

DESTINATION

CONNECTION

HERITAGE

COMMUNITY

QUAD



# GRANBY STATION

FEASIBILITY STUDY

10.31.2018





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INTRODUCTION

Royal Oak is a local developer and award-winning builder with an outstanding reputation and recent experience designing and building in Granby.

Royal Oak buildings offer stylish architecture combined with exciting, functional and livable design, we build each project with tremendous attention to detail and construct to a higher standard of specification and quality.

We are very excited to present to the community the concept for our mixed-use project: Granby Station.

The Granby Station community will incorporate both commercial and residential buildings. There will be retail and office spaces including the Royal Oak Pub and a mix of townhomes and lofts, all with spacious and purposeful layouts. Carefully considered interiors will offer generous amounts of natural light and the abundance of outdoor living spaces will allow you to enjoy spectacular views maximizing the 300 plus days of sunshine in Colorado every year.

We look forward to colaborating with the Town of Granby to craft Granby Station, a place that sparks pride and ownership in the hearts of the local community.



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# HISTORIC SUMMARY

## GRAND COUNTY, COLORADO

Grand County was established in 1874 by the Territory of Colorado, thus becoming a county two years before Colorado became a state. It was named for the Grand River, known today as the Colorado River, with its headwaters located in Rocky Mountain National Park. The county was formed from a portion of Summit County but acquired its current boundaries in 1877. The area of 1,854 square miles (larger than Rhode Island) consists of meadows, river valleys and mountains. Grand County includes the mountain towns of Winter Park, Fraser, Tabernash, Granby, Grand Lake, Parshall, Hot Sulphur Springs and Kremmling, and each town has a rich and unique history of its own.

Located 67 miles west of Denver, Grand County is home to wide-open spaces, breathtaking mountain scenery and authentic old-west towns. Outdoor recreational activities include world renowned skiing, golf, boating, fishing, biking, hiking, hunting, horseback riding, cross country skiing, snowmobiling, ice fishing, sleigh rides and tubing. The area features more than 600 miles of mapped and marked trails, one national park, national forests, wilderness areas, national scenic byways, major ski resorts, world-class dude ranches and four mountain golf courses. Grand County's extensive water network includes Grand Lake, Colorado's largest natural lake, thousands of miles of streams, and acres of high-mountain lakes and reservoirs.

## GRANBY, COLORADO

Granby was founded in 1905. The town was named after attorney Granby Hillyer, who worked to lay out the town site. Granby was created along the railroad being built by Denver, Northwestern & Pacific. The site was chosen because of the dry ground and stunning views of the surrounding Rocky Mountains. Close by town of Grand Lake was established by pioneers in 1879 as a mining settlement. As the mines played out, beautiful Grand Lake became the focus of the town and tourism in the region took over. The close proximity to both Winterpark and Granby Ranch ski resorts, Grand Lake and Lake Granby has had a positive effect on tourism in Granby and we believe Granby is ideally located to take even further advantage of these assets and the available tourism dollars they produce.



GRANBY MAIN STREET





# CLIMATE DATA & ANALYSIS

## CLIMATE SUMMARY

Granby is in a subarctic climate region known for its long cold winters and shorter more mild summers. The average high temperatures peak around 75 degrees Fahrenheit during July and August with average lows dropping to 1 to 5 degrees Fahrenheit in December and January.

Days during the summer months steadily increase in temperature from 8 am to 4 pm before cooling in the evening hours. The longest days of the year are in late July with 15 plus hours of sunlight. Alternatively, the shortest coldest days of the year are in late December with as little as 9 hours of daylight and frigid temperatures for most of the day. The month of May has the highest chance of precipitation at 31% there are chances of snow from late September to mid-May.

The highest average precipitation in the area occurs in August with February and October receiving the least amount. April average wind speeds are the highest of the year with an average wind speed of 13 mph although this is misleading since sustained winds of above 40 MPH and gusts upward of 80 MPH are fairly common. Throughout the year most days have little cloud cover and mostly sunny days with 74% clear skies.

Buildings in subarctic climates face unique challenges; not only the cold, but also permafrost, and extreme temperature shifts. Built structures must meet these challenges while maintaining occupant comfort and, if possible, minimizing impact on the environment.

Design considerations for this climate include the following:

- Maximize overhangs to encourage winter warming and summer shade
- Block winter wind with Trees and vegetation, use vestibules at entry points
- Increase thermal properties of the building envelope – insulation, triple glazing, Thermal breaks
- Decrease air infiltration
- Hardy materials to withstand the elements and temperature swings, dark colors to absorb heat
- Buildings oriented with the long side to the south encourage southern warmth & light into spaces
- Prevent soil erosion from runoff and avoid ice build up
- Utilize efficient systems and recirculate warm air
- Reduce heat loss with shared walls
- Stack effect ventilation for natural cooling in summer

