



# TR2: Technical Report Concrete Sampling and Testing

*Must be typewritten.*

DOB#220636881

✓ Orient and affix BIS  
job number label here

Sheet number 1

## 1 Location Information *Required for all applications.*

House No(s) 560 Street Name Brook Avenue

Borough Bronx Block 2276 Lot 1 BIN 2000133 CB No. 201

Work on Floor(s) CEL,ROF 001 thru 002 Apt/Condo No(s)

## 2 Licensed Concrete Testing Lab Information *Required for all applications.*

Director Last Name Lievano

Director First Name Eduardo

Director Middle Initial

Business Name Tectonic Engineering & Surveying Consultants P.C

Business Telephone (718) 391-9200

Business Address 24-37 46th Street

Business Fax

City Astoria

State New York

Zip 11103

Mobile Telephone

E-Mail Elievano@TectonicEngineering.com

Director's Lic. Number 090876

☒ P.E. ☐ R.A.

Concrete Testing Lab Lic. Number 000073

## 3 Licensed Concrete Testing Laboratory's Identification of Responsibilities *Required prior to Permit.*

### Check all that apply below:

I certify that I am the director of the licensed concrete testing laboratory accepting responsibility for conducting the testing in accordance with BC 1905.6 and BC 1704.1. I further certify that I have read the applicable sections of the New York City Construction Codes in connection with the testing of concrete and licensed concrete testing laboratories as well as 1 RCNY §5-02 and 1 RCNY §101-07(c)(6), which specifies the qualifications and duties required of a licensed concrete testing laboratory and that this licensed testing laboratory meets those qualifications for the work which I take responsibility. I agree that both I and the licensed concrete testing laboratory will comply with all provisions of the New York City Construction Codes as well as 1 RCNY §5-02 and 1 RCNY §101-07(c)(6). I am aware of the additional sanctions imposed on false filings by §28-211.1.2 of the Administrative Code.

**Change of Applicant:** I am a newly designated individual responsible for the testing specified herein and I hereby state that:

- ☐ None of the tests indicated herein have been performed to date by the previously designated individual.
- ☐ Some of the tests indicated herein have been performed by the previously designated individual, as indicated in the attached report.

Name (please print)

Signature

Date

P.E. / R.A. Seal (apply seal, then sign and date over seal)

TR2

Sheet number 2

**4 Design Applicant's Statement and Signature** *P.E./R.A. Required prior to Permit.*

☐ I certify that the licensed concrete testing laboratory specified in section 2 above and engaged by the owner to perform tests on the work at the location specified in section 1 above is acceptable. (BC 1704.1)

Name (please print)

Signature

Date

P.E. / R.A. Seal (apply seal, then sign and date over seal)

**5 Building Owner's Statement and Signature** *Required prior to Permit*

I certify that I have employed the licensed concrete testing laboratory specified in section 2 above in accordance with BC 1704.1. Falsification of any statement is a misdemeanor and is punishable by a fine or imprisonment, or both. It is unlawful to give to a city employee, or for a city employee to accept, any benefit, monetary or otherwise, either as a gratuity for properly performing the job or in exchange for special consideration. Violation is punishable by a fine or imprisonment, or both. I understand that if I am found after hearing to have knowingly or negligently made a false statement or to have knowingly or negligently falsified or allowed to be falsified any certificate, form, signed statement, application, report or certification of the correction of a violation required under the provisions of this code or of a rule of any agency, I may be barred from filing further applications or document with the Department.

Name (print)

Title

Signature

Date

**STOP HERE PRIOR TO PERMIT**



TR2

DOB# 220636881

Sheet number 4 of 0 sheets

**6 Test Report Required prior to Sign-off. Use supplemental pages as needed. Attach Original Lab Test Reports**Specified Concrete Str. (f<sub>c</sub>): 4000 PSI Conv Normal Specified Test Age (days): 28

