



ANDOVER

ANDOVER

ANDOVER YARD

PLANNING BOARD PRESENTATION

ANDOVER, MA
FEBRUARY 13, 2024

PREPARED FOR



Town of Andover

Climate Action & Sustainability Plan



September 2023

ACTION PLAN SUSTAINABILITY SECTORS



BUILDINGS



ENERGY



MOBILITY



NATURAL RESOURCES



PUBLIC HEALTH AND SAFETY



WASTE

SUSTAINABILITY



BUILDINGS

- LEED BD+C Multi-Family Silver precertification for the residential building and LEED ND Certification for the entire site
- High-performance building envelope including:
 - » 30% window-to-wall ratio
 - » Thermal bridge mitigation
 - » Airtight construction with continuous insulation
- Indoor bike storage with outdoor access
- Green roofs at amenity terraces and courtyard
- High albedo roofing materials to reduce heat island effect
- Eco-friendly materials with low environmental impact used where possible
- Prioritized locally sourced materials to reduce transportation related emissions
- Specified low emission materials to improve indoor air quality



ENERGY

- Electrification of the building to include heating and cooling, LED lighting, and induction stoves
- High efficiency HVAC systems including:
 - » Heat Pump System for heating and cooling
 - » Right-sized Energy Recovery Units ensuring proper ventilation
- Solar ready roof design
- Electric vehicle parking on-site
- New high efficiency and dark sky compliant LED Roadway and Pedestrian Lighting

SUSTAINABILITY



MOBILITY

- Site is convenient to public transportation and is in easy proximity to essential services
- Increased visual and physical connectivity to and through the site to increase pedestrian and bike activity while reducing vehicular trips
- Improved Public Realm with increased publicly accessible open space which will improve health, safety and overall well being and quality of life of the neighborhood
- The building will be accessible, meeting FHA and MAAB requirements, including:
 - » All units will be adaptable for accessibility
 - » 9 units will be fully accessible
 - » 4 units will accommodate those who are hearing impaired
- Incorporated Fitwel strategies such as installing defibrillators, providing recreational opportunities (fitness center, parks), encouraging the use of stairwells, provide water refill stations, and provide light darkening shades in bedrooms



