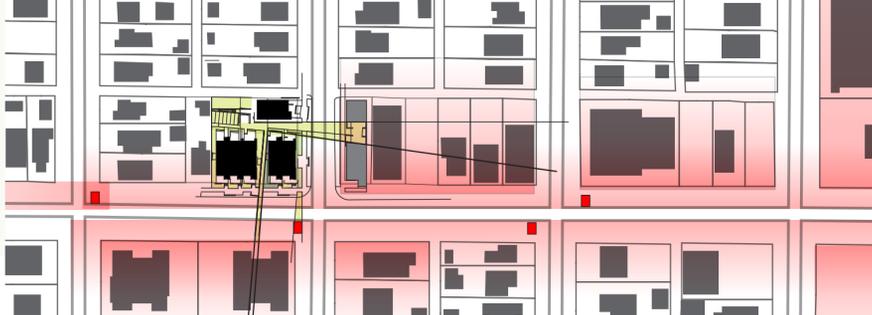


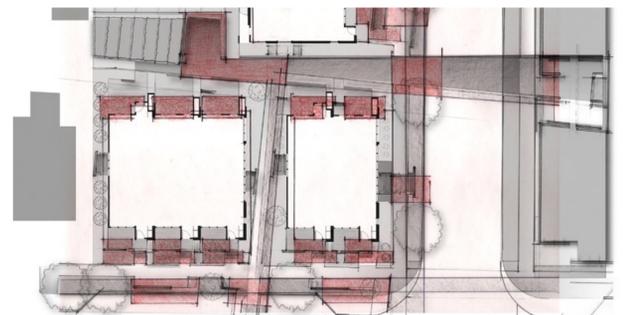
3 FLEX

INTERSPACE | INTERCHANGE | INTERFACE

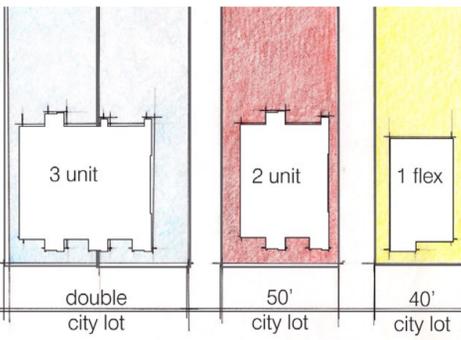
3 FLEX is a versatile housing solution for Bearden Place that will serve and inspire residents, the neighborhood, and the city. Designed with the dynamic needs of today's families in mind, the units are appropriate for young families, single professionals, or retirees. Each unit includes a flexible live/work space that can be oriented to the street or interior. In response to the neighborhood's values, public artistic spaces are integral to the site and building plans. Green building strategies and green spaces reflect the values that are essential to healthy homes and healthy environments. By developing a mix of building sizes with three units, two units, and one unit, the 3|2|1 FLEX concept allows components of this project to be replicated in future developments within the neighborhood and across the city of Minneapolis.



INTERSPACE
 3 FLEX's mix of building sizes provides a porous site design that translates well between the single-family character of the neighborhood west and north of the site, and the more dense commercial character east along Plymouth Avenue. Spaces between buildings invite views into and out of the site, while bringing maximum light and ventilation into each living unit. These view corridors also allow the opportunity to create connections beyond the immediate site, and could connect to future public amenities such as a new bus shelter on Plymouth Avenue, or an art park across Sheridan Avenue.