|                    |                   |               | Field Testing Results: |             |             |                     |                      |                 |                   |
|--------------------|-------------------|---------------|------------------------|-------------|-------------|---------------------|----------------------|-----------------|-------------------|
| Test Report Number | Date of Placement | Cylinder I.D. | Slump                  | Air Content | Temperature | Weight              | Placement Location   | Total Placement | Breaking Strength |
|                    |                   |               | in                     | %           | °F          | lbs/ft <sup>3</sup> |                      | yd <sup>3</sup> | PSI               |
| 5/15 (SD)          | 5/15/2019         | 19CCY-12739   | 5                      | 5.5         | 63          | 144.6               | sidewalk             | 8               | 7070              |
| 5/15 (SD)          | 5/15/2019         | 19CCY-12740   | 5                      | 5.5         | 63          | 144.6               | sidewalk             | 8               | 6470              |
| 5/15 (SD)          | 5/15/2019         | 19CCY-12741   | 5                      | 5.5         | 63          | 144.6               | sidewalk             | 8               | 6510              |
|                    |                   |               |                        |             |             |                     |                      | Average         | 6680              |
| 5/21 (GJ)          | 5/21/2019         | 19CCY-13677   | 5.5                    | 6.2         | 70          | 146.2               | sidewalk             | 6               | 5030              |
| 5/21 (GJ)          | 5/21/2019         | 19CCY-13678   | 5.5                    | 6.2         | 70          | 146.2               | sidewalk             | 6               | 5120              |
| 5/21 (GJ)          | 5/21/2019         | 19CCY-13679   | 5.5                    | 6.2         | 70          | 146.2               | sidewalk             | 6               | 4940              |
|                    |                   |               |                        |             |             |                     |                      | Average         | 5030              |
| 5/28 (FY)          | 5/28/2019         | 19CCY-14139   | 4.5                    | 5.6         | 69          | 141.2               | WATER FEATURE        | 6               | 4440              |
| 5/28 (FY)          | 5/28/2019         | 19CCY-14140   | 4.5                    | 5.6         | 69          | 141.2               | WATER FEATURE        | 6               | 4620              |
| 5/28 (FY)          | 5/28/2019         | 19CCY-14141   | 4.5                    | 5.6         | 69          | 141.2               | WATER FEATURE        | 6               | 4800              |
|                    |                   |               |                        |             |             |                     |                      | Average         | 4620              |
| 5/30 (FY)          | 5/30/2019         | 19CCY-14621   | 5                      | 7.2         | 73          | 143.2               | WATER FEATURE        | 9               | 4550              |
| 5/30 (FY)          | 5/30/2019         | 19CCY-14622   | 5                      | 7.2         | 73          | 143.2               | WATER FEATURE        | 9               | 4590              |
| 5/30 (FY)          | 5/30/2019         | 19CCY-14623   | 5                      | 7.2         | 73          | 143.2               | WATER FEATURE        | 9               | 4640              |
|                    |                   |               |                        |             |             |                     |                      | Average         | 4590              |
| 5/31 (JB)          | 5/31/2019         | 19CCY-14627   | 8.5                    | 6.3         | 72          | 142.8               | shade structure slab | 8               | 4350              |
| 5/31 (JB)          | 5/31/2019         | 19CCY-14628   | 8.5                    | 6.3         | 72          | 142.8               | shade structure slab | 8               | 3830              |
| 5/31 (JB)          | 5/31/2019         | 19CCY-14629   | 8.5                    | 6.3         | 72          | 142.8               | shade structure slab | 8               | 4010              |
|                    |                   |               |                        |             |             |                     |                      | Average         | 4060              |
| 5/31 (JB)          | 5/31/2019         | 19CCY-14633   | 8                      | 6           | 75          | 143                 | shade structure slab | 8               | 4420              |
| 5/31 (JB)          | 5/31/2019         | 19CCY-14634   | 8                      | 6           | 75          | 143                 | shade structure slab | 8               | 4640              |
| 5/31 (JB)          | 5/31/2019         | 19CCY-14635   | 8                      | 6           | 75          | 143                 | shade structure slab | 8               | 3780              |
|                    |                   |               |                        |             |             |                     |                      | Average         | 4280              |
| 6/7 (SV)           | 6/7/2019          | 19CCY-15318   | 4.5                    | 6.5         | 78          | 144.8               | yard slab section    | 6               | 4600              |
| 6/7 (SV)           | 6/7/2019          | 19CCY-15319   | 4.5                    | 6.5         | 78          | 144.8               | yard slab section    | 6               | 4600              |
| 6/7 (SV)           | 6/7/2019          | 19CCY-15320   | 4.5                    | 6.5         | 78          | 144.8               | yard slab section    | 6               | 4630              |
|                    |                   |               |                        |             |             |                     |                      | Average         | 4610              |

Licensed Concrete Lab Director Name (please print)

Eduardo Lievano, P.E.

Signature

Date

09-18-2019

P.E. / R.A. Seal (apply seal, then sign and date over seal)

**7 Licensed Concrete Testing Laboratory's Certification of Completion** *Required prior to Sign-off.*

- ☒ I certify that I have completed the testing specified herein and that the results reported in section 6 of this form are true and accurate in accordance with §28-406.3.2.

I am aware of the additional sanctions imposed on false filings by §28-211.1.2 of the Administrative Code.

- ☐ **Withdrawal of Applicant:** I am withdrawing responsibility for conducting the tests indicated herein and herewith submit the results or status of the work performed to date.

Name (please print)

Eduardo Treviño

Signature

Date

09-13-2019

P.E. / R.A. Seal (apply seal, then sign and date over seal)

**8 Design Applicant's Statements and Signatures** *Required prior to Sign-off. P.E./R.A. responsible for plans, choose one and sign/seal.*

- ☒ I certify I have reviewed the test results reported by the licensed concrete testing lab in section 6 above and found them to be in compliance with the approved construction documents.

- ☐ I certify I have reviewed the test results reported by the licensed concrete testing lab in section 6 above and found them to be in compliance with the approved construction documents except as noted in the attached report (BC 1905.6).  
Note: design sheets must be signed and sealed separately and must be attached to this document

Name (please print)

Donald J. Henry

Signature

Date

4/27/22

P.E. / R.A. Seal (apply seal, then sign and date over seal)

**9 Concrete Producer's Statement and Signature** *Required prior to Sign-off. Must be filled out by Owner of Production Facility.*

I certify that the test results reported in section 6 above were reported to me, and I further certify that the concrete delivered is in accordance with the design mix(es) specified on the TR3 submitted for the work specified in section 1 above.

Name (print) Michael Saccente

Title President

Signature

Date

4/1/22

NRMCA/CIB Expiration Date (BC 1905.8.2)

Business Name Titan Concrete Inc.

Business Telephone 718-288-8585

Business Address 526 Drake Street

Business Fax:

City Bronx

State NY

Zip 10512

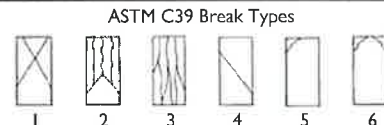
Project ID: **6862.63A**  
Project: **Horizon Juvenile Center Renovation - Main Bldg**  
**Renovation scope**  
Address: **560 Brook Av. Bronx**  
Client: **Department of Design and Construction**

Inspection Date: **03/28/2019**  
Created On: **09/18/2019**  
Yards Placed: **19**

|            |                                                                                                                                            |
|------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| To:        | CC: Campagna, Anthony<br>Lisella, Luca<br>O'Neil, Claude (DDC)<br>Lewis, Shavar (DDC)<br>Gabriel Rohrberg<br>Sean Joiner<br>Konanez, David |
| Attention: |                                                                                                                                            |

Concrete: Sampling of Concrete (ASTM C172), Slump (ASTM C143), Air Content (ASTM C231 Pressure / C173 Volume), Unit Weight (ASTM C138), Temperature (ASTM C1064), Casting Specimen (ASTM C31) Compressive Strength (ASTM C39) Use of unbonded caps (ASTM C1231)

