# NORTHLAND SUBSURFACE STUDY

APRIL 13, 2018







## WHAT WE'LL COVER

- TECHNICAL FEASIBILITY
- USES AND MARKET ACCEPTANCE
- IMAGE / RECEPTION / CHARACTER



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## **TECHNICAL FEASIBILITY**

- CRTKL EXPERIENCE
- EXISTING CONDITIONS



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One-level mall built in 1950's, then enclosed in 1970's. CRTKL overbuild in 1980's and renovation in 2017.

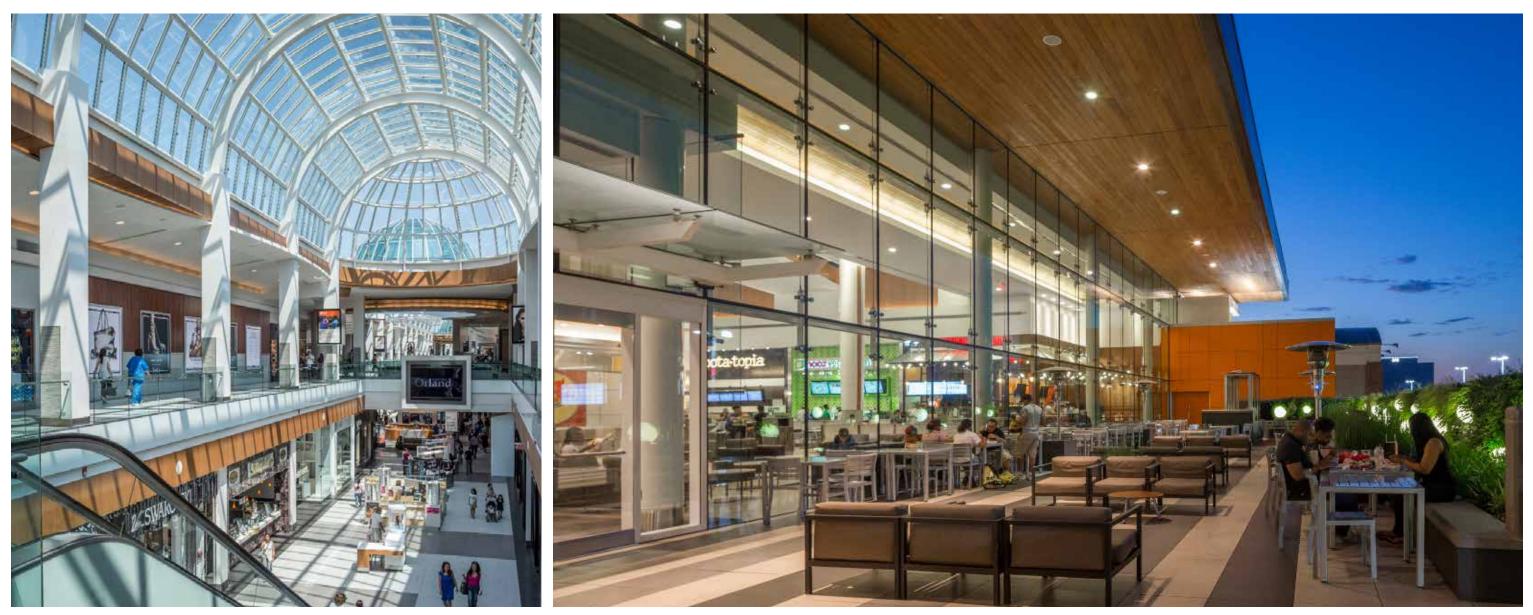
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## **ROOSEVELT FIELD** GARDEN CITY, NY



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Mall renovation, 2017. Transformation of the original simple, one-story buildings possible due to very strong local retail market demand.

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## **ROOSEVELT FIELD** GARDEN CITY, NY



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1970's urban mall turned its back on the city. 2000's de-malling opened retail up to the street and four hundred apartment units added above. Great location and strong retail and residential market enabled the transformation.



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### **PASEO COLORADO** PASEDENA, CA



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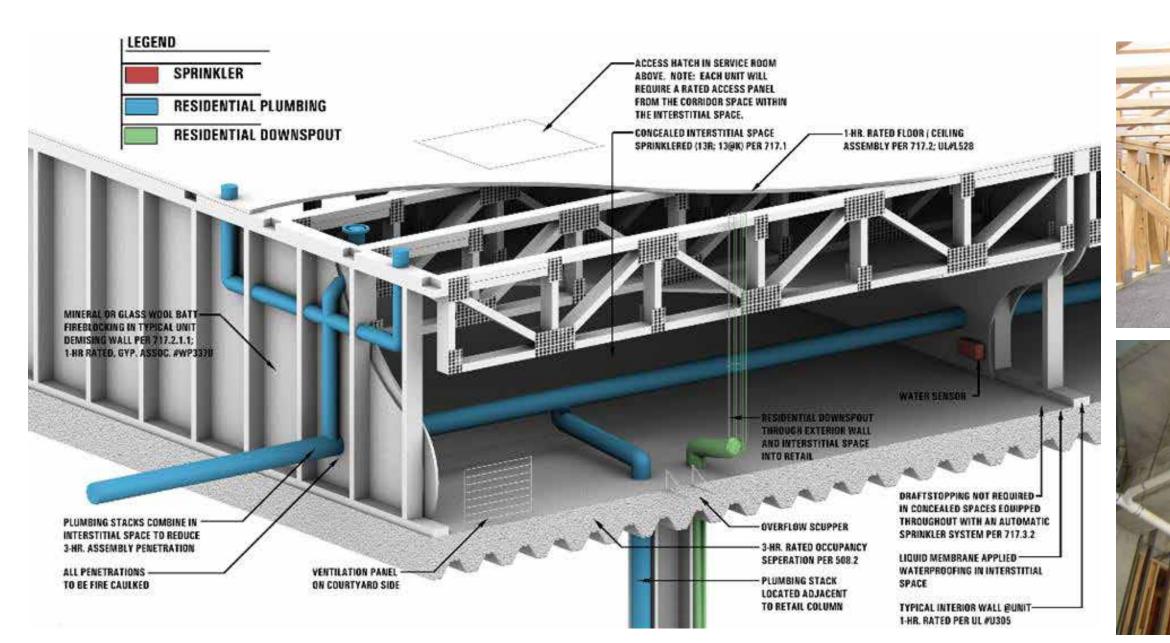


