



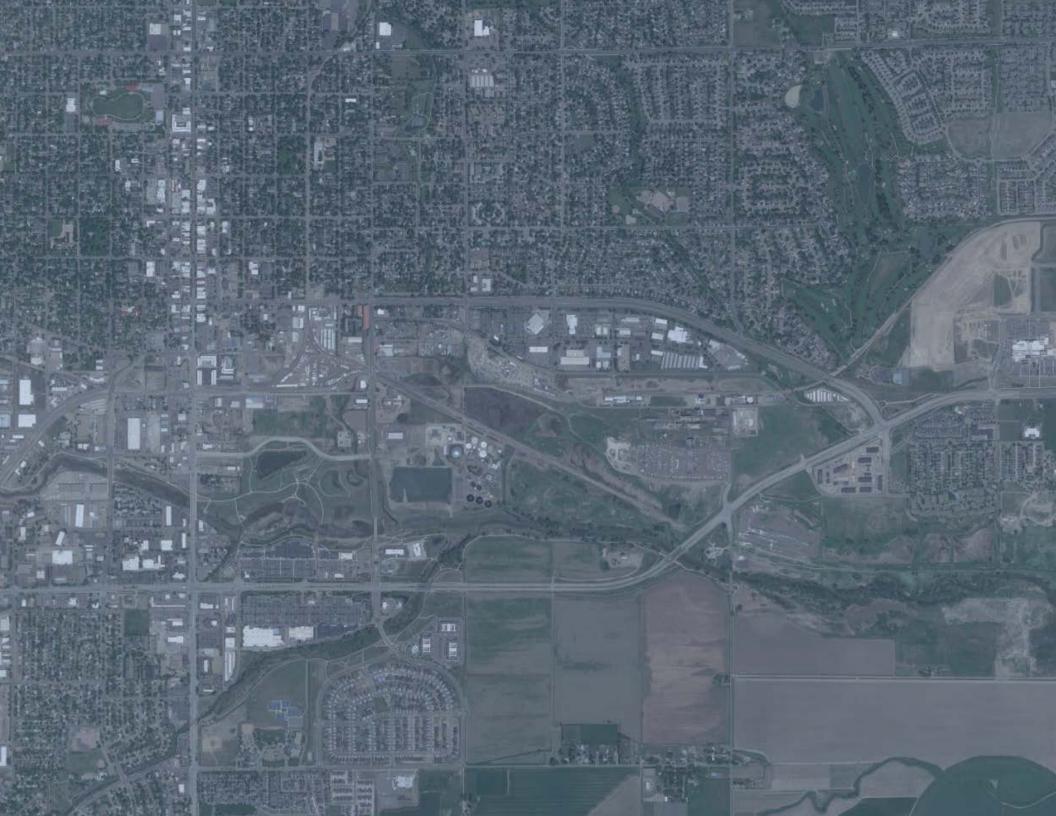
SUGAR FACTORY + STEAM: SUB AREA PLAN

APRIL 2023

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EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

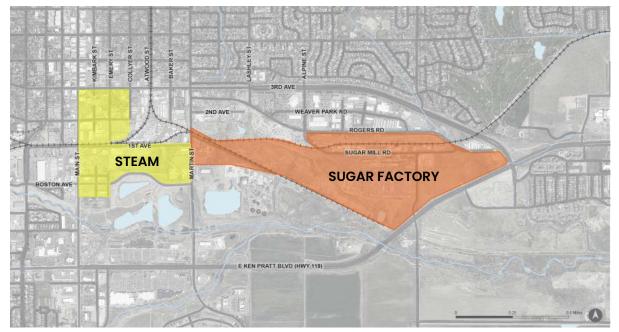
Project Need

This sub-area plan includes two distinct planning areas: the Sugar Factory area and the STEAM area. The interrelated connectivity challenges and redevelopment opportunities of these two areas sets forth the need for a joint planning effort. In addition, the two areas are linked in terms of storm drainage and high-level utility frameworks. An integrated sub-area plan is needed to ensure that development in the two areas is coordinated and focused, and avoids direct market competition that could have negative impacts on one or both areas.

Project Scope

The study area encompasses the three properties that constituted the historic Great Western Sugar Factory site and the area surrounding it, as well as the 'STEAM' area generally bounded by Main Street, 3rd Avenue, Martin Street and Boston Avenue. The two areas together comprise approximately 284 acres and 83 land parcels: 200 acres and 16 parcels in the Sugar Factory area and 84 acres and 67 parcels in the STEAM area.

This plan contains a development framework that provides guidance in three broad areas: land use, character and urban design, and mobility. It evaluates opportunities and challenges in each of the three areas, and provides strategic recommendations and implementation considerations.



The sub-area study area comprises approximately 284 acres and 83 parcels. Martin Street bisects the two areas, with STEAM (shown in yellow) to the west and Sugar Factory (shown in orange) to the east.

Project Process

Market update. The sub-area plan uses market data from two sources: the December 2020 Longmont Area Market Assessment, and a new retail observations/ residential market snapshot. Acknowledging the significant market shifts precipitated by the COVID-19 pandemic, the study also rechecked the market assumptions and demand potential from the 2020 report. *Community Outreach*. The study deployed a robust public outreach process that included a spectrum of in-person and digital input opportunities, such as pop-up information at community events, virtual community forums, city council presentations and elementary school activities. Input was largely supportive of development in both the STEAM and Sugar Factory areas, with particular interests in affordable housing and sustainability.

EXECUTIVE SUMMARY

Sugar Factory Strategy

Development in this area will focus restoration and reuse of the historic sugar factory buildings as the core of the neighborhood, both physically and philosophically. Land uses will focus on an urban mix of uses with a mediumdensity residential focus and an emphasis on building a walkable neighborhood. The community was particularly favorable toward an urban agriculture sub-theme in the area, which could be exhibited in a variety of ways that might include neighborhood gardens, greenhouses, limited entertainment or educational facilities. Notable challenges in the Sugar Factory area are the need for extensive brownfield mitigation in advance of development and extremely limited circulation opportunities to connect with adjacent development. Opportunities include demonstrated developer interest and the large size and 'blank slate' nature of the area.

STEAM Strategy

With several development projects already proposed and in progress, the STEAM framework focuses on creation of cohesive neighborhood character and internal and external connectivity. A new performing arts/cultural center represents one sizeable land use opportunity that could also significantly influence character-setting in the area. Like the Sugar Factory area, the area is anticipated to be very flexible in terms of land use, but with a more robust mix of commercial and retail interspersed with medium-density residential. Area challenges include existing rail alignments and their noise and vibration impacts on nearby uses, while opportunities include the continuation of Longmont's successful Main Street and direct access to well-developed open space resources in the St. Vrain Greenway and Dickens Farm Natural Area.

Implementation

Having largely industrial pasts, both the STEAM and Sugar Factory areas have relatively permissive development policies that will require some level of zoning modifications and/or policy overlays to promote the City's vision for the overall subarea. Significant area for review will include heights, setbacks, street sections, and park/ open space requirements and management.

The sub-area will need to use a variety of public and private funding mechanisms in combination to bring concepts to fruition. These tools include but are not limited to public private partnerships (PPP), urban renewal district (URD) tax increment financing, and a variety of district structures such as general improvement districts (GID), business improvement districts (BID), and metropolitan districts.





The STEAM area offers a mix of popular destinations and opportunity parcels (top), while the Sugar Factory area is more of a blank slate with industrial history (bottom).

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1.1 PROJECT NEED

TWO AREAS, ONE PLAN

As the name suggests, this sub-area plan includes two distinct planning areas: the Sugar Factory area and the STEAM area. Although each area has very distinct characteristics, their interrelated circulation and connectivity challenges and redevelopment opportunities sets forth the need for joint planning.

Adjacency

Although east-west connections between the two areas is sparse at present, there is hope that mid- to long-term potential to provide essential transportation connections between the areas will evolve. The two areas are also linked in terms of storm drainage and high-level utility frameworks, so that a joint plan can identify complementary improvements or studies that may be necessary and impact both areas.

Industrial Scale

Both areas are anticipated to transition from a hodge-podge collection of marginal commercial, storage and industrial uses to a more diversified and urbanized mix of uses. These anticipated changes call for the definition of a new street block structure and roadways, as well as the potential for policy changes relative to zoning, regulatory overlays, funding districts and the like. Planning both areas together ensures that these potential changes are uniformly applicable.

Complementary Uses

The areas' proximity to each other can breed development competition that, unless given direction, can lead to the detriment of both areas. Accordingly, it is important to create a flexible development framework that distributes an appropriate mix of land uses in both areas, but avoids direct competition so that one area's gain is not the other's loss.

Development Pressure

Both areas are experiencing current development interest and activity, whether inquiries or development plan submittals to the City, leading to a pressing need to establish a guiding development framework to ensure that new development in these areas aligns with Longmont's community vision. Planning the areas together provides the necessary development guidance as expediently as possible, establishing concrete expectations for both developers and the community.



The iconic cluster of brick buildings, silos, smokestack and tin shed located on Sugar Mill Road and visible from Colorado State Highway (SH) 119 are well-known to most Longmont residents and readily visible to travelers entering the City from the east. Once owned by the Great Western Sugar Company, the facility once produced over a million pounds of sugar every day, and is a very tangible and significant tie to the City's history and growth. Although commonly referred to it as the Sugar Mill, the facility was operated as a factory. The subarea plan process began with the name 'Sugar Mill' and was changed during the process to the more accurate 'Sugar Factory'.

The **STEAM** name, in contrast, reflects not a historic use but a forward-looking aspiration. First crafted in 2019, the **S**cience-**T**echnology-**E**ngineering-**A**rt-**M**aker acronym references a City-Council backed exploration that suggested this area south of existing downtown could redevelop as an innovation district focused on these creative and inventive interests.

WHAT'S IN A NAME?

1.2 PROJECT SCOPE

STUDY AREA

The study area encompasses the three properties that constituted the historic Great Western Sugar Factory site and the area surrounding it, as well as the 'STEAM' area generally bounded by Main Street, 3rd Avenue, Martin Street and Boston Avenue. The two areas together comprise approximately 284 acres and 83 land parcels: 200 acres and 16 parcels in the Sugar Factory area and 84 acres and 67 parcels in the STEAM area.

Also of note are the existing freight rail lines running through and adjacent to both areas. Significant additional abutting uses - presenting both opportunities and challenges - include the City's water treatment plan (south of the Sugar Factory), the Dickens Farm Nature Area and the St. Vrain Creek corridor (south of both areas).

WHAT IS INCLUDED

This sub-area plan includes a guiding framework of governmental and community expectations and desires regarding Land Use, Urban Design and Character, and Mobility.

Plan Priorities define the key and desired outcomes of the sub-area plan. There are many ways to accomplish each outcome, and these priorities define the goal against which prospective development proposals should be measured: if they support, detract or are neutral relative to these topic-specific statements.

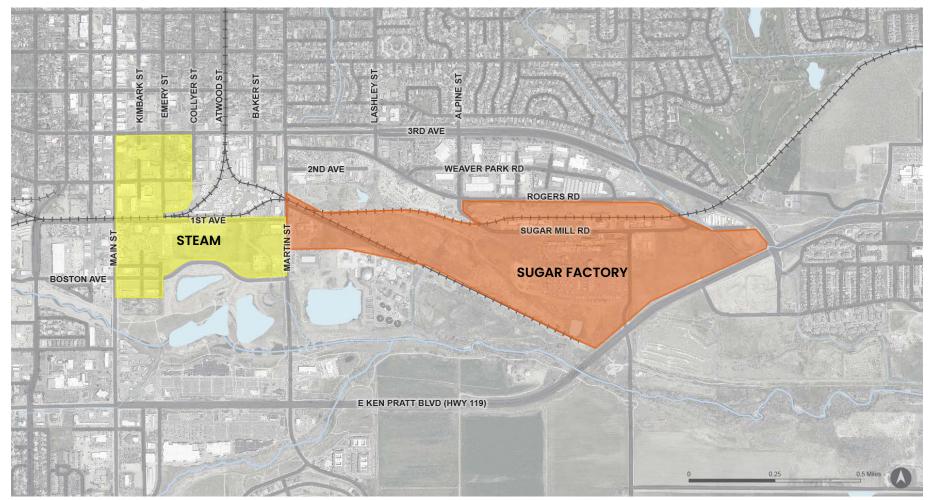
Land Use Strategies define preferred uses for each area. The recommended mix of uses is flexible, and is closely related to the architectural form of new development. In the case of the STEAM area, uses are intended to blend with existing uses that are expected to remain, primarily in the historic downtown section north of 2nd Avenue. In the Sugar Factory area, preservation and re-use of the existing historic structures is an emphasis and priority, and future uses are to be compatible with these buildings and each other.

Urban Design and Character Strategies

underline the importance of human experience and scale. They focus on creating a sense of place and creating a balanced community representative of Longmont's goals and priorities as a community.

Mobility Strategies prioritize a multimodal approach to transportation network design that balances pedestrian, bicycle and vehicular needs and offers choice based on trip length, need, time of day, and even weather conditions. These strategies emphasize the connection between transportation and land use, and support area goals of offering mixed-use neighborhoods that reduce the need to travel to separate locations for employment, dining, living and recreation.

Implementation Considerations recognize a likely extended build-out period in each area, with evolving conditions based on market trends. In place of defining specific phases or implementation tools, this section notes things to be considered as development progresses.



The sub-area study area comprises approximately 284 acres and 83 parcels. Martin Street bisects the two areas, with STEAM (shown in yellow) to the west and Sugar Factory (shown in orange) to the east.

1.3 RELATED PLANNING

PRIOR EFFORTS

1st & Main Station Transit & Revitalization Plan (2012)

This study defined the concept of a multimodal transportation hub on the west side of the 1st Avenue & Main Street intersection abutting the STEAM area. This concept has been further developed by the City in cooperation with the Denver Regional Transportation District (RTD) and is as an important precursor to the multimodal strategies in this sub-area plan.

