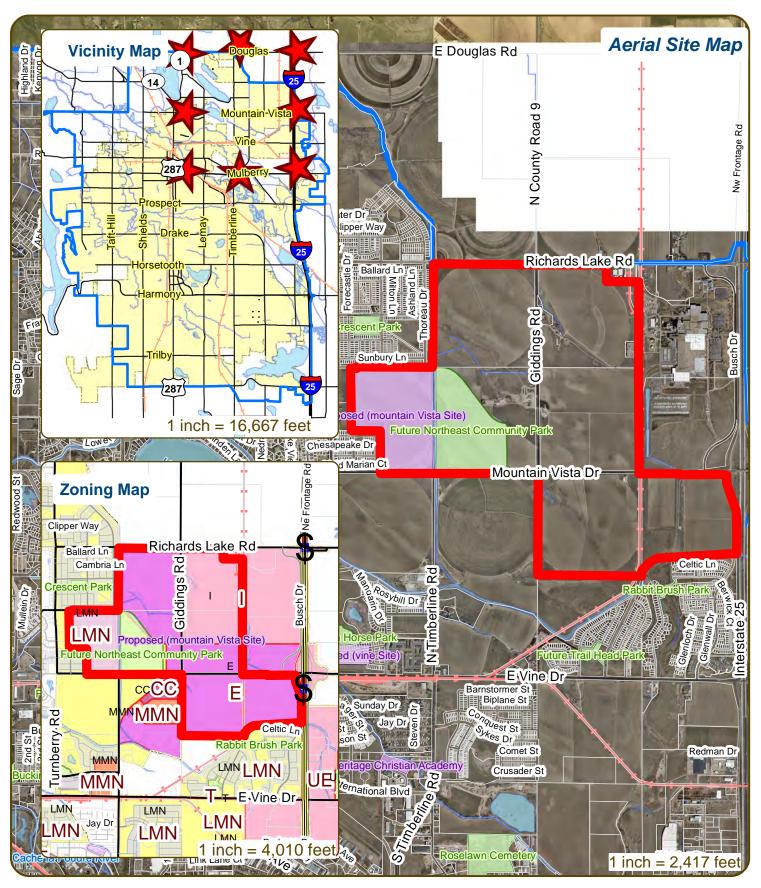
Montava



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Development Review Guide – STEP 2 of 8

PRELIMINARY DESIGN REVIEW:

APPLICATION

General Information

Preliminary design review is an opportunity for an applicant to discuss the requirements, standards, procedure, and potential modifications of standards or variances that may be necessary for a project and to generally consider the development proposal design which has been evaluated as a part of the conceptual review process. While the conceptual review process is a general consideration of the development proposal, a Preliminary Design Review considers the development proposal **in greater detail**. Problems of both a major and minor nature can be identified and solved during the preliminary design review before a formal application is made.

Preliminary design review applications must be submitted to City Staff no later than 5 pm, two weeks prior to the Wednesday meeting date. Application materials can be e-mailed to currentplanning@fcgov.com or sent to/dropped off at 281 North College Avenue.

Representatives of Community Development and Neighborhood Services (Zoning, Environmental Planning, Current Planning, and Development Review Engineering), Light and Power, Stormwater, Water/Waste Water, Advance Planning (Long Range Planning and Transportation Planning), Historic Preservation and Poudre Fire Authority regularly attend preliminary design review meetings. Additionally, other public or quasi-public agencies which may be impacted by the development project are invited and encouraged to attend the preliminary design review. These agencies may include the gas utility, water and/or wastewater utility districts, ditch companies, railroads, cable television service providers and other similar agencies.

Upon receipt of a preliminary development proposal for review, and after review of such proposal with the applicant, the staff shall furnish the applicant with written comments and recommendations regarding such proposal in order to inform and assist the applicant prior to preparing components of the development application. The staff shall provide the applicant with a "critical issues" list, which will identify those critical issues that have surfaced in the preliminary design review as issues that must be resolved during the review process of the formal development application. To the extent that there is a misunderstanding or a misrepresentation of facts, the opinion of the staff may change during the course of development review.

Section to be filled out by City Staff Date of Meeting	Project Planner	
Submittal Date	Fee Paid (\$500)	
BOLDED ITEMS ARE REQUIRED *The more info provided, the more detailed your comments from staff will be.*		
Project Name Montava - Master Plan		
Project Address (parcel # if no address) <u>appx six quarter sections west of the Anheuser-Busch brewery;</u> parcels 8833000001, 8833000006, 8832000001, 8833000002, 8832000002, 8704000001, 8704000002		
Contact Name(s) and Role(s) (Please identify whether Consultant or Owner, etc)		
Business Name (if applicable) _ H	F2M	
Applicant Mailing Address		
Phone Number <u>(512) 507-5570</u>	E-mail Address <u>Max@hf2m.com</u>	
	a detailed narrative is also required)	
Zoning <u>I, E, LMN</u> Proposed l	Jse Mixed Use Master Plan Existing Use undevelope	d, ag
Total Building Square Footage _tb	S.F. Number of Stories <u>tbd</u> Lot Dimensions _	tbd
	unknown bsite: http://www.co.larimer.co.us/assessor/query/search.cfm ood quality, color photos of all sides of the structure are required.	
	, see narrative description and plans for concept	



SUBMITTAL INFORMATION: PRELIMINARY DESIGN REVIEW (PDR)

- 1) Preliminary Design Review Application form and filing fee (\$500).
- 2) **Project Narrative** Please include the following information:
 - (a) What are you proposing/use?
 - (b) What improvements and uses currently exist on the site?
 - (c) Describe the site circulation (auto and pedestrian), parking and how it coordinates with the existing neighborhood.
 - (d) Describe site design and architecture.
 - (e) How is your proposal compatible with the surrounding area?
 - (f) Is water detention provided? If so, where? (show on site plan)
 - (g) How does the site drain now (on and off site)? Will it change? If so, what will change?
 - (h) What is being proposed to treat run-off?
 - (i) How does the proposal impact natural features?
 - (j) Do any existing structures have automatic fire sprinklers? Will the new structures have fire sprinklers?
 - (k) Are there any unusual factors and/or characteristics are present that may restrict or affect your proposal?
 - (I) Have you previously submitted an application?
 - (m) What specific questions, if any, do you want addressed?
- 3) **Site Plan** Please consider including the following:
 - (a) Project site boundary and adjacent property uses
 - (b) Proposed circulation system, and how it ties into existing infrastructure (pedestrian and auto)
 - (c) Existing and proposed landscaping (Will trees be removed?)
 - (d) Existing and proposed buildings (Will they remain? If they will change, how?)
 - (e) Existing natural features (Will these be impacted by the proposal?)
 - (f) On and off site improvements
 - (g) Location of detention, drainage and water quality features
 - (h) Emergency vehicle access and fire hydrant locations

Montava Master Plan

PDR Application Narrative December 5, 2017

The Montava Master Plan is the result of an unprecedented collaborative effort over the past several months. The developer, HF2M has been working with Anhueser-Busch to redevelop the nearly 850-acre parcel west of the current brewery. HF2M is taking this opportunity to plan a true TND community with an integrated mix of uses including housing, employment, schools, parks, natural areas and agriculture.

Montava has been planned in a comprehensive way with early engagement of city staff, utility providers, adjacent landowners, and subject experts. The process included a neighborhood meeting with nearly 100 attendees, and a week-long design charette including multiple topic meetings, three public presentations, seven interim plans and a final master plan. The design team includes national and international experts in Traditional Neighborhood Design, agri-urban developments, transportation planning and affordable housing design and construction. These experts have teamed together with local design and engineering consultants, market experts, and technology leaders to create a comprehensive planning approach.

The following items list the topics requested for PDR review:

Proposed Uses:

Montava will be a true mixed use community encompassing every form of housing, mixed use community service retail, schools, employment and light industrial use.

Existing improvements and uses:

The land is 100% agricultural currently

Describe the site circulation:

See attached transportation report that was generated by Nelson Nygaard during our charrette process.