SCC: Slump flow, T50 VSI (ASTM C1611), J-ring Flow (ASTM C1621), Casting Specimen (ASTM C1758)



|            |                       |                |                    |              |       |                 |            |       |          |                   |             |  |
|------------|-----------------------|----------------|--------------------|--------------|-------|-----------------|------------|-------|----------|-------------------|-------------|--|
| Cast Date: | 03/28/2019            | Sample Type:   | Concrete Cylinders |              |       | Slump Inches:   | 5          |       |          | Air, %(Pressure): | 6           |  |
| Set No:    | 1                     | Curing Method: | Standard Curing    |              |       | Conc Temp, F:   | 70         |       |          | Unit Weight, pcf: | 147.2       |  |
| Truck No:  | 95                    | Load No:       | 1                  |              |       | Mix Class, psi: | 5000       |       |          | Mix Type:         | Conv Normal |  |
| Location:  | fence foundation wall |                |                    |              |       |                 |            |       |          |                   |             |  |
| Remarks:   | south west elev.      |                |                    |              |       |                 |            |       |          |                   |             |  |
| Sample Id  | Barcode No            | Age            | Test Date          | Size, Inches | Area  | Load, lbs       | Stress,psi | % Str | Brk Type | Tested By         | Remarks     |  |
| 19CCY-7723 | 00654980              | 7              | 04/04/2019         | 4 x 8        | 12.57 | 75250           | 5990       | 100+  | 3        | arjoi tiangco     |             |  |
| 19CCY-7724 | 00654981              | 28             | 04/25/2019         | 4 x 8        | 12.57 | 91210           | 7260       | 100+  | 3        | Arjoi Tiangco     |             |  |
| 19CCY-7725 | 00654982              | 28             | 04/25/2019         | 4 x 8        | 12.57 | 92230           | 7340       | 100+  | 2        | Arjoi Tiangco     |             |  |
| 19CCY-7726 | 00642844              | 28             | 04/25/2019         | 4 x 8        | 12.57 | 93660           | 7450       | 100+  | 2        | Arjoi Tiangco     |             |  |
| 19CCY-7727 | 00654983              | 56             | 05/23/2019         | 4 x 8        | 12.57 | 95760           | 7620       | 100+  | 2        | arjoi tiangco     |             |  |

Average Strength: 7 Days: 5990; 28 Days: 7350; 56 Days: 7620;

Field Tech: Simon Daril E, ACI # 151393, Expiry Date: 04/21/2023

Lab Tech: Tiangco Arjoi, ACI # 01210579, Expiry Date: 01/09/2021

Mix Producer: Titan Concrete

**Eduardo Lievano, PE**

Lab Director

Machine No: Model LT-806-90DB Serial No: 83093, Calibration Due Date: 6/29/2020;

Machine No: Model F-30EX-F-Tpilot, Serial No: 07227 Calibration Due Date: 6/29/2020;



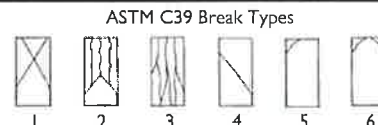
Project ID: **6862.63A**  
Project: **Horizon Juvenile Center Renovation - Main Bldg**  
**Renovation scope**  
Address: **560 Brook Av. Bronx**  
Client: **Department of Design and Construction**

Inspection Date: **04/03/2019**  
Created On: **09/18/2019**  
Yards Placed: **17**

|            |                                                                                                                                            |
|------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| To:        | CC: Campagna, Anthony<br>Lisella, Luca<br>O'Neil, Claude (DDC)<br>Lewis, Shavar (DDC)<br>Gabriel Rohrberg<br>Sean Joiner<br>Konanez, David |
| Attention: |                                                                                                                                            |

Concrete: Sampling of Concrete (ASTM C172), Slump (ASTM C143), Air Content (ASTM C231 Pressure / C173 Volume), Unit Weight (ASTM C138), Temperature (ASTM C1064), Casting Specimen (ASTM C31) Compressive Strength (ASTM C39) Use of unbonded caps (ASTM C1231)

SCC: Slump flow, T50 VSI (ASTM C1611), J-ring Flow (ASTM C1621), Casting Specimen (ASTM C1758)



|            |                |                |                    |              |       |           |                 |       |          |                   |             |  |
|------------|----------------|----------------|--------------------|--------------|-------|-----------|-----------------|-------|----------|-------------------|-------------|--|
| Cast Date: | 04/03/2019     | Sample Type:   | Concrete Cylinders |              |       |           | Slump Inches:   | 5     |          | Air, %(Pressure): | 6.2         |  |
| Set No:    | 1              | Curing Method: | Standard Curing    |              |       |           | Conc Temp, F:   | 71    |          | Unit Weight, pcf: | 145.6       |  |
| Truck No:  | 92             | Load No:       | 1                  |              |       |           | Mix Class, psi: | 5000  |          | Mix Type:         | Conv Normal |  |
| Location:  | curb for fence |                |                    |              |       |           |                 |       |          |                   |             |  |
| Remarks:   |                |                |                    |              |       |           |                 |       |          |                   |             |  |
| Sample Id  | Barcode No     | Age            | Test Date          | Size, Inches | Area  | Load, lbs | Stress,psi      | % Str | Brk Type | Tested By         | Remarks     |  |
| 19CCY-8487 | 00659239       | 7              | 04/10/2019         | 4 x 8        | 12.57 | 58060     | 4620            | 92    | 3        | arjoi tiangco     |             |  |
| 19CCY-8488 | 00659240       | 7              | 04/10/2019         | 4 x 8        | 12.57 | 53370     | 4250            | 85    | 3        | arjoi tiangco     |             |  |
| 19CCY-8489 | 00659235       | 28             | 05/01/2019         | 4 x 8        | 12.57 | 72690     | 5780            | 100+  | 3        | arjoi tiangco     |             |  |
| 19CCY-8490 | 00659236       | 28             | 05/01/2019         | 4 x 8        | 12.57 | 74490     | 5930            | 100+  | 2        | arjoi tiangco     |             |  |
| 19CCY-8491 | 00659238       | 28             | 05/01/2019         | 4 x 8        | 12.57 | 72220     | 5750            | 100+  | 4        | arjoi tiangco     |             |  |
| 19CCY-8492 | 00659237       | 56             | 05/29/2019         | 4 x 8        | 12.57 | 78370     | 6230            | 100+  | 2        | arjoi tiangco     |             |  |

Average Strength: 7 Days: 4440; 28 Days: 5820; 56 Days: 6230;