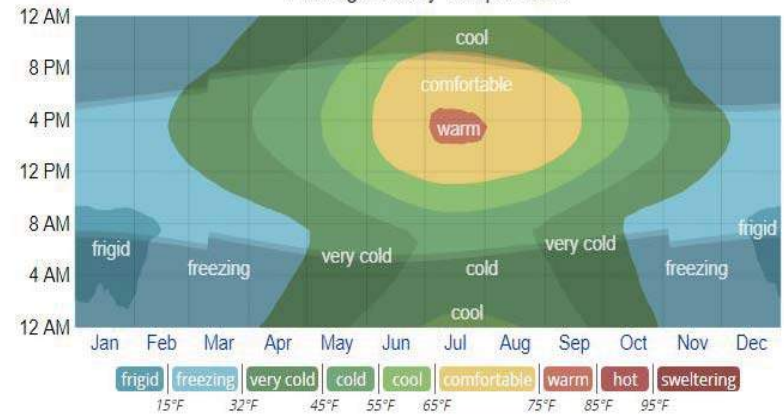


## CLIMATE CHARTS

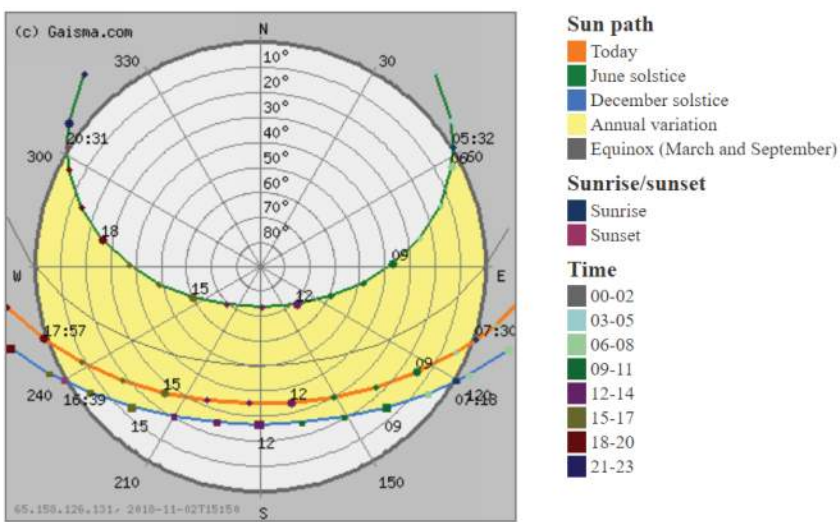
Average temperature Granby, CO



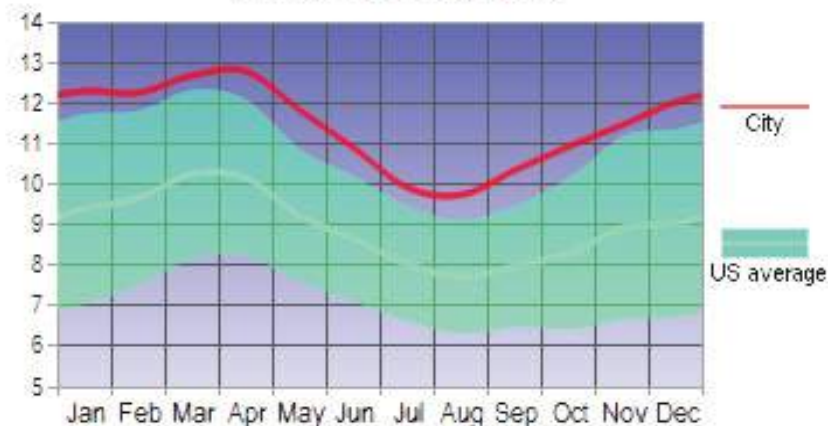
Average Hourly Temperature



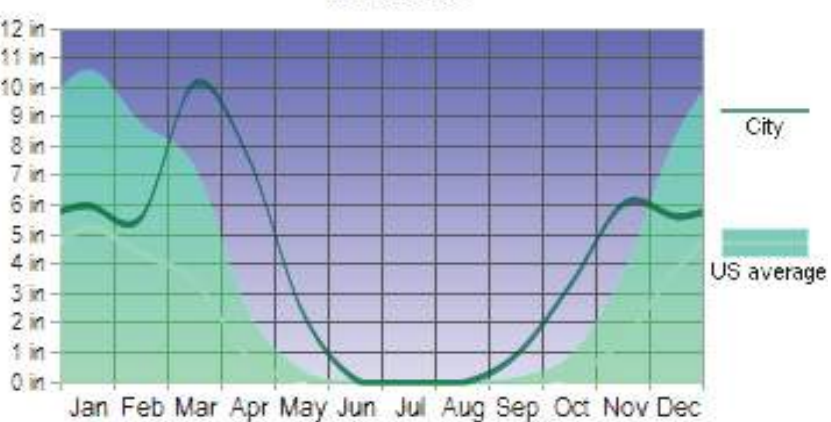
## SUN PATH DIAGRAM



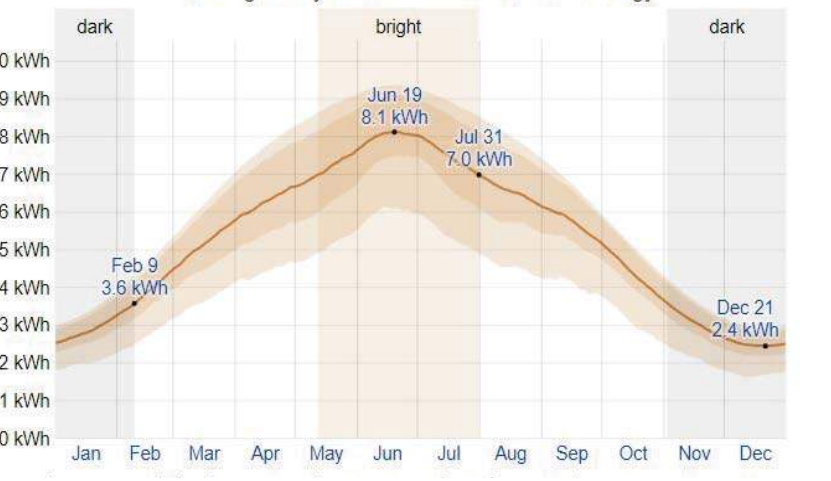
## Wind Speed (mph)



## Snowfall



Average Daily Incident Shortwave Solar Energy





# FEASABILTY SUMMARY

## SUMMARY

The purpose of this document is to study the feasibility for a potential mixed-use development project on the site at 378 Agate Avenue, Granby, Colorado, 80446.

There are three main components to the project as proposed; twelve, three story townhomes to the south, a three story approximately 19,500 SF mixed-use building and open space. The Mixed use building contains approximately 6,965 SF of flexible retail space on the ground floor, a two story Pub/restaurant with exterior patios, and about 5,700 SF of flexible commercial office space above with 4 to 6 loft apartments above that.

