





KENNY CHEUNG



JEAN-PIERRE DEMERIUX GOMEZ

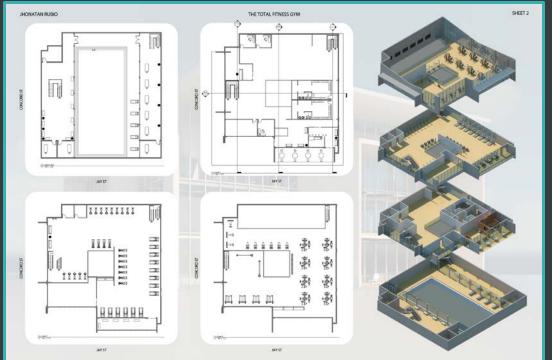


DARWIN DIAZ

Team One

Building Analysis: Original Design

- Designed by Jhonatan Rubio
- Three-Story Fitness Facility with a basement.
- Approximately 10,000 SF per floor, except the basement which is about 11,000 SF
- Located on the corner of Jay Street and Concord Street, near NYCCT's Howard Building.



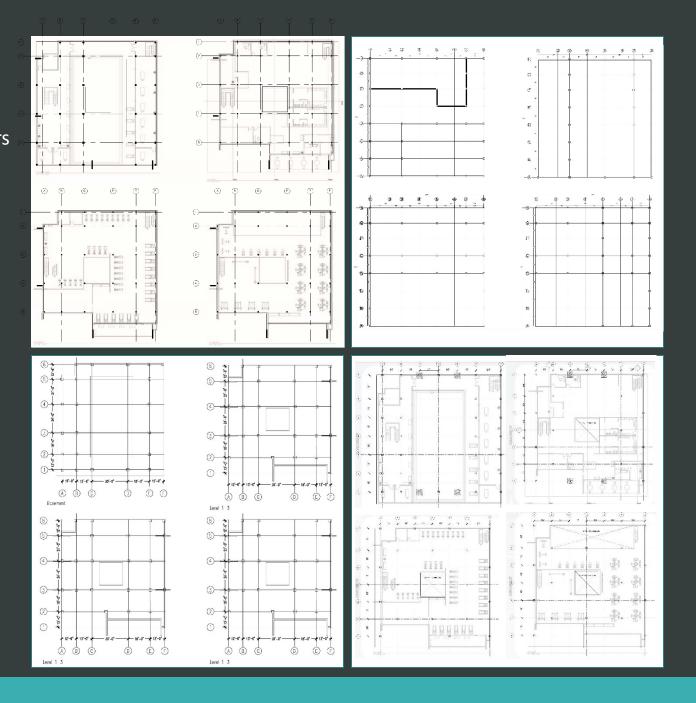


Building Analysis:

Cory's Grid

- Long Span between C and D in basement to account for pool.
- Creating two narrower corridors along East and North ends for anticipated egress and HVAC systems
- Making the "fins" shear walls through the building vertically.
- Approximately 20" Floor to Floor, 30" for Basement

Jean-Pierre's Grid



Kenny's Grid

Darwin's Grid

The foundation should have enough support for four thick columns of 5 feet to support the arch

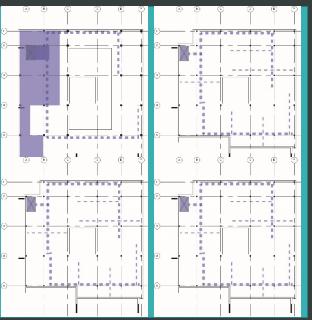
Building Analysis:

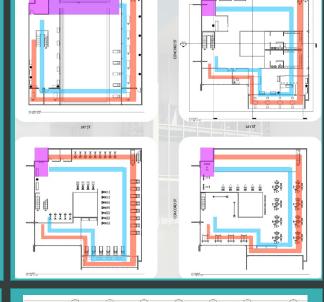
Cory's HVAC Plan

- Intent is to have the ducts running on the ceiling of the each floor, the shaft being located at the top left, which is a largely unused spaced through the entire space
- Feeding off of two directions for efficiency through the structure.

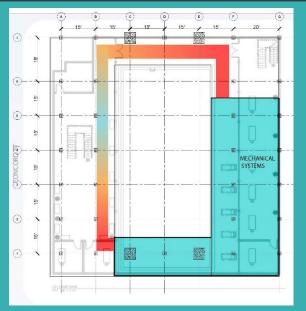
Jean-Pierre's HVAC Plan

- Placing the mechanical room in a place where there is currently a double height space
- The shaft runs parallel with a stairwell in a small corridor of structural columns, which seemed like an obvious place to put the shaft.









Kenny's HVAC Plan

 The intent is for the mechanical room to be located nearest the back wall, which seems logical due to the spaces on each floor, the easiest place for a shaft to go to allow for vertical and horizontal distribution.