New construction, 2000's. Outdoor Lifestyle Center, with 400 residential units above. Wood frame units over concrete retail podium. Very strong retail and residential market.

## **THE DOMAIN** AUSTIN, TX



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Interstitial space between residential and retail acts like the crawl space under a home - to limit plumbing penetrations from residential into retail, and simplify maintenance access.

## THE DOMAIN AUSTIN, TX





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## **OPPORTUNITIES & CONSTRAINTS**

Challenges associated with saving some or all of the below-grade and above-grade portions of Northland Mall.

#### **PRELIMINARY ASSUMPTIONS**

- Hudson's building will remain, in all scenarios.
- Best not to think in a vacuum: bigger picture mall site issues such as utility service, storm water drainage from surface parking lots, and marketability should be considered as well.
- The overall mall site master plan will be revised depending on the chosen direction.
- Carry costs, Phasing, Image, and Final Product should all be considered.



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### **OPPORTUNITIES CREATED BY SAVING SUBSURFACE SPACE**

- Maintain existing, Flexible space
- Potentially have a greater initial Critical Mass for the project
- Limit carry cost to the City: demolition, maintenance, security



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### CHALLENGES OF SAVING SUBSURFACE SPACE

- Perception: Will money spent be seen by the community as representing progress?
- Impact of angled geometry on the Master Plan
- How valuable is subsurface space without daylight?
- Demolition and Construction Costs:
  - Waterproofing, drainage, and insulation for existing mall floor slab that may become "roof".
  - Structural enhancements (Earth and/or Snow load on slab, etc.)
  - Utility Connections (Upgraded Power, Water, Sewer, Stormwater, Cable, etc.)
  - Code Upgrades (Sprinklers, Fireproofing, Exit Stairs and enclosures, etc.)
  - Exiting enhancements
  - Expansion Joints
  - Security
  - Liability
  - Limiting adjacent construction due to potential undermining of foundation walls.



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## USES

#### **BELOW GRADE- NO EXCAVATION**

- 1. Parking
- 2. Storage / Warehouse
- 3. Data Center
- 4. Office or other use (assuming skylight and courtyard or similar)
- 5. Shooting range or similar
- 6. Drone Racing
- 7. Mothballing (no internal use allowed)

### **BELOW GRADE-WITH EXCAVATION**

(Assumes excavation on one or more sides to allow natural light)

- 1. Office (to floor depth of 40-50')
- 2. Institutional Uses



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## USES

### **ABOVE GRADE - SLAB ONLY**

- 1. Surface Parking
- 2. Soccer / Football field with artificial turf
- 3. Tennis and Sport Courts
- 4. Ice Skating / Sledding
- 5. Top Golf (also as temporary use)
- 6. Native landscape waterproof, cover with 12-18" of earth, and seed

### ABOVE GRADE - KEEP ALL OR SOME EXISTING MALL

1. Can create two-story space, with windows at grade; and skylights and an internal court to bring natural light to the basement.

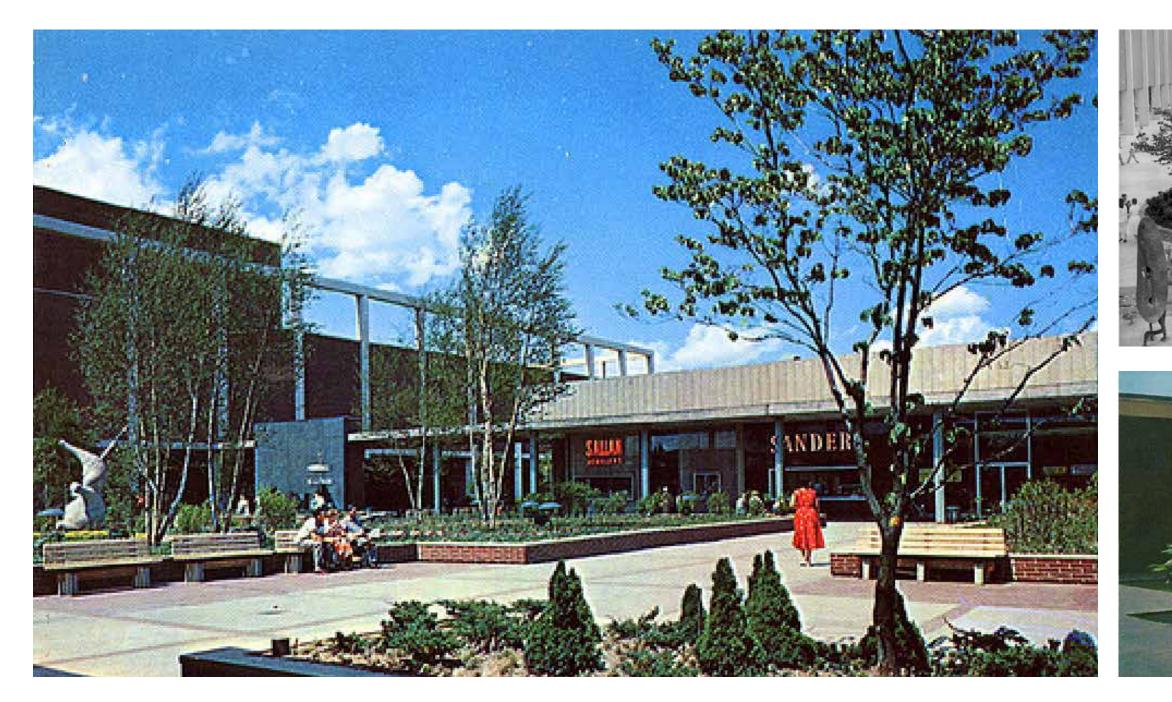
- 2. Don't have to spend money to waterproof the slab
- 3. Need to design as a completely new image can't feel like the old mall.
- 4. Retrofits have risk, and are rarely as cost-effective as expected.