The proposed site solution is driven by two primary factors. First, all buildings are oriented to take best possible advantage of the sloping site to enhance solar access and the stunning views to the south. Second, the commercial spaces are created to infill the missing street front along Agate Avenue to produce the best possible outcome for the retail and commercial spaces and therefor creating a highly visible and desirable location for destination shopping, dining and a centralized location for office space.

Along with the proposed improvements to the city streets and new parking solutions it is our vision to help kickstart the rejuvenation of the Town of Granby by providing quality housing, retail and office space opportunities.

The project looks to draw upon the local heritage and history of the railway station and will contribute positively by helping to create a pleasant transition from the railway station to Agate Avenue.

## CONCLUSION

Granby’s proximity to the Denver Metro area, world class outdoor recreational activities and areas of natural beauty; Its perceived affordability (compared to other similar mountain towns in Colorado), the availability of various development sites and the City planned street and parking improvements make the timing for this project perfect.

Live, Work and Play at Granby Station

## VISUALIZATION OF AGATE AVENUE



## SITE UTILIZATION SUMMARY

TYPE	DETAIL	AREA	PARKING REQUIRED	PARKING PROVIDED	FAR ALLOWED	FAR ACHIEVED
TOWNHOMES	12 UNITS X1,600 SF	19,200 SF	1 2	24		
COMMERCIAL STRUCTURE	1ST FLOOR : RETAIL, PUB, CIRC.	6,965 SF	NONE	NONE		
	2ND FLOOR: OFFICE, PUB, CIRC.	6,839 SF	NONE	NONE		
	3RD FLOOR: 5 RES. UNITS, CIRC.	5,743 SF	5	*		
TOTAL BUILT AREA		38,747 SF				
TOTAL SITE AREA	200 FTx 150 FT	30,000 SF			1.5	1.292

\* 35% OF PARKING MAY BE ACCOMODATED OFF-SITE WITHIN 1 BLOCK - NEGOTIATION REQUIRED



CONCEPTUAL VISUALIZATIONS









EXISITING SITE CONDITIONS



GRANBY STATION FROM SITE



SITE FROM ACROSS TRACKS



SITE FROM BELOW



SITE SATELITE PHOTO



AGATE AVENUE STREETSCAPE



GRADE CHANGE ACROSS SITE





# CITY ANALYSIS

## CITY SUMMARY

Over time, for one reason or another, the once cohesive main street commercial strip along Agate Avenue has been eroded and disjointed. Historically, inappropriate uses have crept into place and demolition of large areas of valuable commercial retail street front have left gaping holes in the urban fabric. The result of this effect is a spread out, awkward and unwalkable retail and commercial district.

Recent improvements and well thought out goals for the future are evidenced in the town's mission statement:

*"Historically, the town of Granby and surrounding developed areas have been the commercial, financial, educational, medical and service base for East Grand County."*

*"The town of Granby and its regional partners will foster Granby's position as the hub of East Grand County by pursuing outward growth while enhancing residential values and commercial vitality with emphasis on the downtown core."*

In recent years strides have been made to improve the town facilities including sports facilities, schools, a new library, Town Hall and medical facilities. The next phase of these improvements, and potentially the largest catalyst for growth to date, will be the planned and budgeted projects for a major redevelopment of Agate Avenue including improved pedestrian zones and traffic calming measures such as bike lanes, planted center medians, landscaped bulb outs at cross walks and intersections, and narrower drive lanes – these improvements should come to fruition during Fiscal Year 2019.

These improvements along with the added parking for the commercial district are designed to spur redevelopment and infill along Agate Avenue speeding up the rebirth and completion of a new destination mountain town and putting Granby firmly on the map as the major hub for East Grand County.

PARKING LOT CREATES VOID IN MAIN STREET



NEW LIBRARY



TYPICAL STREET SCAPE



TYPICAL STREET SCAPE





SITE ANALYSIS

SITE SUMMARY

Located at 378 Agate Avenue, our site is approximately 30,000 square feet with 150 linear feet of highly visible main street frontage. Currently the site is underutilized, and the current structures are inconsequential; this coupled with great views and an allowable density of 1.5 FAR provide a strong incentive for a dense mixed-use infill project and a perfect opportunity to begin the process of creating a main street destination mountain town at this location.

PROS:

- Stunning Vistas
- Highly Visible location
- Pedestrian access
- Vehicular access
- Adjacency to multimodal transportation
- Ability for density and community building
- Ability to create a positive impact on town growth
- Southern orientation
- Adjacency to town parking