Darwin's HVAC Plan

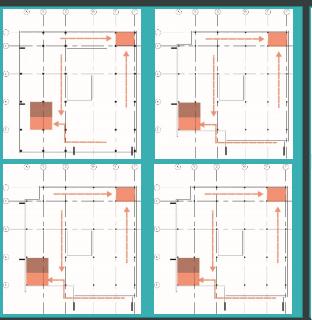
 After adjusting some of the less efficient program spaces, the mechanical room will be located in the lower left, allowing for ease of distribution

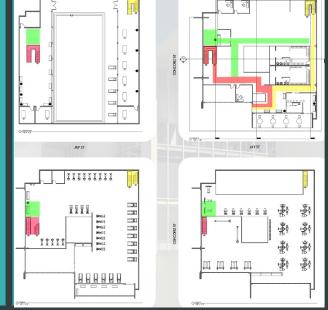
Building Analysis:

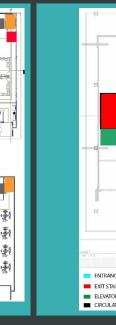
Cory's Circulation Plan

e Egress stairs are located at opposite ends of gym, with freight elevator for equipment on Concord Street, making deliveries easily accepted off a side street, and used as handicap accessible elevator for circulation.

Jean-Pierre's Circulation Plan







Kenny's HVAC Circulation Plan
 Two sets of stairs, both of which have the opportunity to become egress stairs,

connecting to the outside

Darwin's HVAC Circulation Plan

 Currently the spaces are hard to have proper circulation because of all the small hallway spaces, and none of the current stairways connect to the outside.

Site Analysis:

Circulation, Noise, Vibration, Sun Path and Shadow

Loud

Sunset

The Noise Diagram illustrates the fact that we have majority of our sounds coming in from the west side, Jay Street, due to the heavy traffic coming from their, illustrated in the circulation path. Our Sun Path and Shadow Diagrams show that the east side of

the building will get little to no direct sunlight due to a large building blocking it, but we will get significant southern exposure in midday, due to the low profile of the church to the south and the park.

Little to no Sound

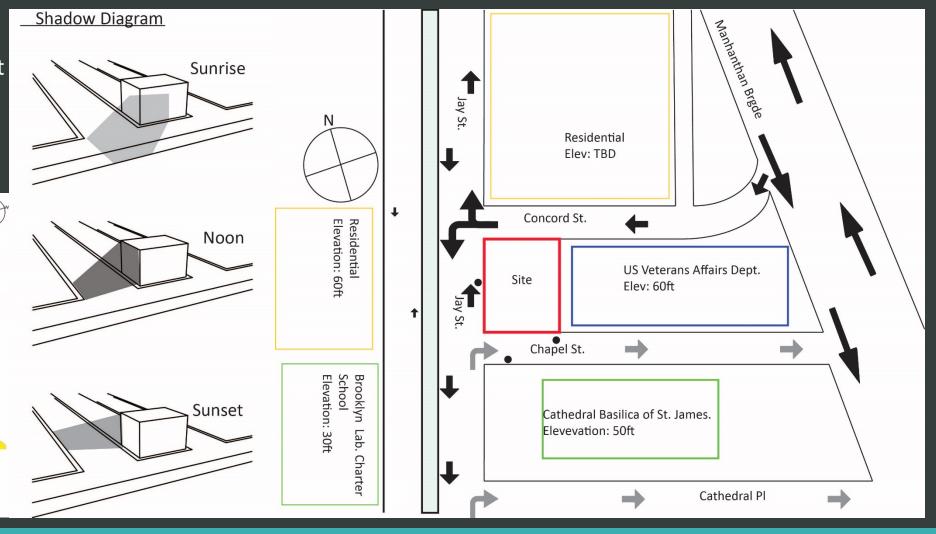
Sound Diagram

December 21

Noor

Chapel St

Site



Sunrise

Sun Diagram

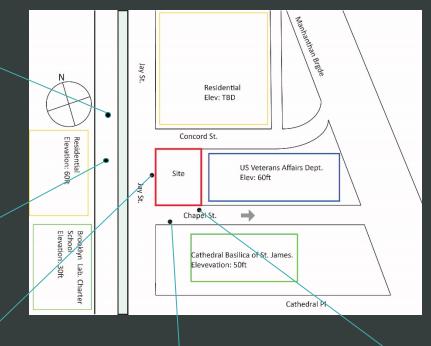
Site Analysis: Views

- Some of the views from the sight and the surrounding area, showing the urban walls.
- The site currently houses a parking garage, and two three-storey buildings.
- Adjacent to a church, depicted in the lower right.
- Directly across Jay street is an apartment complex, which would be a great market for a gym in this location.