Field Tech: Fakhry Ayman, ACI # 01305353, Expiry Date: 10/25/2019

Lab Tech: Tiangco Arjoi, ACI # 01210579, Expiry Date: 01/09/2021

Mix Producer: Titan Concrete

**Eduardo Lievano, PE**

Lab Director

Machine No: Model LT-806-90DB Serial No: 83093, Calibration Due Date: 6/29/2020;  
Machine No: Model F-30EX-F-Tpilot, Serial No: 07227 Calibration Due Date: 6/29/2020;



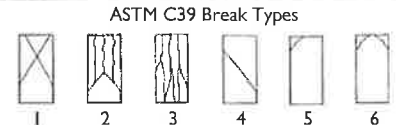
Project ID: **6862.63A** Inspection Date: **04/30/2019**  
 Project: **Horizon Juvenile Center Renovation - Main Bldg** Created On: **09/18/2019**  
 Address: **560 Brook Av. Bronx** Yards Placed: **35**  
 Client: **Department of Design and Construction**

To: **CC:** Campagna, Anthony  
 Lisella, Luca  
 O'Neil, Claude (DDC)  
 Lewis, Shavar (DDC)  
 Gabriel Rohrberg  
 Sean Joiner  
 Konanez, David

Attention:

Concrete: Sampling of Concrete (ASTM C172), Slump (ASTM C143), Air Content (ASTM C231 Pressure / C173 Volume), Unit Weight (ASTM C138), Temperature (ASTM C1064), Casting Specimen (ASTM C31) Compressive Strength (ASTM C39) Use of unbonded caps (ASTM C1231)

SCC: Slump flow, T50 VSI (ASTM C1611), J-ring Flow (ASTM C1621), Casting Specimen (ASTM C1758)



|            |                   |                |                    |                 |      |                   |             |
|------------|-------------------|----------------|--------------------|-----------------|------|-------------------|-------------|
| Cast Date: | <b>04/30/2019</b> | Sample Type:   | Concrete Cylinders | Slump Inches:   | 4    | Air, %(Pressure): | 7.3         |
| Set No:    | 1                 | Curing Method: | Standard Curing    | Conc Temp, F:   | 63   | Unit Weight, pcf: | 141.2       |
| Truck No:  | 57                | Load No:       | 1                  | Mix Class, psi: | 5000 | Mix Type:         | Conv Normal |
| Location:  | Curbs for fence   |                |                    |                 |      |                   |             |
| Remarks:   |                   |                |                    |                 |      |                   |             |

| Sample Id   | Barcode No | Age | Test Date  | Size, Inches | Area  | Load, lbs | Stress, psi | % Str | Brk Type | Tested By     | Remarks |
|-------------|------------|-----|------------|--------------|-------|-----------|-------------|-------|----------|---------------|---------|
| 19CCY-11003 | 00630285   | 7   | 05/07/2019 | 4 x 8        | 12.57 | 82180     | 6540        | 100+  | 3        | Sammy Acevedo |         |
| 19CCY-11004 | 00630283   | 28  | 05/28/2019 | 4 x 8        | 12.57 | 94790     | 7540        | 100+  | 3        | arjoi tiangco |         |
| 19CCY-11005 | 00630286   | 28  | 05/28/2019 | 4 x 8        | 12.57 | 95700     | 7610        | 100+  | 2        | arjoi tiangco |         |
| 19CCY-11006 | 00630287   | 28  | 05/28/2019 | 4 x 8        | 12.57 | 96140     | 7650        | 100+  | 2        | arjoi tiangco |         |
| 19CCY-11007 | 00630284   | 56  | 06/25/2019 | 4 x 8        | 12.57 | 104010    | 8270        | 100+  | 2        | arjoi tiangco |         |

Average Strength: 7 Days: 6540; 28 Days: 7600; 56 Days: 8270;

Field Tech: Fakhry Ayman, ACI # 01305353, Expiry Date: 10/25/2019

Lab Tech: Hernandez Lauro, ACI # 01168987, Expiry Date: 12/06/2019; Tiangco Arjoi, ACI # 01210579, Expiry Date: 01/09/2020

Mix Producer: Titan Concrete

**Eduardo Lievano, PE**

Lab Director

Machine No: Model LT-806-90DB Serial No: 83093, Calibration Due Date: 6/29/2020;

Machine No: Model F-30EX-F-Tpilot, Serial No: 07227 Calibration Due Date: 6/29/2020;

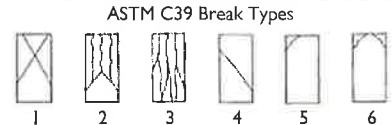


Project ID: **6862.63A** Inspection Date: **05/15/2019**  
Project: **Horizon Juvenile Center Renovation - Main Bldg** Created On: **09/18/2019**  
Address: **560 Brook Av. Bronx** Yards Placed: **8**  
Client: **Department of Design and Construction**

To: CC: Campagna, Anthony  
Lisella, Luca  
O'Neil, Claude (DDC)  
Lewis, Shavar (DDC)  
Gabriel Rohrberg  
Sean Joiner  
Konanez, David  
Attention:

Concrete: Sampling of Concrete (ASTM C172), Slump (ASTM C143), Air Content (ASTM C231 Pressure / C173 Volume), Unit Weight (ASTM C138), Temperature (ASTM C1064), Casting Specimen (ASTM C31) Compressive Strength (ASTM C39) Use of unbonded caps (ASTM C1231)