Describe the site design and architecture:

Montava is intended to be developed as a true TND community. Building a true walkable community based on traditional neighborhood forms. The architecture is intended to be a mixture, but calling on the history of what has made Colorado special. If you were to look at the architectural inspiration, I would say look no further than traditional downtown Fort Collins historical architecture. It will also be inspired by the history of agriculture in the area, while incorporating a working 40-acre vegetable farm as part of that overall development.

How is the proposal compatible with the surrounding area:

Our goal with Montava is to serve as an extension of the heart of Fort Collins. The residential community will be compatible with all the areas to the West/SW/S. The town center will service the entire NE sub area with services including grocery and others. The transportation plan will tie into the entire community including downtown Fort Collins. Any employment that is enabled by this development will provide opportunity for anyone on the surrounding areas.

Describe water detention:

Our engineers with Martin and Marin are working closely with the city staff in this area. You can see where the cooper slough is dealt it's along the eastern boundary of the site, and our own detention needs will be handled throughout the site as well. All detention and run off questions are wrapped up in this response. We are also working with city staff to jointly pay for additional study/consulting work in this area.

Does the proposal impact natural features:

As the current land use is farming, the natural features of the area will certainly change. However, we intend to incorporate agriculture, Nature in the City, and Natural areas, throughout the entire project. It will be much more beautiful when developed than it is currently.

Do any existing structures have automatic fire sprinklers?

No structures have fire sprinklers. I'm sure that some of the new structures will have fire sprinklers depending on code requirements.

Are there any unusual factors and/or characteristics present that may restrict or affect your proposal? There are many unusual factors that may restrict or impede our proposal. The lack of services provided by the city of Fort Collins to the area are significant factors. The lack of physical infrastructure (transportation) to the area may restrict the proposal. The land itself does not pose much challenge.

Have you previously submitted and application? We have not previously submitted an application.

What specific questions do we want addressed?

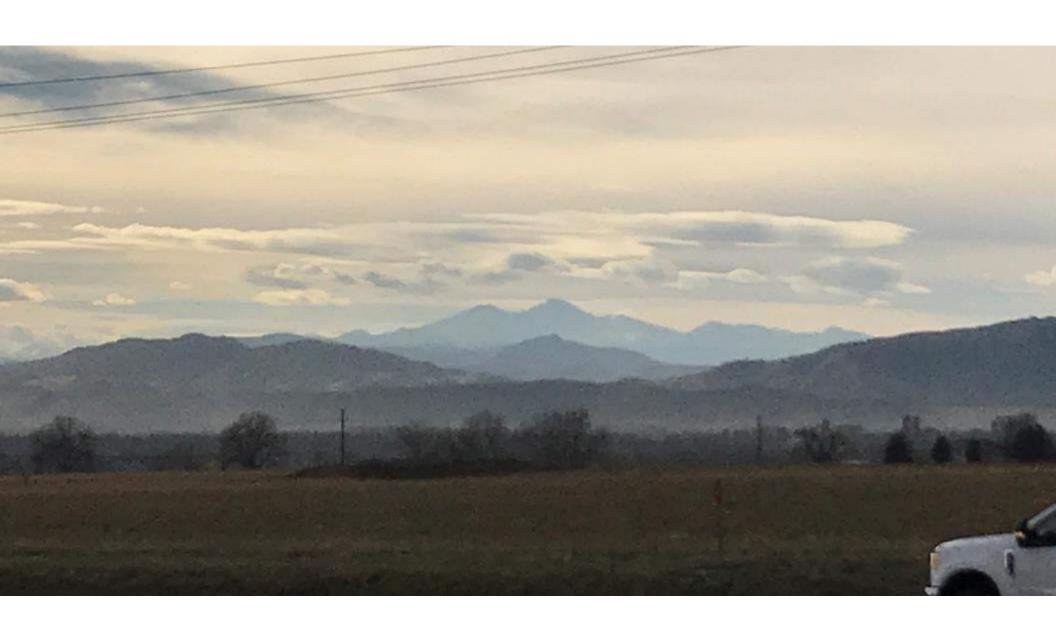
We've met with various departments through this master planning process and developed a
plan as a result of many discussions and the week-long charrette. We would like to receive your
initial comments on the plan.







LONGS PEAK







COMMUNITY, MARKET, PLACEMAKING The Group Real Estate

Fort Collins Culture

- Outdoors Minded place where your bike might cost more than your car
- Healthy mind, body & soul can all be nurtured here
- Culturally Innovative educated, leading edge thinkers. "Highest innovation per capita in the country" Bryan Willson
- Bike/Local Craft Brewing Great water, great trails, "local" culture, great people
- Family Deep commitment to family and community

AGRARIAN URBANISM

Local food production not only as a means of making a living, but as a basis for making a life and structuring the places in which we live



LOCAL FOOD PRODUCTION FOR A BETTER QUALITY OF LIFE SLOW FOOD MOVEMENT

"We have lost the social component to eating," McCarthy says. "The social act of farmer connecting with consumer is itself a radical unwinding of this complex, industrial grid that hides us from our food sources and the costs of food."



We Live In A World Where It's So Much Easier To Eat Badly. This Group Is Changing That.

LOCAL FOOD PRODUCTION FOR A BETTER QUALITY OF LIFE

CARLTON LANDING, OKLAHOMA











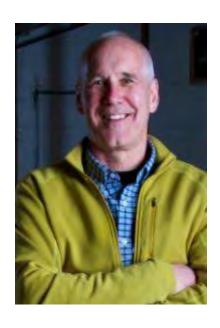
ENERGY: Decrease Use/Increase Renewables