Downtown Longmont Master Plan of Development (2017)

The master plan establishes goals, policies and recommendation relative to the operations of the Longmont Downtown Development Authority (LDDA) and land use, design and development within the LDDA District boundaries. The plan has relevance to a significant portion of the STEAM sub-area covering the entire area north of 1st Avenue and a large 12 acre tract of undeveloped land sandwiched between 1st Avenue and Boston Avenue.

Main Street Corridor Plan (2019)

The Main Street Corridor Plan extends from State Highway 66 on the north to Plateau Road on the south, thus covering most of the STEAM area. The plan provides recommendations for land use and transportation that are applicable to the corridor, character areas and catalyst sites. This sub-area planning initiative took into consideration and expanded on the plan's recommendations.

Building STEAM Visioning Process (2019)

This visioning process directed by City Council focused largely on visioning redevelopment within the STEAM area focusing on land use mix, density and residential housing types. The process provided a number of recommendations on mobility and urban design. The STEAM name and recommendations were incorporated into the sub-area planning process, where the land uses envisioned were evaluated as having potential, while not being restrictive uses within the area.

ULI Technical Advisory Panel (TAP) Report: Revitalizing Longmont's Great Western Sugar Mill (2020)

This report was produced during a two-day virtual charrette in August 2020. The goal of this effort was to brainstorm ideas and financing options for the Sugar Factory area. A significant idea from this report that has been carried forward into the sub-area plan is the concept of developing the area as an "agri-hub" community, integrating agricultural elements and supporting initiatives as part of the new development in recognition of Longmont's and the Sugar Factory's agricultural heritage.

Art & Event Center Hotel Feasibility Study (2021)

This study evaluated the market for a performing arts and conference facilities in or in proximity to downtown Longmont; it detailed the type and size of facilities that were considered feasible given proximity to and competition from local and regional facilities and population growth within a capture area. This idea has been carried forward in the STEAM area noted as a Cultural & Event Center.

Technical Brownfields Assessments (TBA)

The U.S. Environmental Protection Agency (EPA), on behalf of the City and property owner, recently conducted Phase I and Phase II environmental assessments of the soils, water, and buildings for the property upon which the historic buildings are situated. The results of the testing are now being used in conjunction with the preparation of a remediation strategy, including funding and site development plans.

Resilient St. Vrain Project

For the last several years, the City of Longmont has proceeded with improvements to the St. Vrain Creek to mitigate flooding conditions. In conjunction with this effort the entirety of the STEAM area is to be removed from the 100-year floodplain, thus making the area once again viable for redevelopment. More recent channel improvements have effectively accomplished its removal subject to approval and remapping by the Federal Emergency Management Agency (FEMA).

CONCURRENT EFFORTS

Aggregate Extraction Mining and Restoration

A sliver of land abutting the Burlington Northern Santa Fe (BNSF) rail tracks in the Sugar Factory area is subject to mining permit. Upon completion of the aggregate extraction, the impacted land is to be restored and may become available for development. The timeline for extraction is not set at this time, but efforts are being made to accelerate the activity.

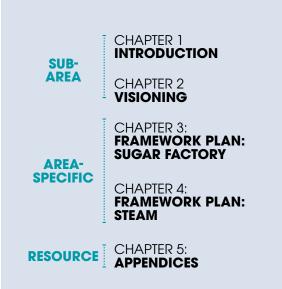
Current Development Proposals

There has been heightened interest for redevelopment within both planning areas. There are currently development proposals in process for about 80% of the Sugar Factory area. There are three projects in process in the STEAM area, one of which comprises about 12 acres of land in a strategic central location. It is anticipated the removal of the STEAM area from the floodplain will result in another 12 acres or so going under contract for development quickly. (see map, page 48)



The 2021 Art & Event Center Hotel Feasibility Study outlined a facility with a variety of performance and practice spaces.

4. HOW TO USE THIS DOCUMENT



The sub-area plan contains both overarching and area-specific information.

Sub-Area Information

Chapter One provides an introduction to the study, including needs and parameters.

Chapter Two describes information that applies to both areas, including a market analysis, a summary of public engagement, and overarching opportunities and constraints.

Area Information

Recognizing that stakeholders are likely to be interested in a specific area, Chapters 3 and 4 are written as 'pull-out' chapters that provide area-specific recommendations. Chapter Three: Sugar Factory and Chapter Four: STEAM provide more detailed opportunities and challenges, as well as unique strategies and roadway sections.

Resources

Resource documents are provided in Chapter 5: Appendices. The full market report, existing conditions assessment, raw community engagement input, and interim alternatives can be found in this section.

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2.1 OUTREACH SUMMARY
2.2 OPPORTUNITIES AND CONSTRAINTS
2.3 PLAN PRIORITIES
2.4 OVERALL IMPLEMENTATION

2.1 OUTREACH SUMMARY

OUTREACH GOALS

Early in the project, the team developed the following goals for community outreach and engagement, to ensure a thoughtful and meaningful process:

- Develop a solid understanding of the community's needs and interests and build on redevelopment efforts currently underway;
- Engage ALL affected stakeholders
 and create an inclusive approach to
 incorporate community voice;
- Gather community input and utilize it to shape the final plan.



A transcript of comments from the Community Forum (top) is available in this document's appendices; students paint their model of the Sugar Factory neighborhood (left); project information board with community comments from Sample the Slope event (right).

OUTREACH PROCESS

In order to meet those goals, the team worked on different fronts: online engagement, community events, stakeholder outreach, youth engagement, City Council updates and presentations, and boards and commissions updates and presentations. Through this process, we were able to engage with a large number of community members and stakeholders with diverse backgrounds and experiences, and to gather feedback rich in content. All these activities are summarized in the table at right.

Project Phase	Existing Conditions	Goals & Strategies	Alternatives	Preferred Plan
Timeline	Dec 2021-Jan 2022	Feb - Mar 2022	Apr - Jun 2022	Aug - Sep 2022
City Council Presentations	Briefing (12/14/21)		Briefing (3/29/22)	
City Boards & Commissions	Presentations & Q&A (TAB, PZC, APPC)	Presentations & Q&A (HPC, LDDA)	Presentations & Q&A	
Engage Longmont	Project Goals Survey	(HPC, LDDA)	(PRAB, SAB, ECAT) Feedback on Plan Alternatives Survey	Share Out (Sep 22)
Community Events	Boards at Longmont Lights (12/10/21)	Community Online Forum (3/2/22) The Slope Event (3/12/22)	Earth Day Outreach (4/22/22)	
Stakeholders Outreach	Meetings with Stakeholders (12/1/21) & Property Owners (1/7/22)	Chamber Commercial Brokers Neighborhood Group Leaders	Developer Workshop (5/18/22)	Sugar Factory Agri Hub Discussion (developer led)
Youth Outreach		Elementary Sch Presentations Presentations	CU Design Studio	
Total No. of Participants	500+	200+	500+	

WHAT WE HEARD

Data from these different outreach activities can be found in the appendices of this report, and is summarized by key themes here. Through the plan development process, these ideas were integrated and have shaped the final plan. **66** Seems to me we could get both affordable housing and urban greenery. Some features like green roofs.

66 I'm a renter in old town, I would move there if I could afford... Maybe 70% income bracket housing?

SUSTAINABILITY

- Encourage green and sustainable building materials and practices (e.g. rooftop solar panels)
- Integrate green infrastructure in the urban landscape
- Favor native & hardy low water plants
- Make space for natural habitat in parks and open spaces
- Re-purpose buildings where possible
- Include electric vehicle infrastructure

HOUSING TYPES

- Accommodate a variety of housing types, from multi-story apartments and condominiums to rowhouses and townhouses
- Make room for more attainable and affordable housing
- Include a mix of uses, such as residential, commercial, retail, community amenities (e.g. childcare, community space, co-working...)
- Be intentional about integrating uses for different demographic groups
- Ensure future developments are equitable & diverse

6 YES to bike, pedestrian, last mile solutions, multiple "bike/ped-ways" to avoid conflict between pedestrians/ e-bikes, and other multi-modal technologies. Need to consider seniors, juniors and physically disabled and their last mile (wheelchair, visibly impaired, etc.) needs.

MOBILITY

- View and integrate bicycle and pedestrian connections as mobility options, not only recreational
- Include bicycle facilities (storage, racks, dedicated lanes & bikeways)
- Connect to St. Vrain River
- Explore implementing a transit hub
- Make the area less car-centric and explore car-free zones

ADAPTIVE REUSE

- Make the Sugar Factory a gateway to
 Longmont
- Reuse / repurpose historic structures (silos, warehouse) where possible, reuse materials (e.g. bricks)
- Highlight Longmont's history: for example use Sugar Factory branding & naming, include museums and arts that reflect the history
- Preserve industrial and agricultural heritage and uses
- Connection to the river & natural environment

GATHERING AND ENTERTAINMENT SPACES

- Include gathering spaces with food & beverages
- Incorporate outdoor programming, entertainment, performing flex space
- Integrate active & exercising space
- Consider water play and natural outdoor space
- Make some open spaces pet-friendly
- Consider placemaking through the arts

2.2 OPPORTUNITIES AND CONSTRAINTS

MARKET SUMMARY

The sub-area plan uses market data from two sources: the December 2020 *Longmont Area Market Assessment*, and a new retail observations and residential market snapshot (neither of which were included in the office and industrial-focused 2020 report). Acknowledging the significant market shifts precipitated by the COVID-19 pandemic, the sub-area plan market evaluation also rechecked the market assumptions and demand potential from the 2020 report.

>> The full Longmont Area Market Summary and Residential Market Snapshot are included in the appendix of this document.

Office

The Longmont area has a scarcity of modern, high quality, flexible and sustainable office space that is attractive to today's modern office users, including larger floorplate space. In addition, Longmont is strategically positioned to capture potential spill over demand from Boulder for companies seeking attractive, lower cost options.

Target opportunities for the STEAM and Sugar Factory areas include:

- Agri-hub employment uses such as agriculture technologies and research and development
- Food and beverage business incubation and entrepreneurship
- Professional and business services, such as finance, engineers, architects, designers, and consulting
- Live-work and co-working spaces to support entrepreneurship and startup small business
- Technology and information businesses looking for flex/office space
- Medical office/healthcare sector

Industrial

The regional and national industrial market has been one of the strongest performing real estate sectors.

Target opportunities for the STEAM and Sugar Factory areas include:

- Smaller-scale flex/warehouse/ manufacturing opportunities <25,000 SF
- Ag/entrepreneurial hub for small scale food producers including R&D, processing, production, and ghost kitchens that prepare online food orders for direct delivery to customers
- Micro-fulfillment centers and distribution hubs
- Adaptive reuse of older warehouses
- Flex/R&D space for technology and life science companies
- Smaller-scale manufacturing opportunities such as natural sciences, renewable energy, natural foods, breweries/distilleries



Delivery or 'ghost' kitchens are a relatively new use that could find a home in either STEAM or Sugar Factory area.

Retail

The pandemic accelerated the retail sector's long-term downturn, and continued weakness in the retail market is expected to continue. The 'great retail reset' continues as convenience and movement toward more mixed-use centers and neighborhoodcentric shopping gain steam. This trend may drive more diverse retail tenant mixes, and adding mixed use elements such as residential, office and micro-fulfillment may be tools toward creating more compelling and attractive retail centers.

Target opportunities for the STEAM and Sugar Factory areas include:

- Food and beverage such as restaurants, cafés and food halls
- Shared kitchens for start-up food
 businesses and culinary 'maker spaces'
- Service and specialty tenants such as healthcare and wellness, education, fitness centers, garden and housewares
- Niche retail opportunities that offer authenticity with a focus on experience
- Experiential retail, active entertainment, smaller independent shops

Residential

Longmont's low inventory of townhouses and condominiums, low market share of total housing sales and faster rising sales prices relative to single family detached houses suggest there is pent up demand for medium- to high-density housing product type. In addition, demographic shifts such as aging adults, and households without children support continued demand for this type of housing.

Target opportunities for the STEAM and Sugar Factory areas include:

- Multifamily housing including for-rent apartments and for-sale condos
- Singe family attached housing such as townhouses, duplexes and triplexes
- Live-Work units containing separate residential and non-residential areas
- Stacked flats
- Compact detached cluster housing such as bungalow courts or cottage courts



LAND USE

OPPORTUNITIES

- Interest is strong from the developer community.
- Vertically and horizontally mixed uses can promote 'one stop' neighborhoods that reduce travel time and distance.

CONSTRAINTS

- Zoning and land use policies could constrain future development.
- Higher commodity and labor costs may deter development as developer returns may not cover cost to build.
- Parking requirements could promote surface parking and reduce developable area.
- Current state law pertaining to housing warranty defects inhibits the developers' interest in constructing some forms of townhouses and condominium units.
- Environmental challenges exist in some areas with the existence of hazardous materials and byproducts



CHARACTER + URBAN DESIGN

OPPORTUNITIES

 The variety and character of existing development in and adjacent to the sub-area can integrate with multiple scales and densities of new development.

CONSTRAINTS

• Extended build-out means that many existing, more industrial uses may remain even while new development takes place over a relatively long period of time.



MOBILITY

OPPORTUNITIES

- First / Last Mile (FLM) improvements can connect the study area with future Bus Rapid Transit (BRT) and commuter rail at the study area's edge.
- The community has expressed strong interest in 'active' transportation such as walking and biking.
- 'Trails as Mobility' existing and new trails through and adjacent to new development can create a truly interconnected multimodal transportation system.

CONSTRAINTS

- Minimal connectivity potential between STEAM and Sugar Factory, due to railroad tracks.
- 3rd Avenue configuration is unappealing, unsafe and challenging for pedestrians and cyclists.

