Pike Place Market
Concept Design
Project Narrative
September 14, 2012

PIKE PLACE MARKET PC-1 NORTH FINAL CONCEPT DOCUMENT

prepared by: The Miller Hull Partnership, Magnusson Klemencic Associates, Arup, Swift Company, Steinbrueck Urban Strategies

CONTENTS

1.0 INTRODUCTION
1.1 Project Overview
1.2 Project Goals
1.3 Design Process

2.0 DESIGN RATIONALE
2.1 Program
2.2 Site, History and Constraints
2.3 Zoning and Code Analysis
2.4 Historic

3.0 PUBLIC REALM ANALYSIS
3.1 View Analysis
3.2 Circulation Analysis

4.0 PRELIMINARY MASSING CONCEPTS
4.1 Options A, B, C & D
4.2 Project Diagrams

5.0 PREFERRED MASSING CONCEPT
5.1 Massing Diagrams

6.0 CONCEPT DESIGN
6.1 Parking Garage
6.2 Building Plans
6.3 Site Sections
6.4 Renderings
6.5 Phasing Diagrams
6.6 Next Steps

7.0 ARCHITECTURAL ATTACHMENTS
7.1 Project Schedule
7.2 Zoning Code Analysis
7.3 Building Code Analysis

APPENDIX 1

8.0 LANDSCAPE NARRATIVE

9.0 STRUCTURAL NARRATIVE

10.0 CIVIL NARRATIVE

11.0 MEP NARRATIVE

APPENDIX 2

12.0 CONCEPT DESIGN DRAWING SET

1.0 INTRODUCTION

1.1 PROJECT OVERVIEW

The Pike Place Market opened in Seattle in 1907, and is one of the oldest continually operated public farmers' markets in the country, attracting some 10 million visitors per year. Spurred on by the replacement of the elevated Alaskan Way Viaduct, which currently blocks much of the waterfront from downtown, with a bored tunnel, the City of Seattle is in the early design stages to overhaul the entire waterfront and drammatically improve the connection from the urban core to water's edge. The Pike Place Market is a central connection point and the PC1-N site will play a critical role in making that connection successful.

1.2 PROJECT GOALS

The project goals, as discussed in numerous meetings with the PDA Council, Waterfront Redevelopment Committee and Market community members can be summarized as a commitment to providing unique and memorable market experiences. The public will feel welcomed into a vibrant mixed-use project made up of commercial spaces and low income residential units with market parking and other support spaces carefully organized into 'back of house' spaces. This collection of program spaces will be framed and enhanced by nearly an acre of public open space. This network of terraced open spaces will belong to everyone — families, seniors, travelers, market vendors--and transition seamlessly with the planned Overlook Walk and connection to the revived waterfront.

The Pike Place Market Preservation and Development Authority (PDA) established a series of 'Guiding Principles' for the development of the PC1N site as follows:

- *Pedestrian Access and Neighborhood Connectivity*
- *Vehicle Access*
- *PC1N Priority Uses (see below under Program)*
- *Character and Identity*
- *Views*
- *24/7 – 365 Activation*
- *Financial Viability*
- *Preservation and Sustainability*

The design team embraced these principles and developed the design concept to address them.

1.3 DESIGN PROCESS

For this process to be a successful one, two paramount objectives were established early to work closely with the market constituency and to work collaboratively with the Waterfront design team. To that end the team:

- Met with PDA on a weekly basis
- Presented to the Waterfront Redevelopment Committee (WRC) on a biweekly basis where the team received a significant amount of input from not only the committee but the general public and market constituency
- Met with the Market Historical Commission regularly
- Held design working sessions with council and WRC Committee
- Met with the Waterfront design team at least once a month
- Participated in a half-day working retreat with the full PDA Council
- Met with the Market stakeholder group and conducted multiple public meetings
- Created a dedicated information page on the Market website
- Presented to the Market Foundation
- Presented to the Central Waterfront Design Oversight Committee

2.0 DESIGN RATIONALE

2.1 PROGRAM

Development of Program

The PDA had developed a series of priority uses for the PC1N site:

PC1N Priority Uses:

1. Parking

- *loss of 130 spaces from surface lots and need to preserve as many of the existing 81 spaces as possible.*

2. Storage

- *Cold storage and dry storage is chronically in short supply. Key component in retention and recruitment of farmers, crafters, restaurants and businesses.*

3. Commercial/Residential Activation

- *Financial support for development and maintenance of PC1N could include commercial and/or residential activation along the edges. activating space along Western, new space facing the Waterfront and integrating with the Desimone bridge consistent with historic plans and concepts.*

4. Social Services

- *The Foodbank, while operating successfully, faces ongoing challenges with access and space. This project could improve access to the Foodbank and consider possible relocation and expansion. Options include possible adult dental or other support spaces for the Medical Clinic.*

5. Programs

- *Provide opportunities to expand and support components of core programs including farming, education and busking will greatly aid in the successful activation of new public space created between the Market and the Waterfront.*

On December 15th, 2011 the PDA passed Resolution 11-102 which adopted a preliminary program:

PC1-North Preliminary Building Program

- Support and enhance the Market's core mission, functions and character, consistent with historical uses for PC1N and adjacent areas as part of Central Waterfront redevelopment
- Improve Market pedestrian connections to and from the Central Waterfront through the PC1N site
- Develop the PC1N site to its maximum potential for serving core Market mission and functions
- Remain consistent with Market Historic Commission Guidelines
- Include the following general uses:
  - Retail
  - Residential
  - Replacement parking
  - Storage
  - Social Services
  - Public Space
  - Circulation and Pedestrian Passage

Final Concept Program

In a previous feasibility study, the PDA further developed the above program and established targets of 76,900 square feet of building area and 23,100 square feet of public open space. Through the course of the concept design process and numerous public meetings, the building program was reduced to approximately 42,000 with an increase in the amount publicly accessible open space to 44,000 square feet. We are providing an additional 9500 square feet provided as open space reserved for the use of residents. The initial parking target was for 260 stalls and we have increased that number through the course of the concept study to meet the requirements of a WSDOT parking mitigation plan.

Final Program Summary

housing	22,500 sf
commercial	19,300 sf
total conditioned area	41,800 sf
parking	122,000 sf
open space	44,000 sf

2.2 SITE, HISTORY AND CONSTRAINTS

SITE

The site comprises approximately 39,142 square feet and is bounded by Western Avenue to the east, the Alaskan Way Viaduct to the west, Victor Steinbrueck Park to the north and the Heritage House and Market Parking Structure to the south.

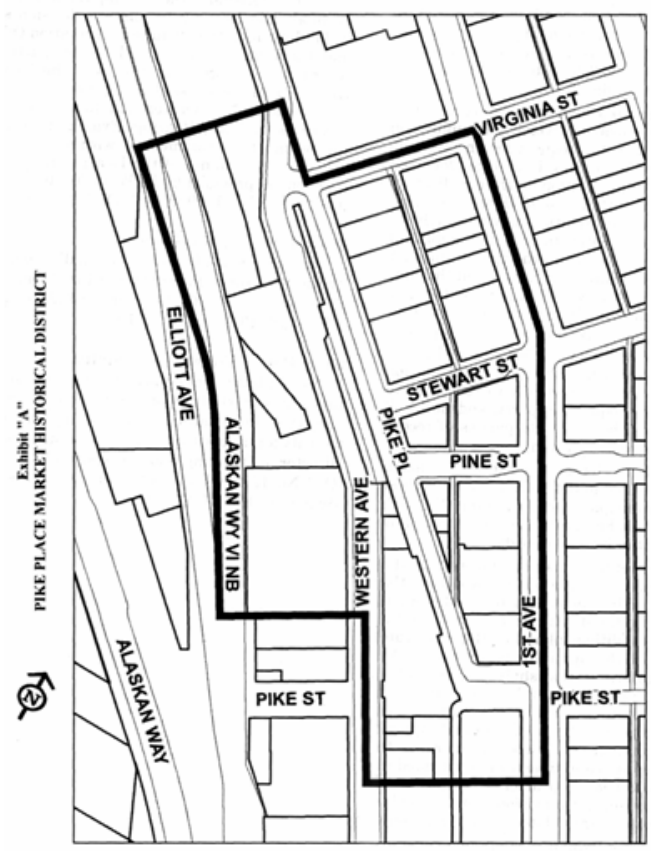
The base zone is Pike Market Mixed with a corresponding height limit of 85 feet. The site, however, is within the boundaries of the Pike Place Market Urban Renew Plan of 1974, which established much lower maximum allowable building heights. The site is also within the city's Pike Place Market Historic District and therefore subject to the Historic Commission Use and Design Guidelines which places further restrictions on the height and the developable areas on site.

PC1-N Site

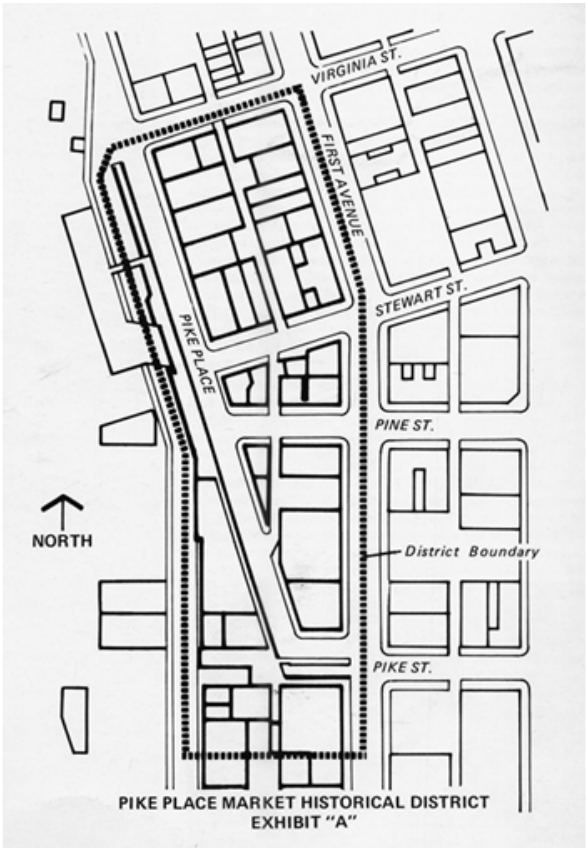
Underground high voltage transmission line

The site is classified as having Environmentally Critical Areas due to steep slopes existing at the southwest corner and a small portion of the northeast corner. The Burlington Northern Railway has an easement to operate a tunnel that runs directly below the site and daylights just to the west of the site. Seattle City Light (SCL) has an underground high voltage transmission line that runs along the western property line and crosses over the top of the tunnel adjacent to the portal and then crosses onto the PC1N site for the northernmost 55 feet. The line encroaches only about a foot so the impact to the building is not significant, however careful coordination with SCL during construction will be required.

While the site is not included in the “Pike Place Market Historic District” that is listed on the US National Register of Historic Places, it is included in the Seattle Department of Neighborhoods “Pike Place Market Historic District”.



