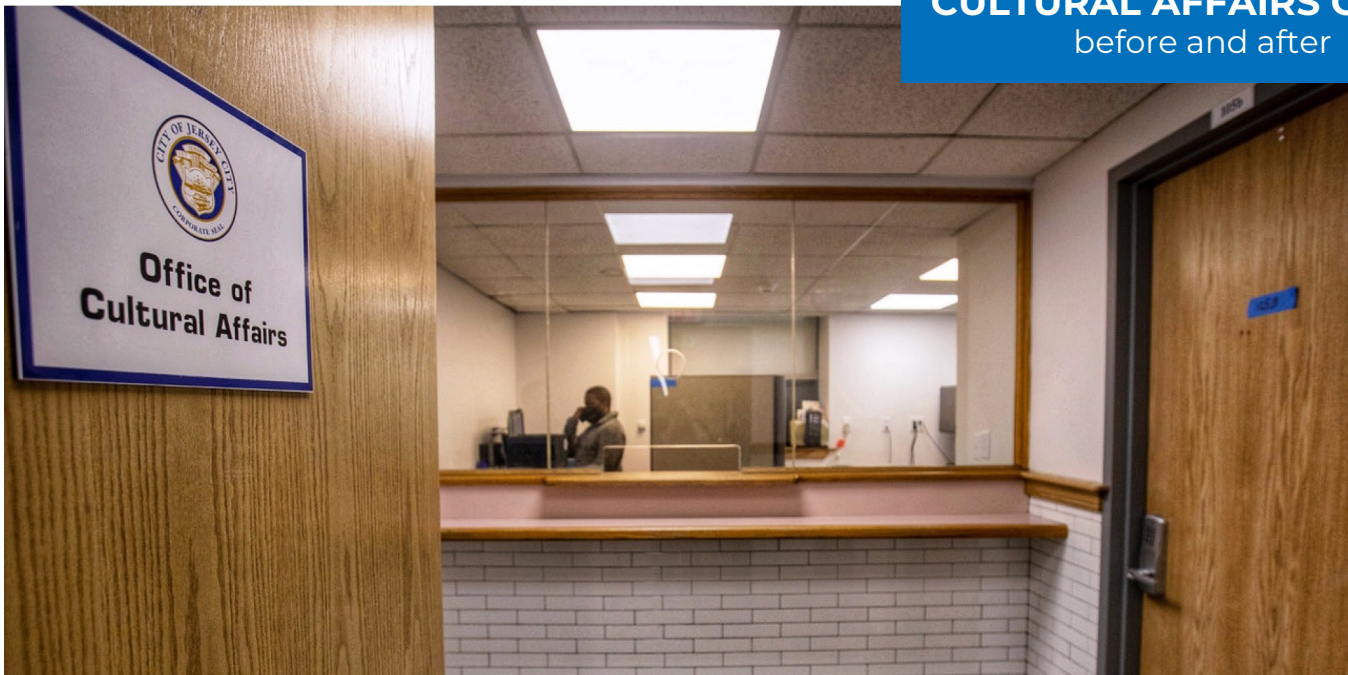


BREAK NOOK
before and after





CULTURAL AFFAIRS OFFICE
before and after



BLOCK GLASS DOORWAY

before and after



FRONT HALLWAY

before and after



Lighting

We transformed dark spaces into modern well lit areas that are safer to occupy and utilize energy-efficient LED light bulbs. Many areas of the project also boast lighting controls which also makes the space greener. All of the meeting areas were fitted with acoustical historic pattern ceilings.

REAR STAIRCASE
before and after



Structural Grade Beam Improvements & Reinforcements of Rear Staircase

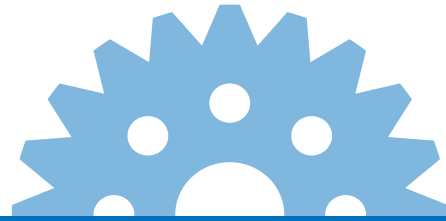
As a result of many years of flooding, the rear staircase and adjoining slabs were sinking and bowing. Part of the lower level improvements included shoring up the original staircase and removing the adjacent slab and replacing it with a new structurally reinforced concrete slab and structural grade beam which will last for many decades.



CLERK STAIRCASE
before and after



Process



1

Implementing a streamlined “Designed-Build” process with partners (reference list on next page) and 50+ union hall workers, the project was able to be substantially completed sooner than it would normally take for a project to be planned and designed, taking only 5 months from commencement to occupancy.