2.3 PLAN PRIORITIES

SETTING DIRECTION

The sub-area plan is guided by five highlevel priorities. These themes are not unique to the areas covered in this plan, but rather represent elements that the citizens of Longmont have expressed a commitment to supporting on a city-wide basis and that Sugar Factory and STEAM areas are particularly suited to support. These five priorities were formulated from public input and from assessment of opportunities and constraints, reviewed and refined by City Council on March 29, 2022, and carried through all subsequent levels of the plan's public engagement process.

HOUSING

Encourage housing options with a range of types and price points



TRANSPORTATION

Provide for both regional and local transportation connections by a variety of travel choices.



DEVELOPMENT

Encourage connectivity between parcels and to the broader Longmont community.



COMMUNITY

Incentivize and encourage cultural arts facilities and community hubs for creativity and innovation.



SUSTAINABILITY

Focus long term efforts on sustainable building and development practices.



2.4 OVERALL IMPLEMENTATION

ZONING MODIFICATIONS

The STEAM area is situated in the Mixed Use-Downtown (MU-D) Zone District that allows for a wide variety of commercial and residential uses, including single family housing subject to specific development requirements. Parts of the Sugar Factory Area located within the City limits are zoned Mixed Use-Employment (MU-E) that provides for a range of uses from light industrial to commercial to housing. Housing, however, is identified as only being permitted as a "secondary use" to employment-producing development. Further, single family detached housing is not permitted in the MU-E District. It is expected that the balance of the Sugar Factory area currently not within the city limits will be zoned MU-E upon annexation.

Significant development challenges to creating an urban environment exist, based on some of the City's developmentrelated codes. Elements that may require modification are discussed in the text that follows. *Height.* The Zoning Districts applicable to development within these areas presently limits the heights of buildings to 4-stories within both Districts, with height incentives that may cumulatively allow up to seven stories. The requirements for additional height include proximity to a transit facility, inclusion of affordable housing and vertical mixed-uses. Neither zone district sets a minimum height requirement, thus allowing for single story buildings to be constructed. The current minimum and maximum height restrictions within the contemplated zone districts should be evaluated and adjusted to enhance development opportunity.

The Districts are also silent to any requirements for ground floor commercial space in multi-level buildings. This element too should be addressed as it could have an impact on implementing the vision for an activated higher density urbanized area in both locations. Height-related recommendations for further study include:

- Increase or eliminate the maximum height allowance/restriction in both the MU-E and MU-D Zone Districts. Given the STEAM area is currently zoned MU-D District and includes the historic downtown area north of 2nd Avenue, care should be taken to also preserve the historic parts of the downtown character. As for the Sugar Factory area, the adjustments could be benchmarked on the existing larger factory mill and silo structures.
- Set minimum height requirements for commercial and residential buildings dependent on location and development opportunity.
- Identify areas where ground-floor commercial is to be required in a multistory building (i.e. Main Street), establish minimum "frontage" requirements, and codify in regulatory framework.

Building Setbacks and Utilities. A primary function of urban-type development is to bring buildings closer to the roadways. The continuing imposition of easements outside the public street right-of-way have the tendency of pushing the buildings further away from the street. This is particularly challenging relative to utility easements, where providers are increasingly seeking separate easements within private property which to site infrastructure.

Setback and utility-related recommendations for further study include:

 Establish policy requiring all public utilities to locate local facilities within the public street right-of-way or upon City property with authorization.

Street Section Design and Emergency

Access. In both the STEAM and Sugar Factory areas the intent is to size the streets appropriately to promote and support the pedestrian experience in an urbanized area. However, the City's current street standards continue to be oriented towards suburban environments, generally having wider travel lane widths and incorporating longer, sweeping curbs at intersections to facilitate faster vehicular turning movements. The width of streets is of particular concern given a current fire safety requirements for providing clearance areas for ladder trucks adjacent to any buildings 3-stories or more in height. This is contrary to a preferred urban street section having travel lanes 9-10 feet in width along with on-street parking.

Street section related recommendations for further study include:

- Formulate strategy or conditions to rightsize fire apparatus access requirements.
- Create, adopt and codify appropriate street sections for urban-style development.

Parking. The current City requirements for parking are rather significant and will require unused spaces. While there is some leniency on meeting the requirements, by virtue of incorporating affordable housing or preparing a parking study, the hurdle to meet the requirements can deter development interest. The Code also does not include conditions or restrictions on the type (surface or structure) or placement or design of parking areas, particularly surface lots on neighborhood streets. Proposed amendments setting maximum parking requirements in the MU-D and MU-C districts have been recently approved by City Council.

Parking-related recommendations for further study include:

- Formulate alternative parking requirements.
- Establish parameters for the placement/ design of surface parking so as to minimize visibility from public streets, parks in neighborhoods, and spaces.
- Establish parameter/allowances for shared parking arrangements.
- Evaluate elimination of minimum parking requirements.



New neighborhood plaza and parks will need to establish responsibility for long-term maintenance.

Storm Detention/Water Quality. The City's on-site detention and water quality requirements can pose challenges to smaller-scale developments and are not consistent with creating urban environments. Both the Sugar Factory and STEAM area, having proximity to City-owned open space, provides the opportunity to create "regional" facilities designed in a manner to enhance wetlands and better protect the adjacent St. Vrain Creek/River with the development community contributing financially.

Storm and detention-related recommendations for further study include:

- Prepare studies to incorporate "regional" storm detention and water quality basins on adjacent or nearby City property.
- Encourage urban hard-space plazas and courts that support multiple functions and programs for satisfying open space requirements.

Parks and Open Space. The sub-area plan calls for the development of smaller parks and public spaces throughout both project areas. The small size of these spaces provides a challenge for city departments that rely on economies of scale to maintain parks. The City has not established criteria relative to efficient maintenance of these smaller public spaces.

Parks and open space-related recommendations for further study include:

- Encourage urban plazas and courts that support multiple functions and programs to satisfy individual project open space requirements
- Develop strategy for incorporating smaller public spaces into City parks inventory and explore mechanisms for operations and maintenance.

REGULATORY OPPORTUNITIES

The City's Zoning Ordinance and development-related standards applicable to the City's Land Development Code (LDC) regulates the design and development standards that are uniformly applied throughout the City. Many of the standards and criteria have evolved over the years to support the outward growth of the City. Thus the roots of the LDC are supportive of suburban rather than urban development. But now, as a more matured City where much focus is now on infill and redevelopment, the current standards and criteria do not necessarily align with current development interests or sustainable design. The unique development opportunities and interests associated with the Sugar Factory and STEAM properties require an evaluation, and as needed, modification to some of the City's design criteria and standards. Both areas are envisioned to be developed in a manner incorporating, among other things, higher densities and height, tighter street sections, more lenient and/or maximum parking requirements, building setbacks, and storm detention/water quality facilities.

It would be highly challenging, however, to rework the City's codes and standards to accommodate the interests of varying development areas throughout the City, primarily due to the associated complexity that would arise and length of time required. Thus, a more pragmatic approach would be to create a regulatory overlay district establishing detailed development standards and criteria distinctive to both the Sugar Factory and STEAM areas and ideally address future infill and redevelopment sites. While some aspects may be applicable to both areas there are other desires and expectations that are more specific to each area.

- Evaluate and identify regulatory challenges within both the Sugar Factory and STEAM areas independent from one another.
- Establish boundaries of overlays districts and codify development allowances/ restrictions accordingly.

PUBLIC PRIVATE PARTNERSHIPS (PPP OR P3)

The significant impediments to preparing these areas for development include the amount and cost of infrastructure and improvements (including environmental remediation) required; the multitude of property ownerships; and the anticipated incremental construction of infrastructure. The incremental installation of infrastructure as development occurs is not in the City's or nor developers' best interest due to its inefficiencies and eventual design challenges. Likewise, the City and a "first developer in" does not necessarily have the desire or ability to incur the extensive cost of building the entire system up front. Public-Private Partnerships provide an effective means of fulfilling these improvements and absorbing the costs without putting an excessive burden on any party or the public at large.

The range of partnerships has the ability to include the city government, other governmental and guasi-governmental agencies, property owners, and developers utilizing a multitude of financial mechanisms from City capital improvement contributions to tax increment funds to property tax proceeds to developer equity. Not only can a public-private partnership provide the mechanism for constructing the infrastructure or preparing property for development, but also offers a means for long-term maintenance and operations of public facilities, thus minimizing or alleviating such responsibilities from the City. Next steps in this area include:

- Gauge the interest of property owners in creating a Business Improvement District (BID), a General Improvement District(s) or Metropolitan District to generate property tax revenue.
- Identify needed improvements and associated costs to be funded by a district.

- Establish a General Improvement District(s) or Metropolitan District as applicable and viable.
- Create a new or expand the existing urban renewal area to include unincorporated areas upon annexation into the City.
- Use public-private partnerships to make redevelopment opportunities attractive for private investment.
- A P3 arrangement can provide the mechanism to solicit and secure financial grants from a multitude of sources including federal government, nonprofits, and foundations.

POTENTIAL INFRASTRUCTURE AND FUNDING MECHANISMS

General Improvement District (GID)

A GID is a guasi-governmental entity, permitted by Colorado Revised Statutes, that can provide for financing, operations and maintenance within established district. boundaries. The GID, while operating as an independent entity, is created by a municipality as a means of facilitating the construction, operation and maintenance of infrastructure within a defined subarea of the municipality. Funding for such improvements and operations is through the imposition of an additional property tax mill levy on properties within the district. The City Council that serves as the Board of the GID, has effective control for funding of improvements and operational costs.

Business Improvement Districts (BID)

Another mechanism available to assist in funding infrastructure improvements, providing maintenance and promoting a development is the BID. Created by the developer, an additional property tax mill levy can be imposed on commercial property within the District. The additional tax cannot be applied against residential properties. The regulatory authority is a board of directors either selected by the property owners or, as an option, the city council can be seated in such a capacity.

Metropolitan (Metro) District

The Colorado Revised State Statutes permit land developers, with the approval of local municipalities, to create a Metro District where, through the imposition of an additional property tax mill levy on properties within the District, the District provides a means of financing, operating and maintaining public infrastructure and amenities. The City's current Ordinance pertaining to Special Districts currently permits the creation of a Metropolitan (Metro) District with strict limitations on the incorporation of residential development. The current ordinance only permits the incorporation of residential development into a district as part of a mixed use project. Residential development as part of a mixed use district is limited to not more than 50 percent by gross square footage of the district. This residential restriction applies to both owner-occupied units and investorowned buildings such as apartments. This square footage restriction effectively eliminates the ability to pursue the creation of a Metro District to support development of a large scale mixed use project.

Urban Renewal District (URD) Tax Increment Funding

The Longmont Urban Renewal Authority (LURA) was created by the Longmont City Council to facilitate investment and redevelopment activity in areas determined to have "blighted conditions". LURA has the ability to generate and reinvest incremental tax revenues, known as TIF, towards assisting in funding public improvements and redevelopment projects. The TIF represents the increase in tax revenue generated from new development activity over the tax revenue generated prior to the development (referred to as the base). It does not involve an increase in the taxes paid by property owners, but rather is premised on existing taxing mill levies imposed by the various taxing bodies such as schools, counties, special districts, and municipalities. Given the TIF is generated from these entities' mill levies, LURA negotiates the amount of TIF that can be applied towards reinvestment into a development or project. The STEAM area and a limited section of the Sugar Factory area are currently situated within an established urban renewal district. The balance of the Sugar Factory area, currently outside the City limits, is a strong candidate for such designation by the City Council upon annexation.

"Brownfields" Grants and Loans

A "Brownfield" is defined as a property(s) either having, or perceived to have, some level of environmental contamination. This generally applies to an older area(s) of the city that is showing or susceptible to disrepair or decay, and having seen little to no private investment for many years. The U.S. Environmental Protection Agency (EPA) and the Colorado Department of Public Health and Environment (CDPHE) offer funding to assist financially in the assessment and remediation of environmental contamination including asbestos product. Funding ranges from direct grants to cities or non-profits. Land owners and developers are not eligible to receive remediation grants. However, they are eligible to pursue low-interest loans having extremely flexible and suitable terms. Grant proceeds from EPA are extremely competitive given the interest for such funding across the nation.

Longmont Downtown Development Authority (LDDA)

The LDDA boundaries cover a significant portion of the STEAM area incorporating property as far south as the south side of 1st Avenue and a large, vacant 12 +/- acre parcel situated between 1st Avenue and Boston Avenue east of Main Street. Similar to the LURA, the LDDA has the ability to capture and reinvest tax increment funds towards improvements, development, maintenance and operations within its district boundaries. In addition, the LDDA has the ability to raise revenue against a property tax mill levy that is currently set at 5 mills, providing another source of revenue to stimulate and support downtown development and activities. The LDDA has the ability to adjust its boundaries subject to a level of property owner support and consent of the Longmont City Council. The LDDA mill levy can also be increase, raising additional revenue, subject to approval of eligible voters within the district.

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FRAMEWORK PLAN: SUGAR FACTORY

3.1 OVERVIEW
3.2 OPPORTUNITIES AND CONSTRAINTS
3.3 STRATEGIES
3.4 ROADWAY SECTIONS

3.

3.1 OVERVIEW

DESCRIPTION

For the purposes of this study, the Sugar Factory area is defined as a roughly triangular collection of parcels comprising approximately 180 acres. It is bounded by the existing, active railroad storage track to the southwest, Highway 119/Ken Pratt Boulevard to the southeast, additional active rail and Rogers Road to the north, and a small portion of 3rd Avenue at its eastern extremity. A significant portion of the land along the southern, diagonal boundary currently serves wetland/drainage functions; the eastern portion of this area is slated to be mined/reclaimed in a near- to mid-term timeframe.

EXISTING USES

The site's most notable features are the historic sugar factory building itself, along with its smokestack, silos and associated outbuildings. The Factory building is red brick on a structural steel frame; the structure is vacant and in disrepair, having also sustained significant damage in a somewhat recent vandalism-set fire. The silos are still in use by the agricultural company immediately adjacent on the north side of Sugar Mill Road.