STRATEGY FOR MONTAVA



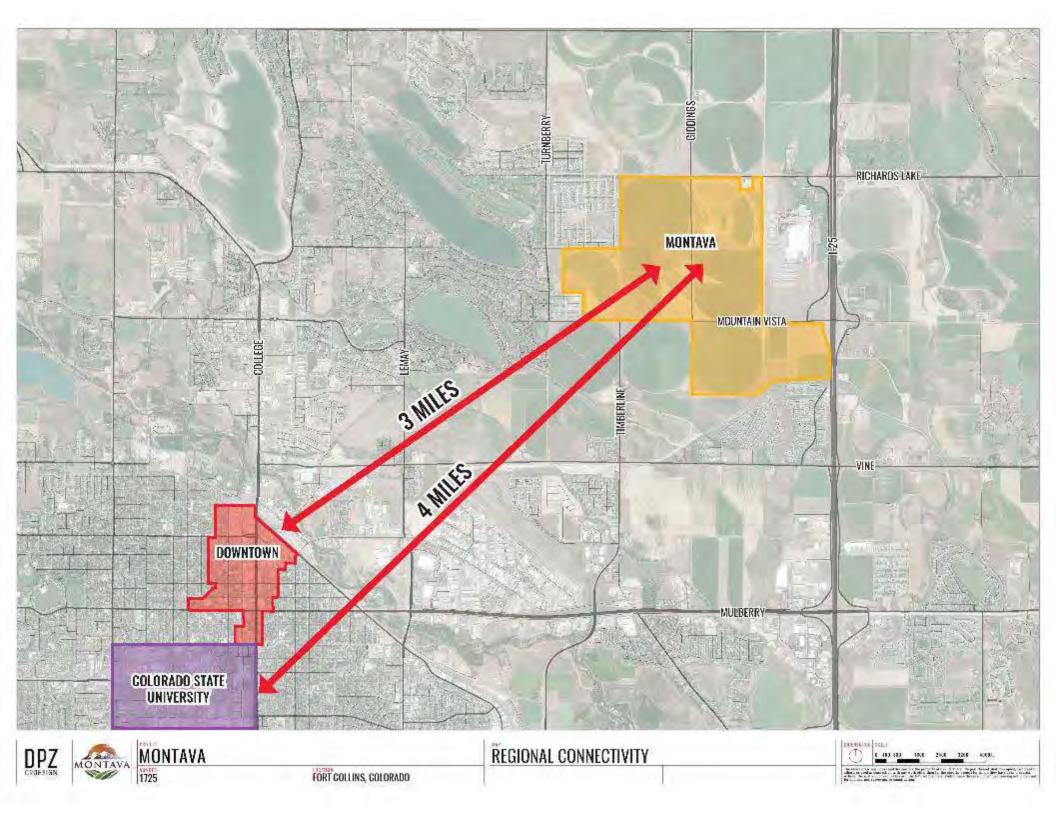


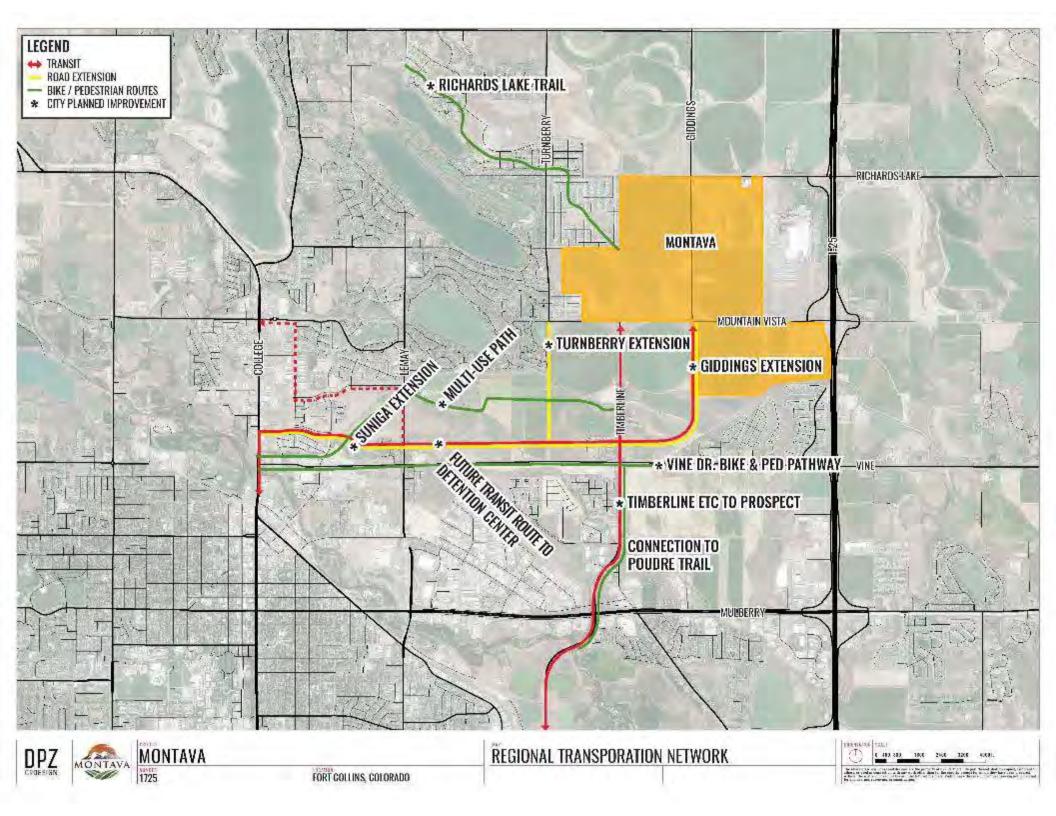


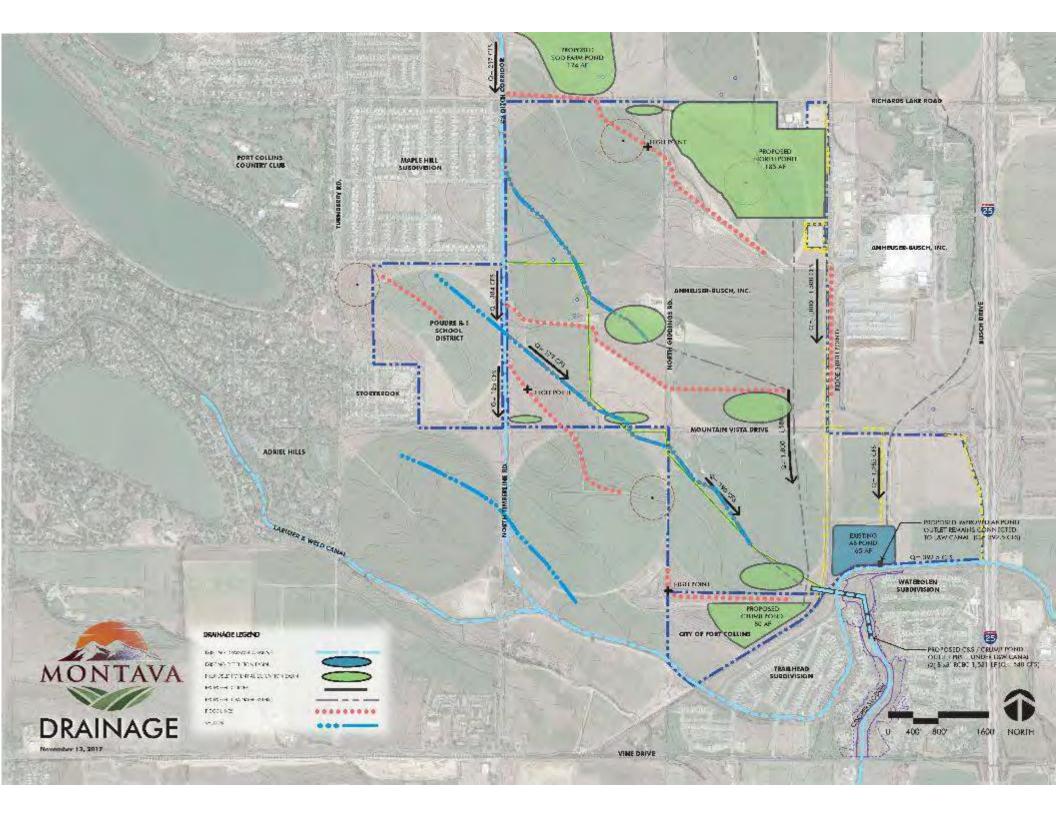


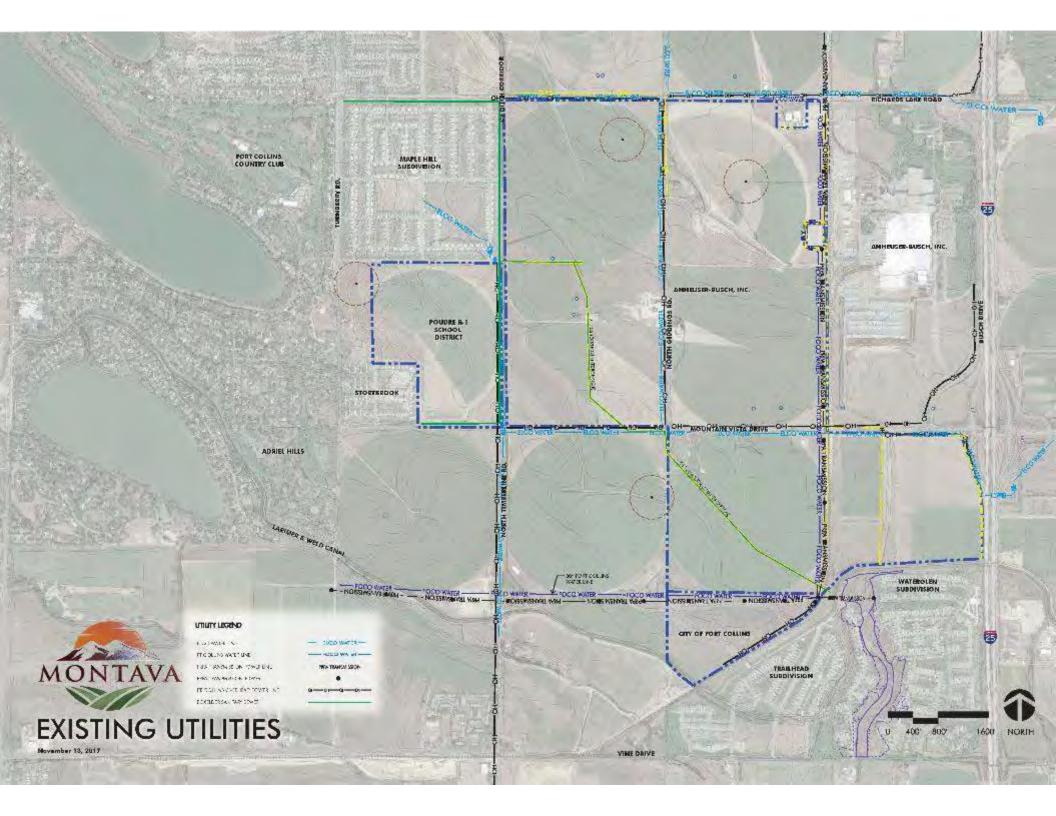












LONGS PEAK VIEW ANGLE



Pre Charrette Public Meetings/City Meetings





















NATURE IN THE CITY

INITIATIVES

Nature in the City | Photo Examples

Gradients: Gardens to Grassland

Native landscape options that translate into targeted habitat creation (e.g. menu of options akin to HOA paint color selection)
"Green fingers" reaching back into the development connecting habitat both small and large
Blurring the line between the city and nature

























