

## The current proposal is:

Preservation Department – Item 1, LPC-25-09348

# 45-40 Court Square – New York State Supreme Court, Queens County, Long Island City Branch – Individual Landmark Borough of Queens

To testify virtually, please join Zoom

Webinar ID: 160 189 6727

Passcode: 366871

By Phone: 646-828-7666 (NY)

833-435-1820 (Toll-free)

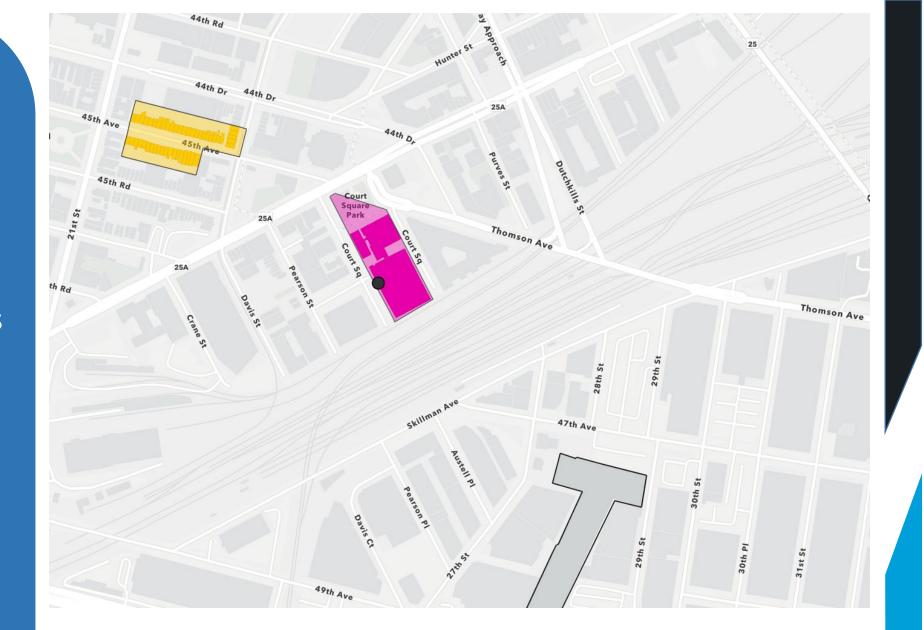
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# **Project Highlights**

- First DCAS-developed parking canopy solar project (Queens BBJ Garage first developed by DDC).
- □ DOT owned property with spacious garage with four Level-2 Dual-portEV Charging Stations used by public
- ☐ The solar project initially kickstarted in 2017 with many revisions to its design.

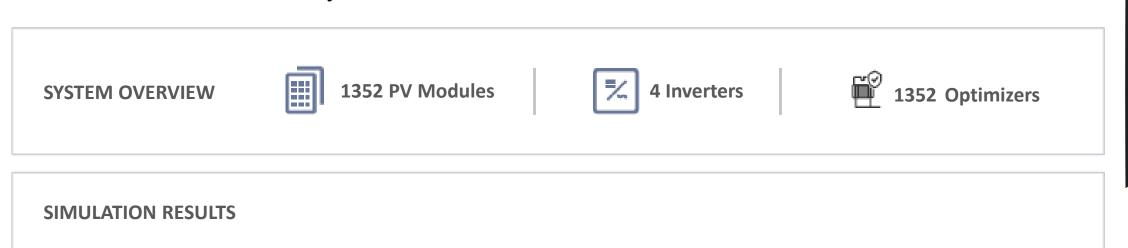


➤ Location: 45-40 Court Square Long Island City, NY 11101, Block 83, Lot 18.



# **Project Summary**

Increase the capacity of solar systems installed on City property as part of the drive towards 150 MW of solar by 2035.