Scenes of the Sugar Factory area (clockwise): the factory cluster with the Rocky Mountains beyond; the main building, smokestack and silos; the historic Tin Shed; a winter cyclist on Sugar Mill Road; inside the factory.

Also notable is the so-called Tin Shed, an approximately 460-long metal structure immediately south of the factory building. A large fenced yard area around the shed is used for RV and large vehicle storage. A seed company and landscape materials center occupy that portion of property between Rogers and Sugar Mill Roads; both companies are active.

CURRENT DEVELOPMENT PLANNING

Several developers are actively planning the bulk of the area south of the east-west railroad/Sugar Mill Road, with plans in various stages of development. The portion of land west of 119th Street will require brownfield mitigation, soils stabilization and annexation into the City of Longmont; the portion of land east of 119th is already within City boundaries. The land between Sugar Mill and Rogers Roads is a potential, likely later area of development that is included in this plan to ensure appropriate transition between the primary largely vacant redevelopment area and the light industrial south of 3rd Avenue.

TOPOGRAPHY AND VIEWS

The site slopes from northeast to southwest, with a notable highpoint in the northeast corner. The height of the historic structures, particularly the factory smokestack, create an iconic, uniquely Longmont view of the historic factory, the City's tree canopy spread behind it, and the Rocky Mountains rising in the background.

HISTORIC REUSE

The City and community strongly hope that some portion of the historic Great Western Sugar Factory structures can be re-used. The developer with an option on these properties



The historic Great Western Sugar Company complex, seen from the east.

has expressed similar priorities and is currently exploring the feasibility of various re-use options, although how many of the structures are candidates for restoration is unclear at this time. Simultaneously, the City is pursuing brownfield mitigation of the larger factory site.

>> A full summary of existing physical conditions can be found in the Design Brief, included in the appendix of this document.

3.2 OPPORTUNITIES AND CONSTRAINTS



OPPORTUNITIES

- Inclusion of urban agricultural uses can increase use of hard-to-use and 'leftover' parcels, while lending unique character to the area.
- A totally new roadway system offers flexibility in block size and potential for different housing types.
- Developers have expressed interest in aggregated open space that builds on existing riparian and open space assets.
- There is opportunity for restoration/ adaptive reuse of historic buildings.
- The site can accommodate a diverse range of development types.

CONSTRAINTS

 Proximity of existing, active rail tracks can limit the distribution of land uses, particularly residential, due to noise and vibration.



CHARACTER AND URBAN DESIGN

OPPORTUNITIES

- The area offers opportunity to express local history in the character of new development.
- As a 'blank slate', the area can promote consistent, coordinated character.
- Location, topography and existing historic structures offer opportunity to create a striking visual gateway to the City.
- Redevelopment could create a thriving community activity center

CONSTRAINTS

- Re-use of historic building can be difficult due to internal configuration; financial feasibility could result in a re-use strategy different than that discussed in community visioning.
- Application of conventional/ standardized infrastructure requirements will limit development.



OPPORTUNITIES

- New roadway sections can promote safer walking and biking and contribute to placemaking.
- Reconfiguration of existing bus routes or incorporation of microtransit could enhance external connectivity.
- A future roadway connection to 1st or Boston Avenues could be made across the railroad tracks at or below grade.

CONSTRAINTS

- Minimal access points to connect with adjacent development.
- Limited access opportunities to St. Vrain Creek corridor.
- Existing at-grade railroad crossings limit flexibility of new roadway system.

3.3 STRATEGIES



Historic Core

- Preserve and restore the historic Sugar Factory buildings in a way that integrates into the new community.
- Emphasize the historic core as the center of the development by reducing height and density of development as it moves outward from the core.
- Include flex multi-use spaces that can evolve or adapt to fit a variety of uses.

The restored sugar factory buildings will act as the visual and physical 'town center' of the development. Although which buildings are retained and restored, and the uses that they will contain, will be determined by the market, it is anticipated that the Sugar Factory will be a true mixed-use center with both public and private uses, such as retail, food and beverage, office, potentially maker-type uses. It will also include publicly accessible open space that will feature the historic buildings as a backdrop for formal and informal events.

High Intensity Residential/Mixed-Use

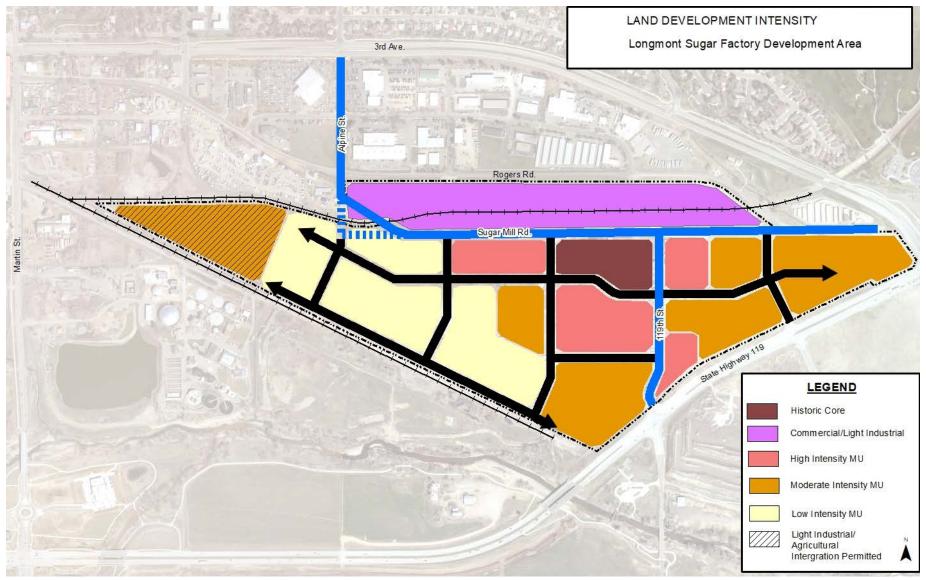
- Recognize and develop as a Mixed Use Urban Center.
- Include employment opportunities that reduce out-commuting.
- Provide a spectrum of housing options, including 'missing middle housing' and higher density multi-family.
- Arrange uses to promote walking and biking to dining, retail, employment

Moving outward from the historic core, development will offer horizontally and vertically mixed uses. Higher density housing such as apartments and condos may be concentrated as a next 'ring' of development outside the sugar factory blocks, or can be spread throughout the area in mini-nodes. Employment uses and 'missing middle' residential products should also be included. It is anticipated that even these 'missing middle' buildings may still host a mix of uses, including home occupations, studios, or even ground floor small-scale commercial.

Supportive Residential

- Provide integrated housing/amenity options that appeal to a spectrum of life stages.
- Include small-scale, aggregated private open spaces.

The outer edges of the community will offer a variety of housing options, with a focus on missing middle products such as duplexes, fourplexes, and cottage courts. Since the roadway system will be built along with the development, block sizes can be designed to accommodate a variety configurations. These residential options are encouraged to include small-scale, private but still aggregated open space, such as shared courtyards. Single family detached housing product is not suitable in the Sugar Factory planning area.



Key land use elements within the Sugar Factory redevelopment area



Historic re-use is at the heart of the community's character, and may take many forms including historic structures as backdrop, restoration and internal renovation of the structure, and re-use and expansion.







Higher intensity mixed-use residential should be scaled to integrate with the historic buildings, and may include a variety of uses at the ground floor.



'Missing Middle' housing can include a diversity of multi-family housing types, such as cottage courts (left), townhomes (middle) and stacked flights (right), among others.

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Open Space

- Provide variety and scale and type of public space.
- Aggregate main open space.

A feature of the community should be a public space that can serve as a "festival plaza" in proximity to the historic Sugar Factory buildings. Enhanced streetscape will connect this space physically and visually to the community's main open space in the area's southern portion. Aggregating public open space into a single location allows the community to optimize use of the core development area, and to capitalize on the proposed park area, which is slated to be mined and restored. This more park-like green space will provide contrast to the more urban character of the festival plaza. providing residents and workers a larger variety of formal and informal programming opportunities. It is anticipated that both spaces will be constructed in earlier phases of development.

Urban Agriculture

• Use urban agriculture to define character, buffer uses from rail, and optimize utility of hard-to-use parcels.

The sugar factory area should reflect the city and the site's agricultural history, as a larger theme but not a literal recreation of past activities. Urban agriculture - such as greenhouses or educational facilities provides an opportunity to capitalize on hard-to-use parcels at the site's 'corners' and to provide a spatial and potentially noise buffer from the active rail on the site's northern and southern sides. Uses should be selected for both form and function, since some of the identified locations for this use are also high visibility and will act as a gateway for the community. Uses may be overseen by a community organization, or through partnership with local agricultural interests







Urban agricultural uses could be chosen for both form and function, depending upon their location. Integrated greenhouses, community gardens and education pavillions might all be viable options.

CHARACTER AND URBAN DESIGN

Suburban vs. Urban Design

- Site layout will promote walkability and human scale through appropriate block size and an enhanced public realm.
- Buildings of all types will use minimal setbacks and provide horizontal and vertical variation in the façade.
- Vehicular access drives will be limited and parking will be located behind buildings or in parking structures.
- Building systems and site layout will be designed to enhance fire and emergency access and minimize roadway widths.

The sugar factory community will be built on a walkable, human scale with a focus on urban principles of design. Many of these principles may be defined in more detail in later developer-led submittals, the following items provide a snapshot of community character. *Walkability.* We feel most comfortable in places that are designed for us as humans - designed to make us feel safe, create reasonable distances to walk or bike from place to place, provide visual interest and variety at street level, and where streetscapes are treated as a critical part of placemaking. The community will strive to use smaller block sizes and to create roadways of reasonable width for use by all modes. Uses will be mixed, so that daily needs including walking, shopping and employment can be met within walking or biking distance of home.

Human Scale and Enclosure. Buildings will be located at or near the pedestrian sidewalk - with no or minimal setbacks - to create a consistent street wall and provide enclosure and a sense of scale. Façades will vary vertically and horizontally to avoid monotony, with the height of the building giving reasonable consideration for access to light and air. Vehicular access and parking. To promote safe walking and biking, curb cuts and driveways will be limited to secondary streets, and should be shared between properties when feasible. Vehicular parking should be interior to the block where possible, and if structured parking fronts the public realm the façade should be wrapped with active ground floor uses such as retail. If not wrapped, it should be enhanced with architectural detail and/or art.

Compact Roadways. Curb to curb widths should be as compact as possible while still providing full mobility for pedestrians and bicycles. Emergency access is critical, and should be provided across all community systems so that roadways will not be needlessly wide.

Images (right): the Sugar Factory area will provide an urban aesthetic that may draw from modern, industial and even European aesthetics.



Festival Plaza

- Provide a flexible, urban space that can host a variety of events.
- Provide an enhanced linear park or greenway connection to the area's southern, aggregated open space.

The festival plaza will be designed as a multi-use urban space that can host a variety of events, from markets and fairs to movie nights and music. Design should maximize flexibility with elements like full electrification and numerous hookups, movable seating and thoughtfully placed planting and shade. Development should provide direct visual and physical connection, as well as enhanced wayfinding, between this northern space around the sugar factory to the area's southern aggregated green space.

Views and Gateway Parcels

- Promote culture and identity of Longmont and existing context through inclusion of art and focus on history.
- Capitalize on and enhance westward views at the site's highpoint near Ken Pratt/3rd Avenue.

The site is a bit of an island, largely separated from adjacent uses by railroads and arterial roadways; for this reason, the site's limited entry points are especially important in establishing the character of the community. Gateway sites at the north and south should include large-scale visual elements that reference the site's history and current identity. In addition to these functional entry points, community design should also emphasize westward views of the sugar factory and the Rocky Mountains, particularly from the site's highpoint in the northwestern corner.

Sustainable Features and Technology Pilots

- Create incentives for green infrastructure
 and sustainable development
- Integrate renewable energy throughout the study area whenever possible.
- Brand the community as a innovator in new energy technologies and promote small-scale pilots.

Building the community from the ground up, including all systems, provides an opportunity for innovation. Developers should create incentives for green infrastructure and sustainable development practices at both the horizontal (site planning, adjacencies, multimodal systems) and vertical (building orientation and materials, renewable energy) scales. Metrics such as those found in the USGBC's Leadership in Energy and Environmental Design (LEED) and ISI's Envision system are useful resources, but emphasis should be on performance rather than formal certification. New residents should be aware of and even choose the community because of its emphasis on sustainability and innovation. The community may include an evolving selection of pilot projects, some of which may become permanent and some which may be replaced.

Green Infrastructure

• Design streetscape as an integrated part of stormwater management.

Roadways as an impervious surface represent a significant contribution to site stormwater, and new approaches and technologies can upgrade them from a source to a solution (or, part of a solution). Roadways and the adjacent streetscape will be designed with a variety of green infrastructure strategies, potentially including but not limited to stormwater planters, bisowales, cisterns, infiltration rain gardens, disconnected roof drainage and permeable paving (street or sidewalks).



Roadway Hierarchy

- Prioritize pedestrians and bicycles over motorized vehicles on internal streets.
- The principal project entry street should be creatively designed as a central pedestrian retail/restaurant spine.
- Support higher levels of vehicular travel on 119th Street and Sugar Mill Road.

An east-west Pedestrian Spine will act as the site's primary pedestrian area, lined with shops, cafés and other active ground floor uses. This detail should extend across 119th Street and into the first block of the eastern development area, to ensure an integrated development character. Driveways should be prohibited or minimized.

Sugar Mill Road and 119th Street will be the main circulation corridors in and out of the site, and will ultimately gather all vehicular traffic coming into or out of the site. They will be designed with these higher traffic levels in mind, while still providing safe and unbroken pedestrian and bicycle circulation along their entire lengths.