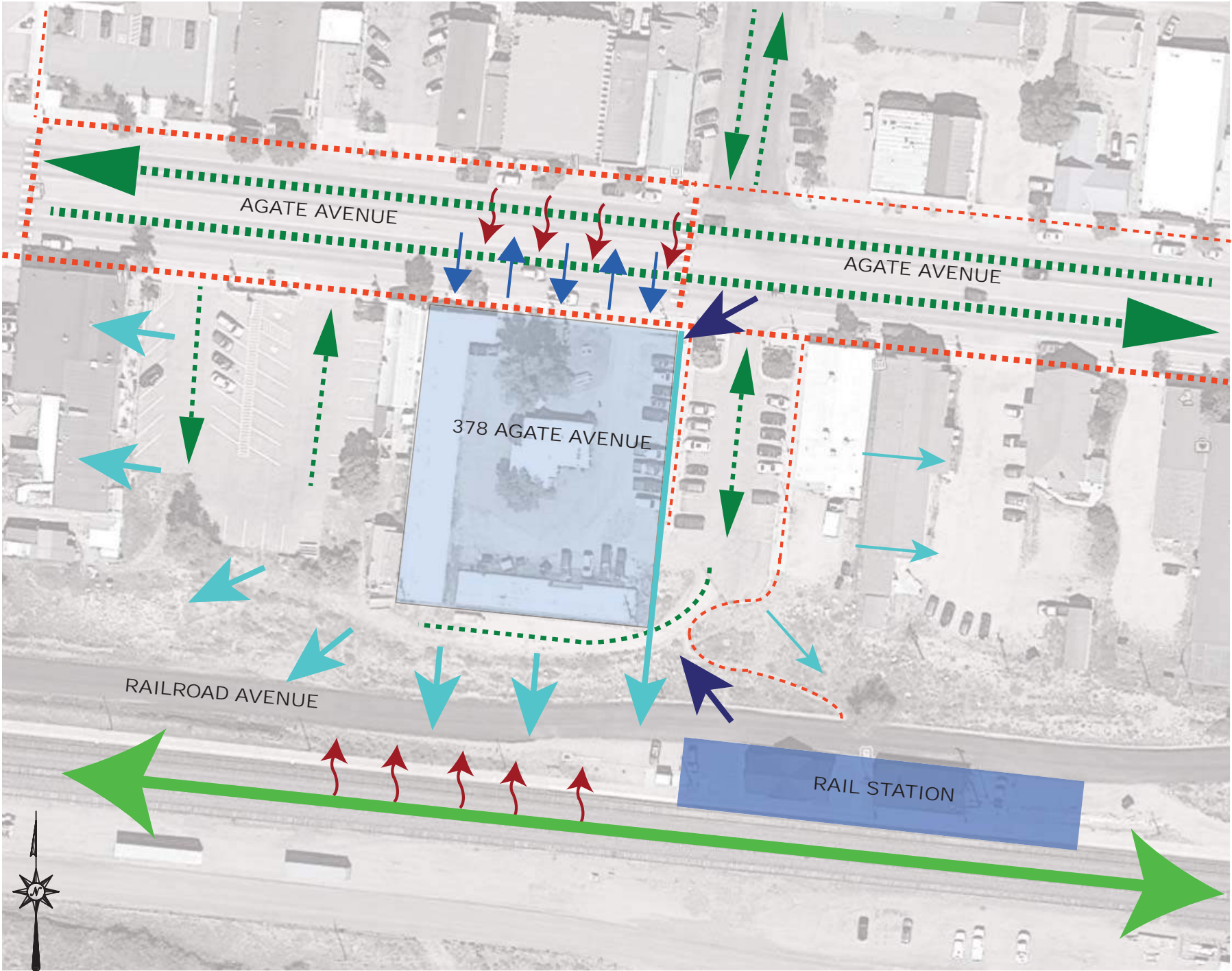
CONS:

- Traffic noise
- Railway noise
- Walkability due to underdeveloped streetscape









VIEW OF SITE FROM AGATE AVENUE



SITE PLAN ANALYSIS



SITE KEY

	HEAVY PEDESTRIAN		VIEWS FROM SITE		NOISE POLLUTION
	LIGHT PEDESTRIAN		RAILWAY LINES		VISIBLE RETAIL
	VEHICLE TRAFFIC		EYES ON STREET		

