Staff Report

Devens Enterprise <u>Commis</u>sion

Date: September 25, 2025

To: Devens Enterprise Commission

From: Neil Angus, FAICP Director

RE: Reframe 6-Lot Innovative Residential Subdivision - Level 2 Unified Permit (#D25-008)

Applicant Reframe Systems
Owner: MassDevelopment

Engineer: Civil & Environmental Consultants, Inc.

Location: 100 Adams Circle, Devens

Zoning: Residential II and Watershed Protection Overlay District

Premises and Proposed Project: Reframe Systems has submitted a Level 2 Unified Permit Application for an Innovative Residential Development Definitive Subdivision, and Site Plan approval to create six (6) residential building lots and construct six (6) modular construction duplexes (12 units total) and associated site improvements along a portion of Adams Circle:



The project involves the modular construction of high-quality, low-carbon housing through innovative construction techniques that will streamline building construction, minimize waste, and create energy-efficient housing solutions.



Rendering of proposed modular units and carports. Provided by Reframe Systems.

The existing site was a former residential neighborhood developed by the Army and consisted of a series of townhome buildings that were removed in 2007 as part of the base clean-up efforts by the Army, EPA, DEP, and MassDevelopment. The property was fully remediated. Eight existing net-zero energy homes are across the street from the proposed site and the 13-unit Transitions Women's shelter is located just north of the site. Because the site was previously developed, there are only a handful of mature trees that exist on this parcel. The Applicant is proposing to preserve the majority of existing trees and has devised a planting plan to compliment the development and enhance the natural environment.

Innovative Residential Development:

Proposed lots are ~15,380 sq.ft. and in compliance with the DEC's minimum lot size requirements for this district. The Applicant is utilizing the Innovative Development Residential II regulations which allow for decreased lot frontage (50-100 feet) if the development is built to a Home Energy Rating System (HERS) Index of 60 or less [974 CMR 5.02(2)]. Proposed lot frontages range from 105-107 feet but include two units (~50 feet frontage each). The Applicant is proposing to construct homes to a HERS rating of 40. Like a miles per gallon rating on vehicles, the HERS Index represents the overall energy consumption/efficiency of a home - the lower the score, the more energy efficient the home. As a reference, the current Massachusetts Stretch Code would require these homes achieve a HERS rating of 65 or less. With the proposed modular construction and energy efficient design and layout, this project will showcase another form of sustainable residential building in Massachusetts. This, coupled with the existing Net-Zero energy homes across the street, the multi-family homes on Bates, and the new housing on Grant Road, are making Devens a great example of innovative, inclusive, and sustainable residential development.

Site Access/ Public Improvements:

All proposed units are fronting on Adams Circle – a public way that is maintained by MassDevelopment. All proposed driveway locations have adequate sight lines for safe access in and out of each parcel. Admas Circle will be improved by MassDevelopment, including but not limited to the following:

- 1. Installation of new sidewalk, curbs, and street trees
- 2. Upgrade of the municipal stormwater system (collection, treatment and management)
- 3. Roadway resurfacing and striping.
- 4. Final roadway width and inclusion of on-street parking to be determined.
- 5. Roadway signage shall be installed as determined by MDFA DPW, Public Safety and Engineering Dept.'s.
- 6. New water line will be installed. Size per Devens Utility Dept. determination. Asbestos Concrete portions of the existing line are to be removed and disposed of in accordance with applicable state requirements.
- 7. New sewer main will be installed. Size per Devens Utility Dept. determination.
- 8. Installation and location of utility connections for new housing units will be coordinated with housing developers during construction.

- 9. New electrical services will be installed within the currently undeveloped portions of Adams Circle. New system will be an underground system.
- 10. New conduits for communications systems will be installed. Installation of new services will be by the provider upon request of the developer. Work to be coordinated with Devens Engineering and Utilities Departments.
- 11. Hydrant locations will be determined in coordination with the Devens Fire Department.

These elements will be coordinated by MassDevelopment and will be required to be completed prior to issuance of any Certificates of Occupancies for thee new units.

Site Design/Layout

The proposed developments have been designed with a number of low-impact development techniques. The site is at the base of a fairy large and steep wooded hill area referred to as Let Hill – named after Fred T. Ley Company who was the general contractor who built Camp Devens in 1917. The Applicant has designed the lot layout and development to minimize impacts to these slope areas. Permanent protection of slopes along rear of lot should be considered through methods such as a conservation restriction (CR) which would protect the existing stabilizing vegetation, restrict any future development and maintain the land in a natural state – still usable for passive recreation. A CR would be a permanent covenant that runs with the land. Ley Hill also has an existing trail system that runs through it and comes out to Adams Circle just south of the southern-most lot. Staff have requested that MassDevelopment provide a formal public access easement to this area to ensure any future residential development does not limit access to this open space area.

Landscaping:

The Applicant has designed the layout of the homes and lots in a manner that preserves much of the existing vegetation on-site. The driveways have been shortened to reduce impervious surfaces and Staff has requested the Applicant look at using more straight native plant species (vs. hybrid natives) to help ensure the success of growth. Additional various minor edits are required to the landscaping and erosion and sediment control plans are required to ensure full compliance with 974 CMR 3.04(8).