Seattle’s Pike Place Market Historic District Map

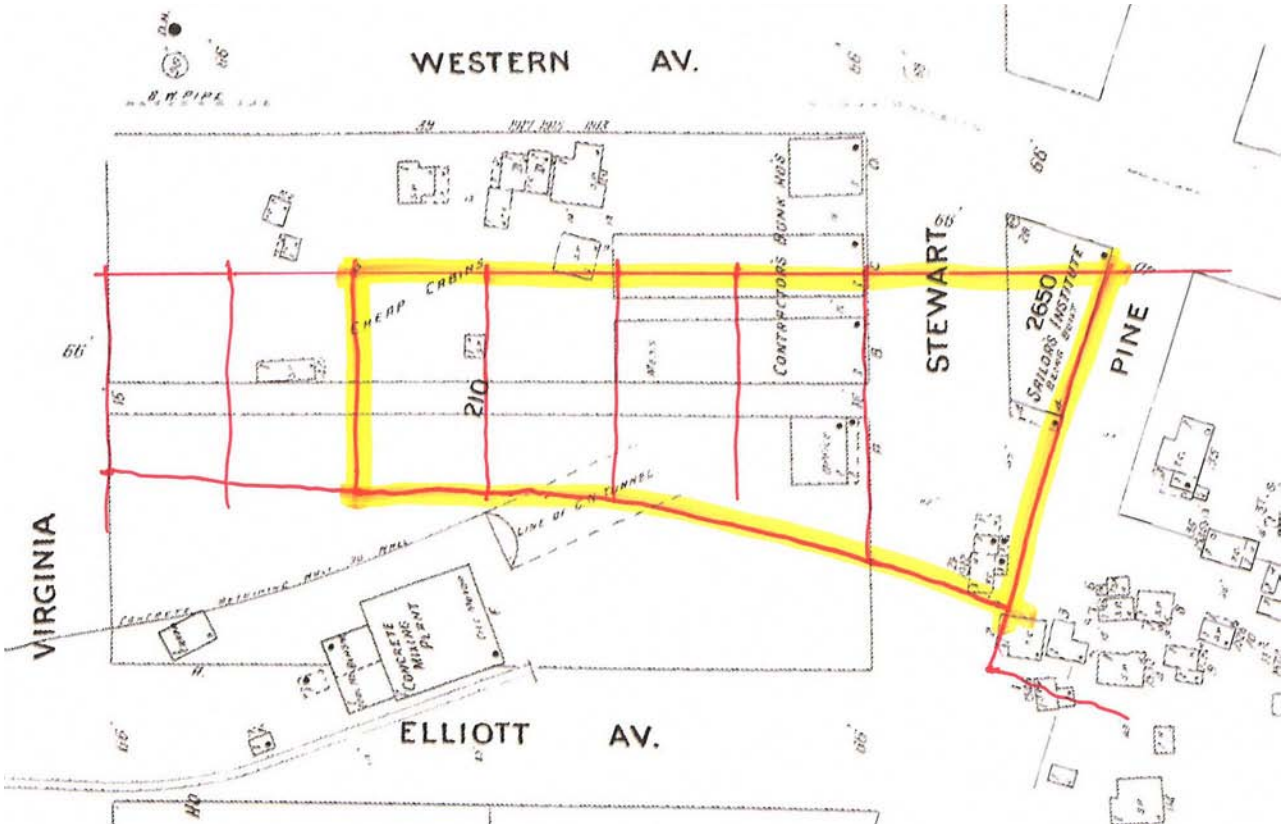


National Register of Historic Places District Map

SITE HISTORY

The site is at a critical juncture in the city of Seattle not only in terms of its proximity to the market and downtown urban core but also in its adjacency to major transportation infrastructure. The Alaskan Way Viaduct runs the length of the site to west and the Burlington Northern train tunnel runs directly below the site. The Viaduct presents phasing challenges and the railroad tunnel presents planning and construction issues. To achieve the parking program the Market requires creates very tight tolerances between the building foundation and the tunnel structure. To better understand the tunnel infrastructure and what else might be buried on site the team researched city archives and historic photo databases. The following is a summary of that research and attached as an appendix is a complete chronology.

While there is earlier information, our focus began with construction of tunnel. A Sanborn fire insurance map from 1904-05 gives us a glimpse of what buildings were on the site right at the time of construction. The maps shows a number of 'cheap cabins' on the northern portion of the site and two long buildings referred to as 'contractor bunk houses' and another west of the alley labeled 'office.' We have assumed these were for the construction of the tunnel as the below photographs suggest. The red lines delineate the current parcel lines which were adjusted when Pike Place connection was established and the Western Avenue right of way shifted to the west.

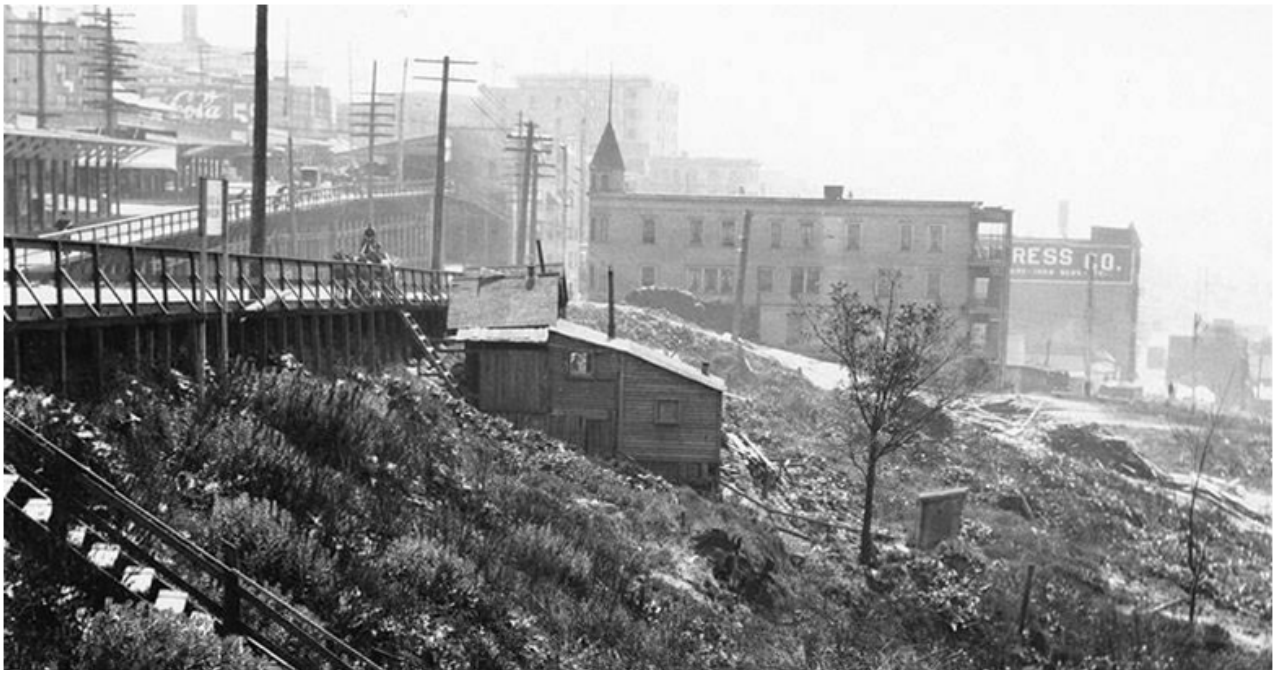


Sanborn Fire Insurance Map, 1904-1905

Tunnel Excavation, 1903

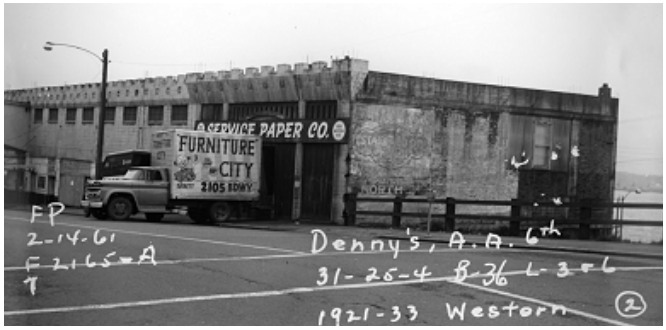
Tunnel Construction, 1905

A photograph dated to 1903 shows the tunnel portal being excavated and three gabled wood frame structures that conform to what is shown on the map. This map also shows a structure just west of the tunnel portal and refers to it as a concrete mixing shed. This shed appears to be in construction with timber columns in place in the 1903 photo and clearly identifiable in the 1905 photo.



View across site to the south, 1909

A photo dated 1909, with the tunnel now operational and construction complete, shows the site cleared and graded with a gentle slope to the west. The contractor's bunk houses, the office and most of the cabins are gone. Western Ave has been re-graded and realigned. The Market was now in its second year of operation. The building at the south end of the site is the Sailor's Institute which is labeled as 'being built' on the 1904-05 Sanborn map.



Municipal Building, 1961

Municipal Building with two bridges, 1961

The site appears to have been largely vacant until 1920, when the Market Municipal Building was constructed. The building had two bridge connections to the market arcade. The original Joe Desimone bridge was an arched truss pedestrian bridge that connected to the north end of the arcade. South of that pedestrian bridge was larger, timber framed bridge.

Municipal Building converted to garage, 1964

Municipal Building converted to garage, 1964

This timber truss bridge was replaced in 1965 with the precast concrete T-section bridge that we see now. This conversion allowed vehicles to access the Municipal building which was converted at the same time to provide open-air parking on the top floor.

Municipal Building, 1974

Municipal Building being demolished after the fire, 1974

In 1974 the Municipal building caught fire and was subsequently torn down. The 10 year old vehicular bridge was preserved however and remained as open air deck until architect Jim Cutler designed an enclosure that allowed the bridge the function as an extension of market arcade. This work occurred in 1985 and remains intact today.

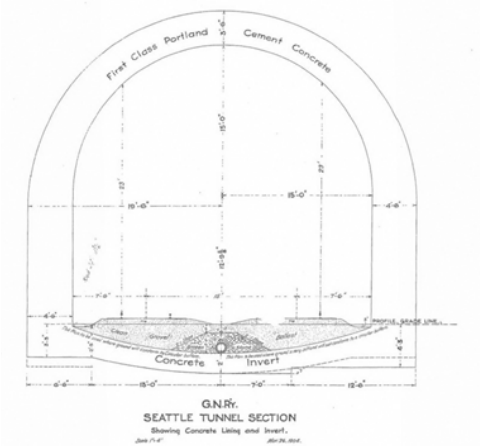
Site cleared and graded for surface parking, 1974

Site cleared and graded for surface parking, 1974

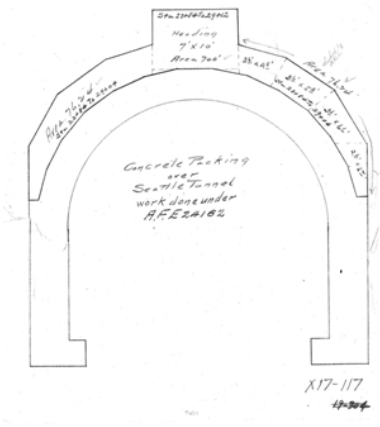
View of site from the Truss Bridge, 2012

SITE CONSTRAINTS

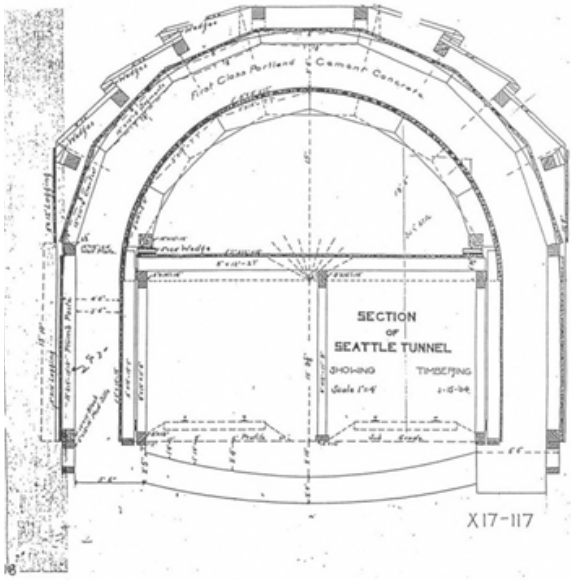
Train Tunnel: A critical feature and design constraint of the site is the Burlington Northern train tunnel. As mentioned above, the tunnel was constructed in 1903-1905. During a review of the as-built drawings of the tunnel we encountered a sketch that described additional concrete that was placed on top of the tunnel and a heading that was seven feet tall and ten feet wide. The sketch says this concrete was placed in 1911-1913.



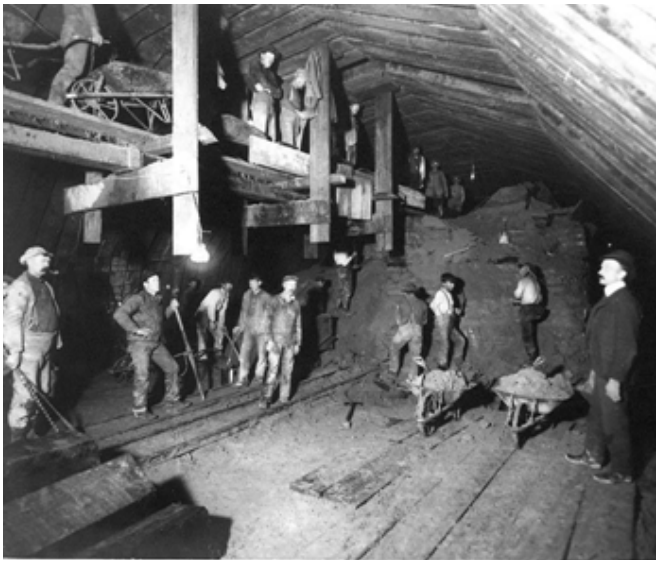
Typical Tunnel Section, 1903



Concrete Packing over Tunnel, 1913



Timber Shoring system, 1903



Crews excavating and placing timber shoring, 1903

The explanation for this additional concrete has to do with the timber shoring that used to retain earth while concrete tunnel was formed and pored. A few years after the construction was complete a number of locations along 4th Avenue and the new Central Library at 4th and Madison in particular, experienced some settling. The city determined that the tunnel was the cause and filed suit against the railroad. Engineers determined that timbers used to retain earth around the concrete tunnel were rotting and the surrounding soils settling down onto the concrete tunnel shell. To mitigate future settlement, the Great Northern company excavated a seven by ten foot access way for the length of the tunnel so that concrete packing could be placed in the voids to prevent further settlement to buildings and infrastructure above. This heading was subsequently filled as crews moved backward toward the tunnel portals.