NATURE IN THE CITY

INITIATIVES

Nature in the City | Photo Examples Wildlife-Friendly Community Agriculture

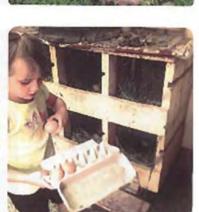
Large-scale gathering place | community center Small scale pockets of community gardens dispersed throughout Pollinator buffers complement urban ag. components





















URBAN FABRIC

BLOCKS 460'/460'





FARM SQUARE



AGRARIAN COTTAGE COURT



COTTAGE MULTIGENERATIONAL LIVING

CARLTON LANDING OK, SERENBE GA











AFFORDABLE HOUSING INITIATIVES

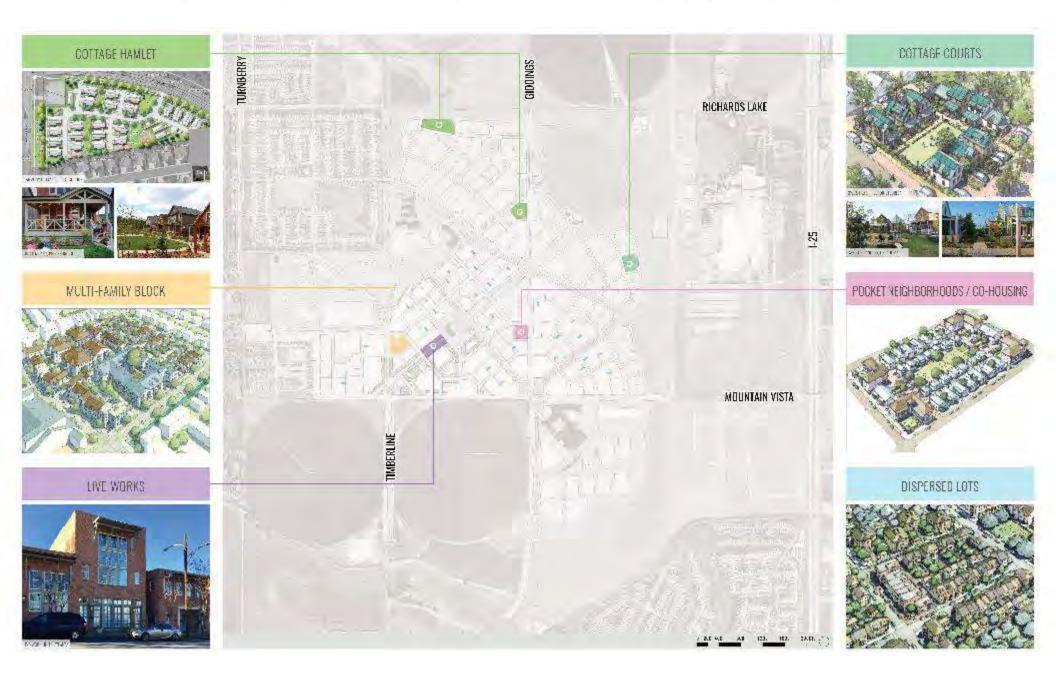
TYPES

- Large-Scale Traditional Model 100-200 units developed by the City and others with MMN Zoning (Medium Density Housing)
- Middle Scale blocks and mid-block clusters of workforce and/or co-housing;
 "pocket neighborhoods"
- Distributed/Scattered Lots carriage houses, micro-units, attached housing, etc.

TOOLKIT

- Design Variety of building types; flexible platting
- Codes Separate tap fee required for each unit, kills affordability for small units; need cap on impact fees for affordable housing
- Management Selection process: Weighted lottery system (Summit County)

DISTRIBUTED AFFORDABLE HOUSING MODEL



INTEGRATION OF EMPLOYMENT OPPORTUNITIES



WIDE VIEW

City
Utility to Natural
Areas

Systems

Siemens Panasonic

Agriculture

Native Hill National Models Brokerage

CBRE/Cush-Wake The Group/Elev.

Equipment

Bosch

GeoThermal

Education PSD/CSU

Construction
DOE-ZERH/
Unity/Thrive

Dev Models

Serenbe Norton Commons Sterling Ranch

SMART CITY/ ADVANCED MOBILITY INITIATIVES



EasyMile

Tweets

@Easy Mile

The EZ10 is a driverless electric vehicle. It moves autonomously combining a hybrid of 3 different location technologies: GPS, video guide, and SLAM technology.

Media

Likes

B

Toulouse, Midi-Pyrénées & easymile.com

319 Following 1,491 Followers

Tweets & replies EasyMile @Easy_Mile 3h Catch @Easy Mile at the 2nd @ADVIhub #IDVS2017 during Nov 16-17 in #Adelaide! idvs2017.com.au Don't miss the demo of our #EZ10 #driverless #shuttle at the event too! #IDVS2017 #ADVISummit2017 0 113 t1 EasyMile Retweeted La Tribune Toulouse @LaTribuneTise 16h Gilbert Gagnaire, fondateur et CEO @Easy_Mile, manager de l'année #Biznext2017 @LaTribuneTise 0 175 th EasyMile Retweeted

SMART CITY INITIATIVES

DEVICE LAYER

Edge Devices: NEST, IoT sensing,
Community & Home sensing and control devices. (3-5 year lifespan)

SYSTEMS LAYER

IoT, HVAC Controls, Traffic Control, Water and Water Treatment, Irrigation Control, Fire Alarm (10-15 year lifespan)

INFRASTRUCTURE LAYER

Fort Collins Broadband Electric, Gas, Water, Sewer, Storm (20-50 year lifespan)



MILESTONES/CHALLENGES

Challenges

- Special Districts
 - · Cost to serve
 - Raw water for potable use (must have long term source)
- Land Use
 - Rezoning to New Overlay Zone
 - Code Flexibility
 - Long-term vested property rights
 - Adequate Public Facilities
 - Vine Drive intersections phasing, other transportation issues.

MILESTONES/CHALLENGES

Financing Tools

- Met District at project level
 - Necessary tool for development @ < 60 mills
 - Offset infrastructure costs enabling
 - affordable housing
 - agri-urbanism
 - energy solutions
 - Zero Energy Ready Home Standard, Geothermal, solar arrays, other.....
- Special Improvement District Primarily in Mountain Vista Sub Area
 - All new growth in area pays for major infrastructure.
 - Transit Extension, RR crossing at intersections, other.....

Schedule

- 20+ year build out
- Closing fall 2018 subject to:
 - Resolution of challenges
 - City/Developer Agreement
 - Met District Service Plan and Overall Development Plan Approval
- First phase 2019

MONTAVA, THE COMMUNITY

- A Model of Urban Growth complete neighborhoods
- Advanced Construction Process DOE ZERH/Unity Homes
- Town Center w/Grocery, Parks, Schools, Nature in the City, Agriculture and Great Urbanism – main ingredients
- Integration of Local Food Production new social activator/ condenser
- Integration of Affordable Housing and Employment in all urban scales
- Integration of Technology but keeping the physical/ spatial integrity of a walkable, mixed-use, human-scale settlement
- Value Creation through Place-making multigenerational, resilient, timeless community



MEMORANDUM

To: Max Moss, HF2M Colorado

From: Pete Costa, Nelson\Nygaard

Date: November 21, 2017

Subject: Montava Charrette - Transportation Summary Report

The following provides a summary report focusing on key transportation and mobility takeaways from the weeklong charrette exercise attended by Nelson\Nygaard staff, in collaboration with HF2M and DPZ staff, as well as input from City staff and public stakeholders.