Parking

- Capture commercial and retail vehicle parking at the edge of the historic core in an area parking structure.
- Shared parking will reduce the overall amount of land dedicated to vehicle storage.

The entire sugar factory community will emphasize pedestrian safety, particularly the historic core. To minimize unnecessary circulation within this core pedestrian area, including the well-known circling for parking, an district parking structure off of 119th Street will capture commercial, restaurant and other non-residential visitors/workers as they enter the community. Sharing parking between uses with opposite or minimally overlapping time demands – such as daytime shops and evening entertainment venues – will reduce the overall number of parking spaces needed.

Trails as Mobility

- Create a connected system of on- and off-street multiuse facilities.
- Create a multiuse trail connection into site from Pace Street/3rd Avenue.
- Enhance 3rd Avenue to be truly multimodal and sized appropriately for future transportation needs.
- Install ped/bike bridge across St. Vrain Creek on northwest side of Ken Pratt Boulevard
- Prioritize connectivity to 1st & Main transit center and downtown.

The sugar factory community will emphasize balanced mobility and will elevate trails from a strictly recreational use to an integrated part of the overall circulation system. The system will mix on-street facilities such as bike lanes with separated and off-street facilities, such as cycletracks and multiuse

trails, to ensure a highly granular system that provides internal and external connectivity. Critical connections include the adjacent St. Vrain open space corridor, the STEAM subarea, and the First & Main transit center. Key elements of this approach include a new trail connection into the site from the north at Pace Street and enhanced bike and pedestrian considerations on 3rd Avenue. 3rd Avenue enhancements could include leading bike-specific signals with intervals to increase bike visibility at signalized intersections; elimination of channelized right turns and prohibition of right-turnon-red to mitigate right-hook conflicts; and median pedestrian refuges and corner bump outs to reduce crossing distance. The City has already defined the southern side of the St. Vrain Creek as primary circulation, with the northern side reserved for wildlife; to connect with existing south-side trails, community development should introduce a pedestrian and bicycle bridge across the creek, immediately west of Ken Pratt Boulevard.

Transit

- Modify existing bus routes, introduce new routes into the site or incorporate microtransit to provide transit coverage.
- Plan for micromobility, allowing space for dockless bikes and bike-n-ride shelters.

Bus connections should work in tandem with trail and micromobility improvements to provide multiple options to connect to the First & Main transit center to the greater Longmont community at-large. The development process should work with RTD and other transit operators to provide transit service internal to the community, either via route modifications/extensions, new routes. Development should also work with RTD and other transit operators to optimize transit stop locations, relative to adjacent uses and desired roadway character. In addition, streetscape should be designed to accommodate parking of dockless bike share, with additional consideration given to the potential location(s) of park-n-ride shelters that allow secure, 24-hour parking of personal bikes.



Existing railroad crossings should be enhanced to provide pedestrian and bicycle facilities.

Railroad Crossings

- Enhance existing grade crossings on Sugar Mill and Rogers Roads.
- Pursue a new multimodal or at least ped/bike railroad crossing at or below grade at the western 'point' of the site.

Acknowledging the extensive coordination needed to relocate existing at-grade crossings, which may also require giving up other crossings in a 2-for-1 ratio, the existing grade crossings on Sugar Mill and Rogers Roads are considered workable for the new development. They will, however, require upgrades to allow safe bicycle and pedestrian crossing; enhanced signals are also likely to be needed. For cyclists and pedestrians wishing to access the community from the west, the recommended route is to travel north on Martin and use the existing at-grade rail crossing just north of 1st Avenue, then proceed east along a new trail paralleling the tracks. Where the northernmost rail splits from the diagonal storage track and continues east, a new underpass will allow pedestrians and cyclists to enter the triangular area of the sugar factory area and continue on the community's internal trail and roadway network.

Inter-Area Connectivity

 Investigate/obtain long-term options to better connect the STEAM and Sugar Factory areas.

Opportunities may arise in the future to enhance connectivity between STEAM and the Sugar Factory Area, and these opportunities should be monitored and optioned as appropriate. Notable opportunities could include relocation of the existing water treatment plan and/or modification or relocation of the rail storage track. Some combination of these options could make a direct roadway connection eastward into the Sugar Factory Area possible, in the area of Boston or 1st Avenues. Additionally, parcel redevelopment near 2nd Avenue and Martin Street and potential extension of 2nd Avenue to Rogers Road OR extension of Weaver Park Road in an 's' to Martin Street could both be long-term connectivity enhancements.

3.4 ROADWAY SECTIONS

Modal Balance

All streets within the Sugar Factory Community will be Complete Streets that offer safe and comfortable mobility for people walking, biking, taking transit and driving. All streets prioritize pedestrians and cyclists, while still acknowledging that the area's main entry points – Sugar Mill Road and 119th Street – will need to move significant volumes of motorized traffic.

Flexibility

The sections that follow prioritize safety and scale; regardless of mode of travel, all residents workers and visitors should feel that they can move throughout the community without conflict, and that they *belong* on the street (as opposed to feeling 'misplaced' and vulnerable, for example, in a cardominated environment). The sections are flexible, and can and should be adjusted to reflect the type and density of land uses on each block. Certain elements, such as bike lanes, may change position or width depending upon pedestrian conditions, demand for on-street parking, or intersection configuration (curb extensions or no curb extensions, for example).



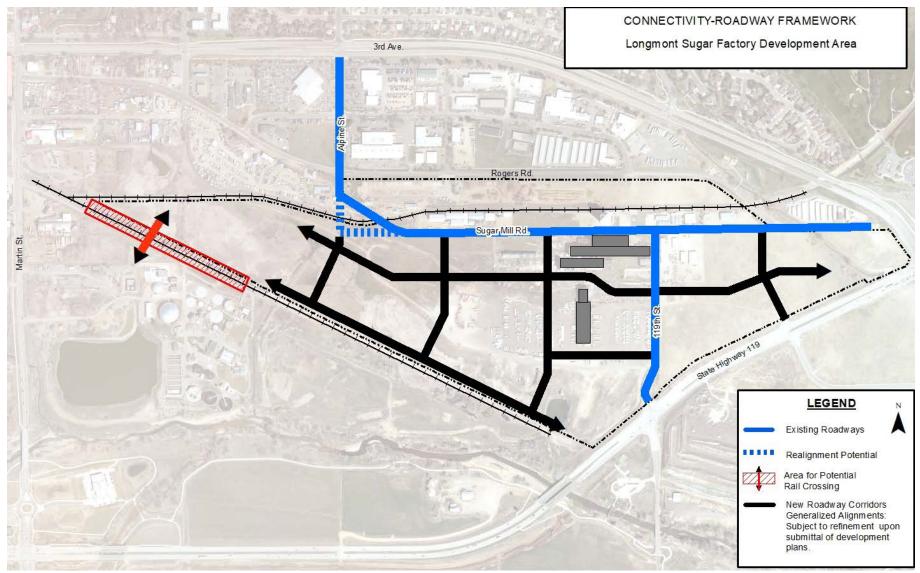
New and enhanced roadways will ensure a safe walking, biking and driving environment for all users in the Sugar Factory area.

>> The following sections are the same in Sugar Factory and STEAM. They are included in both chapters so that each chapter may act as a stand-alone guide to development in each area: Gateway Collector (small dimensional difference due to existing ROW); Neighborhood Street; Local Street; Shared Street; Alley.

New Patterns

These roadway sections differ from Longmont's current standards. Many streets within the development area will be short segments, and may provide opportunity for the City to pilot new technologies or configurations. They may also be a call for the City to reconsider their policy and equipment relative to issues such as fire services; as existing vehicles are replaced, smaller vehicles may be better matched to narrower cross-sections and allow later phases of development to use narrower sections.

As a blank slate, the sugar factory area offers a unique opportunity to depart from business-as-usual, and being to integrate new patterns of sustainability, in both physical form and policy approach.



The Sugar Factory area will require new and enhanced roadways to create a human-scaled, multimodal environment that connects to adjacent development.

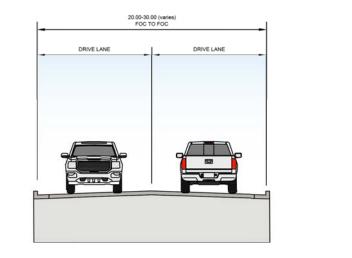
GATEWAY COLLECTOR

- Sugar Mill Road
- North 119th Street

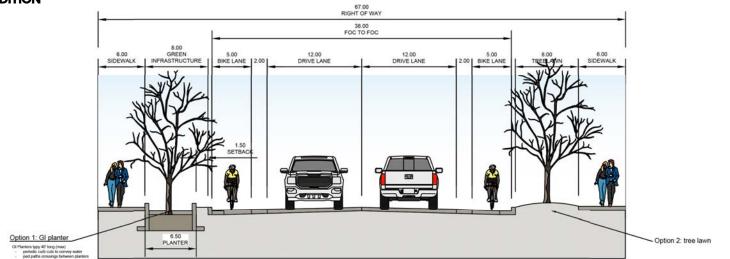
These roadways will be the 'workhorse' streets of the development, with an emphasis on moving vehicles in and out of the development from external access points. They will, however, still provide safe pedestrian and bicycle facilities. Roadway character will be slightly less urban than the rest of the development, and street tree plantings may be in green infrastructure planters or tree lawns; lower levels of pedestrian travel also allows for narrower sidewalks. Bicycle facilities should be included; although bike lanes are shown in the sections, depending upon design speed and levels of service/freight traffic, combining the pedestrian sidewalk and bike lane into a behind-the-curb multiuse path may be an option.

	Appropriate Elements	Gateway Collector
	Ped Lighting	х
	Street Furniture	
	Street Trees	х
	Micromobility Parking	
Public	Mobility Hub	
Realm	Loading Zones	
	Parklets	
	Transit Stops	х
	Paid Parking Kiosks	
	On-Street Parking	
	Crosswalks	
Safety	Curb Bump-Outs	
	Driveways/ Curb Cuts	х
Green	Bioretention Facilities	х
Infra-	Pervious Paving	
structure	Stormwater Tree Trenches	х

EXISTING CONDITION



PROPOSED CONDITION



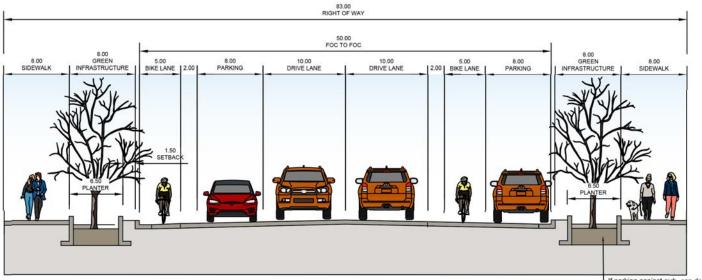
PEDESTRIAN SPINE

• To be constructed

This east-west roadway will be named when the community develops. This street will act as the community's main commercial and retail street. It offers the highest level of urban design in both materials and furnishings, and includes a generous frontage zone for café seating and outdoor retail displays. Because it prioritizes pedestrians above all other modes, curb cuts will be prohibited in core blocks (block to be identified as circulation system is designed). On-street parking should be managed to encourage frequent turnover and discourage all-day office or residential parking.

	Appropriate Elements	Pedestrian Spine
	Ped Lighting	х
	Street Furniture	х
	Street Trees	х
	Micromobility Parking	х
Public	Mobility Hub	х
Realm	Loading Zones	
	Parklets	х
	Transit Stops	
	Paid Parking Kiosks	х
	On-Street Parking	х
	Crosswalks	х
Safety	Curb Bump-Outs	х
	Driveways/ Curb Cuts	
Green	Bioretention Facilities	х
Infra-	Pervious Paving	
structure	Stormwater Tree Trenches	х

PROPOSED CONDITION



If parking against curb, can do intersection bump-outs to narrow crossing distance; planter would widen approx. 8' into space of parking lane.

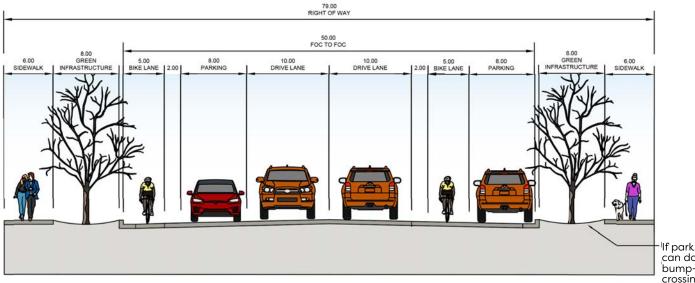
NEIGHBORHOOD STREET

• To be constructed

The street has the same curb-to-curb width and space distribution as the Pedestrian Spine, but with a more compressed sidewalk/amenity zone. This street type will be most common in high intensity residential/mixed-use areas or mini-nodes, where pedestrian and vehicular traffic is expected to be heavier than less dense, predominantly residential zones. Street trees may be planted in a variety of conditions, from stormwater planters to swales, depending upon the character and density of adjacent development. Bicycle facilities may be against the curb, or between onstreet parking and travel lanes; condition will again depend on specific land use adjacency and intersection configuration.

	Appropriate Elements	Neighborhood Street
	Ped Lighting	х
	Street Furniture	
	Street Trees	х
	Micromobility Parking	х
Public	Mobility Hub	
Realm	Loading Zones	х
	Parklets	х
	Transit Stops	х
	Paid Parking Kiosks	х
	On-Street Parking	х
	Crosswalks	х
Safety	Curb Bump-Outs	х
	Driveways/ Curb Cuts	х
Green	Bioretention Facilities	х
Infra-	Pervious Paving	х
structure	Stormwater Tree Trenches	

PROPOSED CONDITION



-If parking against curb, can do intersection bump-outs to narrow crossing distance; planting would widen approximately 8' into space of parking lane.