This addition of seven feet to the top of the tunnel is significant because it affects the number of parking levels that can be accommodated between existing grade and top of tunnel. Without this additional heading, three levels could fit, but with the heading intact, only two are possible. This is important to the project because it determines how much flexibility we have on the west property line to accommodate the Overlook Walk and supporting program spaces.

One final question involved the extent of the concrete cap. The heading is not visible where the tunnel daylights just to the west of our site and no documentation could be found as where exactly the heading started or stopped. Another discrepancy uncovered was conflicting survey data on the exact location of the tunnel below grade. To field verify the location and sectional profile of the tunnel a potholing crew was contracted to dig down and field verify depths of concrete in key locations. We were able to confirm that the heading and packing on top of the tunnel existed at the eastern portion of the site but not the western. We then dug a series of holes along the centerline of the tunnel to determine exactly where the heading stopped and how it terminated. See pothole plans and sections in Appendix 2, 12.0 Concept Design Drawing Set.

Another aspect of the site that was discovered through the course of potholing was the existence of a significant amount of debris across the site. At times, the potholing crew were unable to reach the tunnel zone. An analysis of historic photos and grades where debris was encountered suggested that the original grade of the site was approximately ten feet below the current grade. Below this ten-foot zone of fill and building debris is undisturbed soil. Refer to Appendix 1, Civil Narrative for additional detail and geotechnical data.

2.3 ZONING AND CODE ANALYSIS

Zoning Analysis

An analysis of the Seattle Zoning Code was conducted and included in section 7.0 Architectural Attachments. While the base zoning allowable height is 85 feet, Urban renewal covenants apply which reduce the allowable height. No parking is required for either the commercial uses nor the residential due to fact that site is located within the Commercial Core Urban Center Village. Most of the code does not apply due to the Historic District and Market Historic Commission.

Building Code Analysis

An analysis was also conducted of the Seattle Building Code and found in section 7.0 Architectural Attachments. A quick overview of the major issues is as follows. The parking garage will be required to have a 3-hour fire separation from the commercial and residential above. Separation between commercial and residential will be 1-hour. The building will be sprinkled at all levels. The design intent for the above garage construction is that of a heavy timber building. Whether we design it as a type-IV heavy timber building or as a type-V and utilize the heavy timber exception for the primary structural members will be determined during subsequent phases of design. The housing component is envisioned either as post-tensioned concrete or cross-laminated timber to minimize depth of the floor structure and maximize ceiling heights.

2.4 HISTORICAL

Market Historical Commission Design Guidelines Overview

The Pike Place Market Historical District is a 7-acre site bounded by 1st Avenue, Virginia Street, the Alaska Viaduct and a line approximately midway between Union Street and Pike Street. The Market Historical Commission reviews all design proposals for the Pike Place Market and have established Design Guidelines for decision-making on the approval of uses and designs in the Market.

Our design team has studied and evaluated the guidelines and our work has been substantially influenced by them. Guidelines that we feel are particularly relevant to our project, include: maintaining and enhancing pedestrian qualities, respecting and enhancing visual connections between Steinbrueck Park, Elliott Bay, and within the district, shaping unique utilitarian urban form that is respectful of the surrounding structures, utilizing exterior materials that have inherent color and do not require painted surfaces, differentiating the new work from the historic while being compatible with massing , size, scale and architectural features.

Our team is especially inspired by the use of the concrete post and beam structures along Western Avenue – commonly referred to as the Western Frame. We are also inspired by the use of heavy timber structures in the Market. Wood, harvested from certified forests, and used as a structural element, is the most sustainable building material in the Pacific Northwest.

Regular structural rhythm along Western Avenue

Concrete frame with glass infill

Heavy timber framing

Exposed structure, mechanical and lighting

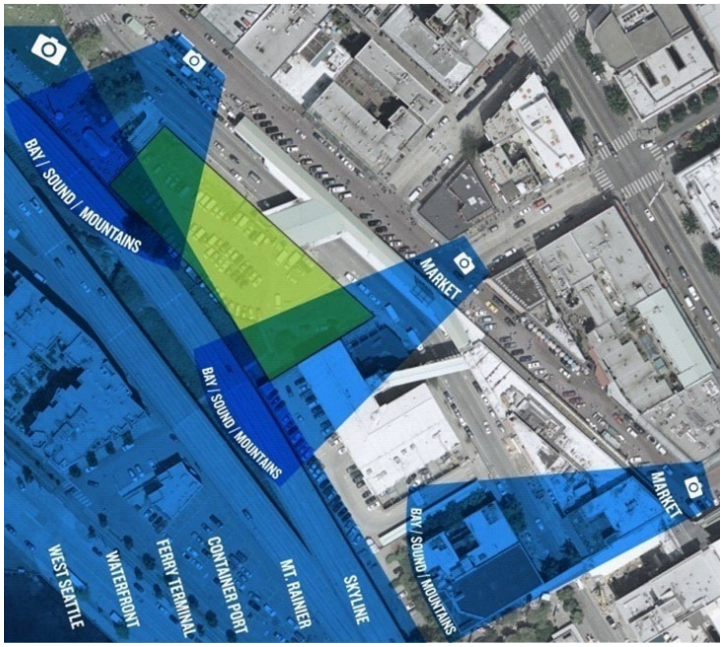
3.0 PUBLIC REALM ANALYSIS

3.1 VIEW ANALYSIS

There are so many great views throughout the Market our first effort was to qualify the views and begin to establish a hierarchy of at the least, primary exterior views of the market and primary interior views.

Primary Exterior Views

We identified four viewpoints as the primary iconic views of the Market, from the city: Pike, Pine, Pike Place and Victor Steinbrueck Park.



View from Pike St.

View from Pine St.

View from Stewart Street

View from Victor Steinbreuck Park

View from Pike Place

Primary Interior Views

The primary interior views include views from within the North arcade across the site, views from restaurants within the market, and views from the Joe Desimone Bridge.

North arcade views

Market views

Desimone Bridge views

3.2 CIRCULATION ANALYSIS

1. Connect to the Overlook Walk along the west edge of the site
2. Connect to Victor Steinbrueck Park
3. Connect to Western along south edge of site
4. Stair connection up to the Desimone Bridge
5. Activation of Western Avenue with commercial
6. Connect the Desimone bridge to Victor Steinbrueck Park which creates a larger circulation loop back across Western to the north end of Pike Place
7. Establish a new, second and lower level on the truss bridge to provide improved access to the DownUnder in the Market
8. Explored a new stair and pedestrian crossing at the north end of Market arcade

4.0 PRELIMINARY MASSING CONCEPTS

4.1 OPTIONS A, B, C & D

The Design team produced four massing options in various configurations to test the program fit on the site. The process was essential to engaging dialog and public input to refine massing and program placement.

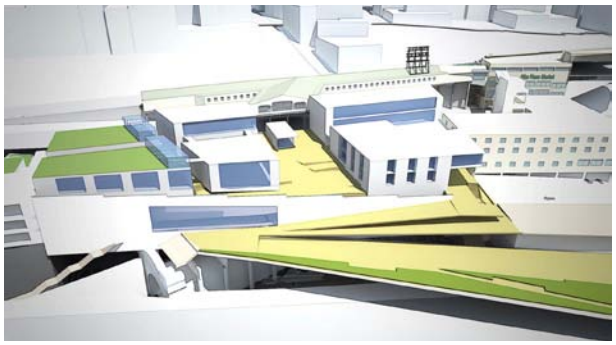
Option-A preserved west views from the slabs on Pike Place with a one-story building at the northern half of the site. The building stepped up to two stories adjacent to the existing arcade. The housing program occupied the south portion of the site and extended westward leaving a 15 feet to accommodate the pedestrian circulation.

Option-B considered a long narrow building along Western Avenue with 2 stories of program at north and three at the south. A break in the center provide open space in front of the Desimone Bridge. A second level exterior circulation space ran along the west side of the north building and connected down to Steinbrueck Park. While we had ample commercial space, the housing program was reduced to about half of the program.

Option-C tested the concept of a housing tower on the south east corner of the site. Also considered was a wider opening from Desimone Bridge. This option provided the most public space along the western portion of the site but compromised views to achieve the program required.

Option-D considered a horizontal projection of residential program instead of the vertical tower form. The pedestrian walk from the waterfront would pass underneath the building.

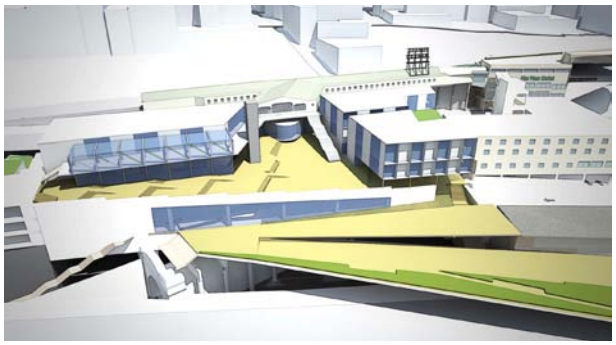
These four massing options were presented to the PDA Council and constituency at a series of public meetings. We received a lot of great feedback that helped us understand how to better place the program on the site. The following series diagrams synthesizes that feedback and provides logical progression that leads us to our preferred massing concepts.



Option-A

Option-B

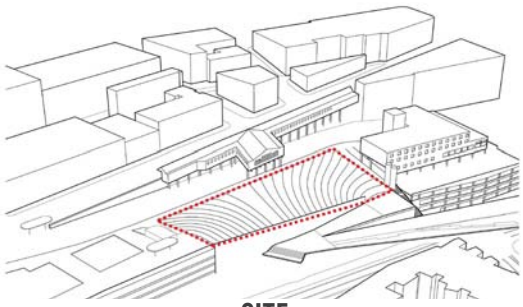
Option-C



Option-D

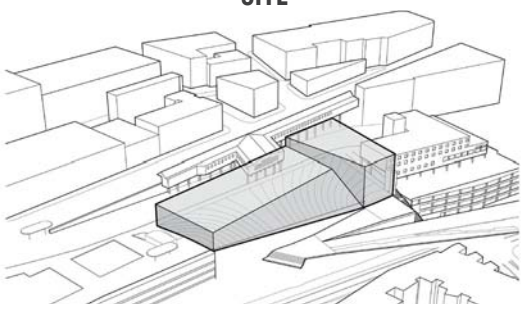
4.2 PROJECT DIAGRAMS

Site: We start with base site which slopes gently to the south and west. The grade change along Western Avenue is roughly 18 feet.



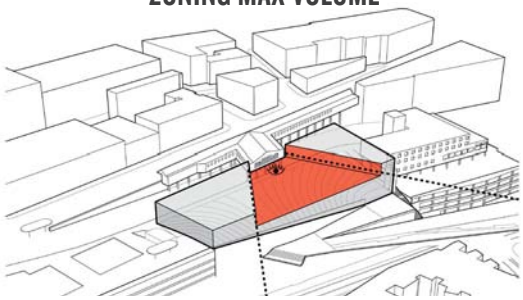
SITE

Zoning Max Volume: The maximum allowable height on site is not the 85 foot limit of the base zone but limited instead by the Urban Renewal legislation passed by city council in 1974 which results in a maximum envelope not to exceed the arcade roof on the northern portion of the site and an approximate one story increase to south.



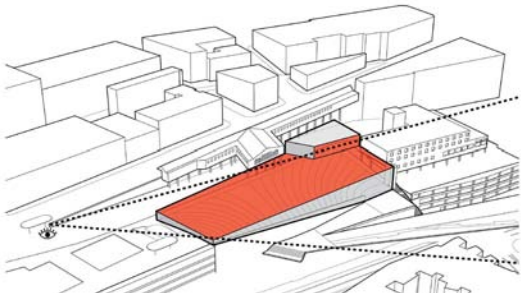
ZONING MAX VOLUME

Maintain Views from Desimone: To ensure that views from the Joe Desimone Bridge were preserved, we carved into this maximum building envelope.