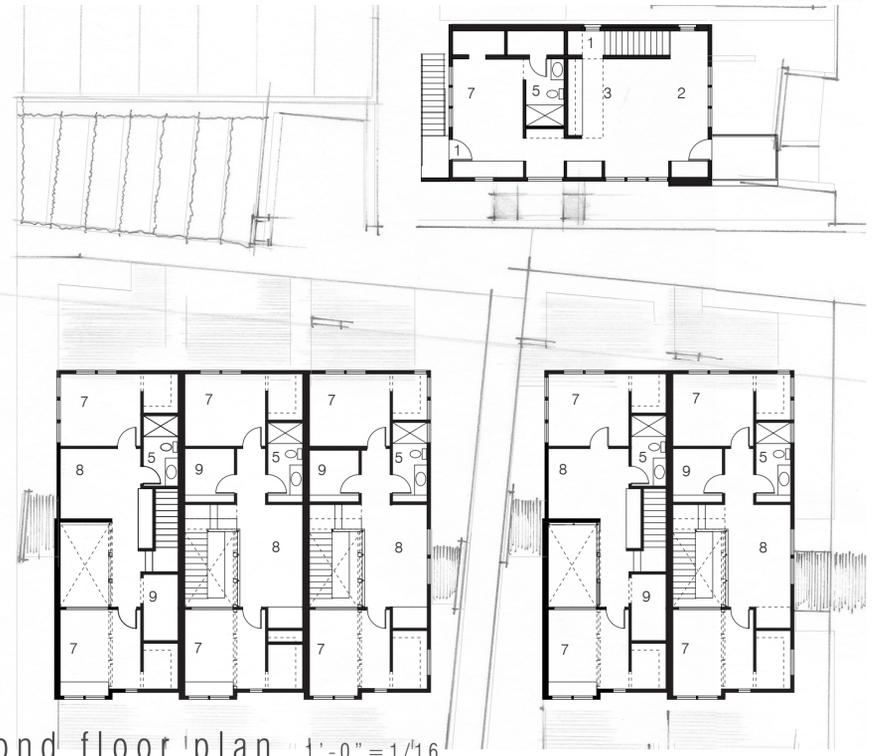
INTERCHANGE
 By developing a mix of building sizes with 3 units, 2 units, plus a one-owner duplex, our 3|2|1 FLEX concept allows components of this project to be replicated on a variety of city lots. Individual units allow for a live/work "flex" space that can be oriented to the street or interior as desired by residents.



INTERFACE
 Within Bearden Place, courtyards, the community hearth, and garden serve as loci for community-building. Between the private and public spaces, generous front porches reach out to welcome the neighborhood. Beyond the boundaries of Bearden Place, sidewalks are critical pathways to bring neighbors together and unite them in "their passion for art." 3 FLEX builds upon this asset by enhancing the nature of the sidewalk. Pockets of space open up along the linear path of the sidewalk and provide opportunity for artistic intervention. Local artists would be invited to help shape the color, texture, and sculptural form of the pedestrian experience, and to impart, in the words of the Willard Hays community, "magic in the sidewalks."

- PLAN KEY**
- 1 ENTRY
 - 2 LIVING
 - 3 KITCHEN
 - 4 DINING
 - 5 BATH
 - 6 LIVE|WORK STUDIO
 - 7 BEDROOM
 - 8 |FLEX| SPACE
 - 9 MECHANICAL/LAUNDRY
 - 10 BIKE STORAGE
 - 11 URBAN VEGETABLE GARDEN PLOTS
 - 12 COMMUNITY SPACE
 - 13 RAIN GARDEN
 - 14 PARKING
 - 15 WATER COLLECTION
 - 16 PUBLIC ART INTERVENTION SPACE

INTERLINKS
 Future community amenities and public artwork can provide important links to ensuring the success of Bearden Place and the Artists' Core. This vision includes the creation of art courtyards along the neighborhood sidewalks [a], the development of new bus shelters along the Plymouth corridor [c], and the creation of a community art studio on the northeast corner of Plymouth and Sheridan.



second floor plan 1'-0" = 1/16



site perspective



site plan 1'-0" = 1/16



north on sheridan

3 FLEX

MATERIALS | SYSTEMS | COST

3 FLEX is a townhouse construction type where units share common interior walls. Each unit is two stories tall with a light monitor rising above a low slope roof. A perimeter foundation wall is filled with a concrete slab-on-grade floor at ground level. Structural Insulated Panels (SIPs) are used for the exterior walls and roof. The main level square footage is 840 and the second floor is 710. Total square footage is 1550.