SHARED STREET

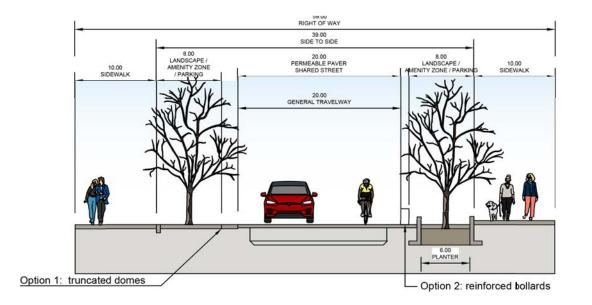
location TBD

A shared street is intended to 'expand' public open space during programmed events; if included in future Sugar Factory area, it is most likely to be adjacent to a park or plaza associated with the historic Sugar Factory buildngs. Due to limited circulation options within the area - particularly for east-west connections- it is also anticipated that a shared street would be a north-south street, so as not to disrupt major east-west connections.

This potentially curbless 'pedestrian mall' can be closed for festivals and events; It will and will use tactile paving or bollards to mark edge of drivable area. Sidewalk is shown as a minimum 10' in width, but is anticipated to vary (potentially much wider) based on the design of adjacent structures. This type of street is sometimes called a 'woonerf' and is truly designed as a pedestrian mall in which motorized vehicles are sometimes allowed as 'guests'.

	Appropriate Elements	Shared Street
	Ped Lighting	х
	Street Furniture	х
	Street Trees	х
	Micromobility Parking	х
Public	Mobility Hub	
Realm	Loading Zones	
	Parklets	х
	Transit Stops	
	Paid Parking Kiosks	х
	On-Street Parking	х
	Crosswalks	х
Safety	Curb Bump-Outs	
	Driveways/ Curb Cuts	
Green	Bioretention Facilities	х
Infra-	Pervious Paving	х
structure	Stormwater Tree Trenches	х

PROPOSED CONDITION



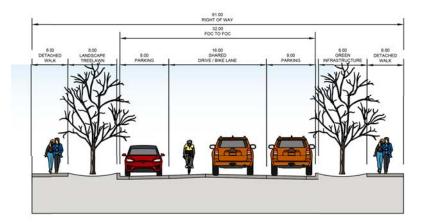
LOCAL STREET

• To be constructed

This roadway type will be found in lower density areas with less commercial/retail/ café activity. It is intended to minimize roadway width by providing a shared drive/ bike lane in place of dedicated bicycle infrastructure. When two cars meet on this type of roadway, one vehicle must typically pull aside and wait for the other to pass. Intensity of adjacent development, and the associated levels of traffic generated, should be considered when deciding between the Local and Neighborhood street typologies. Street trees on the local street will typically be planted in a less urban condition, such as a tree lawn or swale.

	Appropriate Elements	Local Street
	Ped Lighting	х
	Street Furniture	
	Street Trees	х
	Micromobility Parking	
Public	Mobility Hub	
Realm	Loading Zones	
	Parklets	х
	Transit Stops	х
	Paid Parking Kiosks	
	On-Street Parking	х
	Crosswalks	х
Safety	Curb Bump-Outs	х
	Driveways/ Curb Cuts	х
Green	Bioretention Facilities	х
Infra-	Pervious Paving	х
structure	Stormwater Tree Trenches	х

PROPOSED CONDITION



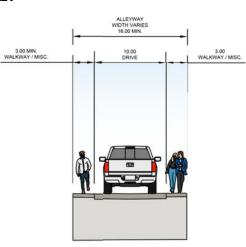
ALLEY

• To be constructed

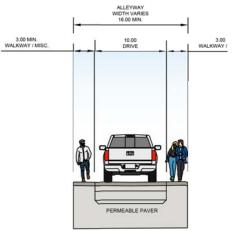
This street can be used in any part of the community; focus is on service use and fire protection. Width may vary; dimensions shown are minimums. Depending upon vehicle weight and frequency of use, alleys may be candidates for permeable paving.

	Appropriate Elements	Alley
	Ped Lighting	
	Street Furniture	
	Street Trees	
	Micromobility Parking	
Public	Mobility Hub	
Realm	Loading Zones	х
	Parklets	
	Transit Stops	
	Paid Parking Kiosks	
	On-Street Parking	
	Crosswalks	
Safety	Curb Bump-Outs	
	Driveways/ Curb Cuts	х
Green	Bioretention Facilities	
Infra-	Pervious Paving	х
structure	Stormwater Tree Trenches	

ALLEY



GREEN ALLEY



FRAMEWORK PLAN: STEAM

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FRAMEWORK PLAN: STEAM

4. FRAMEWORK PLAN: STEAM

4.1 OVERVIEW
4.2 OPPORTUNITIES AND CONSTRAINTS
4.3 STRATEGIES
4.4 ROADWAY SECTIONS
4.5 IMPLEMENTATION

4.1 OVERVIEW

DESCRIPTION

The concept of a 'STEAM' district was first explored in 2019 by a Council-led advisory board and focused on the potential of promoting this portion of downtown as an area for Science, Technology, Engineering, Art and Maker uses (see the 'Related Planning - Prior Efforts' section in Chapter 1 of this document). The STEAM study area is roughly bounded by 3rd Avenue and Boston Avenue to the north and south respectively. and Martin Street and Main Street to the east and west. Significant portions of the area are under developed and lack interconnecting roadways and development supportive infrastructure. Significant portions of the area are undeveloped areas lacking bisecting roadways, but if the existing roadway grid were extended STEAM would comprise approximately 13 city blocks.

EXISTING USES

The area is home to a wide variety of uses that include civic, retail, restaurants, and breweries, to light industrial, outdoor storage and salvage operations, and a very limited amount of residential. The Longmont Safety & Justice Center occupies a prominent midblock position in the northern portion of the



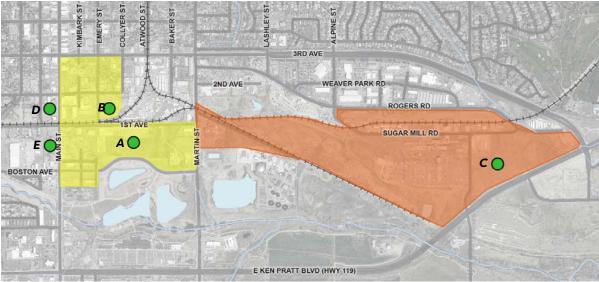
Scenes of the STEAM area (clockwise): new South Main Station apartments; Longmont Safety and Justice Center; Dickens Farm Nature Area; Wibby Brewing; historical commercial at Main & 3rd.

area, while a variety of restaurant, retail and commercial uses line the northern block of Main Street; additional space for these types of uses are offered on the ground floor of the new South Main Station building. South Main Station offers apartment living, with additional apartments and townhomes being planned in Phase 2. A variety of multitenant light industrial/commercial buildings, and undeveloped lots are located in the southern portion of the area. The Regional Transportation District (RTD) plans for a significant multimodal transit hub on the west side of the 1st Avenue & Main Street intersection, adjacent to the STEAM district.

The STEAM area's adjacent surroundings are important for the establishment of its character. The Dickens Farm Nature Area abuts the district to the south and offers both formal and informal recreational opportunities, as well as access to the St. Vrain River trail corridor. Existing rail is situated adjacent to 1st Avenue and includes a large, triangular rail switching and storage area; these rail uses are expected to remain.

CURRENT DEVELOPMENT PLANNING

The area has seen recent development activity, most notably the more recent completion of the first phase of the South Main Station redevelopment - The South Main Station mixed use commercial/ apartment project. Additional phases of the development are underway or awaiting plan approval, including a 20 unit townhouse/apartment project at 210 Emery Street, a 250+/- apartment project at 110 Emery Street, and an approximate 375-unit apartment project on about 12 aces of undeveloped land at 301 1st Avenue. A planned mixed-use "wrap" of the transit station at 1st and Main will add approximately 250 more units. Thus, over the next several years the STEAM area is expected to include about 1,000 new housing units that will serve as a significant catalyst to additional investment.



Current Development Projects: A: Boston Station, live/work, 371 units; B: 110 Emery, retail/ restaurant/office; C: Sugar Mill Station, multifamily, 330 units; D. 121 Main Street, mixed-use, office/ retail/restaurant, 175 units; E. First & Main Transit Center

TOPOGRAPHY AND VIEWS

The STEAM area has a varied topography with more significant slope from 2nd to 3rd Avenues, and being relatively flat from 2nd Avenue to the St. Vrain Creek. Thus the vast portion of the area south of 2nd Avenue does not have any significant grade issues that pose significant development challenges for individual structures or block faces. Given the anticipated higher density development west of Main Street, higher building heights will be required to capitalize on views of the Rocky Mountains.

>> A full summary of existing physical conditions can be found in the Design Brief, included in the appendix of this document.

4.2 OPPORTUNITIES AND CONSTRAINTS



LAND USE

OPPORTUNITIES

- A mix of uses already exists in the STEAM area.
- The City owns a number of potential redevelopment parcels in the STEAM area.
- Large parcels offer flexibility in defining future uses.

CONSTRAINTS

• Proximity of existing, active rail tracks can limit the distribution of land uses, particularly a future performing arts center.



CHARACTER + URBAN DESIGN

OPPORTUNITIES

- Direct geographic relationship with existing Main Street may provide framework for area character.
- Proximity to the St. Vrain Creek bridge offers the potential to define a gateway for STEAM and Longmont as a whole.

CONSTRAINTS

• It may be challenging to integrate recent and anticipated developments into a cohesive identity.



OPPORTUNITIES

- New roadways can introduce a walkable, human scale to existing large parcels.
- New trail connections to downtown/1st & Main Transit Center/St. Vrain Greenway offer enhanced connectivity.

CONSTRAINTS

- The scale of existing arterials 3rd Avenue, 1st Avenue, Boston Avenue, Martin Street - will require extensive enhancement to create pedestrian scale.
- Existing railroad alignments limit internal connectivity.

4.3 STRATEGIES



Mixed Use

- Discourage single family detached housing development.
- Create density around or with easy access to transit.
- Create higher density multifamily residential, for both ownership and rental.
- Promote integrated housing and amenities that appeal to a spectrum of life stages and family compositions.
- Promote multiple scales of development, through changes in height, density and building coverage.
- Provide space for flexible multi-use buildings that can evolve or adapt to fit a variety of both residential and/or commercial uses.

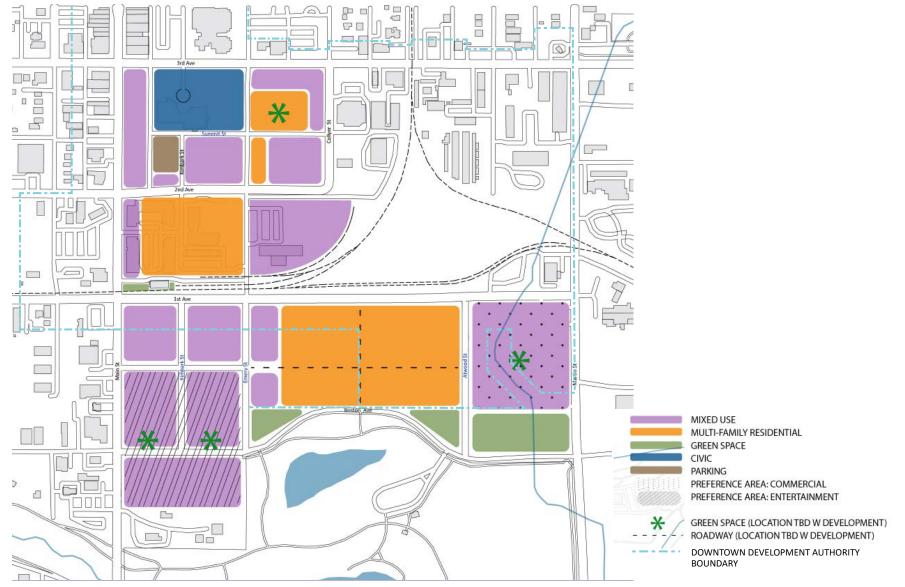
- Provide space for employment uses that promote decreased personal-vehicle commuting.
- Create a mixed-use community that allows people to walk or bike to dining, retail, and employment.

All areas within the STEAM redevelopment area provide opportunity for horizontally and vertically mixed uses. A rich mix of uses decreases the time and expense of traveling from home to separate locations for employment, dining, and recreation. It further serves to meet City goals relative to climate change, quality of life, access to employment, and contributing to the continued success and viability of downtown.

There are specific uses contemplated for STEAM which, if built, should be directed to specific locations within the sub-area; these preference areas (described on the pages that follow) are intended to create nodes of synergistic uses, which also relate to the existing uses that are expected to remain.

All areas should focus on an urban character. Higher residential density and intensity of activity are encouraged in the areas close to the future 1st & Main transit hub. It is particularly important that these transitproximate areas offer a variety of housing types that accommodate a wide variety of household compositions with varying needs and preferences. Housing should be limited to attached-dwellings and multifamily buildings. Multi-family residential development should be a minimum height of 4-stories with townhouse-type projects being no less than 2-stories. Exceptions for affordable housing may be given consideration. Residential parking should be premised on a maximum of one space per unit. Single-family detached housing is not encouraged and supported.

FRAMEWORK PLAN: STEAM



Key land use and preference areas within the STEAM redevelopment area.

Preference Area: Cultural

- Identify a location for cultural facilities that reflect Longmont's history and culture.
- Locate sensitive uses such as performance facilities and/or technical equipment to minimize noise and vibration impacts from freight rail.
- Orient uses and service entrances to minimize visual impacts to important roadways.

The parcel south of Boston Avenue is an appropriate location for the performance and/or conference facility along with a hotel. This location would require three primary façades, facing Main Street, Boston Avenue and the Dickens Farm Nature Area. A cultural facility in this location should strive to include an indoor/outdoor space, which could take advantage of and integrates with the adjacent Dicken's Farm Nature Area.