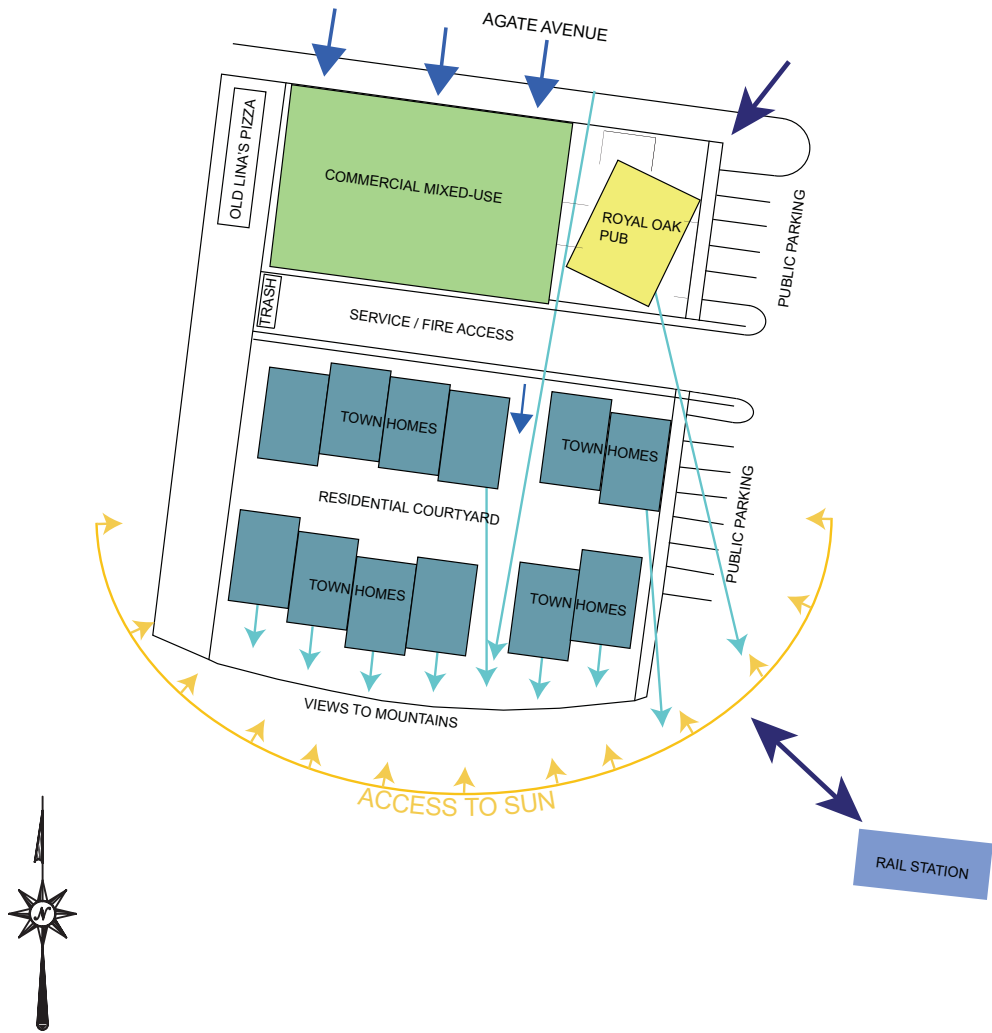


PRECEDENT STUDIES: SITE CONCEPT

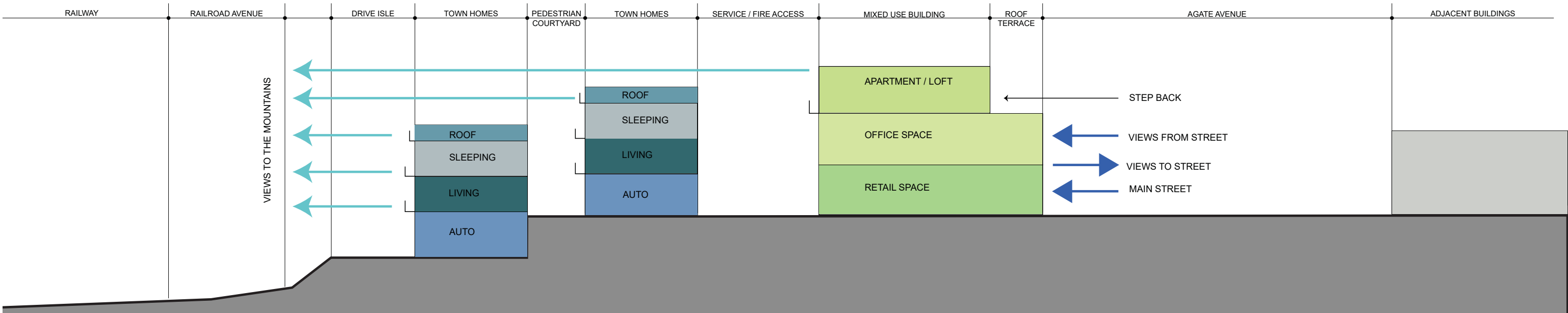




SITE PLAN DIAGRAM



SITE SECTION DIAGRAM



CONCEPT SUMMARY

For the benefit of the town, the community and those living and working in the completed project, our goal is to take full advantage of all the wonderful amenities this site has to offer. These include spectacular views, high visibility, proximity to transportation, walkability and the opportunity to create an infill project with sufficient density to create a positive impact in the community and the region. Granby Station will be a destination and a gathering spot for the community and visitors passing through sparking economic development and tourism.

VISTAS

We plan to provide solar access and spectacular views to as many occupants and from as many different vantage points as possible. To achieve this goal, we are stepping the buildings and staggering their placement to create view corridors between and over the structures (see diagrams). Additionally, we are providing, roof terraces, balconies and patios for the advantage of all occupants.

Just as important for the commercial and retail users are the views and access to the building and local amenities. The high visibility of this site, well designed streetscapes and storefronts, and the central location will allow businesses to blossom in this new community.

THEME

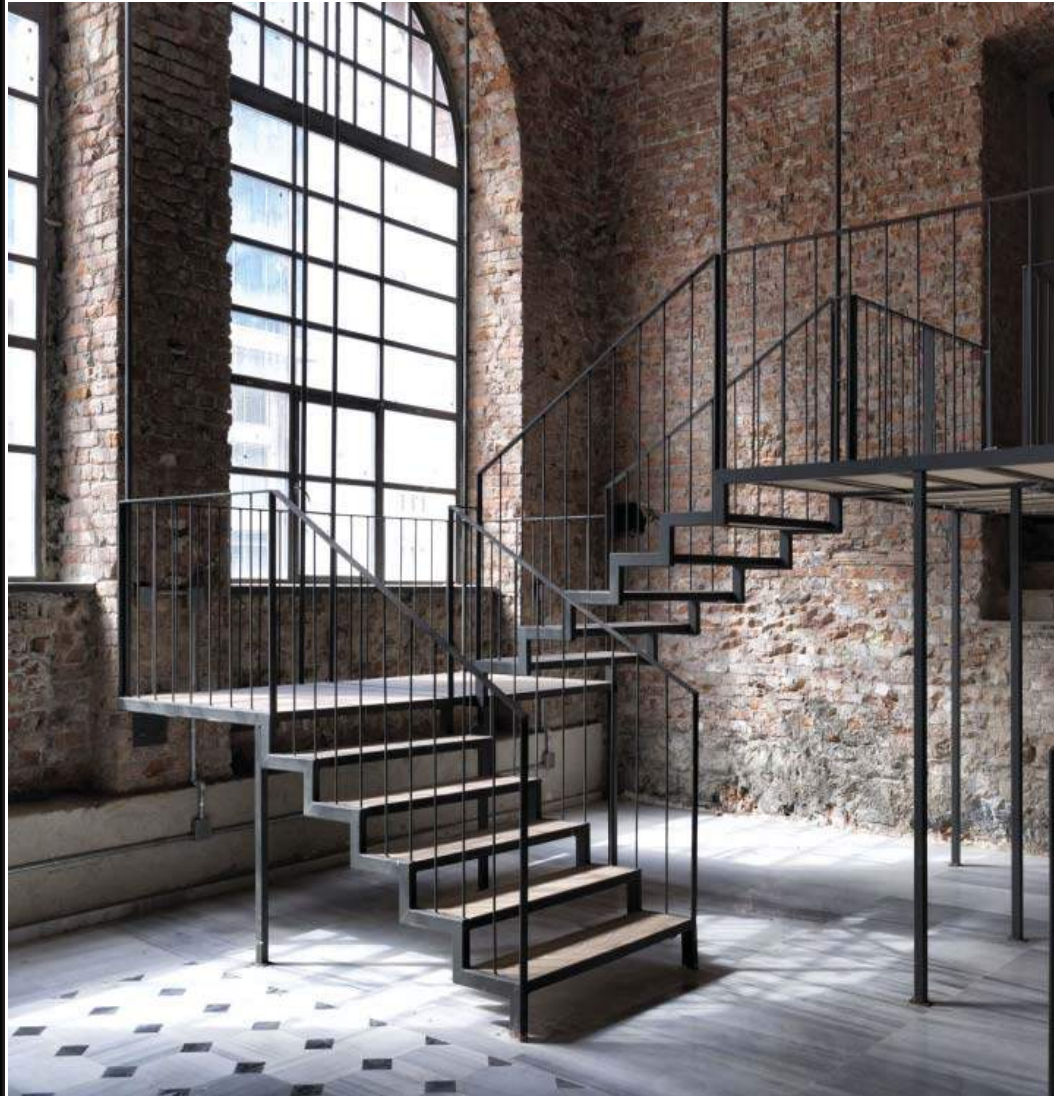
The name Granby Station and the rugged and beautiful nature of Grand County conjure romantic images of steam engines, rugged natural materials, westward expansion and other period references. Our charge is to capture this romanticism through the creation of a development with modern references to rugged materials, resilience and industrial railroad motifs situated in a pleasant environment surrounded with natural landscapes and public plazas