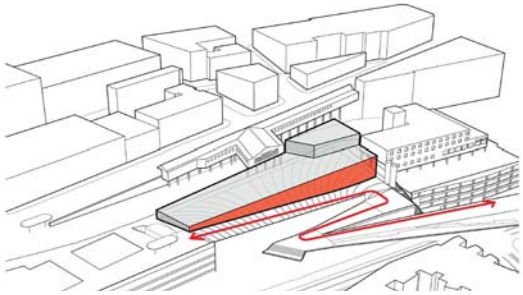
MAINTAIN VIEWS FROM DESIMONE

Maintain Views to South: To ensure that views of Mount Rainier, the stadiums, the Duwamish River and West Seattle are preserved from the Virginia Street pergola, we lowered the top of building as required. This left a small portion at the southeast corner of the site a higher elevation.



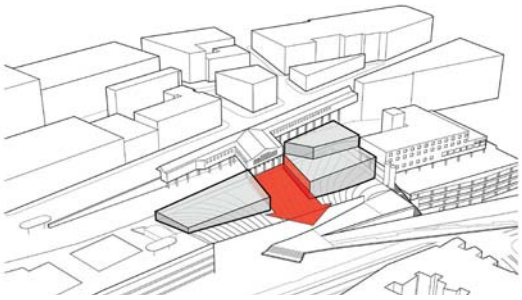
MAINTAIN VIEWS TO SOUTH

Connect to Waterfront: Honoring the switchback concept from the Overlook Walk removed roughly a third of the potential floor area for the below market portion of the project.



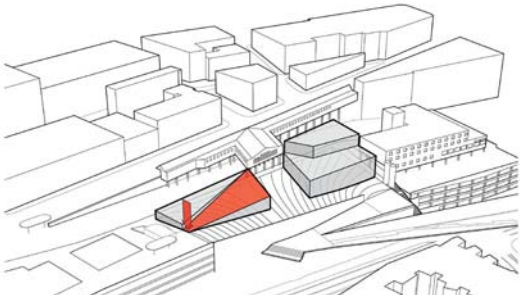
CONNECT TO WATERFRONT

Connect to Western With Plaza: To preserve mountain and sound views from Western Avenue, under the Desimone Bridge, the remaining volume was bisected.



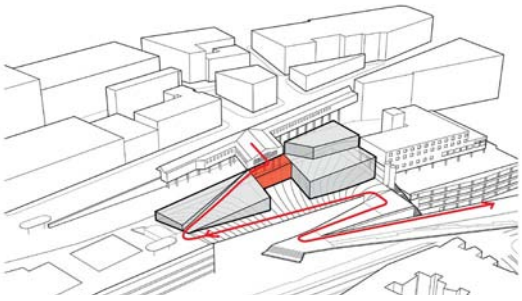
CONNECT TO WESTERN WITH PLAZA

Connect to Park: Providing an accessible connection to Victor Steinbrueck Park was also a strong priority. Sloping the roof terrace accomplished this but reduced ceiling heights in the northwestern portion of the building.



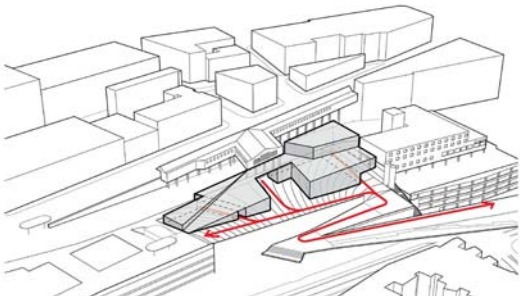
CONNECT TO PARK

Connect to Market: Completing the primary connection from the waterfront to the Desimone Bridge requires a deck area to span over the primary Western Ave breezeway.



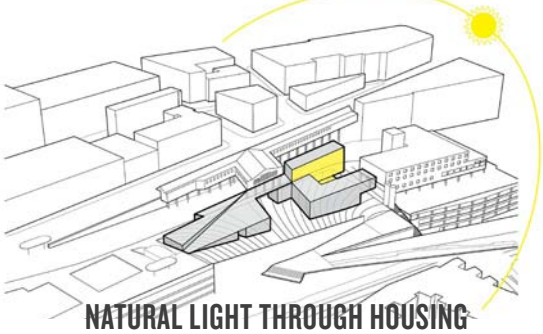
CONNECT TO MARKET

Porosity Through Building: Providing multiple breezeway connections to Western Avenue ensured that pedestrians have numerous options and helped break down the scale and massing of the project further and is consistent with the multiple paths of travel currently found in the Market.



POROSITY THROUGH BUILDING

Natural Light Through Housing: To ensure that the residential uses on the south half of the site have ample access to natural daylight and ventilation the floor plates were narrowed and courtyard created.

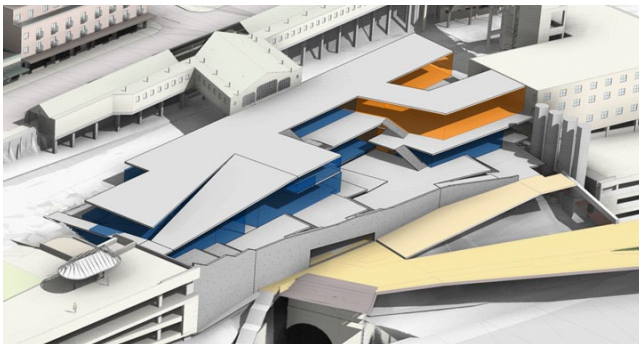


NATURAL LIGHT THROUGH HOUSING

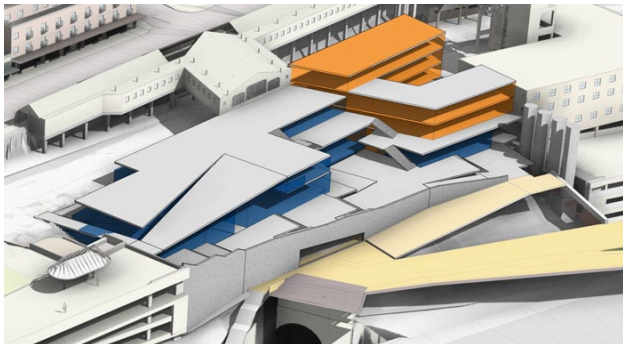
5.0 PREFERRED MASSING CONCEPTS

5.1 MASSING DIAGRAMS

The team received approval from the PDA council on July 19 to continue study of the preferred massing concept, which had two versions — BB (below bridge) and BB+ (below bridge +). The two version were the same with the exception of an additional floor and a half of housing. By lifting the roof of the third floor 3 feet we are able to fit another level below and maintain nine foot floor to floors. A fourth level of housing can also be achieved without going above the ridge of the Market arcade building. Both options were tested to ensure that they didn't block the view from under the Virginia Street Pergola.



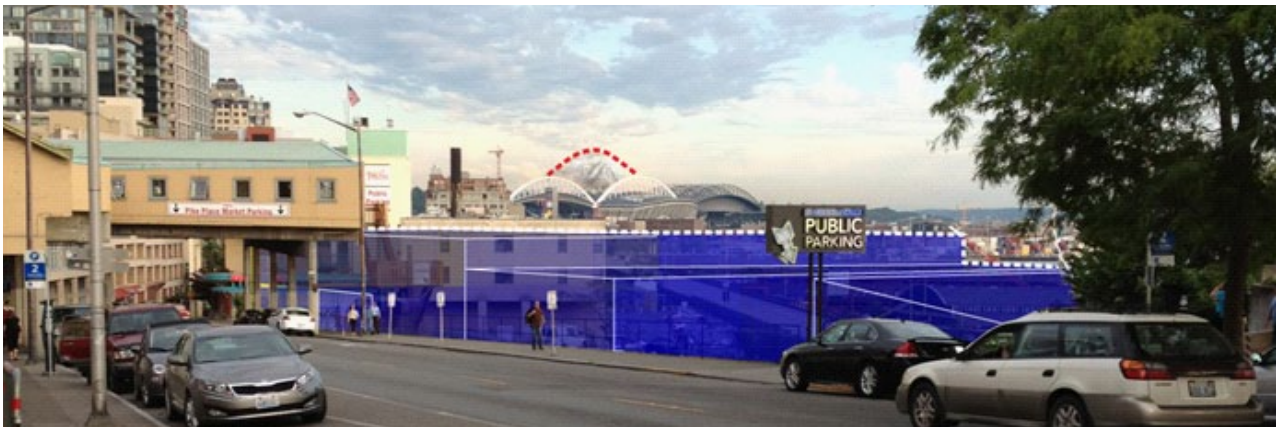
Preferred Massing option BB



Preferred Massing Option BB+

Retail/Commercial

Housing



View Analysis for Preferred Massing Option BB from under the Virginia Street Pergola

View Analysis for Preferred Massing Option BB+ from under the Virginia Street Pergola

6.0 CONCEPT DESIGN

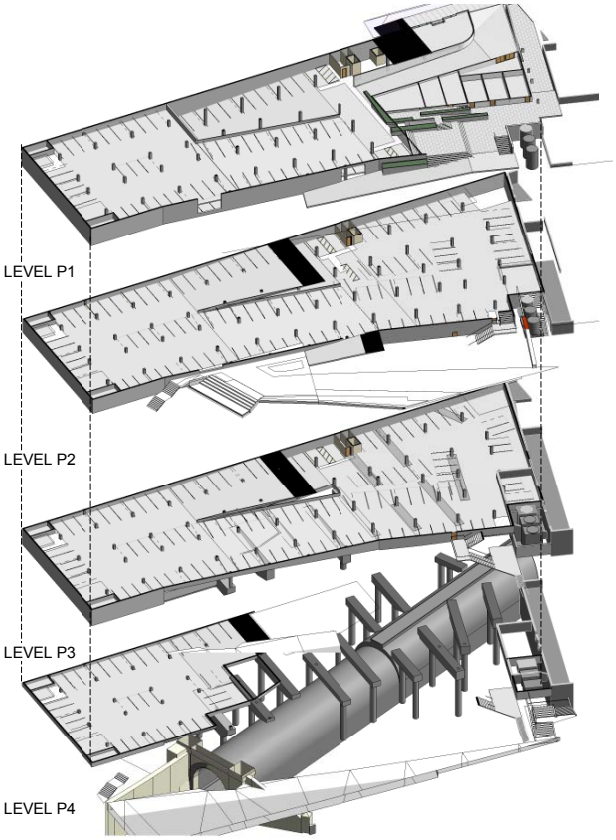
6.1 PARKING

The final concept design brings together nearly four months of work.

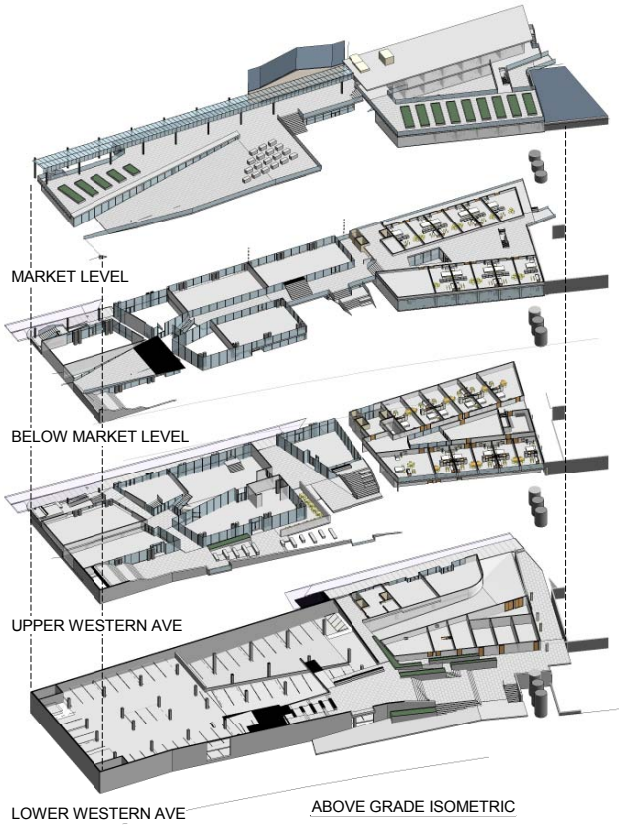
The Parking levels are accessed from a new curb cut along Western Avenue at the southeast corner of the site. To preserve the pedestrian connection across the site to Western Avenue the single parking ramp on the PC1-Market Parking garage will be abandoned and overframed to create a level pedestrian connection through. The Heritage House extends over the new walkway creating a dynamic pedestrian experience and dramatic unfolding of views when walking toward the waterfront.