Preference Area: Commercial/Institutional Cluster

- Capitalize on visibility of Martin Street frontage.
- Work with Public Safety to identify options for relocating the Fire Training Facility.
- Identify opportunities for public private partnerships to redevelop the Cityowned property adjacent to Martin Street.
- Integrate public space into preference zone design.

This preference area is intended to capitalize on Martin Street frontage and its associated visibility, as well as the availability of a large amount of land that can be aggregated if necessary. In addition, partial City ownership of this area could provide an advantage in incentivizing development. This area provides opportunity for a multi-building development, such as an office or innovation park, or an institutional campus such as education or research. If developed as a single project, this area should include publicly-accessible internal open space. If developed as separate parcels, this area should include open space either fronting on or with access from Atwood Street.

Preference Area: Industrial/Maker

 Identify appropriate locations and configurations for public spaces, such as plazas, pocket parks, and similar to serve existing and future uses.

This preference designation supports the character of existing, well-established uses and current development proposals. Also of note in this area is the sensitivity of the Safety & Justice Center as a land use; replacement/relocation of the current parking and conversion to another use should recognize the security and viewshed concerns of this use. Compatible adjacent uses could be public space for new residential or appropriately oriented residential.

Open Space

- Design the east-west utility easement to offer different kinds of amenities than those offered by Dickens Farm Nature Area.
- Maintain public access to and integrate the north-south drainage near Martin Street with redevelopment.

STEAM enjoys excellent proximity to Dickens Farm Nature Area and the St. Vrain Greenway. The nature area provides a natural open space along with a small improved passive park area along with access to the greenway and creek-based recreational activities such as tubing. Additional public spaces will complement this resource by providing an expanded spectrum of experiences. A new space could run parallel with the sanitary sewer easement running east-west along the north side of Boston Avenue. A performance and/ or conference facility could incorporate this



New open spaces should be designed to provide a more urban experience that contrasts with the naturalized/recreational experience available at nearby Dickens Farm Nature Area.

space into its design and programming if it were to be pursued on the north side of Boston Avenue. Adjacent to the proposed Boston Station development, the easement offers two triangles which offer opportunity for street character enhancements and public usage such as community gardens, pocket parks or plazas.

CHARACTER AND URBAN DESIGN



A civic building provides a large 'lantern' to mark the building's entrance and elevate the public realm.

Gateway Features

- Use streetscape elements and public art to connect the St. Vrain Creek bridge gateway through STEAM and to the existing downtown core.
- Provide iconic architectural treatments at key Main Street locations.
- Extend the existing historic downtown streetscape enhancements between 1st and 3rd Avenues.

STEAM will extend Longmont's already successful, pedestrian-focused Main Street several more blocks south, linking downtown with existing gateway treatments on the bridge. As STEAM's section of Main Street is enhanced, it should continue these themes; new artwork or streetscape need not be a literal reproduction of the pillars-and-art on the bridge, but should provide a similar and continuous character. New buildings at high-visibility gateway locations, particularly cultural or civic buildings, should be designed to provide enhanced architecture or public art at these critical locations: Boston Avenue & Main Street is a gateway for all of downtown, while Boston Avenue & Martin Street is an important STEAM gateway.

Heights and Views

- Eliminate maximum building height restrictions.
- Calibrate building heights to roadway width.

STEAM's goals of increasing access to the 1st & Main transit hub and of promoting an amenity-rich urban environment suggest that higher heights than what are currently found in Longmont may be appropriate.

FRAMEWORK PLAN: STEAM

Shared Street

- Design and construct a north-south street as a pedestrian-oriented festival street.
- Locate service and deliveries out of view of shared street.
- Design adjacent buildings to have primary façades facing shared street.
- Extend design elements from shared street into the public open space.

The Cultural Preference Area will include a flexible multi-use street, which can be closed for events. The street will be designed with a high degree of pedestrian interest, in both materials and street elements. The street will include street trees as well as ornamental annual and perennial plantings, either in pots or integrated planters; this design aesthetic should be continued into the new public plaza/park spaces at the south end of the block. To maintain the integrity of materials and elevate the aesthetics of the adjacent building façades, no service functions should take place along this street; service entrances/loading docks and trash receptacles should be located on adjacent east-west streets.

Low Impact/Green Infrastructure and Sustainability

- Create incentives for green infrastructure and sustainable development.
- Integrate renewable energy throughout the study area whenever possible.

The development of new buildings offers opportunities for use of sustainable energy and product/materials technologies at scale. Both passive and active energy technologies should be encouraged, but implemented in a manner that enhances or is complimentary to design character.





Shared streets: Bell Street Park in Seattle (top) is temporarily closed to vehicles for an event; a shared street in Madison WI features a curbless cross-section.





The sub-area plan will accommodate and balance all mobility modes: pedestrians, cyclists, transit riders, emergency services and individual drivers.

Complete Streets

- Update existing roadways, including 3rd Avenue, to offer pleasant and safe bike and pedestrian utilization, including, as viable, reducing the number of vehicular travel lanes.
- Provide strong physical and visual connections between new housing areas and the opportunities and culture within the core of Longmont. All roadways should be designed and constructed to a standard acceptable for conveyance to the City as a public street.
- Install facilities accommodating both pedestrians and bicycles on both sides of Martin Street.
- Prepare design plans for and implement streetscape improvements between the railroad tracks and the St. Vrain Creek.

Modal choice is a priority in STEAM, and people should feel comfortable walking and biking on all streets within the sub-area. Major existing roadways such as 3rd Avenue, 1st Avenue, Boston Avenue and Martin Street should be upgraded to introduce pedestrian and bicycle facilities where they don't exist, increase the comfort and safety of existing facilities and provide traffic calming as appropriate. Multi-block redevelopments, such as 301 1st Avenue and potentially the fire training area, should design all internal roadways - whether publicly dedicated or private - as full roadways rather than drives through parking; these roadways should provide multimodal facilities as appropriate and follow the street cross-sections in this document. Wayfinding and urban design enhancements should create a physical and visual, character connection with the existing Main Street core north of the STEAM area running through downtown.

Transit

- Plan space on walkways for active mobility sharing companies to operate visibly and conveniently.
- Plan for and manage curb space appropriately for motorized micromobility options using the street.
- Coordinate route optimization with RTD and St. Vrain Valley School District (SVVSD).
- Ensure safe active mode connections to the 1st & Main Transit Station.
- Consider future opportunities for extending rail and bus transit to the STEAM and Sugar Factory areas.
- Consider microtransit to help fill transit gaps from traditional transit options.

As roadways and the public realm is upgraded, design should accommodate bike share parking, with additional consideration given to the best use of curb space for future on-demand or microtransit, carshare, and rideshare access to the site. In addition, indoor and outdoor secured bike parking should be encouraged during the development review process as an amenity for both residential and commercial/ office buildings. Finally, most of STEAM is immediately adjacent to the planned transit station, with over half the area within a ¹/₄ mile of the facility. It is also currently immediately served by or within a half-mile of a bus route; but, routes and stop locations should be reconsidered as density and population patterns become clear, and as the potential for new or rerouted service to Sugar Factory are explored.

Trails as Mobility

- Enhance pedestrian/bike connections to the St. Vrain Greenway by integrating facilities into the proposed street network as applicable.
- Provide intuitive wayfinding to reinforce STEAM connectivity with larger regional systems.

By integrating the historic street grid as an element of the STEAM urban design context, bicycle and pedestrian connections will be incorporated into the public street system. These facilities should pay particular attention to connecting on-street, buffered or separated bike/ped systems to the existing St. Vrain Greenway, which acts as the spine of the Longmont trail system. Crosswalks, street narrowing, signalization, and appropriate signage will be particularly important for safe active mode crossings of Boston Avenue.

Inter-Area Connectivity

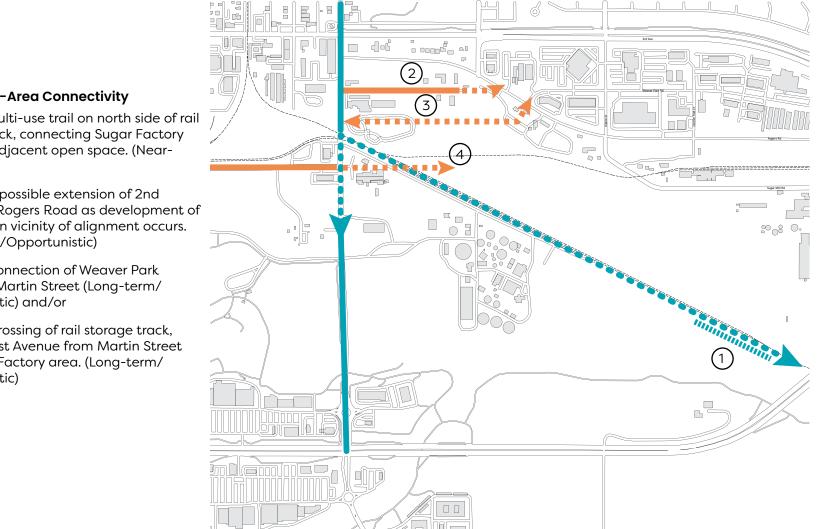
Parking

- Investigate/obtain long-term options to provide more direct connection between the STEAM and Sugar Factory areas.
- Enhance pedestrian/bicycle connections to the 1st & Main Transit Station, including crossing improvements on Main Street.

Opportunities may arise in the future to enhance connectivity between the STEAM and Sugar Factory areas, and these opportunities should be monitored and pursued as appropriate. Notable opportunities could include negotiations with BNSF railroad relative to crossing of the rail storage tracks. Such a roadway and/ or pedestrian connection eastward into the Sugar Factory area with connectivity to Boston Avenue or 1st Avenue would significantly enhance east-west travel. Additionally, the potential extension of 2nd Avenue to Rogers Road and/or the extension of Weaver Park Road to Martin Street could both be long-term connectivity enhancements.

- Promote and incentivize structured parking in place of surface lots.
- Coordinate with Public Safety to construct shared structured parking that meet community needs, while still providing safe, secure parking for activities of the Safety & Justice Center.
- Introduce district-wide shared parking.

A new parking structure in the lower downtown would assist in reducing the amount of land needed for vehicle parking, preserving more available land for development in the vicinity of Main Street and 2nd Avenue. The reduction of surface parking lots will also promote STEAM priorities by contributing to a more pedestrian-friendly, human scaled urban environment. The structure should provide parking for commercial and retail uses, as well as the nearby justice center.



Potential Inter-Area Connectivity

Connect multi-use trail on north side of rail storage track, connecting Sugar Factory (1)area and adjacent open space. (Near-Term)

Pursue the possible extension of 2nd Avenue to Rogers Road as development of (2)properties in vicinity of alignment occurs. (Long-term/Opportunistic)

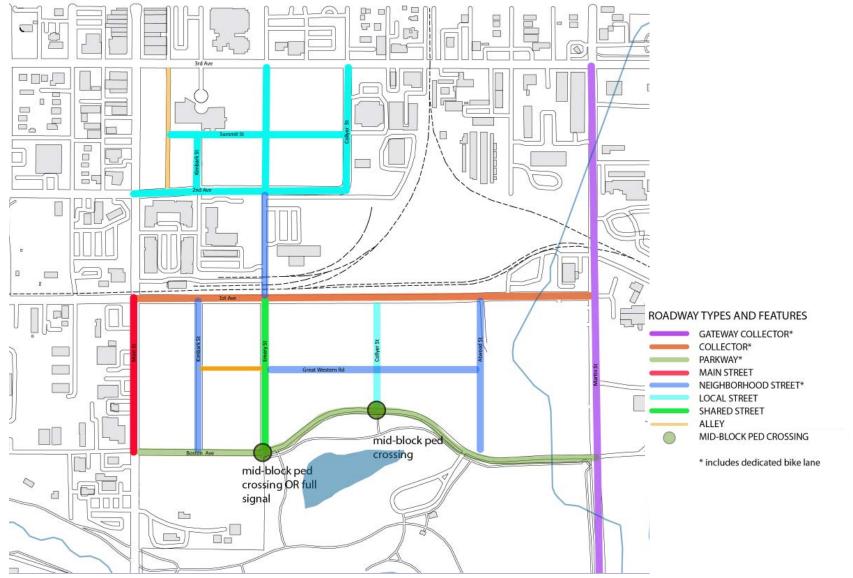
Potential connection of Weaver Park (3) Road and Martin Street (Long-term/ Opportunistic) and/or

Pursuit of crossing of rail storage track, to extend 1st Avenue from Martin Street (4)into Sugar Factory area. (Long-term/ **Opportunistic**)

4.4 ROADWAY SECTIONS

Many but not all of the roadway crosssections shown in this part of the document are retrofits of existing roadways, with a focus on enhancing comfort and safety for pedestrians and cyclists. Exceptions are the shared street, extensions of existing roadways that break large parcels into smaller blocks, and new roadways within the Boston Station development area; these roadways maintain focus on pedestrians and cyclists but are new roadways. Regardless of mode of travel, all residents, workers and visitors should feel that they can move throughout the STEAM area without conflict, and that they *belong* on the street. These sections should be considered ideal designs, and have some degree of flexibility to adjust to the type and density of uses on each block; while certain elements may be widened or relocated within the cross-section (choosing to provide a multiuse path behind the curb on Martin Street, for example, instead of having a sidewalk plus and on-street bike lane), the element shown should always be provided.

>> The following sections are the same in Sugar Factory and STEAM. They are included in both chapters so that each chapter may act as a stand-alone guide to development in each area: Gateway Collector (small dimensional difference due to existing ROW); Neighborhood Street; Local Street; Shared Street; Alley.



Roadway types within the STEAM redevelopment area.