Max Achieved AC Power







Annual Solar Energy Production

Annual CO2 Emission Saved Annual Equivalent Trees Planted

784.16 kWp

487.5 kw

474.32 MWh

335.3 t

15,402



- Height of canopy: 12-13 feet from top deck.
- Designed to blend with existing building's architecture.
- Four Level 2 EV charging stations (dual port) to charge 8 vehicles at a time



150 MW of Photovoltaic Solar planned or installed on City Properties by 2035.

4 Level-2 Dual-port EV **Charging Stations** 

Photo 1 : Original photograph of Court Square Garage (Left View)



Photo 2: Rendering of Solar Canopy on top of Court Square Garage (Left View)





Photo 1: Original photograph of Court Square Garage (Right View)

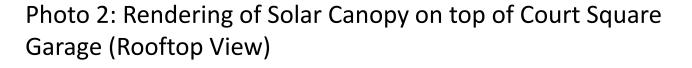


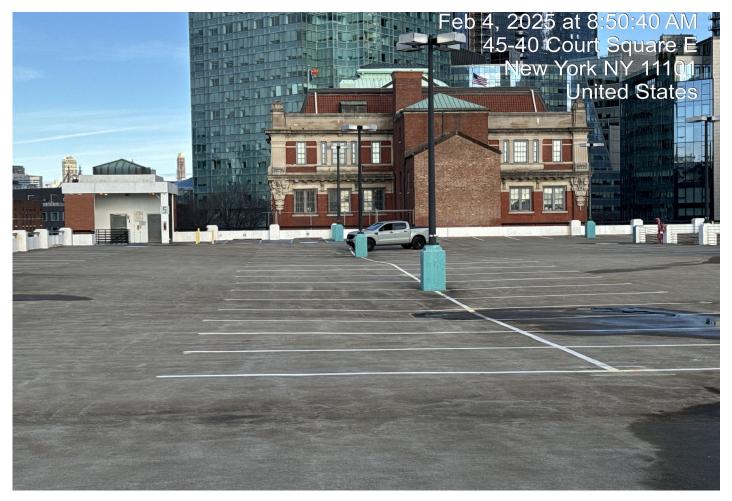
Photo 2: Rendering of Solar Canopy on top of Court Square Garage (Right View)





Photo 1 : Original photograph of Court Square Garage (Rooftop View)













# Photo: Rendering of Court Square Parking Garage (Night View)

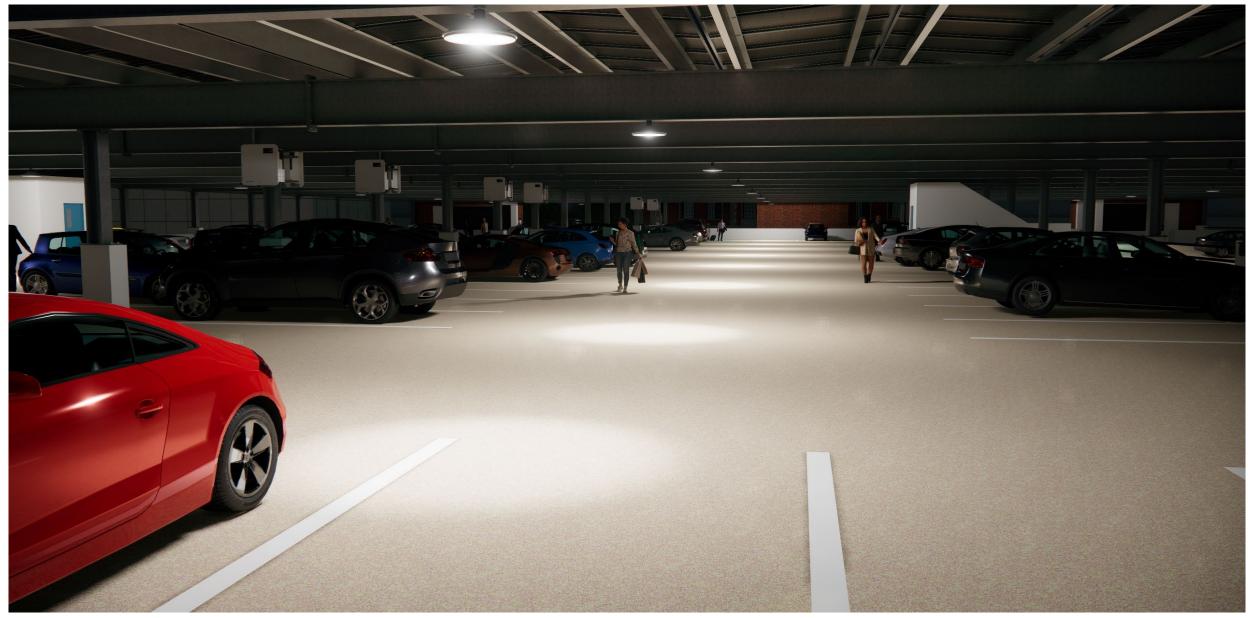




Photo 1 : Original photograph of Court Square Garage (Side View)