The parking access ramp will have fully automated parking payments columns just inside the property lines and under cover of the building above. After ticketing the ramp slopes down at a 5% grade into the garage and below the rising grade on Western Ave by the time it gets to southern end of the Desimone Bridge. This ramp configuration preserves the site connection and views from Western below the bridge.

The garage is configured with four levels on the northern portion of the site and two levels on the south half of the site. Vehicular access between levels is a continuous two way loop with 90 degree parking stalls.

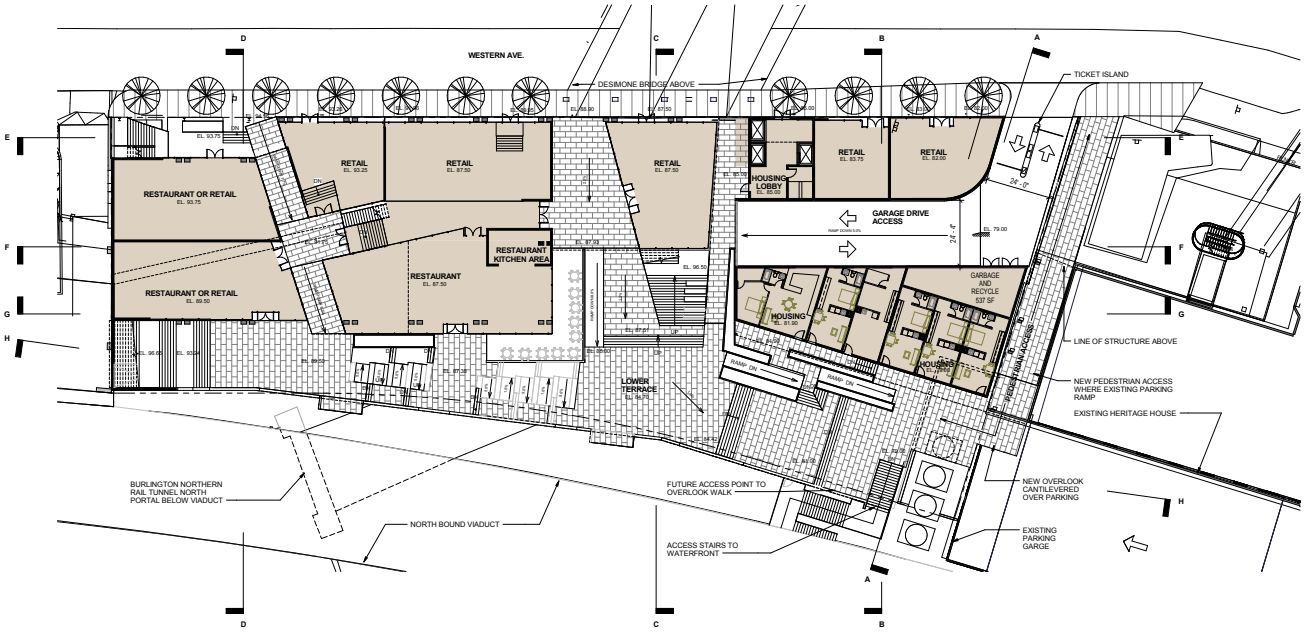


Parking Level Summary

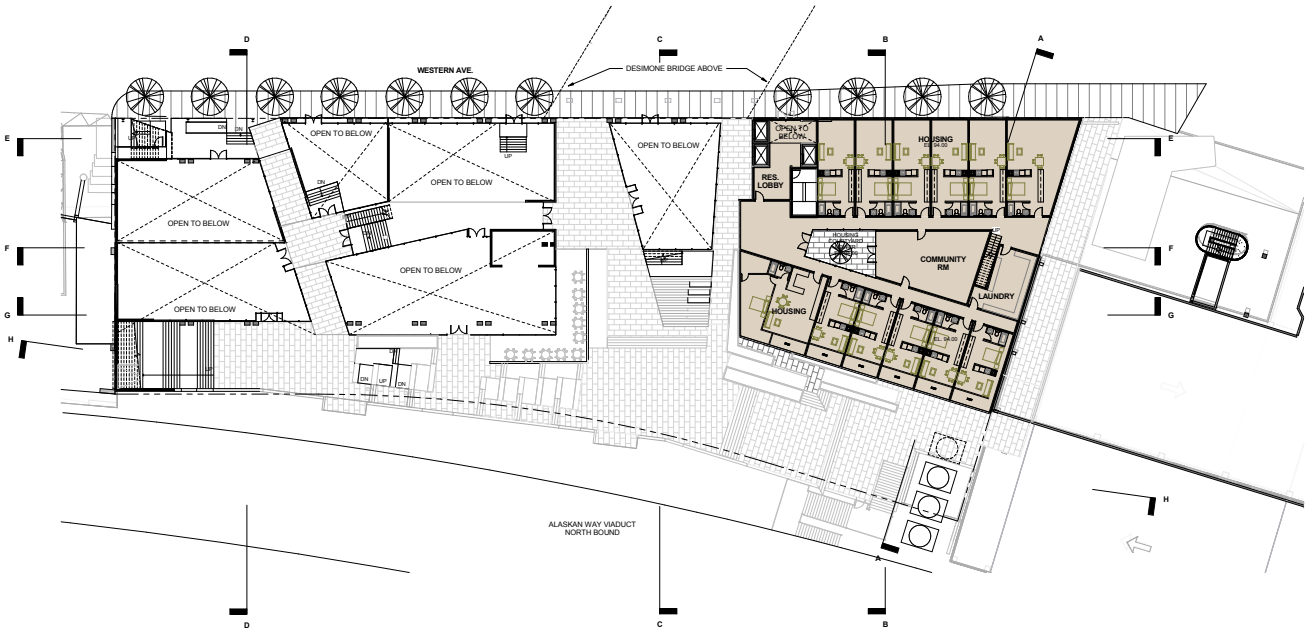


Upper Level Summary

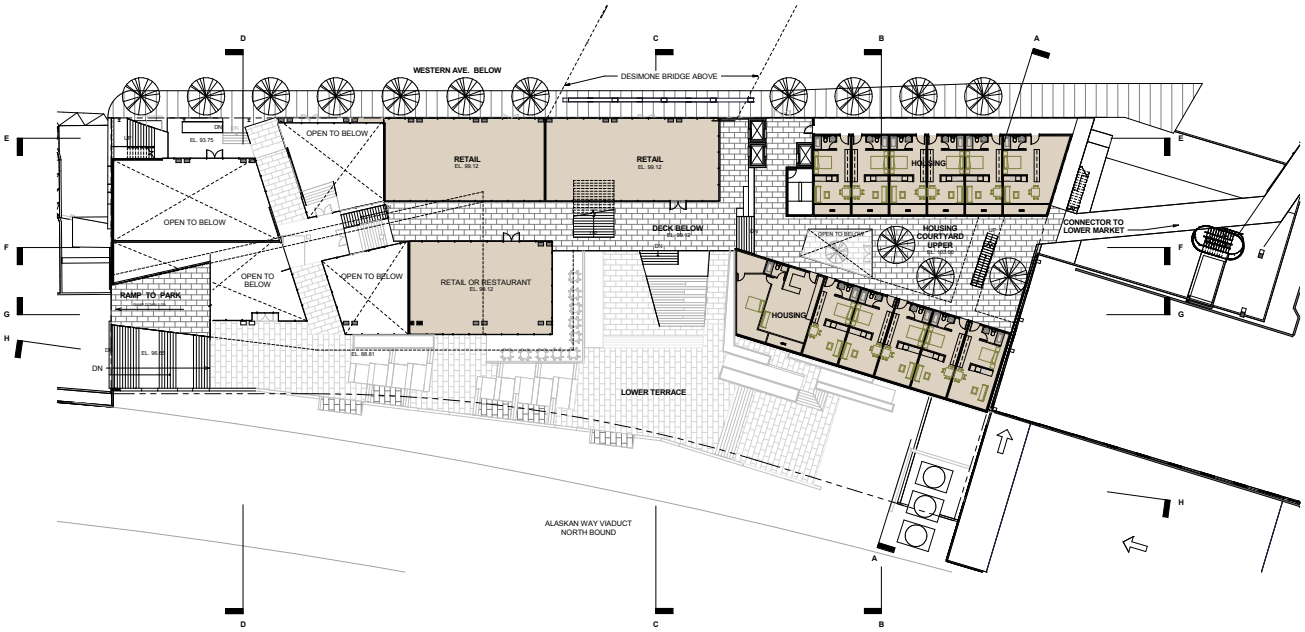
6.2 BUILDING PLANS



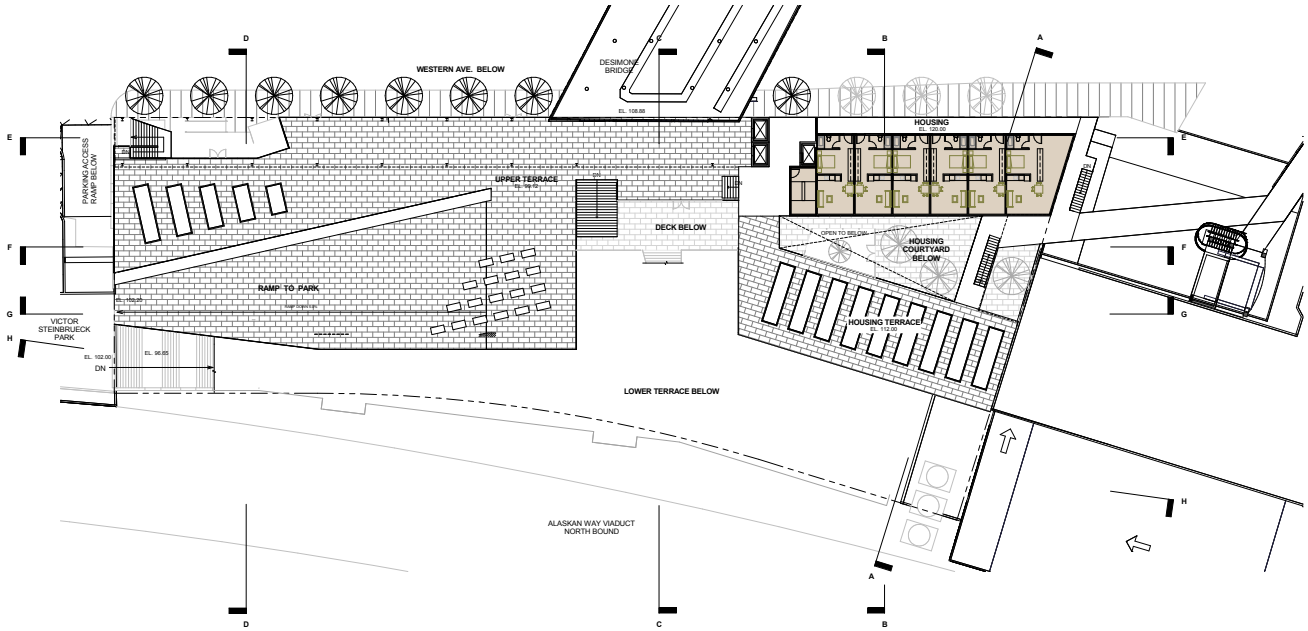
Western Avenue, Lower Terrace Plan, Plan Elements: Retail on Western Ave and public space, arcade connection to Western, central terrace, housing on public space, and entrance to garage.



Housing Level 2 (Lower Courtyard) Plan, Plan Elements: Housing units around shared community spaces.

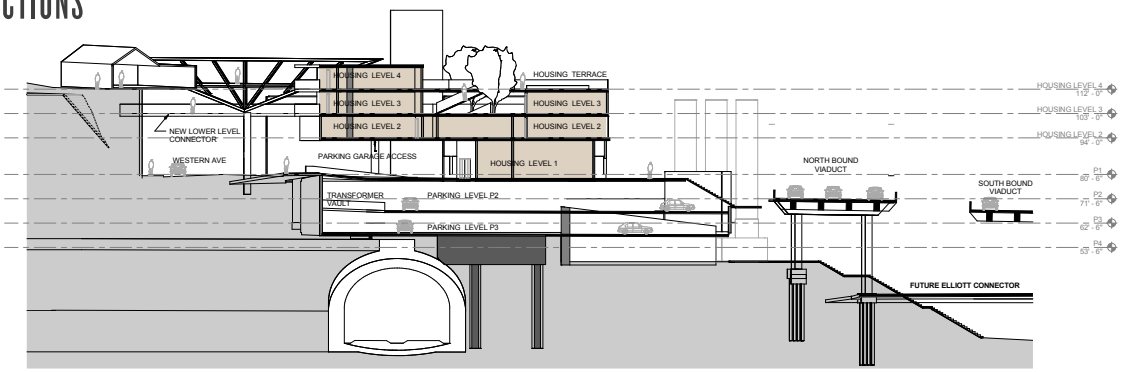


Mezzanine Plan, Plan Elements: Mid-level terrace with associated retail at mezzanine. Housing around semi-public courtyard, bridge to "DownUnder."