SCC: Slump flow, T50 VSI (ASTM C1611), J-ring Flow (ASTM C1621), Casting Specimen (ASTM C1758)



|            |                   |                |                    |                 |      |                   |             |
|------------|-------------------|----------------|--------------------|-----------------|------|-------------------|-------------|
| Cast Date: | <b>05/15/2019</b> | Sample Type:   | Concrete Cylinders | Slump Inches:   | 5    | Air, %(Pressure): | 5.5         |
| Set No:    | 1                 | Curing Method: | Standard Curing    | Conc Temp, F:   | 63   | Unit Weight, pcf: | 144.6       |
| Truck No:  | 95                | Load No:       | 1                  | Mix Class, psi: | 4000 | Mix Type:         | Conv Normal |
| Location:  | sidewalk          |                |                    |                 |      |                   |             |
| Remarks:   |                   |                |                    |                 |      |                   |             |

| Sample Id   | Barcode No | Age | Test Date  | Size, Inches | Area  | Load, lbs | Stress, psi | % Str | Brk Type | Tested By     | Remarks |
|-------------|------------|-----|------------|--------------|-------|-----------|-------------|-------|----------|---------------|---------|
| 19CCY-12738 | 00662100   | 7   | 05/22/2019 | 4 x 8        | 12.57 | 63820     | 5080        | 100+  | 3        | Sammy Acevedo |         |
| 19CCY-12739 | 00662102   | 28  | 06/12/2019 | 4 x 8        | 12.57 | 88810     | 7070        | 100+  | 2        | arjoi tiangco |         |
| 19CCY-12740 | 00662101   | 28  | 06/12/2019 | 4 x 8        | 12.57 | 81290     | 6470        | 100+  | 3        | arjoi tiangco |         |
| 19CCY-12741 | 00662104   | 28  | 06/12/2019 | 4 x 8        | 12.57 | 81810     | 6510        | 100+  | 3        | arjoi tiangco |         |
| 19CCY-12742 | 00662103   | 56  | 07/10/2019 | 4 x 8        | 12.57 | 84560     | 6730        | 100+  | 3        | arjoi tiangco |         |

Average Strength: 7 Days: 5080; 28 Days: 6680; 56 Days: 6730;

Field Tech: Simon Daril E, ACI # 151393, Expiry Date: 04/21/2023

Lab Tech: Hernandez Lauro, ACI # 01168987, Expiry Date: 12/06/2019; Tiangco Arjoi, ACI # 01210579, Expiry Date: 01/09/202

Mix Producer: Titan Concrete

**Eduardo Lievano, PE**

Lab Director

Machine No: Model LT-806-90DB Serial No: 83093, Calibration Due Date: 6/29/2020;

Machine No: Model F-30EX-F-Tpilot, Serial No: 07227 Calibration Due Date: 6/29/2020;



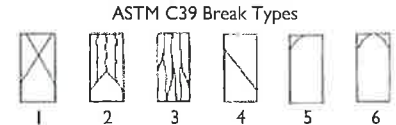
Project ID: **6862.63A**  
Project: **Horizon Juvenile Center Renovation - Main Bldg**  
Renovation scope  
Address: **560 Brook Av. Bronx**  
Client: **Department of Design and Construction**

Inspection Date: **05/21/2019**  
Created On: **09/18/2019**  
Yards Placed: **6**

|            |                                                                                                                                            |
|------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| To:        | CC: Campagna, Anthony<br>Lisella, Luca<br>O'Neil, Claude (DDC)<br>Lewis, Shavar (DDC)<br>Gabriel Rohrberg<br>Sean Joiner<br>Konanez, David |
| Attention: |                                                                                                                                            |

Concrete: Sampling of Concrete (ASTM C172), Slump (ASTM C143), Air Content (ASTM C231 Pressure / C173 Volume), Unit Weight (ASTM C138), Temperature (ASTM C1064), Casting Specimen (ASTM C31) Compressive Strength (ASTM C39) Use of unbonded caps (ASTM C1231)

SCC: Slump flow, T50 VSI (ASTM C1611), J-ring Flow (ASTM C1621), Casting Specimen (ASTM C1758)



|            |                   |                                 |                      |                         |
|------------|-------------------|---------------------------------|----------------------|-------------------------|
| Cast Date: | <b>05/21/2019</b> | Sample Type: Concrete Cylinders | Slump Inches: 5.5    | Air, %(Pressure): 6.2   |
| Set No:    | 1                 | Curing Method: Standard Curing  | Conc Temp, F: 70     | Unit Weight, pcf: 146.2 |
| Truck No:  | 9                 | Load No: 1                      | Mix Class, psi: 4000 | Mix Type: Conv Normal   |
| Location:  | sidewalk          |                                 |                      |                         |
| Remarks:   |                   |                                 |                      |                         |

| Sample Id   | Barcode No | Age | Test Date  | Size, Inches | Area  | Load, lbs | Stress, psi | % Str | Brk Type | Tested By     | Remarks |
|-------------|------------|-----|------------|--------------|-------|-----------|-------------|-------|----------|---------------|---------|
| 19CCY-13675 | 00687053   | 7   | 05/28/2019 | 4 x 8        | 12.57 | 53770     | 4280        | 100+  | 3        | arjoi tiangco |         |
| 19CCY-13676 | 00687050   | 7   | 05/28/2019 | 4 x 8        | 12.57 | 53500     | 4260        | 100+  | 2        | arjoi tiangco |         |
| 19CCY-13677 | 00687051   | 28  | 06/18/2019 | 4 x 8        | 12.57 | 63230     | 5030        | 100+  | 2        | arjoi tiangco |         |
| 19CCY-13678 | 00687055   | 28  | 06/18/2019 | 4 x 8        | 12.57 | 64380     | 5120        | 100+  | 2        | arjoi tiangco |         |
| 19CCY-13679 | 00687054   | 28  | 06/18/2019 | 4 x 8        | 12.57 | 62090     | 4940        | 100+  | 3        | arjoi tiangco |         |
| 19CCY-13680 | 00687052   | 56  | 07/16/2019 | 4 x 8        | 12.57 | 64910     | 5160        | 100+  | 2        | arjoi tiangco |         |

Average Strength: 7 Days: 4270; 28 Days: 5030; 56 Days: 5160;

Field Tech: Girgis Joseph, ACI # 01274920, Expiry Date: 06/16/2023

Lab Tech: Tiangco Arjoi, ACI # 01210579, Expiry Date: 01/09/2021

Mix Producer: Melrose Building Materials

**Eduardo Lievano, PE**

Lab Director

Machine No: Model LT-806-90DB Serial No: 83093, Calibration Due Date: 6/29/2020;  
Machine No: Model F-30EX-F-Tpilot, Serial No: 07227 Calibration Due Date: 6/29/2020;



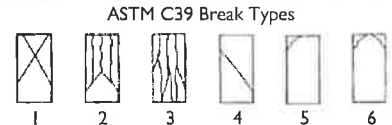
Project ID: **6862.63A**  
Project: **Horizon Juvenile Center Renovation - Main Bldg Renovation scope**  
Address: **560 Brook Av. Bronx**  
Client: **Department of Design and Construction**