Photo 2: Rendering of Solar Canopy on top of Court Square Garage (Side View)





# **Project Schedule**

• The project is currently in Design Phase.

| Estimated Construction Start Date | 12/01/2025 |
|-----------------------------------|------------|
| Estimated Construction Completion | 10/31/2026 |







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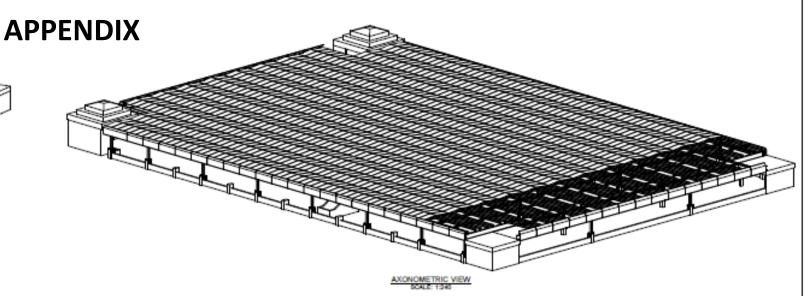
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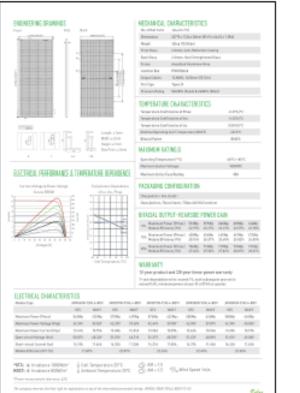
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## PV MODULE SPECS



MODULE - JKM580N-72HL4-BDV QTY - 1352 MODULES TOTAL OUTPUT - 784,16kW



### DRAWING INDEX

S001 - COVER SHEET

S002 - MODULE LAYOUT S100 - PIER/COLUMN LAYOUT

S200 - ARRAY FRAMING PLAN S300 - ARRAY SECTIONS S301 - ARRAY SECTIONS

S302 - ARRAY ELEVATIONS S303 - ARRAY ELEVATIONS

S303 - STAIRWELL ELEVATIONS S400 - CONNECTION DETAILS

S500 - CONNECTION AXONOMETRIC VIEWS

| DESIGN PARAMETER TABLE |       |  |
|------------------------|-------|--|
| KOVERNING CODE:        |       | NEW YORK CITY 2022 BUILDING CODE                 |
|                        |       | STRUCTURAL RISK CATEGORY                         |
| INOW LOAD:             |       |  |
| 25                     | Pg    | GROUND SNOWLOAD,PSF                              |
| 21                     | Pf    | FLAT-ROOF SNOW LOAD, PSF                         |
| 1                      | Con . | SNOW EXPOSURE FACTOR                             |
| 1                      | is.   | SNOW LOAD IMPORTANCE FACTOR                      |
| 1.2                    | œ     | THERMAL FACTOR                                   |
| 20                     | Pm    | MIN SHOW LOAD FOR LOW-SLOPE ROOF PSF             |
| WIND LOAD:             |       |  |
| 117                    | V     | BASIC DESIGN WIND SPEED, MPH                     |
| 1                      | ber   | WIND IMPORTANCE FACTOR                           |
| 0.85                   | K4    | VELOCITY PRESSURE EXPONENT COEFFICIENT           |
| 1                      | Ke    | GROUND ELEVATION FACTOR                          |
| C                      |       | WIND EXPOSURE CATEGORY                           |
| +/-0.18                | GCPI  | INTERNAL PRESSURE COEFFICIENT                    |
| OPEN                   |       | ENCLOSURE CLASSIFICATION FOR NEW CANOPY          |
| PARITIALLY OPEN        |       | ENCLOSURE CLASSIFICATION FOR THE EXISTING GARAGE |
| 34                     | q.    | VELOCITY PRESSURE, PSF                           |
| -37.5742.4             | P     | DESIGN WIND PRESSURE (CBC)                       |
|                        |       |  |
| RESMIC DESIGN:         |       |  |
| 1                      | ie .  | SEISMIC IMPORTANCE FACTOR                        |
| 0,288                  | Sis   | SHORT PERIOD SPECTRAL RESPONSE ACCELERATION      |
| 0.6                    | 51    | 1-SECOND PERIOD SPECTRAL RESPONSE ACCELERATION   |
| D                      |       | SITE CLASS (ASSUMED)                             |