CREATING A 'CONNECTED COMMUNITY'

The Montava Project may be located on the last frontier of developmental opportunity for the City of Fort Collins, but it is the first of its kind to provide a mixed-use neighborhood design with a balanced multimodal network focused on building community connections through sustainable transportation investments. The character of Montava recognizes that transportation is not an end by itself but a platform for achieving broader community goals of mobility, equity, economic development, and healthy living.

The planned transportation network leverages past and current planning efforts. The City has taken a progressive stance on reducing auto congestion and vehicles miles traveled (VMT) from existing and future development. Montava speaks to these initiatives and citywide goals. Specifically, Montava provides an expanded network with greater intersection access points and a structured, functional multimodal network that focuses on more mobility *choices* for future patrons; creating a network that internalizes circulation by purposefully connecting destinations to residences that does not always require a car or multiple trips. The infrastructure is designed to support more modes within street right of ways. Moreover, the planned network provides a stronger connection to existing roadways, bikeways, and recreational trails, while also allowing an opportunity to repurpose existing streets that prioritize safety, access, and convenience for *people*, not just cars. The project includes exploration of new transit opportunities to create a linkage to downtown Fort Collins, major transit hubs and adjacent neighborhoods. A series of new bikeways and pedestrian pathways are planned for all ages and abilities and to encourage walking and biking to local and regional destinations, while also developing enhanced intersection designs that allow for safer crossing and maintaining adequate vehicle flows.

Montava is a project with a long-lasting vision and the planned street network is designed to function for today's needs as well as for future mobility, including a right-sized program for future connected and automated transport that can be interwoven into the City's network; providing greater access, services, and movement of people.

Lastly, the transportation network is designed to support the built environment; providing **economic opportunities for local businesses to grow, preserving the site's natural amenities and** agricultural roots, and creating a sense of place and attraction for the community.

HF2M Colorado

SUPPORT FOR CITY INITIATIVES

The City is currently updating a number of their transportation plans, including the Transportation Master Plan, Bicycle and Pedestrian Plan, and TransFort is working on updates to their Transit Master Plan. Specific plans and key takeaways from meeting City stakeholders that may affect the Montava property include:

Roadway Network Changes

- Timberline Road would be designated as an Enhanced Travel Corridor (ETC), a uniquely designed corridor that is planned for high-frequency transit, bicycling and walking as part of the corridor. ETCs are intended to support high-quality economic opportunities for mixed-use, transit-oriented development and support the City's active lifestyles and environmental goals. The intention of Timberline Road ETC is to enhance travel time through the corridor to connect primary destinations.
- Suniga Drive would be extended further west to College Avenue and extend to the east with a potential connection to Timberline Road or potentially further east to Giddings Road. The roadway would be a four-lane with center median boulevard design and would be a designated ETC, providing greater east-west connectivity to downtown Fort Collins and neighborhoods to the north and east of downtown.
- Turnberry Road is still being considered for a potential extension further south from Mountain Vista Drive to possibly connect to Suniga Drive (or Conifer Street, if that is extended further east), or could potentially extend further south to Vine Drive.
- Vine Drive may be repurposed from an east-west arterial street that carries mostly auto traffic to a local street that includes mostly pedestrian and bicycle routes with limited vehicular access. Due to the planned overcrossings at Lemay Avenue and a potential overcrossing at Timberline Road, Vine Drive would no longer intersect with these streets and the majority of auto traffic would be diverted onto other east-west streets, such as Suniga Drive and bikeways/pathways would be expanded adjacent to the railroad tracks to enhance east-west access and connections for bicyclists and pedestrians.

Transit Network Changes

TransFort's Transit Master Plan

includes three phases of potential transit network and service improvements. Phase 3 of the plan (see image) includes possible changes to Route 2, which would connect portions of Mountain Vista Drive to the Downtown Transit Center. The route would operate along College Avenue, Willow Lane, Blue Spruce Drive, Conifer Street, Lemay Avenue, Suniga Drive, Timberline Road and Mountain Vista



Drive. There is no date of when this potential service would be in effect and operational; nor does the plan include the type of service that would operate along the route, including frequencies or location of bus facilities.

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Although Timberline Road would be a designated ETC with high-quality transit service, and would include transit improvements along the corridor from Mountain Vista Drive to the north and Harmony Road to the south. There are plans that are publicly available that provide any details regarding future transit service along the corridor.

Bicycle Network Changes

Mountain Vista Drive, Giddings Road, and Timberline Road are designated bikeways with striped bike lanes (however, these lanes are currently in the form of roadway shoulders). The following are specific bicycle network changes based on City's current plans:

The current Bicycle Plan includes a full-buildout scenario that includes a buffered bike lane along Giddings
 Road and Richard's Lake Road and protected bike lanes along Mountain Vista Road and Timberline Road (see green lines in image, right), which also includes paved trails/shared-use paths along Timberline Road, south of Mountain Vista Road (see red dashed lines in image, right).



- Vine Drive would be repurposed to provide limited local vehicle access and new off-street bicycle and pedestrian path that runs parallel to the railroad tracks.
- A newly built (albeit discontinuous) **trail runs diagonal within Maple Hill and Richard's Lake neighborhoods and is planned to be located further northwest adjacent to Richard's Lake** (see red dashed lines, above).
- A proposed multi-use path is planned to run east to west from Timberline Road to Conifer Street, connected Waterfield neighborhood to Alta Vista neighborhood (see red dashed lines in image, above).
- A proposed multi-use path is planned slightly north of the Timberline Road/Vine Drive intersection and travels east to the Waterglen neighborhood then orientate south to Mulberry Street (see red dashed lines in image, above).

City and Stakeholder Feedback

The following summarizes input received from City staff and public during an open house event:

City Staff Meeting

- Suniga Drive is planned to reduce congestion on Country Club Road, provide more eastwest connectivity, include off-street multi-use pedestrian/bicycle path and provide highcapacity transit.
- Lemay/Vine overpass (grade separation) at railroad tracks is currently under design.
- Timberline/Vine overpass still under consideration; no funding at this point in time.

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- Fire clearance is 20 feet but there are issues with 30-foot-wide residential streets with onstreet parking on both sides.
- County street standards allow for Complete Streets and City willing to accept modifications to street classification based on land use context and connectivity; transitions are acceptable and City wants to make sure arterials still function with character of the roadway.
- City understands that widening roadways induce traffic demand and contradict VMT goals; City encourages ETCs and transit expansion, and multimodal improvements to reduce vehicle demand.
 - Vision to have Suniga, Mountain Vista, and Timberline at ETCs to carry high-capacity transit
 - ETC on Mountain Vista. Goal to carry high capacity transit
- City has no Transportation Demand Management (TDM) requirements for new developments.
- City will be open to update Transportation Master Plan based on Montava project. recommendations and would require adoption of any adjustments to alignments and classifications to City-owned, existing or planned roadways.
 - Transportation master plan to be adopted April 2019
- Wide sweeping curve on Mountain Vista Drive at Timberline Road can still be adjusted and creation of a standard three- or four-legged intersection shall be considered. A realignment could be expensive and not effective.
- A traditional grid patterns for the Mountain Vista/Timberline intersection would service neighborhood commutes for existing residents to the west and north without going into potential Town Center in Montava property.
- Enhanced Transportation Corridors (ETCs) generally require 115 feet of right of way for multimodal enhancements.
- Transportation Network Companies (TNCs Uber, Lyft)/Emerging Mobility will focus less on parking and more on curbside management. City currently working with Audi to test connected vehicles and enhanced signal system.
- City administers a Traffic Impact Fee (TIF) based on trip generation.
- Cycling community requests more striped bikeways.
- Recommended block spacing approximately 200 feet between streets and alleys.
- Alleys would be private-owned and maintained.
- Local streets are funded by developer. Arterials are co-funded by developer and city and any modifications to arterials that are different from minimum standards would be funded by developer.