2

An added benefit to the streamlined process was completing the work “in-house” as a design-build project. We saved taxpayers over 2 million dollars.

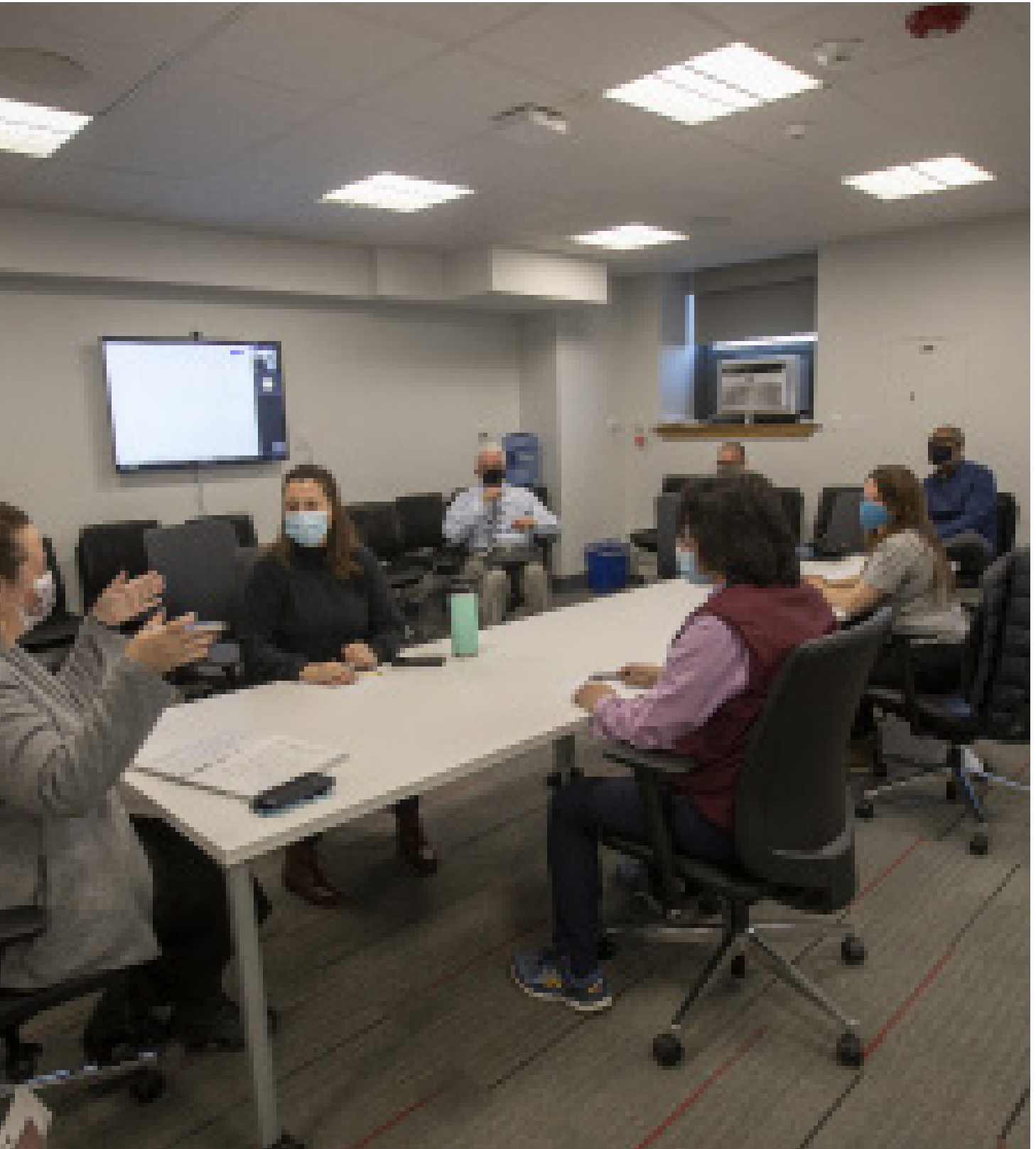
3

Working with the Purchasing Team, the Division of Engineering, Traffic and Transportation was able to process thousands of purchase orders in order to purchase the necessary tools, equipment, and materials to pull off this ambitious project.

4

Working with local Union representatives, in-house Legal team, and Human Resources team, the Division of Engineering; Traffic and Transportation was able to establish a memorandum of understanding and hire 50+ seasonal employees to ensure adequate manpower was available to deliver the primary tasks required by each respective building trades.