LEGEND





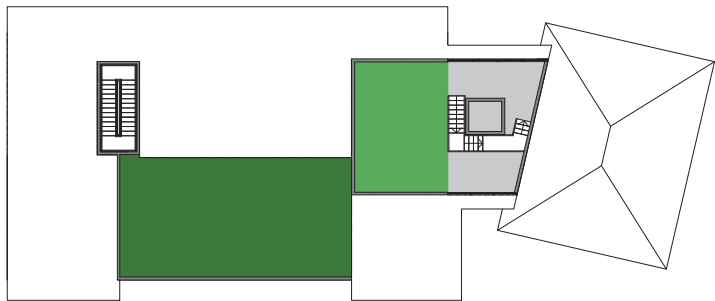
PRECEDENT STUDIES: INDUSTRIAL / RAIL CONCEPT



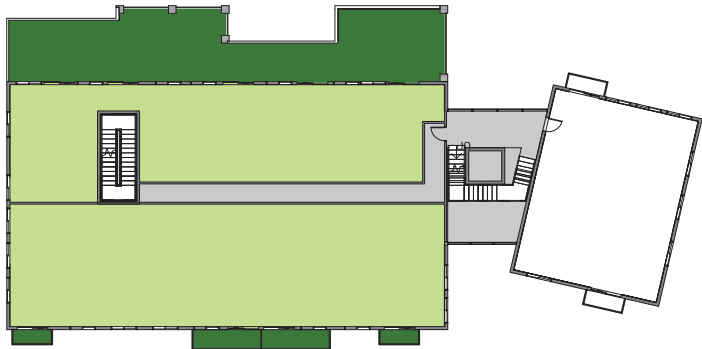




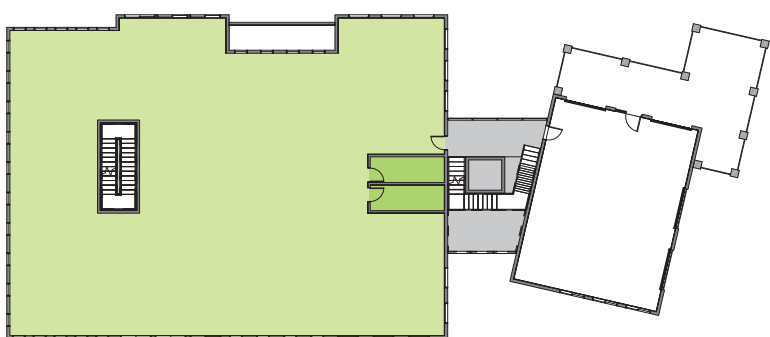
ROOF TOP



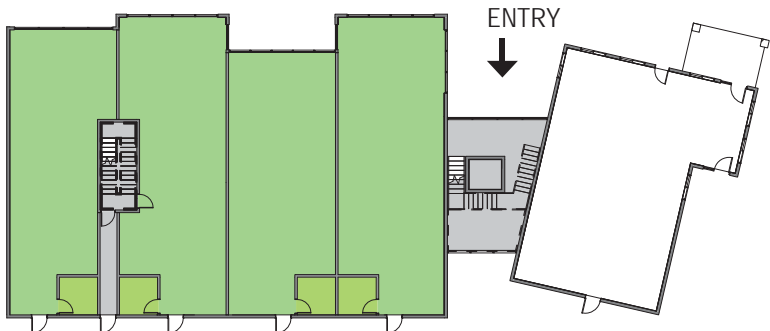
LEVEL 3



LEVEL 2



LEVEL 1



- BATHROOM
- DECK
- FLEXIABLE OFFICE SPACE
- RETAIL SPACE
- 2 AND 3 BEDROOM APARTMENTS
- CIRCULATION

CONCEPT INFORMATION

Commerical Mixed-Use:

Preliminary Areas:

- Retail: 5,000 SF
- Office: 5,000 SF
- Residential: 3,600 SF
- Roof deck and balconies: 2,250 SF

The preliminary commercial building concept includes a mix of uses to include retail on the ground floor with office space above and residential lofts above that. To the east end of the building and connected with a shared circulation tower will be the Royal Oak Pub. The building is structured to allow for mountain views from level 3 and includes a shared roof deck with spectacular 270-degree views. North facing residential units will have spacious patios with street views and mountain views to the east and west.