Stormwater Design:

The Applicant has designed the development to infiltrate all runoff on-site and meet the DEC's green field requirement through the combination of porous pavement, decentralized roof runoff (limiting gutters and downspouts), and site grading and biofiltration swales. The design meets the 90% Total Suspended Solids (TSS) and 60% Total Phosphorous (TP) removal requirements of the DEC regulations and complies with the on-site infiltration and Low-Impact Development requirements of 974 CMR 3.04 and 4.08. The Applicant has provided a draft Homeowners Association Manual that identifies the unique features of these lots and provides detail on the special maintenance requirements for the unique features like the porous pavement driveways and the bio-infiltration swale in the rear of the property.

Building Design/Energy Efficiency:

Reframe is designing these buildings with the goal of carbon-neutrality. This is directly in-line with the DEC's Embodied Carbon Reduction Guidelines and Greenhouse Gas emission reduction goals. The design includes:

- Helical pile foundation
- TimberBatt cavity insulation
- High recycled content in rigid foam insulation and gypsum wall boards (Sheetrock Ecosmart)
- FSC Certified wood & concrete mix with additives to reduce volume while maintaining structural integrity.

These all-electric homes will be highly energy efficient and are designed to meet Passive House standards and achieve a HERS rating of 40. With solar PV, that could bring the HERS ratings down to 0. The orientation of the homes has the long axis facing an east-west orientation, maximizing the southern exposure to take full advantage of passive and active solar design strategies. The homes will also be equipped with EPA Water Sense plumbing fixtures which will improve water efficiency of these units. All homes will be sprinklered for

fire safety. Due to helical pile foundation, the homes will not have any basements. Details for freeze/thaw protection for water and sewer connections to buildings will be required as part of the building permit review.

Design Review:

The design of the building is subject to MassDevelopment Design review which is expected to be provided shortly.

Affordability and Phasing:

The Devens Reuse Plan requires 25% of Devens housing to be affordable to low and moderate income levels. To maintain this 25%, a minimum of 3 units will be required to be deed-restricted affordable. To encourage a broader range of affordability, the DEC regulations require a minimum of 10% of those units to be income restricted to 80%AMI and 15% at an average of 100% AMI. The Applicant is proposing two (2) units at 80% AMI and (1) unit at 120% AMI. With the proposed phasing (4 units in Phase 1 and 8 units in Phase 2), the Applicant will be required to include one (1) deed-restricted affordable unit in Phase 1 at 80% AMI. This deed restriction will meet the Executive Office of Housing and Livable Communities Local Initiative Program Regulatory Agreement and qualify both 80% AMI units for the underlying Town of Harvard's Subsidized Housing Inventory.

Waiver Requests:

The Applicant has updated their waiver requests to include the following:

974 CMR 3.04(1)(a): Front Yard Setback of 25'.

The proposed duplex building principle structures are compliant with all required site setbacks. 6 of the 12 homes have a proposed front porch encroachment into the front setback. The porch encroachment is minor (~4') and allows the project team to make the following improvements to the site design, which are consistent with Innovative Residential Development goals in Devens:

- 1. Regrading so that no piping is required to direct roof runoff to the back rain garden; drainage is overland (CMR 4.08(3)(a));
- 2. Reduced the lengths of the driveways and lessened their slope (reduced impervious, reduced urban heat island impacts;
- 3. Pushing private outdoor spaces closer to the public realm to help foster more community engagement.

Process:

The Applicant submitted a Level II Unified Permit application package on August 5, 2025. The pre-permitting conference was completed on July 1, 2025 and the Determination of Completeness was issued on August 12, 2025. Copies of the application and plans were received by the surrounding Towns on August 13, 2025. Legal notices were placed in Nashoba Publications on August 29, 2025 and September 5, 2025. Certified Mail notice was sent to all abutting property owners on August 13, 2025. The 30-day town comment period expired on September 14, 2025. No public comments were received. The public hearing opens on September 30, 2025. The 75-day review period ends October 26, 2025.

Recommended Action:

Once the commission and public have had an opportunity to ask questions, staff would recommend the commission continue the public hearing till the October 9, 2025 meeting at 7:30AM to provide additional time for the Applicant to resolve any remaining issues and allow staff time to draft a record of decision for the Commission's consideration. As this is a Definitive Subdivision AND site Plan approval, the DEC is required to review this application in accordance with the applicable review criteria under 974 CMR 2.04(6) and 974 CMR 3.03(2). Staff has attached these criteria for the Commission's reference.