Other Work in 2021



Handicap Parking

Our Division worked diligently to bring us up-to-date with our long list of handicap permit parking requests that have recently come in. We had more applications submitted this year than previous years and we were able to establish more regularly schedule committee meetings (from 4 times a year to bi-weekly) and expedite the process. This was accomplished during a time that was so difficult when people really needed this efficient response time, we were able to deliver it. From the time we received an application to the time it was heard at a committee decreased from a 6 month maximum to a one month maximum.

Permitting

We continued issuing dumpster, engineering, and traffic permits while setting up online payments. Over 8,000 permits (traffic, permit, road/sidewalk opening permit, and dumpster permits) were issued in total in 2021. It is not just our Division completing more work than ever. It truly is all others such as PSE&G, Verizon, and MUA improving the city's utilities such as gas, water, sewer, electric, communications, etc. COVID presented a unique opportunity to allow more infrastructure work and more crews on the street than ever. We wanted to capitalize on that and this permitting team took on a heavy lift keeping up with it. We have already dialed utility work back as traffic built back to normal rates and kids returned to school.



Payments

With all of the work we have accomplished, obviously comes more payments. Our billing and finances team kept up with it all and tracked all of the projects so well to keep bills getting paid. This team was also essential in getting so many bids out this year.

Site Reviews

This responsibility never lets up and has been smoother than ever before. We improved this process to a digital sharing platform and have been on time with all reviews even when our standard allotted amount of time needed was not met.





Environmental & Mapping

All of our environmental issues throughout the City demand constant attention. The largest new project Skyway COVID Memorial Park moving forward this year and our teams work tirelessly to keep NJDEP informed on all sites they are involved with in Jersey City. Our team also assists with environmental OPRAs and correspondence for proposed cannabis facilities.

Sign Maintenance and See Click Fix

The City has almost 200 miles of roadway, tens of thousands of signs, and plenty of informed residents making requests. We are on top of our street signage daily to keep them in good shape and work diligently to close out hundreds of See Click Fix issues each year. See Click Fix tickets come in daily for asphalt, concrete, and miscellaneous issues that must be kept up with so that all resident complaints are heard and addressed.

Parklets

We have continued working on a process to bring parklets to restaurants and small businesses in need that acts as a lifeline to continue to serve customers in an outdoor capacity. We have completed permits and even assisted businesses with design guidelines that has led to 65+ parklets constructed during COVID trying times.

Garfield Avenue

We were awarded over \$8 million for safety improvements on Garfield Avenue, which will fund design, planning, and construction for the entire corridor.

VIA

Continued overseeing Via, and developed quarterly system performance reports, and began preparing proposals to secure both public and private funding to expand services.

Morris Canal Greenway

We moved the Morris Canal Greenway design forward to bid the plans and specs in 2022.

Bayfront

We continued the Bayfront Design.

Communipaw Ave LSP

This grant funded project consists of upgrading all curb ramps to be ADA compliant along Communipaw Ave between Marcy Ave and Park St, and also includes 7 new concrete curb extensions. The final design phase of this project was completed and the State has completed their review. This project will be put out to bid and awarded in 2022.

St. Paul's Ave and Oakland Ave Traffic Signal LSP.

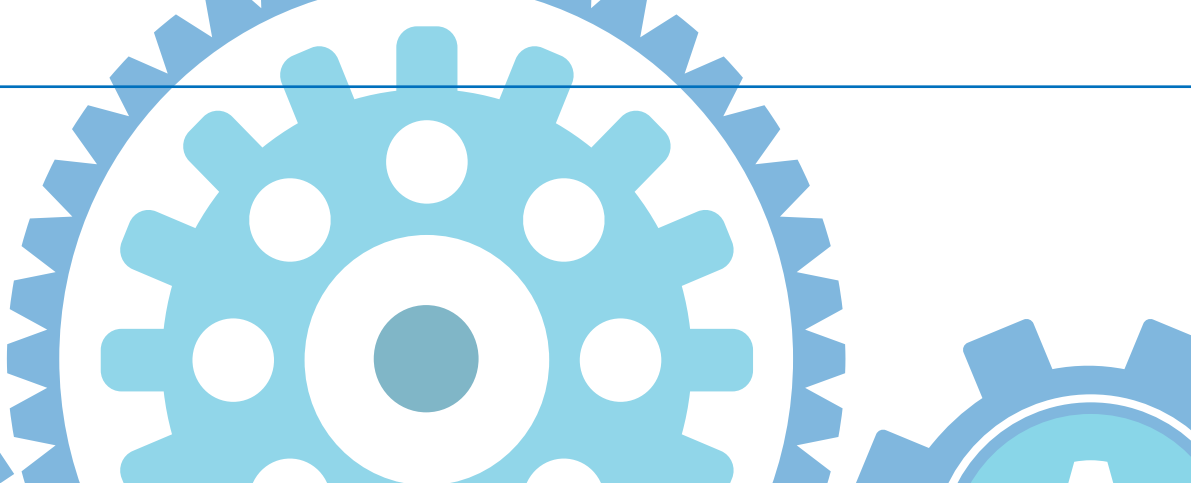
A new traffic signal is planned to be constructed at the intersection of St. Paul's Ave and Oakland Ave. The project includes concrete curb extensions at all four corners as well as green infrastructure. The final design phase was completed this year and is currently being reviewed by the NJDOT for approval. It is expected to go out for bid and awarded in 2022.