The street facing façade will step in and out to create variation and to produce a modern interpretation of an historic main street thereby providing opportunities for landscaping, seating, art and a variety of memorable experiences.

PRELIMINARY CODE ANALYSIS

This code summary is based upon preliminary analysis and presumptions and is not meant to be absolute at this stage of the project.

- Occupancy Classifications:
- A-2 (Assembly - restaurant, pub)
  - B (Business - office)
  - R-2 (Residential - apartment)
  - M (Mercantile - retail)

Construction Type:

Mixed use Building: Type 5-A (sprinkled)

LEVEL 1	6,965 SF Retail (approx.. 5,000 SF), Pub, Circulation.
LEVEL 2	6,839 SF Office (approx.. 5,000 SF), Pub, Circulation.
LEVEL 3	5,743 SF Residential (approx. 4-6 units), Roof Patios, Circulation.
ROOT TOP	2,250 SF Rooftop Deck, Club House, Circulation



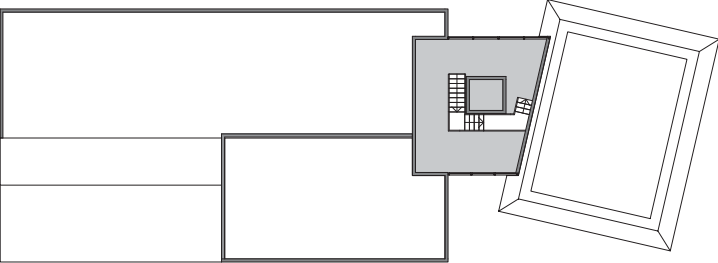
PRECEDENT STUDIES: PUB CONCEPT



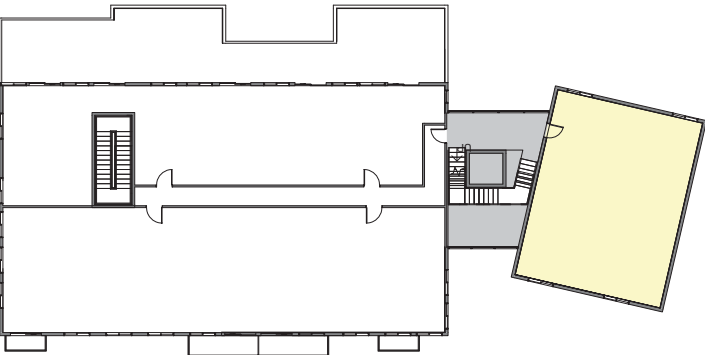




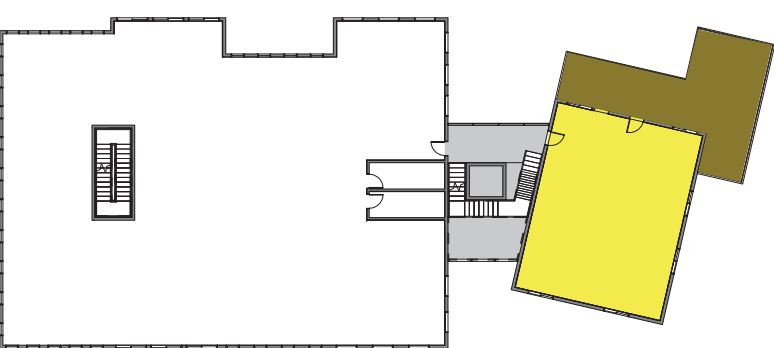
ROOF TOP



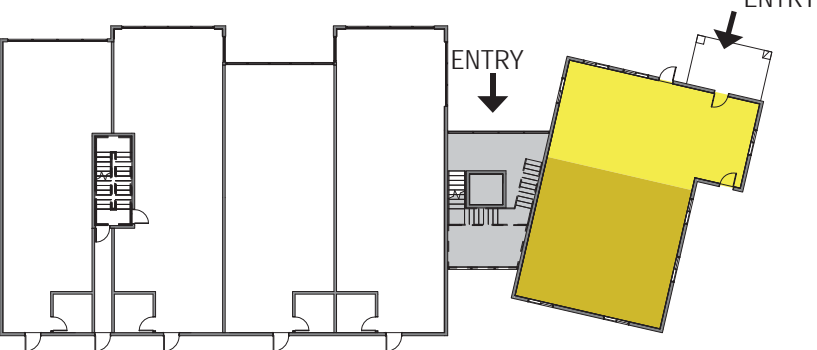
LEVEL 3



LEVEL 2



LEVEL 1



- ROYAL OAK PUB
- PUB KITCHEN
- PUB DECK
- RESIDENTIAL
- LIVE WORK RESIDENCE

CONCEPT INFORMATION

Royal Oak Public House: Bar and Restaurant

Preliminary Areas:

- Restaurant: 2,700 SF
- Living: 1,100 SF
- Patios: 750 SF
- Deck: 600 SF

Located on the most prominent and visible corner of the site and based upon a traditional British public house, the Royal Oak Pub will be a tourist draw and a local's favorite. In addition to other selections, they will serve traditional pub fare with craft and imported beers in traditional pint glasses. To complete the authentic nature of the pub, we anticipate for the landlord to be British and to live in the residence above.

The pub will be two stories and will be rotated to better take in the views and to create a public plaza between the two commercial building massing along Agate Avenue. Traditional beer gardens and decks on both levels are oriented to southern mountain views or to the activity on main street and are sure to appeal to the crowds.

PRELIMINARY CODE ANALYSIS

This code summary is based upon preliminary analysis and presumptions and is not meant to be absolute at this stage of the project.