Public Meeting

- Major concern about increased traffic congestion that the project may cause.
- Concern about more cut-through traffic along Country Club Road.
- Support for Turnberry Road extension.
- Explore bicycle connection to Waterglen neighborhood to the south.
- Interested in public transit opportunities for the project.

HF2M Colorado

PRELIMINARY RECOMMENDATIONS

The transportation concepts have not been finalized at the time of this writing and there are several concepts for consideration. During the charrette exercise, the following preliminary recommendations were considered that include overarching strategies that are applicable to multiple, varying plan concepts and such strategies will be refined based on the preferred concept plan.

Street Network

- The street network shall include a traditional grid pattern that allows for shorter and convenient distances for walking and biking and better distribution of vehicular traffic and provide greater opportunities for transit access and routing.
- Specific street classifications shall be incorporated into the overall network (these classifications will be refined based on the preferred concept). Each street classification shall be based on Complete Streets elements and allow for adequate pedestrian and bicycle zones, as well as general traffic, transit, parking/loading zones as appropriate. These planned classifications include:
 - o Urban Avenue (115' ROW)
 - Gateway Boulevard (100' ROW)
 - Collector Street with Transit (84' ROW)
 - o Suburban Street (66' ROW)
 - o Alleyway (30' ROW)
 - Rural Street (ROW to be determined)
- Mountain Vista Drive and Timberline Road shall be treated as "gateway" corridors that channel the majority of local and regional multimodal traffic and with adequate signage and wayfinding, provide a true "sense of place and arrival" that defines Montava.
- Mountain Vista Drive has the potential to a maintain its "arterial" classification; however, the roadway shall transition from a limited access arterial with 40-45mph speed limits near the I-25 interchange to a traffic-calmed, two-way arterial with 25-40mph speed limited and more intersections to provide greater access between the interchange and intersection at Timberline Road. Building frontages shall align along Mountain Vista Drive to support a "gateway" theme. This street may be widened to four lanes through a phased program that aligns with future development to avoid over-building the roadway.
- Timberline Drive shall remain a two-lane arterial and should not be widened to a four-lane arterial as per the City's plans. The current and future projected traffic would continue to be accommodate within the two-lane capacity; however, this street may be widened through a phased program that aligns with future development to avoid over-building the roadway and inducing traffic.
- The project shall consider potential extension of Giddins Road further south to intersect with potential Suniga Drive extension to provide greater north-south connectivity; coordination with City's plans for Suniga and Giddings would be required.

HF2M Colorado

• The project shall consider potentially extending Turnberry further south to intersect with Suniga Drive and/or Vine Drive to allow for greater north-south connectivity; coordination with City's plans for Turnberry would be required.

Transit Connections

- Two potential transit lines that would serve the project site:
 - o Suniga Extension Route this roadway would be classified as an ETC with high-capacity transit service between downtown to the project site. This route would follow the eastern extension of Suniga Drive and intersect with Timberline Road and a planned extension of Giddings Road. This route would provide a direct connection between the Montava site to downtown, as well as potential connections to future, planned schools, businesses and residences within the project site.
 - o Timberline Road Route this roadway would be classified as an ETC with high-capacity transit between Harmony Road and the project site. This site would provide a direction connection between the Montava site to neighborhoods to the south, including businesses and additional connections to TransFort routes.
- A number of potential bus stops and routing patterns for the above-mentioned bus lines have been identified and are illustrated in Appendix A (note: DPZ team has the original sketches). These stops and routes provide ample coverage of the entire project site, ensuring that each stop is approximately 0.25 miles from planned residences and businesses; this equates to about a 5-minute walk and shorter bike ride.

Bikeways

Appendix B includes preliminary sketches of bicycle networks and precedents of planned bikeways. Three classifications of bikeways shall be considered and these classifications would coincide the street classifications; these include:

- Protected Bike Lanes to be located along gateway and major access streets that carry larger volumes of traffic and within commercial/mixed-use areas.
- Shared Travel Lanes to be located along all residential streets and allow for travel lanes to be used by both vehicles and bicyclists and include proper signage to notify drivers of bicycle activity.
- Multi-Use Pathways to be located within linear parks and open space areas that provide larger trails to accommodate a minimum of two, bi-direction bike lanes and one pedestrian path that is separate from the bike lanes.
- Enhanced ("protected") Intersections these intersections provide additional treatments and pavement markings that include separate pedestrian and bicycle high-visibility crosswalks, ADA-accessible curb ramps, pedestrian signals, and other vertical treatments that narrow turning radii of vehicles, restrict right-turning movements on red, and provide adequate spacing between vehicles and pedestrians/bicyclists. These intersections are to be located at major intersections that include protected bike lanes and multi-use pathways.

HF2M Colorado

Traffic & Parking

Traffic Generation

Mountain Vista Drive and Timberline Road would carry the majority of auto traffic generated by the project. These roadways currently experience very low traffic volumes throughout the day; however, traffic flows appear to be congested during weekday peak hours and in the event there is a crossing freight train, which results in large queues along north-south streets.

The proposed grid-like street network that allows for Turnberry, Timberline, and Suniga/Giddings to connect with Mountain Vista would distribute the traffic evenly throughout the network. Turnberry and Timberline carry about 6,000 vehicles per day, and Mountain Vista Drive has just under 7,000 vehicles per day. These two-lane roadways can accommodate up to 20,000 to 25,000 vehicles per day, respectively.

A conservative (and *very* preliminary) estimate of vehicle trips generated by the project results in about 50,000 vehicles per day; however, this does not account for the mixed-use nature of the project nor multimodal facilities that encourage use of other modes and internalization of trips. However, given the street grid, these trips would be dispersed proportionally based on the land use distribution throughout the entire area, which would result in an average daily demand of about 20,000 vehicle trips along major access streets, such as Timberline Road and Mountain Vista Drive. These estimates will be refined as the land use program is adjusted.

Parking Generation

Similar to vehicle trip generation, a preliminary parking supply and demand analysis was conducted. Table 1 on the following page provides a summary of City code requirements for off-street parking and preliminary demand analysis; note that the demand analysis does not account for a partial or full Transportation Demand Management (TDM) program for the project or a shared parking between retail and office (and potentially residential) uses. No parking demand has been calculated for industrial uses, as specific types have yet to be defined.

As shown below, the project as currently programmed would be required to provide between 8,621 and 9,691 spaces; assuming no adjustments are applied based on TDM programs and shared parking, or specific overlay zoning. The estimated peak parking demand would equate to about 8,696 spaces, which equates to a total land area size of about 3.04 million square feet (approximately 70 acres), or about 11% of total developmental land.

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Table 1: Parking Supply v. Demand Estimation

	City Code Requirements			Peak	Space Equivalent to
Land Use	Minimum	Maximum	Programmed	Demand (Spaces)	Meet Demand (sq. ft. / acre) ¹
Single-Family Residential	Average 2 spaces per unit (5,418 spaces)		2,709 units	5,418	1,896,300 sq. ft. (46 acres)
Multi-Family Residential	Average 1.1 spaces per unit (2,496 spaces)		2,269 units	2,496	873,565 sq. ft. (20 acres)
Office	1 per 1,000 sq. ft. (241 spaces)	3 per 1,000 sq. ft. (724 spaces)	241,300 sq. ft.	339	118,650 sq. ft. (2.7 acres)
Retail	2 per 1,000 sq. ft. (526 spaces)	4 per 1,000 sq. ft. (1,053 spaces)	263,300 sq. ft.	443	155,050 sq. ft. (3.6 acres)
Total	8,621 spaces	9,691 spaces		8,696	3,043,565 sq. ft. (70 acres)

Note: average parking space size estimated at 350 square feet to account for average vehicle size and maneuverability to enter/exit parking space.