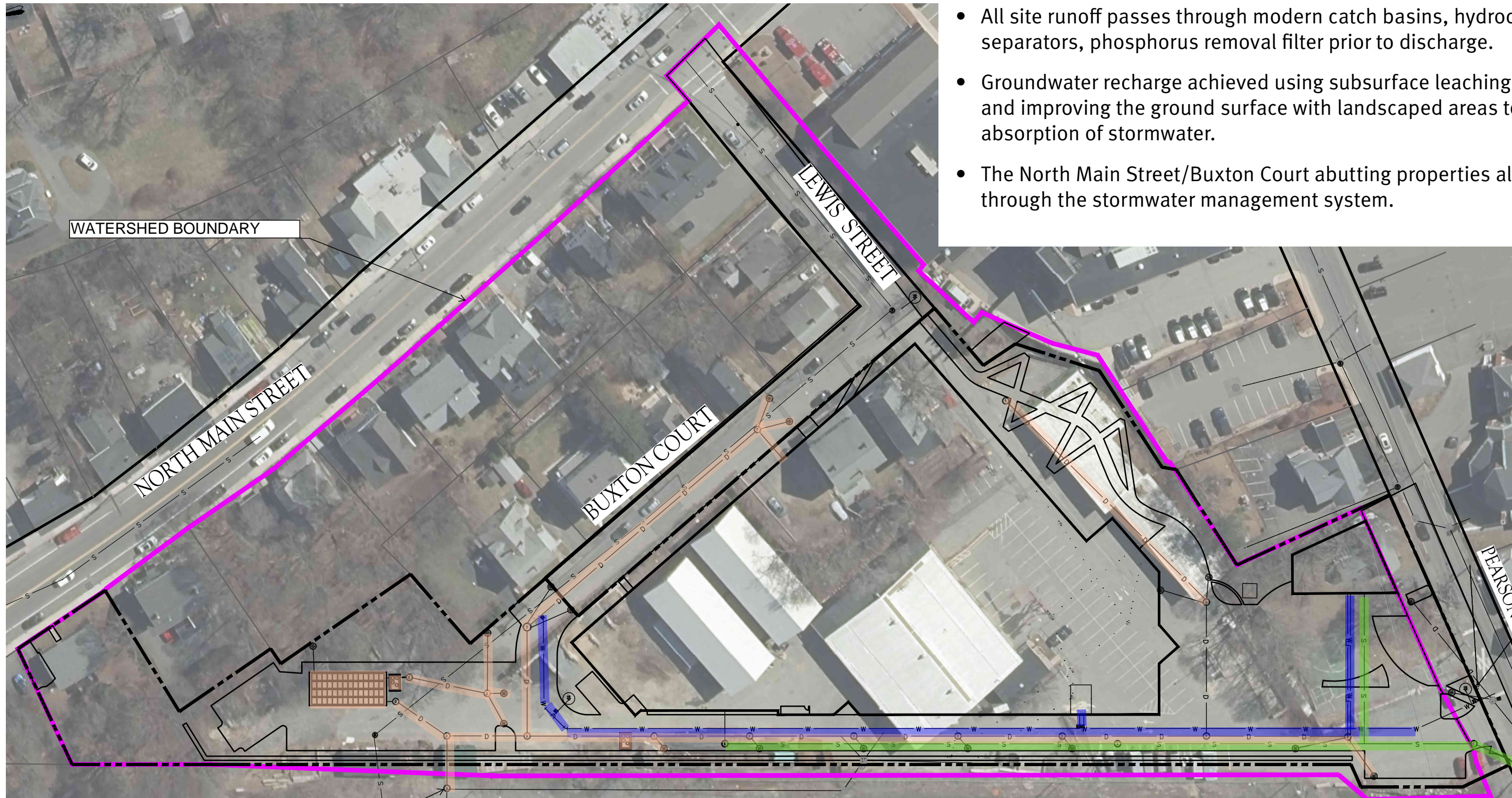
NATURAL RESOURCES

- 100+ new trees to reduce urban heat island effect
- Diverse Planting Species Palette consisting of New England indigenous plants to create interest, increase resistance to disease and pests and lower maintenance
- Increase of site landscape area and capturing of 100% of stormwater runoff in compliance with Town Bylaws
- Recirculating splash pad/ play fountain feature to reduce water use maintain public health and safety
- Infill development of a former industrial site with high-density housing avoids urban sprawl, connects to existing infrastructure, and places residents close to services

SUSTAINABILITY

STORMWATER MANAGEMENT

- Add closed drainage to Buxton Court which includes modern catch basins with 4' sumps and hooded outlets (none exists today)
- All site runoff passes through modern catch basins, hydrodynamic separators, phosphorus removal filter prior to discharge.
- Groundwater recharge achieved using subsurface leaching chambers and improving the ground surface with landscaped areas to promote absorption of stormwater.
- The North Main Street/Buxton Court abutting properties also pass through the stormwater management system.