e the old mall. ected.

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- Secure Environment ullet
- Landscape •
- Artwork ullet



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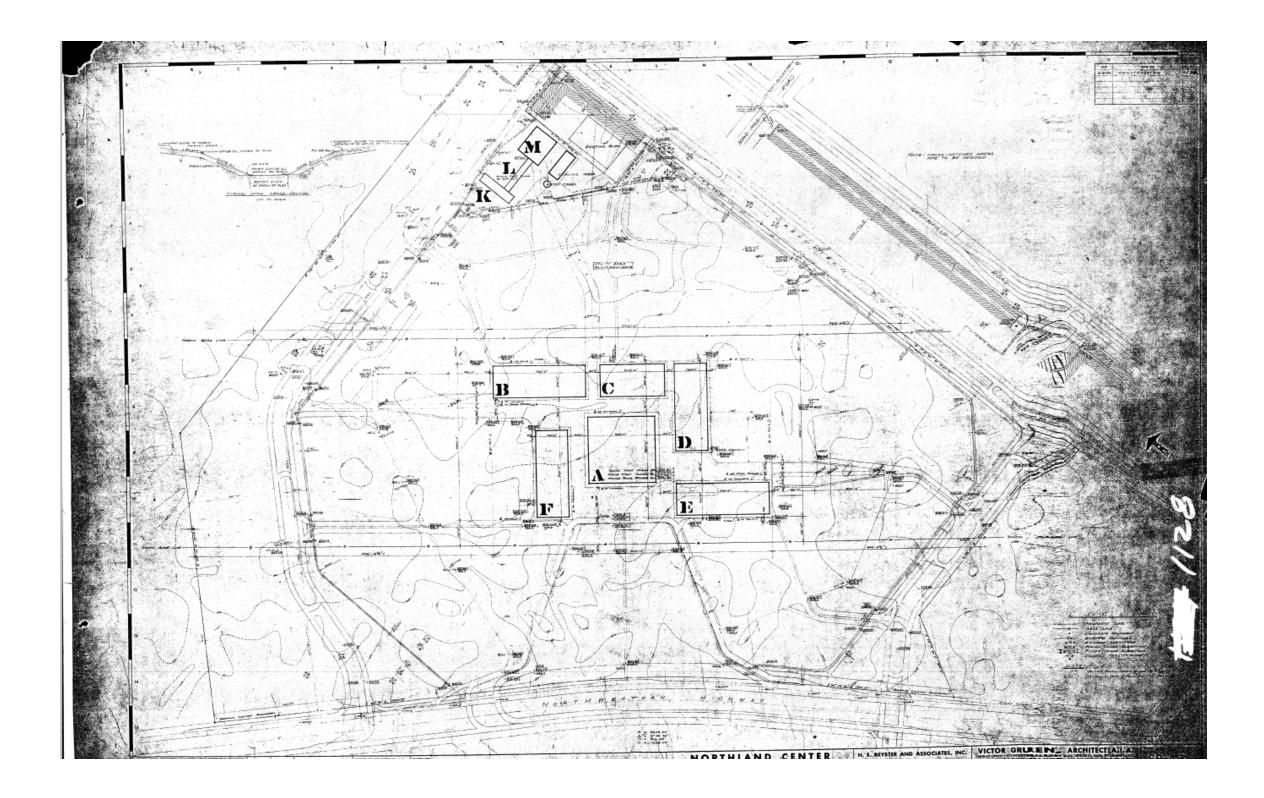