MONTAVA CHARRETTE | TRANSPORTATION SUMMARY REPORT HF2M Colorado

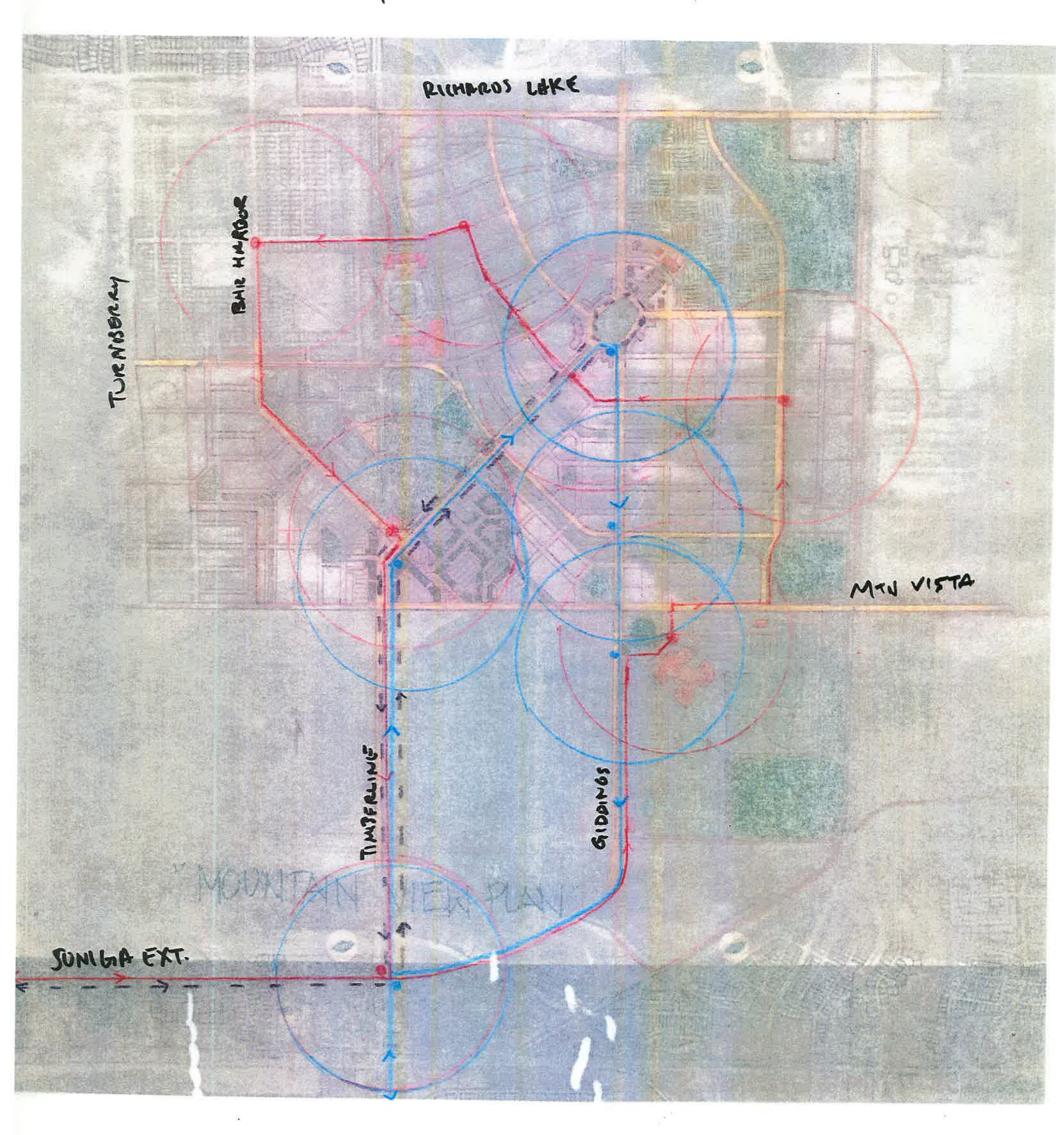
Appendix A Transit Network Sketches

Note: DPZ has original sketches for "Mountain View and Greenbelt" concepts

- Sunga Dantoun Convertor Route / Eures: Forte - Timberline - Prospect ETC Route

"MTD. VIEW"

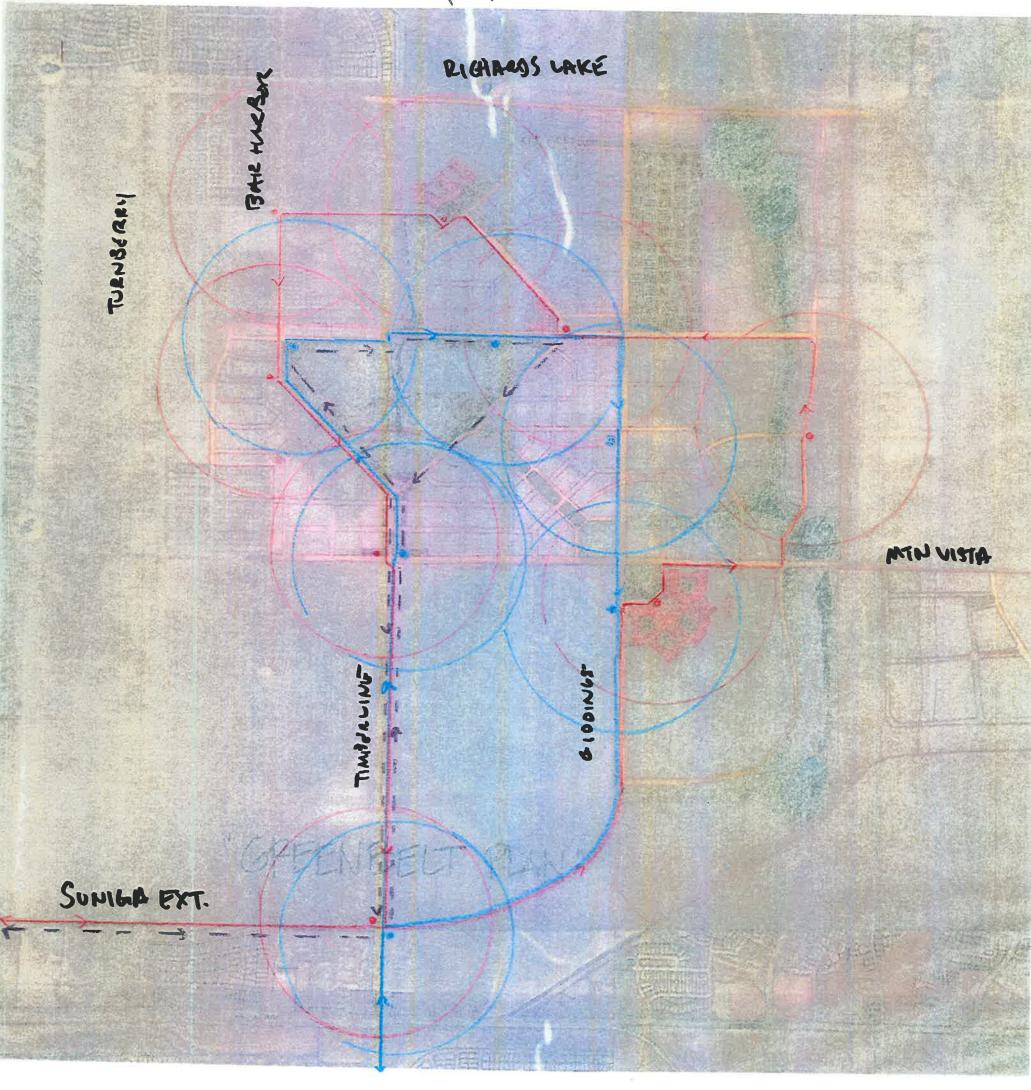
TRANSIT PETWIKK



- Suniga Dourtoux Convertor Plante / Express Route

TRANSIT NETWORK

"Greenbett"