Inspection Date: **05/28/2019**  
Created On: **09/18/2019**  
Yards Placed: **6**

|            |                                                                                                                                            |
|------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| To:        | CC: Campagna, Anthony<br>Lisella, Luca<br>O'Neil, Claude (DDC)<br>Lewis, Shavar (DDC)<br>Gabriel Rohrberg<br>Sean Joiner<br>Konanez, David |
| Attention: |                                                                                                                                            |

Concrete: Sampling of Concrete (ASTM C172), Slump (ASTM C143), Air Content (ASTM C231 Pressure / C173 Volume), Unit Weight (ASTM C138), Temperature (ASTM C1064), Casting Specimen (ASTM C31) Compressive Strength (ASTM C39) Use of unbonded caps (ASTM C1231)

SCC: Slump flow, TSO VSI (ASTM C1611), J-ring Flow (ASTM C1621), Casting Specimen (ASTM C1758)



|            |                    |                |                    |                 |      |                   |             |
|------------|--------------------|----------------|--------------------|-----------------|------|-------------------|-------------|
| Cast Date: | 05/28/2019         | Sample Type:   | Concrete Cylinders | Slump Inches:   | 4.5  | Air, %(Pressure): | 5.6         |
| Set No:    | 1                  | Curing Method: | Standard Curing    | Conc Temp, F:   | 69   | Unit Weight, pcf: | 141.2       |
| Truck No:  | 57                 | Load No:       | 1                  | Mix Class, psi: | 4000 | Mix Type:         | Conv Normal |
| Location:  | WATER FEATURE SLAB |                |                    |                 |      |                   |             |
| Remarks:   |                    |                |                    |                 |      |                   |             |

| Sample Id   | Barcode No | Age | Test Date  | Size, Inches | Area  | Load, lbs | Stress, psi | % Str | Brk Type | Tested By     | Remarks |
|-------------|------------|-----|------------|--------------|-------|-----------|-------------|-------|----------|---------------|---------|
| 19CCY-14137 | 00633902   | 7   | 06/04/2019 | 4 x 8        | 12.57 | 37030     | 2950        | 74    | 2        | arjoi tiangco |         |
| 19CCY-14138 | 00633901   | 7   | 06/04/2019 | 4 x 8        | 12.57 | 38990     | 3100        | 78    | 3        | arjoi tiangco |         |
| 19CCY-14139 | 00633904   | 28  | 06/25/2019 | 4 x 8        | 12.57 | 55750     | 4440        | 100+  | 3        | arjoi tiangco |         |
| 19CCY-14140 | 00633900   | 28  | 06/25/2019 | 4 x 8        | 12.57 | 58040     | 4620        | 100+  | 2        | arjoi tiangco |         |
| 19CCY-14141 | 00633903   | 28  | 06/25/2019 | 4 x 8        | 12.57 | 60280     | 4800        | 100+  | 2        | arjoi tiangco |         |
| 19CCY-14142 | 00633905   | 56  | 07/23/2019 | 4 x 8        | 12.57 | 58910     | 4690        | 100+  | 2        | arjoi tiangco |         |

Average Strength: 7 Days: 3020; 28 Days: 4620; 56 Days: 4690;

Field Tech: Fakhry Yousry, ACI # 01242721, Expiry Date: 01/28/2022

Lab Tech: Tiangco Arjoi, ACI # 01210579, Expiry Date: 01/09/2021

Mix Producer: Titan Concrete

**Eduardo Lievano, PE**

Lab Director

Machine No: Model LT-806-90DB Serial No: 83093, Calibration Due Date: 6/29/2020;  
Machine No: Model F-30EX-F-Tpilot, Serial No: 07227 Calibration Due Date: 6/29/2020;



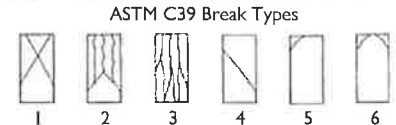
Project ID: **6862.63A**  
Project: **Horizon Juvenile Center Renovation - Main Bldg**  
Renovation scope  
Address: **560 Brook Av. Bronx**  
Client: **Department of Design and Construction**

Inspection Date: **05/30/2019**  
Created On: **09/18/2019**  
Yards Placed: **9**

|            |                                                                                                                                            |
|------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| To:        | CC: Campagna, Anthony<br>Lisella, Luca<br>O'Neil, Claude (DDC)<br>Lewis, Shavar (DDC)<br>Gabriel Rohrberg<br>Sean Joiner<br>Konanez, David |
| Attention: |                                                                                                                                            |

Concrete: Sampling of Concrete (ASTM C172), Slump (ASTM C143), Air Content (ASTM C231 Pressure / C173 Volume), Unit Weight (ASTM C138), Temperature (ASTM C1064), Casting Specimen (ASTM C31) Compressive Strength (ASTM C39) Use of unbonded caps (ASTM C1231)

SCC: Slump flow, T50 VSI (ASTM C1611), J-ring Flow (ASTM C1621), Casting Specimen (ASTM C1758)