- Occupancy Classifications: A-2 (assembly - restaurant, pub)
- R-2 (residential - apartment)

Construction Type:

Mixed use Building: Type 5-A (sprinkled)

LEVEL 1	1,600 SF Bar, Dining, Kitchen, Circulation.
LEVEL 2	1,700 SF Dining (1,100 SF), Roof Deck Dining (600 SF), Circulation.
LEVEL 3	1,100 SF Residential Unit, Circulation.
ROOT TOP	



PRECEDENT STUDIES: RESIDENTIAL



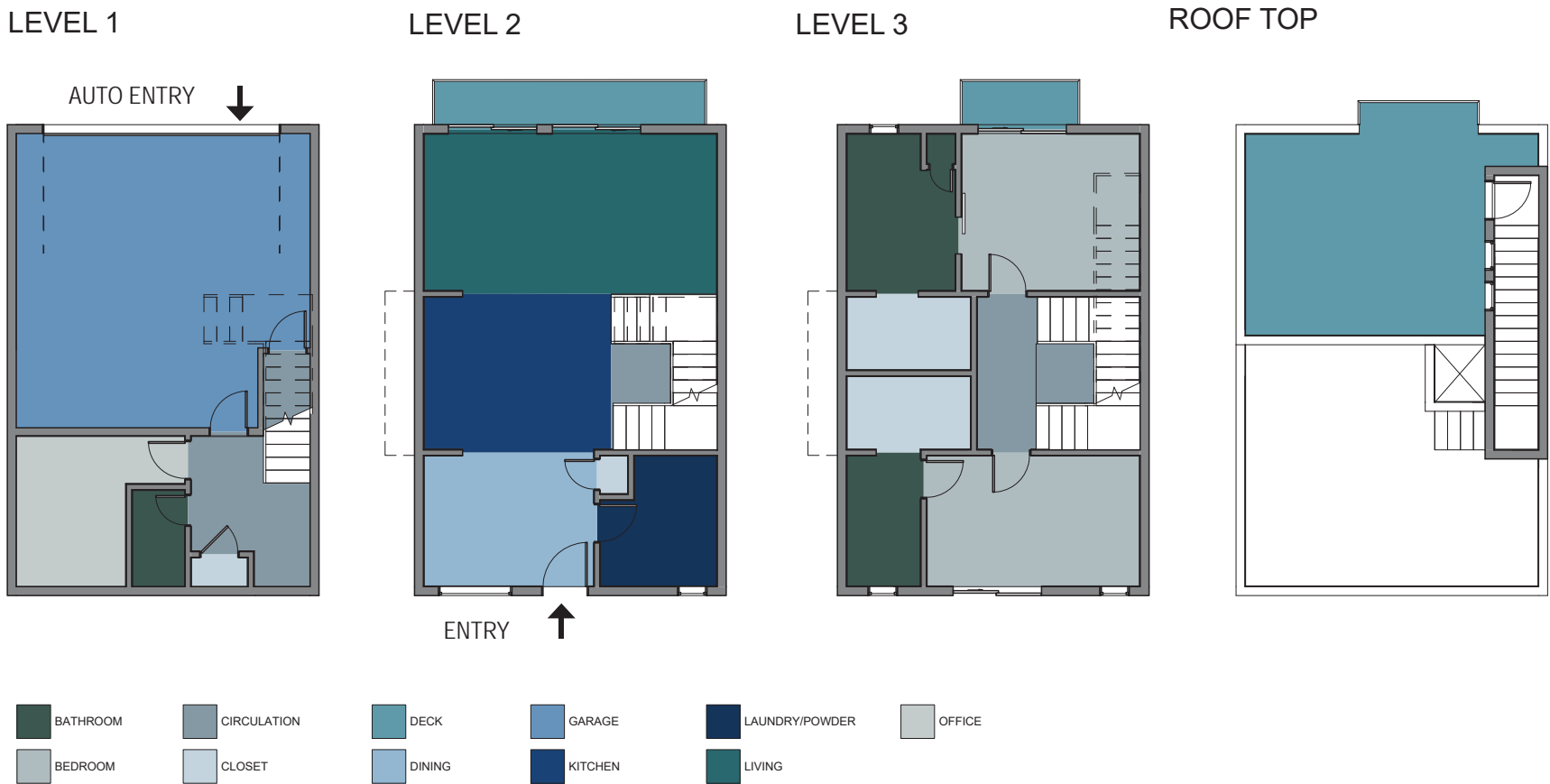


CONCEPT INFORMATION

Townhomes:  
Preliminary Areas:  
Living: 1,600 SF  
Garage: 440 SF  
Roof deck and balconies: 350 SF

Preliminary townhome concepts are compact, three story units with large windows to expansive southern views. The living spaces are laid out with an open plan aspect and both bedrooms feature en-suite bathrooms. The units feature tuck under parking with roof decks and balconies and it is anticipated that the end units will be modified with extra glazing and small bump outs for additional area.

The stepped nature of the site means we will have 2 different but similar layouts for the townhomes. The southern most units (A) will enter the main living level containing the dining room, living room and kitchen. The row of units to the north (B) will enter in to a foyer on the ground level and then proceed up stairs to the main living level.



PRELIMINARY CODE ANALYSIS

This code summary is based upon preliminary analysis and presumptions and is not meant to be absolute at this stage of the project.

Occupancy Classification: R-2 (residential)

Construction Type:

2 Duplex Buildings: Type 5-B (non-sprinkled)  
2 Fourplex Buildings: Type 5-A (sprinkled)

LEVEL 1	678 SF A: Garage, Office, Storage, Mechanical Room, ½ Bath. B: Garage, Entry Foyer, Coat Closet, Office, Storage, Mechanical Room, ½ Bath.
LEVEL 2	678 SF A: Living Room, Balcony, Entry Foyer, Coat Closet, Dining Room, Kitchen, Laundry/ Powder Room. B: Living Room, Balcony, Dining Room, Kitchen, Laundry/Powder Room.
LEVEL 3	678 SF A: Master Bedroom with Ensuite Bathroom and Closet, Balcony, Second Bedroom with Ensuite Bathroom and Closet B same
ROOF TOP	Roof Deck (A & B): 260 SF