Marin Blvd LSP

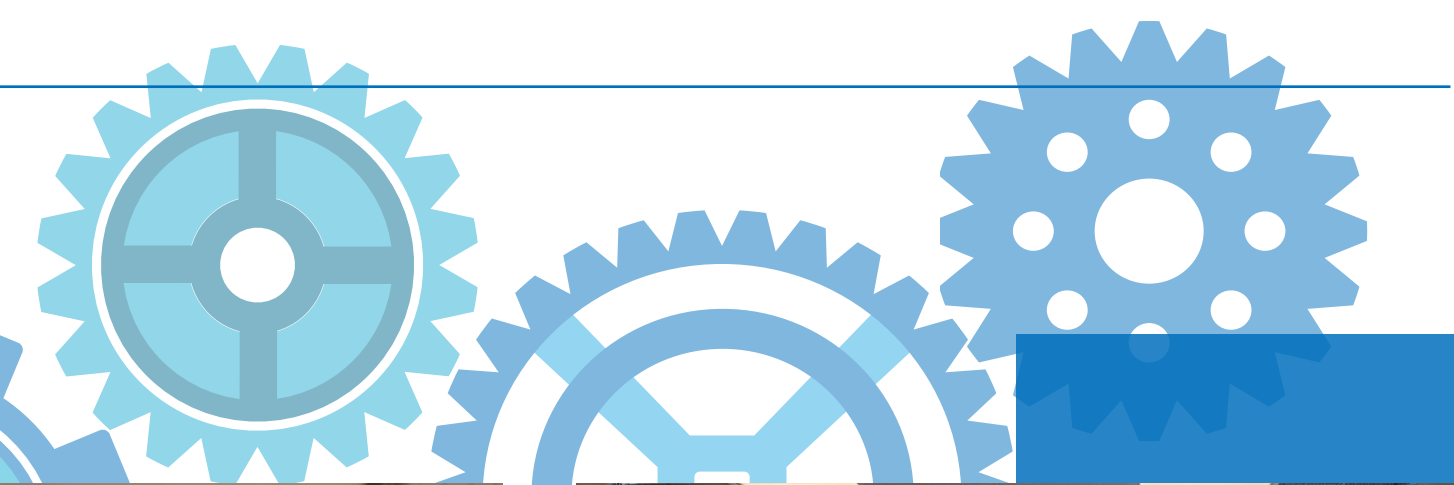
This is another grant funded safety improvements project along Marin Blvd, stretching from Montgomery St to 6th St/Thomas Gange-mi Dr. The final design phase of this project was initiated this fall. It will incorporate a protected northbound bike lane, a new traffic signal at Marin Blvd and Bay St, as well as large curb extensions at the intersection of Columbus Dr and Marin Blvd to shorten the crossing distances for pedestrians and realign the travel lanes to simplify the turning movement. Green infrastructure will be incorporated into the final design.

Sip Ave LSP \$2.6M

This project aims to resurface Sip Ave from Rt 1&9 Truck to Bergen Ave. This project will include curb ramps reconstruction at all corners, curb-extensions, replacement and resetting of casting, drainage improvements, and signal upgrades. A Public Information Center was held this past September to present and discuss the conceptual plans with the community. The comments will be considered and incorporated into the final design.



Thank you.



I am incredibly proud of our Division's ability to adapt and remain productive and efficient during these troubling times and I am confident that we will continue to rise to the occasion and keep moving Jersey City forward with so many important services and improvements!



Department of Administration
Division of Engineering,
Traffic & Transportation

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