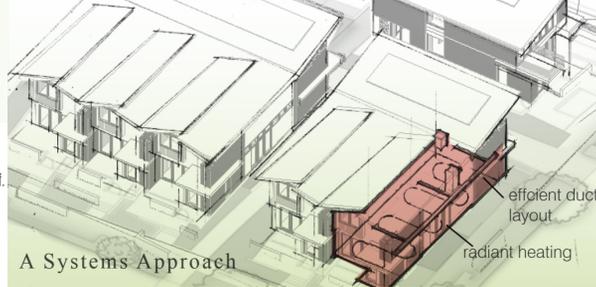
CONSTRUCTION MATERIALS AND SYSTEMS:

- Perimeter foundation wall with footing
- Concrete slab-on-grade main floor with option for radiant heat
- 8" SIP wall construction for perimeter walls and Advanced Framed Double 2x4 wall with cellulose and quiet rock for common walls.
- Second floor framing is 12" deep LSL joists at 24" o.c. exposed to view and painted.
- Second floor deck is double laminated 1/2" thick (1" overall) paint grade plywood
- Second floor finish carpet squares or equivalent
- Roof framing with 12" SIPs
- EPDM roofing
- Combination Hardi-panel and metal siding (prefinished)
- High efficiency forced air heating/cooling system or upgrade to in-floor slab heat with air source heat pump system

Estimated unit cost \$148,500-\$163,500 for 1,550 sq ft units, at a cost per square foot \$96-\$105

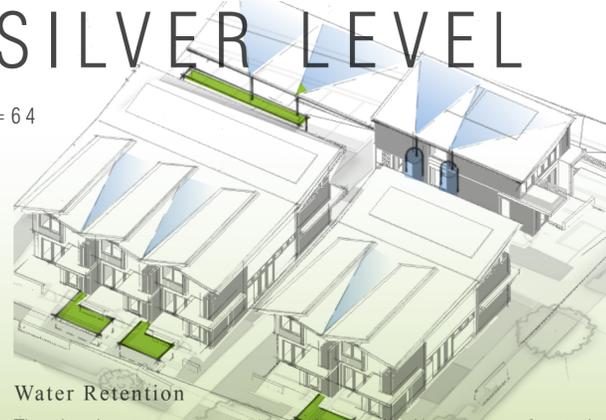
MN GreenStar Rating_ SILVER LEVEL

Energy Modeling_HERS INDEX=64



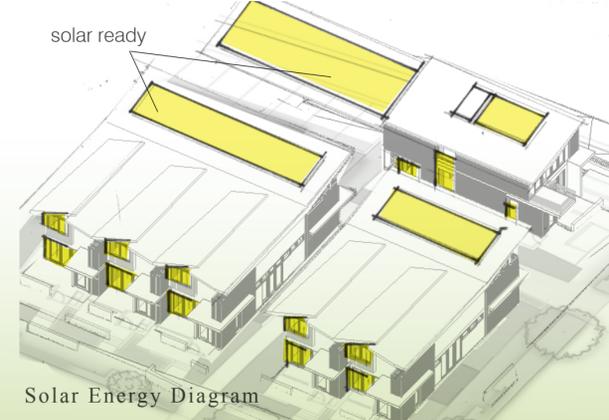
A Systems Approach

In addition to benefit from passive heating, cross ventilation and stack-effect figure prominently in passive cooling (Credit 1B-6). These passive systems are supplemented by a mechanical system in a central location with short runs and stacked cores for a fundamentally **RESOURCE EFFICIENT_RE** system (5C-3). As measured, the basic system includes a high-efficiency gas furnace, power-vented gas water heater, and heat recovery ventilator for optimal indoor **ENVIRONMENTAL QUALITY_IEQ** (5D-2). An advanced system may include in-floor radiant heat (5D-5), air-source heat pump, heat recovery ventilator and on-demand water heater (7A1-C).



Water Retention

The site aims to capture 100% of rainwater for the purpose of nurturing vegetation and community gardening on the site, as well as reducing **SITE AND COMMUNITY IMPACT_SC** on area lakes and streams. Run-off from the 2 and 3 units is captured in rain gardens (3F-4), creating buffers between public sidewalk and front porch. The single unit is illustrated with above grade water tanks, highlighting **WATER CONSERVATION_WC** at a public and educational level, and offering gravity fed watering to native and drought tolerant plants (3C-4). The parking canopy feeds a continuous storage tank convenient to all community garden plots (3B-19).



Solar Energy Diagram

3 Flex captures solar energy in passive and active forms. Passive energy is absorbed through south facing glazing into an insulated concrete slab (1B-5). The single unit design fronting Sheridan takes advantage of an east-west axis for increased **ENERGY EFFICIENCY_EE**. Designed to be solar ready, photovoltaic or solar hot water panels can be added to south-facing roof slopes (6C-7), solar hot water runs can be stacked over cores to minimize distribution lengths.