|             |                               |                                 |            |              |       |                      |             |       |          |                         |         |
|-------------|-------------------------------|---------------------------------|------------|--------------|-------|----------------------|-------------|-------|----------|-------------------------|---------|
| Cast Date:  | 05/30/2019                    | Sample Type: Concrete Cylinders |            |              |       | Slump Inches: 5      |             |       |          | Air, %(Pressure): 7.2   |         |
| Set No:     | 1                             | Curing Method: Standard Curing  |            |              |       | Conc Temp, F: 73     |             |       |          | Unit Weight, pcf: 143.2 |         |
| Truck No:   | 61                            | Load No: 1                      |            |              |       | Mix Class, psi: 4000 |             |       |          | Mix Type: Conv Normal   |         |
| Location:   | WATER FEATURE SLAB            |                                 |            |              |       |                      |             |       |          |                         |         |
| Remarks:    | SHADE STRUCTURE CONCRETE SLAB |                                 |            |              |       |                      |             |       |          |                         |         |
| Sample Id   | Barcode No                    | Age                             | Test Date  | Size, Inches | Area  | Load, lbs            | Stress, psi | % Str | Brk Type | Tested By               | Remarks |
| 19CCY-14619 | 00633916                      | 7                               | 06/06/2019 | 4 x 8        | 12.57 | 42020                | 3340        | 84    | 2        | arjoi tiangco           |         |
| 19CCY-14620 | 00633917                      | 7                               | 06/06/2019 | 4 x 8        | 12.57 | 40020                | 3180        | 80    | 3        | arjoi tiangco           |         |
| 19CCY-14621 | 00633918                      | 28                              | 06/27/2019 | 4 x 8        | 12.57 | 57220                | 4550        | 100+  | 2        | arjoi tiangco           |         |
| 19CCY-14622 | 00633919                      | 28                              | 06/27/2019 | 4 x 8        | 12.57 | 57700                | 4590        | 100+  | 2        | arjoi tiangco           |         |
| 19CCY-14623 | 00633920                      | 28                              | 06/27/2019 | 4 x 8        | 12.57 | 58270                | 4640        | 100+  | 3        | arjoi tiangco           |         |
| 19CCY-14624 | 00633915                      | 56                              | 07/25/2019 | 4 x 8        | 12.57 | 63020                | 5010        | 100+  | 3        | arjoi tiangco           |         |

Average Strength: 7 Days: 3260; 28 Days: 4590; 56 Days: 5010;

Field Tech: Fakhry Yousry, ACI # 01242721, Expiry Date: 01/28/2022

Lab Tech: Tiangco Arjoi, ACI # 01210579, Expiry Date: 01/09/2021

Mix Producer: Titan Concrete

**Eduardo Lievano, PE**

Lab Director

Machine No: Model LT-806-90DB Serial No: 83093, Calibration Due Date: 6/29/2020;  
Machine No: Model F-30EX-F-Tpilot, Serial No: 07227 Calibration Due Date: 6/29/2020;



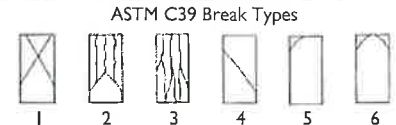
Project ID: **6862.63A**  
Project: **Horizon Juvenile Center Renovation - Main Bldg**  
Renovation scope  
Address: **560 Brook Av. Bronx**  
Client: **Department of Design and Construction**

Inspection Date: **05/31/2019**  
Created On: **09/18/2019**  
Yards Placed: **8**

|            |                                                                                                                                            |
|------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| To:        | CC: Campagna, Anthony<br>Lisella, Luca<br>O'Neil, Claude (DDC)<br>Lewis, Shavar (DDC)<br>Gabriel Rohrberg<br>Sean Joiner<br>Konanez, David |
| Attention: |                                                                                                                                            |

Concrete: Sampling of Concrete (ASTM C172), Slump (ASTM C143), Air Content (ASTM C231 Pressure / C173 Volume), Unit Weight (ASTM C138), Temperature (ASTM C1064), Casting Specimen (ASTM C31) Compressive Strength (ASTM C39) Use of unbonded caps (ASTM C1231)

SCC: Slump flow, T50 VSI (ASTM C1611), J-ring Flow (ASTM C1621), Casting Specimen (ASTM C1758)



|             |                                              |                                 |            |              |       |                      |             |       |          |                         |                     |
|-------------|----------------------------------------------|---------------------------------|------------|--------------|-------|----------------------|-------------|-------|----------|-------------------------|---------------------|
| Cast Date:  | 05/31/2019                                   | Sample Type: Concrete Cylinders |            |              |       | Slump Inches: 8.5    |             |       |          | Air, %(Pressure): 6.3   |                     |
| Set No:     | 1                                            | Curing Method: Standard Curing  |            |              |       | Conc Temp, F: 72     |             |       |          | Unit Weight, pcf: 142.8 |                     |
| Truck No:   | 84                                           | Load No:                        |            |              |       | Mix Class, psi: 4000 |             |       |          | Mix Type: Conv Normal   |                     |
| Location:   | shade structure slab                         |                                 |            |              |       |                      |             |       |          |                         |                     |
| Remarks:    | & 2 slab fill-in on walkway DOB #: 220636881 |                                 |            |              |       |                      |             |       |          |                         |                     |
| Sample Id   | Barcode No                                   | Age                             | Test Date  | Size, Inches | Area  | Load, lbs            | Stress, psi | % Str | Brk Type | Tested By               | Remarks             |
| 19CCY-14625 | 00660773                                     | 7                               | 06/07/2019 | 4 x 8        | 12.57 | 30260                | 2410        | 60    | 3        | arjoi tiangco           | Potential Low Break |
| 19CCY-14626 | 00603995                                     | 7                               | 06/07/2019 | 4 x 8        | 12.57 | 29770                | 2370        | 59    | 2        | arjoi tiangco           | Potential Low Break |
| 19CCY-14627 | 00660721                                     | 28                              | 06/28/2019 | 4 x 8        | 12.57 | 54660                | 4350        | 100+  | 3        | arjoi tiangco           |                     |
| 19CCY-14628 | 00660720                                     | 28                              | 06/28/2019 | 4 x 8        | 12.57 | 48150                | 3830        | 96    | 2        | arjoi tiangco           | Low Break           |
| 19CCY-14629 | 00660722                                     | 28                              | 06/28/2019 | 4 x 8        | 12.57 | 50370                | 4010        | 100+  | 2        | arjoi tiangco           |                     |
| 19CCY-14630 | 00632763                                     | 56                              | 07/26/2019 | 4 x 8        | 12.57 | 60490                | 4810        | 100+  | 3        | arjoi tiangco           |                     |