Attachments:

- Refer to DEC website for all plans and supporting info.
- 974 CMR 2.04(6) and 974 CMR 3.03(2)

974 CMR 2.04(6) – Definitive Subdivision Plan Review Criteria: The DEC shall endorse a Definitive Plan if it meets the following criteria:

- (a) Compliance with 974 CMR 2.00 and with the applicable provisions of the By-Laws.
- (b) Proposed improvements comply with 974 CMR 2.07.
- (c) Streets connect to and are accessible from a public way or an existing private way open to the public and in which the Applicant has the necessary rights.
- (d) All streets in the subdivision are designed so that they provide for safe vehicular and pedestrian travel in accordance with 974 CMR 2.07: Table Street Design Standards by Classification.
- (e) Provision has been made for the future extension of streets or for access to adjoining property not yet subdivided. Proposed ways shall continue to the exterior boundary of the plan unless the DEC determines allowing a lesser extent of roadway is in the public interest.
- (f) All streets shall be in alignment with existing ways in the street system, to the maximum extent possible, and the same or other appropriate width to be determined by the DEC. Ways shall be continuous, and shall compose a convenient system with connections adequate to ensure free movement of vehicular traffic. The use of dead-ended, cul-de-sac streets shall only be permitted if the Applicant demonstrates to the satisfaction of the DEC that alternatives for connecting to other Devens ways are impractical or unreasonable.
- (g) Plans for streets proposed for public acceptance shall provide for private long-term street maintenance unless and until MassDevelopment accepts the streets.
- (h) The drainage shall be designed in accordance with 974 CMR 2.07.
- (i) Storm drains, culverts, and related installations, both surface and subsurface, are designed to provide for safe unimpeded flow of natural water courses, drainage of low areas along streets, and to intercept stormwater run-off along streets at intervals reasonably related to the surface type, grade, and acreage area drained. Proper connection shall be provided to the existing drainage system and drains shall be extended to adjacent lands in order to provide for their future continuation. Easements are required for drainage that runs through land outside the subdivision.
- (j) Adequate water supply exists in terms of quantity, quality, and water pressure, for future development on the property.
- (k) Water mains, laterals, and appurtenances shall be designed to provide adequate water service for the needs of future development of the subdivision and for fire protection. The minimum size of a water main shall be in accordance with 974 CMR 2.07.
- (I) The sewer system has adequate capacity for discharge from future development on the property.
- (m) Sanitary sewers including all appurtenances shall be designed to serve all lots in a subdivision and to provide connection to the Devens sewerage system. The DEC may require that sewers extend to the boundaries of the subdivision where adjacent land is not served by sewers. Easements are required if sewers must extend over land outside the subdivision.
- (n) Names of streets provide for ready identification and are in keeping with the character of Devens.
- (o) Required landscaping amenities are located entirely within the right-of-way and are designed to provide visual and climactic relief from broad expanses of pavement, to create separations between vehicular and pedestrian circulation, and to enhance the natural and rural campus-like character of Devens.
- (p) Indigenous (native) plant material is used to maintain ecological diversity and prevention of local and regional decimation of tree cover by a single disease. Existing healthy, mature vegetation within and adjacent to the right-of-way is retained to the maximum extent feasible.

- (q) The incorporation of sidewalks into the right-of-way of subdivision streets support and enhance safe pedestrian circulation by providing separate, dedicated pedestrian paths, thereby reducing potential conflict with vehicular and bicycle circulation occurring within the roadbed.
- (r) Sidewalks are designed to be universally accessible and to contribute to an overall network of sidewalks that ultimately will become a continuous and predictable system of walkways offering safe connections from any combination of pedestrian generators and destinations.
- (s) Trails shown on the Trail Master Plan have been constructed and adequate connectors to the main trail system have been provided.

974 CMR 3.03(2)Site Plan Review Criteria: The DEC shall approve a Site Plan if it meets the following criteria:

- (a) The Site Plan complies with 974 CMR 3.00 and with the applicable provisions of the By-Laws.
- (b) The development lies on a lot that is or will be recorded at the Registry of Deeds.
- (c) The Submission is Complete.
- (d) All drives, parking lots, loading areas, paths, sidewalks, and streets are designed to provide for safe vehicular and pedestrian travel.
- (e) Access and site circulation enables prompt fire, police, and emergency response.
- (f) Adequate capture and discharge of stormwater and surface water runoff and compliance with applicable portions of the "Devens Stormwater Pollution Prevention Plan" has been achieved.
- (g) Connections with utility, power and communication systems available in the abutting infrastructure have been made.
- (h) Applicable facilities required under the Water Resources Protection By-Law and the related Design Standards have been included.
- (i) Landscape Treatment Design Standards for plant materials, planting strips, screening, and preservation of existing specimen trees and wooded areas have been met.
- (j) A wetlands Order of Conditions has been issued or determined not required.
- (k) Applicable Industrial Performance Standards have been adhered to.
- (I) Sufficient parking for current needs has been provided.
- (m) Adequate traffic mitigation and control measures have been proposed.
- (n) Participation in the Devens Transportation Management Initiative has been agreed to.
- (o) Adequate water supply exists in terms of quantity, quality, and water pressure for commercial and/or domestic needs and fire protection.
- (p) Connection to sanitary sewers has been made.
- (q) Building design meets the minimum standards as established by MassDevelopment for the district in which the lot is located.
- (r) Soil testing indicates that the soils are capable of supporting proposed development.
- (s) The development has been designed with due consideration for public health.
- (t) Adequate climate change mitigation, adaptation and greenhouse gas emissions mitigation measures have been incorporated in accordance with 974 CMR 4.11.