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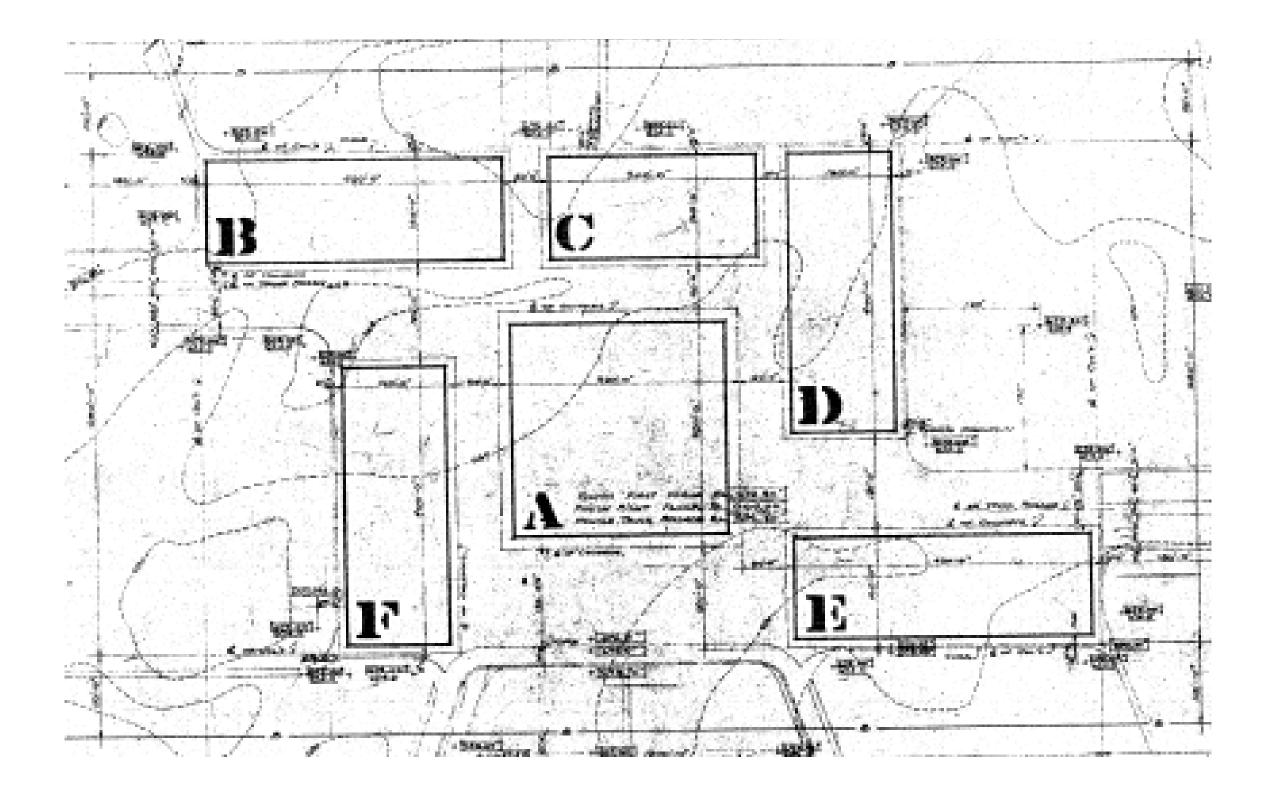


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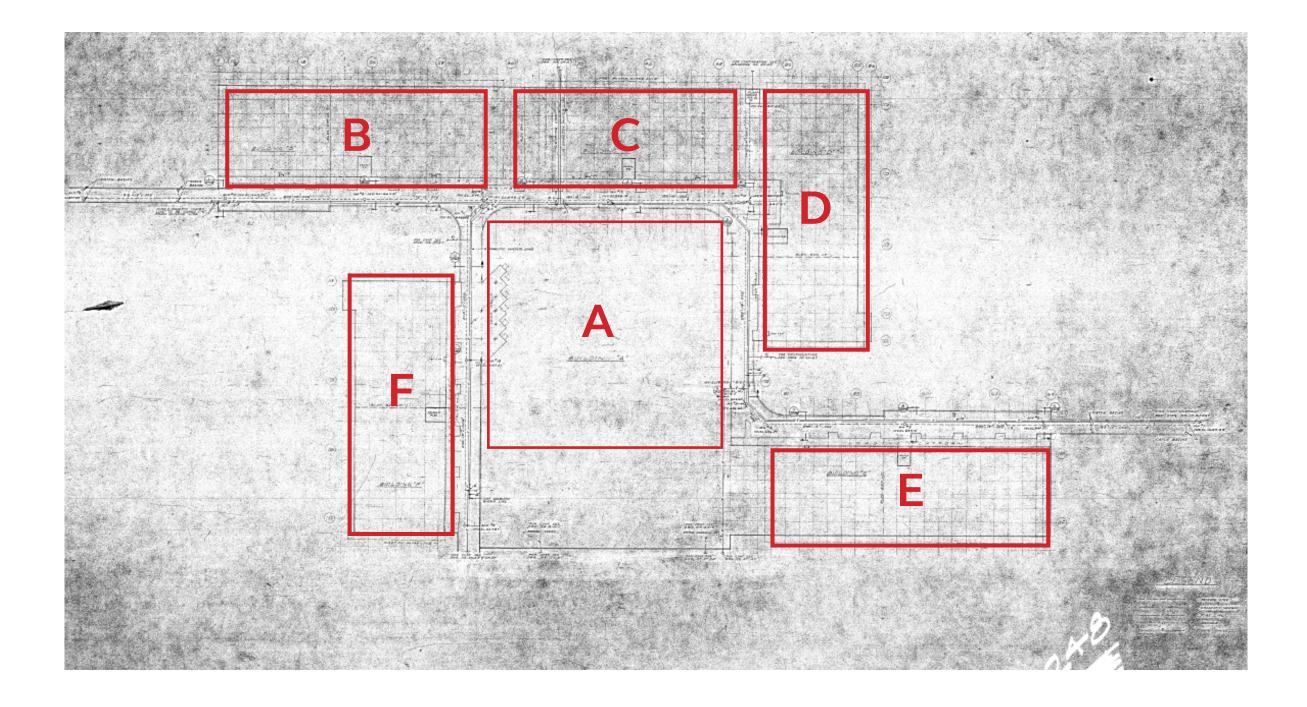


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## THE ORIGINAL NORTHLAND B1 LEVEL





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## USES AND MARKET ACCEPTANCE