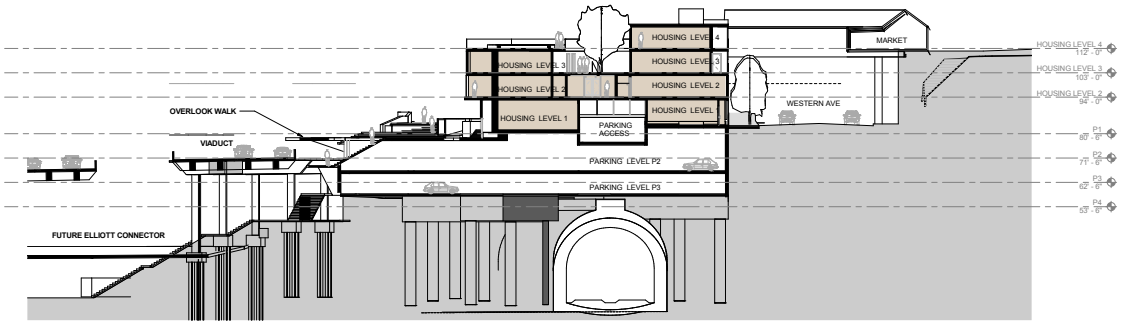


Market (Upper) Terrace Plan & Housing Level 4 Plan, Plan Elements: Connection to Desimone Bridge, roof terrace at Market arcade level, and ramp to Steinbrueck Park and public space. Fourth floor of housing at East and roof garden at West, preserves view corridor from Desimone.

6.3 SITE SECTIONS

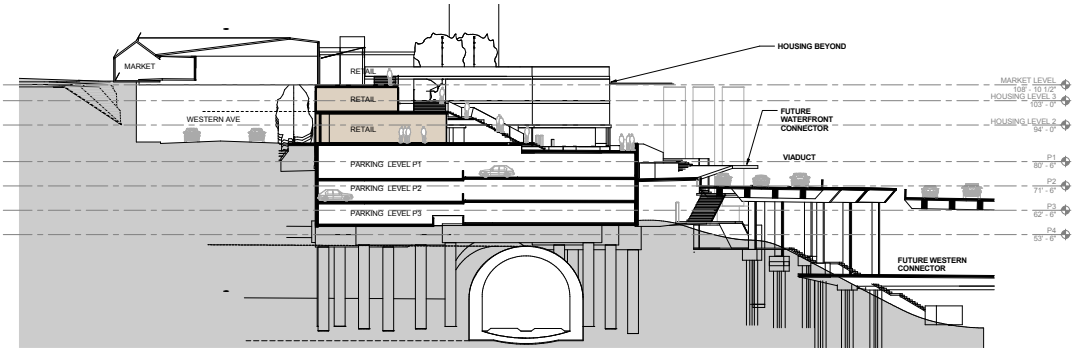


A **SITE SECTION "A"- LOOKING SOUTH**
1/16" = 1'-0"

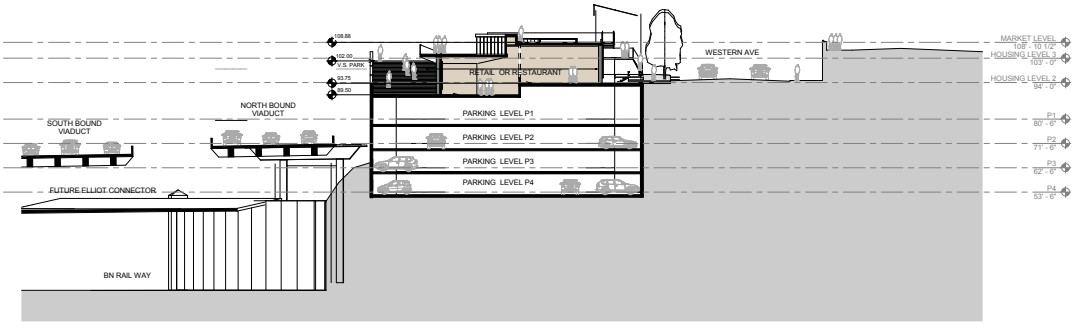


B **SITE SECTION "B" AT SOUTH OF DESIMONE BRIDGE**
1/16" = 1'-0"

0' 8' 16' 32'

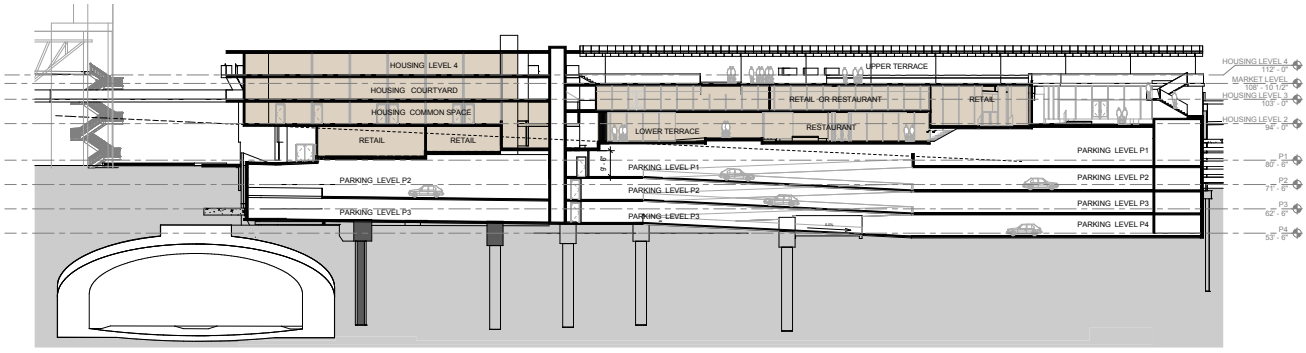


C **SITE SECTION "C" AT DESIMONE BRIDGE**
1/16" = 1'-0"

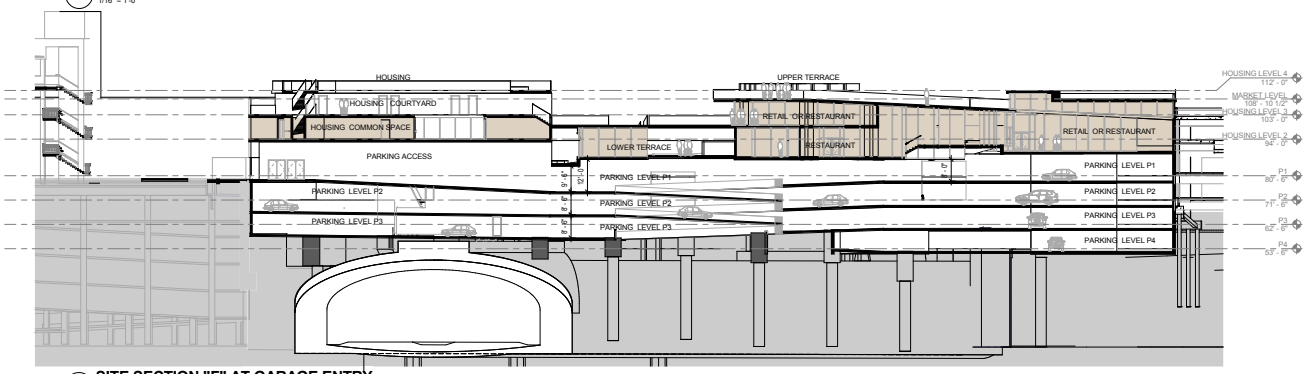


D **SITE SECTION "D" - LOOKING NORTH**
1/16" = 1'-0"

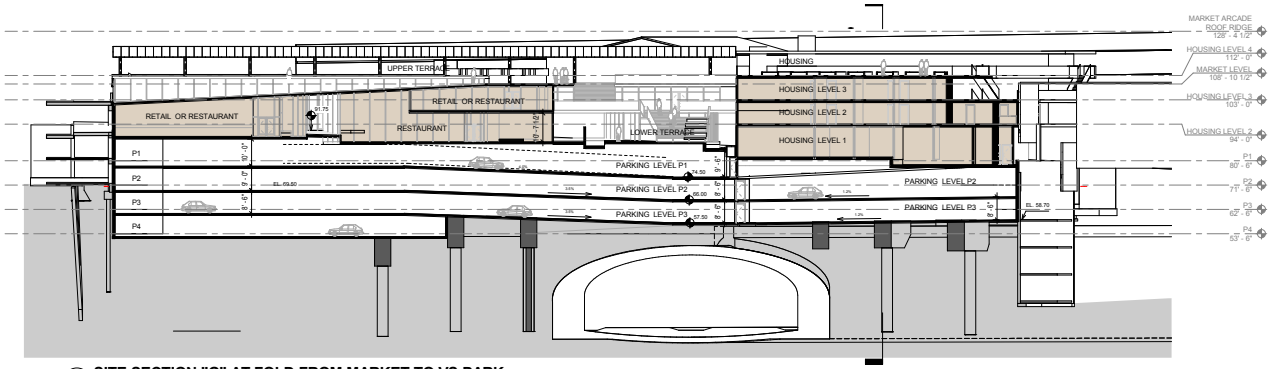
0' 8' 16' 32'



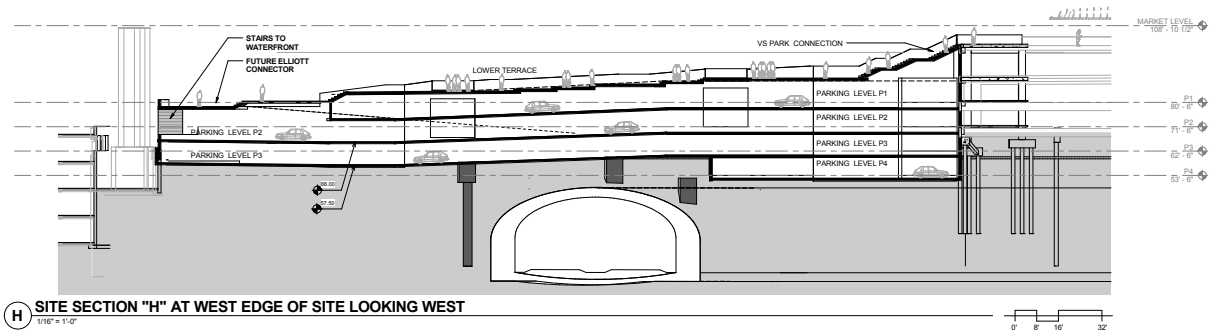
E **SITE SECTION "E" AT WESTERN**
1/16" = 1'-0"



F **SITE SECTION "F" AT GARAGE ENTRY**
1/16" = 1'-0"



G **SITE SECTION "G" AT FOLD FROM MARKET TO VS PARK**
1/16" = 1'-0"