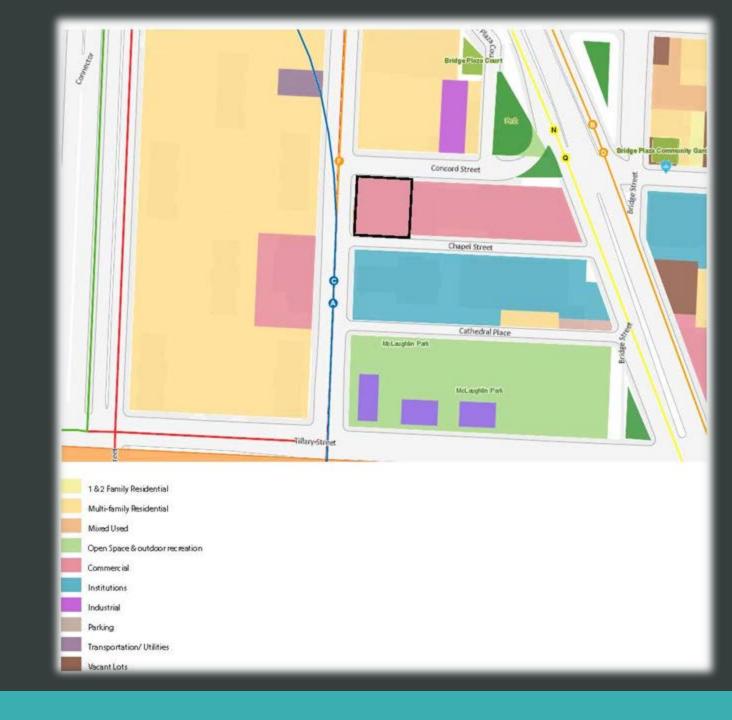






Site Analysis: Land Use and Massing

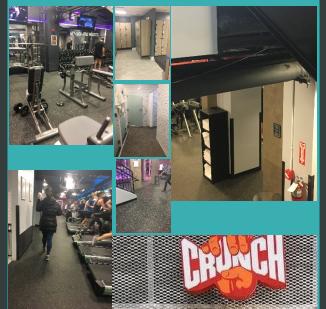
- Land use around the neighborhood and the near the site is mostly residential, with a major housing complex sitting directly across Jay street.
- McLaughlin Park and a place of worship on the corner of Jay and Cathedral are directly south of the site, letting in sunlight from the south.
- Placed directly to the east of our site is New York City College of Technology's Howard Building, acting as a sun block from the early morning sun.
- Also, it is useful to note there is a highrise structure being built currently, north of our site.



Precedent Study

Cory's Case Study (Crunch)

- During my visit to a couple Crunch Fitness facilities, I noticed that all the HVAC is exposed, and due to the fact they are in the city, everything is crammed.
- The floor thickness seemed to be fairly large to accommodate HVAC and beams.





Total Plant of Thomas No.

Jean-Pierre's Case Study

- Behind the immediate reception area are lines of treadmills left of the room.
- To the right are freeweights, and smith machines.
- The locker rooms were located at the top of the stairs when you walk up to the second floor, nearby is the entrance to the Mechanical/Electrical room.
- No photos were allowed to be taken inside of the facility.

- Kenny's Case Study (Bodhi)
- One floor with a store front
- The mechanical room is on the roof, however it is a one floor building
 - Division of space is important for peoples needs (Cardio, Muscular, Flexibility)

Darwin's Case Study (Planet)

- Tall ceiling heights, approx.
 two feet
 - Columns were concrete and no portals around the building, even though it was by itself
- In order to access the pool area, one has to pass through the locker room.

Program:

Present vs. Missing

Spaces In the Design

- Control Point (Check-In)-500 SF
- Locker Room/Restroom- 1,200 SF (600 EA)
- Storage Room(s)- 750 SF
- Staff Offices- 750 SF
- Stretching Area- 1,500 SF
- Swimming Pool- 6,000 SF
- Massage/PT Rooms- 2,000 SF
- Weights- 6,000 SF
- Cardio Areas 6,000 SF
- Studio Space- 900 SF
- Misc Seating- 1,300 SF
- Café- 1,000 SF

Missing Spaces and Improper Use of Spaces

- Locker Room's need the addition of showers and pool access, need to be larger
- Mechanical Room
- Pump Room
- Elevator
- Smaller and more consolidated staff offices
- Private massage/PT rooms, currently taking up too much square footage.
- Studio Space can be expanded
- Too much erroneously placed seating
- "Stash and Dash" lockers
- More accurate pool dimensions
- Proper Egress Stairs
- Floor to Floor, especially the basement, needs to be increased to accommodate physical movement vertically (Jumping, Lifting, Diving)

CB, DD, KC, JPDG

Façade Material

Cory's Choices

- Curtain Wall: Stick
- Site Cast In Place
 - Ribbed Texture Form





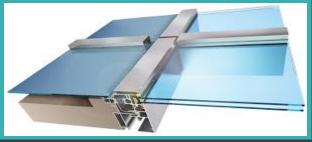
Kenny's Case Choice

- Curtain Wall Panel Infill System
- Fiber Reinforced Plastic

Jean-Pierre's Choices

- Curtain Wall: Vision Glass
- Pre Cast Concrete:Solid Panel





Darwin's Case Choice

- Storefront
- Sandblasted Plywood

Bibliography:

- Kawneer Curtain Wall
 - http://www.kawneer.com/kawneer/north america/catalog/images/Category unitize d.jpg
- http://national-cba.com/concrete-wallform-liners-a-perfect-blend-oftechnology-creativity-and-innovation/
- http://img.archiexpo.com/images_ae/ph oto-g/62511-6001997.jpg
- All Plan overlays used in HVAC plan, Circulation Diagrams, and during the Building Analysis were done by Jhonatan Rubio, the original designer of the facility.