- MARKET RATE RESIDENTIAL
- SENIOR / ACTIVE ADULT RESIDENTIAL
- CREATIVE CLASS OFFICE
- MAKER SPACE
- CIVIC AND CULTURAL



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## CHARACTER IMAGES





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## CHARACTER IMAGES

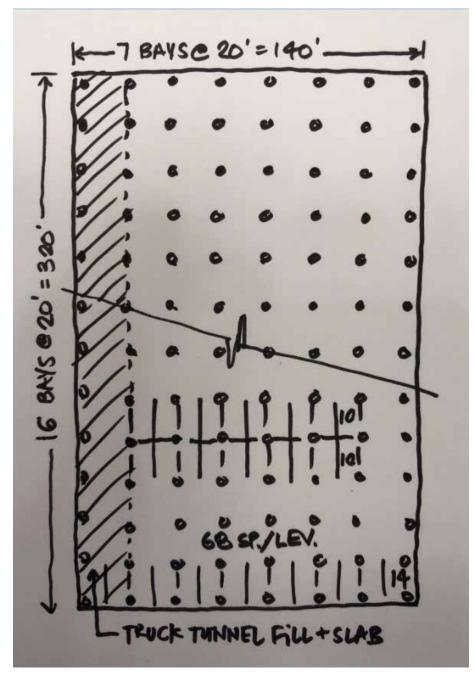


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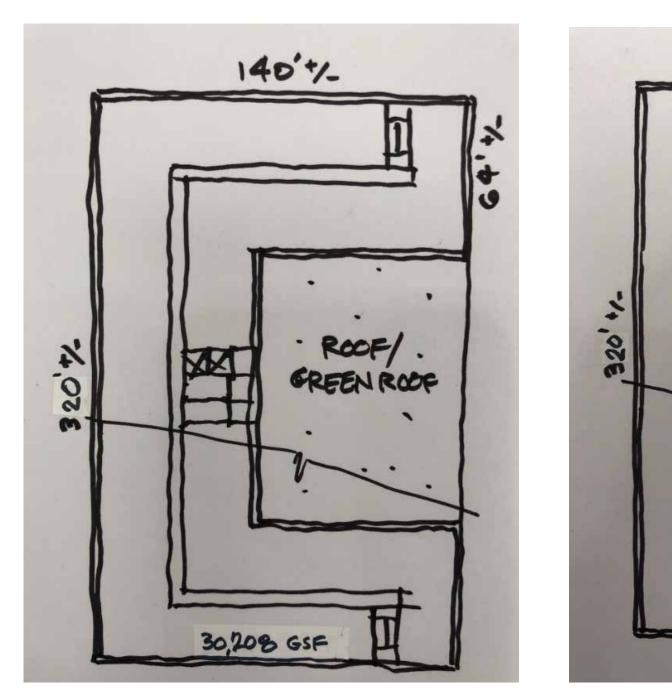


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## PROTOTYPICAL BUILDING TYPOLOGY PLAN DIAGRAMS



TYPICAL RETAIL BUILDING L1 & BASEMENT PLAN



APARTMENT BUILDING PLAN

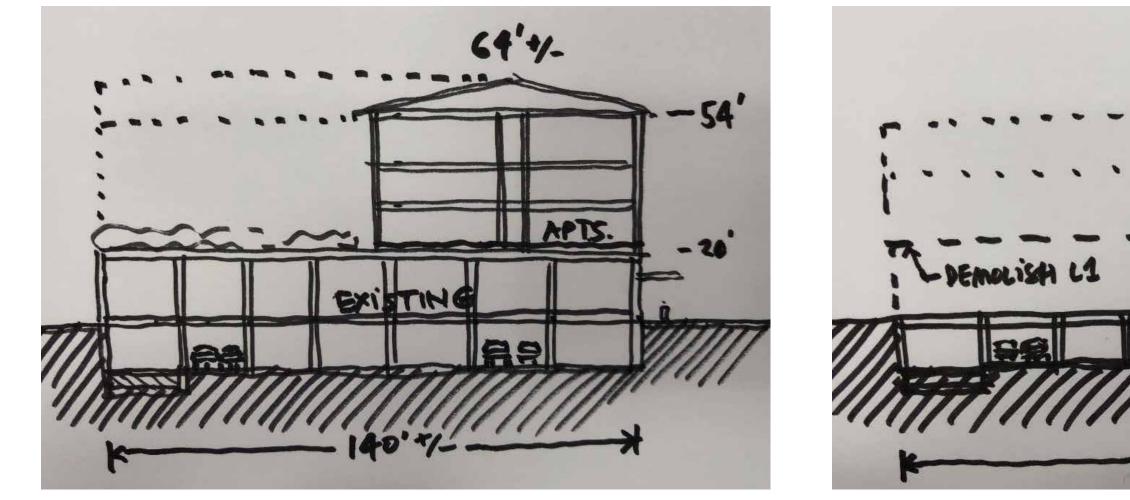


#### SENIOR HOUSING PLAN



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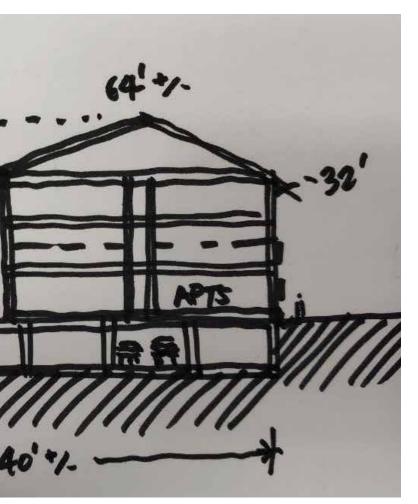
## **PROTOTYPICAL BUILDING TYPOLOGY** SECTION DIAGRAMS