### GENERAL PROJECT NOTES

ALL STRUCTURAL WORK SHALL CONFORM TO THE PROJECT SPECIFICATIONS, INCLUDING THE 2022 NEW YORK CITY BUILDING CODE. THE FOLLOWING STANDARDS WERE USED AS SPECIFIED IN THE GOVERNING BUILDING CODE:

a) ASCE 7-16 MINIMUM DESIGN LOADS (AND ASSOCIATED CRITERIA) FOR BUILDINGS AND OTHER STRUCTURES b) ACI 318-14 BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE c) AISC 360-16 SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS

 CONTRACTOR SHALL PROVIDE TEMPORARY SHORING, BRACING AND SHEETING AND SHALL MAKE SAFE ALL FLOORS, ROOFS, WALLS AND ADJACENT PROPERTY AS PROJECT CONDITIONS REQUIRE. SHORING AND SHEETING SHALL BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER LICENSED IN THE PROJECT JURISDICTION, HIRED BY THE CONTRACTOR, WHO SHALL SUBMIT SHOP DRAWINGS AND CALCULATIONS FOR THE OWNER'S REVIEW.

 DIMENSIONS AND ELEVATIONS OF EXISTING CONSTRUCTION GIVEN IN STRUCTURAL DRAWINGS ARE BASED ON INFORMATION CONTAINED IN VARIOUS ORIGINAL DESIGN AND CONSTRUCTION DOCUMENTS PROVIDED BY THE OWNER, AND LIMITED FIELD DESERVATIONS AND MEASUREMENTS. THE CONTRACTOR SHALL VERIFY ALL INFORMATION PERTAINING TO EXISTING CONDITIONS BY ACTUAL MEASUREMENT AND OBSERVATION AT THE SITE. ALL DISCREPANCIES BETWEN ACTUAL CONDITIONS AND THOSE SHOWN IN THE CONTRACT DOCUMENTS SHALL BE REPORTED TO THE ENGINEER OF RECORD FOR EVALUATION BEFORE THE AFFECTED CONSTRUCTION IS PUT IN PLACE.

4. ALL STEEL COLUMNS, BEAMS, BRIDGING, FITTINGS, BOLTS AND ANCHOR RODS TO BE HOT DIPPED GALVANIZED AND PAINTED TNEMEC 09WH ALBATROSS

5. ALL W-FLANGE MEMBERS TO BE GRADE A992 ALL ANGLE BRIDGING MEMBERS TO BE GRADE A36 ALL PLATE HARDWARE TO BE GRADE A36 UNLESS NOTED GRADE 50 ALL BOLTS TO GRADE A325N ALL ANCHOR RODS TO BE GRADE F1554-55 ALL WELDING ELECTRODES E70XX

6. ALL BOLTS MARKED AS "TC" MAY USE DIRECT TENSION INDICATOR WASHERS WITH NON-TC BOLTS TO ACHIEVE CORRECT BOLT TENSION.

### INSPECTIONS:

1. SPECIAL INSPECTIONS (NYC)

a. SPECIAL INSPECTIONS REQUIRED BY THE LOCAL JURISDICTION SHALL BE PERFORMED BY A TESTING AGENCY PROVIDED BY THE OWNER FOR THE FOLLOWING ITEMS:

L STRUCTURAL STEEL - WELDING (BC 1705.2.1) IL STRUCTURAL STEEL - DETAILS (BC 1705.2.2) IL STRUCTURAL STEEL - HIGH STRENGTH BOLTING (BC 1705.2.3)

2. PROGRESS INSPECTIONS (NYC)

a. INSPECTIONS REQUIRED BY THE LOCAL JURISDICTION SHALL BE PERFORMED BY A TESTING AGENCY PROVIDED BY THE OWNER FOR THE FOLLOWING ITEMS:

L FINAL (28-114, 28-118.2.4.2, BC 110.5, DIRECTIVE 14 OF 1975, AND 1 RCNY 101-10)

b. THE TESTING AGENCY FOR THE INSPECTIONS SHALL FILE ALL APPROPRIATE



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