Average Strength: 7 Days: 2390 ; 28 Days: 4060; 56 Days: 4810;

|             |                                              |                                 |            |              |       |                      |             |       |          |                       |           |
|-------------|----------------------------------------------|---------------------------------|------------|--------------|-------|----------------------|-------------|-------|----------|-----------------------|-----------|
| Cast Date:  | 05/31/2019                                   | Sample Type: Concrete Cylinders |            |              |       | Slump Inches: 8      |             |       |          | Air, %(Pressure): 6   |           |
| Set No:     | 2                                            | Curing Method: Standard Curing  |            |              |       | Conc Temp, F: 75     |             |       |          | Unit Weight, pcf: 143 |           |
| Truck No:   |                                              | Load No:                        |            |              |       | Mix Class, psi: 4000 |             |       |          | Mix Type: Conv Normal |           |
| Location:   | shade structure slab                         |                                 |            |              |       |                      |             |       |          |                       |           |
| Remarks:    | & 2 slab fill-in on walkway DOB #: 220636881 |                                 |            |              |       |                      |             |       |          |                       |           |
| Sample Id   | Barcode No                                   | Age                             | Test Date  | Size, Inches | Area  | Load, lbs            | Stress, psi | % Str | Brk Type | Tested By             | Remarks   |
| 19CCY-14633 | 00632764                                     | 28                              | 06/28/2019 | 4 x 8        | 12.57 | 55560                | 4420        | 100+  | 3        | arjoi tiangco         |           |
| 19CCY-14634 | 00632765                                     | 28                              | 06/28/2019 | 4 x 8        | 12.57 | 58340                | 4640        | 100+  | 2        | arjoi tiangco         |           |
| 19CCY-14635 | 00660739                                     | 28                              | 06/28/2019 | 4 x 8        | 12.57 | 47490                | 3780        | 94    | 2        | Arjoi Tiangco         | Low Break |

Average Strength: 28 Days: 4280;

Field Tech: Jones Barry, ACI # 01288114, Expiry Date: 03/23/2024

Lab Tech: Tiangco Arjoi, ACI # 01210579, Expiry Date: 01/09/2021

Mix Producer: Titan Concrete



**Eduardo Lievano, PE**  
Lab Director

Project ID: **6862.63A** Inspection Date: **05/31/2019**  
Project: **Horizon Juvenile Center Renovation - Main Bldg** Created On: **09/18/2019**  
**Renovation scope**  
Address: **560 Brook Av. Bronx** Yards Placed: **8**  
Client: **Department of Design and Construction**  
Machine No: Model LT-806-90DB Serial No: 83093, Calibration Due Date: 6/29/2020;  
Machine No: Model F-30EX-F-Tpilot, Serial No: 07227 Calibration Due Date: 6/29/2020;



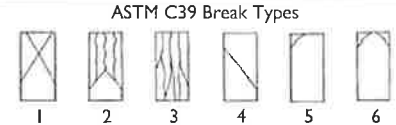
Project ID: **6862.63A**  
Project: **Horizon Juvenile Center Renovation - Main Bldg**  
**Renovation scope**  
Address: **560 Brook Av. Bronx**  
Client: **Department of Design and Construction**

Inspection Date: **06/07/2019**  
Created On: **09/18/2019**  
Yards Placed: **6**

|            |                                                                                                                                            |
|------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| To:        | CC: Campagna, Anthony<br>Lisella, Luca<br>O'Neil, Claude (DDC)<br>Lewis, Shavar (DDC)<br>Gabriel Rohrberg<br>Sean Joiner<br>Konanez, David |
| Attention: |                                                                                                                                            |

Concrete: Sampling of Concrete (ASTM C172), Slump (ASTM C143), Air Content (ASTM C231 Pressure / C173 Volume), Unit Weight (ASTM C138), Temperature (ASTM C1064), Casting Specimen (ASTM C31) Compressive Strength (ASTM C39) Use of unbonded caps (ASTM C1231)

SCC: Slump flow, T50 VSI (ASTM C1611), J-ring Flow (ASTM C1621), Casting Specimen (ASTM C1758)



|            |                   |                |                    |                 |      |                   |             |
|------------|-------------------|----------------|--------------------|-----------------|------|-------------------|-------------|
| Cast Date: | 06/07/2019        | Sample Type:   | Concrete Cylinders | Slump Inches:   | 4.5  | Air, %(Pressure): | 6.5         |
| Set No:    | 1                 | Curing Method: | Standard Curing    | Conc Temp, F:   | 78   | Unit Weight, pcf: | 144.8       |
| Truck No:  | 56                | Load No:       | 1                  | Mix Class, psi: | 4000 | Mix Type:         | Conv Normal |
| Location:  | yard slab section |                |                    |                 |      |                   |             |
| Remarks:   |                   |                |                    |                 |      |                   |             |

| Sample Id   | Barcode No | Age | Test Date  | Size, Inches | Area  | Load, lbs | Stress, psi | % Str | Brk Type | Tested By     | Remarks |
|-------------|------------|-----|------------|--------------|-------|-----------|-------------|-------|----------|---------------|---------|
| 19CCY-15317 | 00651467   | 7   | 06/14/2019 | 4 x 8        | 12.57 | 48810     | 3880        | 97    | 3        | arjoi tiangco |         |
| 19CCY-15318 | 00651470   | 28  | 07/05/2019 | 4 x 8        | 12.57 | 57760     | 4600        | 100+  | 3        | arjoi tiangco |         |
| 19CCY-15319 | 00637972   | 28  | 07/05/2019 | 4 x 8        | 12.57 | 57780     | 4600        | 100+  | 2        | arjoi tiangco |         |
| 19CCY-15320 | 00637974   | 28  | 07/05/2019 | 4 x 8        | 12.57 | 58190     | 4630        | 100+  | 1        | arjoi tiangco |         |
| 19CCY-15321 | 00637973   | 56  | 08/02/2019 | 4 x 8        | 12.57 | 61350     | 4880        | 100+  | 2        | arjoi tiangco |         |

Average Strength: 7 Days: 3880; 28 Days: 4610; 56 Days: 4880;

Field Tech: Samoylov Vladimir, ACI # 01069861, Expiry Date: 03/24/2023

Lab Tech: Tiangco Arjoi, ACI # 01210579, Expiry Date: 01/09/2021

Mix Producer: Titan Concrete

**Eduardo Lievano, PE**

Lab Director

Machine No: Model LT-806-90DB Serial No: 83093, Calibration Due Date: 6/29/2020;  
Machine No: Model F-30EX-F-Tpilot, Serial No: 07227 Calibration Due Date: 6/29/2020;