**KEEP L1 & BASEMENT** NEW STICK RESIDENTIAL ABOVE

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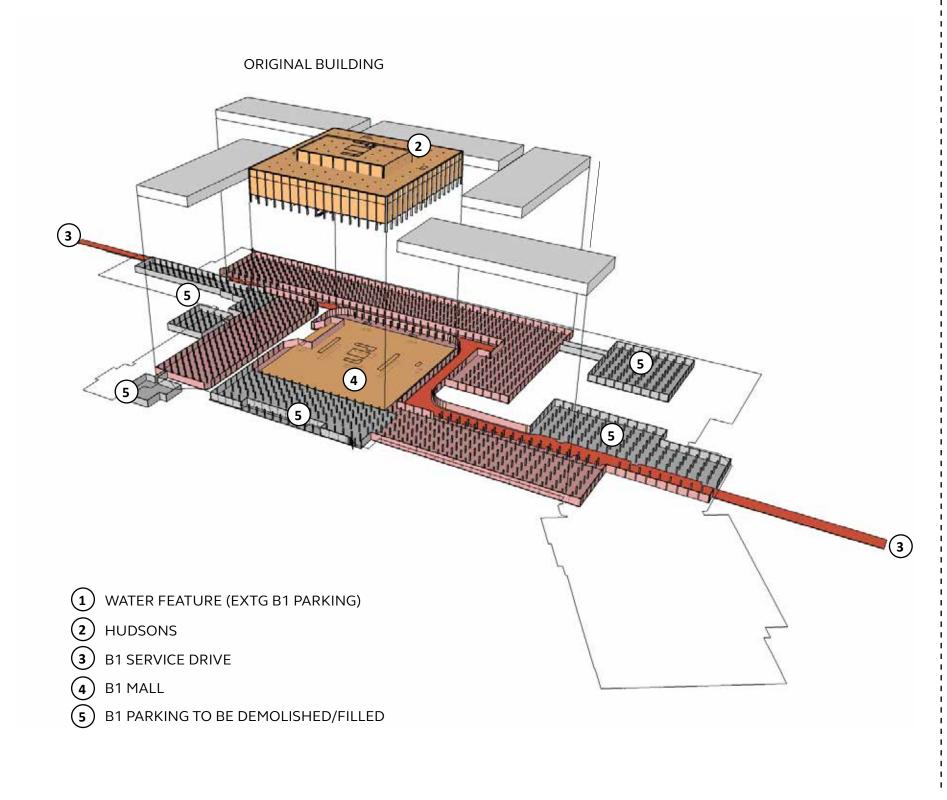
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#### **DEMOLISH L1 & KEEP BASEMENT** NEW STICK RESIDENTIAL ABOVE



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elements:

- below.

The pedestrian areas were designed to be waterproof, and to accept pedestrian, landscape and snow loads.

By only saving buildings and subsurface areas under these two elements, a reasonable waterproof, structurally-sufficient result is possible. Demolishing original buildings will cause their floor slabs to become "roofs" of the B1 space, which will require structural enhancement and waterproofing solutions.





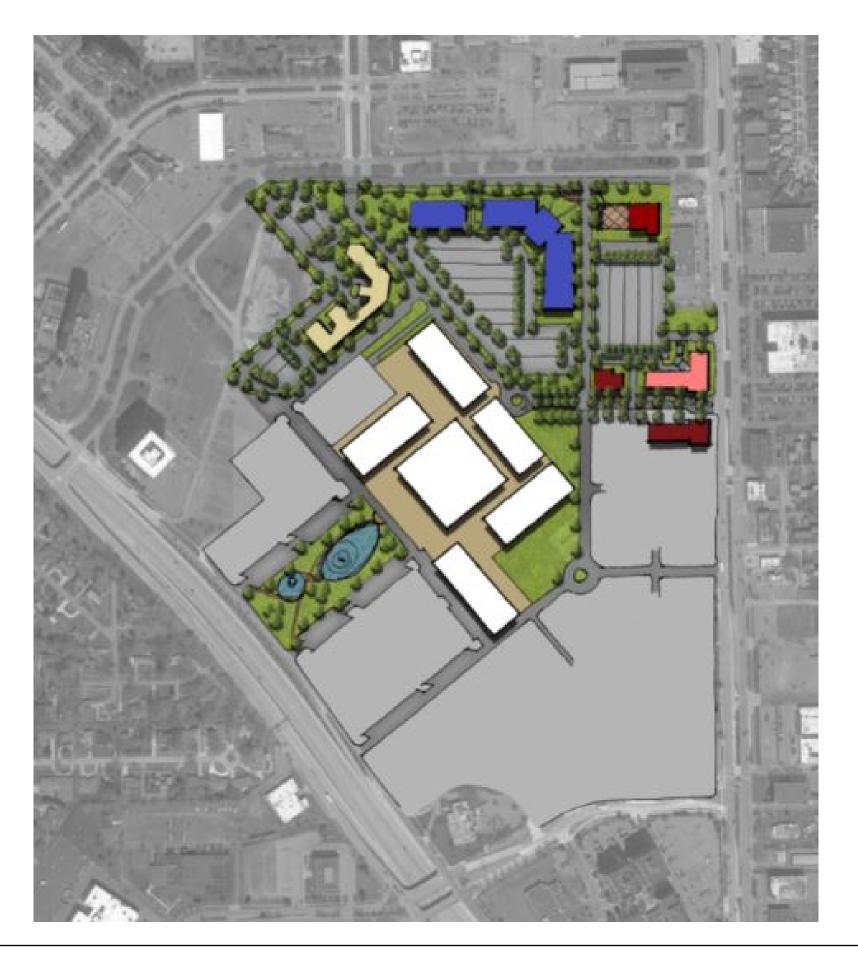
## **BUILDING STUDY**

The original mall construction included two primary

- five one-level buildings with parking below - pedestrian areas between them, also with parking



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## **REVISED MASTERPLAN**



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Character image of secure mixed-use community featuring Maker Spaces, Loft Units, Work/Live, Creative Class Office, and Urban Agriculture.