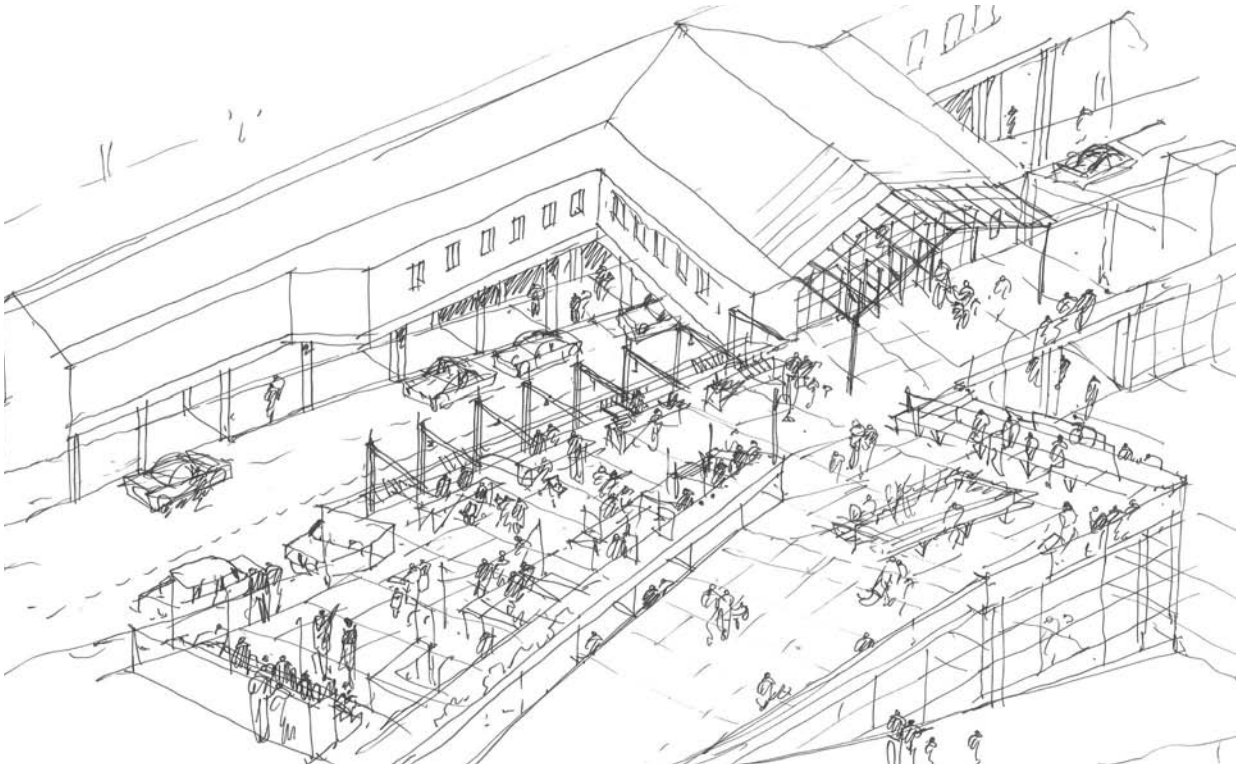
H **SITE SECTION "H" AT WEST EDGE OF SITE LOOKING WEST**
1/16" = 1'-0"

6.4 RENDERINGS

View of project from Pine St.

View of project from Stewart St.

View of the project from the Pergola at Virginia and Pike Place



Axon sketch

View to the West across the roof terrace from the Desimone Bridge

View back toward the Market from the Overlook Walk

View to the to the South from Victor Steinbrueck Park

6.5 PHASING DIAGRAMS

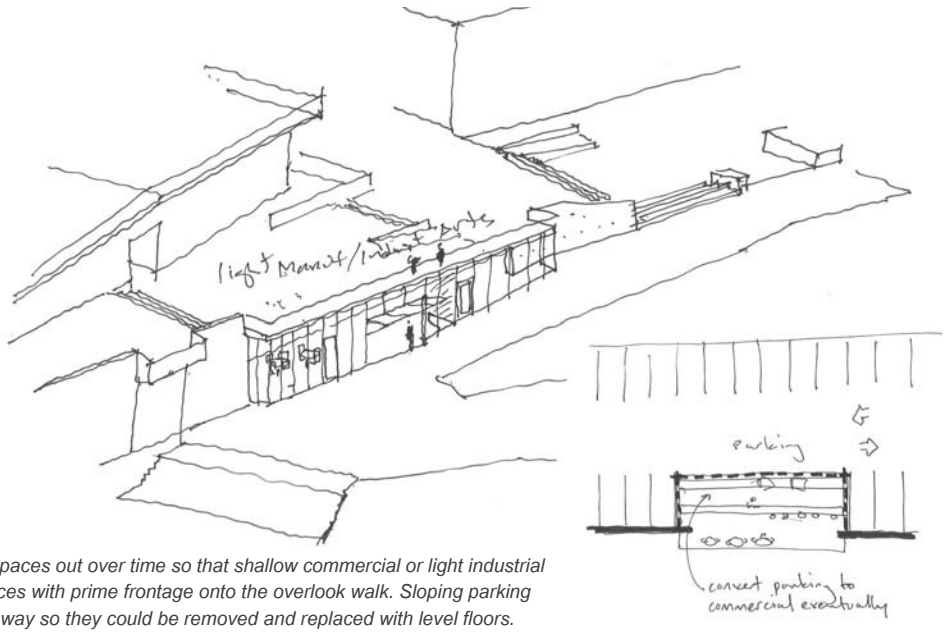
Site Phasing Figure #1: Existing Site Conditions, 2012

Site Phasing #2: Construction of PC1N complete, Fall 2015

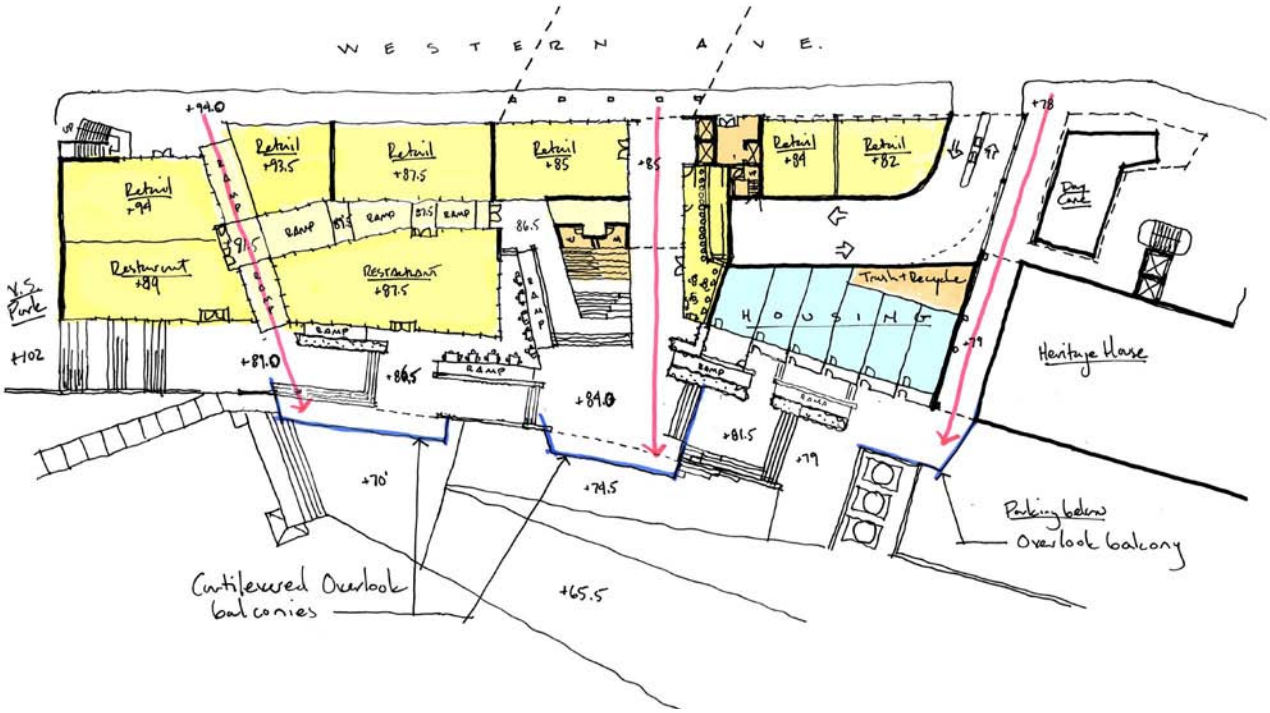
Site Phasing Figure #3: Construction of Overlook Walk est. 2018

6.6 NEXT STEPS

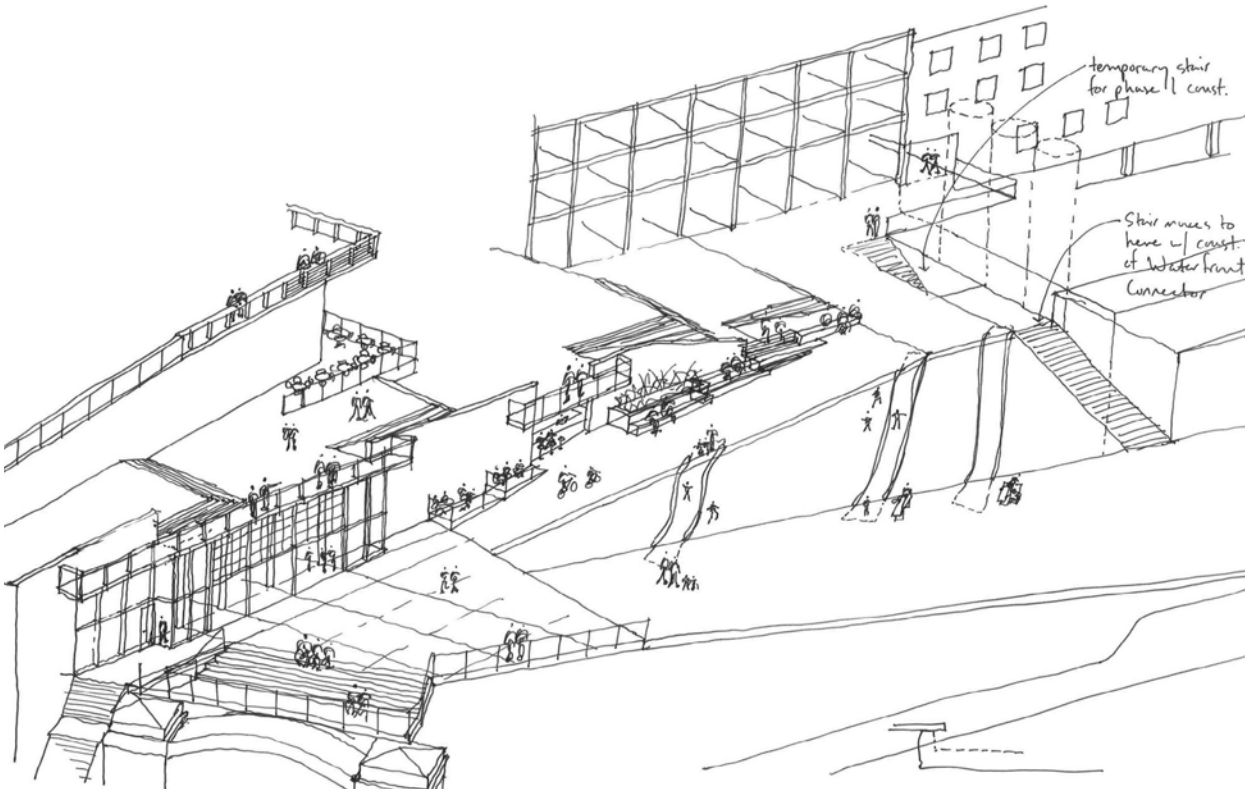
The next steps in the design process are to focus on the connection to the overlook walk and develop a more seamless transition and beginning to address the complex phasing between the two projects. To that end, the team met with the waterfront team on September 13th to formally begin this process. Miller Hull prepared a series of sketches to begin the discussion.



It is possible to phase parking spaces out over time so that shallow commercial or light industrial uses could take over these spaces with prime frontage onto the overlook walk. Sloping parking slabs could be constructed in a way so they could be removed and replaced with level floors.