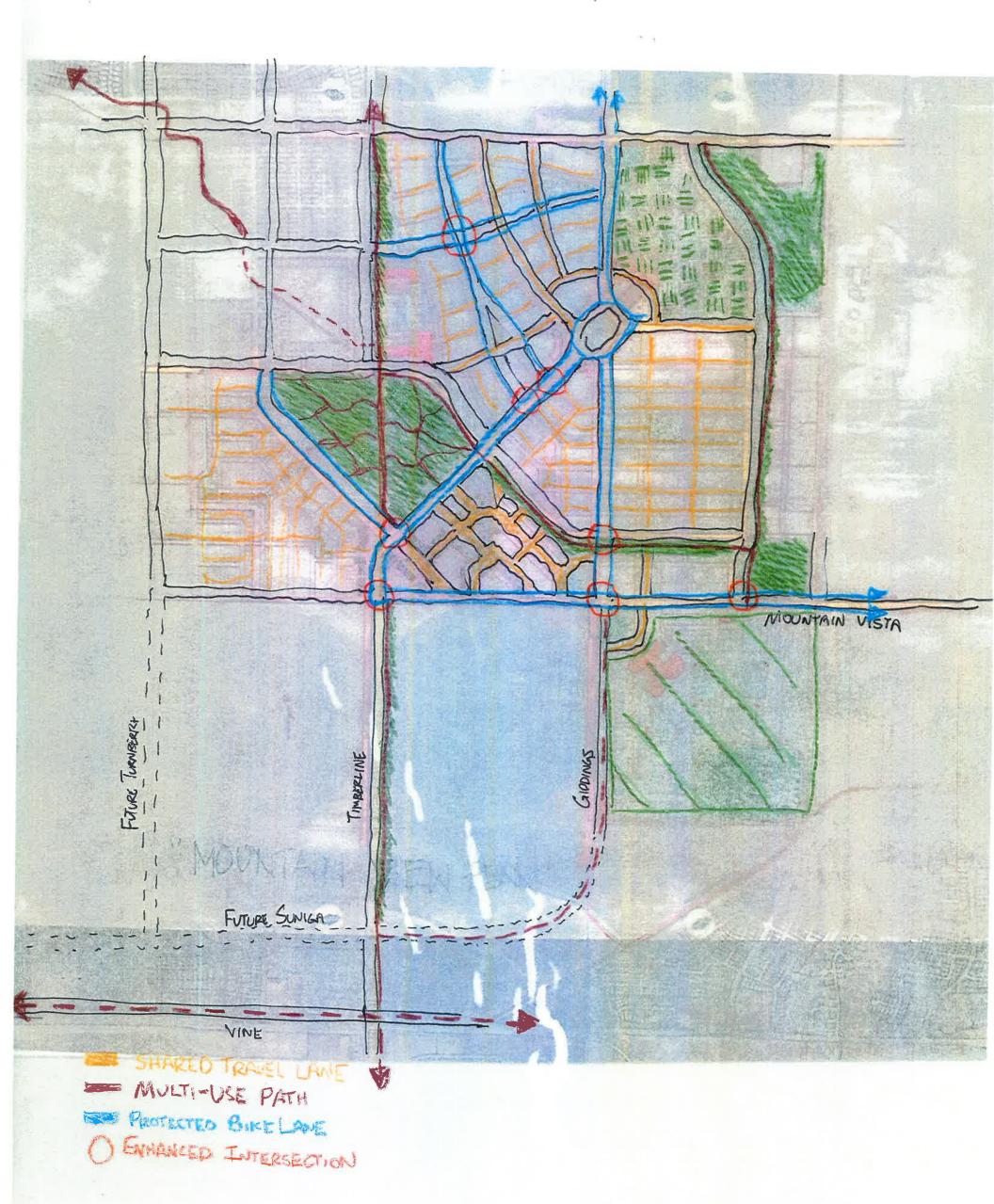


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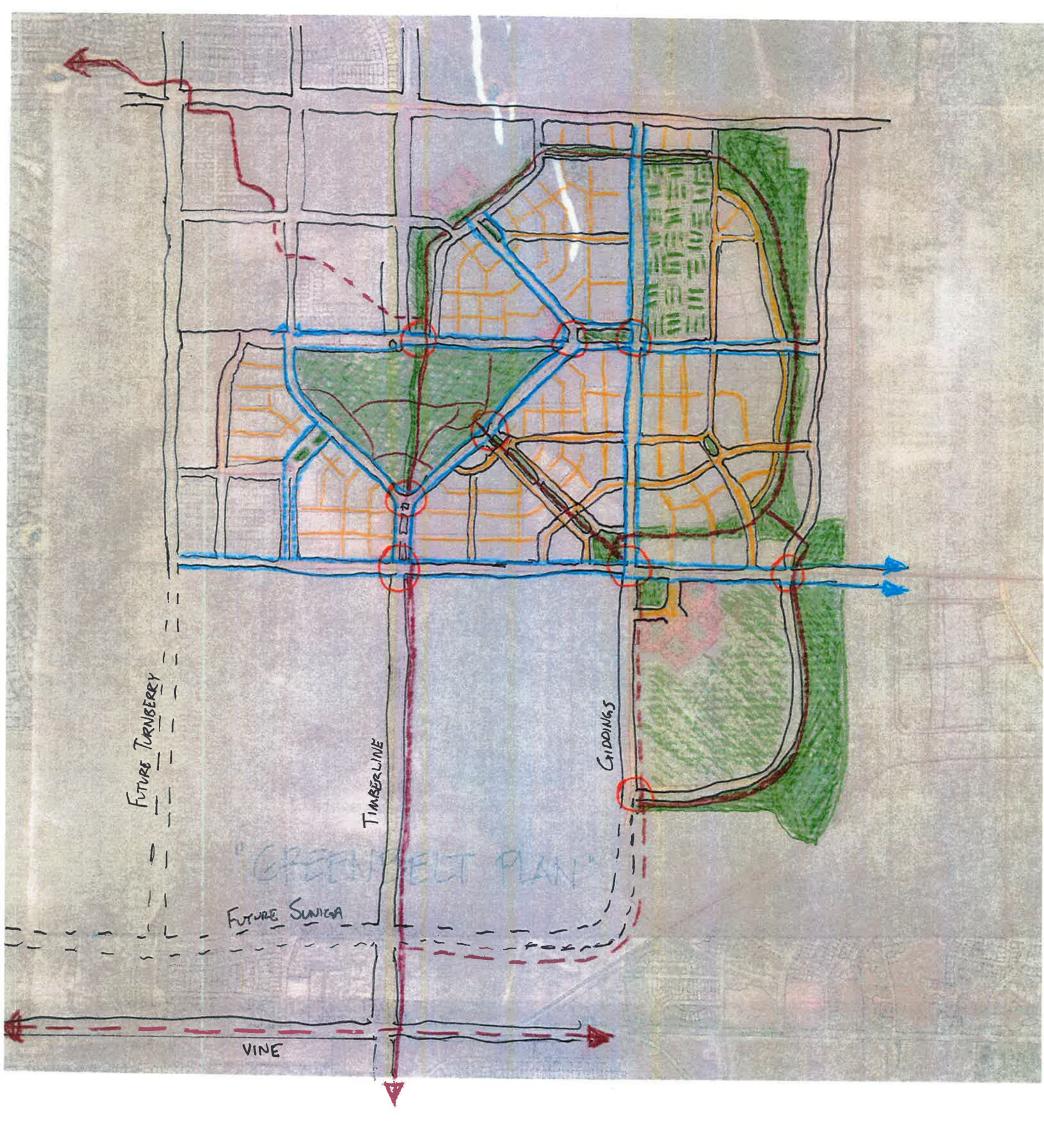
Appendix B Bikeway Sketches & Examples

Note: DPZ has original sketches for "Mountain View and Greenbelt" concepts

MOUNTAIN VIEW - BICYCLE NETWORK.



GREENBELT - BICYCLE NETWORK





MULTI-USE PATH

O ENHANCED INTERSECTION

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Buffered Bike Llane



Source: NACTO Bikeway Design Guide, National Association of City Transportation Officials, Second Edition

Protected Bike Lane



Source: NACTO Bikeway Design Guide, National Association of City Transportation Officials, Second Edition

Temple City, CA (Residential Street - Protected Bike Lane)



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Shared Travel Lane (Colored Backed Sharrows)



Source: NACTO Bikeway Design Guide, National Association of City Transportation Officials, Second Edition

Full, colored shared lane treatment



Source: NACTO Bikeway Design Guide, National Association of City Transportation Officials, Second Edition

Protected Intersection Concepts



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Multi-Use Path (Boulder Creek, CO)



Multi-Use Path (Cherry Creek, CO)