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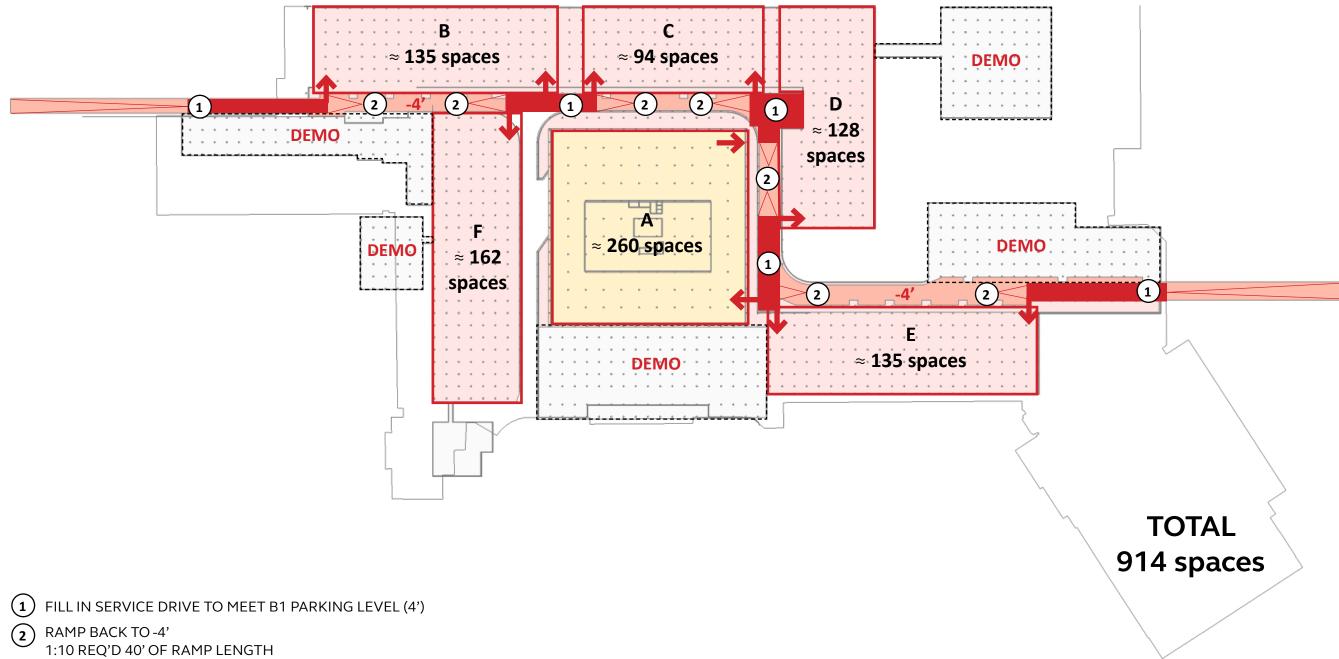
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# APPENDIX





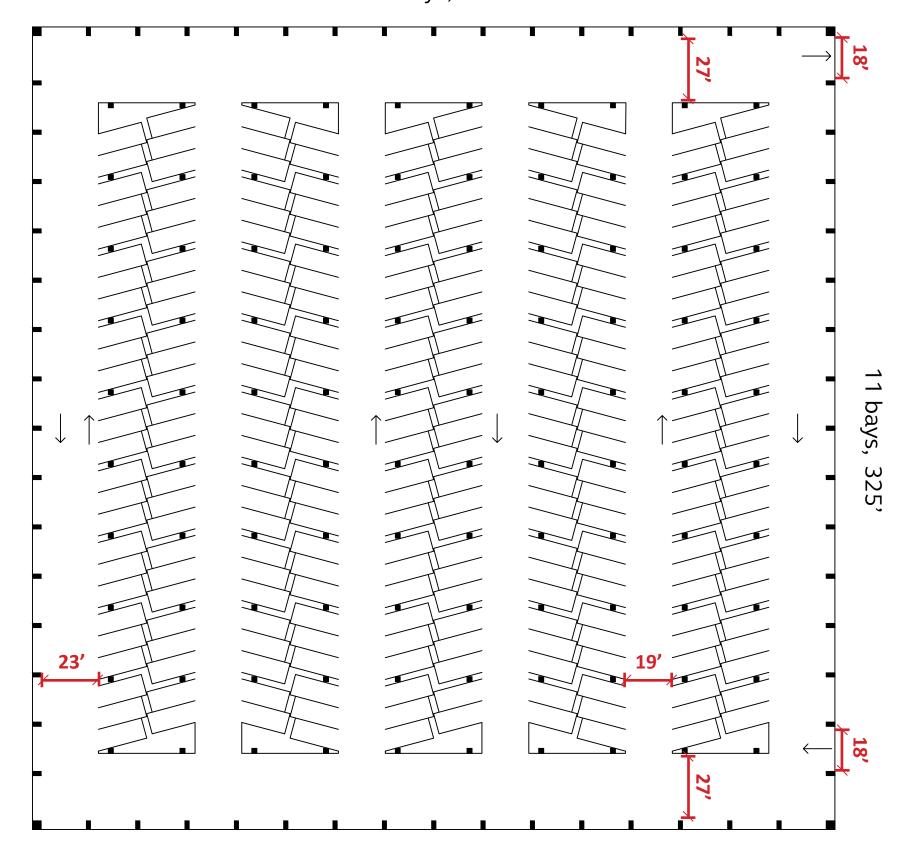
Note: Some subgrade areas demolished to create a compact core area in the plan, and also because they would require extensive waterproofing and structural enhancement.