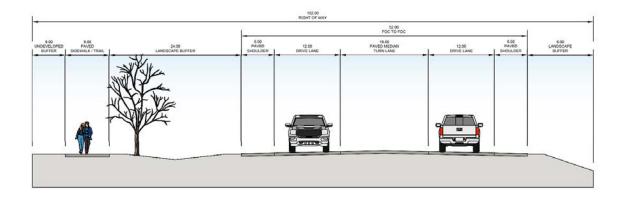
GATEWAY COLLECTOR

Martin Street

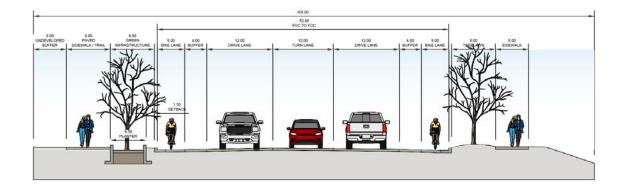
This cross-section recognizes Martin Street as a major through-street collector that connects existing neighborhoods north of 3rd Avenue to the retail centers south of the creek along Ken Pratt Boulevard. Existing geometry, traffic control and posted speed limit make this a challenging corridor for pedestrians and bicyclists; for this reason, a generous buffer should be included between bike lanes and adjacent traffic; tree plantings will also provide visual separation and a degree of traffic calming. Existing development projects and projects currently under construction/development exhibit widely varied character; for this reason, street trees may be planted in green infrastructure planters, tree lawn or bioswales depending upon the character of adjacent redevelopment. Tree planting may vary by block and by size of the road. Alternately, although not shown in the section, the on-road buffered bike lane and sidewalk could be jointly replaced with a 10 to 12-foot wide, detached multiuse path behind the curb.

	Appropriate Elements	Gateway Collector
	Ped Lighting	х
	Street Furniture	
	Street Trees	х
	Micromobility Parking	
Public	Mobility Hub	х
Realm	Loading Zones	
	Parklets	
	Transit Stops	х
	Paid Parking Kiosks	
	On-Street Parking	
	Crosswalks	х
Safety	Curb Bump-Outs	х
	Driveways/ Curb Cuts	х
Green	Bioretention Facilities	х
Infra-	Pervious Paving	
structure	Stormwater Tree Trenches	х

EXISTING CONDITION



PROPOSED CONDITION



SUGAR FACTORY + STEAM SUB AREA PLAN | 75

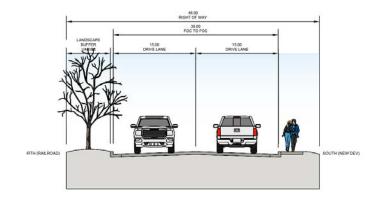
COLLECTOR

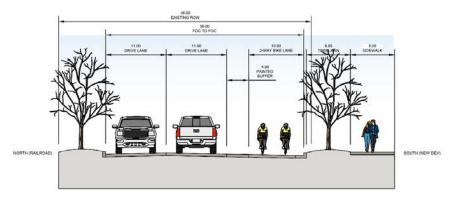
• 1st Avenue

This cross-section recognizes the continued presence of the railroad track and rail storage yard on the north side of the street. Pedestrian and bicycle facilities are aggregated on the south side of the street, allowing additional space for planted buffering of the rail uses on the north side. Due to higher traffic levels and straight geometry that allows potentially greater speeds, the bike lane should also be buffered.

	Appropriate Elements	Collector
	Ped Lighting	х
	Street Furniture	
	Street Trees	х
	Micromobility Parking	
Public	Mobility Hub	
Realm	Loading Zones	
	Parklets	
	Transit Stops	х
	Paid Parking Kiosks	
	On-Street Parking	
	Crosswalks	х
Safety	Curb Bump-Outs	х
	Driveways/ Curb Cuts	х
Green	Bioretention Facilities	х
Infra-	Pervious Paving	
structure	Stormwater Tree Trenches	х

EXISTING CONDITION





PARKWAY

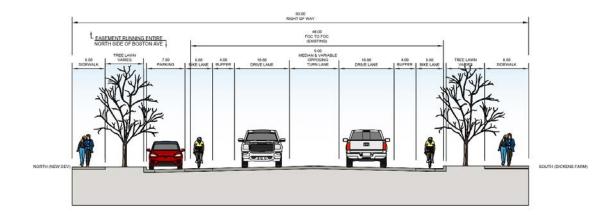
Boston Avenue

This cross-section anticipates a significant amount of residential development on the north side of the roadway between the Emery and Atwood extensions. This change is expected to bring an increased demand for on-street parking, as well as upticks in both pedestrian and bicycle traffic including crossing movements to access the Dickens Farm Nature Area. The cross-section is predicated on re-allocation of existing curb-to-curb space via re-striping. The center median/turn lane is retained where necessary; at locations with curb cuts into the Boston Station development, the nonturning side of the median should be raised to create a protected pedestrian refuge paired with a marked pedestrian crosswalk.

	Appropriate Elements	Parkway
	Ped Lighting	х
	Street Furniture	
	Street Trees	х
	Micromobility Parking	х
Public	Mobility Hub	х
Realm	Loading Zones	
	Parklets	
	Transit Stops	х
	Paid Parking Kiosks	х
	On-Street Parking	х
	Crosswalks	х
Safety	Curb Bump-Outs	х
	Driveways/ Curb Cuts	х
Green	Bioretention Facilities	х
Infra-	Pervious Paving	
structure	Stormwater Tree Trenches	х

NORTH NEW EEK

EXISTING CONDITION



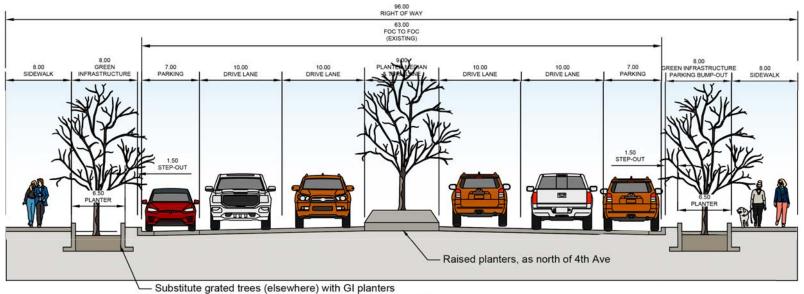
MAIN STREET

• Main Street

In contrast to the Sugar Factory area where 'main street' is a placeholder designation for a street to be named later, this section is truly Longmont's named Main Street and US Highway 287. Existing lanes and dimensions are maintained, with recommendations to add tree plantings within a new center median. This cross section also emphasizes regular street trees and widened sidewalk on both sides of the street. This improvement has already been made in front of the new South Main Station, and for consistency, this new construction should serve as the model for Main Street upgrade along STEAM's frontage.

	Appropriate Elements	Main Street
	Ped Lighting	х
	Street Furniture	х
	Street Trees	х
	Micromobility Parking	х
Public	Mobility Hub	х
Realm	Loading Zones	
	Parklets	
	Transit Stops	х
	Paid Parking Kiosks	х
	On-Street Parking	х
	Crosswalks	х
Safety	Curb Bump-Outs	х
	Driveways/ Curb Cuts	х
Green	Bioretention Facilities	х
Infra-	Pervious Paving	
structure	Stormwater Tree Trenches	х

PROPOSED CONDITION



-

planters widen at intersections to replace parking lane

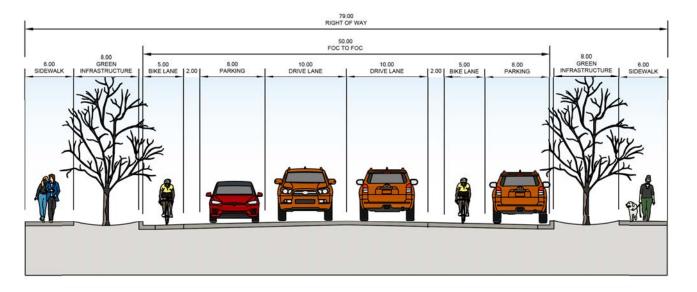
NEIGHBORHOOD STREET

- Atwood Street
- Great Western Street (name placeholder for east-west street through 301 1st Street)

This is a new roadway that provides optimal multimodal facilities. Two bike lane configurations are shown, and should be selected based on adjacent use and intersection design: on the left side of the section, the curbside, buffered bike lane moves bicyclists from the door zone of parked cars. On the right side of the section, the buffered bike lane is located between the parking and drive lanes; this configuration works better with intersections that have curb extensions to reduce pedestrian crossing distance.

	Appropriate Elements	Neighborhood Street
	Ped Lighting	х
	Street Furniture	
	Street Trees	х
	Micromobility Parking	х
Public	Mobility Hub	
Realm	Loading Zones	х
	Parklets	х
	Transit Stops	х
	Paid Parking Kiosks	х
	On-Street Parking	х
	Crosswalks	х
Safety	Curb Bump-Outs	х
	Driveways/ Curb Cuts	х
Green	Bioretention Facilities	х
Infra-	Pervious Paving	х
structure	Stormwater Tree Trenches	

...

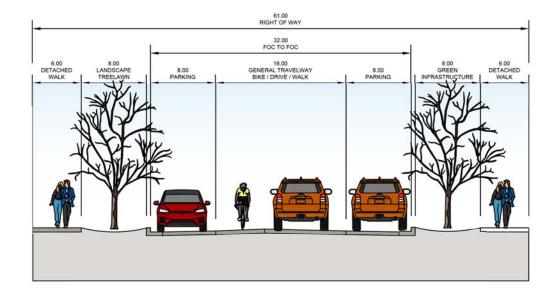


LOCAL STREET

- Summit Street
- 2nd Avenue
- Collyer Street

This roadway reduces street width by providing a shared drive/bike lane in place of dedicated bicycle infrastructure. Due to the narrow width of the travelway when two cars meet, one vehicle must typically pull aside and wait for the other to pass. Intensity of adjacent development, and the associated levels of traffic generated, should be considered when deciding between the Local and Neighborhood street typologies, with the Local typology chosen for lower traffic/less intensive development areas. Street trees on the local street will typically be planted in a less urban condition, such as a tree lawn or swale.

	Appropriate Elements	Local Street
	Ped Lighting	х
	Street Furniture	
	Street Trees	х
	Micromobility Parking	
Public	Mobility Hub	
Realm	Loading Zones	
	Parklets	
	Transit Stops	
	Paid Parking Kiosks	
	On-Street Parking	
	Crosswalks	
Safety	Curb Bump-Outs	
	Driveways/ Curb Cuts	х
Green	Bioretention Facilities	
Infra-	Pervious Paving	х
structure	Stormwater Tree Trenches	

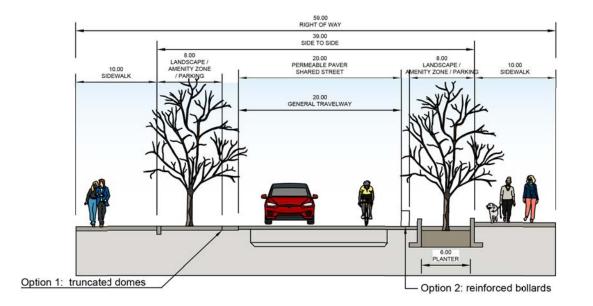


SHARED STREET

Emery Street

This one-block long street will be located within the Cultural Preference Area, offering flexible public open space that can serve as spillover and pre-event space for adjacent Arts & Event Center and Music Venue. This potentially curbless 'pedestrian mall' can be closed for festivals and events, and will use tactile paving or bollards to mark edge of drivable area. Sidewalk is shown as a minimum 10' in width, but is anticipated to vary (potentially much wider) based on the design of adjacent structures. This type of street is sometimes called a 'woonerf' and is truly designed as a pedestrian mall in which motorized vehicles are sometimes allowed as 'guests'.

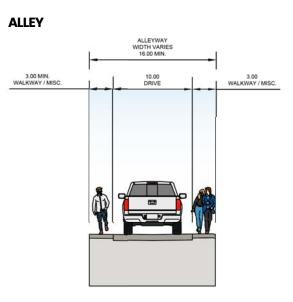
	Appropriate Elements	Shared Street
	Ped Lighting	х
	Street Furniture	х
	Street Trees	х
	Micromobility Parking	х
Public	Mobility Hub	
Realm	Loading Zones	
	Parklets	х
	Transit Stops	
	Paid Parking Kiosks	х
	On-Street Parking	х
	Crosswalks	х
Safety	Curb Bump-Outs	
	Driveways/ Curb Cuts	
Green	Bioretention Facilities	х
Infra-	Pervious Paving	х
structure	Stormwater Tree Trenches	х



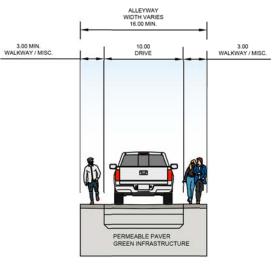
ALLEY

This street can be used in any part of the community; focus is on service use and fire protection. Width may vary; dimensions shown are minimums. Depending upon vehicle weight and frequency of use, alleys map be candidates for permeable paving.

	Appropriate Elements	Alley
	Ped Lighting	
	Street Furniture	
	Street Trees	
	Micromobility Parking	
Public	Mobility Hub	
Realm	Loading Zones	х
	Parklets	
	Transit Stops	
	Paid Parking Kiosks	
	On-Street Parking	
	Crosswalks	
Safety	Curb Bump-Outs	
	Driveways/ Curb Cuts	х
Green	Bioretention Facilities	
Infra-	Pervious Paving	х
structure	Stormwater Tree Trenches	



GREEN ALLEY



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5. APPENDICES

5.1 DESIGN BRIEF
5.2 PLAN ALTERNATIVES
5.3 PUBLIC ENGAGEMENT
5.4 MARKET STUDY UPDATE
5.5 GREEN INFRASTRUCTURE STRATEGIES

APPENDICES

SEE SEPARATE DOCUMENT FOR APPENDICES