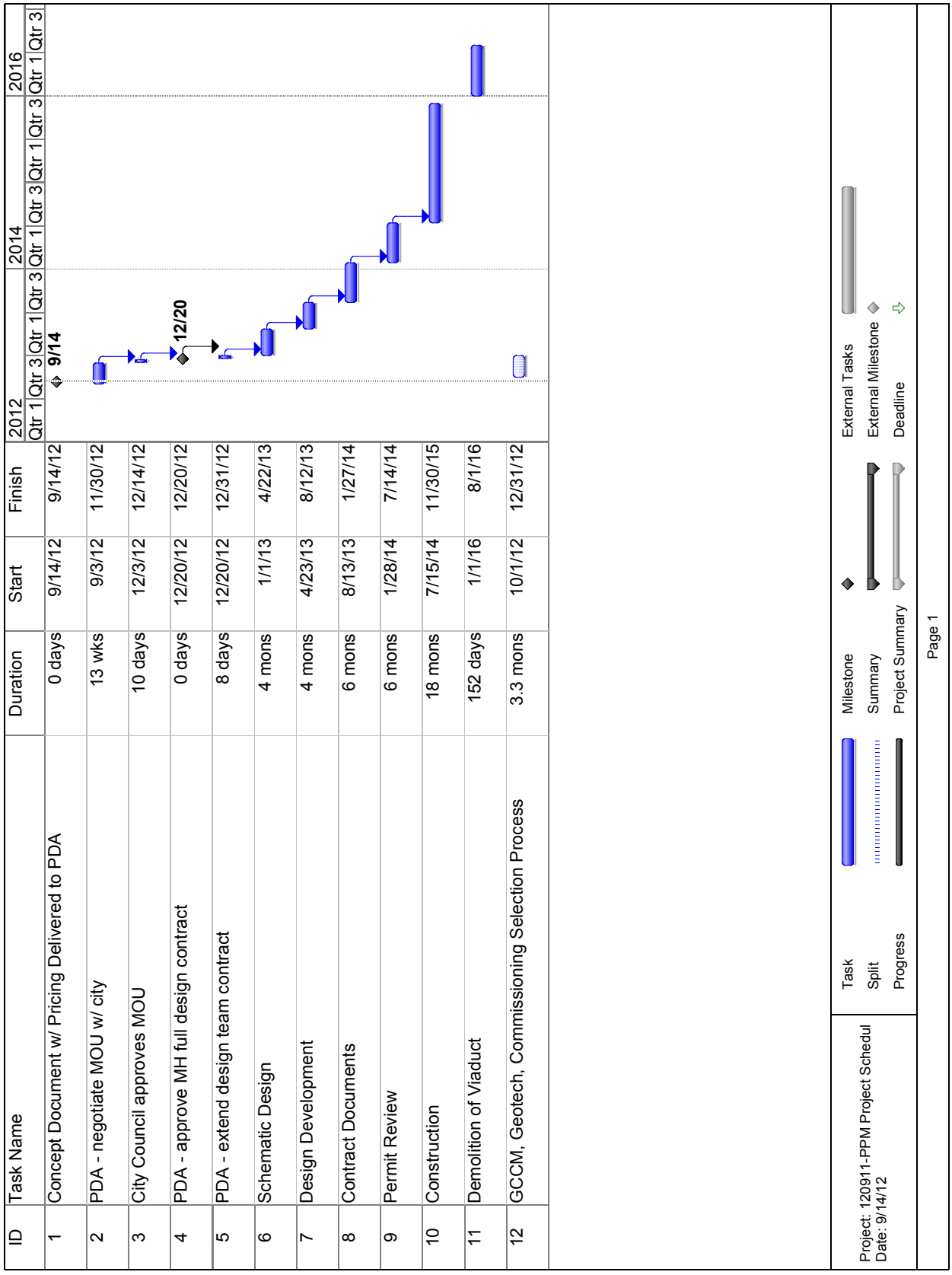
A possible revision to building massing would consolidate the two breezeways below Desimone Bridge into a single larger connection with additional commercial space fronting onto it.



The design team identified three shared goals that we will work toward; (1) the incorporation of children play spaces, (2) breaking down the wall to provide a more graceful flow between the waterfront and the market, and (3) a more consistent presence of landscape along the pedestrian walk.

7.0 ARCHITECTURAL ATTACHMENTS

7.1 PROJECT SCHEDULE



7.2 ZONING CODE ANALYSIS

The table below is a brief overview of the Seattle Land Use and Zoning Code (tiles 23 and 24 of the SMC). An in-depth analysis will be required for future design phases.

CHAPTER	ISSUE	CODE REQUIREMENT	REMARKS
	Zone	Pike Market Mixed (PMM)	Zoning Map #109
	Special Districts	Pike Place Market Urban Renewal Area	
		Pike Place Market Historic District	
	Overlay	Downtown Fire District (DF)	
		Pike Place Market Historic Core Area	
	Urban Village Overlay	Commercial Core Urban Center Village	
	Allowable Height	85 feet	Superseded by Pike Place Market Urban Renewal Plan in adopted by city council in 1974
23.49	Downtown Zoning		
23.49.02		Downtown Amenity Standards also apply to downtown district but....	Downtown Amenity Standards do not apply to the PMM zone
23.49.08	Structure Height	In PMM base height is based on urban renewal covenants	
23.49.008 D.2.b.1	rooftop features-elevator penthouse	elevator penthouses limited to 15 feet above height in PMM	
23.49.008 D.2.d	rooftop features-greenhouses	greenhouses dedicated to food production are permitted to extend 15 feet above height limit	
23.49.008 D.3.c	Screening of Rooftop Features	height of screening shall not exceed height of equipment or based on approval of PPMHC	
23.49.009	Street-level use requirements	per Map 1G street-level use regulated by Special Overlay District	
23.49.010	General requirements for residential uses	Common Recreation Area required for all development with greater than 20 units. 1. area to be equivalent to 5% of gross residential area 2. maximum of 50% required area allowed to be enclosed 3. minimum horizontal dimension of 15 feet, minimum area of 225 sf 4. common recreational area provided as open space at street level counts double 5. director can allow public open space to satidfy a portion of required area 6. pedestrian access can be counted if it meets WSR&R for Barrier free design	
23.49.011	Floor area ratio	FAR of 7 allowed per Table A	
23.49.018	Overhead Weather Protection and Lighting	continuous overhead weather protection required along entire street frontage	there are a few exceptions based on setbacks or landscaping
23.49.019	Parking	this section does not apply to PMM zones	
23.49.025	odor, noise, light/glare and waste recyclable space standards	venting shall be 10 feet above sidewalk and directed away from residential uses within 50 feet	

23.49.336	Allowable Uses	determined by the Market Historical Commission (MHC)	Map 1K delineates the district which includes PC1 North site
23.53	Streets, Alleys and easements		
23.54	Parking		
23.54.015	Required parking	Table A for nonresidential uses, Table B for residential. Parking based on gross floor areas.	
23.54.015 B	required parking	parking in downtown zones regulated by 23.49.019, which per above doesn't apply to PMM zone	no parking requirements then?
23.54.015 D	Parking waivers for nonresidential uses	in pedestrian designated zones, pakring waived for uses listed on table-D	
23.54.015 K	Bicycle parking	minimum number of bicycle spaces set forth in Table E	
23.54.015 Table A	Nonresidential parking requirements	B.2--Eating and drinking establishments--1 per every 250sf B.4--Food processing and craft work--1 per every 2000sf B.7--Medical services--1 per every 500sf D--Live-work--none for units less than 1500sf E--Manufacturing--1 per every 2000sf F--Storage--1 per every 2000sf **Subsection II** **I--nonresidential uses in urban centers--no parking required**	**no required parking for nonresidential uses**
23.54.015 Table B	Residential parking requirements	I--multifamily residential--1 per unit Subsection II **L--residential uses within urban centers--no parking required**	**no required parking for residential uses**
23.54.015 Table E	Parking for Bicycles	A.1--Eating and drinking establishments--1 per 12,000sf long-term and 1 per 2000sf short-term A.4--Medical services--1 per 12,000sf long-term and 1 per 2000sf short-term C--Manufacturing--1 per 4000sf long-term D.2--Multifamily--1 per 4 units long-term	
23.54.030	Parking space standards	parking required by 23.54.015 shall meet the requirements of 23.54.030.	need to clarify that parking provided when not required is subject to the standards of 23.54.030
23.54.030 B.2.c		between 35 and 65% of stalls to be striped for small cars and at least 35% to be striped for large vehicles	
23.54.030 B.2.d		minimum of 6'-9" vertical clearance on at least one floor	
23.54.030 D.2	Exhibit B	Driveway width to be a minimum of 22 feet wide and meet dimensional requirements of Exhibit B (18 foot radius minimum) at turn	
23.54.035	Loading berth requirements	one loading berth is required with 14 foot vertical clearance required	need to verify this can occur on PC1S garage upper deck
23.54.040	waste and recyclable materials storage spaces	375 sf required for residential uses 175 sf required for commercial uses	can be shared space, with some restrictions
23.73	Pike/Pine Conservation Overlay District		
25.24	Historic District Ordinance		

7.3 BUILDING CODE ANALYSIS

The table below is a brief overview of 2009 International Building Code with Seattle Amendments. An in-depth analysis will be required for future design phases.

Seattle Building Code – 2009 Edition

CHAPTER	ISSUE	CODE REQUIREMENT	REMARKS
3	Occupancy	**S-2** Parking Garage (closed) **A-2** (restaurant), **M** Retail **R-2** Residential	
4	406.4 Garage Ventilation	Enclosed parking area; mechanical ventilation required.	
5	509.2 Special Provisions	S-2 with A, M, R-2, above. Consider as separate buildings (area, fire wall continuity, stories, type of construction). Type IA construction below. 3-hour horizontal separation. 2 hr shaft penetrations. Above separation, can have A (<300 occupants), B, M, R, or S. Below separation, can have S-2, or A<300, B, M, if sprinklered. Can also have lobbies, mechanical rooms, etc.	Max total building height no greater than allowed under 503.
5	508 Occupancy Separation	1-hour separation between: • **A-2** and **R**, **M** • **S-2** and **R**, **M** • **M** and **R** No requirement between **S-2** and **A-2**.	Fully Sprinklered
5	504 Building Height	Under 504.2, sprinklers complying with NFPA13 allow adding 1 story and 20 feet to height. Group R may be increased by 20 feet not to exceed 60 feet and 1 stories. This is in addition to area increases allowed under 506.2 and 506.3.	
5	505 Mezzanines	Under 505.2, mezzanines can be up to 1/2 of the floor area of the open space within the room in Type I construction where there are approved voice/alarm communication systems. 2 means of egress are required.	
5	506 Allowable Areas - below horizontal separation	Construction Type: 1A Base Area: Unlimited Base Height: Unlimited Approx Actual area: 121,200 SF.	
5	506 Allowable Areas - above horizontal separation, For R-2 occupancy	Type VA, R-2 occupancy Base Height: 4 stories, 50 feet Increase to 5 stories, 70' per 504.2 Base Area: 12,000 SF Increase to 24,000 SF (F/P = 0.50) per story. Total Area limit: 120,000 SF. Approx Actual R-2 Area: 22,300 SF	
5	506 Allowable Areas - above horizontal separation, for M and A-2 occupancy	Type VA, A-2 occupancy (most restrictive) Base Height: 2 stories, 50 feet Increase to 3 stories, 70' per 504.2 Base Area: 11,500 SF Increase to 23,000 SF (F/P = 0.50) per story. Total Area limit: 69,000 SF. Approx Actual A-2/M Area: 19,400 SF	

6	601 Fire Ratings	Type IA Frame: 3 hr Exterior Bearing Walls: 3 hr Interior Bearing Walls: 3 hr Exterior Non-Bearing Walls: per Table 602 Interior Non-Bearing Walls: unrated Floor: 2 hr Roof: 1 1/2 hr	
		Type VA Frame: 1 hr Exterior Bearing Walls: 1hr Interior Bearing Walls: 1 hr Exterior Non-Bearing Walls: per Table 602 Interior Non-Bearing Walls: unrated Floor: 1 hr Roof: 1 hr or HT	
6	602 Exterior Wall Ratings	Type IA construction, S-2 occupancies: Generally 1 hr < 30' Unrated > 30'	Below Horizontal Separation
		Type VA construction, R-2, A, B, M occupancies: Generally 1 hr < 30' Unrated > 30'	Above Horizontal Separation
6	602.5	Type VA buildings are permitted to have exposed heavy timber construction for columns, beams, girders, arches, trusses floors and roof decks except for fire-resistive construction requirements by section 509 and 708 and Chapter 10	
7	705.8 Unprotected Opening Areas	Area of unprotected openings in rated exterior walls (distance): Not permitted < 3' 15% <5' 25% < 10' 45% < 15' 75% < 20' No limit < 25'	Sprinklered
7	706 Fire Walls	A-2, R-2 and S-2: 2 hr M: 3 hr	
9	903 Fire Protection	Sprinklers complying with NFPA 13 will be used.	Sprinklers are used for stories and area increases and 509.2 Special Provisions.
10	1005 Egress Width	Worst case: Parking levels P2 and P3 39,000 SF / 200 = 200 occupants / Floor. 60" for stairs required and 40" for doorways required Worst case: Residential Level 3 = 12,128 SF /200 = 18" required for Stairs and 12" required for doors.	
10	1016 Exit Access travel distance	A, M, R-2 occupancies: 250' with sprinklers B occupancy: 300' with sprinklers S-2 occupancy: 400' with sprinklers	
10	1017 Corridors	A, M, B and S occupancies: unrated R-2 occupancy: 1 hr rating	
10	1021 Number of Exits	2 exits required from each type of occupancy	