## **RAMPING STUDY**



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11 bays, 325'



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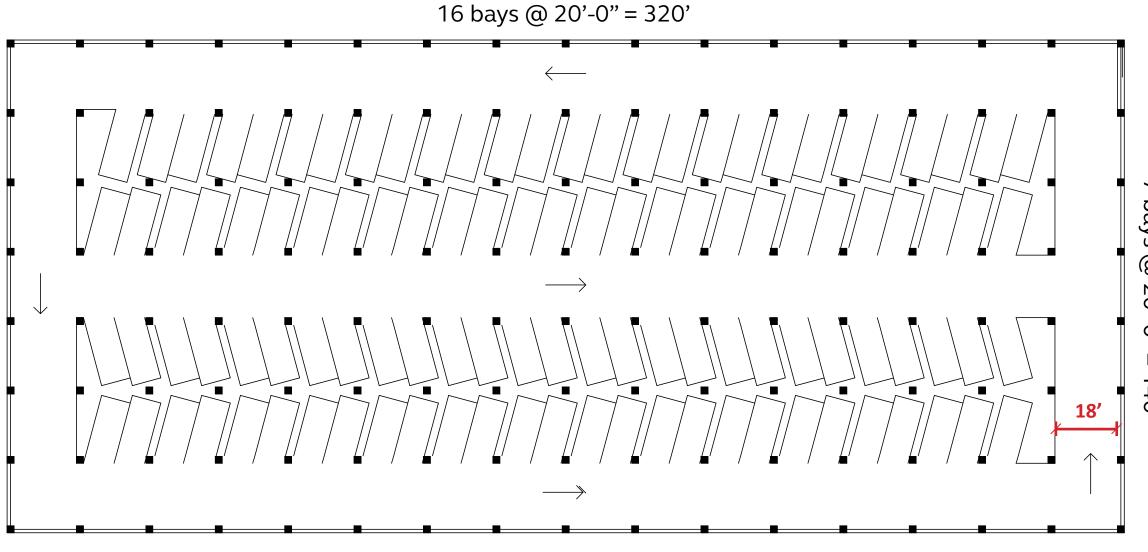
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## PARKING STUDY HUDSONS B1

### 75 degree angled parking one-way 260 parking spaces parking space: 8.5' x 18'



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**TYPICAL 140'x320'** 

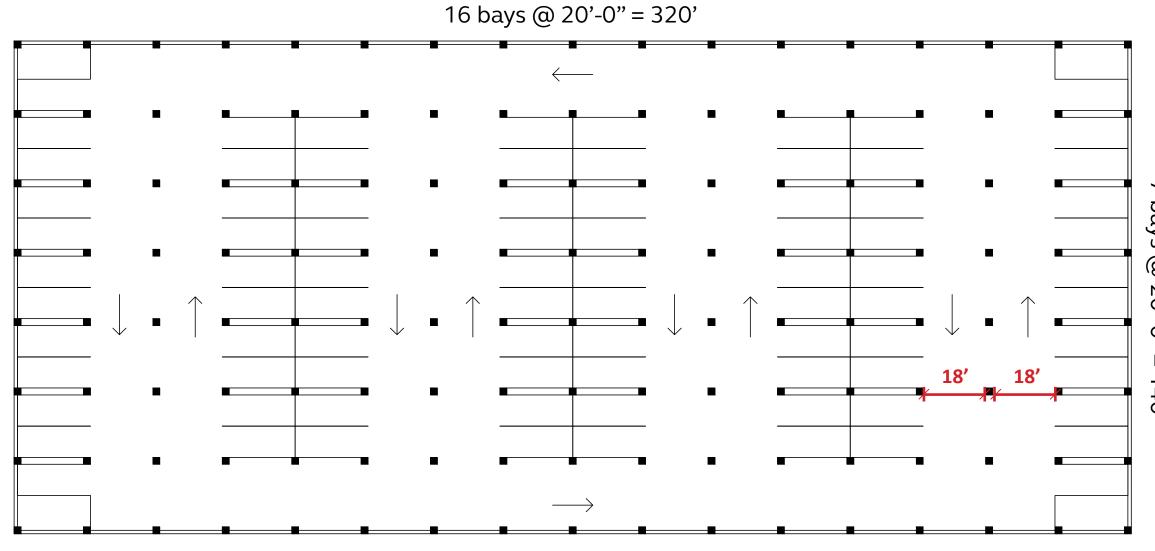
## PARKING STUDY OPTION A

### 75 degree angled parking one-way 108 parking spaces parking space: 8.5' x 18.5'

18' drive lane is very tight, and offers a Class C service.



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**TYPICAL 140'x320'** 

## PARKING STUDY OPTION B

#### 90 degree parking

#### two-way

#### 84 spaces

parking space: 9' x 21'

Larger spaces, more easily accessed. Class B service, but fewer spaces.



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## PARKING STUDY OPTION A



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# **THANK YOU**