SUSTAINABILITY

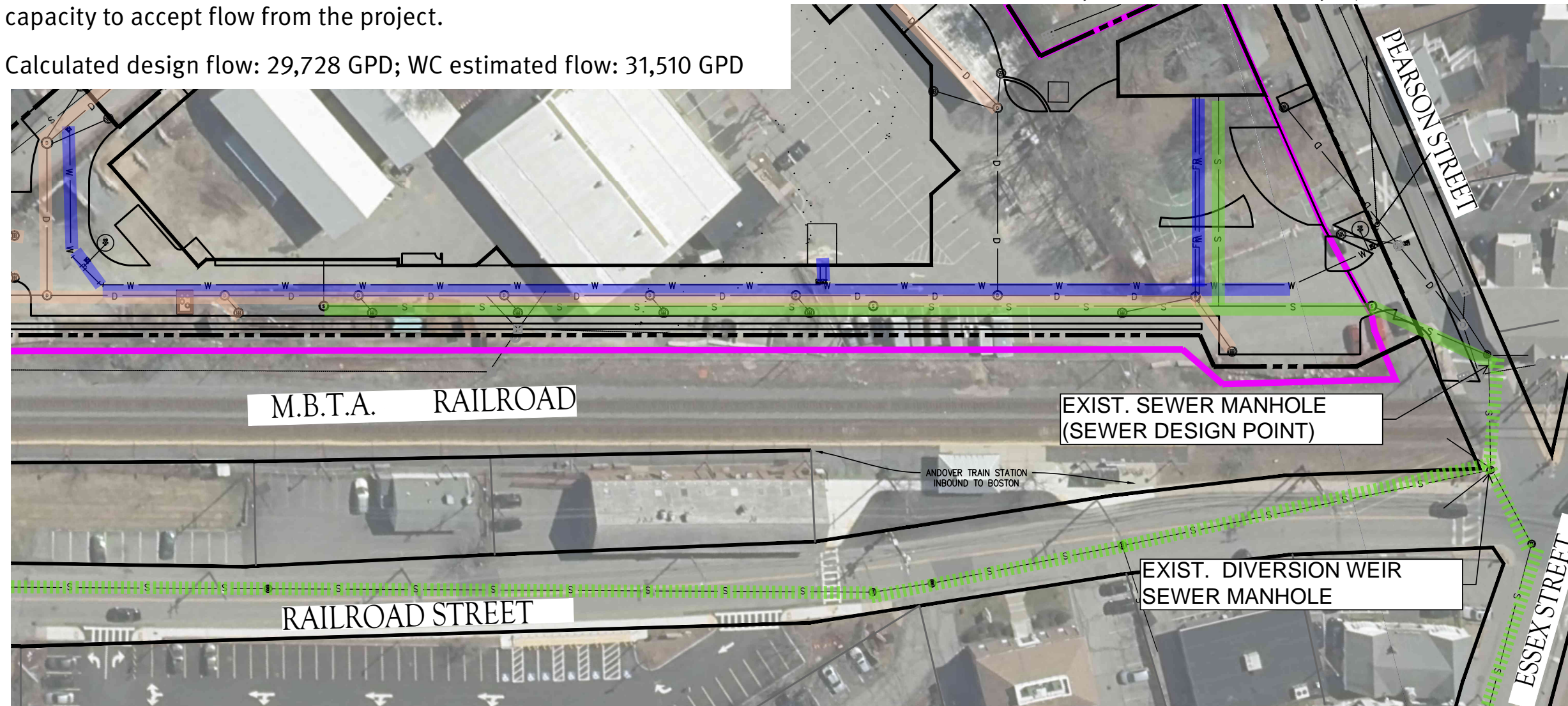


SEWER COLLECTION SYSTEM

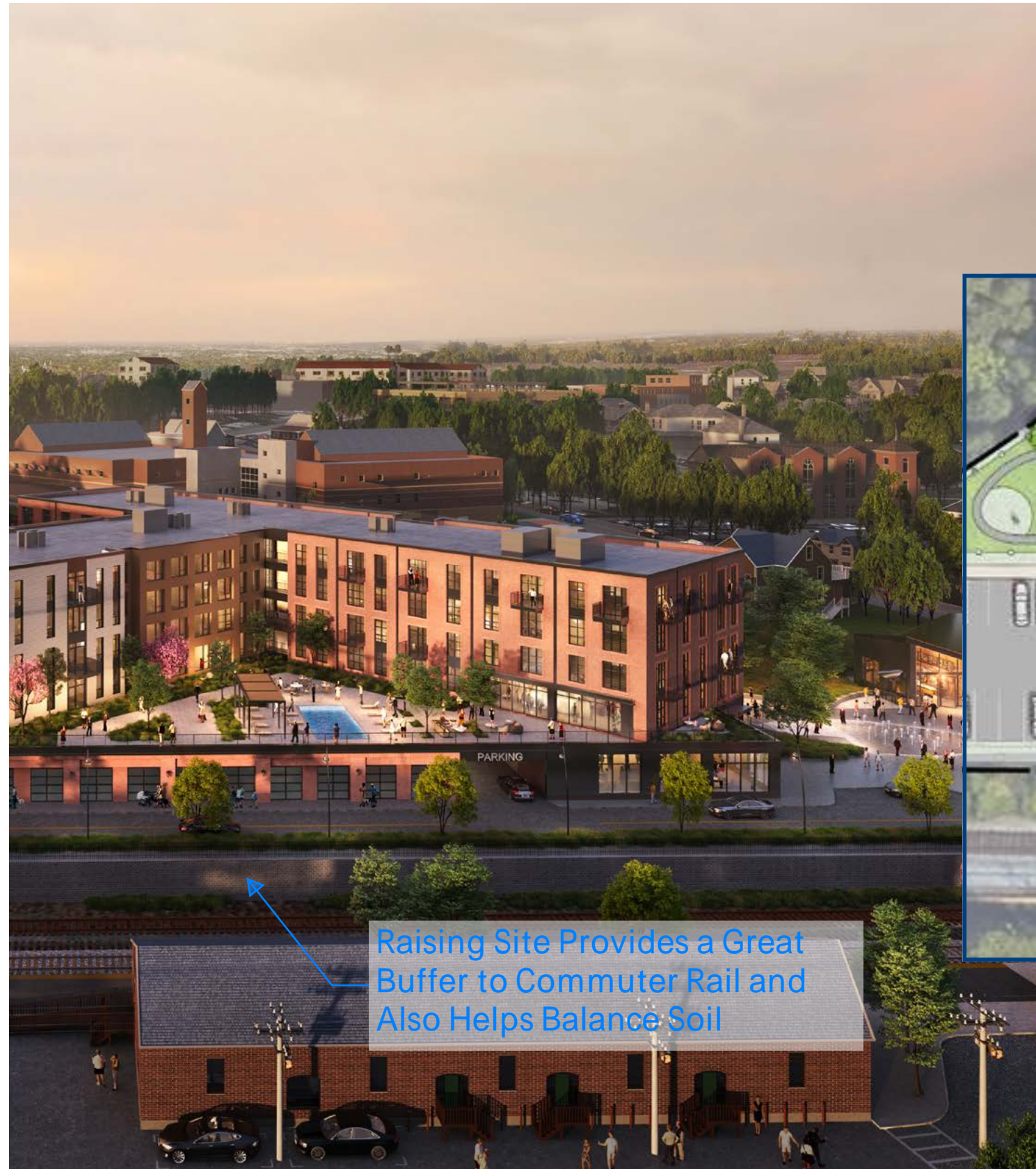
- Working closely with DPW
- Current plan is to connect to the 8" sewer on Pearson Street which has more capacity.
- Evaluating possibility of moving flow from Railroad Street to Essex Street to alleviate Railroad Street Sewer.
- Applicant will meet the Inflow-Infiltration requirement either through a fee based on the new sewage flow for the project or direct improvements to the existing sewer such as lining.
- WC Report states that there are no issues with the Municipal sewer capacity to accept flow from the project.
- Calculated design flow: 29,728 GPD; WC estimated flow: 31,510 GPD

WATER DISTRIBUTION SYSTEM

- Loop 750 linear feet of new water main between Pearson Street and Buxton Quart.
- Add 1 additional hydrant and relocate 2 existing hydrants.
- Fire protection and Domestic Water from this main
- Conducted flow testing to verify that domestic water pressure and fire protection flow are available for the project.
- Woodard Curran (WC) Report: Pearson Street water main already upgraded to 8". MCG flow testing confirms WC findings that adequate flow and pressure exist for the project.

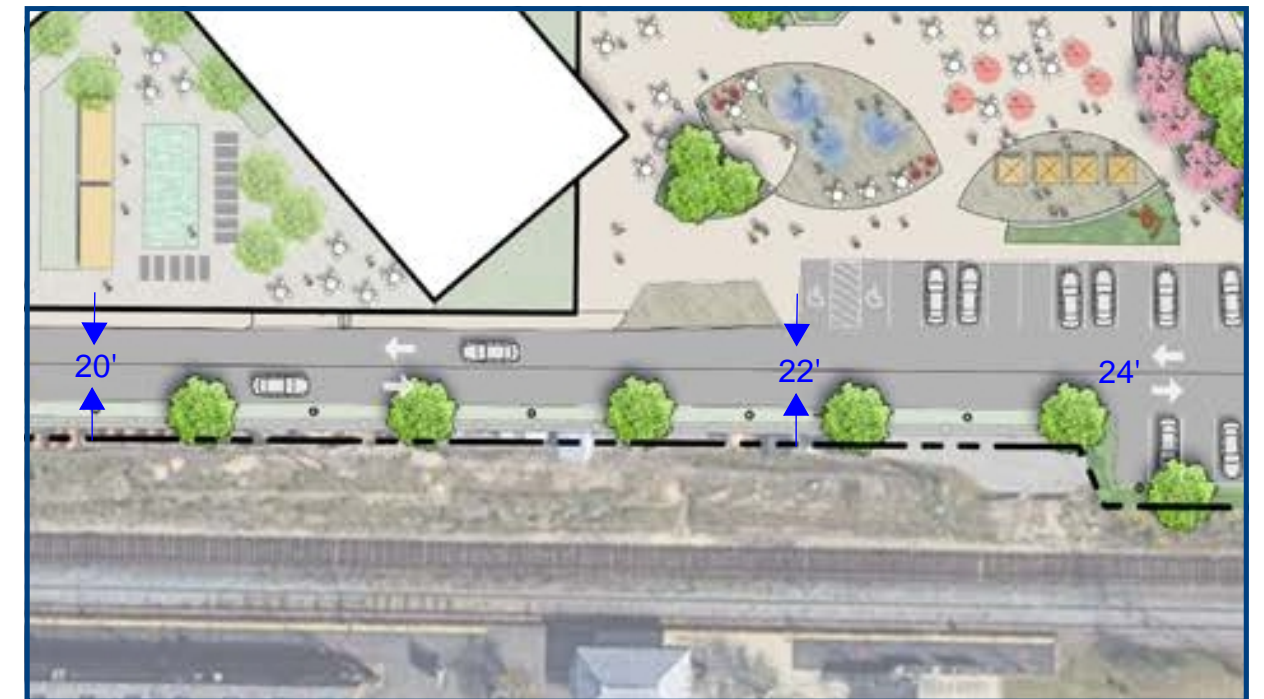


SUSTAINABILITY



SUSTAINABLE CIVIL DESIGN FEATURES

- Balanced soil cut and fill for less truck trips associated with exporting/importing of soils. This in turn reduces wear and tear on public roads and reduces fuel emissions for an optimal carbon footprint.
- Recycle on site building materials where possible. i.e. Grind concrete or asphalt tailings and use as fill. Use stump grindings for erosion control.
- Minimize the reliance on bituminous asphalt by reducing driveway aisles, efficient parking space sizes and 2/3 of the parking within the building.
- Implementation of a comprehensive erosion & sediment control plan with regular oversight and maintenance.



SUSTAINABILITY



PUBLIC HEALTH AND SAFETY

- Public realm improvements, including accessible pedestrian pathways, parking, and new roads, will provide well-lit and safe access to building entries
- The residential building will be equipped with a fully automated sprinkler system and backup power for life safety equipment (lighting and elevators)
- The highly insulated thermal envelope creates a more resilient building, maintaining habitable interior temperatures for longer during a natural disaster, allowing residents to shelter in place



WASTE

- Waste management includes recycling, and trash rooms will be equipped with a dedicated recycling chute for resident use
- The owner will investigate options to provide composting services for building residents
- Landscaping waste will be collected and composted for the entire site

In addition to the goals listed above, Minco believes that economic sustainability is an important part of any project. The Minco team has a long history of partnering with local businesses, and looks forward to continuing that support with this project.